City Council

Agenda

Tuesday, August 4, 2026
Council Chambers
749 Main Street
6:00 PM

Members of the public are welcome to attend and give comments remotely. However, the in-person meeting may continue even if technology issues prevent remote participation.

- You can call in to +1 719 359 4580 or 877 853 5247 (toll free)
  Webinar ID #876 9127 0986.
- You can log in via your computer. Please visit the City's website to link to the meeting.

City Council considers written and oral comments equally. Email comments to the Council received after the packet is posted online and before 3pm the day of the meeting will be included in the Council addendum and provided to each Council member prior to the meeting. If you prefer to address Council in person, you may attend the meeting either in person or virtually.

1. **Call to Order & Roll Call**
2. **Pledge of Allegiance**
3. **Approval of Agenda**
4. **Public Comments on Items Not on the Agenda and Items on the Consent Agenda**

   Public comments are limited to 3 minutes per speaker. When several people wish to speak on the same position on a given item, a spokesperson may be used to state that position.
5. **Consent Agenda**

   The following items on the City Council Agenda are considered routine by the City Manager and shall be approved, adopted, accepted, etc., by motion of the City Council and voice vote unless the Mayor or a City Council person specifically requests an item be considered under "Regular Business." In such an event the item shall be removed from the "Consent Agenda" and Council action taken separately on said item in the order appearing on the Agenda. Those items so approved under the heading "Consent Agenda" will appear in the Council Minutes in their proper order.

A. Resolution No. 69, Series 2026 — A Resolution Approving an Agreement with Heritage Landscape Supply Group for Irrigation Controller Replacement Services

B. Resolution No. 70, Series 2026 — A Resolution Authorizing the Purchase of Replacement Cameras and Video Management Servers from Dell Technologies in an Amount Not to Exceed $92,500

C. Resolution No. 71, Series 2026 — A Resolution Declaring the Intent of the City Council of the City of Louisville, Colorado to Issue Multifamily Housing Revenue Bonds and Authorizing Carryforward Allocation

D. Fire Smart Louisville Proposal

6. Council Informational Comments and Committee Reports

7. City Manager's Report

8. Regular Business

A. Resolution No. 66, Series 2026 — A Resolution Approving a Final Planned Unit Development (PUD), A Special Review Use (SRU) to Allow a Helicopter Pad, and An Associated Development Agreement for the Development of a 371,600 Square-Foot Hospital Building and a 62,000 Square-Foot Medical Building on Approximately 39.9 Acres Located at 900 Rockcress Drive - Continued from July 21, 2026

This will be the only reading of this item and final action may be taken. There will be one round of public comment.

B. Ordinance No. 1935, Series 2026 — An Ordinance Approving a Centennial Valley General Development Plan Amendment for Lot A of the Centennial Valley Business Park Filing No. 8 Final Plat — 2nd Reading, Public Hearing (advertised City of Louisville Website 07/21/2026)

The Public Hearing will be held and 2 rounds of public comment will be taken, along with Council questions and discussion. Final action may be taken on this item.

C. Resolution No. 72, Series 2026 - A Resolution Approving the Centennial 8 Replat B to Facilitate a Minor Subdivision to Combine 1006 Honeysuckle Lane and 1008 Honeysuckle Lane

This will be the only reading of this item and final action may be taken. There will be one round of public comment.

D. Resolution No. 73, Series 2026 — A Resolution Designating the Residence Located at 1101 Main Street a Historic Landmark to be Named the Caranci House and Awarding a Landmark Grant Incentive

This will be the only reading of this item and final action may be taken. There will be one round of public comment.

E. Resolution No. 74, Series 2026 — A Resolution Approving a Focused Preservation and Restoration Grant and an Extraordinary Circumstances Grant for the James House Located at 700 Pine Street

This will be the only reading of this item and final action may be taken. There will be one round of public comment.

9. City Attorney's Report

10. Upcoming Agenda Items and Identification of Future Agenda Items

11. Adjourn

Upcoming Agenda Items
August 18 Meeting

This list is not inclusive; items are subject to change; additional items may be added.

- Inclusionary Housing Ordinance Update - 2nd Reading
- Landmark and Grant Request — 1013 LaFarge Avenue
- Award Development Code Update Contract
- BAP Agreement with Louisville Cyclery
- ChargeAdhead Grant

Resident Information

If you wish to speak at the City Council meeting in person, please fill out a sign-up card and present it to the City Clerk at the meeting. If you are attending remotely, please use the “raise hand” icon to show you wish to speak in appropriate public comments section.

Persons planning to attend the meeting who need sign language interpretation, translation services, assisted listening systems, Braille, taped material, or other accommodation should email the City Clerk’s Office or call at 303.335.4574

A forty-eight-hour notice is requested.

Si requiere una copia en español de esta publicación o necesita un intérprete durante la reunión del Consejo, por favor llame a la Ciudad al 303.335.4574 o email

City of Louisville
COLORADO • SINCE 1878

City Council Communication
Agenda Item 5.A.

Subject: Resolution No. 69, Series 2026 — A Resolution Approving an Agreement with Heritage Landscape Supply Group for Irrigation Controller Replacement Services

Date: August 4, 2026

Prepared By: Christopher Davis, Parks Superintendent

Presented By: Christopher Davis, Parks Superintendent

Summary:
In 2025, as a component of capital funding for irrigation improvements, the Parks Division was approved to begin a Capital Improvement Project (CIP) to replace the City's aging Toro irrigation controllers with modern Toro DXi Sentinel irrigation controllers. Many of the existing controllers have reached or exceeded their useful life, resulting in increased maintenance costs, reduced reliability, limited communication capabilities, and decreased efficiency in managing the City's irrigation systems.

The Toro DXi Sentinel platform is an advanced, centrally managed irrigation control system designed to improve operational efficiency while supporting the City of Louisville's sustainability and water conservation goals. Key benefits of the DXi Sentinel system include:

- Improved Water Conservation: Real-time communication and precise irrigation scheduling help ensure water is applied only when and where it is needed, reducing unnecessary water use.
- Weather-Based Irrigation Management: The system can integrate with weather data and environmental sensors to automatically adjust watering schedules based on rainfall, temperature, and evapotranspiration (ET), preventing overwatering.
- Centralized Monitoring and Control: Staff can remotely monitor, troubleshoot, and adjust irrigation controllers from a central management platform, significantly reducing travel time and improving response to system issues.
- Leak Detection and System Alerts: Automated alarms notify staff of flow anomalies, mainline breaks, valve failures, and other irrigation issues, allowing for rapid repairs that minimize water loss.
- Operational Efficiency: Remote programming and diagnostics reduce labor costs, improve staff productivity, and allow maintenance personnel to focus on higher-priority work.
- Support for Sustainability Goals: By reducing potable water consumption, improving irrigation efficiency, and minimizing water waste, the project aligns with the City's commitment to environmental stewardship and responsible management of natural resources.

As implementation has progressed to the next phase of installations, additional allocated funding is necessary to complete the next phase of controller replacements and continue modernizing the City's irrigation infrastructure. Completion of this project will further reduce long-term maintenance costs, improve system reliability, conserve water, and enhance the quality of Louisville's parks and public landscapes.

Staff respectfully requests that City Council approve using a portion of the irrigation improvements funding in the amount of $247,138.50 (Two Hundred Forty-Seven Thousand One Hundred Thirty-Eight Dollars and Fifty Cents), with a 10% (ten percent) contingency of $24,714.00 (Twenty-Four Thousand Seven Hundred Fourteen Dollars), for a total project cost of $271,852.50 (Two Hundred Seventy-One Thousand Eight Hundred Fifty-Two Dollars and Fifty Cents), to continue the Toro DXi Sentinel Irrigation Controller Replacement Project via a sole source provider. Approval of this request will allow the Parks Division to continue replacing obsolete irrigation infrastructure while advancing the City's goals of fiscal responsibility, water conservation, operational efficiency, and environmental sustainability. This investment will ensure the City continues the successful implementation of this multi-year Capital Improvement Program, providing long-term savings through improved irrigation efficiency, reduced maintenance costs, and enhanced stewardship of Louisville's parks and public landscapes.

Background / Prior Discussions:
As part of the 2025 Capital Improvement Program (CIP), the Parks Division requested and received approval to begin a multi-year initiative to replace the City's aging Toro irrigation controllers with the modern Toro DXi Sentinel irrigation system. This project was identified as a priority due to the age, reliability, and increasing maintenance demands of the existing irrigation infrastructure, much of which had reached or exceeded its expected service life.

The 2025 first phase initiated the systematic replacement of outdated controllers throughout Louisville's park system, establishing the foundation for a modern, centrally managed irrigation network. The new Toro DXi Sentinel controllers provide enhanced system monitoring, remote programming capabilities, improved leak detection, weather-based irrigation scheduling, and significant opportunities for water conservation and operational efficiencies.

The requested sole source approval for 2026 represents the continuation of this multi-year capital improvement effort. Rather than initiating a new project, this request will allow the Parks Division to build upon the progress made in 2025 by replacing additional obsolete controllers and continuing the City's transition to a reliable, sustainable, and efficient irrigation management system that aligns with phase one of the replacements.

Completing this next phase will further improve the City's ability to responsibly manage water resources, reduce long-term maintenance costs, increase operational efficiency, and preserve the health and appearance of Louisville's parks, athletic fields, medians,

and other irrigated public landscapes.

Development Proposal:
N/A

Analysis:
This funding and sole source request includes the purchase of Toro DXi Sentinel irrigation controllers, all required communication and installation components, and professional installation services by Heritage-CPS Distributors. Utilizing Heritage-CPS as a sole source contractor for installation ensures that all equipment is installed in accordance with Toro's manufacturer specifications, protecting the City's investment and maintaining system warranty requirements.

Professional installation also ensures proper configuration, programming, and communication between the City's central irrigation management system and each individual field controller. This is critical to achieving the full functionality of the DXi Sentinel system, including centralized monitoring, remote programming, real-time system alerts, flow management, and efficient irrigation scheduling. The project is anticipated to be completed by March 2027, pending product availability, contractor scheduling, and any unforeseen challenges that may arise during installation. Staff will continue to work closely with the contractor and vendor to minimize delays and maintain the project schedule.

To date, we have successfully installed 27 of our 88 total park irrigation controllers. Phase II will address an additional 29 controllers, bringing the total number of converted controllers to 56 of 88. This will leave 32 controllers remaining for Phase III, completing the conversion of our park irrigation system. By completing the project with manufacturer-approved equipment and installation practices, the City will establish a reliable, fully integrated irrigation network that supports long-term operational efficiency, water conservation, and sustainable management of Louisville's park irrigation infrastructure.

Council Work Plan:
This project directly supports the Louisville City Council Work Plan by investing in the long-term resilience and modernization of the City's public infrastructure to provide quality core services and ensure safe conditions for park visitors. Replacing aging irrigation controllers with the Toro DXi Sentinel system improves operational efficiency, reduces life cycle maintenance costs, and enhances the City's ability to proactively manage critical park assets.

The project also advances the City's sustainability goals by promoting responsible water stewardship through weather-based irrigation scheduling, real-time system monitoring, leak detection, and precise water applications. These improvements will reduce potable water consumption, minimize water waste, and ensure irrigation resources are managed efficiently while maintaining healthy parks, athletic fields, urban forests, and

other public landscapes. The project represents a continued investment in sustainable infrastructure that balances environmental responsibility with fiscal stewardship.

Fiscal Impact:
This project is funded through two Capital Improvement Program (CIP) funding sources that are allocated between the Recreation and Parks Capital Funds. The project expenditures are split with forty-eight percent (48%) funded by the CIP Fund (301511-630101 Irrig Replacements & Improvs), which currently has an available balance of $463,965.53 (Four Hundred Sixty-Three Thousand Nine Hundred Sixty-Five Dollars and Fifty-Three Cents). The remaining fifty-two percent (52%) is funded by the Parks CIP Fund (211511-630101 Irrig Replacements & Improvs), which currently has an available balance of $290,663.97 (Two Hundred Ninety Thousand Six Hundred Sixty-Three Dollars and Ninety-Seven Cents).

Combined, the two CIP funding sources provide an available balance of $754,629.50 (Seven Hundred Fifty-Four Thousand Six Hundred Twenty-Nine Dollars and Fifty Cents), which is sufficient to fund this phase of the Toro DXi Sentinel Irrigation Controller Replacement Project. The cost of Phase II is $247,138.50 (two hundred forty-seven thousand, one hundred thirty-eight dollars and fifty cents) with a 10% (ten percent) contingency of $24,714.00 (twenty-four thousand, seven hundred fourteen dollars) for a total project cost of $271,852.50 (two hundred seventy-one thousand, eight hundred fifty-two dollars and fifty cents).

Alternatives:
- If the project is not completed, the City will continue to rely on aging irrigation controllers that are increasingly unreliable, resulting in higher maintenance costs, greater risk of system failures, increased water loss, and reduced ability to efficiently manage irrigation operations.
- If only a portion of the project is completed, the Parks Division will be required to operate a hybrid irrigation system with both legacy and modern controllers. This reduces the operational benefits of a centralized management system, increases maintenance complexity, limits water conservation opportunities, and delays the realization of long-term cost savings.
- Completing the project as proposed will provide a fully integrated irrigation management system that improves reliability, enhances water conservation, reduces long-term maintenance and labor costs, and supports the City's goals for sustainable infrastructure, operational efficiency, and responsible stewardship of public resources.

Recommendation:
Staff recommend allocation of the requested funding via sole source approval to continue the Toro DXi Sentinel Irrigation Controller Replacement Project. This directive was intended to clarify that this is the only vendor currently available to provide the required controllers, associated electrical components, and certified installation services for the project.This investment will build upon the progress made during the 2025 Capital Improvement Program and continue the modernization of the City's irrigation infrastructure. Completing this phase will improve system reliability, enhance water

conservation efforts, reduce long-term maintenance and operational costs, and support the City's sustainability objectives. Approval of this request will ensure the Parks Division can continue providing efficient, responsible stewardship of Louisville's parks and public landscapes while protecting the City's long-term infrastructure investment.

Attachments:

1. Resolution No. 69, Series 2026
2. Heritage Landscape Agreement
3. Heritage Landscape Quote
4. Heritage-CPS Sole Source Labor
5. Sole Source Justification Toro DXi Irrigation Controllers and Components

RESOLUTION NO. 69
SERIES 2026

A RESOLUTION APPROVING AN AGREEMENT WITH HERITAGE LANDSCAPE SUPPLY GROUP FOR IRRIGATION CONTROLLER REPLACEMENT SERVICES

WHEREAS, an Independent Contractor Agreement has been proposed between the City and Heritage Landscape Supply Group, Inc. for irrigation controller replacement services (the "Project"); and

WHEREAS, by this resolution, the City Council desires to approve the Agreement and to approve contingency for the project.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves the Agreement by and between the City of Louisville and Heritage Landscape Supply Group, Inc. for the Project (the "Agreement") in substantially the same form as the copy of such Agreement accompanying this Resolution.

Section 2. The Mayor is hereby authorized to execute the Agreement on behalf of the City, and the Mayor is hereby further authorized to negotiate and approve such revisions to the Agreement as the Mayor determines are necessary or desirable for the protection of the City, so long as the essential terms and conditions of the Agreement are not altered.

Section 3. The City Council hereby approves contingency for the Project in the amount of $24,714.00 for a total authorized amount of $271,852.50 for the Project. The City's Project Manager for the Contract may approve change orders deemed necessary for the Project, subject to the cost limits set forth in this Resolution.

PASSED AND ADOPTED this 4th day of August, 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

INDEPENDENT CONTRACTOR AGREEMENT
BY AND BETWEEN THE CITY OF LOUISVILLE
AND HERITAGE LANDSCAPE SUPPLY GROUP
FOR IRRIGATION CONTROLLER REPLACEMENT SERVICES

1.0 PARTIES

This INDEPENDENT CONTRACTOR AGREEMENT (this "**Agreement"**) is made and entered into this 4th day of August, 2026 (the "**Effective Date**"), by and between the CITY OF LOUISVILLE, a Colorado home rule municipal corporation (the "**City**") and Heritage Landscape Supply Group, a Delaware corporation (the "**Contractor**").

2.0 RECITALS AND PURPOSE

2.1 The City desires to engage the Contractor for the purpose of providing irrigation controller replacement and certified installation services as further set forth in the Contractor's Scope of Services set forth in Section 3.0 of this Agreement (which services are hereinafter referred to as the "**Services**").

2.2 The Contractor represents that it has the special expertise, qualifications and background necessary to complete the Services.

3.0 SCOPE OF SERVICES

The Contractor agrees to provide the City with the specific Services and to perform the specific tasks, duties and responsibilities set forth in Scope of Services attached hereto as **Exhibit A** and incorporated herein by reference. Contractor shall furnish all tools, labor and supplies in such quantities and of the proper quality as are necessary to professionally and timely perform the Services. Contractor acknowledges that this Agreement does not grant any exclusive privilege or right to supply Services to the City.

4.0 COMPENSATION

4.1 The City shall pay the Contractor for Services under this Agreement a total not to exceed **Two Hundred Forty-Seven Thousand One Hundred Thirty-Eight Dollars and Fifty Cents ($247,138.50)** as set forth in **Exhibit A** attached hereto and incorporated herein by this reference. For Services compensated at hourly or per unit rates, or on a per-task basis, such rates or costs per task shall not exceed the amounts set forth in **Exhibit A.** The City shall not pay mileage and other reimbursable expenses (such as meals, parking, travel expenses, necessary memberships, etc.), unless such expenses are (1) clearly set forth in the Scope of Services, and (2) necessary for performance of the Services ("**Pre-Approved Expenses"**). The foregoing amounts of compensation shall be inclusive of all costs of whatsoever nature associated with the Contractor's efforts, including but not limited to salaries, benefits, overhead, administration, profits, expenses, and outside Contractor fees. The Scope of Services and payment therefor shall only be changed by a properly authorized amendment to this Agreement. No City employee has the authority to bind the City with regard to any payment for any Services which exceeds the amount payable under the terms of this Agreement.

4.2 Upon completion of the Services, the Contractor shall submit an invoice to the City for Services rendered and a detailed expense report for Pre-Approved Expenses. The

invoice shall document the Services provided, identifying by work category and subcategory the work and tasks performed and such other information as may be required by the City. The Contractor shall provide such additional backup documentation as may be required by the City. The City shall pay the invoice within thirty (30) days of receipt unless the Services or the documentation therefor are unsatisfactory. Payments made after thirty (30) days may be assessed an interest charge of one percent (1%) per month unless the delay in payment resulted from unsatisfactory work or documentation therefor.

5.0 PROJECT REPRESENTATION

5.1 The City designates Chris Davis as the responsible City staff to provide direction to the Contractor during the conduct of the Services. The Contractor shall comply with the directions given by Chris Davis and such person's designees.

5.2 The Contractor designates Brandon Gully as its project manager and as the principal in charge who shall be providing the Services under this Agreement. Should any of the representatives be replaced, and such replacement require the City or the Contractor to undertake additional reevaluations, coordination, orientations, etc., the Contractor shall be fully responsible for all such additional costs and services.

6.0 TERM

6.1 The term of this Agreement shall be from the Effective Date to June 30th 2027, unless sooner terminated pursuant to Section 13, below. The Contractor's Services under this Agreement shall commence the Effective Date and Contractor shall proceed with diligence and promptness so that the Services are completed in a timely fashion consistent with the City's requirements.

6.2 Nothing in this Agreement is intended or shall be deemed or construed as creating any multiple-fiscal year direct or indirect debt or financial obligation on the part of the City within the meaning of Colorado Constitution Article X, Section 20 or any other constitutional or statutory provision. All financial obligations of the City under this Agreement are subject to annual budgeting and appropriation by the Louisville City Council, in its sole discretion. Notwithstanding anything in this Agreement to the contrary, in the event of non-appropriation, this Agreement shall terminate effective December 31 of the then-current fiscal year.

7.0 INSURANCE

7.1 The Contractor agrees to procure and maintain, at its own cost, the policies of insurance set forth in Subsections 7.1.1 through 7.1.4. The Contractor shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to this Agreement by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types. The coverages required below shall be procured and maintained with forms and insurers acceptable to the City. All coverages shall be continuously maintained from the date of commencement of Services hereunder. The required coverages are:

7.1.1 Workers' Compensation insurance as required by the Labor Code of the State of Colorado and Employers Liability Insurance. Evidence of qualified self-insured status may be substituted.

7.1.2 General Liability insurance with minimum combined single limits of $1,000,000 each occurrence and $2,000,000 aggregate. The policy shall include the City of Louisville, its officers and its employees, as additional insureds, with primary coverage as respects the City of Louisville, its officers and its employees, and shall contain a severability of interests provision.

7.1.3 Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury and property damage of not less than $400,000 per person in any one occurrence and $1,000,000 for two or more persons in any one occurrence, and auto property damage insurance of at least $50,000 per occurrence, with respect to each of Contractor's owned, hired or non-owned vehicles assigned to or used in performance of the Services. If the Contractor has no owned automobiles, the requirements of this paragraph shall be met by each officer or employee of the Contractor providing services to the City of Louisville under this contract.

7.2 The Contractor's general liability insurance and automobile liability and physical damage insurance shall be endorsed to include the City, and its elected and appointed officers and employees, as additional insureds, unless the City in its sole discretion waives such requirement. Every policy required above shall be primary insurance, and any insurance carried by the City, its officers, or its employees, shall be excess and not contributory insurance to that provided by the Contractor. Such policies shall contain a severability of interests provision. The Contractor shall be solely responsible for any deductible losses under each of the policies required above.

7.3 Certificates of insurance shall be provided by the Contractor as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect, and shall be subject to review and approval by the City. No required coverage shall be cancelled, terminated or materially changed until at least 30 days prior written notice has been given to the City. The City reserves the right to request and receive a certified copy of any policy and any endorsement thereto.

7.4 Failure on the part of the Contractor to procure or maintain policies providing the required coverages, conditions, and minimum limits shall constitute a material breach of contract upon which the City may immediately terminate this Agreement, or at its discretion may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all monies so paid by the City shall be repaid by Contractor to the City upon demand, or the City may offset the cost of the premiums against any monies due to Contractor from the City.

7.5 The parties understand and agree that the City is relying on, and does not waive or intend to waive by any provision of this contract, the monetary limitations or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, § 24-10-101 et seq., C.R.S., as from time to time amended, or otherwise available to the City, its officers, or its employees.

8.0 INDEMNIFICATION

To the fullest extent permitted by law, the Contractor agrees to indemnify and hold harmless the City, and its elected and appointed officers and its employees, from and against all liability, claims, and demands, on account of any injury, loss, or damage, which arise out of or are connected with the Services hereunder, if such injury, loss, or damage is caused by the negligent act, omission, or other fault of the Contractor or any subcontractor of the Contractor, or any officer, employee, or agent of the Contractor or any subcontractor, or any other person for whom Contractor is responsible. The Contractor shall investigate, handle, respond to, and provide defense for and defend against any such liability, claims, and demands. The Contractor shall further bear all other costs and expenses incurred by the City or Contractor and related to any such liability, claims and demands, including but not limited to court costs, expert witness fees and attorneys' fees if the court determines that these incurred costs and expenses are related to such negligent acts, errors, and omissions or other fault of the Contractor. The City shall be entitled to its costs and attorneys' fees incurred in any action to enforce the provisions of this Section 8.0. The Contractor's indemnification obligation shall not be construed to extend to any injury, loss, or damage which is caused by the act, omission, or other fault of the City.

9.0 QUALITY OF WORK

Contractor's Services shall be performed in accordance with the highest professional workmanship and service standards in the field to the satisfaction of the City.

10.0 INDEPENDENT CONTRACTOR

It is the expressed intent of the parties that the Contractor is an independent contractor and not the agent, employee or servant of the City, and that:

10.1. **CONTRACTOR SHALL SATISFY ALL TAX AND OTHER GOVERNMENTALLY IMPOSED RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, PAYMENT OF STATE, FEDERAL AND SOCIAL SECURITY TAXES, UNEMPLOYMENT TAXES, WORKERS' COMPENSATION AND SELF-EMPLOYMENT TAXES. NO STATE, FEDERAL OR LOCAL TAXES OF ANY KIND SHALL BE WITHHELD OR PAID BY THE CITY.**

10.2. **CONTRACTOR IS NOT ENTITLED TO WORKERS' COMPENSATION BENEFITS EXCEPT AS MAY BE PROVIDED BY THE INDEPENDENT CONTRACTOR NOR TO UNEMPLOYMENT INSURANCE BENEFITS UNLESS UNEMPLOYMENT COMPENSATION COVERAGE IS PROVIDED BY THE INDEPENDENT CONTRACTOR OR SOME ENTITY OTHER THAN THE CITY.**

10.3. Contractor does not have the authority to act for the City, or to bind the City in any respect whatsoever, or to incur any debts or liabilities in the name of or on behalf of the City.

10.4. Contractor has and retains control of and supervision over the performance of Contractor's obligations hereunder and control over any persons employed by Contractor for performing the Services hereunder.

10.5. The City will not provide training or instruction to Contractor or any of its employees regarding the performance of the Services hereunder.

10.6. Neither the Contractor nor any of its officers or employees will receive benefits of any type from the City.

10.7. Contractor represents that it is engaged in providing similar services to other clients and/or the general public and is not required to work exclusively for the City.

10.8. All Services are to be performed solely at the risk of Contractor and Contractor shall take all precautions necessary for the proper and sole performance thereof.

10.9. Contractor will not combine its business operations in any way with the City's business operations and each party shall maintain their operations as separate and distinct.

11.0 ASSIGNMENT

Contractor shall not assign or delegate this Agreement or any portion thereof, or any monies due to or become due hereunder without the City's prior written consent.

12.0 DEFAULT

Each and every term and condition hereof shall be deemed to be a material element of this Agreement. In the event either party should fail or refuse to perform according to the terms of this Agreement, such party may be declared in default.

13.0 TERMINATION

13.1 This Agreement may be terminated by either party for material breach or default of this Agreement by the other party not caused by any action or omission of the other party by giving the other party written notice at least thirty (30) days in advance of the termination date. Termination pursuant to this subsection shall not prevent either party from exercising any other legal remedies which may be available to it.

13.2 In addition to the foregoing, this Agreement may be terminated by the City for its convenience and without cause of any nature by giving written notice at least fifteen (15) days in advance of the termination date. In the event of such termination, the Contractor will be paid for the reasonable value of the Services rendered to the date of termination, not to exceed a pro-rated daily rate, for the Services rendered to the date of termination, and upon such payment, all obligations of the City to the Contractor under this Agreement will cease. Termination pursuant to this Subsection shall not prevent either party from exercising any other legal remedies which may be available to it.

14.0 INSPECTION AND AUDIT

The City and its duly authorized representatives shall have access to any books, documents, papers, and records of the Contractor that are related to this Agreement for the purpose of making audits, examinations, excerpts, and transcriptions.

15.0 DOCUMENTS

All computer input and output, analyses, plans, documents photographic images, tests, maps, surveys, electronic files and written material of any kind generated in the performance of this Agreement or developed for the City in performance of the Services are and shall remain the sole and exclusive property of the City. All such materials shall be promptly provided to the City upon request therefor and at the time of termination of this Agreement, without further charge or

expense to the City and in hardcopy or an electronic format acceptable to the City, or both, as the City shall determine. Contractor shall not provide copies of any such material to any other party without the prior written consent of the City. Contractor shall not use or disclose confidential information of the City for purposes unrelated to performance of this Agreement without the City's written consent.

16.0 ENFORCEMENT

16.1 In the event that suit is brought upon this Agreement to enforce its terms, the parties shall each bear and be responsible for their own attorneys' fees and court costs.

16.2 This Agreement shall be deemed entered into in Boulder County, Colorado, and shall be governed by and interpreted under the laws of the State of Colorado. Any action arising out of, in connection with, or relating to this Agreement shall be filed in the courts of Boulder County or the federal district court for the District of Colorado, and in no other court. Colorado law shall apply to the construction and enforcement of this Agreement.

17.0 COMPLIANCE WITH LAWS

Contractor shall be solely responsible for compliance with all applicable federal, state, and local laws, including the ordinances, resolutions, rules, and regulations of the City; for payment of all applicable taxes; and obtaining and keeping in force all applicable permits and approvals.

18.0 INTEGRATION AND AMENDMENT

This Agreement represents the entire Agreement between the parties and there are no oral or collateral agreements or understandings. This Agreement may be amended only by an instrument in writing signed by the parties.

19.0 NOTICES

All notices required or permitted under this Agreement shall be in writing and shall be given by hand delivery, by United States first class mail, postage prepaid, registered or certified, return receipt requested, by national overnight carrier, or by email transmission, addressed to the party for whom it is intended at the following address:

If to the City:

City of Louisville
Attn: City Manager
749 Main Street
Louisville, CO 80027
e-mail: dlangley@louisvilleco.gov

If to the Contractor:
HERITAGE LANDSCAPE SUPPLY GROUP
Attn: Brandon Gully
1105 West 122nd Avenue
Westminster, CO 80027
e-mail: Brandon.Gully@heritagelandscapesupply.com

Except for notices by email transmission, any notice required or permitted under this Agreement shall be effective when received as indicated on the delivery receipt, if by hand delivery or overnight carrier; on the United States mail return receipt, if by United States mail. Notices by email transmission shall be effective on transmission, so long as no message of error or non-receipt is received by the party giving notice. Either party may by similar notice given, change the address to which future notices or other communications shall be sent.

20.0 EQUAL OPPORTUNITY EMPLOYER

20.1 Contractor will not discriminate against any employee or applicant for employment because of age 40 and over, race, sex, color, religion, national origin, disability, genetic information, sexual orientation, veteran status, or any other applicable status protected by state or local law. Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to any status set forth in the preceding sentence. Such action shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notice to be provided by an agency of the federal government, setting forth the provisions of the Equal Opportunity Laws.

20.2 Contractor shall be in compliance with the applicable provisions of the American with Disabilities Act as enacted and from time to time amended and any other applicable federal, state, or local laws and regulations. A signed, written certificate stating compliance with the Americans with Disabilities Act may be requested at any time during the life of this Agreement or any renewal thereof.

21.0 NO THIRD PARTY BENEFICIARIES

It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to City and Contractor, and nothing contained in this Agreement shall give or allow any such claim or right of action by any other third party on such Agreement. It is the express intention of the parties that any person other than City or Contractor receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.

22.0 SUBCONTRACTORS

Contractor may utilize subcontractors identified in its qualifications submittal to assist with non-specialized works as necessary to complete projects. Contractor will submit any proposed subcontractor and the description of its services to the City for approval. The City will not work directly with subcontractors.

23.0 AUTHORITY TO BIND

Each of the persons signing below on behalf of any party hereby represents and warrants that such person is signing with full and complete authority to bind the party on whose behalf of whom such person is signing, to each and every term of this Agreement.

In witness whereof, the parties have executed this Agreement to be effective as of the day and year first above written.

CITY OF LOUISVILLE

_____
By: Christopher Leh, Mayor

_____
Attest: Genny Kline, City Clerk

CONTRACTOR:
HERITAGE LANDSCAPE SUPPLY GROUP, INC.

_____
By: Brandon Gully, Commercial Territory Manager

EXHIBIT A
FEE PROPOSAL / SCOPE OF SERVICES

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

HERITAGE LANDSCAPE SUPPLY WESTMINSTE
1105 W 122nd AVE
WESTMINSTER, CO 80234
FAX: (303)-350-3237
Phone: (303)-350-3236

Account: 12010000 0001
Branch: CPSWEST
Phone: (303)-666-6565
Fax: (303)-335-4528

Bill To: CITY OF LOUISVILLE
749 MAIN ST
LOUISVILLE, CO 80027

Ship To: CITY OF LOUISVILLE
749 MAIN ST
PARKS
LOUISVILLE, CO 80027

PO: Louis DXI 2 **Ref:** **Job:**

Exp Delv Date: 10/06/25	**Sales** S FAUSSET	**Type:** WHSE	**Ship Via:** OUR TRUCK
Activation Date: 03/17/26	**Agents**	**Quoted For:** Chris Davis	
Close Date: 06/30/26	S O'BRIEN	**Quoted By:** SO200088	

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
	** Bridgefield Standalone Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.78	EA	995.78
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	350.00	EA	350.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					2,795.78
	** Not Assigned Group **					
TECDXRWS5XB24	24 STATION, WS5 DXI WS5 RETRO KIT W 24STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED WS5 BACK-PLATE AND MOUNTING BRACKETS, 24-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RWS5XB24M8C Supp#: DXI-RWS5XB24M8C	1	EA	7,698.09	EA	7,698.09
TECONSITEINSTALL	FIELD LABOR INSTALLATION hour charge	200	EA	150.00	EA	30,000.00
900	Misc. Material UniStrut etc	1	EA	6,000.00	EA	6,000.00
	** Group Total **					43,698.09
	** Cedarwood Park XTND MASTER Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.78	EA	995.78
TECDXRWS5XB12	12 STATION, WS5 DXI WS5 RETRO KIT W 12STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED WS5 BACK-PLATE AND MOUNTING BRACKETS, 12-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RWS5XB12M8C Supp#: DXI-RWS5XB12M8C	1	EA	7,459.53	EA	7,459.53

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
TECDXIWOBE	DXI 900MHZ XTND RAD KIT F/NON-SPED METAL ENC XTND RADIO KIT FOR PWM/SWM/PSB/SPEDHY/DPSB ENCLOSURES Supp#: DXi-WOB-E	1	EA	1,194.44	EA	1,194.44
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	350.00	EA	350.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					11,449.75
	** Hutchinson Corner XTND REMOTE Group **					
TECW241XT	LARGE 24 STAT WIRELESS OUTPUT BRD W/ XTN LARGE 24 STAT WIRELESS OUTPUT BRD W/ XTND RADIO Supp#: W241-XT	1	EA	2,485.08	EA	2,485.08
TECRP3000C	REVERSE POLARITY SMA (F) ADAPTER F/ RG58 Supp#: RP-3000-C	1	EA	15.00	EA	15.00
TECRG58CABLE	RG58/U COAX CABLE CABLE BY FOOT GENERAL C1166 Supp#: GENERAL C1166	3	FT	1.00	FT	3.00
TECRFN10052N	N (M) ADAPTER FOR RG58 Supp#: RFN-1005-2N	1	EA	15.00	EA	15.00
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00
TECTRAB9023P	LAIRD 902-928MHZ LP BLK ANTENNA Supp#: TRAB9023P	1	EA	94.60	EA	94.60
TECONSITEINSTALL	FIELD INSTALLATION	1	EA	500.00	EA	500.00
TECSITE1248	GROUND RESISTANCE TESTING	1	EA	250.00	EA	250.00
	** Group Total **					3,437.68
	** X01 - Hutchinson Corner MASTER Group **					
TECDXRPS1XB24	24 STATION, PS1 DXI PS1 RETRO KIT W 24STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED PS1 BACK-PLATE AND MOUNTING BRACKETS, 24-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RPS1XB24M8C Supp#: DXI-RPS1XB24M8C	1	EA	7,805.98	EA	7,805.98
TECDXIWOBE	DXI 900MHZ XTND RAD KIT F/NON-SPED METAL ENC XTND RADIO KIT FOR PWM/SWM/PSB/SPEDHY/DPSB ENCLOSURES Supp#: DXi-WOB-E	1	EA	1,194.44	EA	1,194.44
TECONSITEINSTALL	FIELD INSTALLATION	1	EA	500.00	EA	500.00

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
TECSITE1248	GROUND RESISTANCE TESTING	1	EA	250.00	EA	250.00
	** Group Total **					10,450.42
	** X01 - Cedarwood Park REMOTE Group **					
TOLW12XT	TORO SENTINEL SMALL 12STA WIRELESS OUTPUT BRD. Supp#: W12-XT	1	EA	1,746.27	EA	1,746.27
TECRP30101C	REVERSE POLARITY SMA (F) 90 ADAPTER F/ RG58 Supp#: RP-3010-1C	1	EA	15.00	EA	15.00
TECRG58CABLE	RG58/U COAX CABLE CABLE BY FOOT GENERAL C1166 Supp#: GENERAL C1166	1	FT	1.00	FT	1.00
TECRFN10052N	N (M) ADAPTER FOR RG58 Supp#: RFN-1005-2N	1	EA	15.00	EA	15.00
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00
TECTRAB9023P	LAIRD 902-928MHZ LP BLK ANTENNA Supp#: TRAB9023P	1	EA	94.60	EA	94.60
TECONSITEINSTALL	FIELD INSTALLATION	1	EA	500.00	EA	500.00
TECSITE1248	GROUND RESISTANCE TESTING	1	EA	250.00	EA	250.00
	** Group Total **					2,696.87
	** Centennial Heights Standalone Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.00	EA	995.00
TECDXRWS5XB12	12 STATION, WS5 DXI WS5 RETRO KIT W 12STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED WS5 BACK-PLATE AND MOUNTING BRACKETS, 12-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RWS5XB12M8C Supp#: DXI-RWS5XB12M8C	1	EA	7,459.53	EA	7,459.53
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	350.00	EA	350.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					10,254.53

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
	** Centennial Park Standalone Group **					
SBXSB16SSNBT	16" X 18" X 10" STRONG BOX TOP ENTRY ENCLOSURE ONLY 16" TOP ENTRY ENCLOSURE ONLY, NO TRAY/BACKBOARD INSTALLED FOR RETROKIT INSTALLATIONS SB-16SS-NBT Supp#: SB-16SS-NBT	1	EA	2,134.3750	EA	2,134.38
SBXPED16SS	16" X 12" X 15.5" STRONGBOX PEDESTAL RISER F/ SB-16SS Supp#: PED-16SS	1	EA	603.75	EA	603.75
TECDXRPSBXB12	12 STATION, PSB DXI PSB RETRO KIT W 12STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED PSB BACK-PLATE AND MOUNTING BRACKETS, 12-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RPSBXB12M8C Supp#: DXI-RPSBXB12M8C	1	EA	7,527.92	EA	7,527.92
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	350.00	EA	350.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					12,066.05
	** Cherry St Underp XTND REMOTE Group **					
TECW241XT	LARGE 24 STAT WIRELESS OUTPUT BRD W/ XTN LARGE 24 STAT WIRELESS OUTPUT BRD W/ XTND RADIO Supp#: W241-XT	1	EA	2,485.08	EA	2,485.08
TECRP30101C	REVERSE POLARITY SMA (F) 90 ADAPTER F/ RG58 Supp#: RP-3010-1C	1	EA	15.00	EA	15.00
TECRG58CABLE	RG58/U COAX CABLE CABLE BY FOOT GENERAL C1166 Supp#: GENERAL C1166	3	FT	1.00	FT	3.00
TECRFN10052N	N (M) ADAPTER FOR RG58 Supp#: RFN-1005-2N	1	EA	15.00	EA	15.00
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00
TECPOLIS50NX	POLYPHASER N (F) X N (M) Supp#: IS-50NX-C2-MA	1	EA	141.16	EA	141.16
TEC1183066	V3 DATA RADIO BACKPLATE W/SCREW Supp#: 118-3066	1	EA	6.00	EA	6.00
TECRFN10241	N (F) ADAPTER FOR RG8 Supp#: RFN-1024-1	1	EA	20.00	EA	20.00
TECRG8CABLE	CAROL RG8/ U COAX CABLE BY FOOT CAROL C1154 RG8\U Supp#: 40037	10	FT	4.00	FT	40.00

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
TECRFN10021N	N (M) ADAPTER FOR RG8 Supp#: RFN-1002-1N	1	EA	20.00	EA	20.00
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00
TECFM2	LAIRD FM2 ANTENNA BRACKET WORKS WITH FG + MFB ANTENNA. FITS UPTO 2.5IN POLE TO MOUNT ON	1	EA	98.94	EA	98.94
TECATXFG9023	25" 902-928 MHZ OMNI ANTENNA 3DB GAIN N(F) Supp#: FG9023	1	EA	450.78	EA	450.78
TECONSITEINSTALL	FIELD INSTALLATION W/EXT ANTENNA	1	EA	750.00	EA	750.00
TECSITE1248	GROUND RESISTANCE TESTING	1	EA	250.00	EA	250.00
	** Group Total **					4,444.96
	** Dutch Creek XTND REMOTE Group **					
TECW241XT	LARGE 24 STAT WIRELESS OUTPUT BRD W/ XTN LARGE 24 STAT WIRELESS OUTPUT BRD W/ XTND RADIO Supp#: W241-XT	1	EA	2,485.08	EA	2,485.08
TECRP30101C	REVERSE POLARITY SMA (F) 90 ADAPTER F/ RG58 Supp#: RP-3010-1C	1	EA	15.00	EA	15.00
TECRG58CABLE	RG58/U COAX CABLE CABLE BY FOOT GENERAL C1166 Supp#: GENERAL C1166	3	FT	1.00	FT	3.00
TECRFN10052N	N (M) ADAPTER FOR RG58 Supp#: RFN-1005-2N	1	EA	15.00	EA	15.00
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00
TECPOLIS50NX	POLYPHASER N (F) X N (M) Supp#: IS-50NX-C2-MA	1	EA	141.16	EA	141.16
TEC1183066	V3 DATA RADIO BACKPLATE W/SCREW Supp#: 118-3066	1	EA	6.00	EA	6.00
TECRFN10241	N (F) ADAPTER FOR RG8 Supp#: RFN-1024-1	1	EA	20.00	EA	20.00
TECRG8CABLE	CAROL RG8/ U COAX CABLE BY FOOT CAROL C1154 RG8\U Supp#: 40037	10	FT	4.00	FT	40.00
TECRFN10021N	N (M) ADAPTER FOR RG8 Supp#: RFN-1002-1N	1	EA	20.00	EA	20.00
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
TEG1021	1" X 21' GALVANIZED STEEL DROP PIPE T&C THREADED AND COUPLED	21	FT	5.50	FT	115.50
TECFM2	LAIRD FM2 ANTENNA BRACKET WORKS WITH FG + MFB ANTENNA. FITS UPTO 2.5IN POLE TO MOUNT ON	1	EA	98.94	EA	98.94
TECATXFG9023	25" 902-928 MHZ OMNI ANTENNA 3DB GAIN N(F) Supp#: FG9023	1	EA	450.78	EA	450.78
TECONSITEINSTALL	FIELD INSTALLATION W/EXT ANT & MAST	1	EA	750.00	EA	750.00
TECSITE1248	GROUND RESISTANCE TESTING	1	EA	250.00	EA	250.00
	** Group Total **					4,560.46
	** Elephant XTND MASTER Group **					
TECDXIWOBE	DXI 900MHZ XTND RAD KIT F/NON-SPED METAL ENC XTND RADIO KIT FOR PWM/SWM/PSB/SPEDHY/DPSB ENCLOSURES Supp#: DXi-WOB-E	1	EA	1,194.44	EA	1,194.44
TECONSITEINSTALL	FIELD INSTALLATION	1	EA	300.00	EA	300.00
	** Group Total **					1,494.44
	** Kennedy Park XTND MASTER Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.78	EA	995.78
TECDXRWS5XB12	12 STATION, WS5 DXI WS5 RETRO KIT W 12STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED WS5 BACK-PLATE AND MOUNTING BRACKETS, 12-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RWS5XB12M8C Supp#: DXI-RWS5XB12M8C	1	EA	7,459.53	EA	7,459.53
TECDXIWOBE	DXI 900MHZ XTND RAD KIT F/NON-SPED METAL ENC XTND RADIO KIT FOR PWM/SWM/PSB/SPEDHY/DPSB ENCLOSURES Supp#: DXi-WOB-E	1	EA	1,194.44	EA	1,194.44
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	350.00	EA	350.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					11,449.75

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
	** Gateway XTND REMOTE Group **					
TECW241XT	LARGE 24 STAT WIRELESS OUTPUT BRD W/ XTN LARGE 24 STAT WIRELESS OUTPUT BRD W/ XTND RADIO Supp#: W241-XT	1	EA	2,485.08	EA	2,485.08
TECRP30101C	REVERSE POLARITY SMA (F) 90 ADAPTER F/ RG58 Supp#: RP-3010-1C	1	EA	15.00	EA	15.00
TECRG58CABLE	RG58/U COAX CABLE CABLE BY FOOT GENERAL C1166 Supp#: GENERAL C1166	3	FT	1.00	FT	3.00
TECRFN10052N	N (M) ADAPTER FOR RG58 Supp#: RFN-1005-2N	1	EA	15.00	EA	15.00
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00
TECTRAB9023P	LAIRD 902-928MHZ LP BLK ANTENNA Supp#: TRAB9023P	1	EA	94.60	EA	94.60
TECONSITEINSTALL	FIELD INSTALLATION	1	EA	500.00	EA	500.00
TECSITE1248	GROUND RESISTANCE TESTING	1	EA	250.00	EA	250.00
	** Group Total **					3,437.68
	** Hammer Run Standalone Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.00	EA	995.00
TECDXRWS5XB24	24 STATION, WS5 DXI WS5 RETRO KIT W 24STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED WS5 BACK-PLATE AND MOUNTING BRACKETS, 24-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RWS5XB24M8C Supp#: DXI-RWS5XB24M8C	1	EA	7,698.09	EA	7,698.09
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	350.00	EA	350.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					10,493.09
	** Heritage E. XTND REMOTE Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.00	EA	995.00

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

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ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
TECDXIWS5RETRO	14 ½" x 27" DXI RETROFIT KIT FOR WS5/LD-16 CABINET Supp#: DXi-WS5-KIT	1	EA	708.96	EA	708.96
TECW121XT	LARGE 12 STAT WIRELESS OUTPUT BRD W/ XTN LARGE 12 STAT WIRELESS OUTPUT BRD W/ XTND RADIO Supp#: W121-XT	1	EA	1,746.53	EA	1,746.53
TECRP3000C	REVERSE POLARITY SMA (F) ADAPTER F/ RG58 Supp#: RP-3000-C	1	EA	15.00	EA	15.00
TECRG58CABLE	RG58/U COAX CABLE CABLE BY FOOT GENERAL C1166 Supp#: GENERAL C1166	3	FT	1.00	FT	3.00
TECRFN10052N	N (M) ADAPTER FOR RG58 Supp#: RFN-1005-2N	1	EA	15.00	EA	15.00
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00
TECTRAB9023P	LAIRD 902-928MHZ LP BLK ANTENNA Supp#: TRAB9023P	1	EA	94.60	EA	94.60
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
	** Group Total **					4,403.09
	** Meadows Outlot Standalone Group **					
SBXSB16SSNBT	16" X 18" X 10" STRONG BOX TOP ENTRY ENCLOSURE ONLY 16" TOP ENTRY ENCLOSURE ONLY, NO TRAY/BACKBOARD INSTALLED FOR RETROKIT INSTALLATIONS SB-16SS-NBT Supp#: SB-16SS-NBT	1	EA	2,134.3750	EA	2,134.38
SBXPED16SS	16" X 12" X 15.5" STRONGBOX PEDESTAL RISER F/ SB-16SS Supp#: PED-16SS	1	EA	603.75	EA	603.75
TECDXRPSBXB24	24 STATION, PSB DXI PSB RETRO KIT W 24STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED PSB BACK-PLATE AND MOUNTING BRACKETS, 24-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RPSBXB24M8C Supp#: DXI-RPSBXB24M8C	1	EA	7,805.98	EA	7,805.98
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	350.00	EA	350.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					12,344.11

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
	** Miners Field XTND MASTER Group **					
TECDXIWOBE	DXI 900MHZ XTND RAD KIT F/NON-SPED METAL ENC XTND RADIO KIT FOR PWM/SWM/PSB/SPEDHY/DPSB ENCLOSURES Supp#: DXi-WOB-E	1	EA	1,194.44	EA	1,194.44
TECONSITEINSTALL	FIELD INSTALLATION	1	EA	300.00	EA	300.00
	** Group Total **					1,494.44
	** John Breaux XTND REMOTE Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.00	EA	995.00
TECDXIWS5RETRO	14 ½" x 27" DXI RETROFIT KIT FOR WS5/LD-16 CABINET Supp#: DXi-WS5-KIT	1	EA	708.96	EA	708.96
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	300.00	EA	300.00
TECW121XT	LARGE 12 STAT WIRELESS OUTPUT BRD W/ XTN LARGE 12 STAT WIRELESS OUTPUT BRD W/ XTND RADIO Supp#: W121-XT	1	EA	1,746.53	EA	1,746.53
TECRP3000C	REVERSE POLARITY SMA (F) ADAPTER F/ RG58 Supp#: RP-3000-C	1	EA	15.00	EA	15.00
TECRG58CABLE	RG58/U COAX CABLE CABLE BY FOOT GENERAL C1166 Supp#: GENERAL C1166	3	FT	1.00	FT	3.00
TECRFN10052N	N (M) ADAPTER FOR RG58 Supp#: RFN-1005-2N	1	EA	15.00	EA	15.00
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00
TECPOLIS50NX	POLYPHASER N (F) X N (M) Supp#: IS-50NX-C2-MA	1	EA	141.16	EA	141.16
TECRFN10241	N (F) ADAPTER FOR RG8 Supp#: RFN-1024-1	1	EA	20.00	EA	20.00
TECRG8CABLE	CAROL RG8/ U COAX CABLE BY FOOT CAROL C1154 RG8\U Supp#: 40037	15	FT	4.00	FT	60.00
TECRFN10021N	N (M) ADAPTER FOR RG8 Supp#: RFN-1002-1N	1	EA	20.00	EA	20.00
TEC1183066	V3 DATA RADIO BACKPLATE W/SCREW Supp#: 118-3066	1	EA	6.00	EA	6.00

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00
TEG1021	1" X 21' GALVANIZED STEEL DROP PIPE T&C THREADED AND COUPLED	21	FT	5.50	FT	115.50
TECFM2	LAIRD FM2 ANTENNA BRACKET WORKS WITH FG + MFB ANTENNA. FITS UPTO 2.5IN POLE TO MOUNT ON	1	EA	98.94	EA	98.94
TECATXFG9023	25" 902-928 MHZ OMNI ANTENNA 3DB GAIN N(F) Supp#: FG9023	1	EA	450.78	EA	450.78
TECONSITEINSTALL	MAST/ANTENNA INSTALLATION	1	EA	450.00	EA	450.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
	** Group Total **					6,045.87
	** Pine St 42nd Standalone Group **					
SBXSB16SSNBT	16" X 18" X 10" STRONG BOX TOP ENTRY ENCLOSURE ONLY 16" TOP ENTRY ENCLOSURE ONLY, NO TRAY/BACKBOARD INSTALLED FOR RETROKIT INSTALLATIONS SB-16SS-NBT Supp#: SB-16SS-NBT	1	EA	2,134.3750	EA	2,134.38
SBXPED16SS	16" X 12" X 15.5" STRONGBOX PEDESTAL RISER F/ SB-16SS Supp#: PED-16SS	1	EA	603.75	EA	603.75
TECDXRPSBXB12	12 STATION, PSB DXI PSB RETRO KIT W 12STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED PSB BACK-PLATE AND MOUNTING BRACKETS, 12-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RPSBXB12M8C Supp#: DXI-RPSBXB12M8C	1	EA	7,527.92	EA	7,527.92
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	300.00	EA	300.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					12,016.05
	** Keith Helart Standalone Group **					
SBXSB16SSNBT	16" X 18" X 10" STRONG BOX TOP ENTRY ENCLOSURE ONLY 16" TOP ENTRY ENCLOSURE ONLY, NO TRAY/BACKBOARD INSTALLED FOR RETROKIT INSTALLATIONS SB-16SS-NBT Supp#: SB-16SS-NBT	1	EA	2,134.3750	EA	2,134.38
SBXPED16SS	16" X 12" X 15.5" STRONGBOX PEDESTAL RISER F/ SB-16SS Supp#: PED-16SS	1	EA	603.75	EA	603.75

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
TECDXRPSBXB24	24 STATION, PSB DXI PSB RETRO KIT W 24STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED PSB BACK-PLATE AND MOUNTING BRACKETS, 24-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RPSBXB24M8C Supp#: DXI-RPSBXB24M8C	1	EA	7,805.98	EA	7,805.98
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	300.00	EA	300.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					12,294.11
	** McKinley Park Standalone Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.00	EA	995.00
TECDXRWS5XB24	24 STATION, WS5 DXI WS5 RETRO KIT W 24STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED WS5 BACK-PLATE AND MOUNTING BRACKETS, 24-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RWS5XB24M8C Supp#: DXI-RWS5XB24M8C	1	EA	7,698.09	EA	7,698.09
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	300.00	EA	300.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					10,443.09
	** Museum Standalone Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.00	EA	995.00
TECDXRWS5XB12	12 STATION, WS5 DXI WS5 RETRO KIT W 12STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED WS5 BACK-PLATE AND MOUNTING BRACKETS, 12-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RWS5XB12M8C Supp#: DXI-RWS5XB12M8C	1	EA	7,459.53	EA	7,459.53
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	300.00	EA	300.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					10,204.53
	** Sagebrush Polino XTND MASTER Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.78	EA	995.78
TECDXRWS5XB24	24 STATION, WS5 DXI WS5 RETRO KIT W 24STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED WS5 BACK-PLATE AND MOUNTING BRACKETS, 24-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RWS5XB24M8C Supp#: DXI-RWS5XB24M8C	1	EA	7,698.09	EA	7,698.09
TECDXIWOBE	DXI 900MHZ XTND RAD KIT F/NON-SPED METAL ENC XTND RADIO KIT FOR PWM/SWM/PSB/SPEDHY/DPSB ENCLOSURES Supp#: DXi-WOB-E	1	EA	1,194.44	EA	1,194.44
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	350.00	EA	350.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					11,688.31
	** Pine St Park XTND REMOTE Group **					
TECW241XT	LARGE 24 STAT WIRELESS OUTPUT BRD W/ XTN LARGE 24 STAT WIRELESS OUTPUT BRD W/ XTND RADIO Supp#: W241-XT	1	EA	2,485.08	EA	2,485.08
TECRP3000C	REVERSE POLARITY SMA (F) ADAPTER F/ RG58 Supp#: RP-3000-C	1	EA	15.00	EA	15.00
TECRG58CABLE	RG58/U COAX CABLE CABLE BY FOOT GENERAL C1166 Supp#: GENERAL C1166	3	FT	1.00	FT	3.00
TECRFN10052N	N (M) ADAPTER FOR RG58 Supp#: RFN-1005-2N	1	EA	15.00	EA	15.00
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00
TECTRAB9023P	LAIRD 902-928MHZ LP BLK ANTENNA Supp#: TRAB9023P	1	EA	94.60	EA	94.60
TECONSITEINSTALL	FIELD INSTALLATION	1	EA	500.00	EA	500.00

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
TECSITE1248	GROUND RESISTANCE TESTING	1	EA	250.00	EA	250.00
	** Group Total **					3,437.68
	** Steel Ranch XTND REMOTE Group **					
TECW121XT	LARGE 12 STAT WIRELESS OUTPUT BRD W/ XTN LARGE 12 STAT WIRELESS OUTPUT BRD W/ XTND RADIO Supp#: W121-XT	1	EA	1,746.53	EA	1,746.53
TECRP3000C	REVERSE POLARITY SMA (F) ADAPTER F/ RG58 Supp#: RP-3000-C	1	EA	15.00	EA	15.00
TECRG58CABLE	RG58/U COAX CABLE CABLE BY FOOT GENERAL C1166 Supp#: GENERAL C1166	3	FT	1.00	FT	3.00
TECRFN10052N	N (M) ADAPTER FOR RG58 Supp#: RFN-1005-2N	1	EA	15.00	EA	15.00
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00
TECTRAB9023P	LAIRD 902-928MHZ LP BLK ANTENNA Supp#: TRAB9023P	1	EA	94.60	EA	94.60
TECONSITEINSTALL	FIELD INSTALLATION	1	EA	300.00	EA	300.00
TECSITE1248	GROUND RESISTANCE TESTING	1	EA	250.00	EA	250.00
	** Group Total **					2,499.13
	** Sundance Park Standalone Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.00	EA	995.00
TECDXRWS5XB24	24 STATION, WS5 DXI WS5 RETRO KIT W 24STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED WS5 BACK-PLATE AND MOUNTING BRACKETS, 24-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RWS5XB24M8C Supp#: DXI-RWS5XB24M8C	1	EA	7,698.09	EA	7,698.09
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	300.00	EA	300.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					10,443.09

HERITAGE LANDSCAPE SUPPLY

QUOTE

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ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
	** Via Appia 6 XTND MASTER Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.78	EA	995.78
TECDXRWS5XB12	12 STATION, WS5 DXI WS5 RETRO KIT W 12STA. WOB & CELLKIT DXI-TM RETROFIT KIT W/XBEE INSTALLED WS5 BACK-PLATE AND MOUNTING BRACKETS, 12-STATION WIRELESS OUTPUT BOARD WITH XBEE INSTALLED CELLULAR COMMUNICATION KIT.DXI-RWS5XB12M8C Supp#: DXI-RWS5XB12M8C	1	EA	7,459.53	EA	7,459.53
TECDXIWOBE	DXI 900MHZ XTND RAD KIT F/NON-SPED METAL ENC XTND RADIO KIT FOR PWM/SWM/PSB/SPEDHY/DPSB ENCLOSURES Supp#: DXi-WOB-E	1	EA	1,194.44	EA	1,194.44
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	350.00	EA	350.00
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
NS0000458917	EXT 5 YR WARRANTY TORO DXI ADDITONAL 5YEAR WARRANTY Supp#: EXT 5 YR WARRANTY	1	EA	700.00	EA	700.00
	** Group Total **					11,449.75
	** X03 - Cornerstone XTND REMOTE Group **					
SBXLD16SWNB	16" X 30" X 8" STRONG BOX WIDE LT DUTY ENCLOSURE ONLY WIDE LIGHT DUTY ENCLOSURE ONLY - NO BACKBOARD FOR RETROKITS LD-16SW-NB Supp#: LD-16SW-NB	1	EA	995.00	EA	995.00
TECDXIWS5RETRO	14 ½" x 27" DXI RETROFIT KIT FOR WS5/LD-16 CABINET Supp#: DXi-WS5-KIT	1	EA	708.96	EA	708.96
TECW361XT	LARGE 36 STAT WIRELESS OUTPUT BRD W/ XTN LARGE 36 STAT WIRELESS OUTPUT BRD W/ XTND RADIO Supp#: W361-XT	1	EA	2,753.74	EA	2,753.74
TECONSITEINSTALL	CUSTOM CONTROLLER CONFIGURATION	1	EA	300.00	EA	300.00
TECRP3000C	REVERSE POLARITY SMA (F) ADAPTER F/ RG58 Supp#: RP-3000-C	1	EA	15.00	EA	15.00
TECRG58CABLE	RG58/U COAX CABLE CABLE BY FOOT GENERAL C1166 Supp#: GENERAL C1166	3	FT	1.00	FT	3.00
TECRFN10052N	N (M) ADAPTER FOR RG58 Supp#: RFN-1005-2N	1	EA	15.00	EA	15.00
TECONSITEINSTALL	CUSTOM CABLE ASSEMBLY	1	EA	75.00	EA	75.00

HERITAGE LANDSCAPE SUPPLY

HERITAGE LANDSCAPE SUPPLY

QUOTE

0025602997

ITEM	DESCRIPTION	QTY	UOM	PRICE	UOM	AMOUNT
TECSITE1248	CPS SITE OPTIMIZATION 12-48 STATION	1	EA	750.00	EA	750.00
	** Group Total **					5,615.70
	Subtotal					247,108.50
	FUEL CHARGE					30.00

This quotation is good for 10 days from the date it was issued. Any applicable sales taxes shown are only estimates. We guarantee unit prices only and CPS is not responsible for conditions beyond our control including, but not limited to, manufacturers' shipping schedules. Shipping dates are approximate. Part numbers denoted “N/S” are Non-Stock items and will require additional lead time. Delivered orders may be subject to additional delivery fees.”

HERITAGE LANDSCAPE SUPPLY

Payment Terms:
NET 30 DAYS

Total: **$247,138.50**

Printed: 05/12/26 14:32:59

City of Louisville
COLORADO • SINCE 1878

Sole Source Request

To: Department Director ($5k-$10k)

CC: Finance Director (Threshold $10k-$50k), City Manager (Threshold $50k-$100k)

From: Chris Davis, Parks Superintendent

Date: 05/19/2026

The Parks Department would like to request approval for a sole source purchase order with Heritage Landscape Supply which is formally know as Colorado Pipe Supply (CPS) for labor cost to install the new controllers. Attached is the sole source from Toro to Heritage and the quote with the labor costs highlighted.

Please provide additional details such as but not limited to, the vendor, description, amount, and if budgeted.

The City of Louisville currently utilizes the Toro Sentinel DXi smart irrigation controller platform throughout the park irrigation system to provide centralized irrigation management, water conservation, system monitoring, and operational consistency across park sites. CPS is the sole authorized vendor and provider for this product, including system configuration, technical support, and integration with the City's existing irrigation infrastructure. We are budgeted 208k year to date and the labor for 2026 is:

$30,000 for 200 labor hours with a contingency for misc. material for $6,000.00 and total of $36,000.00.

Staff is requesting this sole source for the following reasons:

The City is requesting approval for CPS to procure and coordinate installation through their approved contractor for the Toro Sentinel DXi controllers, associated electrical components, and secure locked irrigation field cabinets. Utilizing CPS and their approved installer ensures all equipment is installed to manufacturer specifications and system requirements, maintains compatibility with the City's existing irrigation network, protects warranty coverage, and ensures reliable long-term operation and performance of the irrigation system.

APPROVALS

_____
Department Director

Ryder Bailey, CPA 6/4/26
Finance Director

_____
City Manager

- Purchases of **$5,000 - $9,999.99** require Department Director approval.
- Purchases of **$10,000 - $49,999.99** require Finance Director approval.
- Purchases **above $50,000** require City Manager approval.
- Purchases **above $100,000** require City Council approval.

City of Louisville
COLORADO • SINCE 1878

Sole Source Request

To: Department Director ($5k-$10k)

CC: Finance Director (Threshold $10k-$50k), City Manager (Threshold $50k-$100k), City Council ($100k+)

From: Chris Davis, Parks Superintendent

Date: 06/25/2026

The **Parks Department** would like to request approval for a sole source purchase order with **Heritage Landscape Supply Group / CPS Distributors.** The quote is attached for reference.

Please provide additional details such as but not limited to, the vendor, description, amount, and if budgeted.

Staff is requesting this sole source for the following reasons:

The City of Louisville's irrigation infrastructure is predominantly comprised of Toro irrigation controllers and related equipment. As many of the existing controllers have reached or are nearing the end of their useful service life, the Parks Division is continuing its transition to modern smart irrigation technology to improve water management, system reliability, remote monitoring capabilities, and operational efficiency.

To maintain system compatibility and consistency across the City's existing irrigation network, the Parks Division is requesting approval to sole source the purchase of Toro DXi irrigation controllers, cellular communication devices, and all associated components from Heritage Landscape Supply Group / CPS Distributors. Heritage Landscape Supply Group, through CPS Distributors, is the exclusive authorized distributor of Toro DXi irrigation controllers and related components within the State of Colorado.

This controller conversion project was initiated in 2024, and the City previously purchased Toro DXi controllers and associated equipment from Heritage Landscape Supply Group / CPS Distributors as part of the first phase of implementation. Continuing to procure these products through the sole authorized distributor ensures compatibility with the City's existing irrigation infrastructure, maintains manufacturer support and warranty coverage, and provides consistency in installation, programming, training, maintenance, and future expansion of the system.

The current phase of the project includes the purchase of 30 Toro DXi irrigation controllers and associated components. The total project cost is $247,138.50. Of that amount, $30,000 is allocated for labor and $6,000 is allocated for miscellaneous project expenses, both of which have already received sole source approval as part of this project. The remaining equipment purchase amount for the controllers, communications devices, and associated components is $211,138.50.

Based on the exclusive distribution rights held by Heritage Landscape Supply Group / CPS Distributors for Toro DXi products in Colorado, no other vendor can provide the required equipment. Therefore, sole source procurement is requested in the amount of $211,138.50 for the continued implementation of the City's Toro DXi irrigation controller conversion project plus noted funds above for installation expenses.

APPROVALS

_____ _____

Christopher Leh, Mayor

_____

City Clerk (attest)

- Purchases of **$5,000 - $9,999.99** require Department Director approval.
- Purchases of **$10,000 - $49,999.99** require Finance Director approval.
- Purchases **above $50,000** require City Manager approval.
- Purchases **above $100,000** require City Council approval.

City of Louisville
COLORADO • SINCE 1878

City Council Communication
Agenda Item 5.B.

Subject: Resolution No. 70, Series 2026 — A Resolution Authorizing the Purchase of Replacement Cameras and Video Management Servers from Dell Technologies in an Amount Not to Exceed $92,500

Date: August 4, 2026

Prepared By: Paulina Bennett, IT Director

Presented By: Paulina Bennett, IT Director

Summary:

Presented for Council approval is a request for authorization to purchase replacement cameras and video management servers as part of the City's three-year Camera & DVR Replacement Capital Improvement Project.

The approved 2026 project budget is $32,500. Due to unprecedented increases in server memory and storage costs across the technology industry, staff is requesting an additional $60,000, increasing the total project budget to $92,500. This project is currently in year two (2) of a three (3) year Capital Improvement Project (CIP). This project is a like-for-like replacement of existing hardware and includes no new hardware or equipment. The goal of this project is to replace outdated hardware that becomes a cybersecurity risk if not replaced. All servers and equipment throughout the city falls under a replacement schedule and this equipment has met the end of its usable life. This equipment is not used to store or capture personally identifiable information ("PII").

Background / Prior Discussions:

The Camera & DVR Replacement Project is a three-year Capital Improvement Project (2025–2027) that modernizes the City's existing video infrastructure. This project is only to replace existing hardware and there will be no new additions added.

The project replaces aging, end-of-life cameras and Milestone video management servers that store and stream footage from cameras located throughout City facilities. This project does not expand the City's camera footprint or add new camera locations; it only replaces existing equipment that has reached the end of its useful life. This particular replacement will be for the replacement of 2 servers and roughly 15 cameras at the Louisville Rec Center.

During the 2025 phase of the project, the City replaced three (3) Milestone servers for

$23,299.54. As staff prepared for the 2026 phase, procurement revealed significant increases in the cost of enterprise server hardware driven by worldwide demand for high-performance computing components, particularly memory and storage. These market conditions have substantially impacted technology replacement projects across the industry. Staff has previously informed Council that technology infrastructure costs are increasing well beyond historical assumptions and are expected to continue affecting future capital projects. IT has requested increased funding for the 2027 phase of the project during the 2027-2028 budget process in anticipation of the market conditions continuing to impact this project.

The City maintains approximately 200 cameras located throughout municipal facilities and remote sites. These cameras support a variety of operational, safety, and security functions, including protecting critical infrastructure, safeguarding public assets, monitoring facilities where cash transactions occur, enhancing public safety in recreation facilities, securing water and wastewater treatment facilities, monitoring remote reservoirs and utility sites that are not routinely staffed, and assisting with investigations involving theft, vandalism, accidents, or other incidents.

The City's camera infrastructure is also designed to meet Colorado's Municipal Records Retention Schedule, which requires security recordings and images from public areas of municipal facilities to be retained for a minimum of 30 days. As a result, the City's Milestone servers must be appropriately sized with sufficient storage capacity to retain approximately 30 days of video.

Development Proposal:
NA

Analysis:
Information Technology completed a market analysis to identify the most cost-effective solution available. Staff evaluated pricing, alternative hardware configurations, and refurbished equipment where appropriate to minimize costs while ensuring the reliability, performance, and storage capacity required to support the City's camera system. Because the City is required to retain security recordings for a minimum of 30 days, storage capacity cannot be reduced below the amount necessary to meet this legal retention requirement.

Despite these efforts, the cost of enterprise-grade servers has increased dramatically from ~$7,900.00 per server to $33,522.90 for roughly the same server, more than a 400% increase. The current procurement for two replacement Milestone servers and associated camera equipment totals $67,045.80, significantly exceeding historical pricing due to extraordinary increases in the cost of enterprise memory and storage components. Staff evaluated available options and will stay on the lookout for availability on a refurbished option or an older model which could reduce the price for the servers. Additionally, while this request is based on the attached quote, staff may determine a more cost-effective alternative and move forward with that option.

This request is consistent with the technology infrastructure cost escalation memorandum presented to Council in June 2026, which identified unprecedented increases in server, storage, and workstation pricing affecting multiple planned replacement projects throughout the City's Capital Improvement Program.

Council Work Plan:
NA

Fiscal Impact:
Partially Budgeted - funds / resources for this item have been partially budgeted, but additional funding will be required from the fund balance.

The 2026 Camera & DVR Replacement Project was approved with a Capital Improvement Program budget of **$**32,500.

Approval of this request will represent a $60,000 increase in the amount budgeted, increasing the total project cost to $92,500, to accommodate documented increases in enterprise server hardware costs. If approved, this increase will be included in a 2026 budget amendment presented to City Council at a later date.

The requested increase is attributable to extraordinary market conditions affecting enterprise technology infrastructure, particularly server memory and storage pricing, rather than an expansion of project scope. Staff has completed market analysis to ensure the City is obtaining the best available value. Additionally, while this request is based on the attached quote, staff may determine a more cost-effective alternative and move forward with that option.

Alternatives:

Staff evaluated several alternatives to reduce the overall project cost before requesting additinal funds.

- **Refurbished Servers:** Staff investigated purchasing refurbished enterprise servers. While refurbished equipment can reduce costs, availability of enterprise-grade servers with the required specifications is extremely limited. Procuring two matching refurbished servers is unlikely, and even refurbished systems are currently priced **200–300% higher** than comparable servers purchased just a few years ago, so the cost would still be significantly increased.
- **Previous Generation Servers:** Staff also evaluated purchasing unused servers from a previous hardware generation. If suitable inventory is available at the time of purchase, staff intends to utilize this option, which is expected to reduce the project cost by approximately $10,000–$20,000. However, availability of these systems is limited and cannot be guaranteed.
- **Deferring the Project:** Delaying the project would postpone replacement of end-of-life surveillance infrastructure, increasing the risk of hardware failures, reduced

system reliability, and potential disruption to the City's ability to retain security footage in accordance with Colorado's required 30-day records retention schedule.

Recommendation:

Staff recommends approval of Resolution No. 70, Series 2026 for the purchase of replacement cameras and video management servers from Dell Technologies in the amount of $92,500.

Attachments:

1. Resolution No. 70, Series 2026
2. Records Retention Policy - Schedule 105
3. Rec DVR Quote Full PREMIER
4. CIP Form Camera & DVR Replacement

RESOLUTION NO. 70
SERIES 2026

A RESOLUTION AUTHORIZING THE PURCHASE OF REPLACEMENT CAMERAS AND VIDEO MANAGEMENT SERVERS FROM DELL TECHNOLOGIES IN AN AMOUNT NOT TO EXCEED $92,500

WHEREAS, the Camera & DVR Replacement Project is a three-year Capital Improvement Project (2025–2027) that modernizes the City's existing video surveillance infrastructure by replacing existing hardware; and

WHEREAS, the not-to-exceed cost of $92,500 is consistent with the technology infrastructure cost escalation memorandum presented to Council in June 2026, which identified unprecedented increases in server, storage, and workstation pricing affecting multiple planned replacement projects throughout the City's Capital Improvement Program; and

WHEREAS, if this purchase is approved, the increased cost of approximately $60,000 will be included in a 2026 budget amendment to be considered by the City Council at a future meeting; and

WHEREAS, the City Council has considered this purchase request and the increased cost, finds the modernization of the City's existing video surveillance infrastructure is necessary to the public health and safety of the City and its residents, and by this resolution desires to authorize the same.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby authorizes the purchase of replacement cameras and video management servers from Dell Technologies in an amount not to exceed $92,500.

PASSED AND ADOPTED this 4th day of August, 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

SCHEDULE NO. 105

RISK MANAGEMENT RECORDS

General Description: Records relating to risk management functions.

No record may be destroyed under this Retention Schedule if it is pertinent to any current, pending or anticipated investigation, audit or legal proceeding. ***The minimum retention periods specified in this schedule apply to the information contained within the record copy, regardless of the physical format of the record copy (paper, microfilm, electronic).*** Each municipality must decide on the physical format for each type of record, ensuring authenticity, readability and accessibility for the entire retention period. **Duplicate Copies:** Retain duplicated copies until no longer needed but not longer than the record copy.

105.005 ADA COMPLAINTS

Retention: 5 years after response or action or 5 years if no response or action is required*<Added 8/24>*

105.10 INSURANCE RECORDS

A. Certificates of Insurance

Documentation provided by insurance providers as proof of insurance coverage for specific purposes.

Retention: 6 years after expiration or completion of insured work or action, whichever is later

B. Claim Records

Records of claims for damages by or against the municipality.

1. Claim Records

Statements of claims and completed claim forms.

Retention: 6 years after closure of claim

2. Claim Reports

Summary reports regarding losses and handling and disposition of claims.

Retention: 6 years

C. Insurance Policies

Documents issued by the insurance company to outline liability, theft, fire, accident, property damage and other coverage and risk control standards.

Retention: 6 years after expiration of policy, or after all claims made under policy are settled, whichever is later

105.20 SECURITY RECORDS - MUNICIPAL FACILITIES

A. Automated or Manual Access Control Records

Records generated by automated systems to show entry and exit from secured areas by authorized persons using an electronic badge or similar system to gain entry or exit, or records generated manually to document entry and exit to and from secured areas (i.e., entry and exit log sheets, etc.).

Retention: 2 years

B. Recordings and Images Related to Security - Public Areas

Video or audio recordings, biometric data or images from security or surveillance cameras, scanning systems or audio recording systems in public areas of municipal buildings or grounds. Security setups vary and recordings may be continuous, stop-frame or random use. Recordings or images may capture date and time indexing information.

Retention: 30 days

Cross References

Agreements and contracts - 40.030, Agreements and Contracts
Bonds - 90.040, Bonds - Public Officials
Claims - 80.010, Claims
Correspondence and general documentation - 40.100, Correspondence and General Documentation
Election areas surveillance recordings - 15.180, Surveillance Recordings - Election Areas Emergency planning records - 100.040, Emergency Planning and Response
Employee insurance claims - 90.030.C, Employee Insurance Claim Records
Litigation - Schedule 80, Litigation and Legal Counsel Records
Policies and procedures - 40.220, Policies and Procedures Documentation
Recordings in secured police areas - 100.080.Z, Video and Audio Recordings - Secured Police Facilities
Reports - 40.290, Reports
Rules, regulations and standards - 40.310, Rules, Regulations and Standards
Unemployment insurance - 90.190, Unemployment Insurance
Workers' compensation - 90.220, Workers' Compensation

DELL Technologies

A quote for your consideration.

To retrieve this eQuote online, log in to your **Dell Premier Page** and search for your eQuote number under “Quotes” in the top menu bar.

Quote No.:	**3000204346368.1**
Total (USD):	**$67,045.80**
eQuote Name:	Rec DVRs
eQuote Creator:	dwooldridge@louisvilleco.gov
Quoted On:	Jun. 29, 2026
Expires By:	Jul. 29, 2026
Company Name:	CITY OF LOUISVILLE
Customer Number:	2051384
Phone:	3033354569
Premier Page Name:	Louisville, CO
Authorized Buyer:	dwooldridge@louisvilleco.gov
Contract Name:	Standard Governing Terms in Supplier's Quote
Contract Code:	C000000006563

Billing Address:
CITY OF LOUISVILLE
DEPT IT
749 MAIN ST
LOUISVILLE , CO 80027-1829

Pricing Summary

	Qty	Unit Price	Discounted Unit Price	Subtotal
PowerEdge R7715 Smart Selection	**2**	**$114,134.55**	**$33,522.90**	**$67,045.80**
Premier discount		- $80,611.65		
			Subtotal:	**$67,045.80**
			Shipping:	**$0.00**
			Estimated Tax:	**$0.00**
			Total (USD):	**$67,045.80**

Shipping Address:
CITY OF LOUISVILLE
TECHNOLOGY INFORMATION
749 MAIN ST
LOUISVILLE , CO 80027-1829

Shipping Method:
FREE Standard Delivery

Product Details



	Qty	Unit Price	Subtotal
PowerEdge R7715 Smart Selection (210-BNRJ) Order Code: gl_promo_per7715_1	**2**	**$33,522.90**	**$67,045.80**

Module	Description	Product Code	SKU	Qty
Base	PowerEdge R7715 Server	G15LTG9	210-BNRJ	1
Chassis Configuration	3.5" Chassis with up to 12 SAS3/SATA Drives, Adapter PERC12	G4CU3VF	321-BLZK	1
Processor	AMD EPYC 9135 3.65GHz, 16C/32T, 64 Cache (200W) DDR5-6400	GVFP4US	338-CRCJ	1
Processor Thermal Configuration	Heatsink for 1 CPU Configuration (CPU less than or equal to 240W)	GS9XW40	412-BBLD	1
Memory Configuration Type	Performance Optimized	G6VDIHE	370-AHLL	1
Memory DIMM Type and Speed	6400MT/s RDIMMs	GL7EXYA	370-BCCX	1
Memory Capacity	(2) 32GB RDIMM, 6400MT/s, Dual Rank	G3XFPTJ	370-BCCY	2
RAID Configuration	C1, No RAID for HDDs/SSDs (Mixed Drive Types Allowed)	G8510ID	780-BCDI	1
RAID/Internal Storage Controllers	PERC H365i Adapter Full Height	GIZE6KN	405-BBDB	1
Hard Drives	(10) 8TB Hard Drive SAS ISE 12Gbps 7.2K 512e 3.5in Hot-Plug, AG Drive	G3J90AM	161-BCPX	10
BIOS and Advanced System Configuration Settings	Power Saving BIOS Setting	GEARJ9V	384-BBBH	1
Advanced System Configurations	UEFI BIOS Boot Mode with GPT Partition	GSFTG4Y	800-BBDM	1
Advanced System Configurations	No Energy Star	G9IONL3	387-BBEY	1
Fans	PowerEdge 2U High Performance Platinum Fan	GBW8F3L	384-BDTQ	1
Power Supply	Dual, Fault Tolerant Redundant(1+1) Hot-Plug MHS PowerSupply,1100W MM(100-240Vac)Titanium	GY3SPT4	450-BDTF	1
Power Cords	(2) C13 to C14, PDU Style, 12 AMP, 6.5 Feet (2m) Power Cord, North America	GC1DFVJ	492-BBDI	2
PCIe Riser	Riser Config 2, 2 x16 FH Slots (Gen5), 2nd OCP	G8EAURQ	330-BDDJ	1
Motherboard	PowerEdge R7715 Motherboard V2	GCPQ8RD	329-BLHZ	1
OCP 3.0 Network Adapters	Broadcom 5719 Quad Port 1GbE Base-T Adapter, OCP 3.0 NIC +Sec	G0X1RVQ	540-BFPP	1
OCP 3.0 Accessories	1 OCP - 1 Rear Blank, No Cable	GIYJDV5	470-BCHM	1
Additional Network Cards	NVIDIA ConnectX-6 Lx Dual Port 25G SFP28 Adapter, PCIe Full Height +Sec	GV08D7U	540-BFWN	1
DPU Cables	No DPUs Cable Required, No DPU	GV6CUGB	470-AEYU	1
GPU/FPGA/Acceleration Cables	No Cables Required, No GPU Blanks	G0PNZWL	470-AEYU	1
Bezel	PowerEdge 2U Standard Bezel	GX2HMOF	321-BLFN,325-BFWZ	1

Boot Optimized Storage Cards	BOSS-N1 controller card + with 2 M.2 480GB (RAID 1) (22x80) Rear	G2ITOYM	403-BDMM	1
Optics & Cables for Network Cards	(2) SFP+ SR Optic, 10GbE, for all SFP+ ports except high temp validation warning cards	G0FVJIE	407-BCBE	2
Operating System	Windows Server 2025 Standard,16CORE,FI,No Med,No CAL, Multi Language	G841MTY	634-CVGB	1
OS Media Kits	Windows Server 2025 Standard,16CORE,DF Recovery Image, Multi Lang, (Downgrade not included)	GDKFEX5	528-DHTW	1
Embedded Systems Management	iDRAC10, Enterprise 17G	GN3OR80	634-CSHS,634-CSHT,634-CSHY	1
Embedded Systems Management	Dell Connectivity Client - Disabled 17G	G2QT39O	379-BFXT,634-CZRP	1
Dell Secure Onboarding	Dell Secure Onboarding Client 17G - Disabled	GEZIN59	634-CZWJ	1
KVM/Quick Sync	Blank Left Ear Module	GRDXJM0	350-BCYL	1
Password	iDRAC Factory Generated Password for OCP cards	G5HZBFJ	379-BETG	1
Rack Rails	ReadyRails Sliding Rails with Cable Management Arm	GIY2BMN	770-BDRQ,770-BECC	1
Shipping	PowerEdge R7715 Shipping	GU9NEZH	340-DNSW,340-DRYL	1
Shipping Material	PowerEdge 2U Shipping Material	G6KFYLA	340-DPDX	1
Regulatory	PowerEdge CCC, CE Label Marking	GRX73QO	389-FHJC	1
ECCN	Decline Selection	GRO1P6G	817-BBBP	1
Service	7 Years Prosupport Next Business Day Onsite Service	G5A7YS1	713-2384,713-2411,713-2421,989-3439	1
Deployment Services	No Installation	NOINSTL	900-9997	1

Need Help?

We're here to answer any of your Order Support questions. Contact Us.

CONNECT WITH DELL:

Terms of Sale

This Quote will, if Customer issues a purchase order for the quoted items that is accepted by Supplier, constitute a contract between the entity issuing this Quote ("Supplier") and the entity to whom this Quote was issued ("Customer"). Unless otherwise stated herein, pricing is valid for Fourteen days from the date of this Quote. All products, pricing, and other information are based on the latest information available and are subject to change for any reason, including but not limited to tariffs imposed by government authorities, shortages in materials or resources, increase in the cost of manufacturing or other factors beyond Supplier's reasonable control. If such changes occur, pricing may be adjusted or purchase orders may be cancelled by Supplier, even after an order has been placed. Supplier also reserves the right to cancel this Quote and Customer purchase orders arising from pricing errors and/or customer changes to Supplier's planned delivery date.Taxes and/or freight charges listed on this Quote are only estimates. The final amounts shall be stated on the relevant invoice. Additional freight charges will be applied if Customer requests expedited shipping. Please indicate any tax exemption status on your purchase order and send your tax exemption certificate to Tax_Department@dell.com or ARSalesTax@emc.com, as applicable.

Governing Terms: This Quote is subject to: (a) a separate written agreement between Customer or Customer's affiliate and Supplier or a Supplier´s affiliate to the extent that it expressly applies to the products and/or services in this Quote or, to the extent there is no such agreement, to the applicable set of Dell's Terms of Sale (available at www.dell.com/terms or www.dell.com/oemterms), or for cloud/as-a-Service offerings, the applicable cloud terms of service (identified on the Offer Specific Terms referenced below); and (b) the terms referenced herein (collectively, the "Governing Terms"). Different Governing Terms may apply to different products and services on this Quote. The Governing Terms apply to the exclusion of all terms and conditions incorporated in or referred to in any documentation submitted by Customer to Supplier.

Supplier Software Licenses and Services Descriptions: Customer's use of any Supplier software is subject to the license terms accompanying the software, or in the absence of accompanying terms, the applicable terms posted on www.Dell.com/eula. Descriptions and terms for Supplier-branded standard services are stated at www.dell.com/servicecontracts/global or for certain infrastructure products at www.dellemc.com/en-us/customer-services/product-warranty-and-service-descriptions.htm.

Offer-Specific, Third Party and Program Specific Terms: Customer's use of third-party software is subject to the license terms that accompany the software. Certain Supplier-branded and third-party products and services listed on this Quote are subject to additional, specific terms stated on www.dell.com/offeringspecificterms ("Offer Specific Terms").

In case of Resale only: Should Customer procure any products or services for resale, whether on standalone basis or as part of a solution, Customer shall include the applicable software license terms, services terms, and/or offer-specific terms in a written agreement with the end-user and provide written evidence of doing so upon receipt of request from Supplier.

In case of Financing only: If Customer intends to enter into a financing arrangement ("Financing Agreement") for the products and/or services on this Quote with Dell Financial Services LLC or other funding source pre-approved by Supplier ("FS"), Customer may issue its purchase order to Supplier or to FS. If issued to FS, Supplier will fulfill and invoice FS upon confirmation that: (a) FS intends to enter into a Financing Agreement with Customer for this order; and (b) FS agrees to procure these items from Supplier. Notwithstanding the Financing Agreement, Customer's use (and Customer's resale of and the end-user's use) of these items in the order is subject to the applicable governing agreement between Customer and Supplier, except that title shall transfer from Supplier to FS instead of to Customer. If FS notifies Supplier after shipment that Customer is no longer pursuing a Financing Agreement for these items, or if Customer fails to enter into such Financing Agreement within 120 days after shipment by Supplier, Customer shall promptly pay the Supplier invoice amounts directly to Supplier.

Customer represents that this transaction does not involve: (a) use of U.S. Government funds; (b) use by or resale to the U.S. Government; or (c) maintenance and support of the product(s) listed in this document within classified spaces. Customer further represents that this transaction does not require Supplier's compliance with any statute, regulation or information technology standard applicable to a U.S. Government procurement.

For certain products shipped to end users in California, a State Environmental Fee will be applied to Customer's invoice. Supplier encourages customers to dispose of electronic equipment properly.

Electronically linked terms and descriptions are available in hard copy upon request.

Dell Marketing LP. U.S. only. Dell Marketing LP. is located at One Dell Way, Mail Stop 8129, Round Rock, TX 78682

Six-Year (2025-2030) Capital Improvement Plan
Request Form for Capital Equipment or Capital Project

Identification and Funding Source

Is this a new or existing CIP?	New	Is this grant funded?	No
Project Name:	Camera & DVR Replacement	Submitted By:	Information Technol
Version:	1/1/1900		

Program(s):	Sub-Program(s):	Funding Source(s):	Percent
Admin & Support Services	Information Technology	Capital Projects Fund	100%
	Facilities Maintenance		
			100%

Estimated Cash Flow Schedule

Equipment or Project Costs	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030	Six-Year Total
Land Acquisition	-	-	-	-	-	-	-
Design & Engineering	-	-	-	-	-	-	-
Other Prof Services	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-
Other Equip/Project Costs	-	-	-	-	-	-	-
Capital Equipment Purch	25,500	30,000	50,000	-	-	-	105,500
Contingency	2,000	2,500	5,500	-	-	-	10,000
Total Costs (Gross)	27,500	32,500	55,500	-	-	-	115,500
Grants or Other Off-Setting Revenue	-	-	-	-	-	-	-
Impact to Annual Maint/Operating Costs	-	-	-	-	-	-	-

Description and Justification



milestone

Description & Proposed Funding:

Equipment/Project Description:

Upgrade and modernize the city's surveillance system by replacing outdated cameras and rightsizing the milestone servers for storing and streaming live footage. This initiative focuses solely on the replacement of existing cameras and servers, and does not include any new cameras.

Project revenue or grants that will support the project and the impacts to the operating budget:

NA

Reference to Plan being implemented (i.e., Master Plan):

Critical Core Infrastructure

Justification and Alignment with Program/Sub-Program Goals & Key Performance Indicators:

The city has approximately 30 cameras and 2 milestone servers that have reached end of life and require replacement. Failure to upgrade our infrastructure will result in camera malfunctions and inadequate storage capacity on the servers. Presently, the servers are insufficient in size. It is imperative that we replace and rightsize the servers to accommodate additional cameras and comply with our footage retention standards. This proactive approach will ensure the reliability and effectiveness of our surveillance system going forward. IT Staff's sub-program goals are to maintain a secure and connected network ensuring all users have appropriate technological resources to effectively perform their jobs.

Department Priority Ranking:	High	Request Number:	(Finance Use)

CIP Checklist	Yes/No
Has a cost/benefit analysis been completed?	
Has any preliminary scoping work or design been completed?	
Have site conditions been analyzed for potential cost impacts?	
Has stakeholder input been factored into the design?	
Have other departments with capital expertise been consulted on the design and cost estimate?	
Has data from past projects been considered in developing the cost estimate?	
Have future demands been factored into the design?	
Has inflation been reflected in the cost estimate?	
When will construction occur?	
Has this project been discussed with other departments whose workload could be impacted?	
Have there been any changes to the design requirements that could significantly affect the cost estimate and the City's decision to pursue the project?	
Level of Confidence in Cost Estimate	0

High Level of Confidence = 50+	Contingency = 20%
Medium Level of Confidence = 30-50	Contingency = 30%
Low Level of Confidence = 0-30	Contigency = 50%

Notes
If yes, additional contingency may not be required and has already been built into the budget
If no, consult with other departments before submitting request
If yes, discussion may be needed to decide if project should be pursued further

City of Louisville
COLORADO • SINCE 1878

City Council Communication
Agenda Item 5.C.

Subject: Resolution No. 71, Series 2026 — A Resolution Declaring the Intent of the City Council of the City of Louisville, Colorado to Issue Multifamily Housing Revenue Bonds and Authorizing Carryforward Allocation

Date: August 4, 2026

Prepared By: Diana Langley, City Manager

Presented By: Diana Langley, City Manager

Summary:
The Colorado Department of Local Affairs (DOLA) oversees the Private Activity Bond (PAB) program, which funds privately developed projects. Municipalities or housing authorities issue the bonds, but have no obligation to repay the investors that purchase the bonds. The City's 2026 PAB volume cap, as determined by DOLA, is $1,355,091.

By September 15th of each year, the City must decide whether to issue bonds for a specific project or projects, assign the City's volume cap to another government entity such as Boulder County, assign the City's volume cap to another issuer such as the Colorado Housing Finance Authority (CHFA), or relinquish its volume cap to the statewide balance for use on other projects in Colorado.

Eligible activities include:

- New construction or acquisition/rehabilitation of housing for low- to moderate-income people.
- Single-family mortgage revenue bonds sold by local and state agencies for mortgages for low- and moderate-income people
- Mortgage Credit Certificates which is a bond allocation for qualified homeowners
- Manufacturing "small issue" industrial development bonds (not to exceed $10,000,000) for construction of manufacturing facilities that produce goods

Staff recommends carrying forward the City's 2026 allocation of PAB to support new construction of housing for low- to moderate-income people.

Background / Prior Discussions:
A Private Activity Bond (PAB) is a special class of tax-exempt government bond used to finance private or non-profit projects that offer public benefits, primarily affordable housing and local manufacturing. DOLA is the administrator of the PAB volume cap.

The investors of these bonds are exempt from federal income tax on the interest earned, making them an attractive investment. The project pays back the loan and investors get paid with interest.

Eligible activities include:

- New construction or acquisition/rehabilitation of housing for low- to moderate-income people.
- Single-family mortgage revenue bonds sold by local and state agencies for mortgages for low- and moderate-income people
- Mortgage Credit Certificates which is a bond allocation for qualified homeowners
- Manufacturing "small issue" industrial development bonds (not to exceed $10,000,000) for construction of manufacturing facilities that produce goods

Colorado law requires that 50 percent of the volume cap goes to statewide authorities including CHFA (48 percent) and the Colorado Agricultural Development Authority (2 percent). Up to 50 percent of the remaining cap is allocated to local issuers (cities and counties - 47 percent) with a minimum population of 19,048. Any remaining volume cap (3 percent) is retained by DOLA for future allocations from a statewide pool. Due to changes in population, volume cap allocated to issuers can change annually.

Historically, Louisville has received the following allocations.

Year	PAB Volume Cap	Agency Assignment
2017	$1,011,200	Housing Authority of the City of Fort Collins, DBA Housing Catalyst
2018	$1,083,758	Boulder County Housing Authority
2019	$1,126,125	Boulder County Housing Authority
2020	$1,124,637	Boulder County Housing Authority
2021	$1,153,015	Boulder County Housing Authority
2022	$1,170,276	Housing Authority of City of Boulder, DBA Boulder Housing Partners
2023	$1,256,728	Boulder County Housing Authority

2024	$1,220,196	Boulder County Housing Authority
2025	$1,277,471	Boulder County Housing Authority

Development Proposal:
N/A

Analysis:
The City's 2026 PAB volume cap is $1,355,091.

By September 15th of each year, the City must decide whether to issue bonds for a specific project or projects, assign the City's volume cap to another government entity such as Boulder County, assign the City's volume cap to another issuer such as the Colorado Housing Finance Authority (CHFA), relinquish its volume cap to the statewide balance for use on other projects in Colorado, or carryforward the City's volume cap for up to the next three years in order to accumulate a sufficient quantity of bond cap to issue for a qualified project. To carryforward the volume cap, a specific project must be identified. If the specified project fails, the bonds may be issued for another similar project.

Staff recommends carrying forward the City's 2026 PAB volume cap for new construction of housing for low- to moderate-income people. The specific project proposed for consideration at this time is Koelbel and Company's proposed affordable housing project in the Centennial Valley consisting of approximately 100 deed-restricted, permanently affordable rental housing units. Staff has discussed this opportunity briefly with the developer and there is general interest.

To request carryforward of the City's 2026 PAB volume, the following documentation must be submitted to DOLA:

- A letter containing the following information:
    - The name of the issuing authority;
    - The mailing address of the issuing authority;
    - The name and title of the official of the issuing authority and the name and address of the legal counsel of said authority to whom notices should be sent and from whom information may be obtained;
    - The principal amount of the bonds proposed to be issued;
    - The nature and the location or purpose of the project;
    - The initial owner, user, or beneficiary of the project;
    - The classification of the carryforward purpose under section 146 (f) (5) of the IRS code;
    - Any information required by section 146 (f) (2) of the IRS code.
- A written, preliminary opinion of bond counsel, addressed to the department

(DOLA), that the allocation constitutes private activity bonds as defined in section 141 of the IRS code, stating the amount of such bonds and stating that the issuing authority is authorized under the laws and constitution of the state to issue such bonds. The written opinion shall also cite the authority upon which it is based.

- A copy of the fully executed inducement resolution of the issuing authority relating to the project, certified as a true and correct copy by an authorized officer of the issuing authority.
- Any information regarding the project to be financed with the proceeds of the bonds which the issuing authority may want to provide to the department or which the department may request. (This can be very general)
- A certification signed by both an official of the issuing authority responsible for the supervision of the issuance of the bonds and, if applicable, a representative of the person or entity constructing, acquiring, or rehabilitating the project stating that they will proceed with diligence to insure the issuance of the bonds within the carryforward period provided by section 146 (f) of the IRS code.
- A written, preliminary opinion from bond counsel that the carryforward purpose qualifies for carryforward treatment under section 146 (f) of the code. (This can be combined with #2 into a single letter)

Staff worked with City Attorney Kelly and Bond Counsel Kim Crawford to prepare the necessary documents.

Council Work Plan:
This supports the City Council's priority to create affordable housing in Louisville.

Fiscal Impact:
The Private Activity Bond is "private" in nature and not for governmental use. There is no cost associated with assigning or carrying over the bonds.

Alternatives:
1. Do not carryforward the City's 2026 PAB volume cap and direct staff to transfer the funds to another government entity, another issuer, or relinquish the funds to the statewide balance.
2. Identify another project for use of the PAB's.

Recommendation:
Adopt a resolution declaring the intent of the City Council of the City of Louisville, Colorado to issue multifamily housing revenue bonds and authorizing carryforward allocation.

Attachments:

1. Resolution No. 71, Series 2026
2. 2026 Louisville Carryforward - Notice to DOLA
3. Preliminary Bond Opinion-PABS 2026
4. Louisville Diligence Certificate (2026 - Carryforward)
5. 2026 Louisville Carryforward - Certificate of Mayor
6. PAB Letter-2026-City of Louisville

RESOLUTION NO. 71
SERIES 2026

A RESOLUTION DECLARING THE INTENT OF THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO TO ISSUE MULTIFAMILY HOUSING REVENUE BONDS AND AUTHORIZING CARRYFORWARD ALLOCATION

WHEREAS, the City of Louisville, Colorado, a body corporate and politic and political subdivision of the State of Colorado (the "City"), is authorized and empowered by the laws of the State, including the provisions of the County and Municipality Development Revenue Bond Act, being Part 1, Article 3, Title 29 of Colorado Revised Statutes, as from time to time supplemented and amended (the "Act"), to issue revenue bonds to pay the costs of a project (as defined in the Act) and to loan the proceeds of said revenue bonds to others to provide for the financing, acquiring, equipping, and improving of such a project; and

WHEREAS, the City has been awarded $1,355,091 of private activity bond volume cap allocation for the State of Colorado ("State") and its issuing authorities computed under the Section 146(d) of the Internal Revenue Code of 1986, as amended ("IRC") and under the Colorado Private Activity Bond Ceiling Allocation Act, as amended, CRS 24-32-1701, et seq. (the "Allocation Act") for use in the issuance of private activity bonds ("PAB"); and

WHEREAS, the Act and the Supplemental Public Securities Act, as amended, CRS 11-57-201, et seq. (the "Supplemental Act"), authorizes the City to finance or refinance one or more projects for residential facilities for low- and moderate-income individuals and families, intended for use as the sole place of residence by the owner(s) or intended occupant(s), which may be provided in order to promote the public health, welfare, safety, convenience and prosperity; and

WHEREAS, to increase the availability of adequate affordable housing for low and moderate income individuals and families, the City has determined that it is necessary or desirable to carryforward the City's 2026 Allocation for up to three years to accumulate a sufficient quantity of bond cap to issue PABs for a qualified project; and

WHEREAS, the City Council of the City (the "Council") recognizes the need in the City to provide housing facility loans to finance rental housing facilities which constitute "qualified residential rental projects" described in Section 142(a)(7) of the Internal Revenue Code of 1986, as amended (the "Code"), and has made the findings and determinations set forth below; and

WHEREAS, by, through and with this Resolution the Council has determined to carryforward the 2026 Allocation of $1,355,091 to be utilized by the City pursuant to the Allocation Act.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The making of housing facility loans hereby is found and determined to be necessary to provide rental housing facilities in the City that substantially benefit persons of low income, and the Mayor and the City Manager of the City are each hereby directed to prepare a plan for the financing of such housing facilities by the City issuing or supporting the issuance of exempt facility bonds (the "Bonds") under Section 142(a)(7) of the Code and using the proceeds thereof to make housing facility loans (the "Program").

Section 2. Unused volume cap of the City, plus any additional amounts assigned and transferred to the City by city, county and state-wide issuers, including but not limited BHA, or from the City to other such issuing authorities, or made available to the City by any delegations of authority by city, county or state-wide issuers, or made available to other such issuing authorities, by any delegation from the City, plus any amounts allocated or reallocated to the City from the Statewide Balance is hereby allocated to the Program for a carryforward purpose within the meaning of Section 24-32-1706(3)(c) of the Colorado Private Activity Bond Ceiling Allocation Act, Part 17 of Article 32 of Title 24, Colorado Revised Statutes, as from time to time supplemented and amended (the "Allocation Act"); provided, that the Mayor, City Manager and other officers of the City are each independently authorized to permit, in his or her discretion, an amount of volume cap to be relinquished to the statewide balance in order to facilitate a statewide balance award of such amount for the financing of commercial projects, if required, or for use by other issuers for any purpose and to make or accept assignments of volume cap to or from other issuers or delegate authority to or receive delegation from other issuers to issue bonds on behalf of the City. The Mayor, the City Manager and other officers of the City are hereby further authorized and directed to file with the Department of Local Affairs, on or prior to September 15, 2026, under and pursuant to Section 24-32-1705(3)(c) of the Allocation Act, written notification of such carryforward allocation.

Section 3. The Council hereby finds, determines, recites and declares that the Bonds shall not constitute any multiple-fiscal year or indirect debt or other financial obligation whatsoever of the City or the State or any political subdivision of the State within the meaning of any provision or limitation of the State Constitution or statutes, and the Bonds shall not constitute or give rise to a pecuniary liability of the City or a charge against the City's general credit or taxing powers, or ever be deemed to be an obligation or agreement of any council member, officer, director, agent or employee of the City in such person's individual capacity, and none of such persons shall be subject to any personal liability by reason of issuance of the Bonds.

Section 4. The Council hereby finds, determines, recites and declares that the issuance of the Bonds in connection with financing such residential facilities will promote the public purposes set forth in the Act, including, without limitation, assisting persons or families of low- and middle-income in obtaining adequate, safe, and sanitary housing.

Section 5. The City hereby declares that this Resolution shall constitute an inducement resolution for purposes of the Allocation Act.

Section 6. The Mayor, City Manager and other officers of the City are each independently authorized to take all steps necessary or appropriate to assure full utilization by or on behalf of the City of the volume cap hereby allocated to the Program, including, without limitation, the filing of a carryforward election under Section 146(f) of the Code.

Section 7. The City intends to issue or assist in the issuance of the Bonds in an amount to be determined, upon terms acceptable to the City as set forth in a bond resolution or resolutions to be hereafter adopted and to take all further action which is necessary or desirable in connection therewith.

Section 8. All resolutions or parts thereof concerning the subject matter hereof in conflict with this Resolution are hereby repealed to the extent of such conflict. This repealer shall not be construed to revive any resolution or part thereof, heretofore repealed.

Section 9. If any section, paragraph, clause or provision of this Resolution shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this Resolution.

Section 10. This resolution shall be in full force and effect upon its passage and approval.

PASSED, ADOPTED AND APPROVED this 4th day of August, 2026.

_____
Christopher M. Leh, Mayor

(SEAL)

ATTEST:

_____
Genny Kline, City Clerk

STATE OF COLORADO)
)SS.
CITY OF LOUISVILLE)

I, the undersigned duly appointed Mayor of the City of Louisville, Colorado (the "City"), do hereby certify that the foregoing pages 1 through 4, inclusive, are a true, correct and complete copy of the record of proceedings of the City Council of the City, insofar as such proceedings relate to the resolution contained therein, had and taken at a lawful, public meeting of the City Council, on August 4, 2026, commencing at the hour of 6:00 p.m., as recorded in the regular official book of the proceedings of the City kept in my office; that said proceedings were duly had and taken as therein shown; that the meeting therein shown was duly held and was open to the public at all times; and that the persons therein were present at said meeting in person or by telephone as therein shown.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of the City of Louisville, Colorado this August 4, 2026.

_____
Christopher M. Leh, Mayor

August [__], 2026

Elisa Blakeny
Colorado Department of Local Affairs
Division of Housing
1313 Sherman Street, Room 320
Denver, Colorado 80203

RE: Notification Required Pursuant to §24-32-1706, Colorado Revised Statutes, as amended ("C.R.S.")

Dear Lisa:

Pursuant to C.R.S. § 24-32-1706(3)(c), the City of Louisville, Colorado ("Louisville") hereby notifies the Department of Local Affairs that Louisville's 2026 private activity bond volume cap allocation in the amount of $1,355,091 will be utilized for a project which has a carryforward purpose, as such project is described in the attached Resolution. Louisville desires to treat its 2026 private activity bond volume cap allocation as allocated to such project for such carryforward purpose.

The information required follows:

ISSUING AUTHORITY NAME/ADDRESS/OFFICER
City of Louisville, Colorado
749 Main Street
Louisville, Colorado 80027
Diana Langley, City Manager
(303) 335-4530

LEGAL COUNSEL
Kim Crawford
Butler Snow, LLP
1801 California St, Ste 5100
Denver, CO 80202
(720) 330-2354

CITY ATTORNEY
Kathleen Kelly
Kelly PC
1801 Wewatta Street, Suite 1100
Denver, Colorado 80202
(303) 298-1601

PRINCIPAL AMOUNT OF CARRYFORWARD
$1,355,091

NATURE OF PROJECT/BENEFICIARY
Qualified Mortgage Bonds and Qualified Residential Rental Projects
Low- and Middle-Income Families and Persons in the City of Louisville, Colorado

CLASSIFICATION UNDER SECTION 146(f)(5) OF THE INTERNAL REVENUE CODE OF 1986, AS AMENDED
Qualified Mortgage Bonds and Qualified Residential Rental Projects

INFORMATION REQUIRED BY SECTION 146(f)(2) OF THE INTERNAL REVENUE CODE OF 1986, AS AMENDED

Purpose of Carryforward:	Qualified Mortgage Bonds/ Qualified Residential Rental Projects
Portion for such purpose:	$1,355,091

ATTACHMENTS
Inducement Resolution of Louisville City Council
Certificate required by C.R.S. § 24-32-1709(2)(c)
Preliminary Opinion of Bond Counsel

Please be advised that Louisville intends to issue its qualified mortgage or qualified residential rental revenue bonds in 2026 or make a mortgage credit certificate election, but if not, a federal election for carryforward on IRS Form 8328 will be filed on or prior to February 15, 2027. Copies of the appropriate documents will be forwarded as filed.

Please call me with any questions.

Sincerely,

_____
Diana Langley, City Manager
City of Louisville

BUTLER | SNOW

August 4, 2026

State of Colorado
Department of Local Affairs
1313 Sherman Street
Denver, Colorado 80202

City of Louisville, Colorado
Qualified Residential Rental Project Bonds

Ladies and Gentlemen:

This opinion is rendered pursuant to Sections 24-32-1706(3)(c), Colorado Revised Statutes. We are acting as bond counsel in connection with the issuance of the above-captioned bonds (the "Bonds") by the City of Louisville, Colorado (the "City").

The Bonds are to be issued in one or more series in the aggregate principal amount of not exceeding $1,355,091. The Bonds will constitute private activity bonds as defined in Section 141 of the Internal Revenue Code of 1986, as amended (the "Code"). The City is authorized under the laws and constitution of the State of Colorado, particularly Part 1, Article 3, Title 29, Colorado Revised Statutes, to issue the Bonds.

The Bonds will constitute "exempt facility bonds" within the meaning of section 146(f)(5)(A) of the Code (more particularly, bonds for "qualified residential rental projects" as defined in Section 142(a)(7) of the Code) and the carryforward purpose of issuing the Bonds qualify for carryforward treatment under Section 146(f) of the Code.

The scope of our engagement has not extended beyond the examinations and the rendering of the opinions expressed herein. The opinions expressed above are limited to the laws of the State of Colorado and of the United States of America. This letter may not be relied upon by any person other than the addressee hereof for any purpose without our prior written consent.

Very truly yours,

Butler Snow LLP

BUTLER SNOW LLP

1801 California Street
Suite 5100
Denver, Colorado 80202

KIMBERLEY K. CRAWFORD
(720) 330-2354
Kim.Crawford@ButlerSnow.com

T (720) 330-2300
F (720) 330-2301
www.butlersnow.com

BUTLER SNOW LLP

DILIGENCE CERTIFICATION

I, Christopher M. Leh, Mayor of the City of Louisville, Colorado (the "City"), do hereby certify as of August 4, 2026, pursuant to Section 24-32-1709(2)(d) of the Colorado Private Activity Bond Ceiling Allocation Act, with respect to the $1,355,091 of the City's 2026 direct allocation, that the City will proceed with diligence to ensure the issuance of bonds within the carryforward period provided by Section 146(f) of the Internal Revenue Code of 1986, as amended, including through the City's potential delegation to another issuing authority of the authority to act as the City's agent to issue bonds for such purpose.

(Signature page follows)

Dated as of the date first written above.

CITY OF LOUISVILLE,
COLORADO

By: _____
Christopher M. Leh, Mayor

CERTIFICATE REQUIRED BY SECTION 24-32-1709(2)(c)
OF THE COLORADO REVISED STATUTES, AS AMENDED

As an official of the City of Louisville, Colorado responsible for the supervision of the issuance of its $1,355,091 private activity bonds (the "Bonds"), I DO HEREBY CERTIFY that the City of Louisville, Colorado will proceed with diligence to insure the issuance of such Bonds within the time period from the date of the Department of Local Affairs 2026 private activity bond volume cap allocation award letter to December 31, 2029.

IN WITNESS WHEREOF, I have hereunto set my hand this _____ day of _____, 2026.

CITY OF LOUISVILLE, COLORADO

By _____
Christopher M. Leh, Mayor

February 09, 2026

Samma Fox
Deputy City Manager
City of Louisville

Re: Private Activity Bond Allocation of $1,355,091

Dear Samma Fox:

I hereby certify that the above amount will be allocated to the respective local government for the purpose of issuing Private Activity Bonds (PAB) in 2026 under the state ceiling imposed by the Internal Revenue Code of 1986, as amended.

In accordance with the provisions of C.R.S. 24-32-1709.5, a fee on bonds issued is due to DOLA for the portion of each issuance that originated from a direct allocation. The amount of this fee is subject to revision, but is currently 0.027% of bonds issued. This fee is also due within five working days of the bond closing. In the event that the full allocation amount is not issued, or the fee rate changes, the fee will be recalculated to reflect the actual amount issued and the rate in effect at the time of closing.

If you have any questions, please contact Lisa Blakeney (720) 557-2112 or dola_pab@state.co.us.

Sincerely,



Maria De Cambra
Executive Director

City of Louisville
COLORADO • SINCE 1878

City Council Communication
Agenda Item 5.D.

Subject: Fire Smart Louisville Proposal

Date: August 4, 2026

Prepared By: Diana Langley, City Manager

Presented By: Diana Langley, City Manager

Summary:
Fire Smart Louisville is a voluntary, neighborhood-focused wildfire risk reduction initiative developed in early 2026 in response to the Wildfire & Conflagration Risk Assessment (WCRA). The program seeks to empower residents through education, expert guidance, and financial incentives, while coordinating resources across the City of Louisville, the Louisville Fire Protection District (LFPD), Boulder County, and partner organizations. Early accomplishments show strong community interest and demonstrated effectiveness. A 2027 proposal recommends expanding and institutionalizing the program through funding of a $100,000 contract with the Boulder Watershed Collective, enabling mitigation activities in high-risk neighborhoods and continued public outreach.

Background / Prior Discussions:
Fire Smart Louisville was created by local volunteers with support from Boulder Watershed Collective and Boulder County. Its goal is to translate WCRA recommendations into practical neighborhood-level actions that reduce wildfire risk.

Since its launch, the program has:

- Built partnerships among local organizations to support wildfire mitigation.
- Received a $10,000 NFPA grant for direct costs and 20+ matching rebates of $250 each.
- Held a Community Wildfire Preparedness Day event and staffed booths at additional public gatherings.
- Completed or scheduled more than ten neighborhood events including canvassing, meetings, assessments, cleanups, and small-scale mitigation projects.

The program’s approach centers on raising public awareness, identifying neighborhood leaders, coordinating mitigation activities, and working with the City and LFPD on long-term funding strategies.

Development Proposal:
N/A

Analysis:
Fire Smart Louisville's early successes indicate significant resident engagement and a viable model for community-led mitigation. The program aligns with WCRA recommendations and leverages established local expertise. Expanding the initiative in 2027 through a $100,000 contract with Boulder Watershed Collective would provide dedicated staffing and direct mitigation resources, and enhance the ability to serve 3-5 high-risk neighborhoods.

The proposed expansion would:

- Increase the pace of neighborhood-scale mitigation through incentives and streamlined access to resources such as chipping days, dumpster programs, and community assessments.
- Strengthen the City's and LFPD's position in pursuing external grants from Boulder County, DOLA, and other sources.
- Institutionalize the program's capabilities rather than relying solely on volunteers.

Overall, Fire Smart Louisville demonstrates high potential for measurable wildfire risk reduction. Formalizing support would create a sustainable, well-coordinated framework that accelerates mitigation, deepens community participation, and improves alignment with regional wildfire preparedness efforts.

Fire Smart Louisville representatives are also coordinating with LFPD for in-kind support such as prioritization with the WCRA consultant, expanded residential wildfire audits, public education, and possible labor for community mitigation.

Staff is requesting Council authorization to utilize existing funds budgeted in 2026 to fund a $100,000 contract with Boulder Watershed Collective to implement Fire Smart Louisville's proposed scope of work. The funding would be utilized to cover Boulder Watershed Collective's labor costs to provide services and to provide direct mitigation and incentives. With Council's authorization, staff will work with Fire Smart Louisville and Boulder Watershed Collective to refine the scope of work and develop a contract for Boulder Watershed Collective. The contract will be brought before Council at a future date for consideration.

Council Work Plan:
This aligns with several initiatives identified in Council's core priority of Safety.

Fiscal Impact:
The 2026 Budget includes approximately $214,000 (101141-540950) to cover the annual cost of joining Boulder Office of Disaster Management (ODM). This was based on the assumption that the City would join ODM at the start of 2026. On July 21, 2026

City Council approved a Joint Agreement to establish Boulder ODM as the shared emergency management agency for the County of Boulder, City of Boulder, and City of Louisville. With the delay in joining Boulder ODM, there will be sufficient savings to cover the $100,000 requested to fund Fire Smart Louisville's proposed scope of work.

Alternatives:
1. Do not support Fire Smart Louisville's proposal.
2. Allocate a different amount for Fire Smart Louisville's proposal.

Recommendation:
Authorize staff to utilize existing funds budgeted in 2026 to fund a contract with Boulder Watershed Collective to implement Fire Smart Louisville's proposal, and direct staff to refine the scope of work and develop a contract with Boulder Watershed Collective.

Attachments:
1. 2027 Fire Smart Louisville Scope of Work

Fire Smart Louisville

Objective

Engage Louisville residents in voluntary wildfire risk reduction as recommended by the Wildfire & Conflagration Risk Assessment (WCRA). Provide education, expertise, and incentives to encourage neighborhood and individual action. Connect residents with resources of LFPD, City, County, and other programs to accelerate progress.

Approach

1. Create a city-wide voluntary program for neighborhood-scale risk reduction.
2. Raise awareness & identify neighborhood leaders through public events & social media.
3. Organize events such as audits, neighborhood cleanups, chipping days, rebates, & cross-border mitigation with public land owners.
4. Work with the City & LFPD to develop long-term funded programs to reduce risk through collaborations & grants.

Accomplishments to Date

Created in early 2026 by local volunteers & County-funded labor at Boulder Watershed Collective.

- Successfully demonstrating concept and community interest.
- Built working partnerships among local organizations for mitigation.
- Obtained $10K grant from NFPA for direct costs and 20+ matching rebates of $250 each.
- Organized Community Wildfire Preparedness Day event on May 2, and had booth at 2 other public events
- 10+ neighborhood events complete or scheduled:
  - Door-to-door canvasses and mailings
  - Neighborhood meetings, assessments, cleanups, and DIY projects

Proposal for 2027

*Expand and institutionalize **Fire Smart Louisville** in the City of Louisville and the Louisville Fire Protection District through joint funding of a $100,000 contract with Boulder Watershed Collective (half for labor, half for direct mitigation & incentives)*

- Implement WCRA follow-up mitigation for 3-5 high risk neighborhoods. Connect resources, supply chains, expertise, and financial incentives to measurably reduce risk.
- Continue public education through 4-6 tabling events at festivals and fairs.
- Assist the City and LFPD in pursuing grants through Boulder County, DOLA, etc.
- With City in-kind support: communications & outreach, cross-border mitigation on OS & Public Lands, collaboration with new preparedness staff to be hired in late 2026.
- With LFPD in-kind support: Prioritization with WCRA team, expanded residential wildfire audits, public education, possible labor for community mitigation
- With access to Wildfire Partners resources: community assessments, chipping and dumpster days, public information and events.

Partners & Sponsors

City of Louisville · Louisville Fire Protection District · Boulder Disaster Management · The Boulder Watershed Collective · NFPA · Wildfire Partners · FIREWISE USA Residents reducing wildfire risks · FACC Fire Adapted Colorado

City of Louisville
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City Council Communication
Agenda Item 8.A.

Subject: Resolution No. 66, Series 2026 — A Resolution Approving a Final Planned Unit Development (PUD), A Special Review Use (SRU) to Allow a Helicopter Pad, and An Associated Development Agreement for the Development of a 371,600 Square-Foot Hospital Building and a 62,000 Square-Foot Medical Building on Approximately 39.9 Acres Located at 900 Rockcress Drive - Continued from July 21, 2026

This will be the only reading of this item and final action may be taken. There will be one round of public comment.

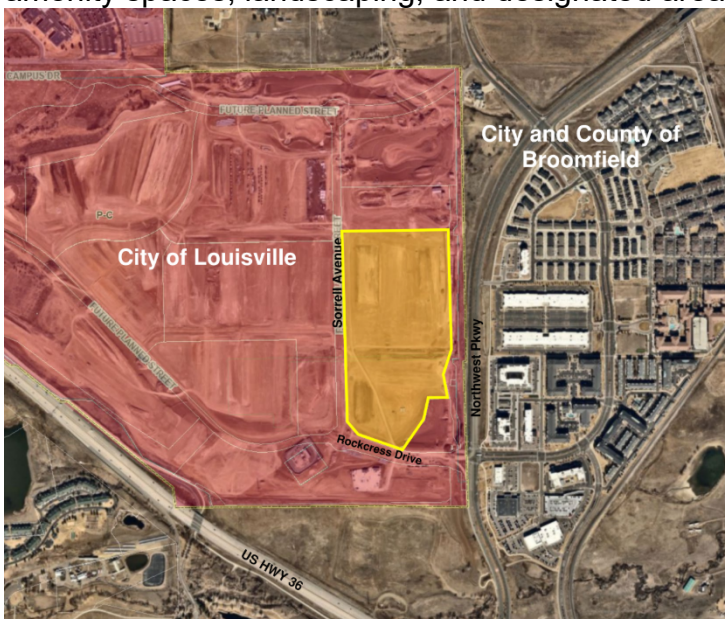
Date: August 4, 2026

Prepared By: Matt Post, Planner III

Presented By: Matt Post, Planner III

Summary:

The applicant, SmithGroup, on behalf of AdventHealth Avista, requests approval of a Final Planned Unit Development (PUD) for a 371,600 square-foot hospital, a 62,000 square-foot medical office building (MOB), and a Special Review Use (SRU) for a helicopter landing pad on 39.9-acres located at 900 Rockcress Drive within the Redtail Ridge development area. The proposal includes associated site improvements, including internal vehicular and pedestrian circulation, parking areas, pedestrian amenity spaces, landscaping, and designated areas for potential future development.



The subject property is zoned Planned Community Commercial (PCZD-C). Development is governed by the ConocoPhillips Campus General Development Plan (GDP), 3RD Amendment, which establishes the regulatory framework, including permitted land

uses, building setbacks, height limitations, floor area ratio, and overall development intensity. All development in this GDP is subject to the Commercial Development Design Standards and Guidelines (CDDSG), which regulate building materials and site design.

Background / Prior Discussions:
The ConocoPhillips Campus GDP encompasses the former StorageTek Corporation campus, originally developed on approximately 310 acres within unincorporated Boulder County. The property was annexed into the City in 1978 and, at full buildout, included approximately 1.6 million square feet of building area.

In 2008, ConocoPhillips acquired the property and demolished the existing StorageTek campus in 2009 to facilitate development of a new research campus. Concurrently, ConocoPhillips petitioned the City to annex an additional 80 acres adjacent to the original campus and to rezone the combined property to Planned Community Zone District – Commercial (PCZD-C).

In 2010, the City approved the rezoning to PCZD-C along with the ConocoPhillips Campus GDP, a Zoning Agreement, a Preliminary Subdivision Plat, and a Preliminary PUD. The GDP established a development cap of approximately 2.5 million square feet, identified permitted land uses, and set standards for setbacks, parking, and a minimum 12 percent public land dedication consistent with code requirements. ConocoPhillips subsequently abandoned its development plans and sold the property. The Preliminary Subdivision Plat and Preliminary PUD were not finalized and have since expired.

In 2024, the City approved the final plat for the Redtail Ridge development to implement the ConocoPhillips Campus GDP framework. The plat dedicated approximately 139 acres of public use land, created development parcels, established utility and access easements, dedicated public rights-of-way including an extension of Campus Drive, and included an agreement for expansion of the City's wastewater treatment plant. The principal developer is currently constructing horizontal infrastructure and public roadways while AdventHealth Avista has begun initial over-lot grading on the subject property.

In October 2025, the City approved the ConocoPhillips Campus GDP, 1st Amendment, processed concurrently with the Avista Adventist Hospital GDP, 2nd Amendment, which governs the existing hospital campus at 100 Health Park Drive. Through this coordinated review, the applicant implemented a "density swap," reducing the allowable building area under the Avista Adventist GDP (existing hospital site) and reallocating 364,400 square feet of development capacity to the ConocoPhillips Campus GDP, 1st Amendment (subject property), resulting in a combined cap of 2,906,780 square feet.

The 1st GDP amendment also more explicitly added hospitals and medical office buildings as allowed uses and established three building height zones (three-, four-, and five-story) for the subject property, with corresponding maximum height allowances for buildings, parapets, and mechanical screening elements to accommodate the functional

needs of medical use development. Additional building massing and design standards include required 15-foot step-backs above 45 feet on primary building façades, upper-story elements limited to 50 percent of the lower-level footprint, provisions for architectural projections and defining architectural elements with required depth variation, and a 10-foot minimum setback for rooftop enclosures.

In February 2026, the City approved the ConocoPhillips Campus GDP, 2nd Amendment, which applied enhanced industrial design standards to Lots 1, 2, 3, and 5, of Block 1 of Redtail Ridge, Filing No. 1. While the amendment did not modify standards on the subject property, it remains the most recent GDP amendment applicable to this application for regulatory purposes.

On May 14, 2026, the Planning Commission recommended approval of these PUD and SRU applications, subject to the conditions listed at the end of this report.

On June 2, 2026, the City Council confirmed the Community Development Director's administrative approval of the ConocoPhillips Campus GDP, 3rd Amendment, which established an alternate method of measuring building height on the subject property from the finished floor elevation (FFE) of each building rather than average grade.

Development Proposal:

Final Planned Unit Development & Special Review Use

The Final PUD (Attachment E) proposes development of the 39.9-acre site with a 371,600 square-foot hospital and a 62,000 square-foot medical office building (MOB). Primary access to the site is proposed from Rockcress Drive. Three additional vehicular access points are proposed along the west side from Sorrell Avenue, providing access to the MOB and service areas located on the north side of the site.

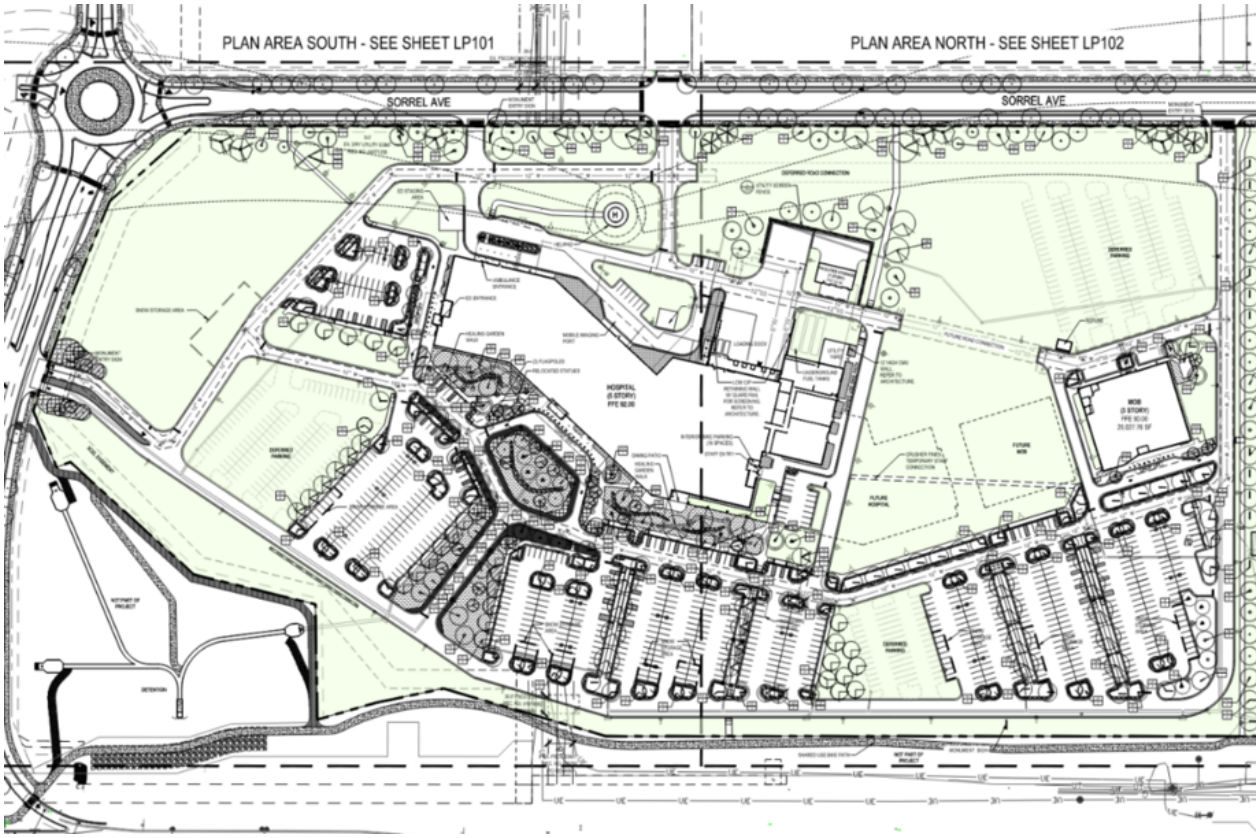
The proposed helicopter pad is permitted pursuant to the ConocoPhillips Campus GDP, 3rd Amendment, which allows for a helipad as a Special Review Use (SRU), subject to the review criteria of LMC Sec. 17.40.100.

Site Plan

The hospital building is sited such that the primary façade and main entrance are oriented to the east-southeast, maximizing visibility from the US Highway 36 corridor. The building has a footprint of 116,685 square feet and a total gross floor area of 371,600 square feet. It is five stories in height, with a maximum building height of 87.61 feet, 92.19 feet to the top of parapet, and 104.86 feet to the top of mechanical screening, as measured from the Finished Floor Elevation (FFE). All rooftop mechanical equipment will setback 10 feet from the edge of the building and be fully screened behind parapets and mechanical enclosures.

The hospital building is designed to comply with the massing and design standards established by the GDP. All portions of the primary façade exceeding 45 feet in height are stepped back a minimum of 15 feet from the ground-floor facade, creating a tiered building form that reduces perceived bulk at the pedestrian level. In addition, the

footprint of each floor above 45 feet does not exceed 50 percent of the building footprint below that elevation, consistent with massing requirements.



The main entrance will serve as the primary entry point for patients and visitors and includes a dedicated drop-off area with enhanced landscaping islands. Pedestrian-oriented amenity areas (Attachment F) adjacent to the entrance include two healing gardens and amenities for patients, visitors, and staff. These areas are further enhanced with low-water landscaping and pedestrian-scale lighting. The primary staff entrance is located on the north side of the building, while all entries are connected to parking areas via pedestrian pathways serving both primary entrance locations.

A 2,000 square-foot facilities storage building is proposed to the west of the hospital and will be screened by an architecturally compatible fence. The loading dock and utility yard are also located on the west side of the building and screened from adjacent rights-of-way.

The proposed MOB is located on the north side of the site and has a footprint of 20,929 square feet, with a total gross floor area of 62,000 square feet. The building is three stories in height, with a maximum building height of 45 feet, 48.5 feet to the top of parapet, and 58 feet to the top of mechanical screening. All rooftop mechanical equipment will be fully screened behind parapets and mechanical enclosures. The primary entrance to the MOB faces east and includes a drop-off lane. An enhanced pedestrian amenity area is located on the north side of the building and includes

seating, landscaping, and pedestrian-scale lighting.

Parking and Pedestrian Circulation
A network of internal private drives is proposed to provide vehicular circulation throughout the site, including access to parking areas and connectivity between the hospital and MOB. Raised crosswalks are incorporated at key pedestrian crossings to slow vehicular traffic and improve pedestrian safety. An internal pedestrian circulation system is designed to provide connections through parking areas to both the hospital and MOB. In addition, a 10-foot-wide shared-use path bisects the site from east to west, providing pedestrian and bicycle connectivity to the broader Redtail Ridge trail network.

Parking is distributed throughout the site, with the majority located on the east side adjacent to Northwest Parkway. A total of 773 parking spaces are proposed, including 306 spaces serving the hospital and 467 spaces serving the MOB. Pedestrian connections are provided throughout all parking areas. Sixteen electric vehicle (EV) charging spaces are proposed, along with infrastructure for 64 EV-ready spaces, 79 EV-capable spaces, and 79 EV-capable-light spaces to accommodate future demand.

A total of 40 exterior bicycle parking spaces are proposed across the site, with 20 located near the hospital and 20 near the MOB entrance. Additionally, 10 interior bicycle parking spaces are provided near the staff entrance on the north side of the hospital building.

Of the total 39.9-acre site, approximately 14.77 acres (643,422 square feet), or 37 percent, are proposed for buildings, parking areas, and drive aisles. The remaining 25.4 acres, or 63 percent of the site, are allocated to open space, landscaping, and pedestrian amenity areas.

The landscape plan includes a total of 393 trees of varying species and sizes, with 147 trees within parking lot areas for internal shading and screening. Additional plantings include approximately 1,988 shrubs and ornamental grasses within parking lot islands and medians, and approximately 1,850 plantings within perimeter and pedestrian amenity areas.

Site Development Phasing
The development is proposed to be constructed in phases. Phase 1 includes the hospital building and associated site improvements, including utilities, grading, and drainage, and will establish the primary site infrastructure and improvements necessary for the hospital to become operational prior to MOB completion, including parking, pedestrian connections, landscaping, and site lighting. Phase 2 will include construction of the MOB and directly associated site improvements. Phasing plans are included with the PUD submittal, with additional detail and refinement to be provided through the civil construction documents as phasing elements are finalized.

Campus-wide Signage
This PUD application does not include a campus-wide sign program. Any future request for a comprehensive sign program, including increases to the maximum allowable sign

height, area, or number of signs, shall require a PUD Amendment in accordance with Section 2.3 of the Louisville Sign Code.

Redtail Ridge Subdivision Improvements and Development Agreement
As part of the 2024 subdivision, the Redtail Ridge Subdivision Improvements and Development Agreement (Redtail Ridge SIA) was executed, establishing sustainability standards for development within the GDP area. The Redtail Ridge SIA requires buildings achieve a minimum of LEED Silver certification, provide on-site solar generation at a rate of at least 1 watt per square foot of building area (for a minimum total of 2.54 megawatts), and obtain Fitwel campus certification. The Redtail Ridge SIA exempts these requirements for healthcare uses, or for projects undertaken by Avista Hospital or its affiliates.

Also part of the Redtail Ridge SIA, a Transportation Demand Management Plan (Redtail Ridge TDM; Attachment J) was adopted for the entire Redtail Ridge development area. The plan requires each PUD to demonstrate compliance with applicable minimum Redtail Ridge TDM commitments and goals. A TDM memorandum (Attachment I) was provided as part of this application indicating how the proposed development satisfies these minimum standards, and is further analyzed below.

Development Agreement
Included with the proposal is a development agreement that addresses construction of public improvements, including water, sewer, and stormwater infrastructure. The agreement required that the property owner complete the required public improvements and provide the City a letter of credit to cover the estimated costs of the identified improvements.

Analysis:

Development of the site is regulated by the ConocoPhillips Campus GDP, 3rd Amendment, the Commercial Development Design Standards and Guidelines (CDDSG), and Chapter 17 of the Louisville Municipal Code. The following analysis evaluates the proposal for compliance with these applicable standards.

ConocoPhillips Campus General Development Plan, 3rd Amendment
The GDP establishes a maximum floor area ratio (FAR) of 0.15 across the Redtail Ridge development area. The AdventHealth hospital parcel received an additional 364,400 square feet of gross floor area through the previously approved “density swap”. This additional allocation is limited to hospital-related development on that parcel. Based on the total GDP area of approximately 389.1 acres (16.9 million square feet), the maximum allowable gross floor area across the ConocoPhillips Campus is approximately 2.5 million square feet, exclusive of the hospital-specific allocation.

This PUD proposes 435,600 square feet of development, with the potential for up to 800,000 square feet on the hospital parcel including the additional 364,400 square feet

reserved for future hospital build-out. The proposed development remains well within the GDP's FAR limitation.

The GDP establishes the land use framework for development within the plan area. Hospital and medical office uses are identified as permitted uses through the 2025 ConocoPhillips Campus GDP, 2nd Amendment. The helipad is also contemplated within the GDP and is permitted subject to Special Review Use (SRU) approval.

Setbacks, height limitations, building design and massing standards, and parking requirements are established by the GDP. The proposed development complies with these standards, with both the hospital and medical office building meeting all applicable setback requirements. Proposed parking areas are also compliant with applicable setback and layout provisions.

The hospital building complies with the applicable GDP massing and design standards, including required upper-level stepbacks and floor plate limitations. The building is five stories in height, with a maximum height of 87.61 feet, 92.19 feet to the top of parapet, and 104.86 feet to the top of mechanical screening, as measured from the Finished Floor Elevation (FFE). The MOB is three stories in height, with a maximum building height of 45 feet to the roof, 48.5 feet to the top of parapet, and 58 feet to the top of mechanical screening. The MOB also complies with applicable GDP massing standards, including the required 15-foot stepback for rooftop mechanical screening, and reaches a maximum height of 58 feet at the southeast corner where the mechanical screen is integrated as an architectural feature.

Compliance with Commercial Development Design Standards and Guidelines (CDDSG)

CDDSG: 1. Site Planning

This application complies with all applicable site development standards, including site orientation, coverage, and overall layout. The project exceeds the minimum landscape coverage requirement, providing 63 percent of the site in landscaped area. Loading docks and service areas are positioned to the rear of the buildings, with screening where necessary to minimize visibility from public areas. Pedestrian amenity spaces are provided adjacent to the main entrance of the hospital and near the north side of the MOB. The proposal also meets the grading and drainage standards contained in the CDDSG, with site improvements designed to ensure proper stormwater management and compatibility with surrounding development.

CDDSG: 2. Vehicular Circulation and Parking

Vehicular access to the site is provided through four separate access points on the south and west sides of the side, with primary access taken from the south at Rockcress Drive. The site is appropriately linked to the surrounding area, providing functional access and convenient pedestrian and bicycle routes through larger parking areas. Parking areas include landscaped medians, islands, and pedestrian connections consistent with CDDSG standards.

CDDSG: 3. Pedestrian and Bicycle Circulation
The application incorporates internal pedestrian paths and walkways throughout the site, connecting parking areas to buildings, between buildings, and extending into the planned off-site trail system and sidewalk network. A 10-foot multi-use path bisects the site, allowing bicycle access from the planned bicycle transportation network within Redtail Ridge. Bicycle parking is provided at the primary entrances of both buildings, with interior bicycle spaces proposed at the hospital.

CDDSG: 4. Architectural Design
Building massing and height are regulated by the GDP, while building materials and entry feature design are governed by the CDDSG. The proposed buildings incorporate high-quality materials and architectural elements, including substantial ground-level glazing, architecturally enhanced metal panels with varied forms, and stone veneer. The color palette is subdued and cohesive, and primary entry features are clearly defined through roof overhangs and dedicated drop-off areas, consistent with CDDSG design standards.

CDDSG: 5. Landscape Design
The proposed landscape plan complies with applicable landscape standards and emphasizes a water-efficient design approach. The plan includes nearly 4,000 low-water shrubs, grasses, and perennials distributed throughout the site, along with 393 trees of varying species and sizes. Of these, 147 trees are located within parking lot areas to provide internal shading and screening, while the remainder are positioned along the site perimeter and adjacent to external roadways. Landscaping within the Rockcress Drive and Sorrell Avenue rights-of-way will be installed separately as part of a civil construction package associated with roadway improvements. The remaining landscape areas are proposed to be seeded with native shortgrass prairie and enhanced shortgrass prairie mixes, reinforcing consistency with water conservation objectives and the surrounding natural context.

CDDSG: 6. Screen Walls and Fences
All proposed walls and fences will be constructed of durable materials, including stone and metal, compatible with overall site design.

CDDSG: 8. Exterior Site Lighting
The application includes LED fixtures and freestanding light poles throughout the site. All lighting is full cut-off and shielded and consistent with the CDDSG lighting standards.

Redtail Ridge Subdivision Improvements and Development Agreement Commitments
As part of the Redtail Ridge SIA, the Redtail Ridge TDM was adopted for the overall development area. The plan requires each PUD to demonstrate compliance with applicable TDM commitments and goals.

A TDM memorandum (Attachment I) was completed for this application to confirm consistency with the adopted Redtail Ridge TDM Plan. The analysis finds that the

proposed uses are consistent with the Redtail Ridge TDM Plan.

Site improvements include construction of pedestrian connections linking the buildings to surrounding streets, internal parks, and multimodal facilities, improved access to shuttle stops, and supporting infrastructure for bicycle commuters, such as paths and connections to showers and changing facilities. These improvements are intended to reduce single-occupant vehicle (SOV) trips and support non-auto travel, consistent with the TDM goals for the Redtail Ridge development.

The TDM memorandum outlines a combination of site-specific strategies and district-level commitments intended to satisfy the requirements of the Redtail Ridge SIA and the associated Redtail Ridge TDM Plan. The Redtail Ridge SIA requires each PUD to meet minimum TDM commitments and contribute to broader SOV reduction goals. The applicant's approach addresses this through both on-site measures and participation in district-wide programs.

At the site level, the developer commits to multimodal and demand-reduction strategies, including bicycle infrastructure with 40 bicycle parking spaces (30 exterior and 10 interior for staff), showers and changing facilities, EV charging facilities, designated carpool and ride-share parking, and telework policies to reduce peak-period commute trips. The applicant also commits to ongoing participation in transportation-related events and programs, such as Bike to Work Day, and to providing employee education and communication regarding transit options, including potential subsidized transit passes as service becomes available.

In addition to these direct measures, the project contributes to district-wide Redtail Ridge TDM implementation through financial participation in the Redtail Ridge metropolitan district's operations and maintenance program. This contribution supports higher-impact strategies identified in the plan, including shuttle connections to transit, EcoPass programs, a dedicated TDM coordinator, guaranteed ride home programs, and other mobility initiatives. These district-level measures are intended to address trip reduction at a larger scale and provide infrastructure and programming that may not be feasible at an individual site level.

The applicant's commitments demonstrate compliance with the Redtail Ridge SIA requirement to meet minimum Redtail Ridge TDM obligations and contribute to the overall goals of reducing SOV trips and supporting alternative modes of transportation. The proposed measures are consistent with the intent of the Redtail Ridge TDM Plan.

Special Review Use Criteria

Pursuant to the ConocoPhillips Campus GDP, 3rd Amendment, a helipad is permitted as Special Review Use (SRU).

SRUs shall be reviewed against the criteria listed in LMC Sec. 17.40.100 to determine whether the proposed use is compatible with the surrounding area and if any conditions on the use may be appropriate. Staff's analysis of the SRU review criteria is provided

below.

1. That the proposed use/development is consistent in all respects with the spirit and intent of the comprehensive plan and of this chapter, and that it would not be contrary to the general welfare and economic prosperity of the city or the immediate neighborhood;

The Comprehensive Plan (2026) designates the property within the Regional Center (RC) Place Type, which supports a mix of community-oriented uses, including higher-density residential, retail and commercial, office, public spaces, and community health services. The proposed helipad is a critical component of a regional medical campus and supports the operation of comprehensive, regional healthcare services within this designation. **Staff find the proposal meets this criterion.**

2. That such use/development will lend economic stability, compatible with the character of any surrounding established areas;

The proposed helipad supports the economic stability of the medical campus by enabling full-service hospital operations, including emergency transport capabilities. It is compatible with the surrounding area, which is planned for regional commercial and employment uses, and its function is consistent with similar institutional development. **Staff find the proposal meets this criterion.**

3. That the use/development is adequate for internal efficiency of the proposal, considering the functions of residents, recreation, public access, safety and such factors including storm drainage facilities, sewage and water facilities, grades, dust control and such other factors directly related to public health and convenience;

The proposed helipad is necessary for the internal functionality and efficiency of the hospital, supporting emergency response and patient transport operations. It is integrated into the overall site design with appropriate access, safety considerations, and coordination with circulation, utilities, and drainage infrastructure, including a 96-foot diameter safety zone around the helipad, free of obstructions. The development has been designed to accommodate all required services, including water, sewer, and storm drainage, and does not introduce impacts that would compromise public health, safety, or convenience. **Staff find the proposal meets this criterion.**

4. That external effects of the proposal are controlled, considering compatibility of land use; movement or congestion of traffic; services, including arrangement of signs and lighting devices as to prevent the occurrence of nuisances; landscaping and other similar features to prevent the littering or accumulation of trash, together with other factors deemed to effect public health, welfare, safety and convenience;

External effects of the proposed helipad are adequately controlled through its integration and location within the overall hospital campus and site design. The use is compatible with the planned commercial character of the surrounding area, and helicopter operations are intermittent and do not generate sustained traffic or congestion impacts. Site lighting, signage, and operational features are designed to meet applicable standards and avoid nuisance conditions. **Staff find the proposal meets this criterion.**

5. That an adequate amount and proper location of pedestrian walks, malls and landscaped spaces to prevent pedestrian use of vehicular ways and parking spaces and to separate pedestrian walks, malls and public transportation loading places from general vehicular circulation facilities.

The helipad is located and designed to avoid conflicts with pedestrian circulation and general vehicular activity. It is separated from primary pedestrian routes, parking areas, and public access points, with access restricted to authorized medical and emergency personnel. This separation ensures that helicopter operations do not interfere with pedestrian movement or site circulation, maintaining safe and efficient use of the site. **Staff find the proposal meets this criterion.**

Waivers Requested

Louisville Municipal Code Sec. 17.28.110 sets forth the PUD waiver process and criteria. The applicant requests waivers from CDDSG design requirements as set forth below.

Street-side landscaping is required pursuant to CDDSG Sec. 5.1.E.2.C, which requires one (1) shrub for every five (5) linear feet of street frontage within ten (10) feet of the sidewalk on the interior side of the site. The applicant proposes a naturalized tree planting scheme with understory areas seeded with a native shortgrass prairie mix, consistent with the overall landscape strategy for the Redtail Ridge development area. Staff supports the requested waiver, as the proposed design aligns with the naturalized character of the site and reduces overall water demand.

Section 5.1.E.2.B of the CDDSG requires one (1) tree for every forty (40) linear feet of street frontage within ten (10) feet of the sidewalk on the interior side of the site. On the south side of the site, adjacent to Rockcress Drive and internal to the site, a 30-foot-wide Xcel Energy easement runs directly behind the sidewalk, which restricts tree planting. The applicant proposes a native shortgrass prairie mix in lieu of required trees. Staff supports the requested waiver due to the constraint imposed by the existing easement.

Traffic Impact Study

The Traffic Impact Study (Attachment G) evaluated site-generated traffic associated with initial buildout of the hospital and MOB (2030) and full buildout, including a hospital expansion and an additional MOB (2040/2045) and concludes that the proposed

development can be accommodated within the existing and planned transportation network with implementation of identified improvements. The 2030 buildout is projected to generate approximately 6,268 weekday daily trips, increasing to approximately 10,632 daily trips at full buildout.

For the 2030 buildout, recommended improvements are largely consistent with infrastructure already planned as part of the Redtail Ridge master development. Key improvements include construction of the Campus Drive and Sorrell Avenue intersection as a roundabout; signalization and lane configuration upgrades at Campus Drive and 96th Street; potential extension of eastbound right-turn storage at 96th Street/Via Varra/Northwest Parkway; and construction of the Rockcress Drive and Sorrell Avenue intersection as a roundabout. Additional improvements at Rockcress Drive/Via Varra/Northwest Parkway include dual eastbound left-turn lanes. Site-specific access recommendations include three full-movement access points along Sorrell Avenue with appropriate turn lanes and stop control, and a primary access from Rockcress Drive with turn lane improvements.

For the 2040/2045 full buildout, additional capacity enhancements are identified to maintain acceptable operations. These include expansion of lane configurations at key regional intersections, such as additional northbound through and turn lanes at Campus Drive and 96th Street, and triple left-turn lane configurations at 96th Street/Via Varra/Northwest Parkway. Improvements at Rockcress Drive/Via Varra/Northwest Parkway include additional southbound through lanes and potential extension of northbound turn lanes to address queuing. The primary site access on Rockcress Drive is anticipated to meet requirements for signalization at full buildout and is recommended to be upgraded accordingly, including dual southbound left-turn lanes and additional lane separation.

The study concludes that the identified improvements for future buildout, in combination with those already planned and under construction as part of the broader Redtail Ridge development, will allow the surrounding transportation network to operate acceptably in both near-term and long-term conditions (p. 42).

Compliance with PUD Evaluation Criteria in LMC Sec. 17.28.120

Section 17.28.120 of the Louisville Municipal Code lists 28 criteria for PUDs that must be satisfied or found not applicable to approve a PUD. Analysis and staff's findings for each criterion are provided in the attached appendix.

Conclusion

Staff finds that the application satisfies all Planned Unit Development criteria, including the requirements of the ConocoPhillips Campus GDP and its amendments, including the concurrent ConocoPhillips Campus GDP, 3rd Amendment, which establishes an alternate method of measurement for building height. The application also complies with all applicable standards of the Louisville Municipal Code, the Commercial Development Design Standards and Guidelines with the supported waivers, and the obligations of the Redtail Ridge Subdivision Improvements and Development Agreement (2024).

Council Work Plan:
The development proposal is consistent with the Council's Economic Vitality priority of implementing the City's adopted planning framework. The proposal represents implementation of the ConocoPhillips Campus General Development Plan and the City's development regulations and is being considered concurrently with the City's broader efforts related to Comprehensive Plan implementation

Fiscal Impact:
Approval of the proposed PUD does not have a direct fiscal impact to the City. The development will support economic vitality in Redtail Ridge and the City and the site-specific public improvements are being addressed through separate development agreements and will be paid for by the property owner.

Alternatives:
The City Council may approve the application as presented, approve the application with conditions if it determines that modifications are necessary to ensure compliance with applicable regulations or to address identified issues, or deny the application if it finds that the proposal does not satisfy the applicable review criteria.

Recommendation:
PLANNING COMMISSION RECOMMENDATION:
On May 14, 2026, the Planning Commission approved Resolution No. 6, Series 2026, recommending to the City Council approval, with waivers, of a Final Planned Unit Development (PUD) to allow a 371,600 square-foot hospital building, a 62,000 square-foot medical office building and a Special Review Use (SRU) to allow a helicopter pad on 39.9 acres at 900 Rockcress Drive, subject to the following conditions.

Prior to City Council approval of the Final PUD and SRU, the applicant shall:

1. Forward the ConocoPhillips Campus GDP, 3rd Amendment to City Council for formal acceptance on the consent agenda.

2. Provide a detailed planting schedule for all shrubs and perennials located internal to the site. The planting schedule shall include species, size, quantity, spacing, and installation standards, and shall be incorporated into the landscape plan set, subject to review and approval by Planning.

3. Confirm that the water main, running adjacent to the main entrance of the hospital building, will be privately owned and maintained, subject to review and approval by the City Engineer.

4. Provide draft legal descriptions and exhibits for all easement vacation requests, proposed on-site and off-site easements including final executed and recorded off-site easements.

5. Submit engineer’s cost estimates for all required public improvements, subject to review and acceptance by the City.

6. Revise the drainage report to utilize the 100-year storm event precipitation value of 2.50 inches for point precipitation. All runoff calculations shall be updated accordingly and shall demonstrate compliance with applicable City drainage criteria, subject to review and approval by the City Engineer.

7. Display updated site triangle exhibits at the primary access point on Rockcress Drive.

The applicant has satisfied all conditions of the Planning Commission's approval required prior to City Council consideration of this application.

RECOMMENDATION:
Approval of Resolution No. 66, Series 2026, approving a Final Planned Unit Development (PUD) to allow a 371,600 square-foot hospital building and a 62,000 square-foot medical office building, a Special Review Use (SRU) to allow a helicopter pad, and an associated Development Agreement for the development of approximately 39.9 acres located at 900 Rockcress Drive, subject to the following conditions.

1. Prior to recordation of the Final PUD, SRU, and associated Development Agreement, the applicant shall address any remaining City staff technical review comments related to the Final PUD and SRU that do not materially alter the development approved by City Council.

2. Prior to recordation of the Final PUD, SRU, and associated Development Agreement, the applicant shall address all remaining City review comments related to the public improvements cost estimate, to be included as Exhibit A to the Development Agreement.

Attachments:
1. Attachment A - Resolution No. 66, Series 2026
2. Attachment B - AdventHealth PC Resolution
3. Attachment C - ConocoPhillips Campus GDP Amendment 3 (1)
4. Attachment D - Narrative
5. Attachment E - Final PUD
6. Attachment F - Pedestrian Amenities
7. Attachment G - Traffic Study
8. Attachment H - Development Agreement AdventHealth
9. Attachment I - TDM Memorandum
10. Attachment J - Redtail Ridge TDM Plan
11. AdventHealth Presentation

RESOLUTION NO. 66
SERIES 2026

A RESOLUTION APPROVING A FINAL PLANNED UNIT DEVELOPMENT (PUD), A SPECIAL REVIEW USE (SRU) TO ALLOW A HELICOPTER PAD, AND AN ASSOCIATED DEVELOPMENT AGREEMENT FOR THE DEVELOPMENT OF A 371,600 SQUARE-FOOT HOSPITAL BUILDING AND A 62,000 SQUARE-FOOT MEDICAL OFFICE BUILDING ON APPROXIMATELY 39.9 ACRES LOCATED AT 900 ROCKCRESS DRIVE.

WHEREAS, there has been submitted to the Louisville City Council an application for a Final Planned Unit Development (PUD) to allow construction of a 371,600 square-foot hospital building and a 62,000 square-foot medical office building on approximately 39.9 acres located at 900 Rockcress Drive; and

WHEREAS, there has been submitted to the Louisville City Council an application for a Special Review Use (SRU) to allow a helicopter pad associated with the proposed hospital; and

WHEREAS, there has been submitted to the Louisville City Council a Development Agreement establishing the obligations of the developer and the City related to construction of the proposed development and associated public improvements; and

WHEREAS, City staff has reviewed the applications and determined that, subject to the requested waivers and the conditions set forth herein, the applications comply with the applicable provisions of the Louisville Municipal Code, the ConocoPhillips Campus General Development Plan, 3rd Amendment, the Commercial Development Design Standards and Guidelines, and other applicable City regulations; and

WHEREAS, the Louisville Planning Commission considered the applications at a duly noticed public hearing on May 14, 2026, where evidence and testimony were entered into the record, including the Louisville Planning Commission Staff Report dated May 14, 2026, and recommended approval subject to conditions; and

WHEREAS, the City Council considered the applications at a duly noticed public hearing on July 21, 2026, where evidence and testimony were entered into the record, including the Louisville City Council Staff Report dated July 21, 2026; and

WHEREAS, the City Council finds the application should be approved, as set forth herein.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council of the City of Louisville hereby approves the Final Planned Unit Development (PUD) for the development of a 371,600 square-foot hospital and a 62,000 square-foot medical office building on approximately 39.9 acres at 900 Rockcress Drive, subject to the following conditions:

1. Prior to recordation of the Final PUD, SRU, and associated Development Agreement, the applicant shall address any remaining City staff technical review comments related to the Final PUD and SRU that do not materially alter the development approved by City Council.

2. Prior to recordation of the Final PUD, SRU, and associated Development Agreement, the applicant shall address all remaining City review comments related to the public improvements cost estimate, to be included as Exhibit A to the Development Agreement.

Section 2. The City Council hereby approves the Special Review Use (SRU) to allow a helicopter pad as part of the approved hospital development on approximately 39.9 acres located at 900 Rockcress Drive.

Section 3. The City Council hereby approves the Development Agreement between the City and Portercare Advent Health System, a Colorado nonprofit corporation, associated with the approved development. The Mayor is authorized to sign the Development Agreement, and is further authorized to negotiates such revisions to the Development Agreement prior to execution as the Mayor finds are necessary or desirable to the City, so long as the essential terms and conditions of the Agreement are not altered.

PASSED AND ADOPTED this 4th day of August, 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

RESOLUTION NO. 06
SERIES 2026

A RESOLUTION RECOMMENDING APPROVAL WITH CONDITIONS OF A FINAL PLANNED UNIT DEVELOPMENT TO ALLOW A 371,600 SQUARE-FOOT HOSPITAL, A 62,000 SQUARE-FOOT MEDICAL OFFICE BUILDING, AND A SPECIAL REVIEW USE TO ALLOW A HELICOPTER PAD ON 39.9 ACRES AT 900 ROCKCRESS DRIVE.

WHEREAS, there has been submitted to the Louisville Planning Commission an application for a final planned unit development to allow construction of a 371,600 square-foot hospital and 62,000 square medical office building on 39.9 acres at 900 Rockcress Drive; and

WHEREAS, there has been submitted to the Louisville Planning Commission an application for a special review use to allow a helicopter pad ("helipad") to support hospital operations at 900 Rockcress Drive; and

WHEREAS, the Community Development Director has conditionally approved an administrative GDP Amendment, subject to City Council approval, to allow an alternate method of measuring building height; and

WHEREAS, City staff has reviewed the submitted materials and finds that, subject to the two requested waivers and seven (7) conditions, the application complies with the ConocoPhillips Campus General Development Plan and its amendments, the Commercial Development Design Standards and Guidelines, and Chapter 17 of the Louisville Municipal Code; and

WHEREAS, the City has reviewed the submitted materials and finds that the application satisfies the requirements, commitments, and obligations of the Redtail Ridge Subdivision Improvements and Development Agreement (2024); and

WHEREAS, the Planning Commission considered the application at a duly noticed public hearing on May 14, 2026, where evidence and testimony were entered into the record, including the Louisville Planning Commission Staff Report dated May 14, 2026 the Planning Commission voted unanimously in favor of recommending approval with conditions; and

NOW THEREFORE, BE IT RESOLVED BY THE PLANNING COMMISSION OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The Planning Commission of the City of Louisville, Colorado does hereby recommend approval of the application, with waivers, for a final planned unit development to allow construction of a 371,600 square-foot hospital and 62,000 square medical office building on 39.9 acres at 900 Rockcress Drive subject to the following conditions:

Prior to City Council approval of the Final PUD and SRU, the applicant shall:

A. Forward the ConocoPhillips Campus GDP, 3rd Amendment to City Council for formal acceptance on the consent agenda.

B. Prior to City Council approval, the applicant shall provide a detailed planting schedule for all shrubs and perennials located internal to the site. The planting schedule shall include species, size, quantity, spacing, and installation standards, and shall be incorporated into the landscape plan set, subject to review and approval by Planning.

C. Prior to City Council approval, the applicant shall confirm that the water main, running adjacent to the main entrance of the hospital building, will be privately owned and maintained, subject to review and approval by the City Engineer.

D. Prior to City Council approval, the applicant shall provide draft legal descriptions and exhibits for all easement vacation requests, proposed on-site and off-site easements. Final executed and recorded off-site easements shall be provided prior to City Council approval.

E. Prior to City Council approval, the applicant shall submit engineer's cost estimates for all required public improvements, subject to review and acceptance by the City.

F. Prior to City Council approval, the applicant shall revise the drainage report to utilize the 100-year storm event precipitation value of 2.50 inches for point precipitation. All runoff calculations shall be updated accordingly and shall demonstrate compliance with applicable City drainage criteria, subject to review and approval by the City Engineer.

G. Prior to City Council approval, the applicant shall display updated site triangle exhibits at the primary access point on Rockcress Drive.

Section 2. The Planning Commission of the City of Louisville, Colorado does hereby recommend approval of a special review use to allow a helicopter pad ("helipad") to support hospital operations at 900 Rockcress Drive:

PASSED AND ADOPTED this 14th day of May, 2026.

Steve Brauneis

_____

Steve Brauneis, Chair
Planning Commission

ATTEST:

Cullen Choi

_____

Cullen Choi, Secretary
Planning Commission

04135488 06/10/2026 11:18 AM
RF: $43.00 Page 1 of 2
Electronically recorded in Boulder County Colorado. Recorded as received.

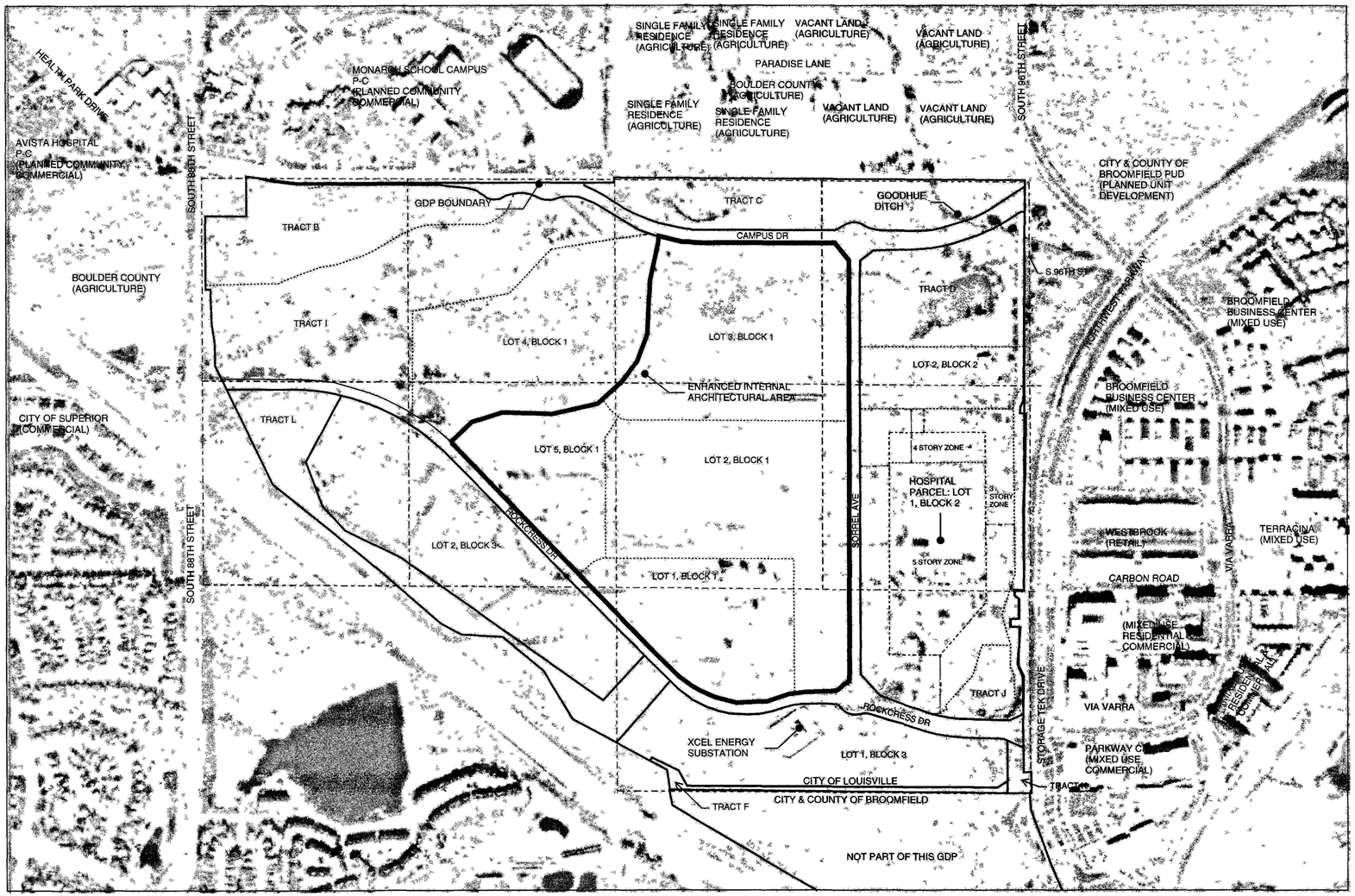
CONOCOPHILLIPS CAMPUS
GENERAL DEVELOPMENT PLAN AMENDMENT 3

A PART OF THE SOUTH HALF OF SECTION 20, THE NORTH HALF SECTION 29,
TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.
SHEET 1 OF 2

AMENDMENT NO.3 - SUMMARY OF CHANGES

THE PURPOSE OF THIS AMENDMENT IS SPECIFICALLY FOR THE HOSPITAL PARCEL AND THE REST OF THE REDTAIL DEVELOPMENT REMAINS UNCHANGED

1) Use of alternate method of measurement for hospital parcel



GENERAL DEVELOPMENT PLAN

400 200 0 400 800

SCALE: 1" = 400'

RECEPTION NUMBER

GENERAL NOTES:

1 UNLESS OTHERWISE NOTED, DEVELOPMENT SHALL CONFORM AND BE CONSISTENT WITH THE LOUISVILLE MUNICIPAL CODE AND THE COMMERCIAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES UNLESS OTHERWISE WAIVED OR MODIFIED BY THE CITY COUNCIL THROUGH THE PUD DEVELOPMENT PLAN PROCESS.
2 THE CAMPUS SECURITY BOUNDARY WILL NOT EXTEND OUTSIDE THE SITE BOUNDARY
3. EXISTING FREE STANDING CMRS FACILITIES WITHIN THE GDP BOUNDRY SHALL CONSTITUTE A PERMISSIBLE NON-CONFORMING USE.
4 PUBLIC LAND DEDICATION REQUIRMENT SATISFIED PURSUANT TO LOUISVILLE MUNICIPAL CODE SECTION 16 16 060(B) WITH REDTAIL RIDGE FILING NO 1 SUBDIVISION PLAT
5 LOTS 1,2,3 AND 5 OF BLOCK 1 OF REDTAIL RIDGE FILING NO 1 SHALL CONFORM TO AND BE CONSISTENT WITH THE LOUISVILLE MUNICIPAL CODE, THE INDUSTRIAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES, AND THE ENHANCED DESIGN STANDARDS CONTAINED HEREIN IN LIEU OF COMMERCIAL DESIGN GUIDELINES,UNLESS OTHERWISE WAIVED OR MODIFIED BY THE CITY COUNCIL THROUGH THE PUD DEVELOPMENT PLAN PROCESS

SITE INFORMATION

GROSS DEVELOPABLE AREA (PUD BOUNDARY):	391 719 ACRES (MAXIMUM 0 15 F.A.R.) * FOR LEGAL DESCRIPTION SEE EXHIBIT A OF ORDINANCE NO. 1589 SERIES 2010
ZONING	PLANNED COMMUNITY ZONED DISTRICT (PCZD) - COMMERCIAL WITH PUD-C OVERLAY
PLANNED ACCESS.	NORTHWEST PARKWAY, CAMPUS DRIVE, SOUTH 88TH STREET

* THE F.A.R APPLIES TO THE GROSS AREA OF THE ENTIRE DEVELOPMENT AND IS NOT PARCEL-SPECIFIC THIS GDP ACKNOWLEDGES AN ADDITIONAL 364,400 SF ALLOCATED TO THE HOSPITAL PARCEL, ON TOP OF THE ALLOCATED DEVELOPMENT SQUARE FOOTAGE.THE 364,400 SF IS IN CONSIDERATION WITH A DENSITY SWAP FROM HEALTH PARK 1

PERMITTED USES

PERMITTED USE	COMMENTS / REMARKS	PARKING REQUIREMENTS
PROFESSIONAL, BUSINESS, AND ADMINISTRATIVE OFFICES	-	4 / 1,000 S.F
EDUCATIONAL AND TRAINING FACILITIES	MEETING ROOMS AND SOCIAL SPACE FOR EMPLOYEES AND VISITORS	0.5/ 1,000 S F
PRIVATE SHORT TERM LODGING FOR CONOCOPHILLIPS EMPLOYEES AND GUESTS	OVERNIGHT ACCOMMODATIONS FOR EMPLOYEES/VISITORS	0 5 / ROOM
PEDESTRIAN PLAZAS AND PEDESTRIAN WAYS	-	-
PRIVATE, NONCOMMERCIAL, RECREATIONAL AND SOCIAL FACILITIES	-	1 / 1,000 S.F
PARKING LOTS AND PARKING BUILDINGS	SURFACE AND STRUCTURED PARKING	-
CAMPUS ORIENTED CHILDCARE CENTER	PRIVATE CHILDCARE FOR EMPLOYEES	1.5 SPACES PER TEACHER PLUS ONE SPACE PER ADMINISTRATIVE EMPLOYEE
RESEARCH/OFFICE AND CORPORATE USES AND FACILITIES FOR THE RESEARCH, DEVELOPMENT, MANUFACTURING, FABRICATION, PROCESSING, OR ASSEMBLY OF SCIENTIFIC OR TECHNICAL PRODUCTS, OR OTHER PRODUCTS	-	1.25 / 1,000 S F
BUILDING MOUNTED CMRS FACILITIES	-	-
CAMPUS ORIENTED FOOD SERVICE	RESTAURANTS, CAFETERIAS, OR CAFES FOR USE BY EMPLOYEES/VISITORS INTEGRATED THROUGHOUT THE CAMPUS	-
COMMERCIAL USES, INCLUDING BUT NOT LIMITED TO BUILDING CONTRACTOR'S EQUIPMENT YARDS, TRANSPORTATION CENTERS AND SERVICES, WAREHOUSES AND STORAGE FACILITIES	STORAGE OF MATERIALS IN SUPPORT OF THE CAMPUS RESEARCH AND DEVELOPMENT FACILITY, HELIPAD (SPECIAL REVIEW USE), HOSPITAL, MEDICAL OFFICE BUILDINGS	1 / 1,000 S F
PRIVATE UTILITY USES	TO ALLOW THE EXISTING SANITARY LIFT STATION, POTENTIAL SUBSURFACE GEO EXCHANGE FIELD, SOLAR PANELS, BUILDING MOUNTED WIND POWERED ELECTRICAL GENERATION FACILITIES, AND CENTRAL MECHANICAL, ELECTRICAL, AND PLUMBING FACILITY	-
OTHER USES AS ESTABLISHED BY THE CITY COUNCIL AS FOUND TO BE SPECIFICALLY COMPATIBLE FOR COMMERCIAL AND OFFICE PLANNING AREAS	-	-

YARD AND BULK REQUIREMENTS

1 OTHER THAN FOR THE HOSPITAL PARCEL, MAXIMUM BUILDING HEIGHTS SHALL BE BASED ON THE CONOCOPHILIPS CAMPUS GDP (RECEPTION NO 0308879). STANDARDS FOR THE HOSPITAL PARCEL ARE NOTED BELOW

MINIMUM BUILDING SETBACKS
(FOR BUILDING FOOTPRINTS LESS THAN OR EQUAL TO 30,000 GROSS SQUARE FEET)

STREET R.O W LINE.

ARTERIAL STREET	30 FT
COLLECTOR STREET	20 FT
INTERNAL/PRIVATE DRIVE	10 FT

(FOR BUILDING FOOTPRINTS GREATER THAN OR EQUAL TO 30,000 GROSS SQUARE FEET)

STREET R.O W LINE

ARTERIAL STREET	50 FT
COLLECTOR STREET	40 FT
INTERNAL/PRIVATE DRIVE	10 FT

MINIMUM PARKING SETBACKS
(FROM ALL PERIMETER PROPERTY LINE OR RIGHTS-OF-WAYS)

PROPERTY LINES ADJACENT TO U S. 36	40 FT
ARTERIAL STREET R.O.W	25 FT
COLLECTOR STREET R.O.W	15 FT
INTERNAL/COMMON PROPERTY BOUNDARY	10 FT

HOSPITAL PARCEL
FOR THE HOSPITAL PARCEL (LOT 1, BLOCK 2) BUILDING HEIGHTS ARE EXPECTED TO RANGE FROM THREE TO FIVE OCCUPIABLE STORIES, RANGING IN HEIGHT FROM 50' TO 90' UNOCCUPIED MECHANICAL SCREENING OF UP TO 20' WOULD BE ABOVE THE 5 STORIES. THE HOSPITAL PARCEL WILL BE ZONED TO SUPPORT LOWER THREE-STORY BUILDING HEIGHTS TOWARDS THE NORTH, EAST, AND WEST PROPERTY BOUNDARIES CONCENTRATING THE 5-STORY STRUCTURES CENTRALLY WITHIN THE SITE. REFER TO THE GRAPHIC FOR PARCEL HEIGHT ZONES

BUILDING HEIGHT ZONING:
THREE STORY ZONE
45'-0" MAXIMUM BUILDING HEIGHT
50'-0" PARAPET HEIGHT
65'-0" MECHANICAL PENTHOUSE HEIGHT*

FOUR STORY ZONE.
60'-0" MAXIMUM BUILDING HEIGHT
65'-0" PARAPET HEIGHT
80'-0" MECHANICAL PENTHOUSE HEIGHT*

FIVE STORY ZONE.
85'-0' MAXIMUM BUILDING HEIGHT
90'-0" PARAPET HEIGHT
105'-0" MECHANICAL PENTHOUSE HEIGHT*

*ROOF ACCESS AND ELEVATOR OVERUN IS EXCLUDED FROM THE BUILDING HEIGHT

METHOD OF MEASUREMENT
Building height shall be measured as the vertical distance from the approved finished floor elevation (FFE) of the structure to the highest point of the specific building element being measured The FFE shall be as established on the approved grading and drainage plans

BUILDING MASSING DESIGN PARAMETERS APPLICABLE TO HOSPITAL PARCEL ONLY
FOR BUILDING FACADES EXCEEDING 100 FEET IN LENGTH AND MORE THAN 45 FT IN HEIGHT A RELIEF IN THE BUILDING MASSING IS REQUIRED TO REDUCE VISUAL MONOTONY AND ENHANCE ARCHITECTURAL INTEREST:
•A MAXIMUM HEIGHT OF 45 FEET IS PERMITTED BEFORE A MINIMUM HORIZONTAL SETBACK OF 15 FEET IS REQUIRED FROM THE PRIMARY BUILDING FACE
•A PROJECTED RELIEF ELEMENT MAY EXTEND OUTWARD FROM THE MAIN BUILDING MASS BY A MINIMUM OF 2 FEET, PROVIDED IT CONTRIBUTES TO THE OVERALL ARTICULATION AND DESIGN OF THE FACADE.
•THE FOOTPRINT OF EACH FLOOR ABOVE 45 FEET SHALL NOT EXCEED 50% OF THE FOOTPRINT OF THE BUILDING AT OR BELOW 45 FEET.
•ANY ROOFTOP ENCLOSURE (E.G., MECHANICAL PENTHOUSES) MUST BE SET BACK A MINIMUM OF 10 FEET FROM THE EDGE OF THE BUILDING MASS, UNLESS IT IS ARCHITECTURALLY INTEGRATED INTO THE OVERALL DESIGN OF THE BUILDING.
•EXCEPTION: A DEFINING ARCHITECTURAL ELEMENT OR DISTINCT BUILDING FORM WITH A TOTAL WIDTH OF LESS THAN 100 FEET IS EXEMPT FROM THE ABOVE SETBACK AND RELIEF REQUIREMENTS. A MINIMUM 2-FOOT DEPTH VARIATION FROM THE ADJACENT PRIMARY FACADE PLANE MUST STILL BE PROVIDED TO ENSURE VISUAL ARTICULATION.
DEFINING ARCHITECTURAL ELEMENTS MAY INCLUDE, BUT ARE NOT LIMITED TO:
-VERTICAL CIRCULATION TOWERS (E.G., STAIR OR ELEVATOR CORES)
-ENTRY PAVILIONS OR LOBBIES
-ARCHITECTURAL EYEBROWS OR ROOF OVERHANGS
-BRANDED OR SCULPTURAL FACADE FEATURES
-CORNER ELEMENTS OR TURRETS
-ATRIUM VOLUMES OR LIGHT WELLS
DISTINCTIVE ROOF FORMS

CERTIFICATIONS/SIGNATURE BLOCKS

CITY COUNCIL CERTIFICATION:

APPROVED THIS 2nd DAY OF June, 2026 BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO

RESOLUTION NO 52, SERIES 2026

MAYOR'S SIGNATURE

DIRECTOR OF COMMUNITY DEVELOPMENT CERTIFICATE

APPROVED THIS 2nd DAY OF June, 2026 BY THE DIRECTOR OF COMMUNITY DEVELOPMENT OF THE CITY OF LOUISVILLE, COLORADO.

BY DIRECTOR OF COMMUNITY DEVELOPMENT

OWNERSHIP SIGNATURE BLOCK

BY SIGNING THIS GDP, THE OWNER ACKNOWLEDGES AND ACCEPTS ALL THE REQUIREMENTS AND INTENT SET FORTH IN THIS GDP WITNESS OUR HANDS AND SEALS

THIS 5th DAY OF June, 2026

OWNER

PORTERCARE ADVENTIST HEALTH SYSTEM,
A COLORADO NONPROFIT CORPORATION

BY SIGNATURE

TITLE CFO

NOTARY NAME AND SIGNATURE

MY COMMISSION EXPIRES: Jan 27, 2030

JEANNE BOLT
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 19964013077
MY COMMISSION EXPIRES JANUARY 27, 2030

SMITHGROUP
1675 LARIMAR STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

ISSUE / REVISION	DATE
GDP AMENDMENT 3	05/01/2026

CONOCOPHILLIPS CAMPUS
2270 SO 88TH STREET
LOUISVILLE, CO

GENERAL DEVELOPMENT PLAN

DRAWN	TEAM
CHK	TEAM
PRJ #	

SHEET NUMBER:
1 OF 2

CONOCOPHILLIPS CAMPUS
GENERAL DEVELOPMENT PLAN AMENDMENT 3

A PART OF THE SOUTH HALF OF SECTION 20, THE NORTH HALF SECTION 29,
TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.
SHEET 2 OF 2

ENHANCED DESIGN STANDARDS APPLICABLE TO THE ENHANCED INTERNAL ARCHITECTURAL AREA DEPICTED HEREON, WHICH CONSISTS OF LOT 1, 2, 3, AND 5 OF BLOCK 1, REDTAIL RIDGE FILING NO. 1.

TRANSPARENCY REQUIREMENTS:

FOR ELEVATIONS THAT FACE A PUBLIC OR PRIVATE STREET, 50% OF THE AREA BETWEEN 2 – 10 FEET ABOVE GRADE SHALL INCLUDE TRANSPARENCY IN THE FORM OF DOORS OR WINDOWS. WINDOWS MUST BE EVENLY DISTRIBUTED

FOR ELEVATIONS THAT FACE A PUBLIC OR PRIVATE STREET ON BUILDINGS TALLER THAN 18 FEET, 18% OF THE AREA BETWEEN 12 – 30 FEET ABOVE GRADE SHALL INCLUDE TRANSPARENCY THAT MIMICS A SECOND-FLOOR DESIGN.

ENHANCED ENTRANCE FEATURES:

PRIMARY BUILDING ENTRANCES SHALL BE POSITIONED IN A MANNER THAT HIGHLIGHTS THE ENHANCED ENTRANCES BEST FROM A PUBLIC OR PRIVATE STREET.

WHERE THE LONG SIDE OF A BUILDING FACES A PUBLIC OR PRIVATE STREET, A MINIMUM OF ONE PRIMARY ENTRANCE SHALL BE REQUIRED.

IF AN ENTRY FEATURE IS PROPOSED ON A BUILDING CORNER, THE FEATURE SHALL WRAP THE BUILDING ON THE BUILDING SIDE FACING A PUBLIC OR PRIVATE STREET A MINIMUM DISTANCE OF 15 FEET

IF THE SHORT SIDE OF A BUILDING FACES A PUBLIC OR PRIVATE STREET AND NO CORNER ENTRY IS PROPOSED, THE FOLLOWING STANDARDS APPLY:

BUILDING HEIGHT INCREASE A MINIMUM OF 3' 6" TO EXTEND A MINIMUM OF 15 FEET ALONG EACH ADJOINING FAÇADE.

A MINIMUM OF 50% OF THE AREA WITHIN 15 FEET OF THE CORNER SHALL INCLUDE GLAZING WITHIN THE AREA 2-10 FEET ABOVE GRADE.

A PROJECTING ARCHITECTURAL FEATURE, SUCH AS AN AWNING, PORTICO, EYEBROW, OR SIMILAR FEATURE SHALL EXTEND A MINIMUM OF 15 FEET ALONG THE ADJOINING FAÇADE.

BUILDING FAÇADES GREATER THAN 200 FEET IN LENGTH SHALL PROVIDE A MINIMUM OF 2 PRIMARY ENTRY FEATURES. FAÇADES GREATER THAN 400 FEET IN LENGTH SHALL INCLUDE A MINIMUM OF 3 ENTRY FEATURES WRAPPED CORNER FEATURES ARE ENCOURAGED WHERE APPROPRIATE.

ENTRY FEATURES SHALL INCLUDE A GLASS VESTIBULE OR FAÇADE, METAL CANOPY, PORTICO, OR OTHER SIMILAR ARCHITECTURAL FEATURE PROPORTIONAL TO THE FAÇADE HEIGHT.

ENTRANCES SHALL BE ARTICULATED THROUGH RECESSES OR PROJECTED ELEMENTS SUCH AS CANOPIES, AWNINGS, BELT COURSES OR OVERHANGS, OR COMBINATION THEREOF THAT PROJECT AT LEAST 4 FEET FROM THE BUILDING FACE.

ENTRY FEATURES SHALL INCORPORATE A DISTINCT ACCENT MATERIAL OR TEXTURE, SEPARATE FROM THE PRIMARY AND SECONDARY FAÇADE MATERIALS AND TEXTURES, TO CLEARLY DIFFERENTIATE THE BUILDING ENTRIES FROM THE REMAINDER OF THE FAÇADE.

ENTRY FEATURES SHALL ACCOUNT FOR 20% OF THE TOTAL BUILDING FAÇADE LENGTH ON WHICH THEY ARE LOCATED, TO BE CALCULATED IN AGGREGATE ACROSS THE FAÇADE. ENTRY FEATURES SHALL BE A MINIMUM OF 10 FEET WIDE.

MATERIAL OR TEXTURE VARIATION:

AT LEAST TWO PRIMARY MATERIALS AND ONE ACCENT MATERIAL SHALL BE INCORPORATED ON FAÇADES FACING A PUBLIC OR PRIVATE STREET TEXTURED, RIBBED, OR PATTERNED CONCRETE PANELS MAY BE CONSIDERED A SEPARATE MATERIAL IF THEY PROVIDE A CLEAR TEXTURAL AND COLOR CONTRAST.

NO SINGLE TEXTURE OR COLOR SHALL COVER MORE THAN 75% OF ANY STREET-FACING FAÇADE.

ACCENT MATERIALS SUCH AS ARCHITECTURAL METAL PANELS, MASONRY VENEER, ARCHITECTURAL CONCRETE FINISHES, OR WOOD SHALL BE USED TO EMPHASIZE ENTRIES, CORNERS, HORIZONTAL OR VERTICAL DIVISIONS

SMITHGROUP
1675 LARIMAR STREET
SUITE 500
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ISSUE / REVISION	DATE
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CONOCOPHILLIPS CAMPUS
2270 SO 88TH STREET
LOUISVILLE, CO

GENERAL DEVELOPMENT PLAN

DRAWN	TEAM
CHK	TEAM
PSU #	

SHEET NUMBER:
2 OF 2

The following pages are the original used for recordation, the image quality is better than the recorded copy.

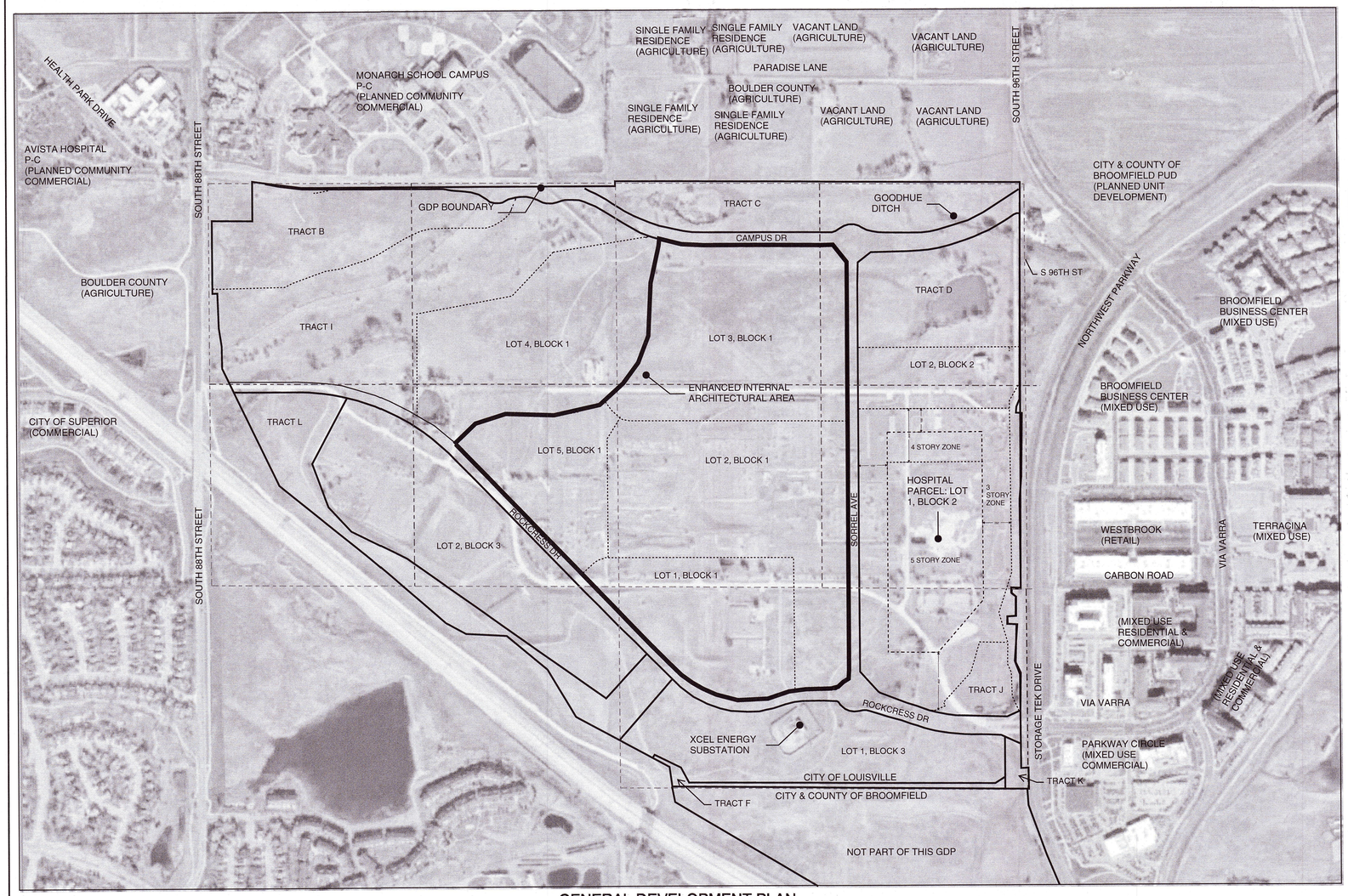
CONOCOPHILLIPS CAMPUS
GENERAL DEVELOPMENT PLAN AMENDMENT 3

A PART OF THE SOUTH HALF OF SECTION 20, THE NORTH HALF SECTION 29,
TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.
SHEET 1 OF 2

AMENDMENT NO.3 - SUMMARY OF CHANGES

THE PURPOSE OF THIS AMENDMENT IS SPECIFICALLY FOR THE HOSPITAL PARCEL AND THE REST OF THE REDTAIL DEVELOPMENT REMAINS UNCHANGED.

1) Use of alternate method of measurement for hospital parcel



GENERAL DEVELOPMENT PLAN

400 200 0 400 800

SCALE: 1" = 400'

N

RECEPTION NUMBER

CERTIFICATIONS/SIGNATURE BLOCKS

CITY COUNCIL CERTIFICATION:

APPROVED THIS 2nd DAY OF June, 2026 BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO.

RESOLUTION NO. 52, SERIES 2026

MAYOR SIGNATURE

DIRECTOR OF COMMUNITY DEVELOPMENT CERTIFICATE

APPROVED THIS 2nd DAY OF June, 2026 BY THE DIRECTOR OF COMMUNITY DEVELOPMENT OF THE CITY OF LOUISVILLE, COLORADO.

BY DIRECTOR OF COMMUNITY DEVELOPMENT

OWNERSHIP SIGNATURE BLOCK:

BY SIGNING THIS GDP, THE OWNER ACKNOWLEDGES AND ACCEPTS ALL THE REQUIREMENTS AND INTENT SET FORTH IN THIS GDP. WITNESS OUR HANDS AND SEALS

THIS 5th DAY OF June, 2026.

OWNER

PORTERCARE ADVENTIST HEALTH SYSTEM,
A COLORADO NONPROFIT CORPORATION

BY: SIGNATURE

CFO
TITLE

Jeanne Bolt
NOTARY NAME AND SIGNATURE

MY COMMISSION EXPIRES: Jan 27, 2030

JEANNE BOLT
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 19984013077
MY COMMISSION EXPIRES JANUARY 27, 2030

GENERAL NOTES:

1. UNLESS OTHERWISE NOTED, DEVELOPMENT SHALL CONFORM AND BE CONSISTENT WITH THE LOUISVILLE MUNICIPAL CODE AND THE COMMERCIAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES UNLESS OTHERWISE WAIVED OR MODIFIED BY THE CITY COUNCIL THROUGH THE PUD DEVELOPMENT PLAN PROCESS.
2. THE CAMPUS SECURITY BOUNDARY WILL NOT EXTEND OUTSIDE THE SITE BOUNDARY.
3. EXISTING FREE STANDING CMRS FACILITIES WITHIN THE GDP BOUNDRY SHALL CONSTITUTE A PERMISSIBLE NON-CONFORMING USE.
4. PUBLIC LAND DEDICATION REQUIRMENT SATISFIED PURSUANT TO LOUISVILLE MUNICIPAL CODE SECTION 16.16.060(B) WITH REDTAIL RIDGE FILING NO. 1 SUBDIVISION PLAT.
5. LOTS 1,2,3 AND 5 OF BLOCK 1 OF REDTAIL RIDGE FILING NO.1 SHALL CONFORM TO AND BE CONSISTENT WITH THE LOUISVILLE MUNICIPAL CODE, THE INDUSTRIAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES, AND THE ENHANCED DESIGN STANDARDS CONTAINED HEREIN IN LIEU OF COMMERCIAL DESIGN GUIDELINES,UNLESS OTHERWISE WAIVED OR MODIFIED BY THE CITY COUNCIL THROUGH THE PUD DEVELOPMENT PLAN PROCESS.

SITE INFORMATION

GROSS DEVELOPABLE AREA (PUD BOUNDARY):	391.719 ACRES (MAXIMUM 0.15 F.A.R.) * FOR LEGAL DESCRIPTION SEE EXHIBIT A OF ORDINANCE NO. 1569 SERIES 2010
ZONING:	PLANNED COMMUNITY ZONED DISTRICT (PCZD) - COMMERCIAL WITH PUD-C OVERLAY
PLANNED ACCESS:	NORTHWEST PARKWAY, CAMPUS DRIVE, SOUTH 88TH STREET

* THE F.A.R APPLIES TO THE GROSS AREA OF THE ENTIRE DEVELOPMENT AND IS NOT PARCEL-SPECIFIC. THIS GDP ACKNOWLEDGES AN ADDITIONAL 364,400 SF ALLOCATED TO THE HOSPITAL PARCEL, ON TOP OF THE ALLOCATED DEVELOPMENT SQUARE FOOTAGE.THE 364,400 SF IS IN CONSIDERATION WITH A DENSITY SWAP FROM HEALTH PARK 1.

PERMITTED USES

PERMITTED USE	COMMENTS / REMARKS	PARKING REQUIREMENTS
PROFESSIONAL, BUSINESS, AND ADMINISTRATIVE OFFICES	-	4 / 1,000 S.F.
EDUCATIONAL AND TRAINING FACILITIES	MEETING ROOMS AND SOCIAL SPACE FOR EMPLOYEES AND VISITORS	0.5/ 1,000 S.F.
PRIVATE SHORT TERM LODGING FOR CONOCOPHILLIPS EMPLOYEES AND GUESTS	OVERNIGHT ACCOMMODATIONS FOR EMPLOYEES/VISITORS	0.5 / ROOM
PEDESTRIAN PLAZAS AND PEDESTRIAN WAYS	-	-
PRIVATE, NONCOMMERCIAL, RECREATIONAL AND SOCIAL FACILITIES	-	1 / 1,000 S.F.
PARKING LOTS AND PARKING BUILDINGS	SURFACE AND STRUCTURED PARKING	-
CAMPUS ORIENTED CHILDCARE CENTER	PRIVATE CHILDCARE FOR EMPLOYEES	1.5 SPACES PER TEACHER PLUS ONE SPACE PER ADMINISTRATIVE EMPLOYEE
RESEARCH/OFFICE AND CORPORATE USES AND FACILITIES FOR THE RESEARCH, DEVELOPMENT, MANUFACTURING, FABRICATION, PROCESSING, OR ASSEMBLY OF SCIENTIFIC OR TECHNICAL PRODUCTS, OR OTHER PRODUCTS	-	1.25 / 1,000 S.F.
BUILDING MOUNTED CMRS FACILITIES	-	-
CAMPUS ORIENTED FOOD SERVICE	RESTAURANTS, CAFETERIAS, OR CAFES FOR USE BY EMPLOYEES/VISITORS INTEGRATED THROUGHOUT THE CAMPUS	-
COMMERCIAL USES, INCLUDING BUT NOT LIMITED TO BUILDING CONTRACTOR'S EQUIPMENT YARDS, TRANSPORTATION CENTERS AND SERVICED, WAREHOUSES AND STORAGE FACILITIES	STORAGE OF MATERIALS IN SUPPORT OF THE CAMPUS RESEARCH AND DEVELOPMENT FACILITY, HELIPAD (SPECIAL REVIEW USE), HOSPITAL, MEDICAL OFFICE BUILDINGS	1 / 1,000 S.F.
PRIVATE UTILITY USES	TO ALLOW THE EXISTING SANITARY LIFT STATION, POTENTIAL SUBSURFACE GEO EXCHANGE FIELD, SOLAR PANELS, BUILDING MOUNTED WIND POWERED ELECTRICAL GENERATION FACILITIES, AND CENTRAL MECHANICAL, ELECTRICAL, AND PLUMBING FACILITY	-
OTHER USES AS ESTABLISHED BY THE CITY COUNCIL AS FOUND TO BE SPECIFICALLY COMPATIBLE FOR COMMERCIAL AND OFFICE PLANNING AREAS	-	-

YARD AND BULK REQUIREMENTS

1. OTHER THAN FOR THE HOSPITAL PARCEL, MAXIMUM BUILDING HEIGHTS SHALL BE BASED ON THE CONOCOPHILIPS CAMPUS GDP (RECEPTION NO. 0308879). STANDARDS FOR THE HOSPITAL PARCEL ARE NOTED BELOW.

MINIMUM BUILDING SETBACKS
(FOR BUILDING FOOTPRINTS LESS THAN OR EQUAL TO 30,000 GROSS SQUARE FEET)

STREET R.O.W. LINE:
- ARTERIAL STREET 30 FT.
- COLLECTOR STREET 20 FT.
- INTERNAL/PRIVATE DRIVE 10 FT.

(FOR BUILDING FOOTPRINTS GREATER THAN OR EQUAL TO 30,000 GROSS SQUARE FEET)

STREET R.O.W. LINE:
- ARTERIAL STREET 50 FT.
- COLLECTOR STREET 40 FT.
- INTERNAL/PRIVATE DRIVE 10 FT.

MINIMUM PARKING SETBACKS
(FROM ALL PERIMETER PROPERTY LINE OR RIGHTS-OF-WAYS)

- PROPERTY LINES ADJACENT TO U.S. 36 40 FT.
- ARTERIAL STREET R.O.W. 25 FT.
- COLLECTOR STREET R.O.W. 15 FT.
- INTERNAL/COMMON PROPERTY BOUNDARY 10 FT.

HOSPITAL PARCEL
FOR THE HOSPITAL PARCEL (LOT 1, BLOCK 2) BUILDING HEIGHTS ARE EXPECTED TO RANGE FROM THREE TO FIVE OCCUPIABLE STORIES, RANGING IN HEIGHT FROM 50' TO 90'. UNOCCUPIED MECHANICAL SCREENING OF UP TO 20' WOULD BE ABOVE THE 5 STORIES. THE HOSPITAL PARCEL WILL BE ZONED TO SUPPORT LOWER THREE-STORY BUILDING HEIGHTS TOWARDS THE NORTH, EAST, AND WEST PROPERTY BOUNDARIES CONCENTRATING THE 5-STORY STRUCTURES CENTRALLY WITHIN THE SITE. REFER TO THE GRAPHIC FOR PARCEL HEIGHT ZONES.

BUILDING HEIGHT ZONING:
THREE STORY ZONE:
- 45'-0" MAXIMUM BUILDING HEIGHT
- 50'-0" PARAPET HEIGHT
- 65'-0" MECHANICAL PENTHOUSE HEIGHT*

FOUR STORY ZONE:
- 60'-0" MAXIMUM BUILDING HEIGHT
- 65'-0" PARAPET HEIGHT
- 80'-0" MECHANICAL PENTHOUSE HEIGHT*

FIVE STORY ZONE:
- 85'-0" MAXIMUM BUILDING HEIGHT
- 90'-0" PARAPET HEIGHT
- 105'-0" MECHANICAL PENTHOUSE HEIGHT*

*ROOF ACCESS AND ELEVATOR OVERUN IS EXCLUDED FROM THE BUILDING HEIGHT

METHOD OF MEASUREMENT:
Building height shall be measured as the vertical distance from the approved finished floor elevation (FFE) of the structure to the highest point of the specific building element being measured. The FFE shall be as established on the approved grading and drainage plans.

BUILDING MASSING DESIGN PARAMETERS: APPLICABLE TO HOSPITAL PARCEL ONLY.
FOR BUILDING FACADES EXCEEDING 100 FEET IN LENGTH AND MORE THAN 45 FT IN HEIGHT, A RELIEF IN THE BUILDING MASSING IS REQUIRED TO REDUCE VISUAL MONOTONY AND ENHANCE ARCHITECTURAL INTEREST:
- •A MAXIMUM HEIGHT OF 45 FEET IS PERMITTED BEFORE A MINIMUM HORIZONTAL SETBACK OF 15 FEET IS REQUIRED FROM THE PRIMARY BUILDING FACE.
- •A PROJECTED RELIEF ELEMENT MAY EXTEND OUTWARD FROM THE MAIN BUILDING MASS BY A MINIMUM OF 2 FEET, PROVIDED IT CONTRIBUTES TO THE OVERALL ARTICULATION AND DESIGN OF THE FACADE.
- •THE FOOTPRINT OF EACH FLOOR ABOVE 45 FEET SHALL NOT EXCEED 50% OF THE FOOTPRINT OF THE BUILDING AT OR BELOW 45 FEET.
- •ANY ROOFTOP ENCLOSURE (E.G., MECHANICAL PENTHOUSES) MUST BE SET BACK A MINIMUM OF 10 FEET FROM THE EDGE OF THE BUILDING MASS, UNLESS IT IS ARCHITECTURALLY INTEGRATED INTO THE OVERALL DESIGN OF THE BUILDING.
- •EXCEPTION: A DEFINING ARCHITECTURAL ELEMENT OR DISTINCT BUILDING FORM WITH A TOTAL WIDTH OF LESS THAN 100 FEET IS EXEMPT FROM THE ABOVE SETBACK AND RELIEF REQUIREMENTS. A MINIMUM 2-FOOT DEPTH VARIATION FROM THE ADJACENT PRIMARY FACADE PLANE MUST STILL BE PROVIDED TO ENSURE VISUAL ARTICULATION.
  - DEFINING ARCHITECTURAL ELEMENTS MAY INCLUDE, BUT ARE NOT LIMITED TO:
  - -VERTICAL CIRCULATION TOWERS (E.G., STAIR OR ELEVATOR CORES)
  - -ENTRY PAVILIONS OR LOBBIES
  - -ARCHITECTURAL EYEBROWS OR ROOF OVERHANGS
  - -BRANDED OR SCULPTURAL FACADE FEATURES
  - -CORNER ELEMENTS OR TURRETS
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CONOCOPHILLIPS CAMPUS
2270 SO 88TH STREET
LOUISVILLE, CO

GENERAL DEVELOPMENT PLAN

DRAWN	TEAM
CHK	TEAM
PRJ #	

SHEET NUMBER:
1 OF 2

CONOCOPHILLIPS CAMPUS
GENERAL DEVELOPMENT PLAN AMENDMENT 3

A PART OF THE SOUTH HALF OF SECTION 20, THE NORTH HALF SECTION 29,
TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.
SHEET 2 OF 2

ENHANCED DESIGN STANDARDS APPLICABLE TO THE ENHANCED INTERNAL ARCHITECTURAL AREA DEPICTED HEREON, WHICH CONSISTS OF LOT 1, 2, 3, AND 5 OF BLOCK 1, REDTAIL RIDGE FILING NO. 1.

TRANSPARENCY REQUIREMENTS:

FOR ELEVATIONS THAT FACE A PUBLIC OR PRIVATE STREET, 50% OF THE AREA BETWEEN 2 – 10 FEET ABOVE GRADE SHALL INCLUDE TRANSPARENCY IN THE FORM OF DOORS OR WINDOWS. WINDOWS MUST BE EVENLY DISTRIBUTED.

FOR ELEVATIONS THAT FACE A PUBLIC OR PRIVATE STREET ON BUILDINGS TALLER THAN 18 FEET, 18% OF THE AREA BETWEEN 12 – 30 FEET ABOVE GRADE SHALL INCLUDE TRANSPARENCY THAT MIMICS A SECOND-FLOOR DESIGN.

ENHANCED ENTRANCE FEATURES:

PRIMARY BUILDING ENTRANCES SHALL BE POSITIONED IN A MANNER THAT HIGHLIGHTS THE ENHANCED ENTRANCES BEST FROM A PUBLIC OR PRIVATE STREET.

WHERE THE LONG SIDE OF A BUILDING FACES A PUBLIC OR PRIVATE STREET, A MINIMUM OF ONE PRIMARY ENTRANCE SHALL BE REQUIRED.

IF AN ENTRY FEATURE IS PROPOSED ON A BUILDING CORNER, THE FEATURE SHALL WRAP THE BUILDING ON THE BUILDING SIDE FACING A PUBLIC OR PRIVATE STREET A MINIMUM DISTANCE OF 15 FEET

IF THE SHORT SIDE OF A BUILDING FACES A PUBLIC OR PRIVATE STREET AND NO CORNER ENTRY IS PROPOSED, THE FOLLOWING STANDARDS APPLY:

BUILDING HEIGHT INCREASE A MINIMUM OF 3' 6" TO EXTEND A MINIMUM OF 15 FEET ALONG EACH ADJOINING FAÇADE.

A MINIMUM OF 50% OF THE AREA WITHIN 15 FEET OF THE CORNER SHALL INCLUDE GLAZING WITHIN THE AREA 2-10 FEET ABOVE GRADE.

A PROJECTING ARCHITECTURAL FEATURE, SUCH AS AN AWNING, PORTICO, EYEBROW, OR SIMILAR FEATURE SHALL EXTEND A MINIMUM OF 15 FEET ALONG THE ADJOINING FAÇADE.

BUILDING FAÇADES GREATER THAN 200 FEET IN LENGTH SHALL PROVIDE A MINIMUM OF 2 PRIMARY ENTRY FEATURES. FAÇADES GREATER THAN 400 FEET IN LENGTH SHALL INCLUDE A MINIMUM OF 3 ENTRY FEATURES. WRAPPED CORNER FEATURES ARE ENCOURAGED WHERE APPROPRIATE.

ENTRY FEATURES SHALL INCLUDE A GLASS VESTIBULE OR FAÇADE, METAL CANOPY, PORTICO, OR OTHER SIMILAR ARCHITECTURAL FEATURE PROPORTIONAL TO THE FAÇADE HEIGHT.

ENTRANCES SHALL BE ARTICULATED THROUGH RECESSES OR PROJECTED ELEMENTS SUCH AS CANOPIES, AWNINGS, BELT COURSES OR OVERHANGS, OR COMBINATION THEREOF THAT PROJECT AT LEAST 4 FEET FROM THE BUILDING FACE.

ENTRY FEATURES SHALL INCORPORATE A DISTINCT ACCENT MATERIAL OR TEXTURE, SEPARATE FROM THE PRIMARY AND SECONDARY FAÇADE MATERIALS AND TEXTURES, TO CLEARLY DIFFERENTIATE THE BUILDING ENTRIES FROM THE REMAINDER OF THE FAÇADE.

ENTRY FEATURES SHALL ACCOUNT FOR 20% OF THE TOTAL BUILDING FAÇADE LENGTH ON WHICH THEY ARE LOCATED, TO BE CALCULATED IN AGGREGATE ACROSS THE FAÇADE. ENTRY FEATURES SHALL BE A MINIMUM OF 10 FEET WIDE.

MATERIAL OR TEXTURE VARIATION:

AT LEAST TWO PRIMARY MATERIALS AND ONE ACCENT MATERIAL SHALL BE INCORPORATED ON FAÇADES FACING A PUBLIC OR PRIVATE STREET. TEXTURED, RIBBED, OR PATTERNED CONCRETE PANELS MAY BE CONSIDERED A SEPARATE MATERIAL IF THEY PROVIDE A CLEAR TEXTURAL AND COLOR CONTRAST.

NO SINGLE TEXTURE OR COLOR SHALL COVER MORE THAN 75% OF ANY STREET-FACING FAÇADE.

ACCENT MATERIALS SUCH AS ARCHITECTURAL METAL PANELS, MASONRY VENEER, ARCHITECTURAL CONCRETE FINISHES, OR WOOD SHALL BE USED TO EMPHASIZE ENTRIES, CORNERS, HORIZONTAL OR VERTICAL DIVISIONS.

NO SINGLE TEXTURE OR COLOR SHALL COVER MORE THAN 75% OF ANY STREET-FACING FAÇADE.

ACCENT MATERIALS SUCH AS ARCHITECTURAL METAL PANELS, MASONRY VENEER, ARCHITECTURAL CONCRETE FINISHES, OR WOOD SHALL BE USED TO EMPHASIZE ENTRIES, CORNERS, HORIZONTAL OR VERTICAL DIVISIONS.

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GENERAL DEVELOPMENT PLAN

DRAWN	TEAM
CHK	TEAM
PRJ #	

SHEET NUMBER:
2 OF 2

SMITHGROUP

PROJECT NARRATIVE – LOUISVILLE REPLACEMENT HOSPITAL

Advent Health

November 17, 2025

PURPOSE AND NEED

With a sacred mission of Extending the Healing Ministry of Christ, AdventHealth is a connected system of care for every stage of life and health. A shared vision, common values, and a strategic focus on whole person care unifies the system's more than fifty hospital campuses in diverse markets throughout nine states.

It is Advent Health's intent to build a replacement hospital for the existing Avista Hospital on the 40-acre parcel in Redtail Ridge.

AdventHealth Avista is the longest continuously operating hospital in AdventHealth, tracing its roots back to the Colorado Boulder Sanitarium, which opened 129 years ago in 1896. Since 1990, AdventHealth Avista has served Louisville in its present location, and is the city's only acute care hospital. During this time, Avista has been caring the Louisville's healthcare needs with excellence, including delivering over 62,000 babies in that period.

To better serve Louisville and the surrounding communities, AdventHealth needs both a different location and a different building. They need better access for their patients, and room to expand and grow to meet the evolving health care needs of the communities they are caring for.

PROJECT LOCATION

The site is located on Lot #1, Block 2, Redtail Ridge PUD #6, City of Louisville, Boulder County, Colorado. The Project (first phase) consists of the development of a portion of the overall 39.9 acre site which sits west of Northwest Parkway, north of the Rockcress Drive (under construction) and east of Sorrel Dr (under construction).

PROJECT DESCRIPTION

The Site is anticipated to be developed in phases over the next 10- 20 years with the first phase consisting of an approximate 371,600 SF hospital and 62,000 SF medical office building (MOB). The 5-story hospital is comprised of 153 inpatient rooms (30 shelled for future build out), OR's, Emergency Department and Imaging. The hospital will be a 24-hour facility and is expected to be staffed with approximately 500 staff – across all shifts. The MOB is expected to have 50 – 60 staff.

The new hospital is located on the southern portion of the site with its main entrance oriented toward the southeast. The Emergency Department is located on the south end of the hospital.

The southeast orientation of both of these elements provide clear and effective wayfinding for patients and families as they exit Highway 36 onto Northwest Parkway

There are 4 vehicular entrances onto the campus including: 1) Main Entrance off Rockcress, which also serves as the ED entrance, 2) Ambulance Entrance on Sorrel, 3) Service/Delivery entrance off Sorrel and 4) Secondary entry to access the MOB on the north end of the site, from Sorrel. A loop road provides efficient access to the different areas on the site, ensuring that users do not have to go back onto public roads if they need to go from one part of the site to another (Ex. Moving from the ED parking lot to the main parking lot)

Parking for patients, visitors and staff is provided along the east side of the site. For pedestrian ease of access, parking aisles are placed perpendicular to the hospital and MOB and are connected to the hospital and MOB with pedestrian sidewalks with pedestrian crossings. Non-motorized connections are made to the proposed offsite bike lanes, walks and shared use path and bike parking is distributed across the hospital and MOB entrances.

Service and delivery functions are aggregated on the west side of the hospital. This includes the recessed loading dock, 1917 SF storage building, medical gas storage, screened outdoor electrical yard and helipad. Ambulance parking/drop-off and a mobile imaging port are also located on the west side of the hospital.

The landscape approach is respectful of the hospital's high plain desert setting, using native plants and low water species. In keeping with the new state law, all lawn areas will be shortgrass prairie rather than traditional, non-native turfgrass that requires extensive watering, fertilization and mowing. The main focal point of the landscape will be the large swath of landscape that runs along the east side of the hospital. Known as the Ribbon, this area is designed to mimic the morphology and landscape of a dry creek bed. Gently sloped banks planting with native prairie grasses, forbs, shrubs and trees provide a welcoming entry experience, restful natural views from the inside of the hospital, an outdoor dining patio and 2 healing walks for respite and contemplation. The variety of plant material helps to increase biodiversity in the area and help filter the storm water runoff that will be discharged into the Ribbon from the building and adjacent pavement areas.

ADVENTHEALTH PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT # 1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE # PUD-0006-2025 & SRU-000583-2026

PROJECT IMAGE



SHEET INDEX

SHEET NUMBER	INTERNAL NUMBER	SHEET TITLE
01	LS-000	COVER SHEET
02	CS-100	OVERALL SITE PLAN - 100 SCALE
03	CS-101	SITE PLAN SOUTH - 50 SCALE
04	CS-102	SITE PLAN NORTH - 50 SCALE
05	CS-103	PEDESTRIAN / BICYCLE CIRCULATION PLAN
06	CG-100	OVERALL GRADING PLAN - 100 SCALE
07	CG-101	GRADING PLAN SOUTH - 50 SCALE
08	CS-102	GRADING PLAN NORTH - 50 SCALE
09	CU-100	OVERALL UTILITY PLAN - 100 SCALE
10	CU-101	UTILITY PLAN SOUTH - 50 SCALE
11	CU-102	UTILITY PLAN NORTH - 50 SCALE
12	FS-100	FIRE AND HYDRANT RADIUS PLAN
13	FA-100	FIRE ACCESS ROUTE
14	LP-100	OVERALL TREE PLAN - 100 SCALE
15	LP-101	LANDSCAPE PLAN SOUTH - 50 SCALE
16	LP-102	LANDSCAPE PLAN NORTH - 50 SCALE
17	LP-103	LANDSCAPE PLANTING SCHEDULE
18	LS-500	SITE AMENITIES DETAILS
19	LS-501	SITE AMENITIES DETAILS
20	LI-100	IRRIGATION HYDROLOGY
21	E-01	SITE LIGHTING SCHEDULE
22	E-02	OVERALL PHOTOMETRIC PLAN - 100 SCALE
23	E-03	PHOTOMETRIC PLAN SOUTH - 50 SCALE
24	E-04	PHOTOMETRIC PLAN NORTH - 50 SCALE
25	E-05	SITE LIGHTING CUTSHEETS
26	E-06	SITE LIGHTING CUTSHEETS
27	E-07	SITE LIGHTING CUTSHEETS
28	A-01	HOSPITAL EXTERIOR ELEVATIONS
29	A-02	HOSPITAL EXTERIOR ELEVATIONS
30	A-03	HOSPITAL / FACILITY STORAGE EXTERIOR ELEVATIONS
31	A-04	HOSPITAL EXTERIOR RENDERINGS
32	A-05	MOB EXTERIOR ELEVATIONS
33	A-06	MOB EXTERIOR RENDERINGS
34	A-07	EXTERIOR BUILDING MATERIALS
35	PH-01	OVERALL SITE PHASING PLAN
36	PH-02	OVERALL GRADING PHASING PLAN
37	PH-03	OVERALL UTILITY PHASING PLAN
38	PH-04	OVERALL LANDSCAPE PHASING PLAN
39	PH-05	OVERALL SITE LIGHTING PHASING PLAN

PROJECT DESCRIPTION:

THE PROJECT INCLUDES THE CONSTRUCTION OF A 370,787 SF HOSPITAL AND 61,467 SF MEDICAL OFFICE BUILDING. THE 5-STORY HOSPITAL IS COMPRISED OF 153 INPATIENT ROOMS (30 SHELLED FOR FUTURE BUILD OUT), OR'S, EMERGENCY DEPARTMENT AND IMAGING. THE PROJECT INCLUDES PARKING, VEHICULAR AND NON-MOTORIZED CIRCULATION, HELIPAD, EMERGENCY DEPARTMENT DROPOFF, AMBULANCE PARKING/DROPOFF, RECESSED LOADING DOCKS AND A SCREENED MECHANICAL YARD.

A SPECIAL REVIEW USE FOR A GROUND LEVEL HELIPAD IS PROPOSED AS PART OF THE PROJECT TO PROVIDE RAPID CARE AND TRANSPORT OF EMERGENCY DEPARTMENT PATIENTS. THE HELIPAD IS LOCATED ALONG THE WEST SIDE OF THE SITE NEAR SORREL AVENUE, WEST OF THE PROPOSED BUILDINGS. TAKEOFFS AND LANDINGS ARE IN A NORTH-SOUTH ORIENTATION TRAVELING OVER ROCKCRESS DRIVE, SORREL AVENUE, AND US-36. NO REFUELING ACTIVITIES ARE PROPOSED WITH THIS HELIPAD.

ZONING: P-C, PLANNED COMMUNITY ZONED DISTRICT (PCZD) - COMMERCIAL WITH PUD-C OVERLAY
PLANNED ACCESS: NORTHWEST PARKWAY, CAMPUS DRIVE, SOUTH 88TH ST

PHASING PLANS ARE PROVIDED AS FOLLOWS:
PHASE 1 - HOSPITAL BUILDING AND ADJACENT SITE IMPROVEMENTS
PHASE 2 - MOB BUILDING AND ADJACENT SITE IMPROVEMENTS

WAIVER REQUEST(S):

A LIST OF ALL REQUESTS, WITH COMMERCIAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES, INDUSTRIAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES, OR LOUISVILLE MUNICIPAL CODE SECTION(S) IDENTIFIED.

PROVIDE PRAIRIE SEED MIX AS NOTED IN PLANS IN LIEU OF COMMERCIAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES SECTION 5.1.E.2.C, WHICH REQUIRES ONE (1) SHRUB PER FIVE (5) LINEAR FEET OF STREET FRONTAGE WITHIN TEN (10) FEET OF THE SIDEWALK, INTERNAL TO THE DEVELOPMENT.

DUE TO EXISTING XCEL EASEMENT PREVENTING TREES TO BE PLANTED, COMMERCIAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES SECTION 5.1.E.2.B, WHICH REQUIRES ONE (1) TREE PER FORTY (40) LINEAR FEET OF STREET FRONTAGE WITHIN TEN (10) FEET OF THE SIDEWALK, INTERNAL TO THE DEVELOPMENT, ADJACENT TO ROCKCRESS DRIVE.

PREVIOUS AMENDMENTS:

A LIST OF ALL PREVIOUS AMENDMENTS, INCLUDING NAME AND APPROVAL DATE, IDENTIFIED. EXPLANATION OF WHETHER, AND TO WHAT EXTENT, THE CURRENT AMENDMENT REPLACES THE PREVIOUSLY APPROVED PUD(S).

N/A

OWNERSHIP SIGNATURE BLOCK:

BY SIGNING THIS PUD, _____ ACKNOWLEDGES ALL THE REQUIREMENTS AND INTENT SET FORTH IN THIS PUD.

WITNESS MY / OUR HAND(S) SEAL(S) THIS _____ DAY OF _____, 20_____

_____
OWNER SIGNATURE

_____
NOTARY NAME

_____
NOTARY SIGNATURE

MY COMMISSION EXPIRES_____

CITY COUNCIL CERTIFICATE:

APPROVED THIS _____ DAY OF _____, 20_____

BY THE CITY OF LOUISVILLE COLORADO

BY _____
MAYOR

BY _____
CITY CLERK

RESOLUTION NO. _____, SERIES _____

PLANNING COMMISSION CERTIFICATE:

APPROVED THIS _____ DAY OF _____, 20_____

BY THE PLANNING COMMISSION OF THE CITY OF LOUISVILLE, COLORADO

RESOLUTION NO. _____

SERIES 20 _____

OWNER/APPLICANT:

ADVENTHEALTH LOUISVILLE
100 HEALTH PARK DRIVE
LOUISVILLE, CO 80027
303.673.1000
www.adventhealth.com

OWNER'S REPRESENTATIVE :

ADAMS
336 BROAD STREET, SUITE 300
ROME, GA 30161
www.adamspmc.com

ARCHITECT, LANDSCAPE ARCHITECT:

SMITHGROUP
1675 LARIMER STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

CIVIL ENGINEER:

Kimley»Horn
6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2300
www.kimley-horn.com

ELECTRICAL ENGINEER / PHOTOMETRICS:

WSP
2000 S. COLORADO BLVD, SUITE 2-1000
DENVER, CO 80222
www.wsp.com

ISSUED FOR:
PLANNED UNIT DEVELOPMENT - SITE

SUBMITTAL DATES:

1st SUBMITTAL	11.13.2025
2nd SUBMITTAL	2.10.2025
3rd SUBMITTAL	5.6.2026

ISSUE DATE:
MAY 6, 2026

15696.000

SITE DATA TABLE

SITE AREA

	REQUIRED	PROPOSED
TOTAL SITE AREA		1,739,700 SF (39.9 AC)
SITE COVERAGE	70% MAX SF or 1,217,828 SF (28 AC)	
BUILDING - HOSPITAL		116,685 SF (2.68 AC)
BUILDING - MOB		20,929 SF (0.48 AC)
BUILDING - FACILITIES STORAGE		2,000 SF (0.05 AC)
PARKING		246,569 SF (5.66 AC)
DRIVEWAYS		257,259 SF (5.91 AC)
TOTAL		643,442 SF (14.77 AC) 37%

LANDSCAPE COVERAGE

	30% MIN SF or 521,910 SF (11.98 AC)	
LANDSCAPE AREA		969,648 SF (22.26 AC)
HARDSCAPE AREA		126,610 SF (2.91 AC)
TOTAL	100% /SF	1,096,258 SF (25.17 AC) 63%

BUILDING AREA CALCS

		GROSS SF
HOSPITAL (HIGH DENSITY ZONE)		371,600 SF
MOB (MEDIUM DENSITY)		62,000 SF
FACILITIES STORAGE		2,000 SF
	TOTAL	435,600 SF

NOTE:
FUTURE PHASES - 364,400 SF
TOTAL MAXIMUM BUILD-OUT - 800,000SF

BUILDING INFORMATION

	REQUIRED (PER APPROVED GDP)	PROPOSED
BUILDING HEIGHT: HIGH DENSITY		FFE - LEVEL 1
HOSPITAL (5 STORIES)	85' (5 STORIES MAX) - BUILDING HEIGHT	84.75' TOP OF ROOF MATERIAL
HOSPITAL	PARAPET HEIGHT 90'	89.33' TOP OF PARAPET
HOSPITAL	MECHANICAL HEIGHT 105'	102.0 ' TOP OF MECH. PARAPET
FACILITIES STORAGE SHED	85' (5 STORIES MAX) - BUILDING HEIGHT	20'-0" TOP OF ROOF MATERIAL
FACILITIES STORAGE SHED	PARAPET HEIGHT 90'	20'-0" TOP OF PARAPET
FACILITIES STORAGE SHED	MECHANICAL HEIGHT 105'	20'-0" TOP OF MECH. PARAPET
BUILDING HEIGHT: MEDIUM DENSITY		
MOB (3 STORIES)	45' (3 STORIES MAX) - BUILDING HEIGHT	45.0' TOP OF ROOF MATERIAL
MOB	PARAPET HEIGHT 50'	48.5' TOP OF PARAPET
MOB	MECHANICAL HEIGHT 65'	58.0' TOP OF MECH. PARAPET

NOTE:
PER GDP, THE FFE SHALL SERVE AS THE ESTABLISHED BASE ELEVATION FOR PURPOSES OF CALCULATING HEIGHT.

PARKING SPACES

	REQUIRED	PROPOSED
STANDARD - HOSPITAL (INCLUDES ADA/EV LISTED BELOW)	* 2 SPACES PER BED (153 BEDS - 30 SHELLED)	306 SPACES
STANDARD - MOB (INCLUDES ADA/EV LISTED BELOW)	** 1 SPACE / 150 SF + 1 SPACE / 2 EMP 62,000 SF/150SF = 413 SPACES + 25 SPACES / EMPLOYEES = 438 SPACES	467 SPACES
ACCESSIBLE	10%	79 SPACES
EV - INSTALLED	2%	16 SPACES
EV - READY	8%	64 SPACES
EV - CAPABLE	10%	79 SPACES
EV - CAPABLE-LIGHT (CONDUIT ONLY)	10%	79 SPACES
TOTAL	773 SPACES	773 SPACES

* CITY CODE DOES NOT HAVE A HOSPITAL PARKING REQUIREMENT. ADVENT HEALTH IS PROPOSING 2 SPACES PER BED WHICH IS CONSISTENT WITH THEIR PARKING NEEDS AT OTHER LOCATIONS.
** PER CITY CODE

BICYCLE SPACES

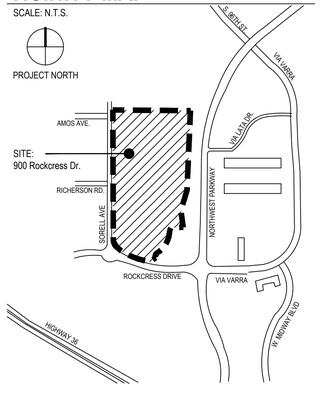
	REQUIRED	PROPOSED
EXTERIOR SPACES	NA	40 SPACES
INTERIOR SPACES	NA	10 SPACES
TOTAL	40 MIN.	50 SPACES

PARKING SETBACKS

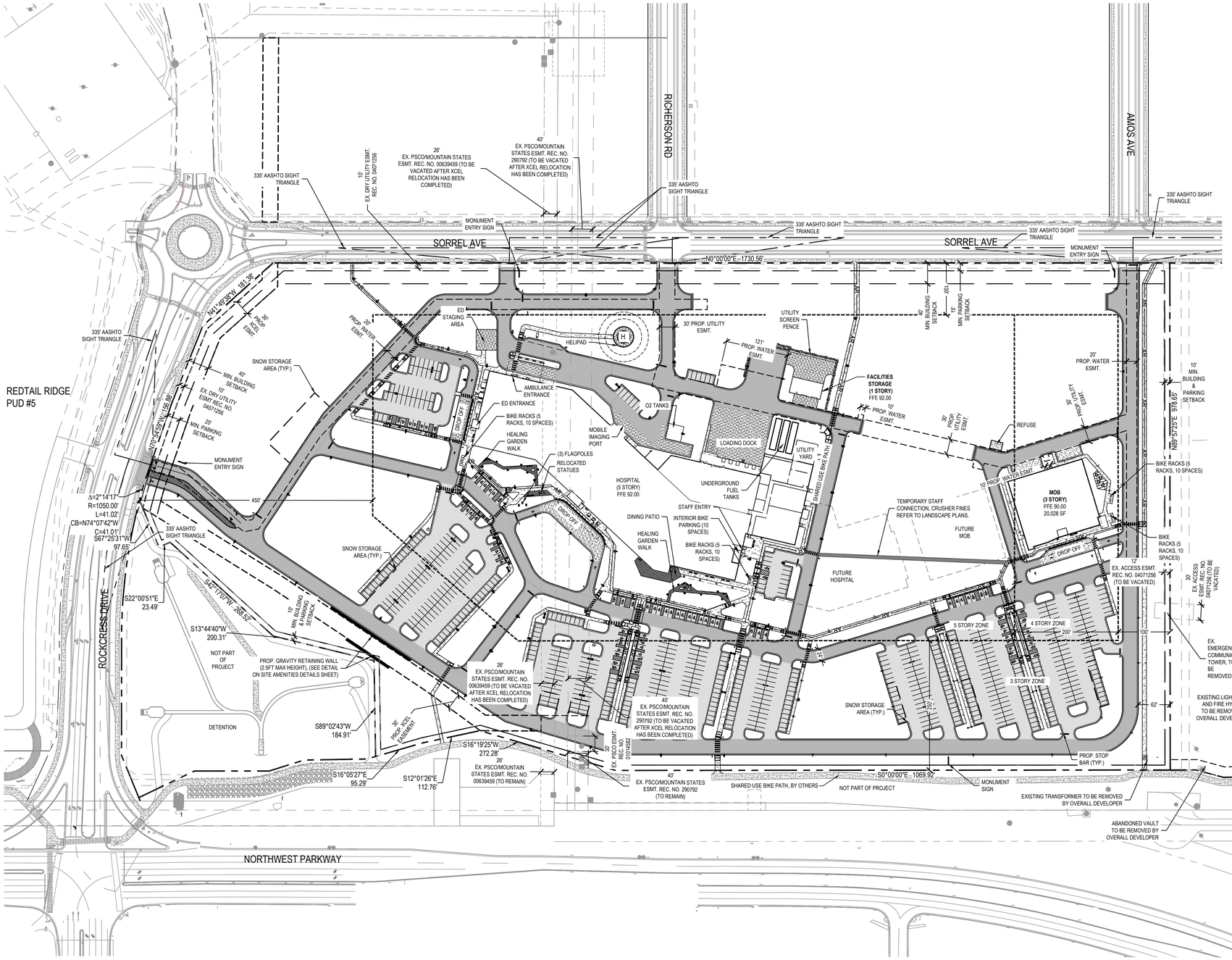
	REQUIRED	PROPOSED
NORTH - INTERNAL/COMMON PROP.	10'-0" MIN.	+ 55'-0"
SOUTH - ROCKCRESS DR. (Collector)	15'-0" MIN.	+ 25'-0"
EAST - INTERNAL/COMMON PROP.	10'-0" MIN.	+ 30'-0"
WEST - SORREL AVE. (Collector)	15'-0" MIN.	+ 55'-0"

VICINITY MAP

SCALE: N.T.S.



Plot Date:



LEGEND:

- PROPERTY LINE
- MATCHLINE
- ZONE AREA BOUNDARY
- HEAVY DUTY ASPHALT
- STANDARD DUTY ASPHALT
- HEAVY DUTY CONCRETE PAVEMENT FOR O2 YARD
- HEAVY DUTY CONCRETE PAVEMENT (SEE SITE AMENITIES SHEET LP100–LP102)
- STANDARD CONCRETE PAVEMENT (SEE SITE AMENITIES SHEET LP100–LP102)
- CONCRETE UNIT PAVERS (SEE SITE AMENITIES SHEET LP100–LP102)
- EV PARKING SPACE (CHARGER INSTALLED)
- EV–READY PARKING SPACE
- EV–CAPABLE PARKING SPACE
- EV–CAPABLE LIGHT PARKING SPACE
- FUTURE BUILDING FOOTPRINT
- CURB & GUTTER
- PARKING COUNT
- BUILDING/PARKING SETBACK LINE
- EX. EASEMENT LINE
- ACCESSIBLE ROUTE
- SIGN, SEE PLAN FOR TYPE
- PROPOSED SITE LIGHTING

NOTES

1. ALL DIMENSIONS ARE TO THE FLOWLINE UNLESS OTHERWISE NOTED
2. ALL CURB RADII TO BE 3' UNLESS OTHERWISE STATED IN PLANS.
3. ALL INTERNAL DRIVES TO BE PRIVATE.
4. ACCESSIBLE ROUTE SHALL HAVE A 5% MAXIMUM LONGITUDINAL SLOPE AND 2% MAXIMUM CROSS SLOPE. ACCESSIBLE PARKING SPACES AND LANDING AREAS SHALL BE 2% MAXIMUM SLOPE IN ANY DIRECTION.
5. ALL ACCESSIBLE ROUTES, GENERAL SITE AND BUILDING ELEMENTS, RAMPS, CURB RAMPS, STRIPING AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.
6. ALL SIGNS TO COMPLY WITH MUTCD LATEST EDITION UNLESS OTHERWISE NOTED.

REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT # 1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

SMITHGROUP
1675 LARIMER STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

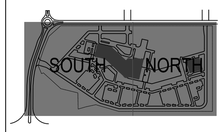
Kimley»Horn
6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2300
kimley-horn.com

ISSUED FOR	DATE
3rd PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



PROJECT NORTH

SCALE

GRAPHIC SCALE IN FEET
0 50 100 200

SHEET TITLE

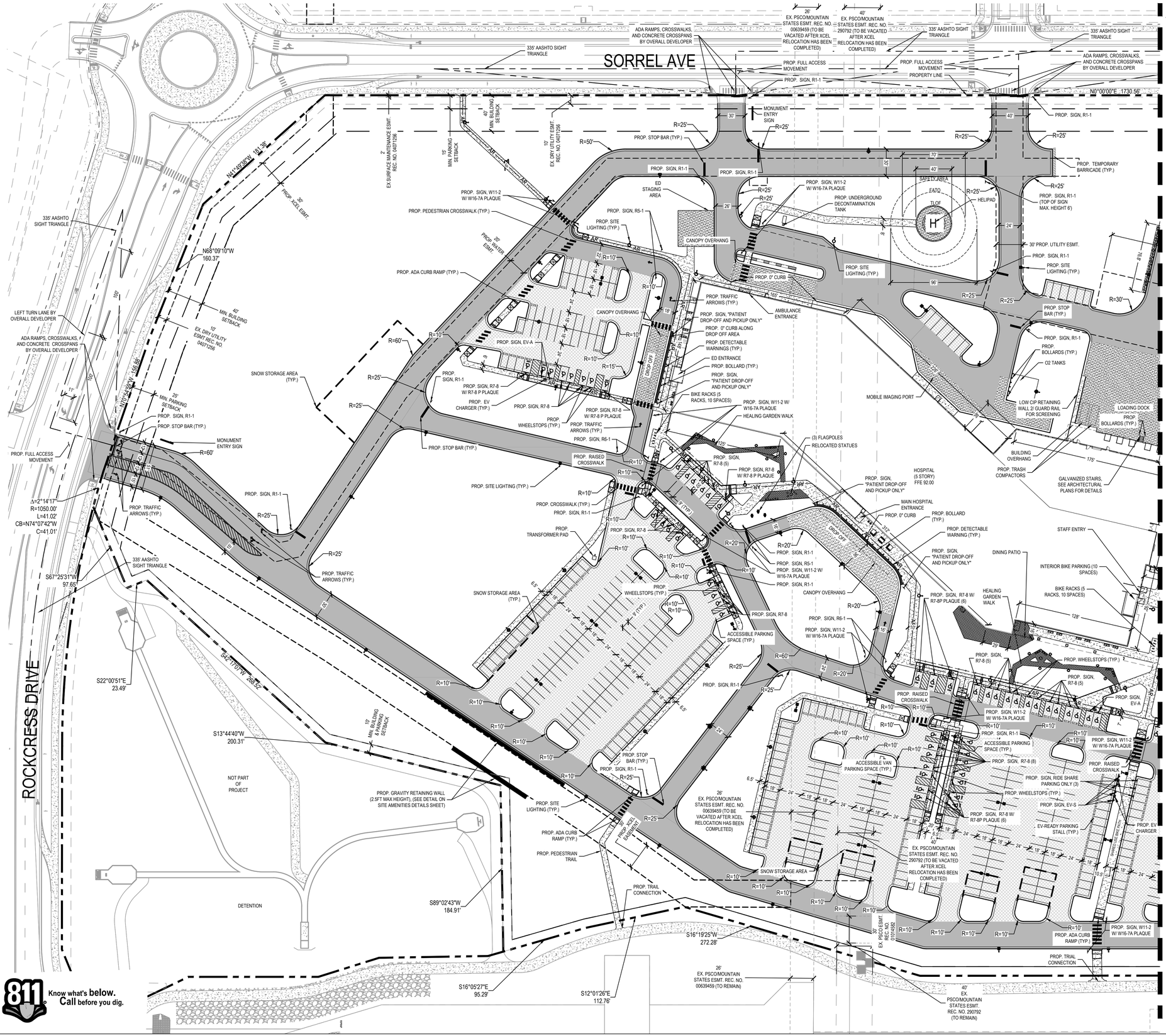
OVERALL SITE PLAN - 100 SCALE

PUD SHEET NUMBER	SG SHEET NUMBER
02 of 39	CS-100

PROJECT NUMBER 196315001

811 Know what's below. Call before you dig.

Plot Date:



LEGEND:

- PROPERTY LINE
- MATCHLINE
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- HEAVY DUTY ASPHALT
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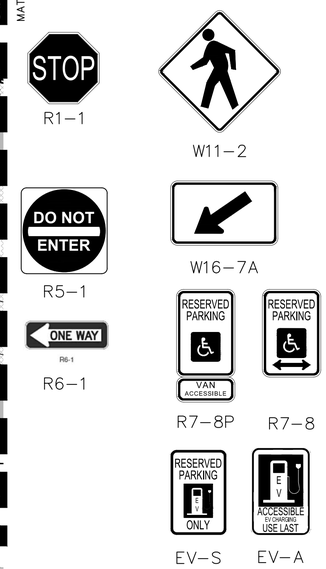
SIGN LEGEND



REDTAIL RIDGE PUD #6

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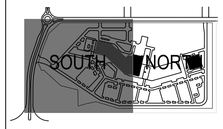
SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



PROJECT NORTH

SCALE

GRAPHIC SCALE IN FEET
0 25 50 100

SHEET TITLE

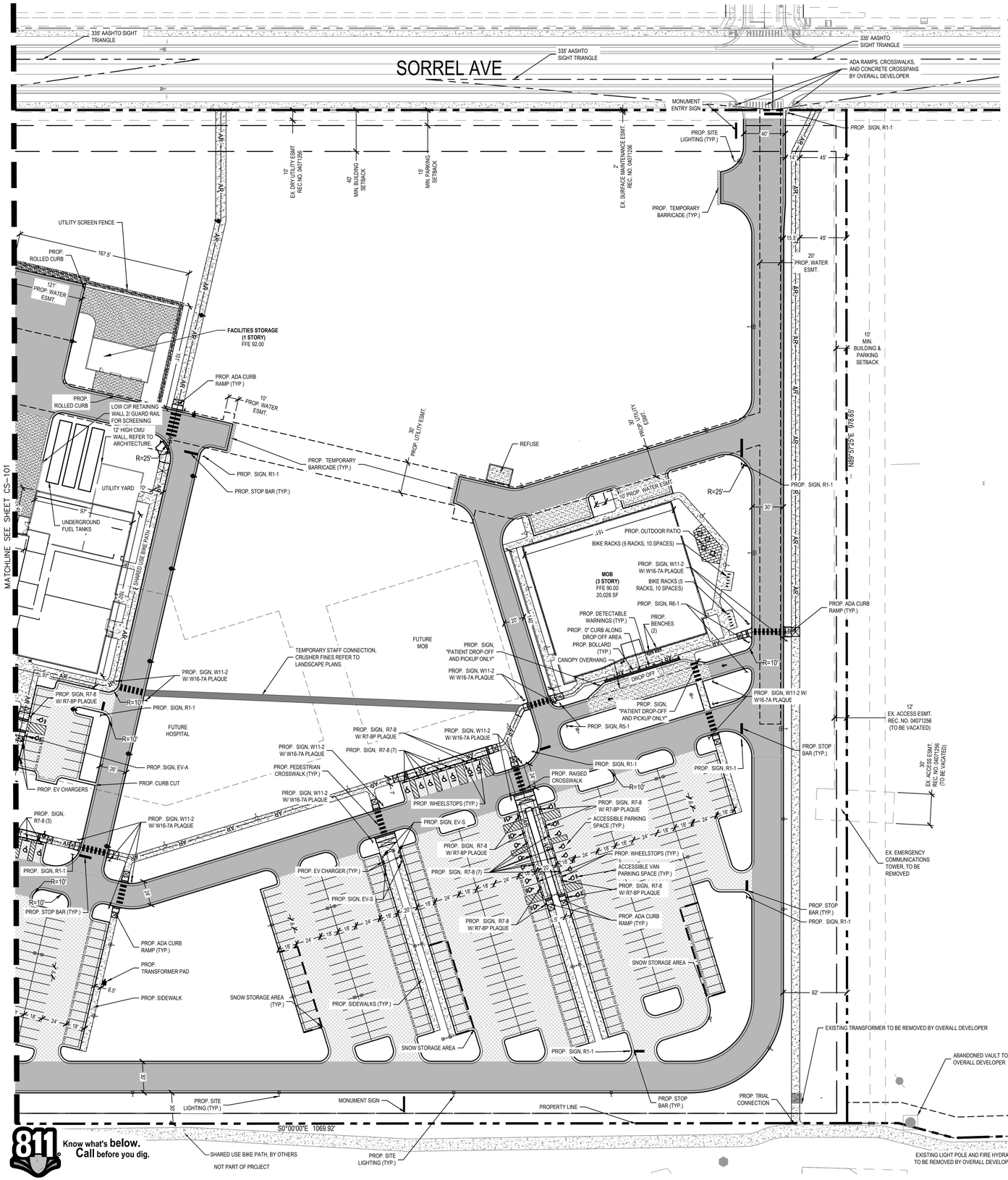
SITE PLAN SOUTH - 50 SCALE

PUD SHEET NUMBER	SG SHEET NUMBER
03 of 39	CS-101

PROJECT NUMBER 196315001

811 Know what's below. Call before you dig.

Plot Date:

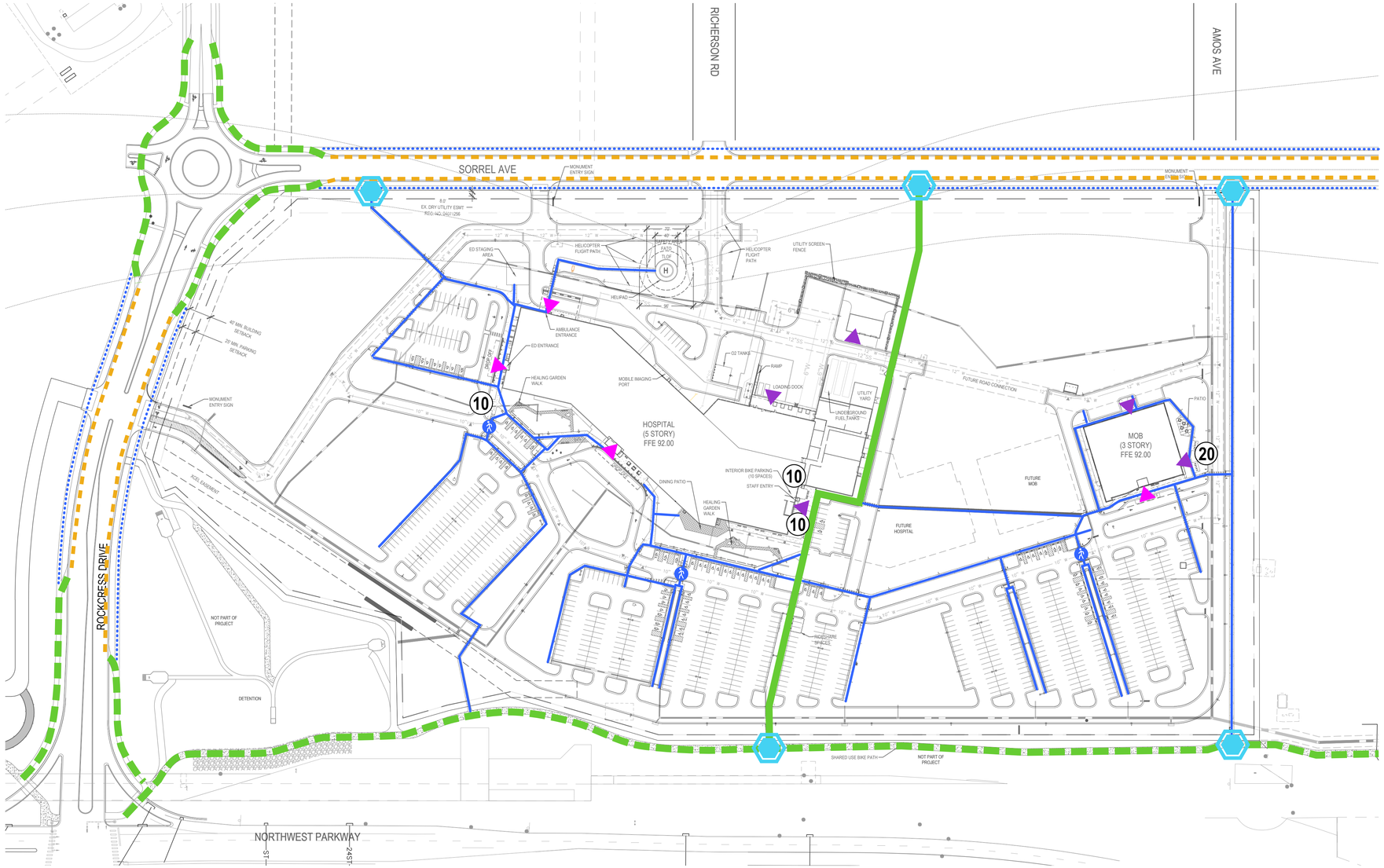

SORREL AVE
335' AASHTO SIGHT TRIANGLE
335' AASHTO SIGHT TRIANGLE
335' AASHTO SIGHT TRIANGLE
ADA RAMPS, CROSSWALKS, AND CONCRETE CROSSPANS BY OVERALL DEVELOPER
MONUMENT ENTRY SIGN
PROP. SIGN, R1-1
PROP. SITE LIGHTING (TYP.)
PROP. TEMPORARY BARRICADE (TYP.)
10' EX. DRY UTILITY ESMT REC.NO. 04071256
40' MIN. BUILDING SETBACK
15' MIN. PARKING SETBACK
17' EX. SURFACE MAINTENANCE ESMT. REC. NO. 04071256
UTILITY SCREEN FENCE
PROP. ROLLED CURB
167.5'
121' PROP. WATER ESMT.
FACILITIES STORAGE (1 STORY) FFE 92.00
PROP. ADA CURB RAMP (TYP.)
PROP. ROLLED CURB
LOW CIP RETAINING WALL 2' GUARD RAIL FOR SCREENING
12' HIGH CMU WALL, REFER TO ARCHITECTURE
10' PROP. WATER ESMT.
30' PROP. UTILITY ESMT.
REFUSE
PROP. TEMPORARY BARRICADE (TYP.)
PROP. SIGN, R1-1
PROP. STOP BAR (TYP.)
UTILITY YARD
UNDERGROUND FUEL TANKS
MATCHLINE SEE SHEET CS-101
SHARED USE BIKE PATH
20' PROP. WATER ESMT.
PROP. OUTDOOR PATIO
BIKE RACKS (5 RACKS, 10 SPACES)
MOB (3 STORY) FFE 90.00 20,028 SF
PROP. SIGN, W11-2 W/ W16-7A PLAQUE
BIKE RACKS (5 RACKS, 10 SPACES)
PROP. SIGN, R5-1
PROP. DETECTABLE WARNINGS (TYP.)
PROP. BENCHES (2)
PROP. 0" CURB ALONG DROP OFF AREA
PROP. BOLLARD (TYP.)
CANOPY OVERHANG
DROP OFF
PROP. SIGN, "PATIENT DROP-OFF AND PICKUP ONLY"
PROP. ADA CURB RAMP (TYP.)
TEMPORARY STAFF CONNECTION, CRUSHER FINES REFER TO LANDSCAPE PLANS.
FUTURE MOB
PROP. SIGN, W11-2 W/ W16-7A PLAQUE
PROP. SIGN, R7-8 W/ R7-8P PLAQUE
PROP. SIGN, R1-1
PROP. SIGN, EV-A
PROP. EV CHARGERS
PROP. CURB CUT
FUTURE HOSPITAL
PROP. SIGN, R7-8 W/ R7-8P PLAQUE
PROP. SIGN, R7-8 (7)
PROP. SIGN, W11-2 W/ W16-7A PLAQUE
PROP. PEDESTRIAN CROSSWALK (TYP.)
PROP. SIGN, W11-2 W/ W16-7A PLAQUE
PROP. WHEELSTOPS (TYP.)
PROP. SIGN, R7-8 W/ R7-8P PLAQUE
PROP. SIGN, W11-2 W/ W16-7A PLAQUE
PROP. SIGN, R7-8 (3)
PROP. SIGN, EV-S
PROP. RAISED CROSSWALK
PROP. SIGN, R1-1
PROP. SIGN, R1-1
PROP. STOP BAR (TYP.)
PROP. EV CHARGER (TYP.)
PROP. SIGN, EV-S
PROP. SIGN, R7-8 (7)
PROP. SIGN, R7-8 W/ R7-8P PLAQUE
ACCESSIBLE PARKING SPACE (TYP.)
PROP. WHEELSTOPS (TYP.)
ACCESSIBLE VAN PARKING SPACE (TYP.)
PROP. SIGN, R7-8 W/ R7-8P PLAQUE
PROP. ADA CURB RAMP (TYP.)
PROP. STOP BAR (TYP.)
PROP. SIGN, R1-1
PROP. ADA CURB RAMP (TYP.)
PROP. TRANSFORMER PAD
PROP. SIDEWALK
SNOW STORAGE AREA (TYP.)
PROP. SIDEWALKS (TYP.)
SNOW STORAGE AREA
SNOW STORAGE AREA
PROP. SIGN, R1-1
PROP. SITE LIGHTING (TYP.)
MONUMENT SIGN
PROPERTY LINE
PROP. STOP BAR (TYP.)
PROP. TRIAL CONNECTION
S0°00'00"E 1069.92'
SHARED USE BIKE PATH, BY OTHERS
NOT PART OF PROJECT
PROP. SIGN, R1-1
PROP. STOP BAR (TYP.)
PROP. SIGN, R1-1
PROP. SIGN, R1-1
PROP. SIGN, R1-1

SHEET NOTES

1. REFER TO SCHEMATIC DESIGN SUPPLEMENTAL INFORMATION NARRATIVE FOR ADDITIONAL DESIGN INTENT.

LEGEND

- SHARED USE PATH (BIKE & PEDESTRIAN) 10' WIDE
- SHARED USE PATH (OFF SITE)
- BIKE LANE (OFF SITE)
- WALKWAY 6.5' WIDE
- WALKWAY (OFF SITE)
- OFF SITE CONNECTIONS
- PUBLIC/STAFF ENTRANCE
- SUPPORT/STAFF ENTRANCE
- (4) BIKE PARKING (NUMBER OF SPACES)
- RAISED CROSSWALK



REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT # 1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

SMITHGROUP

1675 LARIMER STREET
SUITE 500
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smithgroup.com

Kimley»Horn

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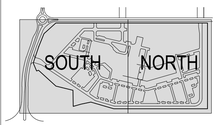
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2307
kimley-horn.com

ISSUED FOR	DATE
3rd PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



PROJECT NORTH

SCALE

0' 50' 100' 200'

SCALE: 1"=100'

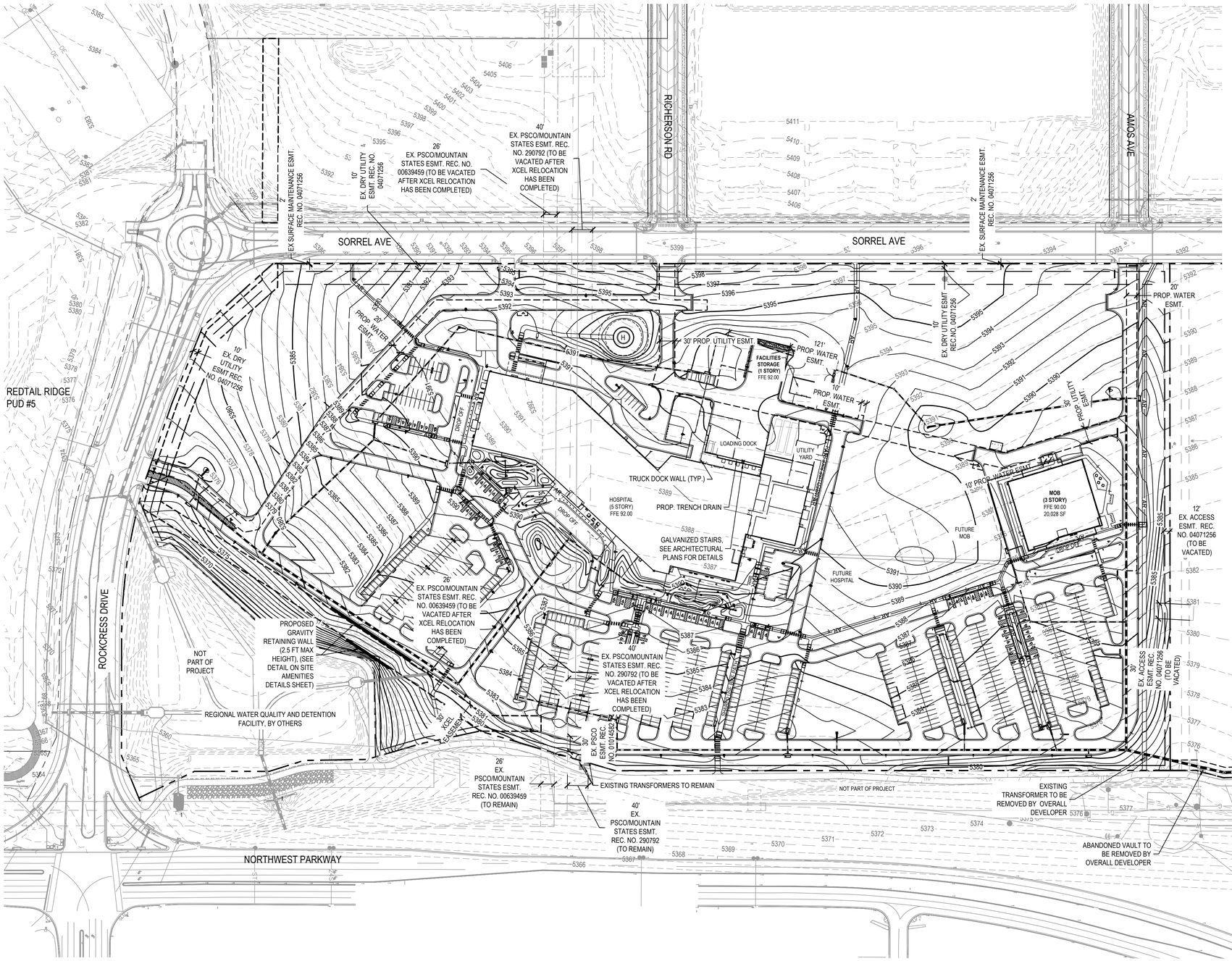
SHEET TITLE

BICYCLE / PEDESTRIAN CIRCULATION PLAN

PUD SHEET NUMBER	SHEET ID
05 of 39	CS-103

PROJECT NUMBER 15696

Plot Date:



LEGEND

- PROPERTY LINE
- MATCH LINE
- PROP. SWALE
- EX. EASEMENT LINE
- PROP. EASEMENT LINE
- EX. MINOR CONTOUR
- EX. MAJOR CONTOUR
- PROP. MINOR CONTOUR
- PROP. MAJOR CONTOUR
- X.XX% PROP. SLOPE
- XX.XX PROP. SPOT ELEVATION
- EX. STORM SEWER
- PROP. STORM SEWER
- PROP. STORM STRUCTURES
- AR ACCESSIBLE ROUTE

NOTES

1. ADD 5300 FEET TO ALL PROPOSED SPOT ELEVATIONS IN REFERENCE TO NAVD88 DATUM.
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7. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0% SLOPE IN ANY DIRECTION.
8. MATCH EXISTING ELEVATIONS AT ALL TIE IN POINTS.
9. ALL PROPOSED STORM SEWER SHALL BE PRIVATELY OWNED AND MAINTAINED.
10. 4:1 MAXIMUM SLOPE IN LANDSCAPED AREAS.

811 Know what's **below.** **Call** before you dig.

Plot Date:

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SEALS AND SIGNATURES

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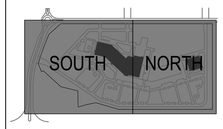


PROJECT NORTH

SCALE

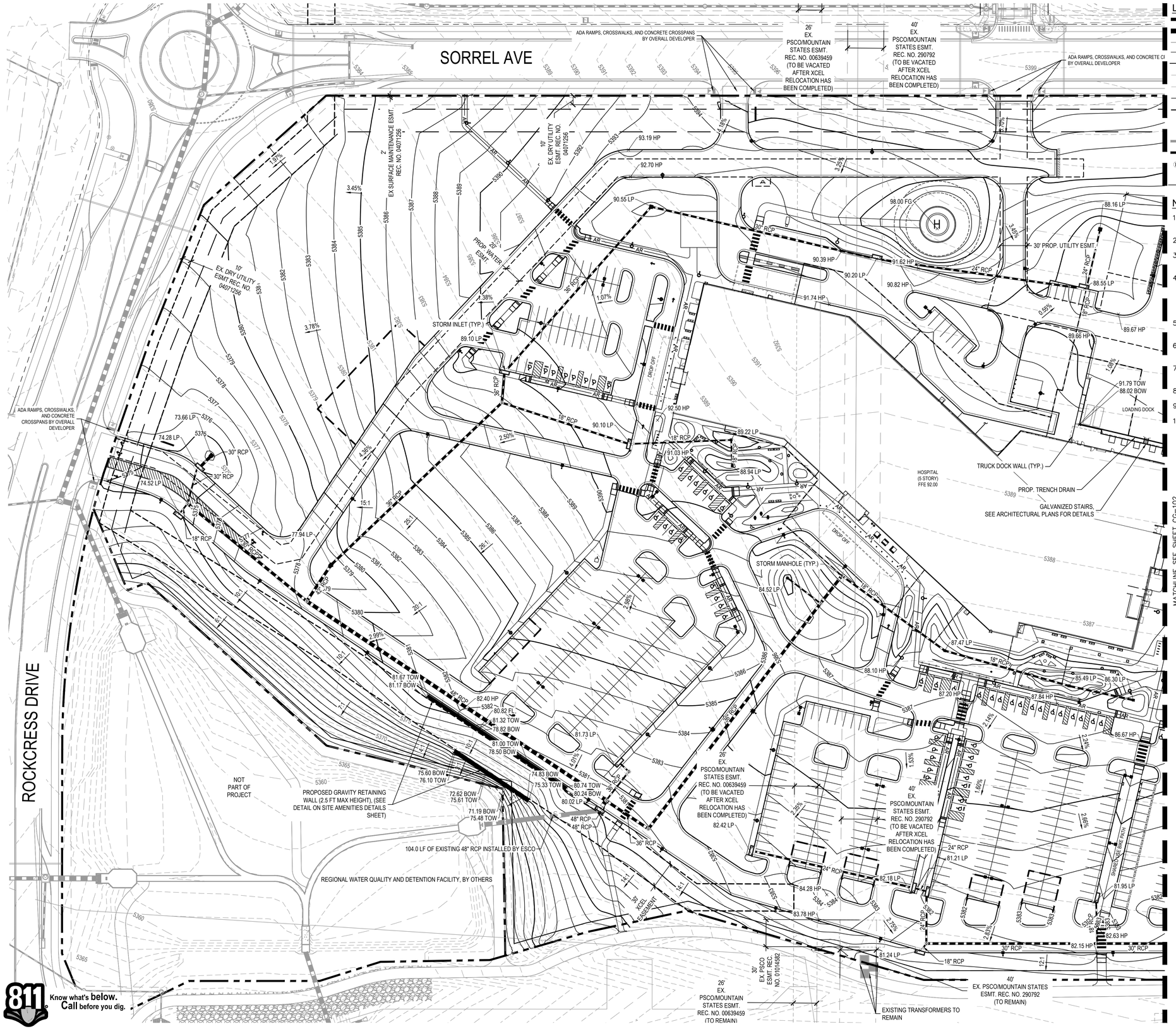
GRAPHIC SCALE IN FEET
0 50 100 200

SHEET TITLE

OVERALL GRADING PLAN - 100 SCALE

PUD SHEET NUMBER	SG SHEET NUMBER
06 of 39	CG-100

PROJECT NUMBER 196315001



LEGEND

- PROPERTY LINE
- MATCH LINE
- PROP. SWALE
- EX. EASEMENT LINE
- PROP. EASEMENT LINE
- XXXX EX. MINOR CONTOUR
- XXXX EX. MAJOR CONTOUR
- XXXX PROP. MINOR CONTOUR
- XXXX PROP. MAJOR CONTOUR
- X.XX% PROP. SLOPE
- XX.XX PROP. SPOT ELEVATION
- EX. STORM SEWER
- PROP. STORM SEWER
- Ⓓ PROP. STORM STRUCTURES
- AR ACCESSIBLE ROUTE

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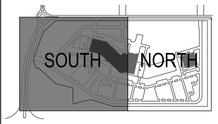


PROJECT NORTH

SCALE

GRAPHIC SCALE IN FEET
0 25 50 100

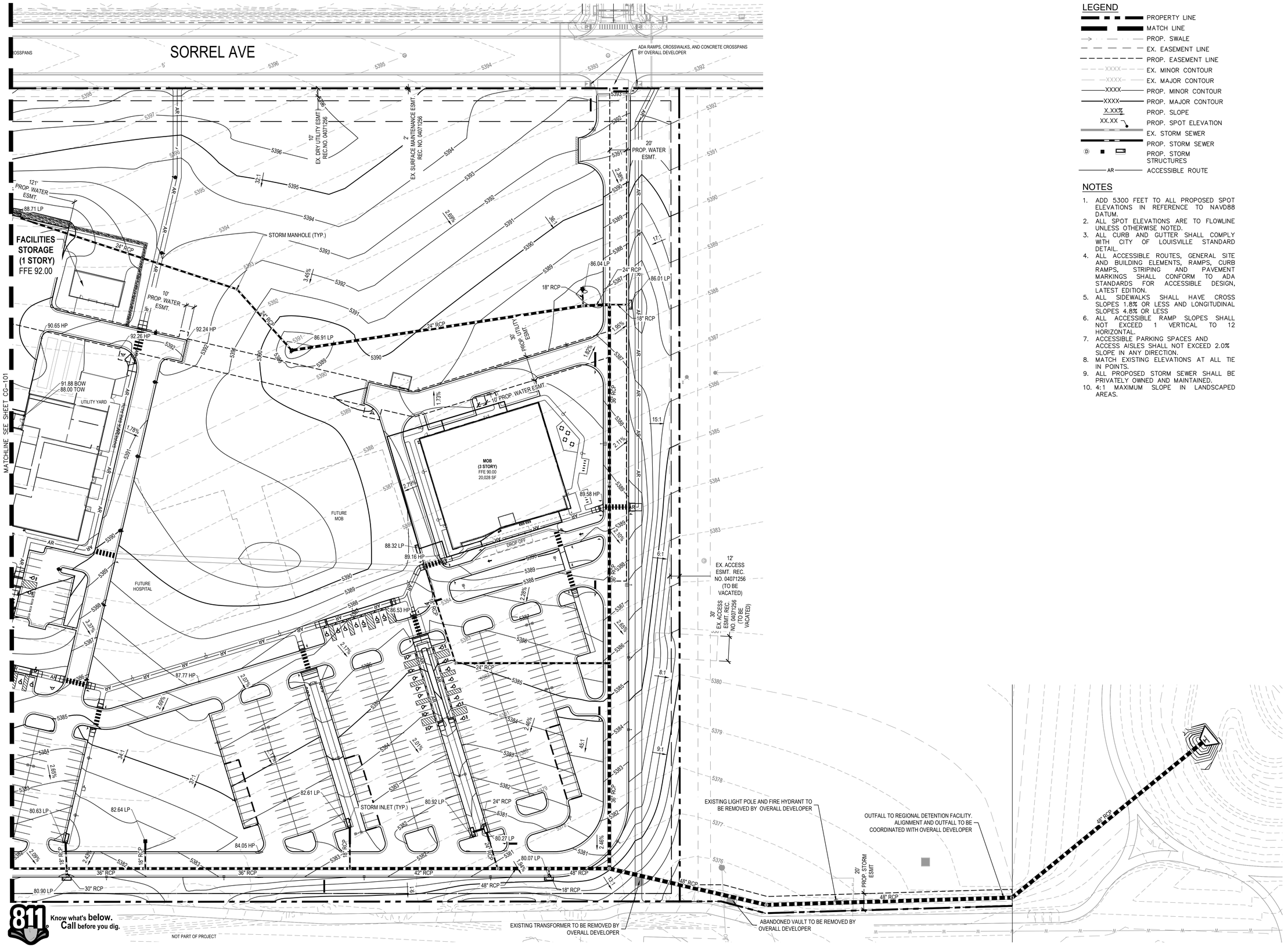
SHEET TITLE

GRADING PLAN SOUTH - 50 SCALE

PUD SHEET NUMBER	SG SHEET NUMBER
07 of 39	CG-101

PROJECT NUMBER 196315001

Plot Date:



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Plot Date:

LEGEND

- PROPERTY LINE
- MATCH LINE
- PROP. SWALE
- EX. EASEMENT LINE
- PROP. EASEMENT LINE
- EX. MINOR CONTOUR
- EX. MAJOR CONTOUR
- PROP. MINOR CONTOUR
- PROP. MAJOR CONTOUR
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- PROP. SPOT ELEVATION
- EX. STORM SEWER
- PROP. STORM SEWER
- PROP. STORM STRUCTURES
- ACCESSIBLE ROUTE

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CASE #

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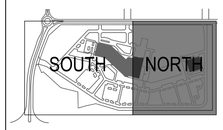
ISSUED FOR	DATE
3rd PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



PROJECT NORTH

SCALE

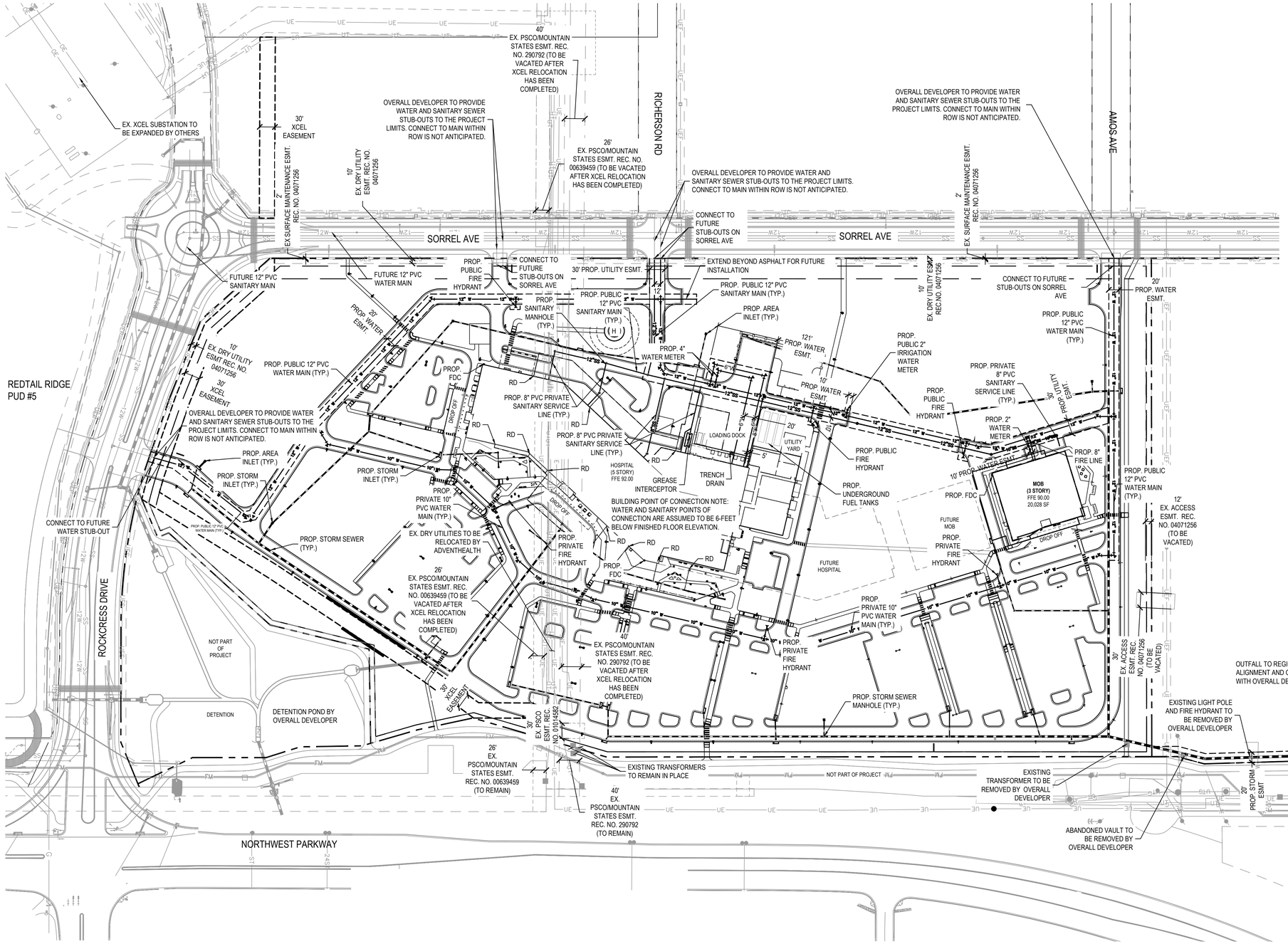
GRAPHIC SCALE IN FEET
0 25 50 100

SHEET TITLE

GRADING PLAN NORTH - 50 SCALE

PUD SHEET NUMBER	SG SHEET NUMBER
08 of 39	CG-102

PROJECT NUMBER 196315001



LEGEND

- PROPERTY LINE
- MATCH LINE
- EX. 12" WATER LINE
- EX. SANITARY SEWER LINE
- EX. GAS LINE
- EX. UNDERGROUND TELECOM
- PROP. 8" WATER LINE
- PROP. 10" WATER LINE
- PROP. 12" WATER LINE
- PROP. 8" SAN. SEWER LINE
- PROP. 10" SAN. SEWER LINE
- PROP. 12" SAN. SEWER LINE
- PROP. STORM SEWER
- STORM STRUCTURES
- SANITARY SEWER MANHOLE
- WATER METER
- FIRE HYDRANT
- PROPOSED SITE LIGHTING

NOTES

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9. REFER TO GRADING PLAN FOR STORM SEWER DETAILS.
10. ALL DRY UTILITIES ARE SHOWN FOR REFERENCE ONLY. EXACT LOCATION AND CONNECTION TO EXISTING UTILITIES TO BE DETERMINED BY UTILITY PROVIDER.
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15. ALL ONSITE SANITARY SEWER MAINS ARE PUBLIC AND SANITARY SEWER SERVICES ARE PRIVATE.

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Plot Date:

REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT # 1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

SMITHGROUP
1675 LARIMER STREET
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Kimley»Horn
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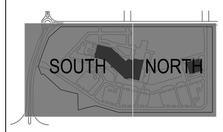
ISSUED FOR	DATE
3rd PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



PROJECT NORTH

SCALE

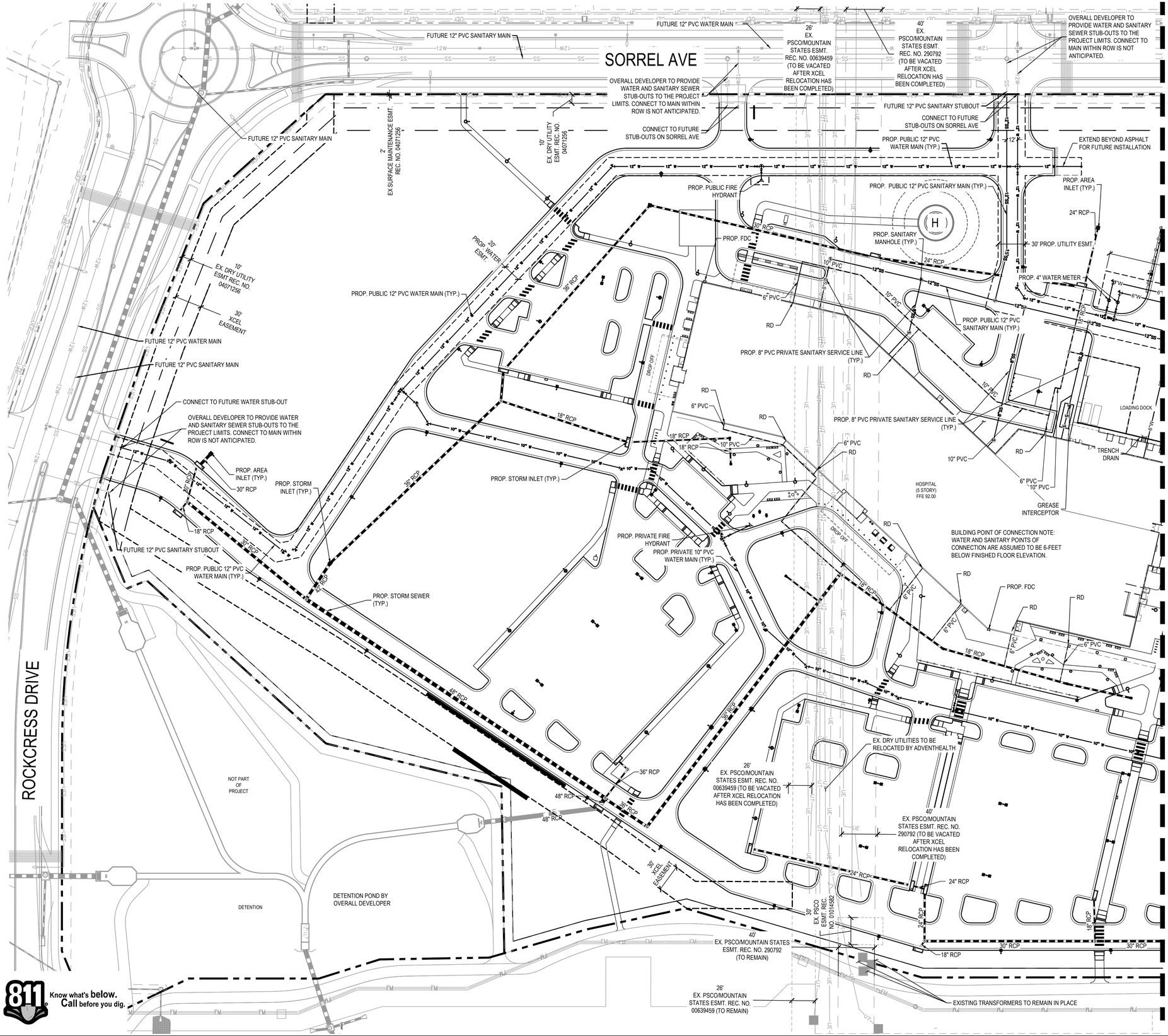
GRAPHIC SCALE IN FEET
0 50 100 200

SHEET TITLE

OVERALL UTILITY PLAN - 100 SCALE

PUD SHEET NUMBER	SG SHEET NUMBER
09 of 39	CU-100

PROJECT NUMBER 196315001



LEGEND

- PROPERTY LINE
- MATCH LINE
- EX. 12" WATER LINE
- EX. SANITARY SEWER LINE
- EX. GAS LINE
- EX. UNDERGROUND TELECOM
- PROP. 8" WATER LINE
- PROP. 10" WATER LINE
- PROP. 12" WATER LINE
- PROP. 8" SAN. SEWER LINE
- PROP. 10" SAN. SEWER LINE
- PROP. 12" SAN. SEWER LINE
- PROP. STORM SEWER
- STORM STRUCTURES
- SANITARY SEWER MANHOLE
- WATER METER
- FIRE HYDRANT
- PROPOSED SITE LIGHTING

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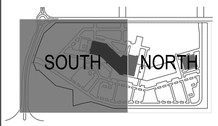


PROJECT NORTH

SCALE

GRAPHIC SCALE IN FEET
0 25 50 100

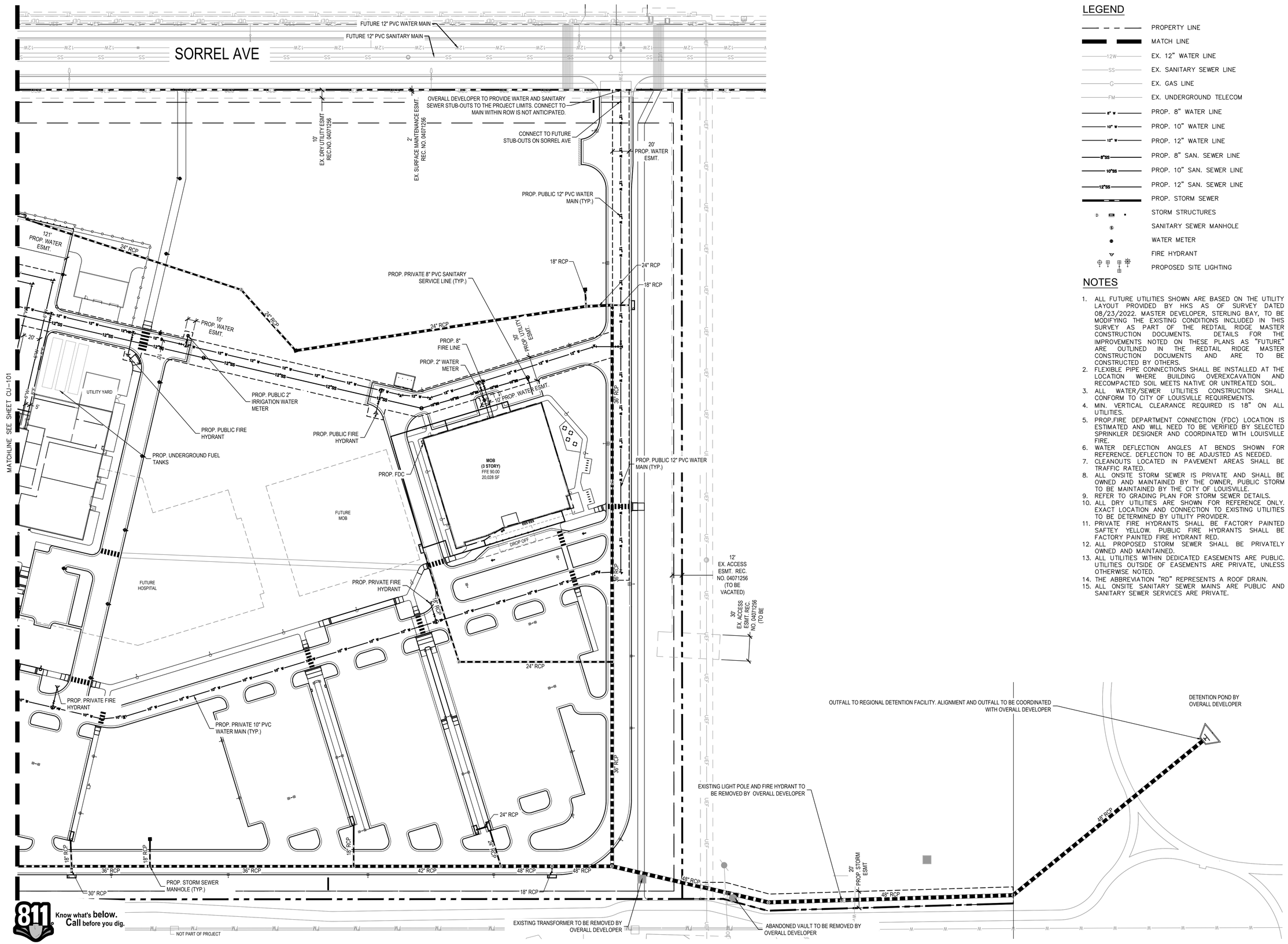
SHEET TITLE

UTILITY PLAN SOUTH - 50 SCALE

PUD SHEET NUMBER	SG SHEET NUMBER
10 of 39	CU-101

PROJECT NUMBER 196315001

Plot Date:



811 Know what's **below.** **Call** before you dig.

Plot Date:

LEGEND

- PROPERTY LINE
- MATCH LINE
- 12W — EX. 12" WATER LINE
- SS — EX. SANITARY SEWER LINE
- G — EX. GAS LINE
- FM — EX. UNDERGROUND TELECOM
- 8" W — PROP. 8" WATER LINE
- 10" W — PROP. 10" WATER LINE
- 12" W — PROP. 12" WATER LINE
- 8"SS — PROP. 8" SAN. SEWER LINE
- 10"SS — PROP. 10" SAN. SEWER LINE
- 12"SS — PROP. 12" SAN. SEWER LINE
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8. ALL ONSITE STORM SEWER IS PRIVATE AND SHALL BE OWNED AND MAINTAINED BY THE OWNER, PUBLIC STORM TO BE MAINTAINED BY THE CITY OF LOUISVILLE.
9. REFER TO GRADING PLAN FOR STORM SEWER DETAILS.
10. ALL DRY UTILITIES ARE SHOWN FOR REFERENCE ONLY. EXACT LOCATION AND CONNECTION TO EXISTING UTILITIES TO BE DETERMINED BY UTILITY PROVIDER.
11. PRIVATE FIRE HYDRANTS SHALL BE FACTORY PAINTED SAFTEY YELLOW. PUBLIC FIRE HYDRANTS SHALL BE FACTORY PAINTED FIRE HYDRANT RED.
12. ALL PROPOSED STORM SEWER SHALL BE PRIVATELY OWNED AND MAINTAINED.
13. ALL UTILITIES WITHIN DEDICATED EASEMENTS ARE PUBLIC. UTILITIES OUTSIDE OF EASEMENTS ARE PRIVATE, UNLESS OTHERWISE NOTED.
14. THE ABBREVIATION "RD" REPRESENTS A ROOF DRAIN.
15. ALL ONSITE SANITARY SEWER MAINS ARE PUBLIC AND SANITARY SEWER SERVICES ARE PRIVATE.

REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT # 1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

SMITHGROUP
1675 LARIMER STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

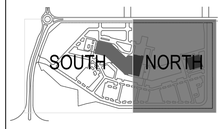
Kimley»Horn
6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2300
kimley-horn.com

ISSUED FOR	DATE
3rd PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



PROJECT NORTH

SCALE

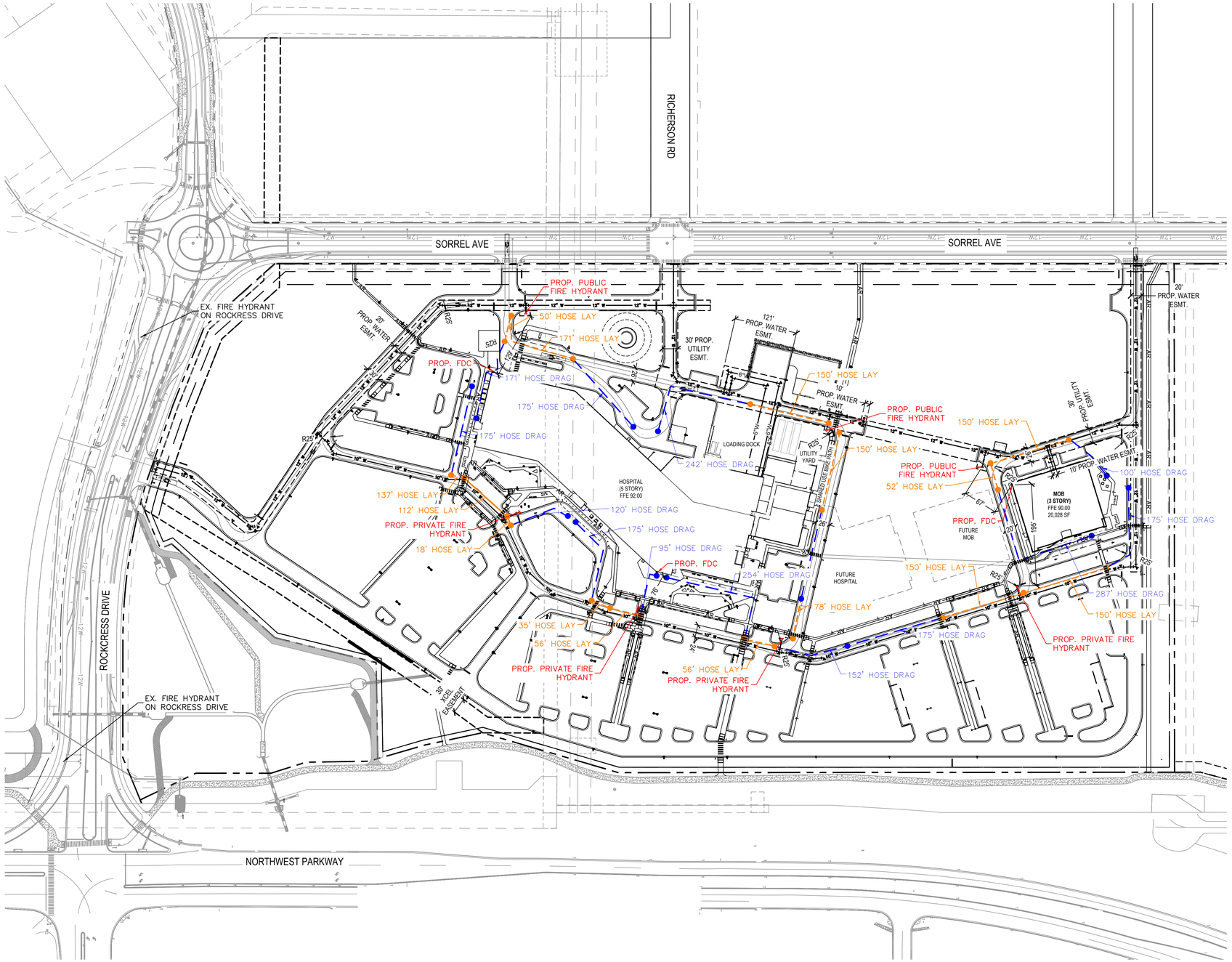
GRAPHIC SCALE IN FEET
0 25 50 100

SHEET TITLE

UTILITY PLAN NORTH - 50 SCALE

PUD SHEET NUMBER	SG SHEET NUMBER
11 of 39	CU-102

PROJECT NUMBER 196315001



LEGEND:

- PROPERTY LINE
- MATCHLINE
- HEAVY DUTY ASPHALT
- STANDARD DUTY ASPHALT
- HEAVY DUTY CONCRETE PAVEMENT (SEE SITE AMENITIES SHEET LS101–LS102)
- STANDARD CONCRETE PAVEMENT (SEE SITE AMENITIES SHEET LS101–LS102)
- CONCRETE UNIT PAVERS (SEE SITE AMENITIES SHEET LS101–LS102)
- EV PARKING SPACE (CHARGER INSTALLED)
- EV–READY PARKING SPACE
- EV–CAPABLE PARKING SPACE
- EV–CAPABLE LIGHT PARKING SPACE
- FUTURE BUILDING FOOTPRINT
- CURB & GUTTER
- FUTURE/DEFERRED CURB
- PARKING COUNT
- BUILDING/PARKING SETBACK LINE
- EX. EASEMENT LINE
- ACCESSIBLE ROUTE
- FIRE TRUCK (AERIAL) ACCESS ROUTE
- FIRE TRUCK ACCESS ROUTE
- PROPOSED FIRE HYDRANT
- FIRE HOSE LAY
- FIRE HOSE DRAG

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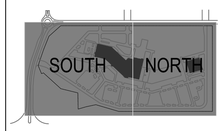


PROJECT NORTH

SCALE

GRAPHIC SCALE IN FEET
0 50 100 200

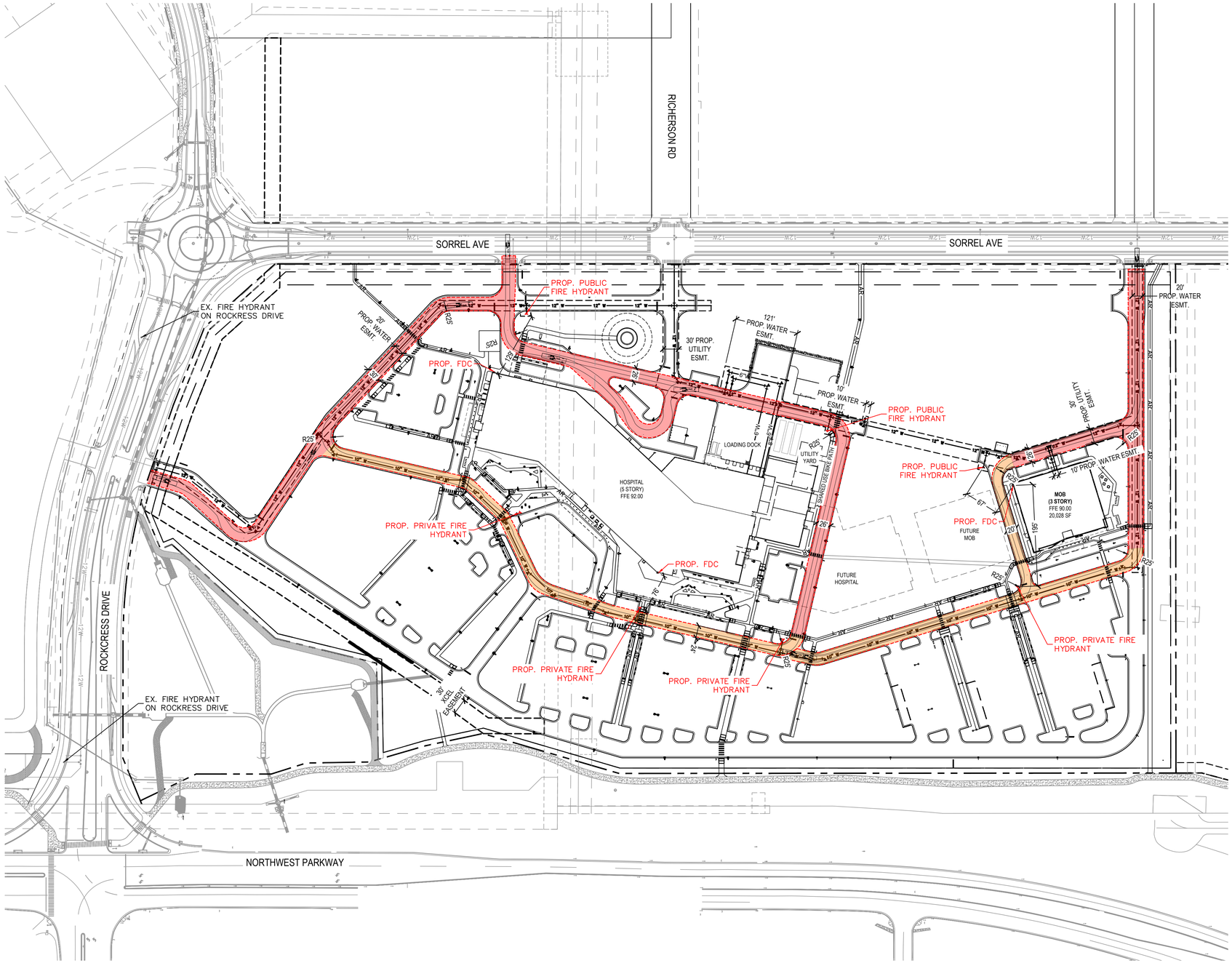
SHEET TITLE

FIRE AND HYDRANT RADIUS PLAN

PUD SHEET NUMBER 12 of 39
SG SHEET NUMBER FS-100
PROJECT NUMBER 196315001

811 Know what's **below.** **Call** before you dig.

Plot Date:



LEGEND:

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- MATCHLINE
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- STANDARD DUTY ASPHALT
- HEAVY DUTY CONCRETE PAVEMENT (SEE SITE AMENITIES SHEET LS101–LS102)
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- CONCRETE UNIT PAVERS (SEE SITE AMENITIES SHEET LS101–LS102)
- EV PARKING SPACE (CHARGER INSTALLED)
- EV–READY PARKING SPACE
- EV–CAPABLE PARKING SPACE
- EV–CAPABLE LIGHT PARKING SPACE
- FUTURE BUILDING FOOTPRINT
- CURB & GUTTER
- FUTURE/DEFERRED CURB
- PARKING COUNT
- BUILDING/PARKING SETBACK LINE
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- ACCESSIBLE ROUTE
- FIRE TRUCK (AERIAL) ACCESS ROUTE
- FIRE TRUCK ACCESS ROUTE
- PROPOSED FIRE HYDRANT

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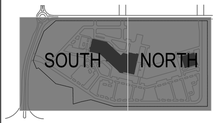


PROJECT NORTH

SCALE

GRAPHIC SCALE IN FEET
0 50 100 200

SHEET TITLE

FIRE ACCESS ROUTE

PUD SHEET NUMBER 13 of 39
SG SHEET NUMBER FA-100
PROJECT NUMBER 196315001

811 Know what's **below.** **Call** before you dig.

Plot Date:

ENHANCED SHORT GRASS PRAIRIE MIX

BY: WESTERN NATIVE SEED
www.westernnativeseed.com

+/- 48,000 SF

SPECIES	SEEDING RATE: 1-2 lbs per 1,000 sf.	QUANTITY
BUFFALO GRASS *BUCHLOE DACTYLOIDES*	45%	+/-48,000 SF
BLUE GRAMA *BOUTELOUA GRACILIS*	50%	
WESTERN WHEATGRASS PASCOPYRUM SMITHII	3%	
SPOROBOLUS CRYPTANDRUS SAND DROPSEED	2%	
WILDFLOWER PERENNIAL MIX SPECIES MIX,TBD	4" PLUGS @ 18" O.C. , 10% OF TOTAL AREA	+/- 2,100 4" PLUGS
GRASSES AND PERENNIAL MIX SPECIES MIX,TBD	1 GAL. @ 18" O.C., 10% OF TOTAL AREA	+/- 2,100 (1 GAL.)

SHORT GRASS PRAIRIE MIX

BY: WESTERN NATIVE SEED
www.westernnativeseed.com

+/- 818,000 SF

SPECIES	SEEDING RATE: 1-2 lbs per 1,000 sf.
BUFFALO GRASS *BUCHLOE DACTYLOIDES*	45%
BLUE GRAMA *BOUTELOUA GRACILIS*	50%
WESTERN WHEATGRASS PASCOPYRUM SMITHII	3%
SPOROBOLUS CRYPTANDRUS SAND DROPSEED	2%

TOPDRESS LEGEND

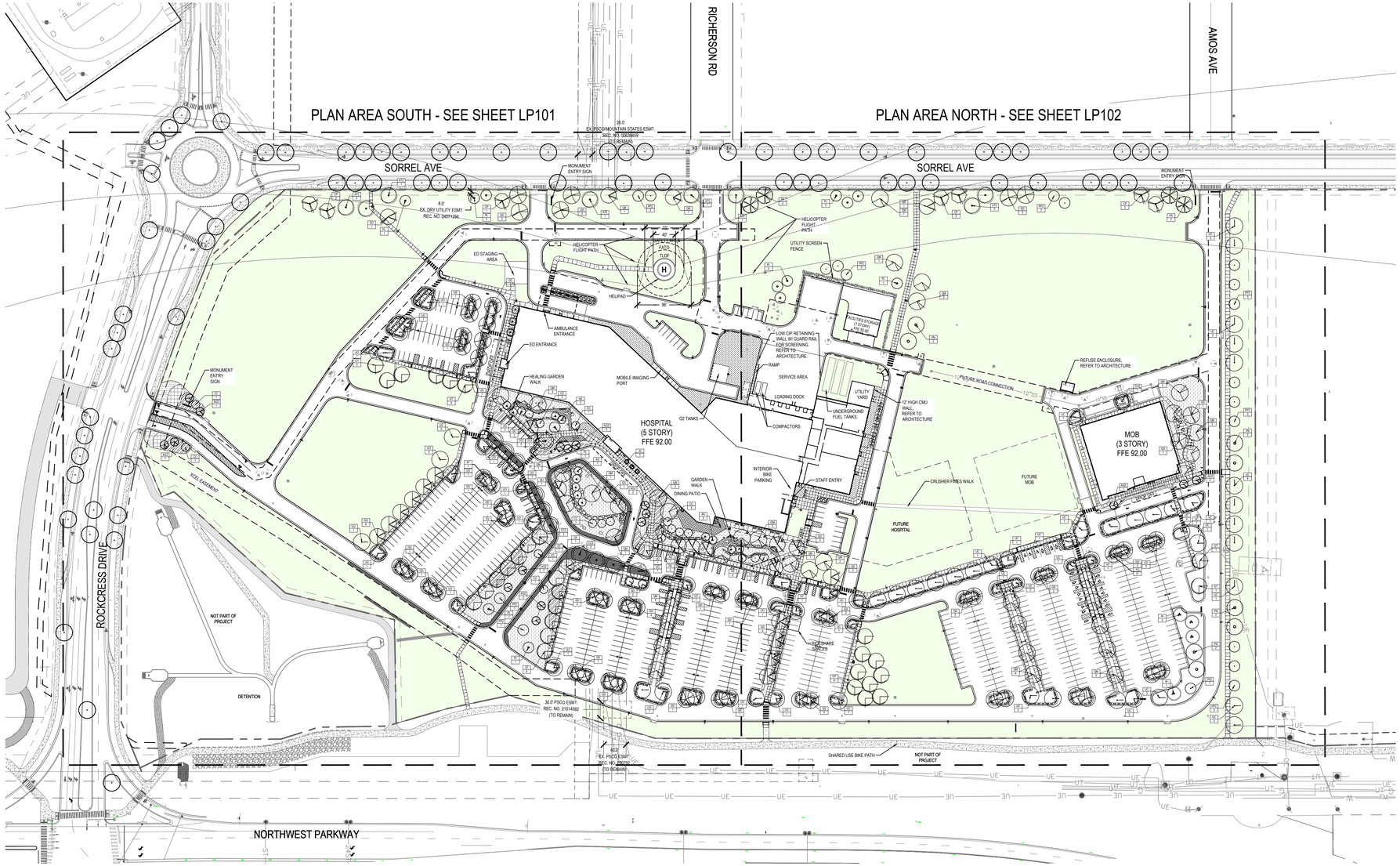
ENTRY DRIVE MAINTENANCE EDGE:
2" - 4" COBBLESTONE 4" DEPTH
COLOR: BULK RIVER ROCK GRAY ROSE
PH: 303.340.1440
www.pioneerco.com
9,000 SF

PARKING MAINTENANCE EDGE / RIBBON BIOSWALE:
4" - 8" COBBLE STONE 4" MIN. DEPTH
COLOR: BULK GLACIER WHITE RIVER
PH: 303.340.1440
www.pioneerco.com
20,000 SF

BUILDING MAINTENANCE EDGE: 1-1/2" SCREENED, MIN 2" DEPTH
COLOR: BULK RIVER ROCK GRAY ROSE
PH: 303.340.1440
www.pioneerco.com
40,000 SF

ALL PLANTING BEDS

CONTAINER PLANTING AND TREE PLANTING BEDS IN PARKING AREAS
CEDAR SHREDDED MULCH, 3" MIN. DEPTH
COLOR: DARK BROWN
PH: 303.340.1440
www.pioneerco.com
43,000 SF



LEGEND

- PERENNIALS
- LOW SHRUBS
- ORNAMENTAL GRASS/PERENNIALS MIX
- SHORT GRASS PRAIRIE
- ENHANCED SHORT GRASS PRAIRIE
- 4' HT. DECORATIVE FENCE
- BENCH
- BIKE RACK
- LITTER/RECYCLING
- BOLLARDS
- BOULDER

PLANT LEGEND

SYMBOL	CODE	BOTANICAL / COMMON NAME
TREES		
	PR	PROPOSED (BY OTHERS)
DECIDUOUS TREES		
	AT2	ALNUS INCANA TENUIFOLIA THINLEAF ALDER
	CP	CELTIS OCCIDENTALIS 'PRAIRIE PRIDE' PRAIRIE PRIDE HACKBERRY
	CC2	CERCIS CANADENSIS EASTERN REDBUD
	GT	GLEDITSIA TRIACANTHOS HONEY LOCUST
	GS	GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE' SKYLINE HONEY LOCUST
	GD	GYMNOCLADUS DIOICUS 'ESPRESSO-JFS' ESPRESSO™ KENTUCKY COFFEETREE
	PA	POPULUS X ACUMINATA LANCELEAF COTTONWOOD
	QB	QUERCUS BICOLOR SWAMP WHITE OAK
	QM	QUERCUS MACROCARPA BURR OAK
	QU	QUERCUS MUEHLENBERGII CHINKAPIN OAK
	UO	ULMUS AMERICANA 'LEWIS & CLARK' PRAIRIE EXPEDITION® AMERICAN ELM
EVERGREEN TREES		
	PL	PINUS FLEXILIS LIMBER PINE
	PP2	PINUS PONDEROSA PONDEROSA PINE
ORNAMENTAL TREES		
	AG	ACER GRANDIDENTATUM BIGTOOTH MAPLE
	AG2	ACER GRISEUM PAPERBARK MAPLE
	AS	AMELANCHIER ALNIFOLIA SERVICEBERRY
	AI	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE' AUTUMN BRILLIANCE SERVICEBERRY
	CC	CRATAEGUS CHRYSOCARPA FIREBERRY HAWTHORN

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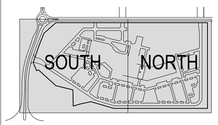


PROJECT NORTH

SCALE

0' 50' 100' 200'

SCALE: 1"=100'

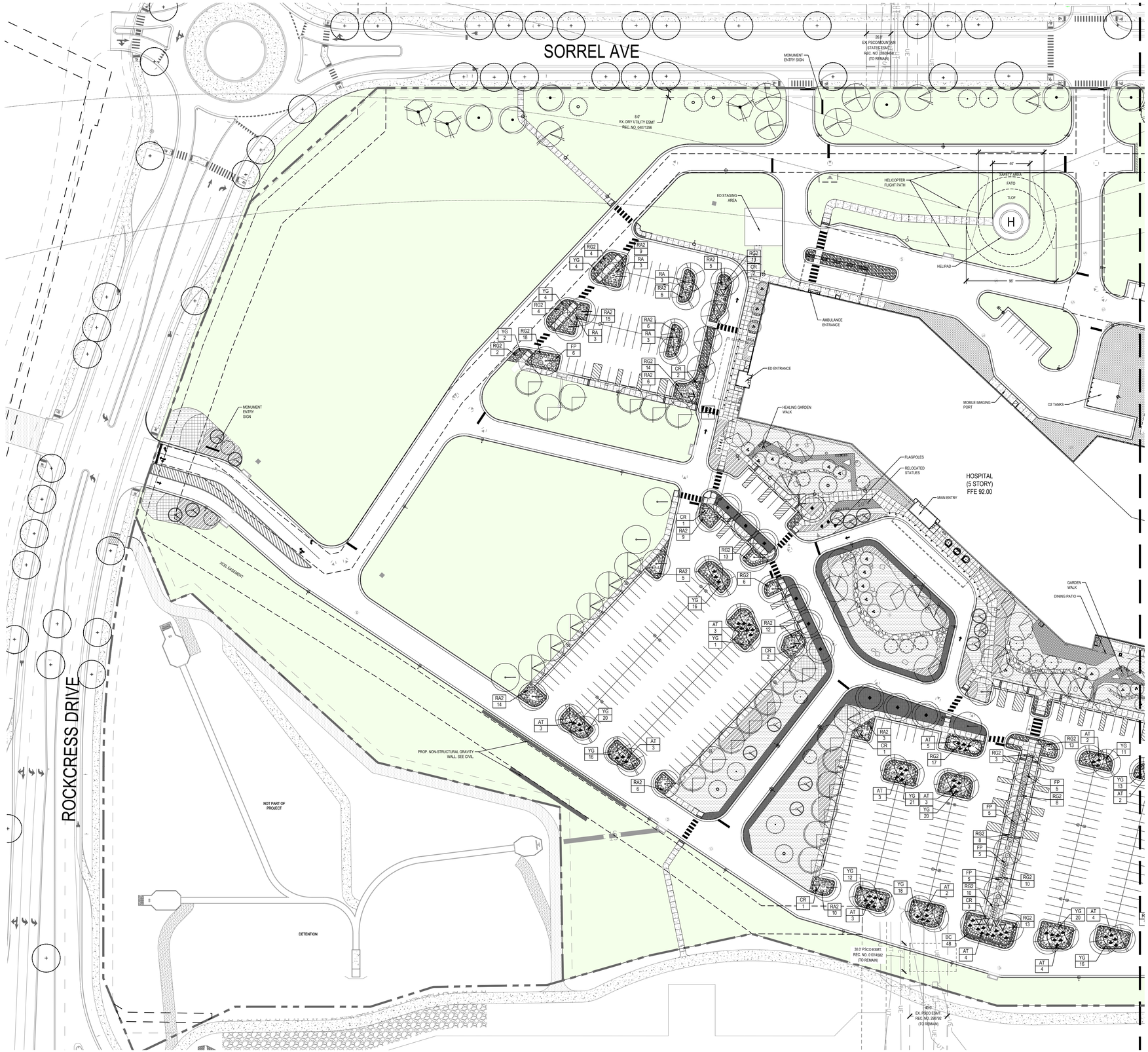
SHEET TITLE

OVERALL TREE PLAN - 100 SCALE

PUD SHEET NUMBER	SHEET ID
14 of 39	LP100

PROJECT NUMBER 15696

Plot Date:



TOPDRESS LEGEND

- ENTRY DRIVE MAINTENANCE EDGE:
  2" - 4" COBBLESTONE 4" DEPTH
  COLOR: BULK RIVER ROCK GRAY ROSE
  PH: 303.340.1440
  www.pioneerco.com
  9,000 SF
- PARKING MAINTENANCE EDGE / RIBBON BIOSWALE:
  4" - 8" COBBLE STONE 4" MIN. DEPTH
  COLOR: BULK GLACIER WHITE RIVER
  PH: 303.340.1440
  www.pioneerco.com
  20,000 SF
- BUILDING MAINTENANCE EDGE: 1-1/2" SCREENED, MIN 2" DEPTH
  COLOR: BULK RIVER ROCK GRAY ROSE
  PH: 303.340.1440
  www.pioneerco.com
  40,000 SF
- ALL PLANTING BEDS — CONTAINER PLANTING AND TREE PLANTING BEDS IN PARKING AREAS
  CEDAR SHREDDED MULCH, 3" MIN. DEPTH
  COLOR: DARK BROWN
  PH: 303.340.1440
  www.pioneerco.com
  43,000 SF

LEGEND

- PERENNIALS
- LOW SHRUBS
- ORNAMENTAL GRASS/PERENNIALS MIX
- SHORT GRASS PRAIRIE
- ENHANCED SHORT GRASS PRAIRIE
- 4' HT. DECORATIVE FENCE
- BENCH
- BIKE RACK
- LITTER/RECYCLING
- BOLLARDS
- BOULDER

SHRUBS

AF	AMORPHA FRUTICOSA	FALSE INDIGO
AT	ARTEMISIA TRIDENTATA	BIG SAGEBRUSH
BC	BERBERIS THUNBERGII 'CRIMSON PYGMY'	CRIMSON PYGMY JAPANESE BARBERRY
CR	CORNUS SERICEA	RED TWIG DOGWOOD
ER	ERIANTHUS RAVENNAE	RAVENNA GRASS
FP	FALLUGIA PARADOXA	APACHE PLUME
JS	JUNIPERUS X PFITZERIANA 'SEA GREEN'	SEA GREEN PFITZER JUNIPER
MF	MAHONIA FREMONTII	DESERT MAHONIA
NW	NEPETA X 'WALKER'S LOW'	WALKER'S LOW CATMINT
RA2	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC
RG	RHUS GLABRA	SMOOTH SUMAC
RG2	RIBES ALPINUM 'GREEN MOUND'	GREEN MOUND ALPINE CURRANT
RA	RIBES AUREUM	GOLDEN CURRANT
SL	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM
SJ	SPIRAEA JAPONICA	JAPANESE SPIREA
YG	YUCCA GLAUCA	SOAPWEED

NOTE: SEE SHEET 14 OF 39 FOR TREE LOCATIONS AND SPECIES

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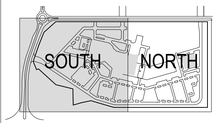

PROJECT NORTH

SCALE

0' 25' 50' 100'

SCALE: 1"=50'

SHEET TITLE

LANDSCAPE PLAN - SOUTH

PUD SHEET NUMBER	SHEET ID
15 of 39	LP101

PROJECT NUMBER 15696

Plot Date:



TOPDRESS LEGEND

ENTRY DRIVE MAINTENANCE EDGE:
2" - 4" COBBLESTONE 4" DEPTH
COLOR: BULK RIVER ROCK GRAY ROSE
PH: 303.340.1440
www.pioneerco.com
9,000 SF

PARKING MAINTENANCE EDGE / RIBBON BIOSWALE:
4" - 8" COBBLE STONE 4" MIN. DEPTH
COLOR: BULK GLACIER WHITE RIVER
PH: 303.340.1440
www.pioneerco.com
20,000 SF

BUILDING MAINTENANCE EDGE: 1-1/2" SCREENED, MIN 2" DEPTH
COLOR: BULK RIVER ROCK GRAY ROSE
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www.pioneerco.com
40,000 SF

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43,000 SF

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SJ	SPIRAEA JAPONICA	JAPANESE SPIREA
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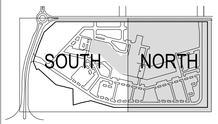

PROJECT NORTH

SCALE

0' 25' 50' 100'

SCALE: 1"=50'

SHEET TITLE

LANDSCAPE PLAN - NORTH

PUD SHEET NUMBER	SHEET ID
16 of 39	LP102

PROJECT NUMBER 15696

Plot Date:

LANDSCAPE REQUIREMENTS

BUFFER PARKING ADJACENT TO PUBLIC/PRIVATE ROADS

	REQUIRED	PROPOSED
BUFFER PARKING LANDSCAPE	NA	NA

ENTRY DRIVES/SIGNS

	REQUIRED	PROPOSED
ENTRY PLANTING AREAS	DIVERSE PLANT MATERIAL	ORNAMENTAL GRASS MIX & LOW SHRUBS
	INTEGRATE PLANTING & SIGNAGE	PLANTING TO FRAME SIGNAGE

PERIMETER LANDSCAPING ADJACENT TO ABUTTING PROPERTY

	REQUIRED	PROPOSED
NORTH PROPERTY	1 TREE PER 40LF = 931 / 40 = 23 TREES	23 TREES (DECIDUOUS AND CONIFER)
MINIMUM 10' BUFFER REQUIRED	APPROPRIATE SHRUBS/GROUNDCOVER	SHORT GRASS PRAIRIE MIX

PARKING LOT ISLANDS

	REQUIRED	PROPOSED
PARKING SPACE TREES	1 TREE PER 8 SPACES = 773 / 8 = 97	97 TREES
PARKING ISLANDS	2 TREES PER ISLAND: 25 x 2 = 50	50 TREES
PARKING ISLAND SHRUBS	8 SHRUBS PER 10FT ISLAND	20 FOOT ISLAND PROVIDED @ 15 SHRUBS MIN. PER ISLAND
PARKING PERIMETER SHRUBS	APPROPRIATE PLANTING	SHORT GRASS PRAIRIE MIX AND ACCENT SHRUBS

PARKING LOT MEDIANS

	REQUIRED	PROPOSED
PLANTING MEDIANS - TREES	1 TREE PER 30 LF = 730 / 30 = 24 TREES	24 TREES
PLANTING MEDIANS - SHRUBS	8 SHRUBS PER 30 LF = 730 / 30 * 8 = 192	MINIMUM 192 SHRUBS/GROUNDCOVER

BUILDING LANDSCAPING

	REQUIRED	PROPOSED
PLANTING BEDS	6' MIN. PLANTING ADJACENT BUILDINGS	6' MIN. PLANTING ADJACENT BUILDINGS
	MIN. 25% AREA OF PERIMETER WITH ORNAMENTAL TREES, SHRUBS PERENNIAL FLOWERS AND GROUNDCOVERS	MIN. 25% AREA OF PERIMETER WITH ORNAMENTAL TREES, SHRUBS PERENNIAL FLOWERS AND GROUNDCOVERS

TOPDRESS LEGEND

ENTRY DRIVE MAINTENANCE EDGE:
2" - 4" COBBLESTONE 4" DEPTH
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www.pioneerco.com
9,000 SF

PARKING MAINTENANCE EDGE / RIBBON BIOSWALE:
4" - 8" COBBLE STONE 4" MIN. DEPTH
COLOR: BULK GLACIER WHITE RIVER
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20,000 SF

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43,000 SF

PLANT LEGEND

SYMBOL	CODE	BOTANICAL/COMMON NAME	SIZE	MATURE	PHASE 1 QTY	PHASE 2 QTY	TOTAL
	PR	PROPOSED (BY OTHERS)					72
DECIDUOUS TREES							
	AT2	ALNUS INCANA TENUIFOLIA THINLEAF ALDER	2" CAL.	20'X20'	8		8
	CP	CELTIS OCCIDENTALIS 'PRAIRIE PRIDE' PRAIRIE PRIDE HACKBERRY	2" CAL.	50'X40'	7		7
	CC2	CERCIS CANADENSIS EASTERN REDBUD	2" CAL.	30'X30'	10	1	11
	GT	GLEDITSIA TRIACANTHOS HONEY LOCUST	2" CAL.	40'X30'	19	11	30
	GS	GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE' SKYLINE HONEY LOCUST	2 " CAL.	40'X30'	13	4	17
	GD	GYMNOCLADUS DIOICUS 'ESPRESSO-JFS' ESPRESSO™ KENTUCKY COFFEETREE	2" CAL.	50'X35'	38	16	54
	PA	POPULUS X ACUMINATA LANCELEAF COTTONWOOD	2" CAL.	50'X35'	4		4
	QB	QUERCUS BICOLOR SWAMP WHITE OAK	2" CAL.	55'X50'	3		3
	QM	QUERCUS MACROCARPA BURR OAK	3" CAL.	60'X40'	22	16	38
	QU	QUERCUS MUEHLENBERGII CHINKAPIN OAK	2" CAL.	50'X50'	11		11
	UO	ULMUS AMERICANA 'LEWIS & CLARK' PRAIRIE EXPEDITION® AMERICAN ELM	2 " CAL.	30'X30'	24		24
	UC	ULMUS X 'FRONTIER' FRONTIER ELM	2 " CAL.	30'X30'		44	44
				TOTAL	**159**	**92**	**251**

PLANT LEGEND

SYMBOL	CODE	BOTANICAL/COMMON NAME	SIZE	MATURE	PHASE 1 QTY	PHASE 2 QTY	TOTAL
EVERGREEN TREES							
	PL	PINUS FLEXILIS LIMBER PINE	8` HT.	50`X30`	13		13
	PN	PINUS NIGRA AUSTRIAN PINE	8` HT.	50`X30`		8	8
	PP2	PINUS PONDEROSA PONDEROSA PINE	8` HT.	80`X30`	9	10	19
				TOTAL	**22**	**18**	**40**

PLANT LEGEND

SYMBOL	CODE	BOTANICAL/COMMON NAME	SIZE	MATURE	PHASE 1 QTY	PHASE 2 QTY	TOTAL
ORNAMENTAL TREES							
	AG	ACER GRANDIDENTATUM BIGTOOTH MAPLE	2" CAL.	25'X25'	2		2
	AG2	ACER GRISEUM PAPERBARK MAPLE	2" CAL.	25'X20'	14	3	17
	AI	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE' AUTUMN BRILLIANCE SERVICEBERRY	2" CAL.	10'X12'	3		3
	AS	AMELANCHIER ALNIFOLIA SERVICEBERRY	2 " CAL.	20'X25'	19	4	23
	CC	CRATAEGUS CHRYSOCARPA FIREBERRY HAWTHORN	2 " CAL.	25'X25'	16		16
				TOTAL	**54**	**7**	**61**

SHORT GRASS PRAIRIE MIX

BY: WESTERN NATIVE SEED
www.westernnativeseed.com

+/- 818,000 SF

SPECIES	SEEDING RATE: 1-2 lbs per 1,000 sf.
BUFFALO GRASS *BUCHLOE DACTYLOIDES*	45%
BLUE GRAMA *BOUTELOUA GRACILIS*	50%
WESTERN WHEATGRASS PASCOPYRUM SMITHII	3%
SPOROBOLUS CRYPTANDRUS SAND DROPSEED	2%

ENHANCED SHORT GRASS PRAIRIE MIX

BY: WESTERN NATIVE SEED
www.westernnativeseed.com

+/- 48,000 SF

SPECIES	SEEDING RATE: 1-2 lbs per 1,000 sf.	QUANTITY
BUFFALO GRASS *BUCHLOE DACTYLOIDES*	45%	+/-48,000 SF
BLUE GRAMA *BOUTELOUA GRACILIS*	50%	
WESTERN WHEATGRASS PASCOPYRUM SMITHII	3%	
SPOROBOLUS CRYPTANDRUS SAND DROPSEED	2%	
WILDFLOWER PERENNIAL MIX SPECIES MIX,TBD	4" PLUGS @ 18" O.C. , 10% OF TOTAL AREA	+/- 2,100 4" PLUGS
GRASSES AND PERENNIAL MIX SPECIES MIX,TBD	1 GAL. @ 18" O.C., 10% OF TOTAL AREA	+/- 2,100 (1 GAL.)

LANDSCAPE AREA

	HOSPITAL LIMITS +/- SF	MOB LIMITS +/- SF	TOTAL AREA +/- SF
SHORT GRASS PRARIE	435,782 SF	385,693 SF	821,475 SF
ENHANCED SHORT PRAIRIE GRASS	38,974 SF	8,938 SF	47,912 SF
ENTRY DRIVE MAINTENANCE EDGE	9,062 SF		9,062 SF
CONTAINER PLANING BED AREAS (NO HATCH)	43,000 SF		+/-43,000 SF
PARKING MAINTENANCE EDGE / RIBBON BIOSWALE	10,188 SF	7,490SF	17,687 SF
BUILDING MAINTENANCE EDGE	13,865 SF	383 SF	14,248 SF
RIBBON/ENTRY PLANTING ZONES			
PERENNIALS	3,838 SF	1,000 SF	4,838 SF
LOW SHRUBS	9,864 SF		9,864 SF
ORNAMENTAL GRASS / PERENNIALS MIX	1,541 SF		1,541 SF
TOTAL LANDSCAPE AREA	566,114 SF	403,504 SF	969,648 SF

PLANT LEGEND

SYMBOL	CODE	BOTANICAL/COMMON NAME	SIZE	MATURE	1 QTY	2 QTY	TOTAL
PARKING/PERIMETER AREA							
	AF	AMORPHA FRUTICOSA FALSE INDIGO	5 GAL	7'X7'	3	2	5
	AT	ARTEMISIA TRIDENTATA BIG SAGEBRUSH	5 GAL	6'X6'	71	77	148
	BC	BERBERIS THUNBERGII 'CRIMSON PYGMY' CRIMSON PYGMY JAPANESE BARBERRY	5 GAL	2'X2'	50	79	129
	CR	CORNUS SERICEA RED TWIG DOGWOOD	5 GAL	6'X8'	29	76	105
	FP	FALLUGIA PARADOXA APACHE PLUME	5 GAL	5'X5'	44	105	149
	RA2	RHUS AROMATICA 'GRO-LOW' GRO-LOW FRAGRANT SUMAC	5 GAL	2'X6'	136	175	311
	RG	RHUS GLABRA SMOOTH SUMAC	4` HT.	10'X10'	1	30	31
	RG2	RIBES ALPINUM 'GREEN MOUND' GREEN MOUND ALPINE CURRANT	5 GAL	3'X3'	285	356	641
	RA	RIBES AUREUM GOLDEN CURRANT	5 GAL	5'X5'	12	17	29
	YG	YUCCA GLAUCA SOAPWEED	5 GAL	3'X3'	238	220	458
				TOTAL	**869**	**1137**	**2006**

PLANT LEGEND

SYMBOL	CODE	NAME	SIZE	MATURE	1 QTY	2 QTY	TOTAL
RIBBON CONCEPTUAL PLANT LIST					(ESTIMATED AND NOT SHOWN ON PLANS)		
	AL	AMORPHA CANESCENS LEADPLANT	5 GAL	2'X2'	270		
	BG	BOUTELOUA GRACILIS BLUE GRAMA GRASS	3 GAL	2'X2'	180		
	CB	CARYOPTERIS X CLANDONENSIS 'BLUE MIST' BLUE MIST BLUEBEARD	5 GAL	4'X3'	250		
	ES	ERIGERON SPECIOSUS SHOWY FLEABANE	3 GAL	2'X2'	30		
	GA	GAILLARDIA ARISTATA BLANKET FLOWER	3 GAL	2'X2'	35		
	HS	HELICTOTRICHON SEMPERVIRENS BLUE OAT GRASS	3 GAL	3'X3'	180		
	HO	HEMEROCALLIS X 'STELLA DE ORO' STELLA DE ORO DAYLILY	1 GAL	2'X2'	50		
	LP	LIATRIS PUNCTATA DOTTED BLAZING STAR	1 GAL	2'X2'	50		
	MR	MISCANTHUS SINENSIS 'ROTSILBER' RED SILVER EULALIA GRASS	3 GAL	4'X4'	180		
	MU	MUHLENBERGIA REVERCHONII 'PUND01S' UNDAUNTED® RUBY MUHLY	3 GAL	2'X2'	180		
	PW	PENSTEMON WHIPPLEANUS WHIPPLE'S PENSTEMON	1 GAL	3'X2'	20		
	PP	POTENTILLA FRUTICOSA 'PINK BEAUTY' PINK BEAUTY BUSH CINQUEFOIL	5 GAL	3'X3'	300		
	RH	RUDBECKIA HIRTA BLACK-EYED SUSAN	1 GAL	1'X2'	40		
				TOTAL	**1765**		

REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
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CASE #

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ISSUED FOR	DATE
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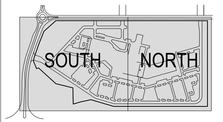
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



PROJECT NORTH

SCALE

SCALE: NTS

SHEET TITLE

LANDSCAPE PLANTING SCHEDULE

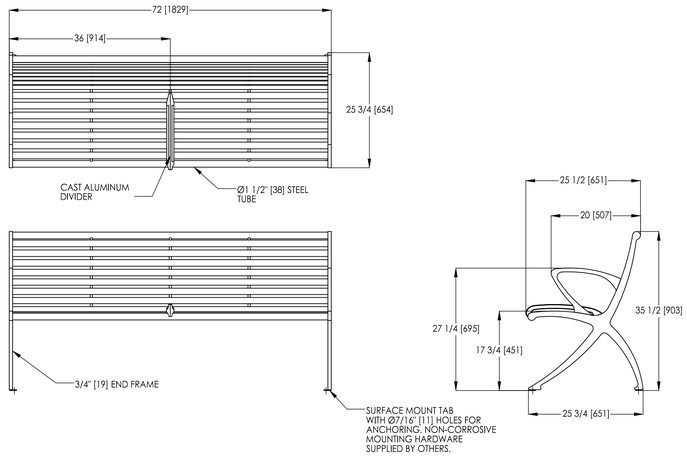
PUD SHEET NUMBER	SHEET ID
17 of 39	LP103

PROJECT NUMBER 15696

Plot Date:

Parc Vue® Backed Bench, 72in, Surface Mount, with End Arms and Divider
Product Drawing www.landscapeforms.com

Date: 5/19/2010
Ph: 800.521.2546



landscapeforms Drawing: PV644-08
Dimensions are in inches [mm]
U.S. Patent Nos.: D532,630; D534,021; D536,844

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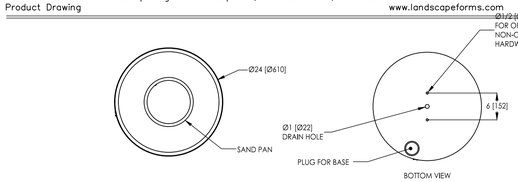
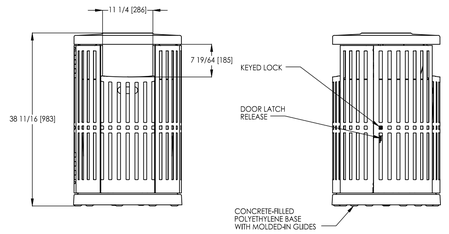
1 PARC VUE BENCH

SCALE: 1/16" = 1'

Chase Park® Single Opening Litter Receptacle, With Sand Pan, With Lock
Product Drawing www.landscapeforms.com

Date: 8/22/2019
Ph: 800.521.2546





landscapeforms Drawing: CP362-04
Dimensions are in inches [mm]

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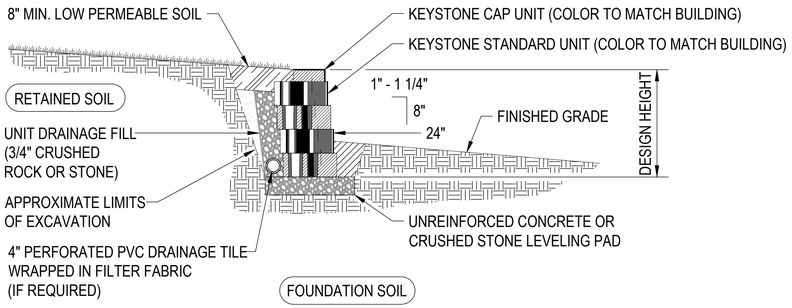
2 CHASE LITTER RECEPTACLE

SCALE: 1/16" = 1'



3 TYPICAL GRAVITY RETENTION WALL (HEIGHT OF 2.5' MAX.)

SCALE: NTS

Plot Date:

REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
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2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN

SCALE

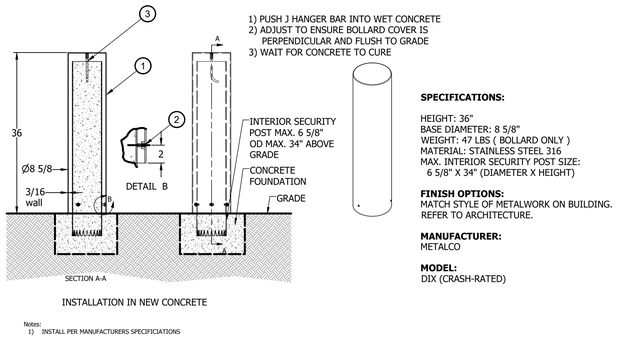
SCALE: NTS

SHEET TITLE

SITE AMENITIES DETAILS

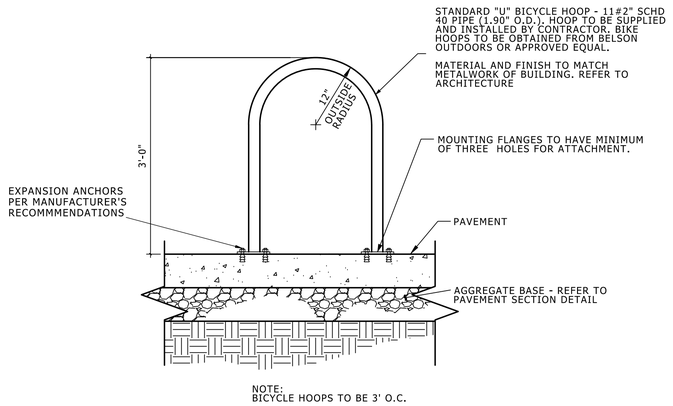
PUD SHEET NUMBER	SHEET ID
18 of 39	LS500

PROJECT NUMBER 15696



Notes:
1) INSTALL PER MANUFACTURERS SPECIFICATIONS

1 BOLLARD
SCALE: NTS



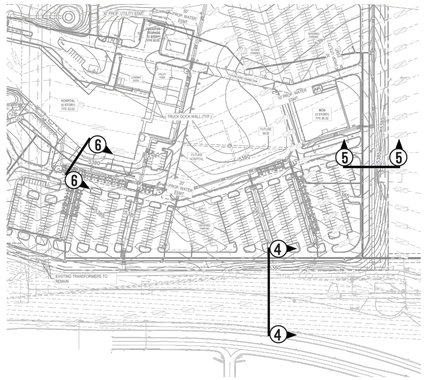
NOTE:
BICYCLE HOOPS TO BE 3' O.C.

2 U BIKE RACK
SCALE: NTS

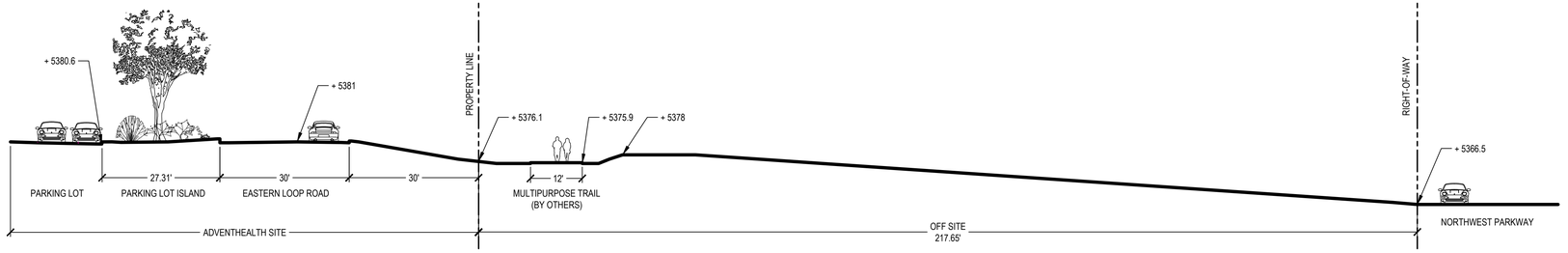
STEEL LOUVERED FENCE
MODEL : SHADOW 80
MANUFACTURER: AMETCO
8' HT.
COLOR TO MATCH STYLE OF METALWORK ON BUILDING.
REFER TO ARCHITECTURE



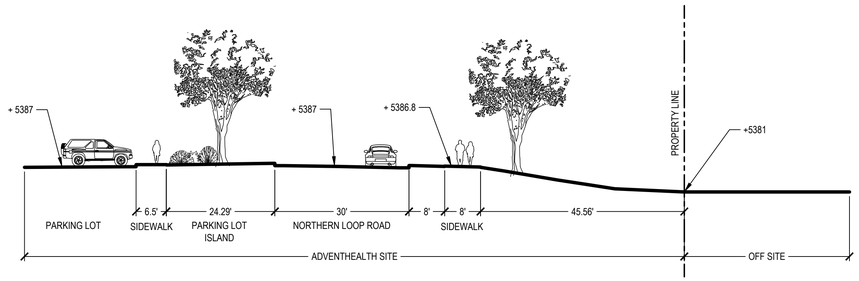
3 UTILITY SCREEN FENCE
SCALE: NTS



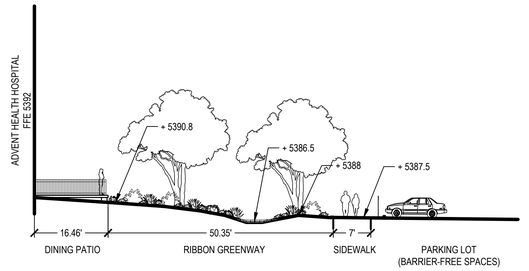
SECTION KEY



4 EAST LOOP ROAD
SECTION
SCALE: 1/16" = 1' - 0"



5 NORTH LOOP ROAD
SECTION
SCALE: 1/16" = 1' - 0"



6 DINING PATIO AND RIBBON GREENWAY
SECTION
SCALE: 1/16" = 1' - 0"

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2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN

SCALE

SCALE: NTS

SHEET TITLE

SITE AMENITIES DETAILS

PUD SHEET NUMBER	SHEET ID
19 of 39	LS501

PROJECT NUMBER 15696

Plot Date:



TOPDRESS LEGEND
IRRIGATION LEGEND

- PERMANENT IRRIGATION
  PRESSURE COMPENSATING DRIP IRRIGATION
  PRESSURE COMPENSATING SPRAY IRRIGATION
- TEMPORARY IRRIGATION
  (REMOVED WITHIN 1 YEAR OF PLANT ESTABLISHMENT)
- ISLAND PLANTING
- MEDIAN PLANTING
- MAIN DRIVE PLANTING
- RIBBON
- ROCKRESS ENTRY
- BUILDING PLANTERS

SITE AREA - PHASE 1 & 2	PERMANENT IRRIGATION
ZONES	
ISLAND PLANTING	23,827 SF
MEDIAN PLANTING	9,187 SF
MAIN DRIVE PLANTING	17,698 SF
RIBBON	47,912 SF
ROCKRESS ENTRY	4,965 SF
BUILDING PLANTERS	9,087 SF
TOTAL	100,867 SF

SITE AREA	TEMPORARY IRRIGATION
ZONES	
SHORT GRASS PRARIE	821,475 SF
TOTAL	821,475 SF

REDTAIL RIDGE PUD #6

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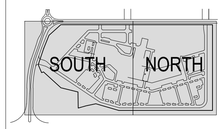


PROJECT NORTH

SCALE

0' 50' 100' 200'

SCALE: 1"=100'

SHEET TITLE

IRRIGATION HYDROLOGY

PUD SHEET NUMBER	SHEET ID
20 of 39	LI100

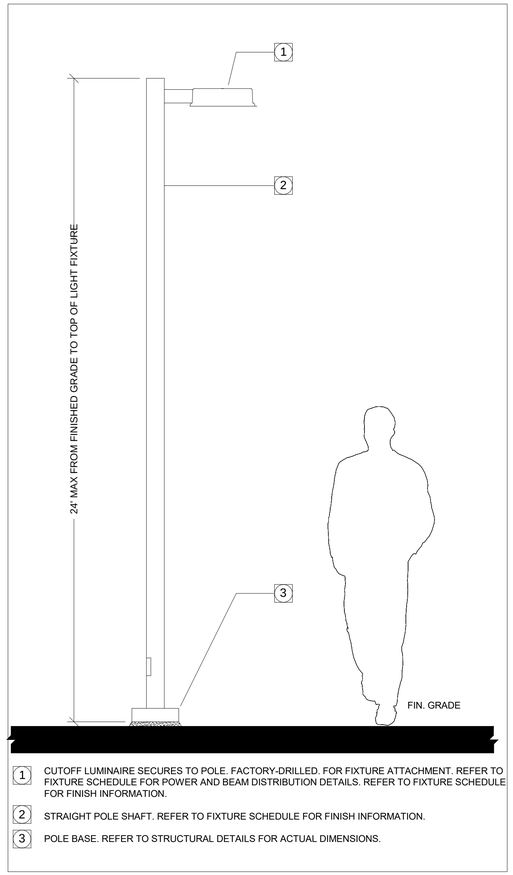
PROJECT NUMBER 15696

Plot Date:

FIXTURE TYPE	GENERAL DESCRIPTION	POLE HEIGHT	LOCATION	LUMENS	SYSTEM WATTAGE	COLOR TEMP.	CRI	VOLTAGE	DRIVER	CONTROL TYPE	MANUFACTURER + CATALOGUE #
B1	RECESSED DAMP LOCATION RATED ROUND 3IN DOWNLIGHT, 60 DEGREE BEAM	-	CANOPY	2500	25.8EA.	3500	90+	UNIV	INTEGRAL	0-10V 1%	3G LIGHTING 3G-DL33RF-25-H95-35K-60D-UNV-DIM-[FINISH]-[OPTIONS]
B2	RECESSED WET LOCATION RATED SQUARE 6IN DOWNLIGHT, WIDE DISTRIBUTION	-	CANOPY	8139	69.2EA.	3500	80+	UNIV	INTEGRAL	0-10V 1%	PRESCOLITE LFR-6SQD-M-80L-35K8MD-DM1 TRIM: LFR-6SQD-T-CL-S
D1	ROADWAY POLE SINGLE HEAD, TYPE 3 DISTRIBUTION. 16FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	-	SITE	2812	30EA.	4000	70+	UNIV	INTEGRAL	-	KIM LIGHTING UR20-28L-30-3K7-3-UNV-PT24-[FINISH]-[OPTIONS] POLE: RSAK14-40A-1-[DRILL]-[FINISH]-[OPTIONS]
EN	CEILING MOUNTED IP65 RATED LINEAR, 10 X 30 DEGREE DISTRIBUTION, 60IN LENGTH	-	CANOPY	925	5/FT	4000	-	120V ONLY	INTEGRAL	DMX	INSIGHT LIGHTING AP-LO-RBG40-1030-60-120-[CONTROL OPTIONS]-[FINISH]-[OPTIONS]
P1	ROADWAY POLE SINGLE HEAD, TYPE 3 DISTRIBUTION. 10FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	10' OVERALL	SITE	6293	65EA.	4000	70+	UNIV	INTEGRAL	-	KIM LIGHTING UR20-24L-65-3K7-3-UNV-PT24-[FINISH]-[OPTIONS] POLE: RSAK14-40A-1-[DRILL]-[FINISH]-[OPTIONS]
P2	PEDESTIAN BOLLARD. TYPE ME DISTRIBUTION. 3FT 3IN OVERALL BOLLARD HEIGHT.	-	HEALING WALKS	1132	10EA.	4000	80+	UNIV	INTEGRAL	-	LIGMAN LIGHTING UJE-10571-10W-ME-W40-[FINISH]-120/277v
S2	ROADWAY POLE SINGLE HEAD, TYPE 3 DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	24' OVERALL	SITE	5028	39.1EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-39-3K7-3-UNV-PT24-[FINISH]-[OPTIONS] POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
S3A	ROADWAY POLE SINGLE HEAD, TYPE 3 DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	24' OVERALL	SITE	11505	108.2EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-105-3K7-3-UNV-A5-[FINISH]-[OPTIONS] POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
S3B	ROADWAY POLE SINGLE HEAD, TYPE 3 DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	24' OVERALL	SITE	11505	108.2EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-105-3K7-3-UNV-A5-[FINISH]-HSS-90-B POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
S4A	ROADWAY POLE SINGLE HEAD, TYPE 4 FORWARD DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	24' OVERALL	SITE	11660	108.2EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-105-3K7-4F-UNV-A5-[FINISH]-[OPTIONS] POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
S4B	ROADWAY POLE SINGLE HEAD, TYPE 4 FORWARD DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	24' OVERALL	SITE	11660	108.2EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-105-3K7-4F-UNV-A5-[FINISH]-[OPTIONS] POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
S5A	ROADWAY POLE DOUBLE HEAD, TYPE 4 FORWARD DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	24' OVERALL	SITE	11660	216.4EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-105-3K7-4F-UNV-A5-[FINISH]-[OPTIONS] POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
S5B	ROADWAY POLE DOUBLE HEAD, TYPE 4 FORWARD DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	24' OVERALL	SITE	11660	216.4EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-105-3K7-4F-UNV-A5-[FINISH]-[OPTIONS] POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
WM1	EXTERIOR WALL MOUNTED TYPE 4 FORWARD DISTRIBUTION	-	EXTERIOR	3343	30EA.	4000	80+	UNIV	INTEGRAL	-	KIM LIGHTING WDS-D-24L-30-3K8-4F-UNV-[FINISH]-[OPTIONS]
U2	POLE MOUNT FLAG POLE LIGHT. UL LISTED FOR WET LOCATIONS.	-	FLAGPOLES	5000	58EA.	4000	80+	UNIV	INTEGRAL	-	LITHIONA LWR-5000-277-80-41K-[POLE DIA.]

NOTE: MAX ALLOWABLE POLE HEIGHT TO BE USED IS 24'-0" FROM F.G. TO TOP OF FIXTURE. SEE DETAIL 01 ON PAGE E-01

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Central Parking Lot	+	1.5 fc	4.0 fc	0.4 fc	10.0:1	3.8:1
East Exit Discharge	+	2.7 fc	6.5 fc	0.5 fc	13.0:1	5.4:1
East Parking	+	1.7 fc	4.3 fc	0.2 fc	21.5:1	8.5:1
Full Site	+	0.9 fc	57.3 fc	0.0 fc	N/A	N/A
Healing walk	+	1.6 fc	6.8 fc	0.3 fc	22.7:1	5.3:1
healing walk- north	+	2.2 fc	9.1 fc	0.2 fc	45.5:1	11.0:1
Main Drive	+	1.7 fc	12.7 fc	0.2 fc	63.5:1	8.5:1
Main Entry	+	11.4 fc	19.0 fc	3.0 fc	6.3:1	3.8:1
Main North Drive	+	1.7 fc	3.0 fc	0.9 fc	3.3:1	1.9:1
MOB Drive	+	1.4 fc	4.5 fc	0.1 fc	45.0:1	14.0:1
MOB ENTRANCE	+	9.0 fc	14.5 fc	4.7 fc	3.1:1	1.9:1
MOB walkway	+	3.6 fc	7.2 fc	0.7 fc	10.3:1	5.1:1
North Drive	+	1.3 fc	3.1 fc	0.2 fc	15.5:1	6.5:1
North Parking Lot	+	1.9 fc	4.4 fc	0.2 fc	22.0:1	9.5:1
Property Line	+	0.0 fc	0.3 fc	0.0 fc	N/A	N/A
South Drive	+	1.2 fc	2.8 fc	0.2 fc	14.0:1	6.0:1
South ED Entrance	+	14.5 fc	22.3 fc	3.3 fc	6.8:1	4.4:1
South Exit Discharge	+	3.6 fc	15.6 fc	1.0 fc	15.6:1	3.6:1
South Main Drive	+	2.4 fc	21.6 fc	0.5 fc	43.2:1	4.8:1
South Parking Lot	+	1.6 fc	3.7 fc	0.3 fc	12.3:1	5.3:1
staff outdoor area	+	2.2 fc	4.9 fc	0.2 fc	24.5:1	11.0:1
SW Parking Lot	+	2.0 fc	7.8 fc	0.4 fc	19.5:1	5.0:1
West Drive/ Helicopter Pad	+	0.9 fc	20.4 fc	0.1 fc	204.0:1	9.0:1
West ED Entry	+	39.7 fc	94.1 fc	5.9 fc	15.9:1	6.7:1



1 CUTOFF LUMINAIRE SECURES TO POLE. FACTORY-DRILLED. FOR FIXTURE ATTACHMENT. REFER TO FIXTURE SCHEDULE FOR POWER AND BEAM DISTRIBUTION DETAILS. REFER TO FIXTURE SCHEDULE FOR FINISH INFORMATION.

2 STRAIGHT POLE SHAFT. REFER TO FIXTURE SCHEDULE FOR FINISH INFORMATION.

3 POLE BASE. REFER TO STRUCTURAL DETAILS FOR ACTUAL DIMENSIONS.

1 LIGHT POLE BASE DETAIL
N.T.S.

REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT #1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

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100 HEALTH PARK DRIVE
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303.673.1000
www.adventhealth.com

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1675 LARIMER STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

Kimley»Horn
6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2307
kimley-horn.com

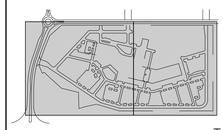
WSP
2000 SOUTH COLORADO BOULEVARD
SUITE 2-1000
DENVER, CO 80222
WWW.WSP.com

ISSUED FOR	DATE
3RD PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



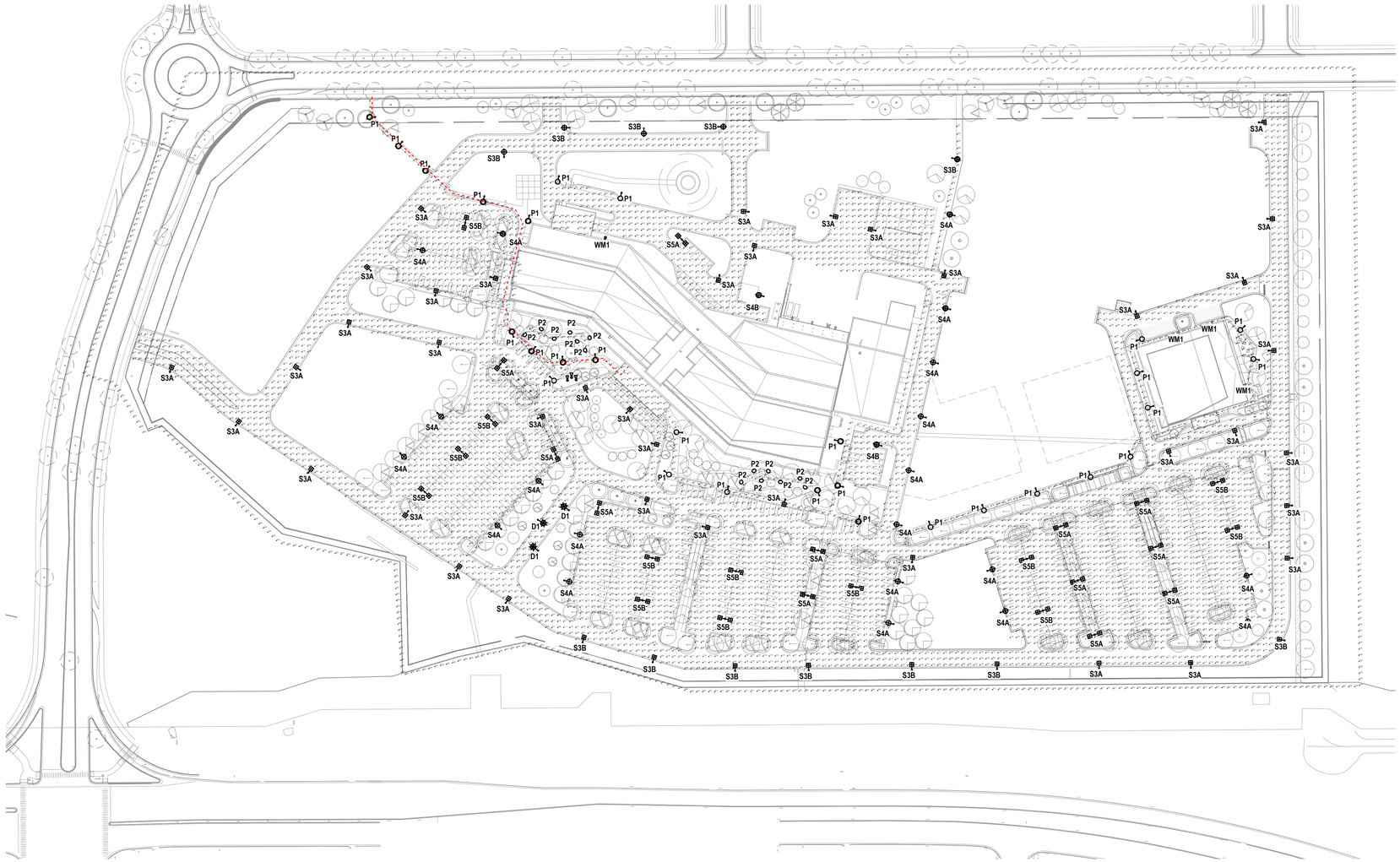
TRUE NORTH

SCALE
As indicated

SHEET TITLE
SITE LIGHTING SCHEDULE

PUD SHEET NUMBER	SG SHEET NUMBER
21 OF 39	E-01

PROJECT NUMBER
15696.00



FIXTURE TYPE	GENERAL DESCRIPTION	LOCATION	LUMENS	SYSTEM WATTAGE	COLOR TEMP.	CRI	VOLTAGE	DRIVER	CONTROL TYPE	MANUFACTURER + CATALOGUE #
B1	RECESSED DAMP LOCATION RATED ROUND 3IN DOWNLIGHT, 60 DEGREE BEAM	CANOPY	2500	25.8EA.	3500	90+	UNIV	INTEGRAL	0-10V 1%	3G LIGHTING 3G-DL33RF-25-H95-35K-60D-UNV-DIM-[FINISH]-[OPTIONS]
B2	RECESSED WET LOCATION RATED SQUARE 6IN DOWNLIGHT, WIDE DISTRIBUTION	CANOPY	8139	69.2EA.	3500	80+	UNIV	INTEGRAL	0-10V 1%	PRESCOLITE LFR-6SQD-M-80L-35K8MD-DM1 TRIM: LFR-6SQD-T-CL-S
D1	ROADWAY POLE SINGLE HEAD, TYPE 3 DISTRIBUTION. 16FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	SITE	2812	30EA.	4000	70+	UNIV	INTEGRAL	-	KIM LIGHTING UR20-28L-30-3K7-3-UNV-PT24-[FINISH]-[OPTIONS] POLE: RSAK14-40A-1-[DRILL]-[FINISH]-[OPTIONS]
EN	CEILING MOUNTED IP65 RATED LINEAR, 10 X 30 DEGREE DISTRIBUTION, 60IN LENGTH	CANOPY	925	5/FT	4000	-	120V ONLY	INTEGRAL	DMX	INSIGHT LIGHTING AP-LO-RBG40-1030-60-120-[CONTROL OPTIONS]-[FINISH]-[OPTIONS]
P1	ROADWAY POLE SINGLE HEAD, TYPE 3 DISTRIBUTION. 10FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	SITE	6293	65EA.	4000	70+	UNIV	INTEGRAL	-	KIM LIGHTING UR20-24L-65-3K7-3-UNV-PT24-[FINISH]-[OPTIONS] POLE: RSAK14-40A-1-[DRILL]-[FINISH]-[OPTIONS]
P2	PEDESTIAN BOLLARD. TYPE ME DISTRIBUTION. 3FT 3IN OVERALL BOLLARD HEIGHT.	HEALING WALKS	1132	10EA.	4000	80+	UNIV	INTEGRAL	-	LIGMAN LIGHTING UJE-10571-10W-ME-W40-[FINISH]-120/277v
S2	ROADWAY POLE SINGLE HEAD, TYPE 3 DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	SITE	5028	39.1EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-39-3K7-3-UNV-PT24-[FINISH]-[OPTIONS] POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
S3A	ROADWAY POLE SINGLE HEAD, TYPE 3 DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	SITE	11505	108.2EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-105-3K7-3-UNV-A5-[FINISH]-[OPTIONS] POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
S3B	ROADWAY POLE SINGLE HEAD, TYPE 3 DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	SITE	11505	108.2EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-105-3K7-3-UNV-A5-[FINISH]-HSS-90-B POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
S4A	ROADWAY POLE SINGLE HEAD, TYPE 4 FORWARD DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	SITE	11660	108.2EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-105-3K7-4F-UNV-A5-[FINISH]-[OPTIONS] POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
S4B	ROADWAY POLE SINGLE HEAD, TYPE 4 FORWARD DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	SITE	11660	108.2EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-105-3K7-4F-UNV-A5-[FINISH]-[OPTIONS] POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
S5A	ROADWAY POLE DOUBLE HEAD, TYPE 4 FORWARD DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	SITE	11660	216.4EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-105-3K7-4F-UNV-A5-[FINISH]-[OPTIONS] POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
S5B	ROADWAY POLE DOUBLE HEAD, TYPE 4 FORWARD DISTRIBUTION. 24FT 0IN OVERALL POLE HEIGHT. POLE TO BE FIELD CUT.	SITE	11660	216.4EA.	4000	70+	UNIV	INTEGRAL	-	BEACON LIGHTING VP-ST-1-36L-105-3K7-4F-UNV-A5-[FINISH]-[OPTIONS] POLE: RSAB-S25-60A-B-1[DRILL]-[FINISH]-[OPTIONS]
WM1	EXTERIOR WALL MOUNTED TYPE 4 FORWARD DISTRIBUTION	EXTERIOR	3343	30EA.	4000	80+	UNIV	INTEGRAL	-	KIM LIGHTING WDS-D-24L-30-3K8-4F-UNV-[FINISH]-[OPTIONS]
U2	POLE MOUNT FLAG POLE LIGHT. UL LISTED FOR WET LOCATIONS.	FLAGPOLE S	5000	58EA.	4000	80+	UNIV	INTEGRAL	-	LITHIONA LWR-5000-277-80-41K-[POLE DIA.]

② SITE PLAN - LIGHTING
1" = 100'-0"

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Central Parking Lot	+	1.5 fc	4.0 fc	0.4 fc	10.0:1	3.8:1
East Exit Discharge	+	2.7 fc	6.5 fc	0.5 fc	13.0:1	5.4:1
East Parking	+	1.7 fc	4.3 fc	0.2 fc	21.5:1	8.5:1
Full Site	+	0.9 fc	57.3 fc	0.0 fc	N/A	N/A
Healing walk	+	1.6 fc	6.8 fc	0.3 fc	22.7:1	5.3:1
healing walk- north	+	2.2 fc	9.1 fc	0.2 fc	45.5:1	11.0:1
Main Drive	+	1.7 fc	12.7 fc	0.2 fc	63.5:1	8.5:1
Main Entry	+	11.4 fc	19.0 fc	3.0 fc	6.3:1	3.8:1
Main North Drive	+	1.7 fc	3.0 fc	0.9 fc	3.3:1	1.9:1
MOB Drive	+	1.4 fc	4.5 fc	0.1 fc	45.0:1	14.0:1
MOB ENTRANCE	+	9.0 fc	14.5 fc	4.7 fc	3.1:1	1.9:1
MOB walkway	+	3.6 fc	7.2 fc	0.7 fc	10.3:1	5.1:1
North Drive	+	1.3 fc	3.1 fc	0.2 fc	15.5:1	6.5:1
North Parking Lot	+	1.9 fc	4.4 fc	0.2 fc	22.0:1	9.5:1
Property Line	+	0.0 fc	0.3 fc	0.0 fc	N/A	N/A
South Drive	+	1.2 fc	2.8 fc	0.2 fc	14.0:1	6.0:1
South ED Entrance	+	14.5 fc	22.3 fc	3.3 fc	6.8:1	4.4:1
South Exit Discharge	+	3.6 fc	15.6 fc	1.0 fc	15.6:1	3.6:1
South Main Drive	+	2.4 fc	21.6 fc	0.5 fc	43.2:1	4.8:1
South Parking Lot	+	1.6 fc	3.7 fc	0.3 fc	12.3:1	5.3:1
staff outdoor area	+	2.2 fc	4.9 fc	0.2 fc	24.5:1	11.0:1
SW Parking Lot	+	2.0 fc	7.8 fc	0.4 fc	19.5:1	5.0:1
West Drive/ Helicopter Pad	+	0.9 fc	20.4 fc	0.1 fc	204.0:1	9.0:1
West ED Entry	+	39.7 fc	94.1 fc	5.9 fc	15.9:1	6.7:1

LEGEND

EGRESS PATH

REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT #1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

ADVENT HEALTH LOUISVILLE
100 HEALTH PARK DRIVE
LOUISVILLE, CO 80027
303.673.1000
www.adventhealth.com

SMITHGROUP
1675 LARIMER STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

Kimley»Horn
6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2307
kimley-horn.com

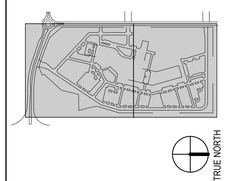
WSP
2000 SOUTH COLORADO BOULEVARD
SUITE 2-1000
DENVER, CO 80222
WWW.WSP.com

ISSUED FOR	DATE
3RD PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



TRUE NORTH

SCALE

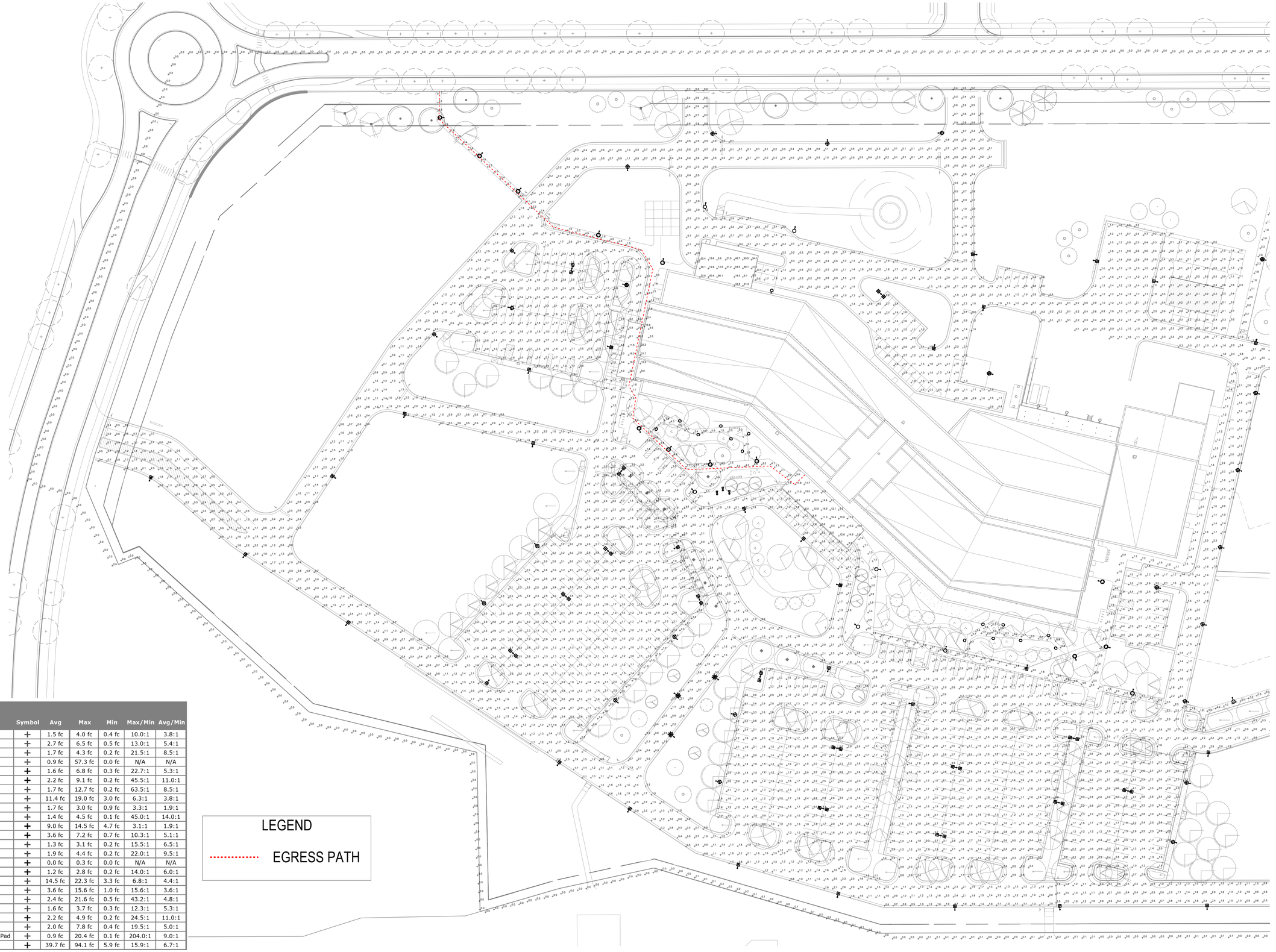
As indicated

SHEET TITLE

OVERALL PHOTOMETRIC PLAN - 100 SCALE

PUD SHEET NUMBER	SG SHEET NUMBER
22 OF 39	E-02

PROJECT NUMBER
15696.00



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Central Parking Lot	+	1.5 fc	4.0 fc	0.4 fc	10.0:1	3.8:1
East Exit Discharge	+	2.7 fc	6.5 fc	0.5 fc	13.0:1	5.4:1
East Parking	+	1.7 fc	4.3 fc	0.2 fc	21.5:1	8.5:1
Full Site	+	0.9 fc	57.3 fc	0.0 fc	N/A	N/A
Healing walk	+	1.6 fc	6.8 fc	0.3 fc	22.7:1	5.3:1
healing walk- north	+	2.2 fc	9.1 fc	0.2 fc	45.5:1	11.0:1
Main Drive	+	1.7 fc	12.7 fc	0.2 fc	63.5:1	8.5:1
Main Entry	+	11.4 fc	19.0 fc	3.0 fc	6.3:1	3.8:1
Main North Drive	+	1.7 fc	3.0 fc	0.9 fc	3.3:1	1.9:1
MOB Drive	+	1.4 fc	4.5 fc	0.1 fc	45.0:1	14.0:1
MOB ENTRANCE	+	9.0 fc	14.5 fc	4.7 fc	3.1:1	1.9:1
MOB walkway	+	3.6 fc	7.2 fc	0.7 fc	10.3:1	5.1:1
North Drive	+	1.3 fc	3.1 fc	0.2 fc	15.5:1	6.5:1
North Parking Lot	+	1.9 fc	4.4 fc	0.2 fc	22.0:1	9.5:1
Property Line	+	0.0 fc	0.3 fc	0.0 fc	N/A	N/A
South Drive	+	1.2 fc	2.8 fc	0.2 fc	14.0:1	6.0:1
South ED Entrance	+	14.5 fc	22.3 fc	3.3 fc	6.8:1	4.4:1
South Exit Discharge	+	3.6 fc	15.6 fc	1.0 fc	15.6:1	3.6:1
South Main Drive	+	2.4 fc	21.6 fc	0.5 fc	43.2:1	4.8:1
South Parking Lot	+	1.6 fc	3.7 fc	0.3 fc	12.3:1	5.3:1
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SW Parking Lot	+	2.0 fc	7.8 fc	0.4 fc	19.5:1	5.0:1
West Drive/ Helicopter Pad	+	0.9 fc	20.4 fc	0.1 fc	204.0:1	9.0:1
West ED Entry	+	39.7 fc	94.1 fc	5.9 fc	15.9:1	6.7:1

LEGEND

EGRESS PATH

1 SITE PLAN - LIGHTING
1" = 50'-0"

REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT #1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

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ISSUED FOR	DATE
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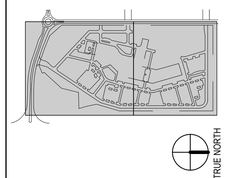
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



SCALE

As indicated

SHEET TITLE

PHOTOMETIC PLAN - 50 SCALE

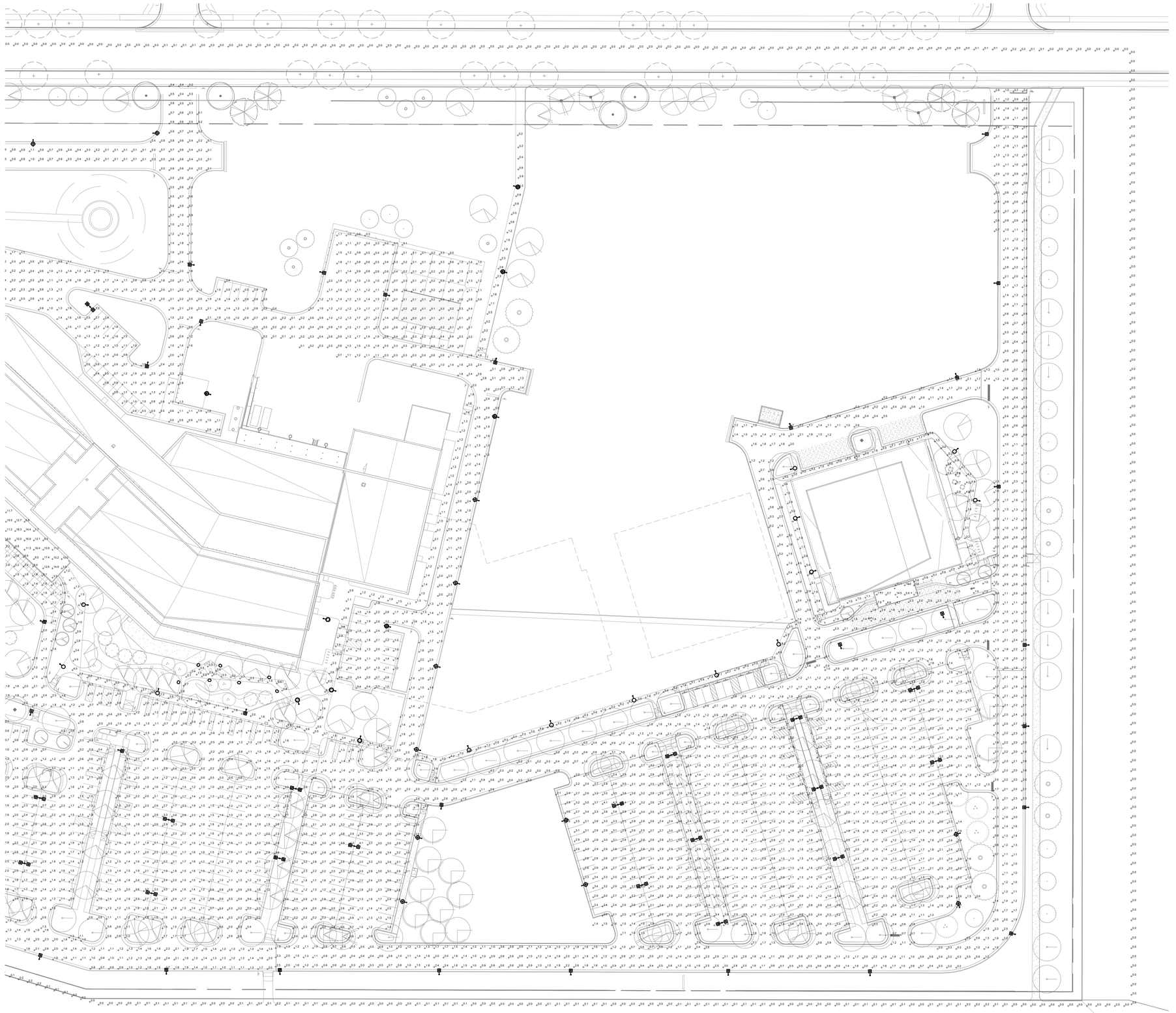
PUD SHEET NUMBER	SG SHEET NUMBER
23 OF 39	E-03

PROJECT NUMBER

15696.00

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Central Parking Lot	+	1.5 fc	4.0 fc	0.4 fc	10.0:1	3.8:1
East Exit Discharge	+	2.7 fc	6.5 fc	0.5 fc	13.0:1	5.4:1
East Parking	+	1.7 fc	4.3 fc	0.2 fc	21.5:1	8.5:1
Full Site	+	0.9 fc	57.3 fc	0.0 fc	N/A	N/A
Healing walk	+	1.6 fc	6.8 fc	0.3 fc	22.7:1	5.3:1
healing walk- north	+	2.2 fc	9.1 fc	0.2 fc	45.5:1	11.0:1
Main Drive	+	1.7 fc	12.7 fc	0.2 fc	63.5:1	8.5:1
Main Entry	+	11.4 fc	19.0 fc	3.0 fc	6.3:1	3.8:1
Main North Drive	+	1.7 fc	3.0 fc	0.9 fc	3.3:1	1.9:1
MOB Drive	+	1.4 fc	4.5 fc	0.1 fc	45.0:1	14.0:1
MOB ENTRANCE	+	9.0 fc	14.5 fc	4.7 fc	3.1:1	1.9:1
MOB walkway	+	3.6 fc	7.2 fc	0.7 fc	10.3:1	5.1:1
North Drive	+	1.3 fc	3.1 fc	0.2 fc	15.5:1	6.5:1
North Parking Lot	+	1.9 fc	4.4 fc	0.2 fc	22.0:1	9.5:1
Property Line	+	0.0 fc	0.3 fc	0.0 fc	N/A	N/A
South Drive	+	1.2 fc	2.8 fc	0.2 fc	14.0:1	6.0:1
South ED Entrance	+	14.5 fc	22.3 fc	3.3 fc	6.8:1	4.4:1
South Exit Discharge	+	3.6 fc	15.6 fc	1.0 fc	15.6:1	3.6:1
South Main Drive	+	2.4 fc	21.6 fc	0.5 fc	43.2:1	4.8:1
South Parking Lot	+	1.6 fc	3.7 fc	0.3 fc	12.3:1	5.3:1
staff outdoor area	+	2.2 fc	4.9 fc	0.2 fc	24.5:1	11.0:1
SW Parking Lot	+	2.0 fc	7.8 fc	0.4 fc	19.5:1	5.0:1
West Drive/ Helicopter Pad	+	0.9 fc	20.4 fc	0.1 fc	204.0:1	9.0:1
West ED Entry	+	39.7 fc	94.1 fc	5.9 fc	15.9:1	6.7:1



1 SITE PLAN - LIGHTING
1" = 50'-0"

REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT #1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

ADVENT HEALTH LOUISVILLE
100 HEALTH PARK DRIVE
LOUISVILLE, CO 80027
303.673.1000
www.adventhealth.com

SMITHGROUP
1675 LARIMER STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

Kimley»Horn
6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2307
kimley-horn.com

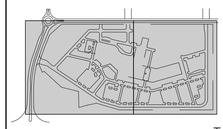
WSP
2000 SOUTH COLORADO BOULEVARD
SUITE 2-1000
DENVER, CO 80222
WWW.WSP.com

ISSUED FOR	DATE
3RD PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



TRUE NORTH

SCALE
1" = 50'-0"

SHEET TITLE
PHOTOMETRIC PLAN - 50 SCALE

PUD SHEET NUMBER	SG SHEET NUMBER
24 OF 39	E-04

PROJECT NUMBER
15696.00

KIM LIGHTING

DATE: LOCATION: D1, P1

TYPE: PROJECT:

CATALOG #:

UR20 - Post Top

ARCHITECTURAL AREA/SITE

Ouro

FEATURES

- 20" size in single/dual arm post top, pole and wall mount
- High performance optics up to 16,874 delivered lumens
- Elegant form factor
- Diffusion lens option
- UL/cUL listed for wet locations, IP66 and 4G/1.5G vibration rated

3000K as standard CCTs only

CONTROL TECHNOLOGY

LIGHTGRID®



FM33



FMS433/PTSA23
FMS434, PTSA24, PTSA34

SPECIFICATIONS

CONSTRUCTION

- Low copper aluminum alloy die-casting is designed as one-piece.
- Molded silicone gasket throughout insures the sealing between the two compartments and provides ingress protection.
- All external fasteners are stainless steel.
- Cover is secured to Lens frame by the latch and hinge.

OPTICS

- LEDs mount to a metal printed circuit board assembly (MCPCB).
- Optical lenses are clear injection molded PMMA acrylic.
- Optional Blacklight Control on each LED module to completely control unwanted backlight.
- Optional fixture finish optical surfaces will not exceed BUG ratings of the standard white finish.

LENS

- Standard lens (CLR) IK08
- Clear Polycarbonate Lens (CP) IK10

INSTALLATION

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

ELECTRICAL

- Universal voltage, 120 through 277V with ±10% tolerance. Driver is Underwriters Laboratories listed.
- High voltage configurations, 347/480. Driver has a 0-10V dimming interface for multi-level illumination options. Driver is Underwriters Laboratories listed.
- "Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components
- Drivers shall have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments.
- Luminaire shall be capable of operating at 100% brightness in a 40°C environment. Both driver and optical array have integral thermal protection circuitry that shall provide notification of temperature conditions in excess of 85°C.
- Surge protection: 10,000A in parallel, 20,000A in series
- Wiring: No. 18AWM rated 105°C, wet rating.

	Weight	EPA
UR20	35 lbs / 15.8 kg	0.62 ft.²

CONTROLS

7PR

- Fully gasketed and wired 7 pin receptacle option. Easy access location above the electrical compartment. 7 pin construction with gold plated pins and sockets and provides a controlled definition of operational performance. ANSI twist-lock control module by others.

Standard customer operation modes:

- Traditional on/off photoelectric control.
- 5-pin wireless photoelectric control for added dimming feature.
- 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use.

(Specifications continued on page 5)

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KIM LIGHTING

DATE: LOCATION: D1, P1

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UR20 - Post Top

ARCHITECTURAL AREA/SITE

ORDERING GUIDE

Example: UR20-24L-25-3KB-3-UNV-FMSA33-BLT-7PR-BC

CATALOG #

HOUSING

UR20

Model	LED Engine		CCT/CRI		Distribution		Rotation		Voltage	
UR20	Gulo	No Lens or Clear Lens		AM[1,2]	Amber, 595nm	No Lens or Clear Lens		(Blank)	Blank for no rotation	UNV	120-277V
		24L-25	3,000 lm	ZT63	2700K, 80 CRI	FR	Type I(Front Row			347	347V
		24L-65	7,000 lm	3K7	3000K, 70 CRI	2	Type II	L*	Optic rotation left	480	480V
		16L-75	11,000 lm	3K8	3000K, 80 CRI	3	Type III	R*	Optic rotation right	Consult factory	
		16L-90	11,000 lm	35K8	3500K, 80 CRI	4	Type IV				
		16L-140	17,000 lm	4K7	4000K, 70 CRI	5	Type V Wide				
		HDL - High Diffusion Lens		4K8	4000K, 80 CRI	SQW[3]	Type V Square Medium				
		24L-30	3,000 lm	5K7	5000K, 70 CRI	SQW[3]	Type V Square Narrow				
		28L-70	7,000 lm		Consult factory for other CCTs and CRIs	5R[3]	Type V Rectangular				
		68L-80	5,000 lm			SW[3]	Type V Wide (Round)				
		68L-115	11,000 lm			HDL - High Diffusion Lens					
		68L-150	15,000 lm			3	Type III(Asymmetric				
						SW[3]	Type V(Symmetric				

Mounting		Fixture Finish		Control Options		Options		Control Accessories	
FM33	Flush mt 3.5"-OD pole, 2" fixture tenon	BLS	Black Gloss Smooth	7PR-TL	7 pin PCR with twist-lock photocontrol	BC*	Back-light Control	WIR-RME-L	LightGRID™ External Fixture Module
FM44	Flush mt 3.6"-to 4.0"-OD pole, 4" fixture tenon	BLT	Black Matte Textured	7PR-SC	7 pin PCR with shorting cap	SF	Single Fuse	SCH-R	Occ. Sensor for Round Pole
PT23	3" Post Top mount for 2 3/8"-OD x 4" Long Tenon	DBS	Dark Bronze Gloss Smooth	7PR	7 pin PCR, wireless control enabled	DF	Double Fuse		14 to 30' MH
PT24	3" Post Top mount for 2 3/8"-OD x 4" Long Tenon	DBT	Dark Bronze Matte Textured	AD-01*	AstroDIM 50% output at midnight	CL**	Clear Lens	SCH-S	Occ. Sensor for Square Pole
PT34	3" Post Top mount for 2 3/8"-OD x 4" Long Tenon	GTT	Graphite Matte Textured	AD-02*	AstroDIM 50% output midnight to 4 AM	TPL	Tamper proof latch		14 to 30' MH
FMSA33	Solo Arm Post Top Flush Mount 3.0"-OD Pole, 2" fixture tenon	LGS	Light Grey Gloss Smooth	AD-03*	AstroDIM 50% output 10PM	CP***	Clear Polycarbonate Lens	NXT-PH	NX7-Ph Twist-Lock® with NX Networked Photocontrols. Integral Automatic Dimming Protocol, Integral Single Pole Relay with Dimming, and Bluetooth Programming	
FMS444	Solo Arm Post Top Flush Mount 3.6"-to 4.0"-OD Pole, 4" fixture tenon	LGT	Light Grey Matte Textured	AD-04*	AstroDIM 50% output 10PM to 4AM	WBPM3	Wall Bracket Arm for FM33 or FMS433			
PTSA23	3" Post Top mount for 2 3/8"-OD x 4" Long Tenon	PSS	Platinum Silver Gloss Smooth	NOM*	Dimming Occ. Sensor for up to 40' Mt. 208/240V	WBPM4	Wall Bracket Arm for FM44 or FMS444			
PTSA24	4" Solo Arm Post Top Mount for 2.38"-OD x 4" Long Tenon	VGT	Verde Green Matte Textured	WSP-40F-1**	Dimming Occ. Sensor for up to 40' Mt. 120/277/347V	TAPM3***	Twin Arm mount for FMS3 or FMS433			
PTSA34	4" Solo Arm Post Top Mount for 2.38"-OD x 4" Long Tenon	WHS	White Gloss Smooth	WSP-40F-2**	Dimming Occ. Sensor for up to 40' Mt. 480V	TAPM4***	Twin Arm mount for FMS4 or FMS444			
		WHT	White Matte Textured	NXWSP40F**	NX Networked Wireless Enabled Integral NXSMP2-LMO PR Occupancy Sensor with Automatic Dimming Protocol and Bluetooth Programming					
		Color Option		NXWSP40F-1**	NX Networked Wireless Enabled Integral NXSMP2-HMO PR Occupancy Sensor with Automatic Dimming Protocol and Bluetooth Programming					
		CC*	Custom Color	NXWSP40F-2**	NX Networked Wireless Enabled Integral NXSMP2-LMO PR Occupancy Sensor with Automatic Dimming Protocol and Bluetooth Programming					

1 Turtle-Friendly.
2 Not available with 24L-65 and the 16L-140 configuration of the LED Engine
3 Not available with HDL option
4 Not available with 7pR, SCR, and SW distributions.
5 Not available with other sensor or wireless control options.
6 Not available with Solo Arm Post Top (FMSA33).
7 Not available with HDL option
8 24L and 16L only
9 Not available with HDL option
10 Not available with 7PR, SCR, and SW distributions. Consult factory for details.
11 BTD rated. Consult factory for details.
12 Only requires 2 pcs of Long Lens.
13 Order one for each pair of fixtures per pole.

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KIM LIGHTING

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UR20 - Post Top

ARCHITECTURAL AREA/SITE

OUTDOOR LIGHTING CONTROLS OPTIONS

CONTROLS FUNCTIONALITY

LIGHTGRID®

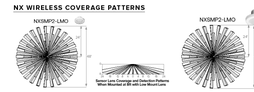
Control Option Ordering Logic & Description		Control Option Functionality								Control Option Components
		Networkable	Grouping	Scheduling	Occupancy / Vacancy Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Interface
NXCPMWFBS-HMO	NX 7-Pin Twist-Lock® with NX Networked Wireless Enabled Integral Automatic Dimming Protocol, Single Relay, Bluetooth Programming and Bluetooth Programming	✓	✓	✓	Paired with external control	✓	✓	✓	✓	NXCPM-WSD-LH
NXFM	NX Networked Wireless Node Module for Bluetooth Programming, without Sensor	✓	✓	✓	-	-	✓	✓	✓	NXRMG-H
NXSMP2F	NX Networked Wireless Enabled Integral NXSMP2-LMO PR Occupancy Sensor with Automatic Dimming Protocol and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	NXSMP2-LMO
NXSMP2F	NX Networked Wireless Enabled Integral NXSMP2-HMO PR Occupancy Sensor with Automatic Dimming Protocol and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	NXSMP2-HMO

DEFAULT SETTINGS

Occupancy Sensor	Enabled
Occupancy Sensor Sensitivity	7
Occupancy Sensor Timeout	5 Minutes
Occupied ON Level	100%
Unoccupied ON Level	0%
Daylight Sensor	Disabled
Bluetooth	Enabled
2.4GHz Wireless Mesh	On
Reconcile Factory Passcode: Hybrid3677	Enabled

Occupancy Sensor	Enabled
Occupancy Sensor Sensitivity	7
Occupancy Sensor Timeout	5 Minutes
Occupied ON Level	100%
Unoccupied ON Level	50%
Daylight Sensor	Disabled

NX WIRELESS COVERAGE PATTERNS





NX LIGHTING CONTROLS FREE APP

NX

The NX Lighting Controls App is free to use mobile application for programming both NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless mobile luminaires and program NX system settings.

Apple App: https://apps.apple.com/us/app/nx-lighting-controls/id1462312508

Google Play: https://play.google.com/store/apps/details?id=tv.centrex.NXTRIM&hl=en_US&gl=US

Apple App

Google Play

CONTROLS TECH SUPPORT 800-888-8006 (7:00 AM - 7:00 PM)

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ARCHITECTURAL AREA/SITE

SPECIFICATIONS (CONTINUED)

CONTROLS (CONTINUED)

DIMMING:

- Dimming range from 100% to 10% through the use of the standard 0-10V interface on the programmable driver.
- Modular wiring harness in the service area provides user access to the dimming circuitry.
- Dimming circuitry compatible with 0-10V, user-defined control devices.
- Optional factory programmed dimming profile.



WIRELESS CONTROLS LightGRID®

- LightGRID® wireless control modules allow an individual fixture to managed, monitored and measured. The modules communicate securely over a robust certified meshed radio signal. The LightGRID™ modules provide on/off/dim control, external device input, alerts and metering.

WIR-RME-L

- LightGRID® External Module(20-480V, 1000ft range (LOS), Internal Photocell, 1 Digital Input. Compatible with the A-25-7H option

NX LIGHTING CONTROLS

- NX lighting controls platform utilizes a Distributed Network Architecture (DNA) that connects intelligent devices including luminaires, controllers, panels, occupancy sensors, photocells, wall switches and dimmers, creating a system with an unmatched level of reliability, scalability and simplicity.

INSTALLATION (CONTINUED)

- Knuckle arm fitter option available for 2-3/8" OD tenon.

For products with EPA less than 1 mounted to a pole greater that 20ft, a vibration damper is recommended.

ELECTRICAL

- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
- Ambient operating temperature -40°C to 40°C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20kA protection meeting ANSI/ IEEE C62.41.2 Category C Low and Surge Level Exposure Category C3. Automatically takes fixture off-line for protection when device is compromised
- Dual Driver option provides 2 drivers within luminaire for redundancy. In the event of a driver failure, where Dual Power Feed provides two drivers which can be wired independently as two circuits. Each driver is connected from the luminaire. Both options cannot be combined.

CONTROLS

- Photocontrol, occupancy sensor programmable controls, and ZigGee wireless controls available for complete on/off and dimming control
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application
- 7 pin ANSI C136.41-2013 photocontrol receptacle option. Easy access location above the electrical compartment. Easy access location above the electrical compartment. 7 pin construction with gold plated pins and sockets and provides a controlled definition of operational performance. ANSI twist-lock control module by others.
- Please consult your sales representative for wireless control modules (control accessories sold separately)
- 0-10V Dimming Drivers are standard. Select CD option to have dimming leads extended outside fixture for ease of access. Dimming leads are to be greater than the 6" standard.

MOUNTING

- Arm mount for square pole/flat surface less than 2(IN.THK)
- Universal arm mount for square pole
- Universal arm mount for round pole *
- Adjustable arm for pole mounting (universal drill pattern)
- Adjustable arm mount for round pole *
- Decorative upsweept Arm (universal drill pattern)
- Decorative upsweept arm mount for square pole
- Mast arm fitter for 2-3/8"-OD horizontal arm
- Knuckle
- Trunnion
- Wall Bracket, horizontal tenon with M40
- Wall mount bracket with decorative upsweept arm
- Wall mount bracket with adjustable arm

POLE MOUNTED

ROUND POLE-MOUNTED OCCUPANCY

- Sensor up to 30'. Select voltage and finish color.

SCH-R

- Round Pole-Mounted Occupancy Sensor: up to 30' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.
- Ordering Example: SCH-R#12771BL*

SQUARE POLE-MOUNTED OCCUPANCY

Sensor up to 30'. Select voltage and finish color.

SCH-S

- Square Pole-Mounted Occupancy Sensor: up to 30' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.
- Ordering Example: SCH-S/2771BL*

ASTRODIM

- Astro-DIM provides multi-stage night-time power reduction based on an internal timer requiring no sensor or on/off time. There is no need for an external control infrastructure. The unit automatically performs a dimming profile based on the predefined scheduled reference to the midpoint, which is calculated based on the power on/off times.



OPTIONAL FUSING:

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

CAUTION

CERTIFICATIONS AND LISTINGS

- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40°C ambient temperatures
- IEC 62262 Mechanical Impact Code IK08, IK10
- EPA approved, 3000K and warmer CCTs only
- IP66 rated
- RoHS compliant

WARRANTY

- 5 year warranty



7-Pin receptacle placement

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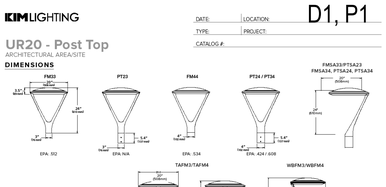
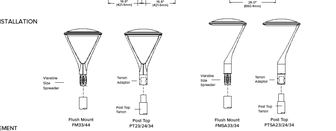
ARCHITECTURAL AREA/SITE

DIMENSIONS

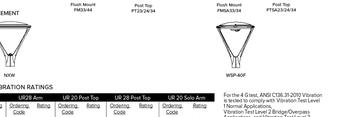


ARM	DIAMETER
FMSA33	3" diameter
FMSA44	4" diameter
PTSA23	3" diameter with Tenon mount
PTSA24	4" diameter with Tenon mount
PTSA34	4" diameter with tenon mount

MOUNTING INSTALLATION



SENSOR PLACEMENT



MOUNTING VIBRATION RATINGS

UR 20 Arm		UR24 Arm		UR 20 Post Top		UR 28 Post Top		UR 28 Solo Arm	
Ordering Code	Rating	Ordering Code	Rating	Ordering Code	Rating	Ordering Code	Rating	Ordering Code	Rating
A5Q	4G	A5Q	4G	FM33	4G	FM44	1.5G	FMSA33	1.5G
A34	4G	A34	4G	FM44	1.5G	FMA44	1.5G	FMA5	1.5G
A46	4G	A46	4G	PT23	4G	PT24	1.5G	PTSA23	1.5G
MAF	4G	MAF	4G	PT34	4G	PT24	1.5G	PTSA24	1.5G
				PT34	1.5G	PT25	1.5G	PTSA34	1.5G

For the 4 G test, ANSI C136.31-2010 Vibration is tested to comply with Vibration Test Level 2 Bridge/Overpass Vibration Test Level 2 Bridge/Overpass Applications, and Vibration Test Level 3

For the 1.5G test, ANSI C136.31-2010 Vibration is tested to comply with Vibration Level 1 Bridge/Overpass Applications

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KIM LIGHTING

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ARCHITECTURAL AREA/SITE

DELIVERED LUMENS

LEDs #	Lumens Package	Drive Current	Nominal Watts	Lens Options	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
						Lumens	BUG Rating			lm/w	Lumens	BUG Rating			lm/w	Lumens	BUG Rating			lm/w
							B	U	G			B	U	G			B	U	G	
24L	3,000	298mA	25	No lens	FR	2922	0	0	1	115	3119	0	0	1	123	3098	0	0	1	124
					FR-BC	1994	0	0	0	78	2121	0	0	0	83	2107	0	0	0	83
					2	2943	1	0	1	116	3099	1	0	1	122	3110	1	0	1	124
					2-BC	1724	0	0	1	68	1834	0	0	1	72	1822	0	0	1	72
					3	3007	1	0	1	118	3200	1	0	1	126	3178	1	0	1	127
					3-BC	1830	0	0	1	72	1947	0	0	1	78	1934	0	0	1	77
					4	3056	0	0	1	120	3251	0	0	1	128	3229	0	0	1	129
					4-BC	2235	0	0	1	88	2377	0	0	1	93	2362	0	0	1	93
					4W	371	1	0	1	125	3374	1	0	1	133	3351	1	0	1	134
					4W-BC	1912	0	0	1	75	2034	0	0	1	80	2020	0	0	1	79
					5QM	2931	2	0	1	115	3119	2	0	1	123	3098	2	0	1	124
					5QN	2694	2	0	1	106	2866	2	0	1	113	2847	2	0	1	114
					5R	3054	2	0	2	120	3250	2	0	2	128	3228	2	0	2	129
					5W	3043	2	0	1	120	3237	2	0	1	127	3216	2	0	1	129
				Clear lens	FR	2773	0	0	1	109	2951	0	0	1	116	2930	0	0	1	117
					FR-BC	1882	0	0	0	74	2007	0	0	1	79	1993	0	0	1	78
					2	2734	1	0	1	109	2963	1	0	1	116	2942	1	0	1	118
					2-BC	1631	0	0	1	64	1736	0	0	1	68	1723	0	0	1	67
					3	2845	1	0	1	111	3028	1	0	1	119	3007	1	0	1	120
					3BC	1806	0	0	1	72	1922	0	0	1	77	1909	0	0	1	76
					4	2891	0	0	1	113	3076	0	0	1	120	3055	0	0	1	122
					4-BC	2114	0	0	1	83	2250	0	0	1	88	2234	0	0	1	88
					4W	2999	1	0	1	117	3192	1	0	1	125	3169	1	0	1	127
					4W-BC	1808	0	0	1	71	1924	0	0	1	75	191	0	0	1	76
					5QM	2773	1	0	1	109	2950	2	0	1	116	2931	2	0	1	117
					5QN	2549	1	0	0	100	2712	2	0	1	106	2693	2	0	1	108
					5R	2890	2	0	2	113	3075	2	0	2	120	3054	2	0	2	122
					5W	2879	2	0	1	113	3064	2	0	1	120	3042	2	0	1	122
28L		298mA	30	HDL lens	3	2816	1	0	1	96	2997	1	0	1	102	3020	1	0	1	101
					5W	2917	1	0	1	100	3105	1	0	1	106	3084	1	0	1	103

Scaling factors 2743 = 0.859, 3563 = 0.906 of 5K7 lumen packages

Current

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KIM LIGHTING

DATE: LOCATION: D1, P1

TYPE: PROJECT:

CATALOG #:

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ARCHITECTURAL AREA/SITE

DELIVERED LUMENS (CONTINUED)

LEDs #	Lumens Package	Drive Current	Nominal Watts	Lens Options	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
						Lumens	BUG Rating			lm/w	Lumens	BUG Rating			lm/w	Lumens	BUG Rating			lm/w
							B	U	G			B	U	G			B	U	G	
24L	7,000	800mA	65	No lens	FR	6754	1	0	1	104	7167	1	0	1	111	7138	1	0	1	110
					FR-BC	4392	0	0	1	68	4673	0	0	1	72	4648	0	0	1	71
					2	6571	1	0	2	101	6992	1	0	2	108	6944	1	0	2	107
					2-BC	3799	0	0	1	58	4042	0	0	1	62	4014	0	0	1	62
					3	6625	1	0	2	102	7051	1	0	2	108	7002	1	0	2	108
					3BC	4032	0	0	1	62	4291	0	0	1	66	4261	0	0	1	66
					4	6788	1	0	2	104	7223	1	0	2	111	7174	1	0	2	110
					4-BC	4924	0	0	2	76	5239	0	0	2	81	5203	0	0	2	80
					4W	6900	1	0	2	106	7343	1	0	2	113	7295	1	0	2	112
					4W-BC	4212	0	0	2	65	4482	0	0	2	69	4453	0	0	2	68
					5QM	7025	3	0	1	108	7477	3	0	1	115	7425	3	0	1	114
					5QN	6964	3	0	1	107	7410	3	0	1	114	7323	3	0	1	113
					5R	7038	3	0	3	108	7489	3	0	3	115	7437	3	0	3	114
					5W	7011	3	0	2	108	7462	3	0	2	115	7409	3	0	2	114
				Clear lens	FR	6432	1	0	1	97	6844	1	0	1	104	6798	1	0	1	105
					FR-BC	4182	0	0	1	63	4450	0	0	1	67	4420	0	0	1	67
					2	6258	1	0	1	95	6659	1	0	2	101	6613	1	0	2	102
					2-BC	3617	0	0	1	55	3849	0	0	1	58	3823	0	0	1	58
					3	6310	1	0	2	96	6714	1	0	2	102	6668	1	0	2	103
					3-BC	3599	0	0	1	55	3829	0	0	1	59	3803	0	0	1	59
					4	6465	1	0	2	98	6879	1	0	2	104	6832	1	0	2	105
					4-BC	4688	0	0	2	71	4990	0	0	2	76	4955	0	0	2	75
					4W	6572	1	0	2	100	6993	1	0	2	106	6944	1	0	2	107
					4W-BC	4011	0	0	2	61	4268	0	0	2	65	4238	0	0	2	64
					5QM	6691	3	0	1	101	7119	3	0	1	108	7070	3	0	1	109
					5QN	6632	2	0	1	100	7058	3	0	1	107	7009	3	0	1	108
					5R	6702	3	0	3	102	7131	3	0	3	108	7082	3	0	3	109
					5W	6676	3	0	2	101	7104	3	0	2	108	7055	3	0	2	109
				HDL lens	3	6047	2	0	2	92	6047	2	0	2	92	6236	2	0	2	89
28L		700mA	70		5W	6221	2	0	1	94	6619	2	0	1	100	6525	2	0	1	93

Scaling factors 2718 = 0.859, 3563 = 0.906 of 5K7 lumen packages

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KIM LIGHTING

DATE: LOCATION: D1, P1

TYPE: PROJECT:

CATALOG #:

UR20 - Post Top

ARCHITECTURAL AREA/SITE

PHOTOMETRY

UR20-56L-140-8K7-FP-FT

LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	7,140
Watts	140
Efficacy	116.5
IES Type	II
BUG Rating	B2-U0-G2
Mounting Height	30 ft
Grid Scale	30 ft

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	1498	87.1%
Downward House Side	2108	12.9%
Downward Total	16306	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	16306	100%

UR20-56L-140-8K7-2-PT

LUMINAIRE DATA

Description	4000K, 70CRI
Delivered Lumens	15952
Watts	280
Efficacy	115.2
IES Type	II
BUG Rating	B2-U0-G2
Mounting Height	30 ft
Grid Scale	30 ft

**

S3, S3B, S4, S5

BEACON design . performance . technology

VIPER Area/Site
VIPER LUMINAIRE

SILICONE STRIKE OPTIC – ORDERING GUIDE (CONTINUED)

Mounting	
A	Arm mount for square pole/flat surface
A_	Arm mount for round pole [3]
ASQU	Universal arm mount for square pole
A_U	Universal arm mount for round pole [3]
AAU	Adjustable arm for pole mounting (universal drill pattern)
AA_U	Adjustable arm mount for round pole [3]
ADU	Decorative upswept Arm (universal drill pattern)
AD_U	Decorative upswept arm mount for round pole [3]
MAF	Mast arm fitter for 2-3/8" OD horizontal arm
K	Knuckle
T	Trunnion
WB	Wall Bracket, horizontal tenon with MAF
WM	Wall mount bracket with decorative upswept arm
WA	Wall mount bracket with adjustable arm

Color	
BLT	Black Matte Textured
BLS	Black Gloss Smooth
DBT	Dark Bronze Matte Textured
DBS	Dark Bronze Gloss Smooth
GTT	Graphite Matte Textured
LGS	Light Grey Gloss Smooth
LGT	Light Grey Gloss Textured
PSS	Platinum Silver Smooth
WHT	White Matte Textured
WHS	White Gloss Smooth
VGT	Verde Green Textured
Color Option	
CC	Custom Color

Options	
BC	Backlight Control (3%)
MBC	Max Backlight Control (1.5%)
LCC	Left Corner Control
RCC	Right Corner Control
F	Fusing
E	Battery Backup [1,2,7,8,9]
2PF	Dual Power Feed
2DR	Dual Driver
TE	Tooless Entry
TB	Terminal Block
CD	Customer Dimming

Network Control Options	
NXWS16F	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming [1,4,5]
NXWS40F	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming [1,4,5]
NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor [4,5]
WIR	LightGRID+ In-Fixture Module [4,5]
WIRSC	LightGRID+ Module and Occupancy Sensor [4,5]
Stand Alone Sensors	
BTS-14F	Bluetooth® Programmable, BTSMP-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens
BTS-40F	Bluetooth® Programmable, BTSMP-HMO PIR Occupancy Sensor with Automatic Dimming® Photocell and 360° Lens
BTSO-12F	Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming® Photocell and 360° Lens
7PR	7-Pin Receptacle [4]
7PR-SC	7-Pin Receptacle with shorting cap [4]
7PR-TL	7-Pin PCR with photocontrol
3PR	3-Pin twist lock [4]
3PR-SC	3-Pin receptacle with shorting cap [4]
3PR-TL	3-Pin PCR with photocontrol [4]
Programmed Controls	
SCP-_F	Sensor Control Programmable, 8F or 40F [11]
ADD	AutoDim Timer Based Dimming [12]
ADT	AutoDim Time of Day Dimming [12]

1 – Items with a grey background can be done as a custom order. Contact brand representative for more information
2 – Battery temperature rating -20C to 55C
3 – Replace "_" with "3" for 3.5"-4.13" OD pole, "4" for 4.18"-5.25" OD pole, "5" for 5.5"-6.5" OD pole
4 – Networked Controls cannot be combined with other control options
5 – Not available with 2PF option
6 – Not available with 480V
7 – Not available with 347 or 480V
8 – Not available with Dual Driver option
9 – Only available in Size 1 housing, up to 105 Watts
10 – Some voltage restrictions may apply when combined with controls
11 – At least one SCPREMOTE required to program SCP motion sensor. Must select 8ft or 40ft.
12 - Please refer to page 8 for AutoDim ordering guide

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S3, S3B, S4, S5

BEACON design . performance . technology

VIPER Area/Site
VIPER LUMINAIRE

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

ORDERING GUIDE (CONT'D)

CATALOG #

Accessory Type	
SHD	Shield
MTG	Mounting

Size	
1	Size 1
2	Size 2
3	Size 3
4	Size 4

Option	
HSS-90-B	House Side Shield 90° Back
HSS-90-F	House Side Shield 90° Front
HSS-90-S	House Side Shield 90° Side
HSS-270-BSS	House Side Shield 270° Back/Side/Side
HSS-270-FSS	House Side Shield 270° Front/Side/Side
HSS-270-FSB	House Side Shield 270° Front/Side/Back
HSS-360	House Side Shield 360°
BC	Back Light Control
A	Arm Mount for square pole/flat surface
ASQU	Universal Arm Mount for square pole
AAU	Adjustable Arm for pole mounting
ADU	Decorative upswept Arm
RPA	Round Pole Adapter
MAF	Mast Arm Fitter for 2-3/8" OD horizontal arm
K	Knuckle
T	Trunnion
WB	Wall Bracket (compatible with universal arm mounts)

Color	
BLS	Black Gloss Smooth
BLT	Black Matte Textured
DBS	Dark Bronze Gloss Smooth
DBT	Dark Bronze Matte Textured
GTT	Graphite Matte Textured
LGS	Light Gray Gloss Smooth
PSS	Platinum Silver Smooth
WHS	White Gloss Smooth
WHT	White Matte Textured
VGT	Green Landscape Decorative
LEG	Legacy Colors
Color Option	
CC	Custom Color

Accessory Type	
MSC	Miscellaneous

Option	
BIRD SPK	Bird Spike

Current Control Solutions — Accessories (Sold Separately)

NX Lighting Controls
- ☐ NXOFM2-1R1D-UNV — On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with NX Radio and Bluetooth® Radio, 120–480VAC

LightGRID+ Lighting Control
- ☐ WIR-RME-L — On-fixture Module (7-pin or 5-pin), On / Off / Dim, Daylight Sensor with LightGRID+ Radio, 110–480VAC
- ☐ SCP-REMOTE — Remote Control for SCP/_F option. Order at least one per project to program and control the occupancy sensor

For additional information related to these accessories please visit currentlighting.com/beacon. Options provided for use with integrated sensor, please view specification sheet ordering information table for details.

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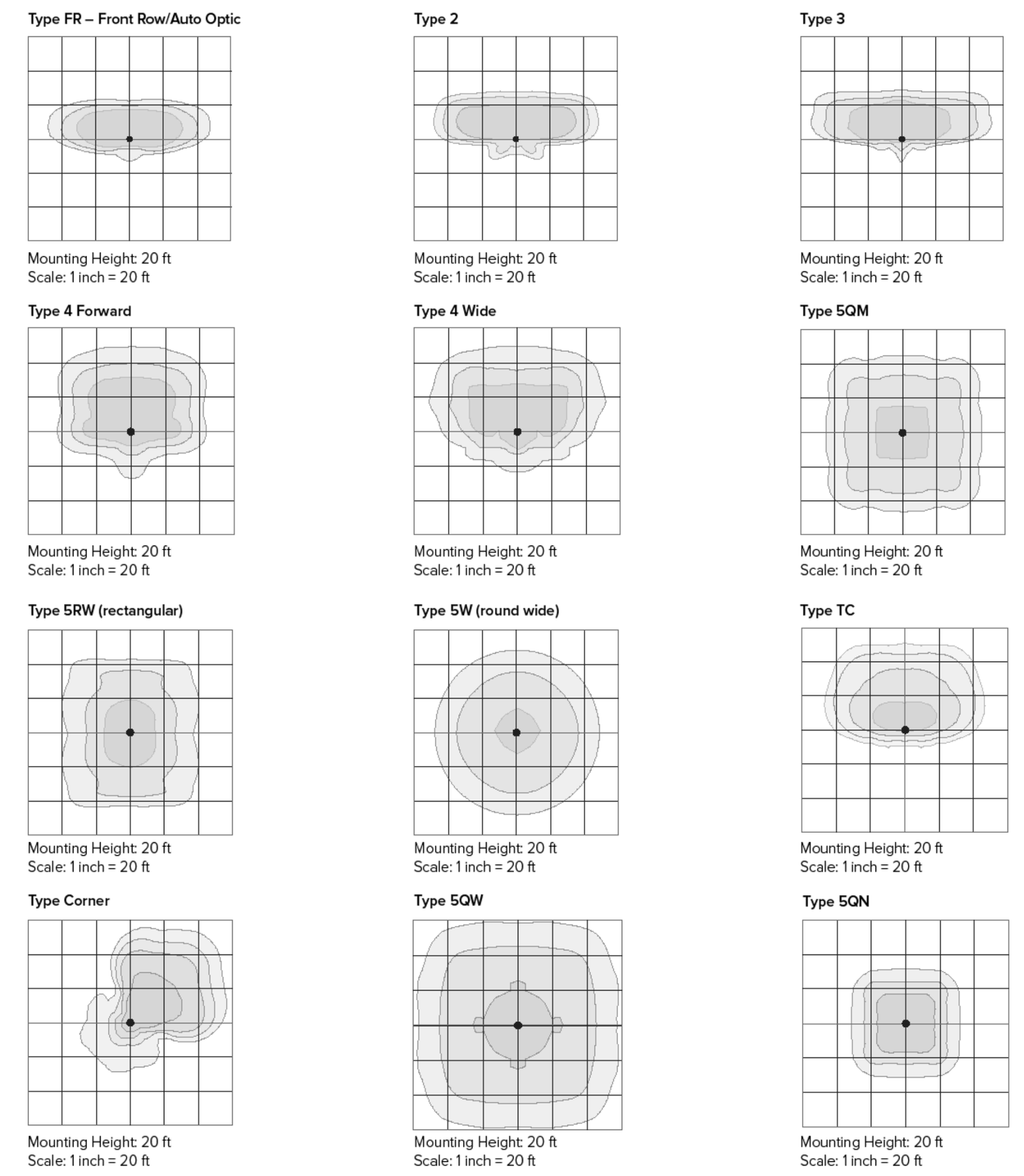
BEACON design . performance . technology

VIPER Area/Site
VIPER LUMINAIRE

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

OPTIC STRIKE PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see website photometric test reports.



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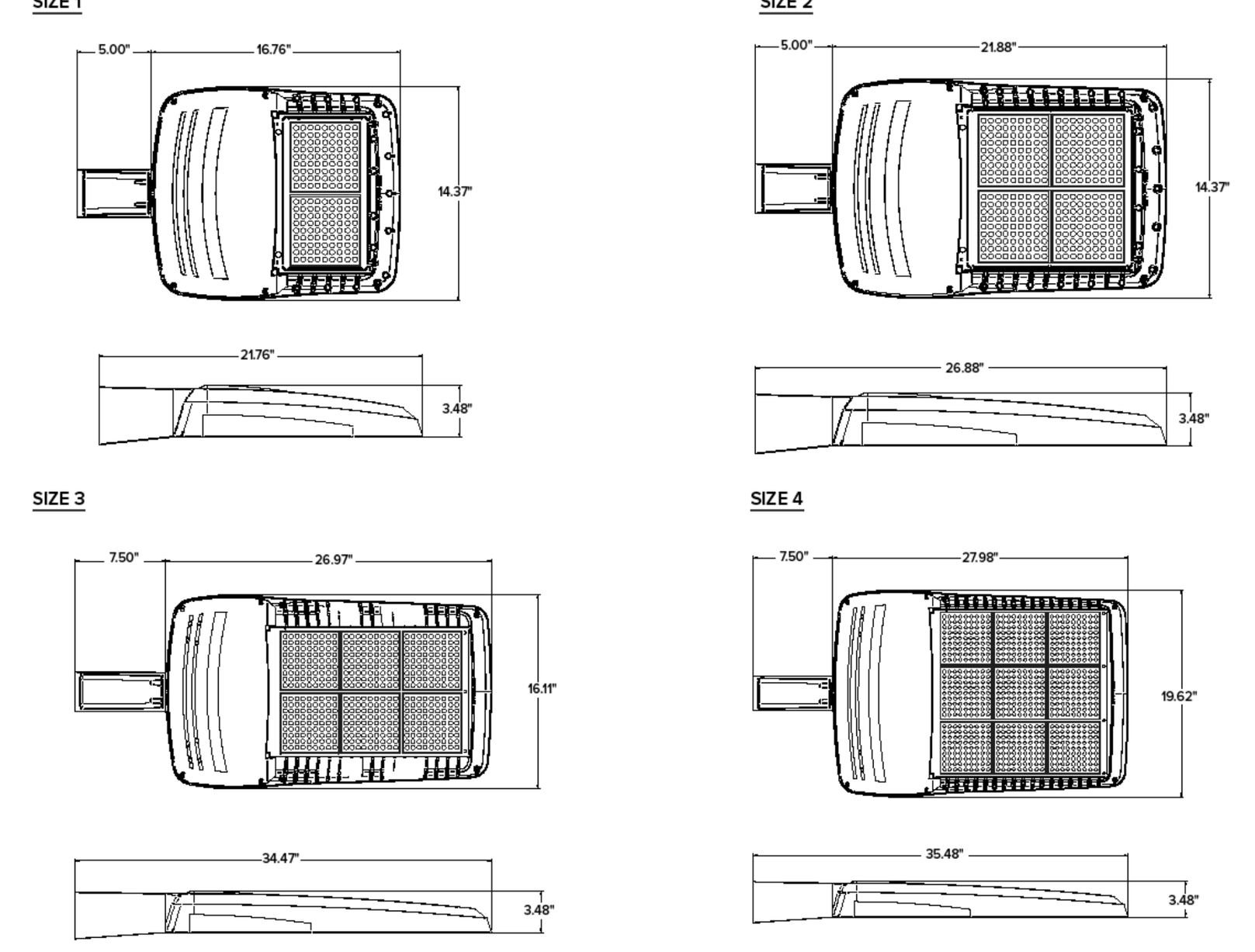
S3, S3B, S4, S5

BEACON design . performance . technology

VIPER Area/Site
VIPER LUMINAIRE

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

DIMENSIONS



	EPA				
	VP1 (Size 1)	VP2 (Size 2)	VP3 (Size 3)	VP4 (Size 4)	Config.
Single Fixture	0.454	0.555	0.655	0.698	
Two at 180	0.908	1.110	1.310	1.396	
Two at 90	0.583	0.711	0.857	0.948	
Three at 90	1.037	1.266	1.512	1.646	
Three at 120	0.943	1.155	1.392	1.680	
Four at 90	1.166	1.422	1.714	1.896	

	Weight	
	lbs	kgs
VP1 (Size 1)	13.7	6.2
VP2 (Size 2)	16.0	7.26
VP3 (Size 3)	25.9	11.7
VP4 (Size 4)	30.8	13.9

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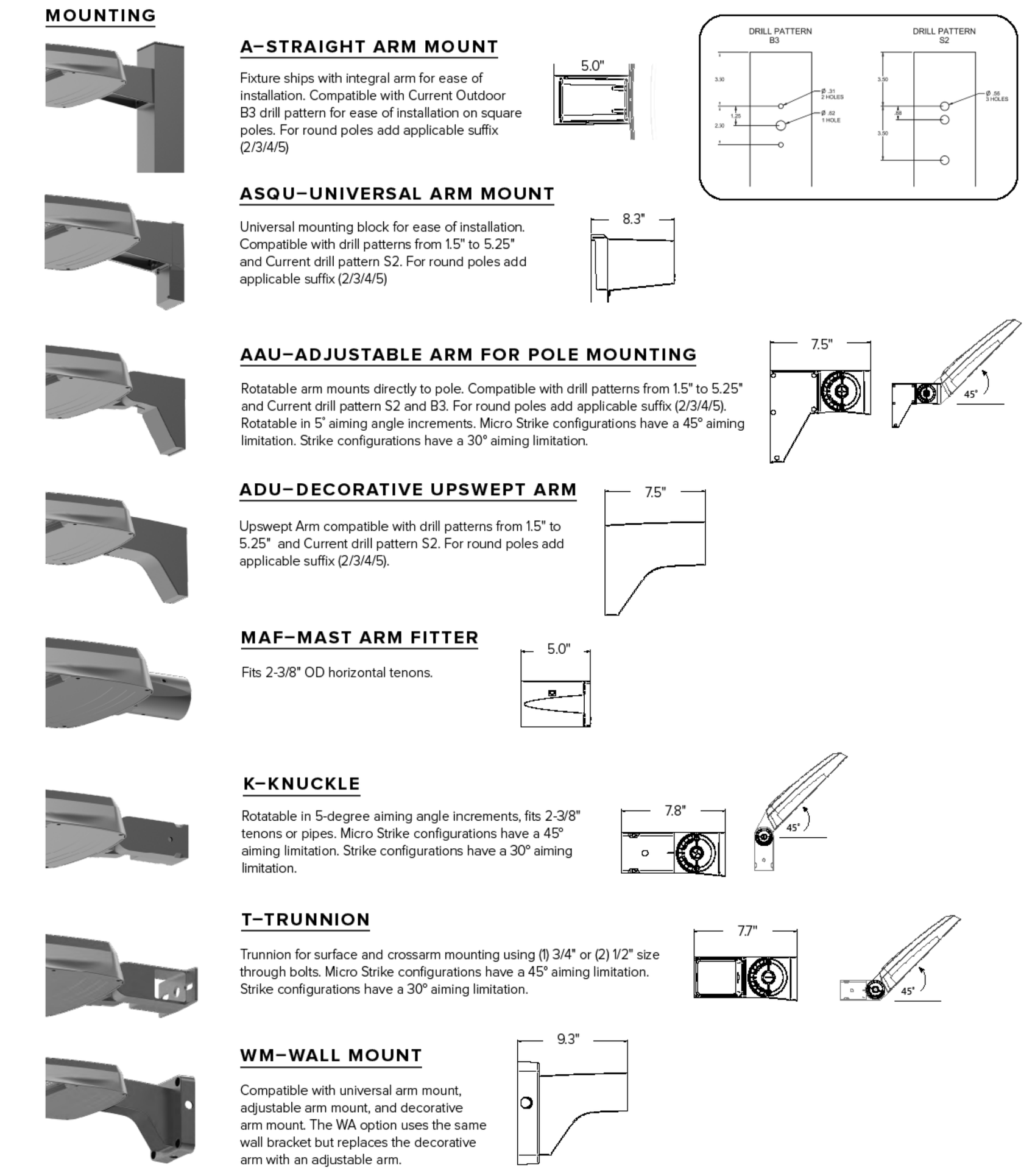
S3, S3B, S4, S5

BEACON design . performance . technology

VIPER Area/Site
VIPER LUMINAIRE

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

MOUNTING



A–STRAIGHT ARM MOUNT
Fixture ships with integral arm for ease of installation. Compatible with Current Outdoor B3 drill pattern for ease of installation on square poles. For round poles add applicable suffix (2/3/4/5)

ASQU–UNIVERSAL ARM MOUNT
Universal mounting block for ease of installation. Compatible with drill patterns from 1.5" to 5.25" and Current drill pattern S2. For round poles add applicable suffix (2/3/4/5)

AAU–ADJUSTABLE ARM FOR POLE MOUNTING
Rotatable arm mounts directly to pole. Compatible with drill patterns from 1.5" to 5.25" and Current drill pattern S2 and B3. For round poles add applicable suffix (2/3/4/5). Rotatable in 5° aiming angle increments. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.

ADU–DECORATIVE UPSWEPT ARM
Upswept Arm compatible with drill patterns from 1.5" to 5.25" and Current drill pattern S2. For round poles add applicable suffix (2/3/4/5).

MAF–MAST ARM FITTER
Fits 2-3/8" OD horizontal tenons.

K–KNUCKLE
Rotatable in 5-degree aiming angle increments, fits 2-3/8" tenons or pipes. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.

T–TRUNNION
Trunnion for surface and crossarm mounting using (1) 3/4" or (2) 1/2" size through bolts. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.

WM–WALL MOUNT
Compatible with universal arm mount, adjustable arm mount, and decorative arm mount. The WA option uses the same wall bracket but replaces the decorative arm with an adjustable arm.

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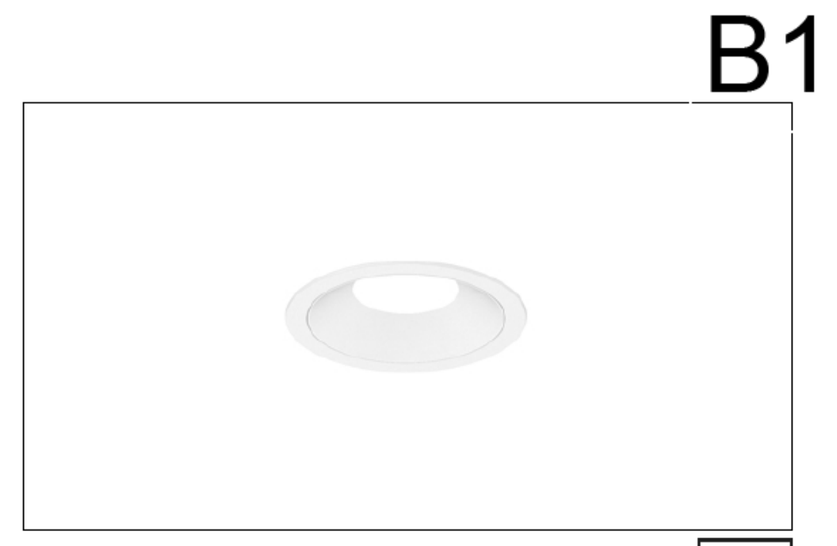
B1

3G LIGHTING

3G-DL33RF
3" ROUND FIXED DOWNLIGHT



- 3" diameter fixed downlight with upgraded performance
- Standard 95+ CRI LED system with performance up to 144 LPW
- Delivered lumen range up to 3000lm at 95+ CRI
- Regressed LED source for enhanced glare control
- 10° to 90° beam angle options suitable for various applications
- Title 24 JA8 certified with maximum 1500lm output
- Companion to 3G's Cylinder product family

JA8 TITLE 24

PROJECT:		TYPE:	
CATALOG#:		DATE:	QTY:

CAT. NO	LUMEN OUTPUT	CRI	COLOR TEMP	BEAM ANGLE	VOLTAGE
3G-DL33RF	10 - 1000 LUMENS 15 - 1500 LUMENS 20 - 2000 LUMENS 25 - 2500 LUMENS 30 - 3000 LUMENS All lumen outputs are delivered lumens at 95+ CRI	H95 - 95+ CRI	27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K	10D - 10° [1] 20D - 20° [1] 40D - 40° 60D - 60° 90D - 90° * *90D optic supplied with lens. Not available with other lens options	UNV - 120/277V 120 - 120V 347 - 347V [2]

DRIVER	TRIM FLANGE	BEVELED INSERT	HOUSING TYPE
DIM - 0-10V (100-1%) LE - PHASE DIM [3] (TRIAC/ELV, 100-1%) D01 - 0-10V (100-0.1%) DALI - DALI (100-1%) [4] DMX - DMX (100-0%) [5] DHL2 - LUTRON HI-LUME LDE1 (1% ECOSYSTEM)	WT - WHITE TRIM BT - BLACK TRIM ST - SILVER TRIM XTR - TRIMLESS (MUD-IN DRYWALL) MWF - FLANGELESS MILLWORK [6]	WI - WHITE BI - BLACK SI - SILVER	RMD - REMODEL (NON-IC) NCF - NEW CONSTRUCTION FRAME (NON-IC) SH - SHALLOW HOUSING [7] (IC RATED & CP RATED) NC - NEW CONSTRUCTION HOUSING (CP RATED) IC - NEW CONSTRUCTION IC HOUSING [7] NCF and SH housings ship nailer type bar hangers. NC and IC housings available with optional C-channel bar hangers

OPTIONS
SF - SOFTENING LENS (SUPPLIED STANDARD) *
SB - SANDBLASTED LENS
LS - LINEAR SPREAD LENS
WL - WET LOCATION RATED (SUPPLIED WITH SOFTENING LENS)
CP - CHICAGO PLENUM [8]
BH - C-CHANNEL BAR HANGERS (FOR NC AND IC HOUSINGS ONLY)
EMR - REMOTE EMERGENCY BATTERY [9]
EMB - INTEGRAL EMERGENCY BATTERY (ABOVE CEILING ACCESS REQUIRED) [10]
*Softening lens not provided with 90D optic. Maximum 1 optical accessory

** 3G has upgraded our LED system and overall performance at no additional cost. We now offer 95+CRI as standard. All lumen outputs are delivered lumens. This upgraded LED system is more efficient than our previous 80CRI, 90CRI, and 97CRI options. Please see the last page of this spec sheet to cross-reference old lumen outputs with our new, 95+CRI lumen output options

1 10D and 20D reflector available up to 2000lm
2 347 available in "DIM" 0-10V only (100-1%)
3 Phase dimming options available in 120V only
4 DALI-2 (Type 6) provided as standard
5 3000lm not available with DMX driver option
6 MWF not available with Remodel (NON-IC)
7 Shallow Housing and New Construction IC housing available up to 2000lm
8 Chicago Plenum option available with Shallow Housing (2000lm max) and New Construction Housing
9 Supplied with enclosure with Emergency Battery and driver. Installed remotely by others. Not accessible through fixture aperture
10 Available with NCF (New construction frame housing) only. Above ceiling access required. Not accessible through fixture aperture

JA8 TITLE 24 — JA8 (Title 24) Listing available with 1500lm maximum. Driver options include "DIM" (0-10V) and "LE" (Phase dimming)

B1

3G LIGHTING

3G-DL33RF
3" ROUND FIXED - DOWNLIGHT

PERFORMANCE | TECHNICAL

PERFORMANCE

LUMEN OUTPUT	DELIVERED LUMENS	SYSTEM WATTS	EFFICACY (LPW)
1000	1000	8.6	116
1500	1500	13.5	111
2000	2000	18.3	109
2500	2500	25.8	97
3000	3000	31.2	96

BASED ON 95+ CRI, 3500K, 40D OPTIC WITH SOFTENING LENS
Lumen output and actual wattage may vary +/- 5%

MULTIPLIERS

BEAM ANGLE	
10D	0.92
20D	1.24
40D	1.00
60D	0.97
90D	0.91

COLOR TEMP	
2700K	0.98
3000K	1.00
3500K	1.00
4000K	1.02

HOUSING
Remodel, new construction frame, shallow housing, new construction and IC housing options available
Maximum ceiling thickness of 1.5". Consult factory for modifications
All housing options (except millwork) designed to be easily converted in field to trim or trimless with minimal components
Housing rated for #12 AWG (4 in, 4 out), 90°C conductors and through branch wiring

BEVELED INSERT
Cast aluminum beveled insert with matte powder coated finish
3" aperture with regressed LED source for enhanced glare control

TRIM
Machined aluminum trim flange with matte powder coated finish and minimal 0.375" overlap

TRIMLESS
Mudding flange features a perforated surface for easy mud-in application
Integral blocking support provided to ensure fixture is properly secured within ceiling structure

OPTICS
Proprietary anodized, aluminum reflectors
Beam angle available in 10°, 20°, 40°, 60° and 90°
Reflectors are field replaceable (10° reflector not interchangeable)
Softening lens supplied standard

LED SYSTEM
Standard 95+ CRI
Color consistency <2 SDCM
Available in 27K, 30K, 35K, and 40K
L90 > 50,000 hours

ELECTRICAL
Standard 0-10V, constant current drivers
100-1% dimming range and >0.9 power factor
Standard 120/277V universal voltage with several driver options
120V Forward Phase/Reverse Phase driver option (100-1%)
Integral drivers are easily accessible through luminaire aperture

EMERGENCY
7W output for 90 minutes (+/- 800lm at 95+ CRI). Title 24 Certified
Integral emergency battery (above ceiling access required)
Remote emergency battery (not accessible through fixture aperture)
Maximum remote mounting distance:
3000lm or below - 50ft (12AWG) or 25ft (14AWG)
Above 3000lm - 30ft (12AWG) or 20ft (14AWG)
Caution: Emergency Battery utilizes more than one power source and servicing should be performed by qualified personnel

MOUNTING
Trim fixture designed for use in drywall, wood, acoustic, and other architectural ceilings
Trimless fixture designed for use in drywall, mud-in ceiling applications
Recommended cut-out for Millwork Flangeless option (3.525")
Recommended cut-out for other housing options (3 13/16")
New construction frame and IC rated shallow housing ship with nailer type bar hangers (14" to 26" extension)
Optional C-Channel bar hangers available for NC and IC housing options

LISTING
ETL listed and conforms to UL1598 standard
Certified to CSA22.2 NO.250.0.
JA8 (Title 24) Listed
Rated for dry or damp locations

WARRANTY
5 year limited warranty
LED system rated for operation in ambient environments up to 25°C

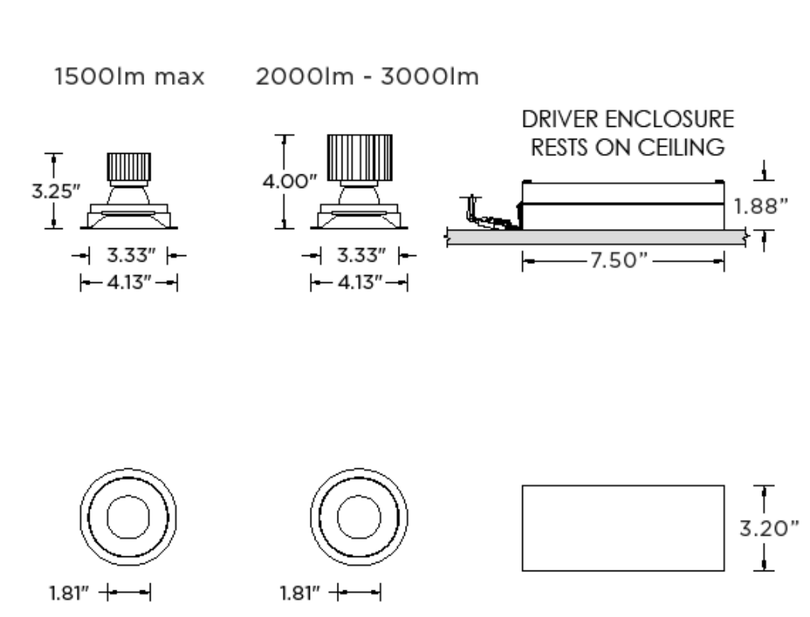
B1

3G LIGHTING

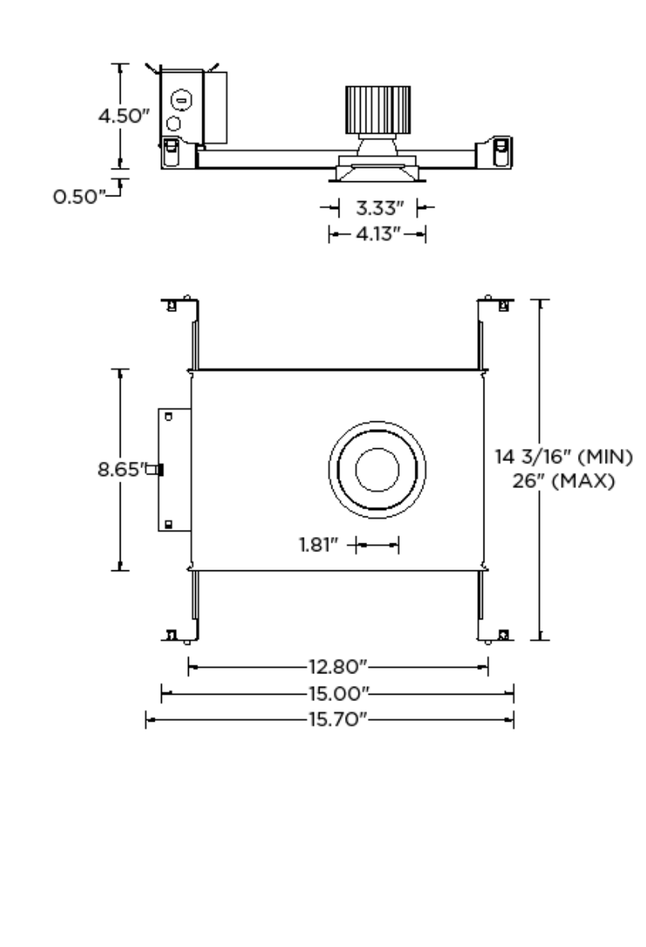
3G-DL33RF
3" ROUND FIXED - DOWNLIGHT

TRIM HOUSING OPTIONS

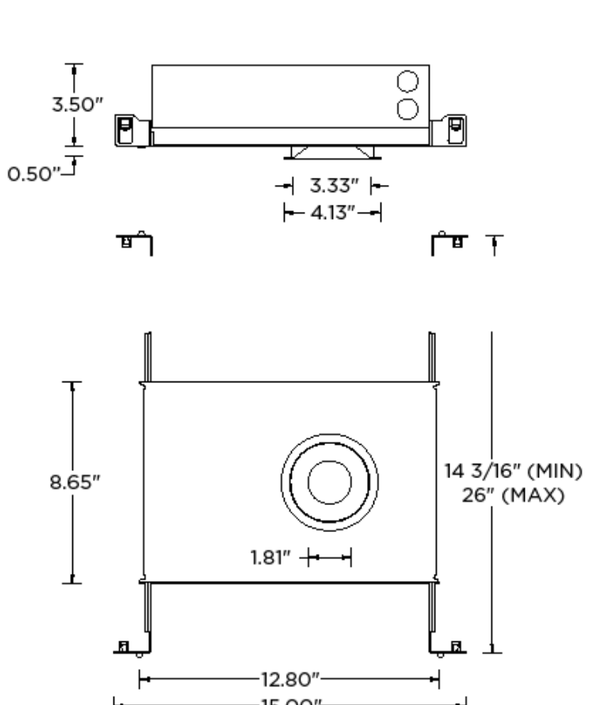
RMD - REMODEL (NON-IC)



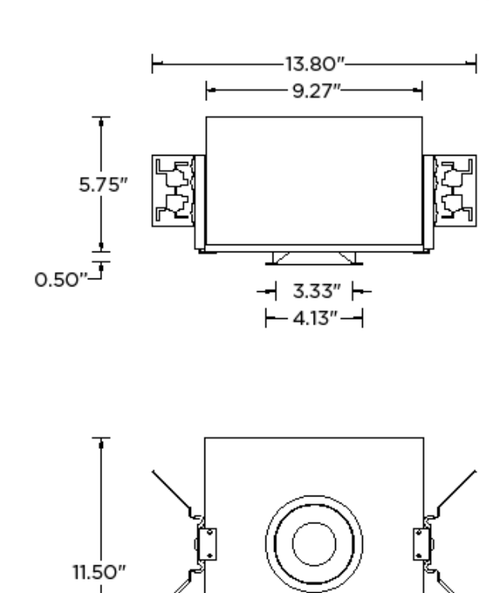
NCF - NEW CONSTRUCTION FRAME (NON-IC)



SH - SHALLOW HOUSING (2000LM MAX) (IC RATED AND CP RATED)



NC- NEW CONSTRUCTION HOUSING (NON-IC AND CP RATED)
IC - NEW CONSTRUCTION IC HOUSING (2000LM MAX)



B1

3G LIGHTING

3G-DL33RF
3" ROUND FIXED - DOWNLIGHT

REFERENCE CHART

LUMEN OUTPUT REFERENCE CHART

3G has upgraded our LED system and overall performance at no additional cost. We now offer 95+CRI as standard. All lumen outputs are delivered lumens. This new LED system is more efficient than our previous 80CRI, 90CRI, and 97CRI options. Please use these charts to cross-reference old lumen outputs with our new, 95+CRI lumen output options

80CRI REFERENCE CHARTS
MATCH THE GRADIENT SHADE FROM THE OLD LUMEN OUTPUT CHART TO THE NEW LUMEN OUTPUT OPTION

OLD 80CRI SPECS			
LUMEN OUTPUT	DELIVERED LUMENS	SYSTEM WATTS	EFFICACY (LPW)
1000	1080	10.3	105
1500	1408	13.9	101
2200	2132	21.9	97
3000	2799	31.3	89

NEW 95+CRI SPECS			
LUMEN OUTPUT	DELIVERED LUMENS	SYSTEM WATTS	EFFICACY (LPW)
1000	1000	8.6	116
1500	1500	13.5	111
2000	2000	18.3	109
2500	2500	25.8	97
3000	3000	31.2	96

90CRI REFERENCE CHARTS
MATCH THE GRADIENT SHADE FROM THE OLD LUMEN OUTPUT CHART TO THE NEW LUMEN OUTPUT OPTION

OLD 90CRI SPECS			
LUMEN OUTPUT	DELIVERED LUMENS	SYSTEM WATTS	EFFICACY (LPW)
1000	950	10.3	92
1500	1239	13.9	89
2200	1876	21.9	86
3000	2463	31.3	79

NEW 95+CRI SPECS			
LUMEN OUTPUT	DELIVERED LUMENS	SYSTEM WATTS	EFFICACY (LPW)
1000	1000	8.6	116
1500	1500	13.5	111
2000	2000	18.3	109
2500	2500	25.8	97
3000	3000	31.2	96

B2

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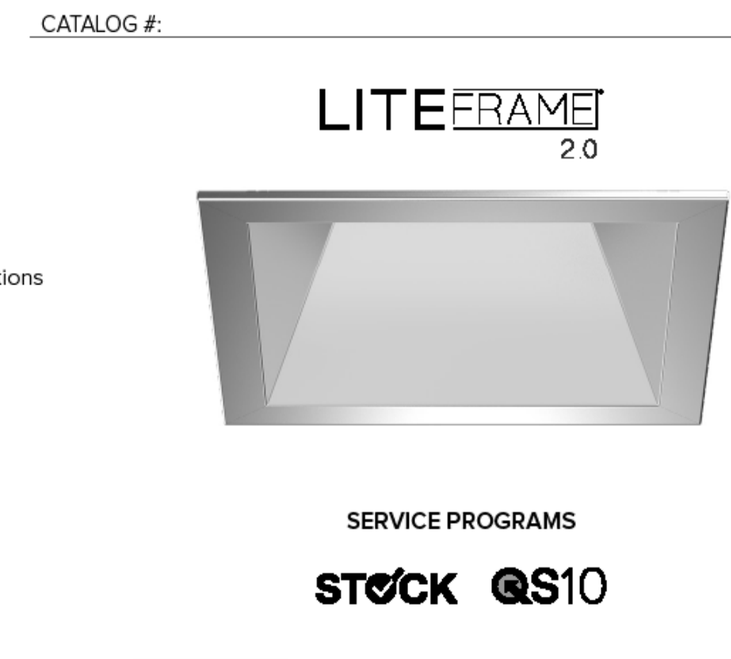
DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

LFR-6SQD
LITEFRAME 6" SQUARE DOWNLIGHT

LITEFRAME 2.0

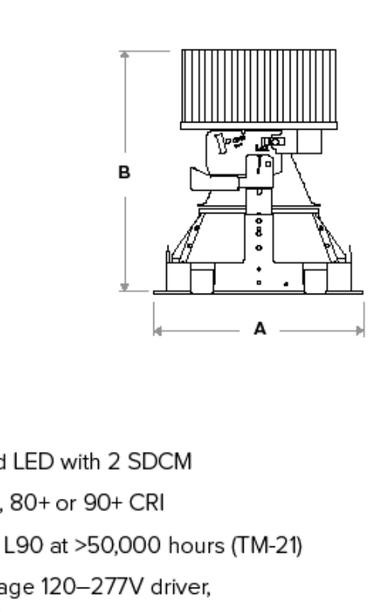


FEATURES
- 6" LED downlight delivering 1000–8000 lumens
- Direct Install from below ceiling for New Construction or Remodel applications
- Optional housing accessories available
- Five beam distributions
- 2700K–5000K, 80+ and 90+ CRI (2 SDCM)
- Dimming protocols include 0–10V, Phase (Forward/Reverse), DALI, DMX, and Lutron EcoSystem
- NX Lighting Controls wired and wireless controls capability available

SERVICE PROGRAMS
STOCK QS10

CSA C US — WET LOCATION With CL Lens Option

CONTROLS TECHNOLOGY
NX WIRELESS — NX WIRED



Typical Dimensions and Weights			
Lumen Package	"A" Width Inches (mm)	"B" Height Inches (mm)	Weight lbs (kg)
10L - 35L	7.38 (187)	6.71 (170)	4.6 (2.1)
40L - 50L	7.38 (187)	7.28 (185)	4.8 (2.2)
60L - 80L	7.38 (187)	8.47 (215)	5.4 (2.4)

See DIMENSIONS section for complete details

SPECIFICATIONS

CONSTRUCTION
- Standard Fixture Module designed for Non-IC, Direct Install construction
- Optional Non-IC frame or IC housing available with pre-installed bar hangers
- Die cast aluminum fixture module support ring with spring steel clips for secure mounting to ceiling
- Driver J-Box can be installed and accessed from below the ceiling as direct install or easily snap on to optional housing frame/enclosure
- Light Engine connections use plenum rated (CMP) cable

OPTICS
- High purity, 4 panel aluminum reflector, self-flanged
- Specular or Semi-Specular anodized or White painted cone reflector finish/colors
- Painted flange options in White or Black
- Optional clear lens trim for wet location applications
- Wide Angle and Soft Focus lens filter/clip accessories available

ELECTRICAL
- Chip-on-board LED with 2 SDCM
- Multiple CCTs, 80+ or 90+ CRI
- Long LED life: L90 at >50,000 hours (TM-21)
- Universal voltage 120–277V driver, 347V optional
- UL Class 2, inherent short circuit and overload protection
- Flicker-free dimming options in a wide range of protocols from 1% to <0.1% performance
- 0–10V, Phase (Forward/Reverse), DALI, DMX, and Lutron EcoSystem options
- NX Lighting Controls provides options for standalone and networked functionality with wired or wireless connectivity for NX system deployments
- Integral and remote emergency battery options available

INSTALLATION
- Accommodates ceiling thickness from 0.50" to 2.50"
- Fixture Module including driver fully accessible from above or below the ceiling
- 10L-15L Fixture Modules are inherently protected IC without the use of IC housing enclosure. (IC housing is still recommended when using loose-fill or spray foam insulation types.)

CERTIFICATIONS
- cCSAus certified to UL 1598
- For ≥60L: Marked spacing required 36" fixture center to center; 18" fixture center to building member; 0.5" above fixture
- Suitable for wet locations, covered ceiling when used with CL lens trim; all other configurations, suitable for damp locations
- EM/EMR: Certified under UL 924 standard for emergency lighting and power equipment
- EM/EMR: Emergency battery packs are California Energy Commission (CEC) Title 20 Compliant
- Approved for 8 (4 in/4 out) No. 12AWG conductors rated for 90°C through wiring

WARRANTY
- 5 year warranty

KEY DATA	
Lumen Range	1000–8000
Wattage Range	8–70
Efficacy Range (LPW)	114–143
Reported Life (Hours)	L90 / >50,000
Input Current (mA)	66–583 (120V)

*Based on Specular, 35K, 80 CRI

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REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT #1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

ADVENT HEALTH LOUISVILLE
100 HEALTH PARK DRIVE
LOUISVILLE, CO 80027
303.673.1000
www.adventhealth.com

SMITHGROUP
1675 LARIMER STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

Kimley»Horn
6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2307
kimley-horn.com

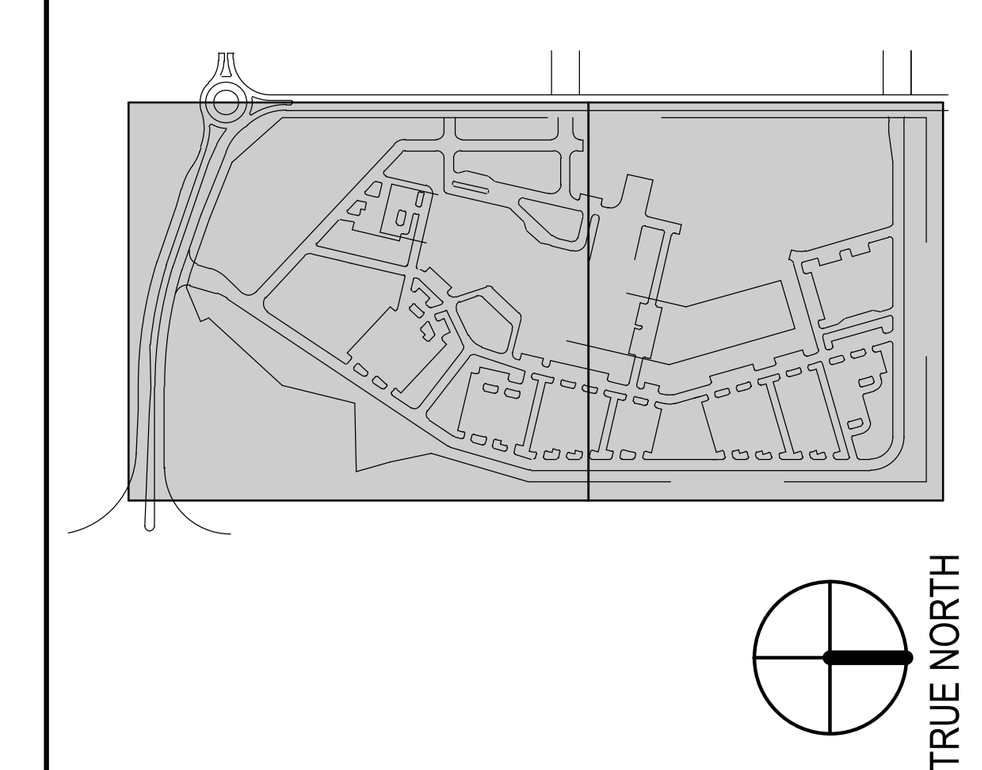
WSP
2000 SOUTH COLORADO BOULEVARD
SUITE 2-1000
DENVER, CO 80222
WWW.WSP.com

ISSUED FOR	DATE
3RD PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



SCALE

SHEET TITLE
LIGHTING SITE PLAN - CUTSHEETS

PUD SHEET NUMBER	SG SHEET NUMBER
26 OF 39	E-06

PROJECT NUMBER
15696.00

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LFR-6SQD

LITEFRAME 6" SQUARE DOWNLIGHT

DATE: LOCATION: B2

TYPE: PROJECT:

CATALOG #:

Gray Shading = Service Program: STOCK QS10

ORDERING GUIDE

Example: LFR-6SQD-M-10L35KB-WD-DMT / LFR-6SQD-T-S / LFR-6SQD-H

CATALOG #

FIXTURE MODULE

LFR-6SQD-M

Ap/Sp/Punch	Lumen Output	CCI	CRI
LFR-6SQD-M 6" Square Downlight Fixture Module for Direct Install *Non-IC frame kit (H) is also available under Housing Options below)	10L 1000 15L 1500 20L 2000 25L 2500 30L 3000 35L 3500 40L 4000 50L 5000 60L 6000 † 70L 7000 † 80L 8000 †	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	B 80+ 9 90+

Distribution	Driver Options	Control Options	Voltage	Module Options
VNR Very Narrow (16°/0.3 SC) NR Narrow (27°/0.5 SC) MD Medium (38°/0.9 SC) WD Wide (60°/2.0 SC) XW Extra Wide (82°/3.2 SC) *	DMF 0-10V Dimming to 1% DMDX 0-10V Dimming to < 1% * PDM Phase (Forward/Reverse) Dimming to 1% * DMX DMX with Dimming to < 0.1% * DALI DALI Dimming to 1% * EDM Lutron Hi-Lume EcoSystem Dimming to 1% *	NX Lighting Controls Standard: 120-277V Networked Wireless NXW NX Networked Wireless Enabled Module, NXMA2 and Bluetooth Programming, without Sensor * Networked Wired NXE NX Wired, Dual EcoXL SmartPORTS, without Sensor *	34 347V *	CP Chicago Plenum ** / EM 6W Emergency Battery Pack (CEC Title 20 Compliant) with integral test switch and indicator light * EMB 6W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light * DTS Device Transfer Switch with Dimming Bypass * *

TRIM (Ships separately)

LFR-6SQD-T

Aperture/Shape/Function	Distribution	Reflector Finish/Color	Flange Color Options	Lens Options	Lower Trim Options
LFR-6SQD-T 6" Square Downlight Trim Assembly	Standard (NR, MD, WD, XW) VNR Very Narrow	S Specular * SS Semi Specular WC Painted White Cone and Flange	Standard matches reflector color WT White Flange * BT Black Flange	Standard no lens CL Clear Lens (Wet listed) *	EM Prejunched reflector for EM integral test switch and indicator * FM Flush Mount Flange *

HOUSING OPTIONS (Ships separately)

Ap/Sp/Punch/Shape/Function
☐ LFR-6SQD-H 6" Housing Frame, New Construction, Non-IC
☐ LFR-6SQD-H-IC 6" Housing Enclosure, New Construction, IC Rated * *

Accessories

- ☐ SFL6 Soft Focus Lens and Clip, 6° Square
- ☐ WAL6 Wide Angle 80° Lens and Clip, 6° Square
- ☐ LiteGear LiteGear® Inverter, 120VAC–277VAC
- ☐ LPS Series LightPower Micro-Inverter, 20VA–175VA
- ☐ LF-FMR6-SQ Flush Mount Mud-In Ring, 6" Square **
- ☐ LF-MORS-SQ-WH Metal Oversized Ring, 6" Square, White (10.3" outside dimension)

Notes:
1. 60L–80L require marked spacing. See line art for more details.
2. DMO, 1DM, DMX, DALI available up to 50L. EDM available 10L–40L.
3. NX+ requires DMF driver option.
4. 347V requires DMF driver option; available 10L–40L; not available with Controls, DTS, EM, EMB.
5. CP not available with PDM, DMX, or Controls.
6. PDM not available with Controls in combination.
7. DTS available with DMF, DMDX, or DALI.
8. 70L and 80L available in 4000K.
9. CL lens and EM trim options not available in combination.
10. IC available up to 35L. 5L, 15L Fixture Modules are inherently protected IC without the use of IC housing enclosure. (IC housing is still recommended when using tower fill in lamp flank types.)
11. NL Housing not for use in combination with Controls or with Module Options CP, EM, EMB, DTS.
12. HM distinction is not available for Specular (S) reflector finish.
13. Flush Mount Flange requires FMR accessory.

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LFR-6SQD

LITEFRAME 6" SQUARE DOWNLIGHT

B2

PERFORMANCE DATA TABLE

Performance data shown is 3500K 80+CRI with Specular reflector except Extra Wide distribution which is Semi-Specular.

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
10L	1000	Very Narrow	662	7.5	142
		Narrow	1000	7.5	142
		Medium	933	7.5	137
		Wide	971	7.5	139
		Extra Wide	1025	7.5	137
15L	1500	Very Narrow	1007	11.4	142
		Narrow	1521	11.4	141
		Medium	1366	11.4	137
		Wide	1476	11.4	139
		Extra Wide	1558	11.4	138
20L	2000	Very Narrow	2063	14.5	140
		Narrow	2042	14.5	140
		Medium	1836	14.5	138
		Wide	1996	14.5	138
		Extra Wide	2055	14.5	139
25L	2500	Very Narrow	2707	19.4	139
		Narrow	2737	19.4	139
		Medium	2513	19.4	135
		Wide	2480	19.4	128
		Extra Wide	2757	19.4	142
30L	3000	Very Narrow	3307	24.2	137
		Narrow	3277	24.2	136
		Medium	3020	24.2	125
		Wide	2982	24.2	123
		Extra Wide	3166	24.2	131
35L	3500	Very Narrow	3873	29.9	134
		Narrow	3835	29.9	133
		Medium	3536	29.9	123
		Wide	3546	29.9	123
		Extra Wide	3783	29.9	129
40L	4000	Very Narrow	4427	32.3	137
		Narrow	4387	32.3	136
		Medium	4026	32.3	130
		Wide	3982	32.3	124
		Extra Wide	4211	32.3	131
50L	5000	Very Narrow	5537	41.9	132
		Narrow	5428	41.9	129
		Medium	5228	41.9	125
		Wide	5227	41.9	125
		Extra Wide	5237	41.9	125
60L	6000	Very Narrow	6653	49.5	134
		Narrow	6523	49.5	132
		Medium	6423	49.5	130
		Wide	6396	49.5	129
		Extra Wide	6436	49.5	130
70L	7000	Very Narrow	7768	59.0	132
		Narrow	7615	59.0	129
		Medium	7500	59.0	127
		Wide	786	59.0	121
		Extra Wide	7511	59.0	127
80L	8000	Very Narrow	8862	69.2	128
		Narrow	8809	69.2	127
		Medium	8575	69.2	124
		Wide	8529	69.2	123
		Extra Wide	8518	69.2	123

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LFR-6SQD

LITEFRAME 6" SQUARE DOWNLIGHT

DATE: LOCATION: B2

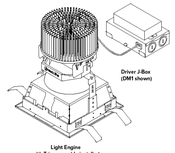
TYPE: PROJECT:

CATALOG #:

DIMENSIONS

LFR-6SQD-M

Fixture Module consists of Light Engine and Driver J-Box assemblies. Overall dimensions for each are dependent upon configuration selected. See the following pages for details.



Driver J-Box (DMH shown)

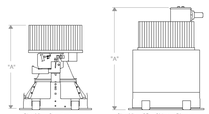
Light Engine with Trim assembly installed

DIMENSIONAL DATA		
APERTURE		O 5.00" (52.4mm)
FLANGE WIDTH	Standard	0.69" (17.5mm)
	Flush Mount	0.30" (5.1mm)
FLANGE TO FLANGE	Standard	0.738" (187.4mm)
	Flush Mount	O 6.40" (162.6mm)
CEILING CUTOUT	Standard	O 5.75" (171.5mm)
	Flush Mount	O 6.88" (174.7mm)
CEILING THICKNESS		0.50" – 2.50" (12.7 – 63.5mm)

LFR-6SQD LIGHT ENGINE

OVERALL LIGHT ENGINE HEIGHT "H" *			
LUMEN PACKAGE	FIXTURE MODULE	BEAM DISTRIBUTION	
		VNR	NR / MD / WD / XW
10L–35L	STANDARD	7.90" (202.0mm)	6.37" (172.5mm)
	CP	11.11" (282.3mm)	9.89" (251.6mm)
40L–50L	STANDARD	8.52" (216.5mm)	7.28" (185.0mm)
	CP	11.11" (282.3mm)	9.89" (251.6mm)
60L–80L	STANDARD	9.17" (246.7mm)	8.47" (215.2mm)
	CP	11.11" (282.3mm)	9.89" (251.6mm)

* Note: Add 0.75" minimum plenum clearance when Light Engine fixture.
** For 6SQ, Marked spacing required 30" fixture center to center, 15" fixture center to building interior, 0.5" above fixture.
*** Non-IC rating requires 3" from insulation and combustible materials.



Side View Standard

Side View CP – Chicago Plenum

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LFR-6SQD

LITEFRAME 6" SQUARE DOWNLIGHT

DATE: LOCATION: B2

TYPE: PROJECT:

CATALOG #:

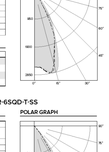
PHOTOMETRY CONTINUED

LFR-6SQD-M-20L35KBWD-DM1 / LFR-6SQD-T-S

LUMINAIRE DATA

Test No.	P22-001584
Description	2000 lm, White, 3500K, 80 CRI
Delivered Lumens	2055
Watts	14.5W
Efficacy	139
Mounting	Recessed/Ceiling
Spacing Criterion	0.9
Beam Angle (FWHM)	110

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	2574
5	2602
15	2612
25	1481
35	168
45	4
55	1
65	0
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	244
55°	79
65°	0
75°	0
85°	0

*Candela/Square Meter

ZONAL LUMEN SUMMARY

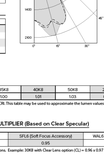
Zone	Lumens	% Luminaire
0-40	1883	91.3
0-60	1996	100.0
0-90	1996	100.0
0-180	1996	100.0

LFR-6SQD-M-20L35KBXW-DM1 / LFR-6SQD-T-SS

LUMINAIRE DATA

Test No.	22-000121
Description	2000 lm, Extra Wide, 3500K, 80 CRI
Delivered Lumens	2055
Watts	14.5W
Efficacy	139
Mounting	Recessed/Ceiling
Spacing Criterion	1.2
Beam Angle (FWHM)	142

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1683
5	1748
15	1750
25	1837
35	481
45	2
55	0
65	0
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	122
55°	0
65°	0
75°	0
85°	0

*Candela/Square Meter

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1871	91.1
0-60	2051	100.0
0-90	2051	100.0
0-180	2051	100.0

LUMEN MULTIPLIER

Option	27K0	30K0	35K0	40K0	50K0	27K9	30K0	35K9	40K9	50K9
Multiplier	0.93	0.96	1.00	1.00	1.00	0.93	0.96	0.99	0.97	0.99

Photometrics are published below at a nominal 3500 Kelvin, 80+ CRI. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

LENS OPTION / LENS FILTER ACCESSORY MULTIPLIER (Based on Clear Specular)

Option	CL (Clear Lens)	SFL6 (Soft Focus Accessory)	WAL6 (Wide Angle Accessory)
Multiplier	0.97	0.95	0.85

Multiply lumen/lens multipliers to calculate applicable combinations. Example: 30K9 with Clear Lens option (CL) = 0.96 x 0.97 = **0.97**

KIM LIGHTING

RSAK Series Poles

ROUND STRAIGHT ALUMINUM

DATE: LOCATION: D1, P1

TYPE: PROJECT:

CATALOG #:

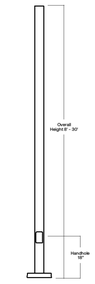
SPECIFICATIONS

CONSTRUCTION

- Shaft: One-piece straight aluminum with round cross section; Extruded shafts of 6061-T6 aluminum in 1/8", 3/16", or 1/4" thickness. Base plate of 356 cast aluminum
- Bolt covers: Four (4) individual bolt covers provided, painted to match pole and base finish
- Pole cap: Cap available for side mounted luminaires. Open top or tenons provided for post top mounted luminaires
- Hand hole: Rectangular 3x5 aluminum hand hole frame (2.28" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- Anchor bolts: Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling
  - Anchor bolt part numbers: 3/4 x 30 x 3 — TAB-30-M38
- Super Durable polyester-TGIC powder coat finish with nominal 3.0 mil thickness. Meets or exceeds AAMA 2604 standards

INSTALLATION

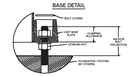
- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location



BASE



BASE DETAIL



TENON



POLE CAP



KIM LIGHTING

RSAK Series Poles

ROUND STRAIGHT ALUMINUM

DATE: LOCATION: D1, P1

TYPE: PROJECT:

CATALOG #:

ORDERING INFORMATION

drill?

Example: RSAK15–40A–2L–K2–BLS–UL

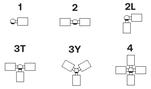
RSAK							
Series	**Height**	**Shaft**	**Thickness**	**Mounting**	**Drill Pattern**	**Finish**	**Options**
RSAK Round Straight Aluminum Pole Kim Lighting	Select on page 3 Ordering matrix	Select on page 3 Ordering matrix	Reference page 3 Ordering matrix	2 Single arm mount 4 Two fixtures at 180° 2L Two fixtures at 90° 3T Three fixtures at 90° 3Y Three fixtures at 120° 4 Four fixtures at 90° TA Tenon (2.375" OD) TB Tenon (2.875" OD) QT No drilling (includes pole cap)	A2 4 @ 2 bolt 5-3/16" spacing K2 Shaft 2 bolt 5 1/2" spacing K3 Shaft 3 bolt 5" spacing UDP Universal Drill Pattern	BLT Black Matte Textured BLS Black Gloss Smooth DBT Dark Bronze Matte Textured DBS Dark Bronze Gloss Smooth GTT Graphite Matte Textured LGT Light Grey Matte Textured LGS Light Grey Gloss Smooth PSS Platinum Silver Smooth WHT White Matte Textured WHS White Gloss Smooth VGT Verde Green Textured **Color Option** CC Custom Color*	GP1 90 Amp GFCI Receptacle and Cover EH04 Extra Handhole CO5† 5" Coupling CO7† 7" Coupling CO9† 9" Coupling VMS* 2nd Mode Vibration Dampener LAB Less Anchor Bolts UL* UL Certified

Accessories (Order Separately)

- ☐ A51999-0001 Field-installed 2nd mode vibration dampener - VMS108
- ☐ A51999-0005 Field-installed 2nd mode vibration dampener - VMS160
- ☐ A51999-0004 Field-installed 2nd mode vibration dampener - VMS112
- ☐ A51999-0003 Field-installed 2nd mode vibration dampener - VMS134
- ☐ A51999-0007 Field-installed 2nd mode vibration dampener - VMS116
- ☐ A51999-0006 Field-installed 2nd mode vibration dampener - VMS135
- ☐ A51999-0009 Field-installed 2nd mode vibration dampener - VMS120
- ☐ A51999-0008 Field-installed 2nd mode vibration dampener - VMS125

MOUNTING ORIENTATION

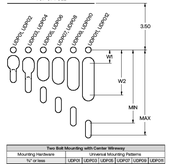
Denotes handhole location



DRILL PATTERNS

UNIVERSAL DRILL PATTERN (UDP)

TOP OF POLE



Two Bolt Mounting with Center Wireway						
Mounting Hardware	Universal Mounting Patterns					
"A" or less	UDP(K2)	UDP(K3)	UDP(K2)	UDP(K2)	UDP(K3)	UDP(K3)
"A" to "B"	UDP(K2)	UDP(K3)	UDP(K3)	UDP(K2)	UDP(K2)	UDP(K3)
"Max" Attachment Dimension	1.89	2.25	3.00	3.76	4.50	5.50
"Max" Attachment Dimension	2.24	2.99	3.75	4.49	5.49	6.00
W1 (Wireway min)	0.85	1.00	1.00	1.00	1.00	1.00
W2 (Wireway max)	1.05	1.26	1.88	2.13	2.63	3.00

UPD to Accomodate 3rd party luminaires.
Current Brands only utilize exact drilling patterns as published.

KIM LIGHTING

RSAK Series Poles

ROUND STRAIGHT ALUMINUM

DATE: LOCATION: D1, P1

TYPE: PROJECT:

CATALOG #:

ORDERING INFORMATION (CONTINUED)

CATALOG NUMBER	HEIGHT FEET	HEIGHT METERS	NOMINAL SHAFT DIMENSIONS	WALL THICKNESS	BOLT CIRCLE	BOLT SQUARE	BASE PLATE SIZE	ANCHOR BOLT SIZE	BOLT PROJECTION	POLE WEIGHT
RSAK08-40A	8	2.4	4" Round	0.125	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	19
RSAK10-40A	10	3.0	4" Round	0.125	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	22
RSAK12-40A	12	3.7	4" Round	0.125	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	25
RSAK14-40A	14	4.3	4" Round	0.125	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	29
RSAK16-40A	16	4.9	4" Round	0.125	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	33
RSAK12-40B	12	3.7	4" Round	0.188	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	36
RSAK14-40B	14	4.3	4" Round	0.188	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	42
RSAK16-40B	16	4.9	4" Round	0.188	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	47
RSAK18-40B	18	5.5	4" Round	0.188	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	52
RSAK20-40B	20	6.1	4" Round	0.188	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	57
RSAK16-40C	16	4.9	4" Round	0.25	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	60
RSAK18-40C	18	5.5	4" Round	0.25	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	67
RSAK20-40C	20	6.1	4" Round	0.25	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	74
RSAK24-40C	24	7.3	4" Round	0.25	8.75"	4.77"	9.65" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	88
RSAK14-50B	14	4.3	5" Round	0.188	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	52
RSAK16-50B	16	4.9	5" Round	0.188	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	59
RSAK18-50B	18	5.5	5" Round	0.188	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	66
RSAK20-50B	20	6.1	5" Round	0.188	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	72
RSAK22-50B	22	6.7	5" Round	0.188	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	79
RSAK24-50B	24	7.3	5" Round	0.188	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	86
RSAK25-50B	25	7.6	5" Round	0.188	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	89
RSAK14-50C	14	4.3	5" Round	0.25	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	67
RSAK16-50C	16	4.9	5" Round	0.25	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	76
RSAK18-50C	18	5.5	5" Round	0.25	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	84
RSAK20-50C	20	6.1	5" Round	0.25	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	93
RSAK22-50C	22	6.7	5" Round	0.25	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	102
RSAK24-50C	24	7.3	5" Round	0.25	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	111
RSAK25-50C	25	7.6	5" Round	0.25	7.75"	5.48"	10.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	116
RSAK14-60A	14	4.3	6" Round	0.125	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	43
RSAK16-60A	16	4.9	6" Round	0.125	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	49
RSAK18-60A	16	5.5	6" Round	0.125	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	54
RSAK20-60A	20	6.1	6" Round	0.125	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	60
RSAK22-60A	22	6.7	6" Round	0.125	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	65
RSAK24-60A	24	7.3	6" Round	0.125	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	71
RSAK25-60A	25	7.6	6" Round	0.125	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	91
RSAK14-60C	14	4.3	6" Round	0.25	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	80
RSAK16-60C	16	4.9	6" Round	0.25	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	90
RSAK18-60C	18	5.5	6" Round	0.25	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	101
RSAK20-60C	20	6.1	6" Round	0.25	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	112
RSAK22-60C	22	6.7	6" Round	0.25	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	122
RSAK24-60C	24	7.3	6" Round	0.25	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	133
RSAK25-60C	25	7.6	6" Round	0.25	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	174
RSAK30-60C	30	9.1	6" Round	0.25	8.75"	6.9"	11.63" Dia x 1.88" Thk	3/4 x 30 x 3	2-3/4"	208

Notes:
- Factory supplied template must be used when setting anchor bolts. Current will deny any claim for
- Payment and hinge placement resulting from failure to use factory supplied template and anchor bolts.
- For more information about pole vibration and vibration dampeners, please consult factory.
- Unwep poles immediately upon receipt to avoid condensation build up and possible corrosion.
- There will be a weld witness mark on the side of the pole with the Factory installed VMD.

EH4
Extra handhole



CO5 / CO7 / C20
Coupling

VMD
2nd mode vibration dampener



Factory installed, internal dampener designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

VMDSXX
Field-installed 2nd mode vibration dampener

- VMDS08 – 8'
- VMDS10 – 10'
- VMDS12 – 12'
- VMDS14 – 14'

Field-installed, internal dampener designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

GFI
20 Amp GCFI Receptacle & Cover



Option Orientation
Follow the logic below when ordering together specific options. For each option, include orientation (in degrees) and its height (in feet).

Example: Option CO5 at 90° at 4', Option EH04 at 45° at 3'
RSAK-40A-7A2-DOT-CO5-C-90-4F-EH04-A-45-3F-BLT
Example: Option CO5 at 90° at 4' from the handhole side of pole, 15' up from base. Option EH04 as required between luminaires. Consult factory for other configurations.



BEACON

RSAB-S Series Poles

ROUND STRAIGHT ALUMINUM

DATE: LOCATION: S3, S3B, S4, S5

TYPE: PROJECT:

CATALOG #:

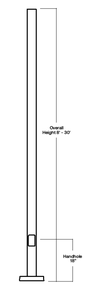
SPECIFICATIONS

CONSTRUCTION

- Shaft: One-piece straight aluminum with round cross section; Extruded shafts of 6061-T6 aluminum in 1/8", 3/16", or 1/4" thickness. Base plate of 356 cast aluminum
- Bolt covers: Four (4) individual bolt covers provided, painted to match pole and base finish
- Pole cap: Cap available for side mounted luminaires. Open top or tenons provided for post top mounted luminaires
- Hand hole: Rectangular 3x5 aluminum hand hole frame (2.28" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- Anchor bolts: Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling
  - Anchor bolt part numbers: 3/4 x 30 x 3 — TAB-30-M38
- Super Durable polyester-TGIC powder coat finish with nominal 3.0 mil thickness. Meets or exceeds AAMA 2604 standards

INSTALLATION

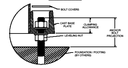
- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location



BASE



BASE DETAIL



TENON



POLE CAP



Current

currentlighting.com/beacon

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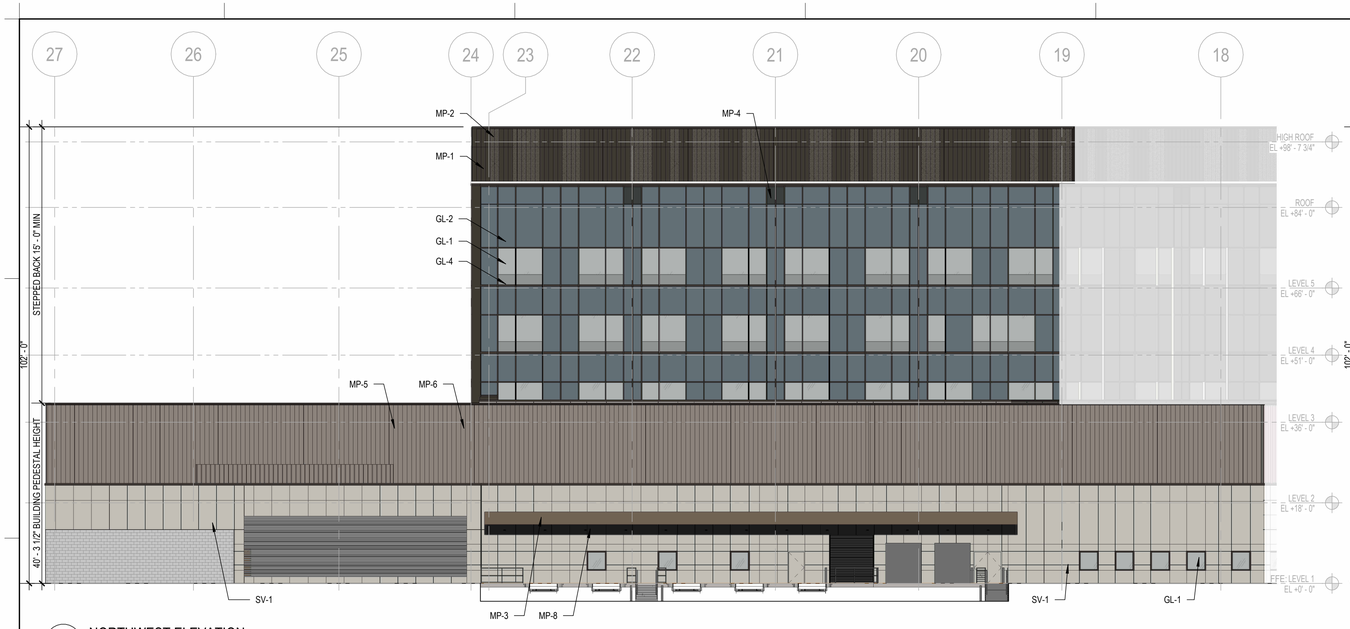
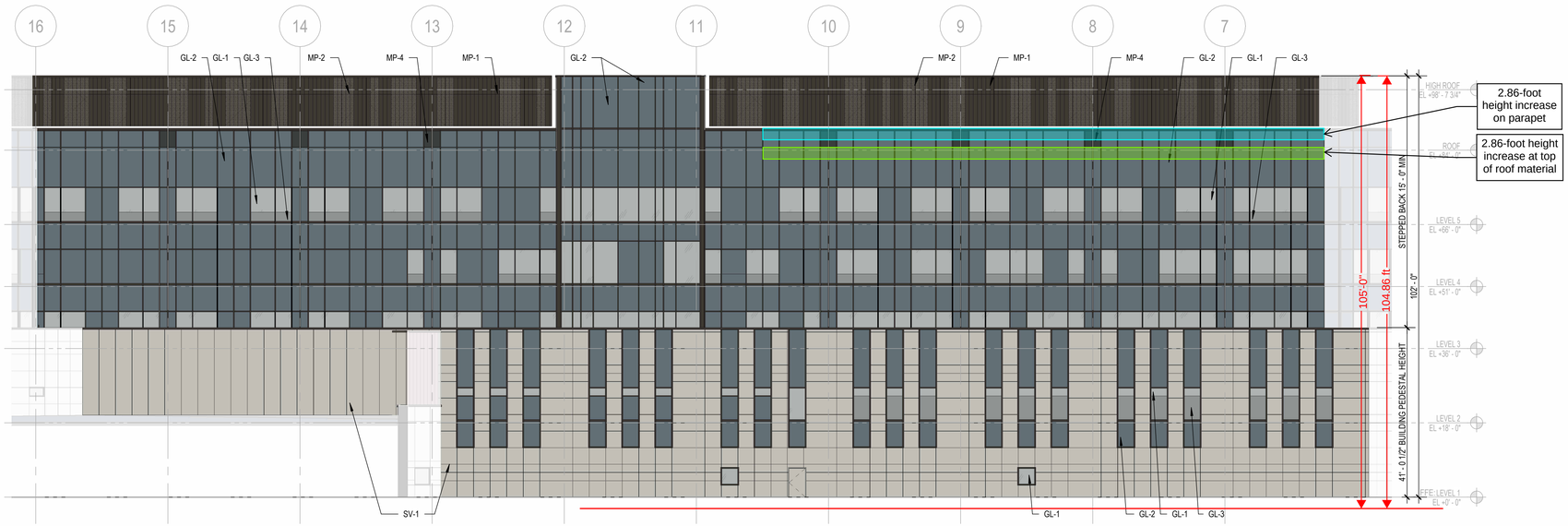


39 NORTHWEST ELEVATION
SCALE: 1/16" = 1'-0"



19 SOUTHWEST ELEVATION
SCALE: 1/16" = 1'-0"

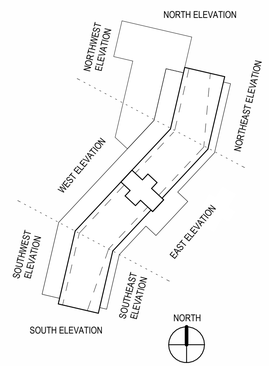


63 WEST ELEVATION
SCALE: 1/16" = 1'-0"

EXTERIOR MATERIAL LEGEND

BASIS OF DESIGN MATERIALS

- MP-1 SMOOTH METAL PANEL — MORIN MX-0: SPARTAN BRONZE
- MP-2 CORRUGATED METAL PANEL — MORIN MX-1: SPARTAN BRONZE
- MP-3 ALUMINUM COMPOSITE PANEL — ALUCABOND PLUS: DRIFTWOOD MICA
- MP-4 ALUMINUM COMPOSITE PANEL — ALUCABOND PLUS: SERPENTINE METALLIC
- MP-5 SMOOTH METAL PANEL — MORIN MX-0: CHAMPAGNE BRONZE
- MP-6 CORRUGATED METAL PANEL — MORIN MX-1: CHAMPAGNE BRONZE
- MP-7 ALUMINUM BRAKE METAL — BRAKE METAL: PAINTED TO MATCH MULLIONS
- MP-8 METAL SOFFIT PLANKS — LONGBOARD 6" SMOOTH T&G: ROCK ELM
- MP-9 SMOOTH METAL PANEL — MORIN MX-6: SPARTAN BRONZE
- MP-10 FORMED METAL PANEL — MORIN P-9: SPARTAN BRONZE
- SV-1 STONE VENEER - FIELD — PETRARCH: 247 PEWTER, SMOOTH
- SV-2 STONE VENEER - ACCENT — PETRARCH: 247 PEWTER, RIVEN
- GL-1 VISION GLAZING — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VZRE 1-46; COLOR: SUBSTRATE CLEAR
- GL-2 SPANDREL GLAZING — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VRE 1-46; COLOR: SUBSTRATE CLEAR, W/ SUBDUED GRAY SPANDREL AND METAL BACK PAN
- GL-3 VISION - FULL COVERAGE FRIT — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VRE 1-46; COLOR: SUBSTRATE CLEAR W/ #3058 VPC2110 FOG GRAY #3 SURFACE
- GL-4 VISION - DOT PATTERN FRIT — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VZRE 1-46; COLOR: SUBSTRATE CLEAR W/ #5006 V957 SUBDUED GRAY #3 SURFACE
- GL-5 VISION - FULL COVERAGE FRIT — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VRE 1-46; COLOR: SUBSTRATE CLEAR W/ #3058 VPC2110 FOG GRAY #3 SURFACE, MW-3 INSULATION AND METAL BACK PAN



REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT #1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

ADVENT HEALTH LOUISVILLE
100 HEALTH PARK DRIVE
LOUISVILLE, CO 80027
303.673.1000
www.adventhealth.com

SMITHGROUP
1675 LARIMER STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

Kimley»Horn
6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2307
kimley-horn.com

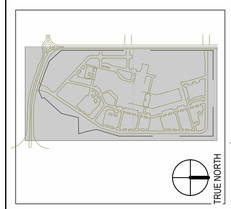
WSP
2000 SOUTH COLORADO BOULEVARD
SUITE 2-1000
DENVER, CO 80222
WWW.WSP.com

ISSUED FOR	DATE
3rd PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN

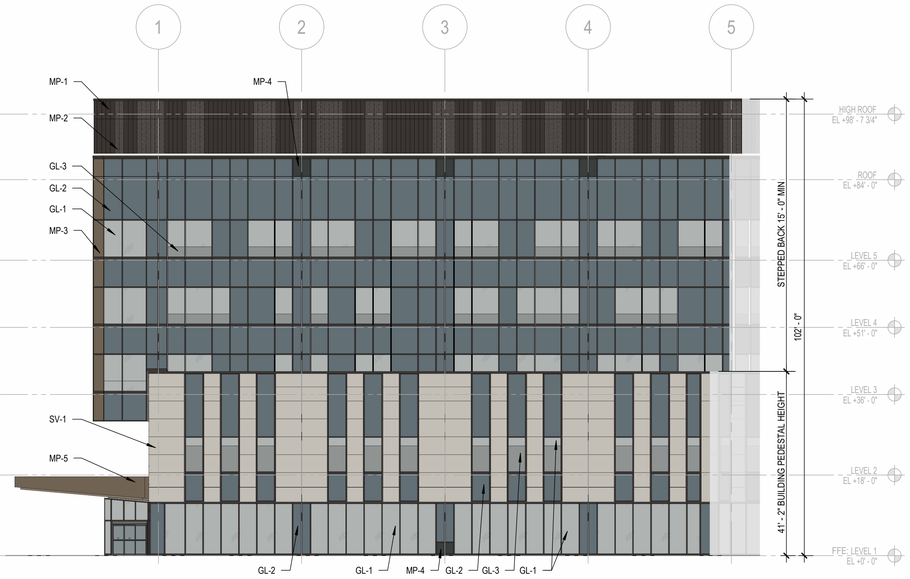


SCALE
As indicated

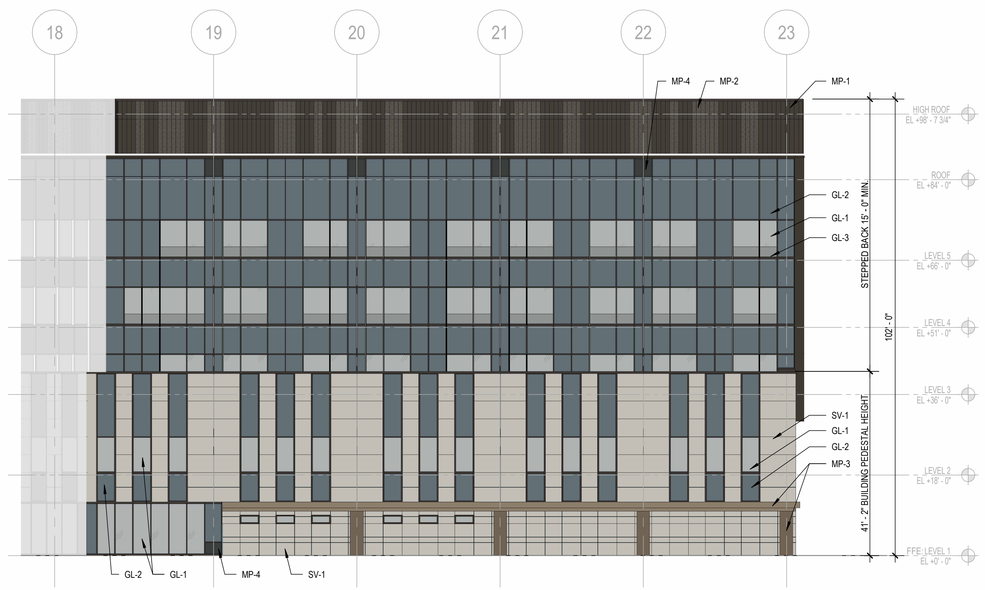
SHEET TITLE
HOSPITAL EXTERIOR ELEVATIONS

PUD SHEET NUMBER	SG SHEET NUMBER
28 OF 39	A-01

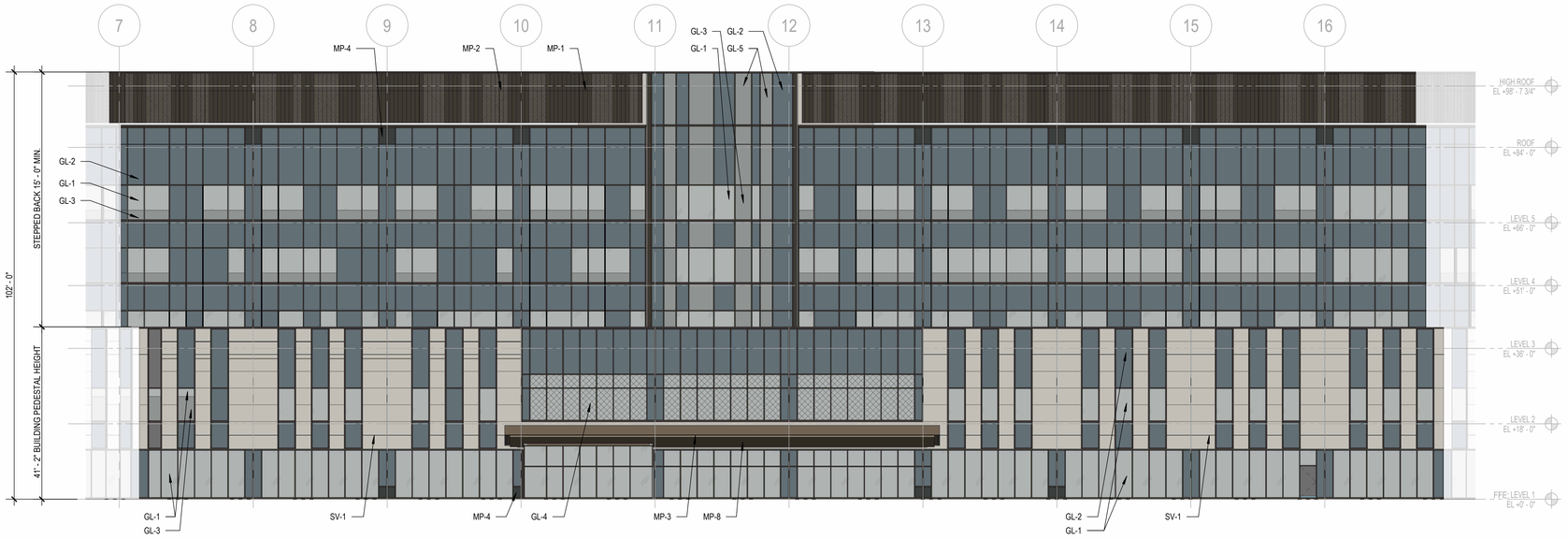
PROJECT NUMBER
15696.00



39 SOUTHEAST ELEVATION
SCALE: 1/16" = 1'-0"



21 NORTHEAST ELEVATION
SCALE: 1/16" = 1'-0"

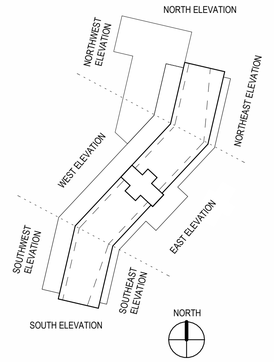


41 EAST ELEVATION
SCALE: 1/16" = 1'-0"

EXTERIOR MATERIAL LEGEND

BASIS OF DESIGN MATERIALS

- MP-1 SMOOTH METAL PANEL — MORIN MX-0: SPARTAN BRONZE
- MP-2 CORRUGATED METAL PANEL — MORIN MX-1: SPARTAN BRONZE
- MP-3 ALUMINUM COMPOSITE PANEL — ALUCABOND PLUS: DRIFTWOOD MICA
- MP-4 ALUMINUM COMPOSITE PANEL — ALUCABOND PLUS: SERPENTINE METALLIC
- MP-5 SMOOTH METAL PANEL — MORIN MX-0: CHAMPAGNE BRONZE
- MP-6 CORRUGATED METAL PANEL — MORIN MX-1: CHAMPAGNE BRONZE
- MP-7 ALUMINUM BRAKE METAL — BRAKE METAL: PAINTED TO MATCH MULLIONS
- MP-8 METAL SOFFIT PLANKS — LONGBOARD 6" SMOOTH T&G: ROCK ELM
- MP-9 SMOOTH METAL PANEL — MORIN MX-6: SPARTAN BRONZE
- MP-10 FORMED METAL PANEL — MORIN P-9: SPARTAN BRONZE
- SV-1 STONE VENEER - FIELD — PETRARCH: 247 PEWTER, SMOOTH
- SV-2 STONE VENEER - ACCENT — PETRARCH: 247 PEWTER, RIVEN
- GL-1 VISION GLAZING — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VZRE 1-46; COLOR: SUBSTRATE CLEAR
- GL-2 SPANDREL GLAZING — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VRE 1-46; COLOR: SUBSTRATE CLEAR, W/ SUBDUED GRAY SPANDREL AND METAL BACK PAN
- GL-3 VISION - FULL COVERAGE FRIT — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VRE 1-46; COLOR: SUBSTRATE CLEAR W/ #3058 VPC2110 FOG GRAY #3 SURFACE
- GL-4 VISION - DOT PATTERN FRIT — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VZRE 1-46; COLOR: SUBSTRATE CLEAR W/ #5006 V957 SUBDUED GRAY #3 SURFACE
- GL-5 VISION - FULL COVERAGE FRIT — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VRE 1-46; COLOR: SUBSTRATE CLEAR W/ #3058 VPC2110 FOG GRAY #3 SURFACE, MW-3 INSULATION AND METAL BACK PAN



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ADVENT HEALTH LOUISVILLE
100 HEALTH PARK DRIVE
LOUISVILLE, CO 80027
303.673.1000
www.adventhealth.com

SMITHGROUP
1675 LARIMER STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

Kimley»Horn
6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2307
kimley-horn.com

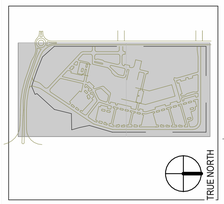
WSP
2000 SOUTH COLORADO BOULEVARD
SUITE 2-1000
DENVER, CO 80222
WWW.WSP.com

ISSUED FOR	DATE
3rd PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN

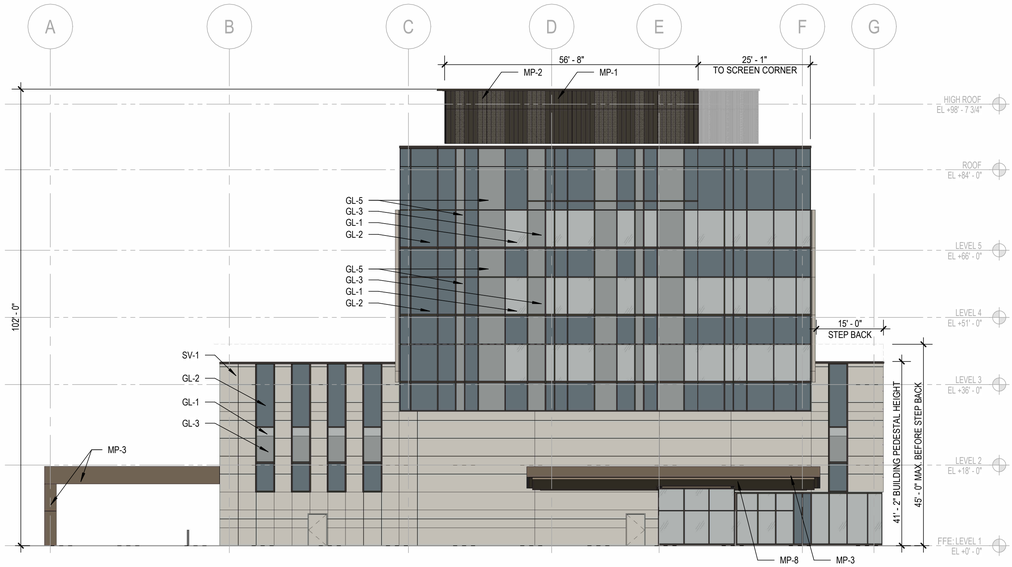


SCALE
As indicated

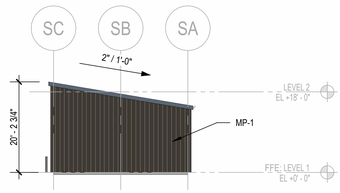
SHEET TITLE
HOSPITAL EXTERIOR ELEVATIONS

PUD SHEET NUMBER	SG SHEET NUMBER
29 OF 39	A-02

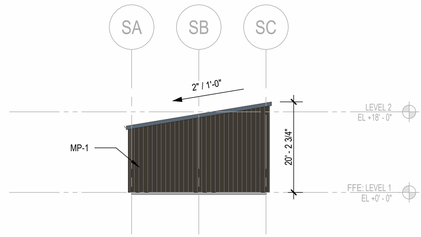
PROJECT NUMBER
15696.00



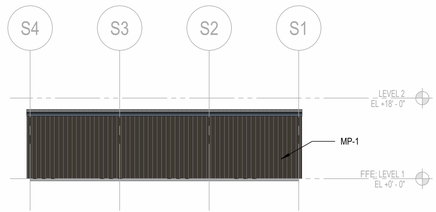
59 SOUTH ELEVATION
SCALE: 1/16" = 1'-0"



26 STORAGE SHED - EAST ELEVATION
SCALE: 1/16" = 1'-0"



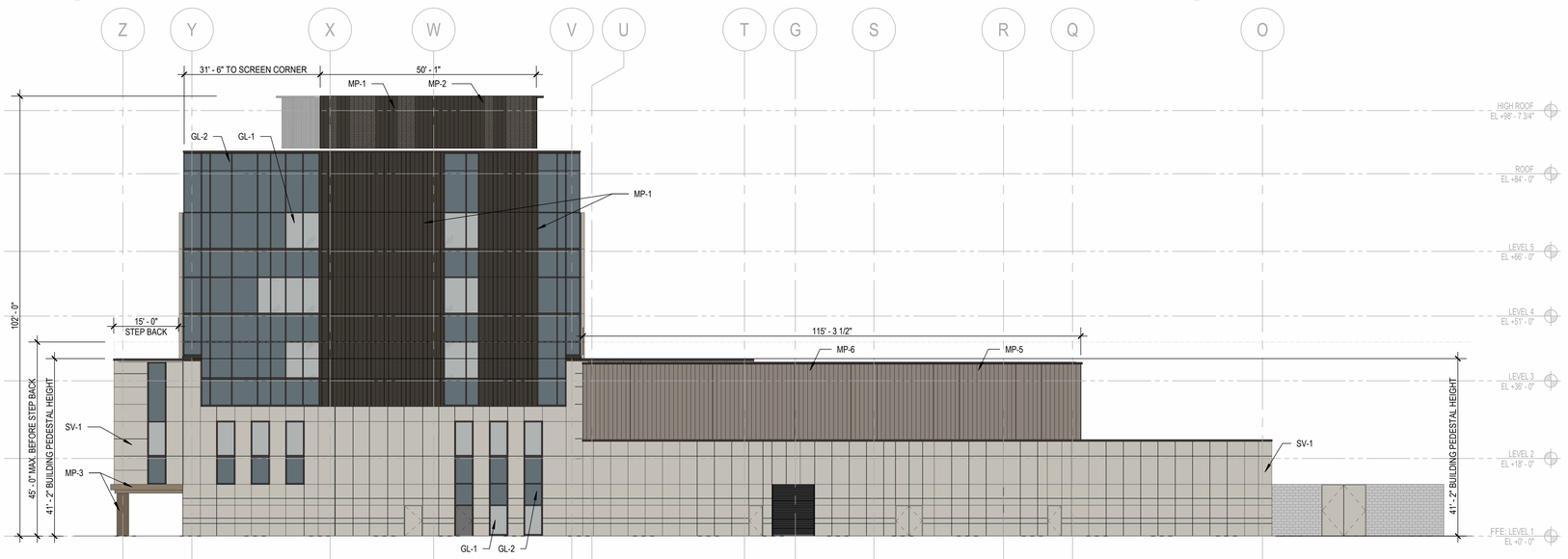
10 STORAGE SHED - WEST ELEVATION
SCALE: 1/16" = 1'-0"



27 STORAGE SHED - NORTH ELEVATION
SCALE: 1/16" = 1'-0"



11 STORAGE SHED - SOUTH ELEVATION
SCALE: 1/16" = 1'-0"

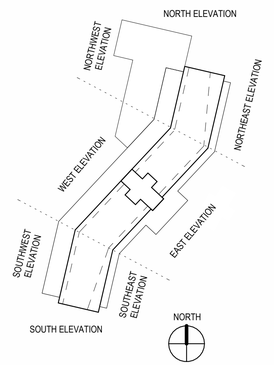


62 NORTH ELEVATION
SCALE: 1/16" = 1'-0"

EXTERIOR MATERIAL LEGEND

BASIS OF DESIGN MATERIALS

- MP-1 SMOOTH METAL PANEL — MORIN MX-0: SPARTAN BRONZE
- MP-2 CORRUGATED METAL PANEL — MORIN MX-1: SPARTAN BRONZE
- MP-3 ALUMINUM COMPOSITE PANEL — ALUCABOND PLUS: DRIFTWOOD MICA
- MP-4 ALUMINUM COMPOSITE PANEL — ALUCABOND PLUS: SERPENTINE METALLIC
- MP-5 SMOOTH METAL PANEL — MORIN MX-0: CHAMPAGNE BRONZE
- MP-6 CORRUGATED METAL PANEL — MORIN MX-1: CHAMPAGNE BRONZE
- MP-7 ALUMINUM BRAKE METAL — BRAKE METAL: PAINTED TO MATCH MULLIONS
- MP-8 METAL SOFFIT PLANKS — LONGBOARD 6" SMOOTH T&G: ROCK ELM
- MP-9 SMOOTH METAL PANEL — MORIN MX-6: SPARTAN BRONZE
- MP-10 FORMED METAL PANEL — MORIN P-9: SPARTAN BRONZE
- SV-1 STONE VENEER - FIELD — PETRARCH: 247 PEWTER, SMOOTH
- SV-2 STONE VENEER - ACCENT — PETRARCH: 247 PEWTER, RIVEN
- GL-1 VISION GLAZING — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VZRE 1-46; COLOR: SUBSTRATE CLEAR
- GL-2 SPANDREL GLAZING — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VRE 1-46; COLOR: SUBSTRATE CLEAR, W/ SUBDUED GRAY SPANDREL AND METAL BACK PAN
- GL-3 VISION - FULL COVERAGE FRIT — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VRE 1-46; COLOR: SUBSTRATE CLEAR W/ #3058 VPC2110 FOG GRAY #3 SURFACE
- GL-4 VISION - DOT PATTERN FRIT — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VZRE 1-46; COLOR: SUBSTRATE CLEAR W/ #5006 V957 SUBDUED GRAY #3 SURFACE
- GL-5 VISION - FULL COVERAGE FRIT — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VRE 1-46; COLOR: SUBSTRATE CLEAR W/ #3058 VPC2110 FOG GRAY #3 SURFACE, MW-3 INSULATION AND METAL BACK PAN



REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT #1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

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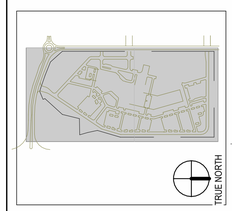
ISSUED FOR	DATE
3rd PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



SCALE

As indicated

SHEET TITLE

HOSPITAL & FACILITIES STORAGE EXTERIOR ELEVATIONS

PUD SHEET NUMBER	SG SHEET NUMBER
30 OF 39	A-03

PROJECT NUMBER

15696.00



ENTRANCE PERSPECTIVE



ED ENTRY PERSPECTIVE



MAIN DROP-OFF PERSPECTIVE



ED ENTRY PERSPECTIVE

REDTAIL RIDGE PUD #6

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LOT #1, BLOCK 2, REDTAIL RIDGE PUD #6
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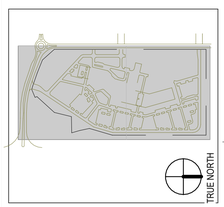
KEYPLAN



SCALE

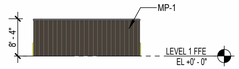
SHEET TITLE

HOSPITAL RENDERINGS

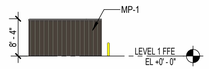
PUD SHEET NUMBER	SG SHEET NUMBER
31 OF 39	A-04

PROJECT NUMBER

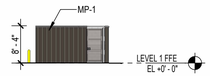
15696.00



8 TRASH ENCLOSURE - BACK ELEVATION
SCALE: 1/16" = 1'-0"



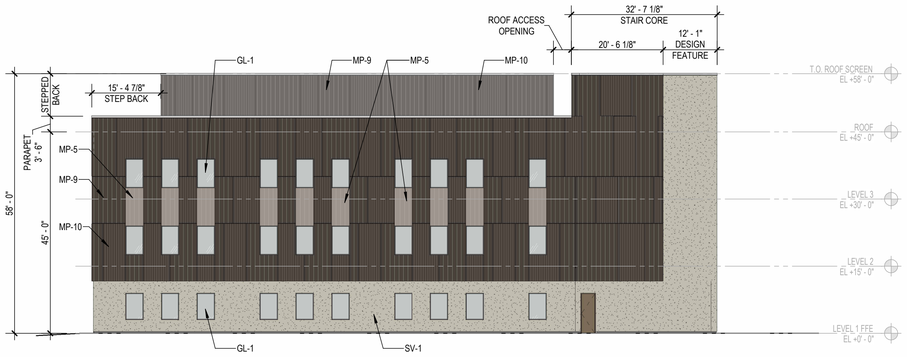
7 TRASH ENCLOSURE - SIDE ELEVATION
SCALE: 1/16" = 1'-0"



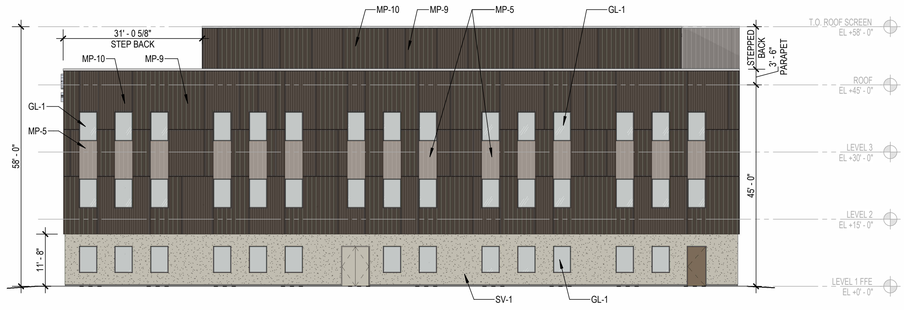
6 TRASH ENCLOSURE - SIDE ELEVATION
SCALE: 1/16" = 1'-0"



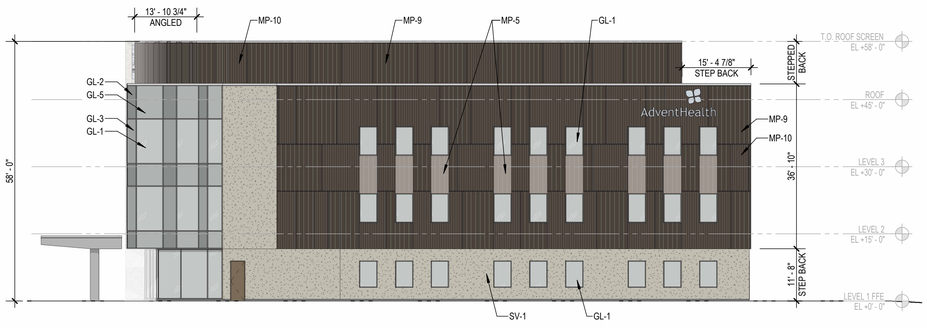
5 TRASH ENCLOSURE - FRONT ELEVATION
SCALE: 1/16" = 1'-0"



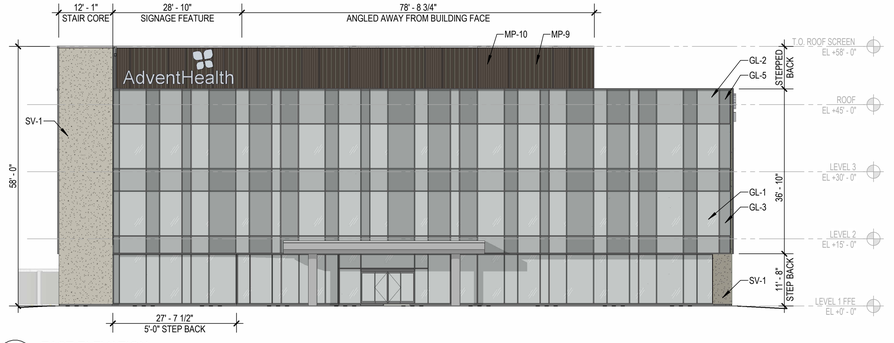
4 SOUTH ELEVATION
SCALE: 1/16" = 1'-0"



3 WEST ELEVATION
SCALE: 1/16" = 1'-0"



2 NORTH ELEVATION
SCALE: 1/16" = 1'-0"



1 EAST ELEVATION
SCALE: 1/16" = 1'-0"

EXTERIOR MATERIAL LEGEND

BASIS OF DESIGN MATERIALS

- MP-1 SMOOTH METAL PANEL — MORIN MX-0: SPARTAN BRONZE
- MP-2 CORRUGATED METAL PANEL — MORIN MX-1: SPARTAN BRONZE
- MP-3 ALUMINUM COMPOSITE PANEL — ALUCABOND PLUS: DRIFTWOOD MICA
- MP-4 ALUMINUM COMPOSITE PANEL — ALUCABOND PLUS: SERPENTINE METALLIC
- MP-5 SMOOTH METAL PANEL — MORIN MX-0: CHAMPAGNE BRONZE
- MP-6 CORRUGATED METAL PANEL — MORIN MX-1: CHAMPAGNE BRONZE
- MP-7 ALUMINUM BRAKE METAL — BRAKE METAL: PAINTED TO MATCH MULLIONS
- MP-8 METAL SOFFIT PLANKS — LONGBOARD 6" SMOOTH T&G: ROCK ELM
- MP-9 SMOOTH METAL PANEL — MORIN MX-6: SPARTAN BRONZE
- MP-10 FORMED METAL PANEL — MORIN P-9: SPARTAN BRONZE
- SV-1 STONE VENEER - FIELD — PETRARCH: 247 PEWTER, SMOOTH
- SV-2 STONE VENEER - ACCENT — PETRARCH: 247 PEWTER, RIVEN
- GL-1 VISION GLAZING — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VZRE 1-46; COLOR: SUBSTRATE CLEAR
- GL-2 SPANDREL GLAZING — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VRE 1-46; COLOR: SUBSTRATE CLEAR, W/ SUBDUED GRAY SPANDREL AND METAL BACK PAN
- GL-3 VISION - FULL COVERAGE FRIT — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VRE 1-46; COLOR: SUBSTRATE CLEAR W/ #3058 VPC2110 FOG GRAY #3 SURFACE
- GL-4 VISION - DOT PATTERN FRIT — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VZRE 1-46; COLOR: SUBSTRATE CLEAR W/ #5006 V957 SUBDUED GRAY #3 SURFACE
- GL-5 VISION - FULL COVERAGE FRIT — TYPE: INSULATING; MANUFACTURER: VIRACON; SERIES: VRE 1-46; COLOR: SUBSTRATE CLEAR W/ #3058 VPC2110 FOG GRAY #3 SURFACE, MW-3 INSULATION AND METAL BACK PAN

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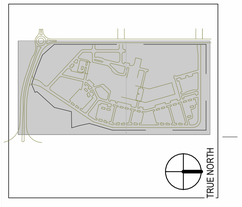
ISSUED FOR	DATE
3rd PUD SUBMITTAL	06MAY2026
2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

KEYPLAN



SCALE
As indicated

SHEET TITLE
MOB EXTERIOR ELEVATIONS

PUD SHEET NUMBER	SG SHEET NUMBER
32 OF 39	A-05

PROJECT NUMBER
15696.01



SOUTHEAST CORNER



ENTRANCE PERSPECTIVE



MAIN DROP-OFF PERSPECTIVE



NORTHWEST CORNER

REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
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SEALS AND SIGNATURES

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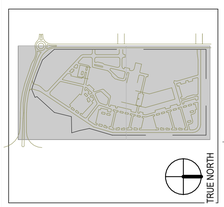
KEYPLAN



SCALE

SHEET TITLE

MOB RENDERINGS

PUD SHEET NUMBER	SG SHEET NUMBER
33 OF 39	A-06

PROJECT NUMBER
15696.01

METAL PANEL MP-1 & MP-5

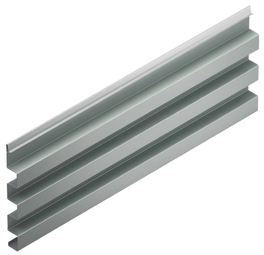


BASIS OF DESIGN: MORIN MX-0 SMOOTH PANEL: SPARTAN BRONZE & CHAMPAGNE BRONZE

MP-1 SPARTAN BRONZE

MP-5 CHAMPAGNE BRONZE

METAL PANEL MP-2 & MP-6

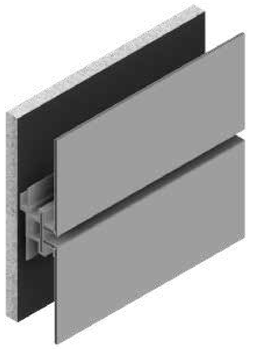


BASIS OF DESIGN: MORIN MX-1 CORRUGATED PANEL: SPARTAN BRONZE & CHAMPAGNE BRONZE

MP-2 SPARTAN BRONZE

MP-6 CHAMPAGNE BRONZE

METAL PANEL MP-3 & MP-4



BASIS OF DESIGN: ALUCOBOND PLUS: DRIFTWOOD MICA & SERPENTINE METALLIC

MP-3 DRIFTWOOD MICA

MP-4 SERPENTINE METALLIC

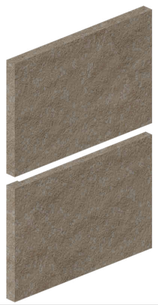
METAL PANEL MP-8



BASIS OF DESIGN: LONGBOARD METAL SOFFIT PLANK 6" SMOOTH T&G: ROCK ELM

MP-8 ROCK ELM

STONE VENEER SV-1 & SV-2



BASIS OF DESIGN: PETRARCH: 247 PEWTER SMOOTH & RIVEN

SV-1 PEWTER SMOOTH

SV-2 PEWTER RIVEN

METAL PANEL MP-9



BASIS OF DESIGN: MORIN MX-6 SMOOTH PANEL: SPARTAN BRONZE

MP-9 SPARTAN BRONZE

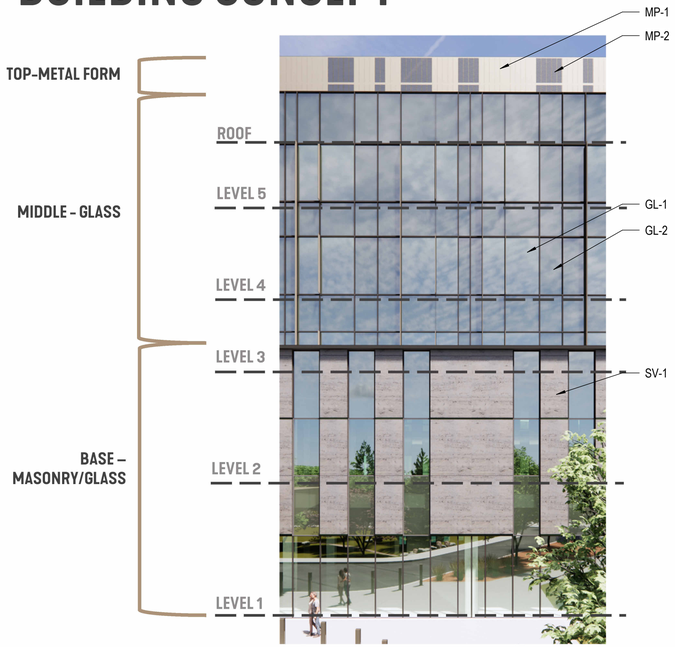
METAL PANEL MP-10



BASIS OF DESIGN: MORIN P-9 FORMED PANEL: SPARTAN BRONZE

MP-10 SPARTAN BRONZE

BUILDING CONCEPT





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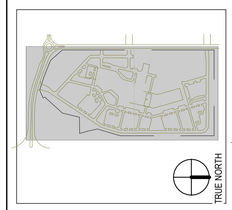


SCALE

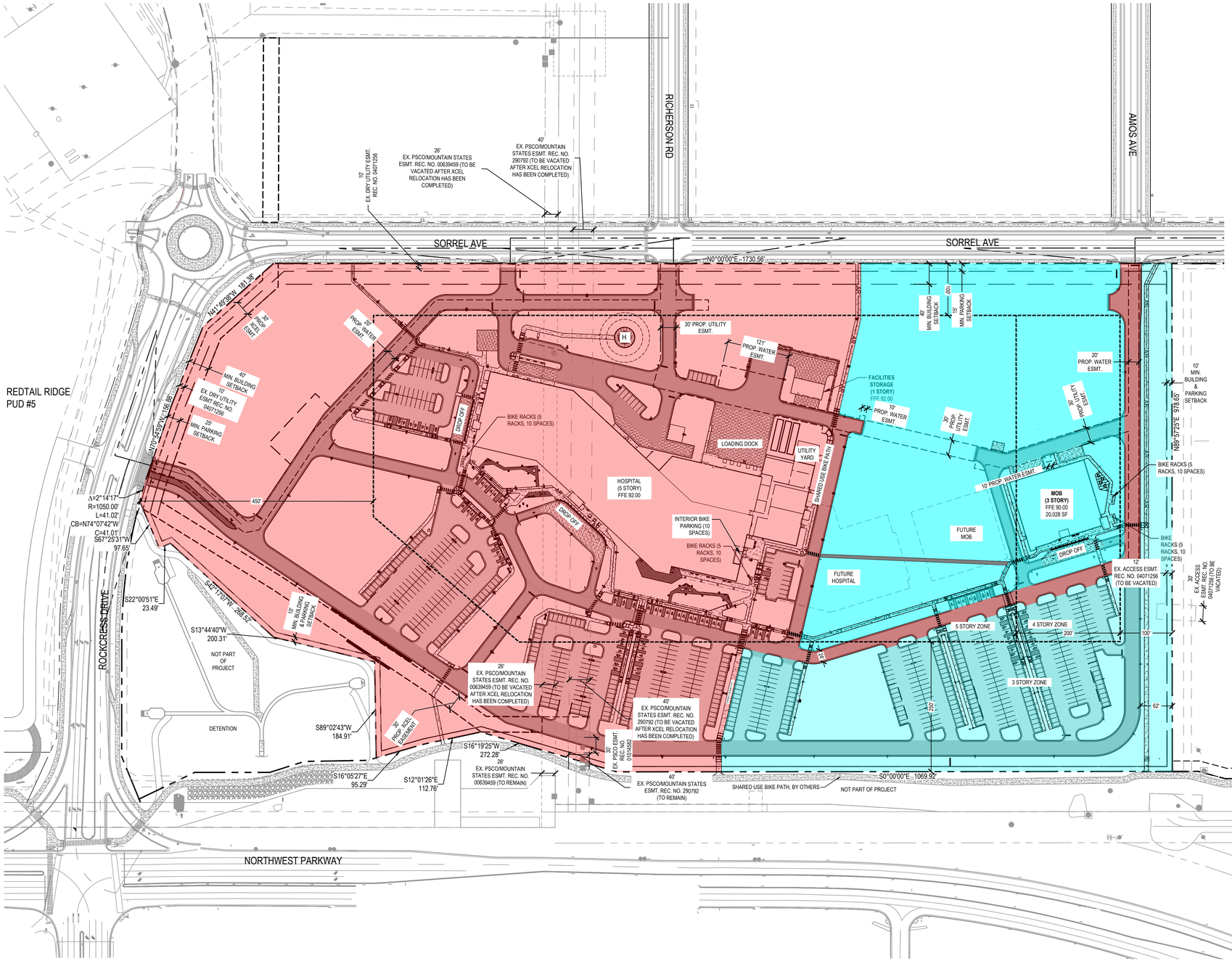
SHEET TITLE

EXTERIOR BUILDING MATERIALS

PUD SHEET NUMBER	SG SHEET NUMBER
34 OF 39	A-07

PROJECT NUMBER

15696.00



PHASING PLAN

- PHASE 1 - HOSPITAL
- PHASE 2 - MOB

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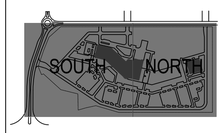


PROJECT NORTH

SCALE

GRAPHIC SCALE IN FEET
0 50 100 200

SHEET TITLE

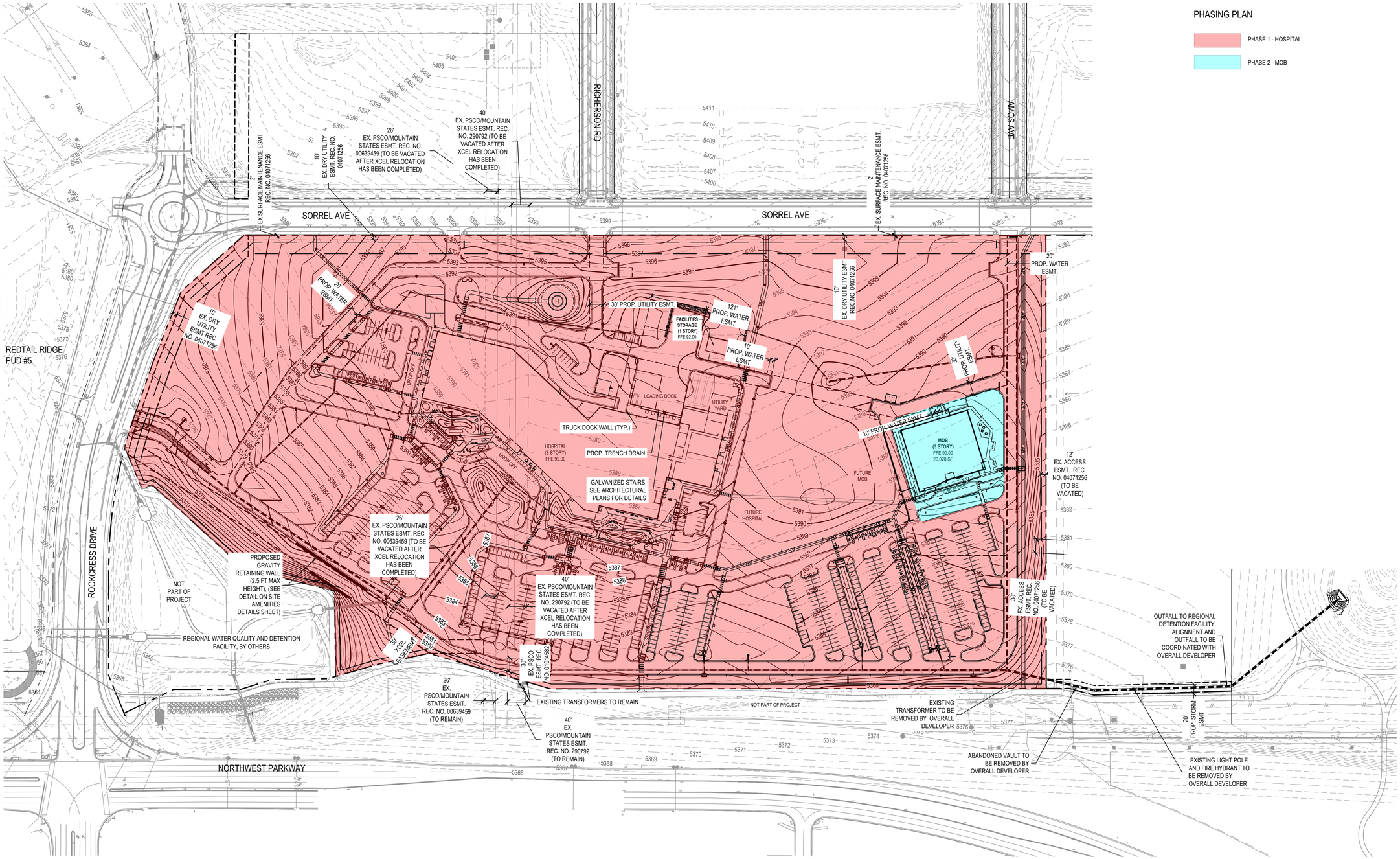
OVERALL SITE PHASING PLAN

PUD SHEET NUMBER	SG SHEET NUMBER
35 of 39	PH-01

PROJECT NUMBER 196315001

811 Know what's **below.** **Call** before you dig.

Plot Date:



PHASING PLAN

- PHASE 1 - HOSPITAL
- PHASE 2 - MOB

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SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

Kimley»Horn

6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2300
kimley-horn.com

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2nd PUD SUBMITTAL	10FEB2026
1st PUD SUBMITTAL	17NOV2025

SEALS AND SIGNATURES

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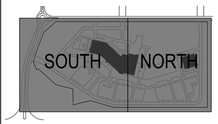

PROJECT NORTH

SCALE

GRAPHIC SCALE IN FEET
0 50 100 200

SHEET TITLE

OVERALL GRADING PHASING PLAN

PUD SHEET NUMBER	SG SHEET NUMBER
36 of 39	PH-02

PROJECT NUMBER 196315001

811 Know what's **below.** **Call** before you dig.

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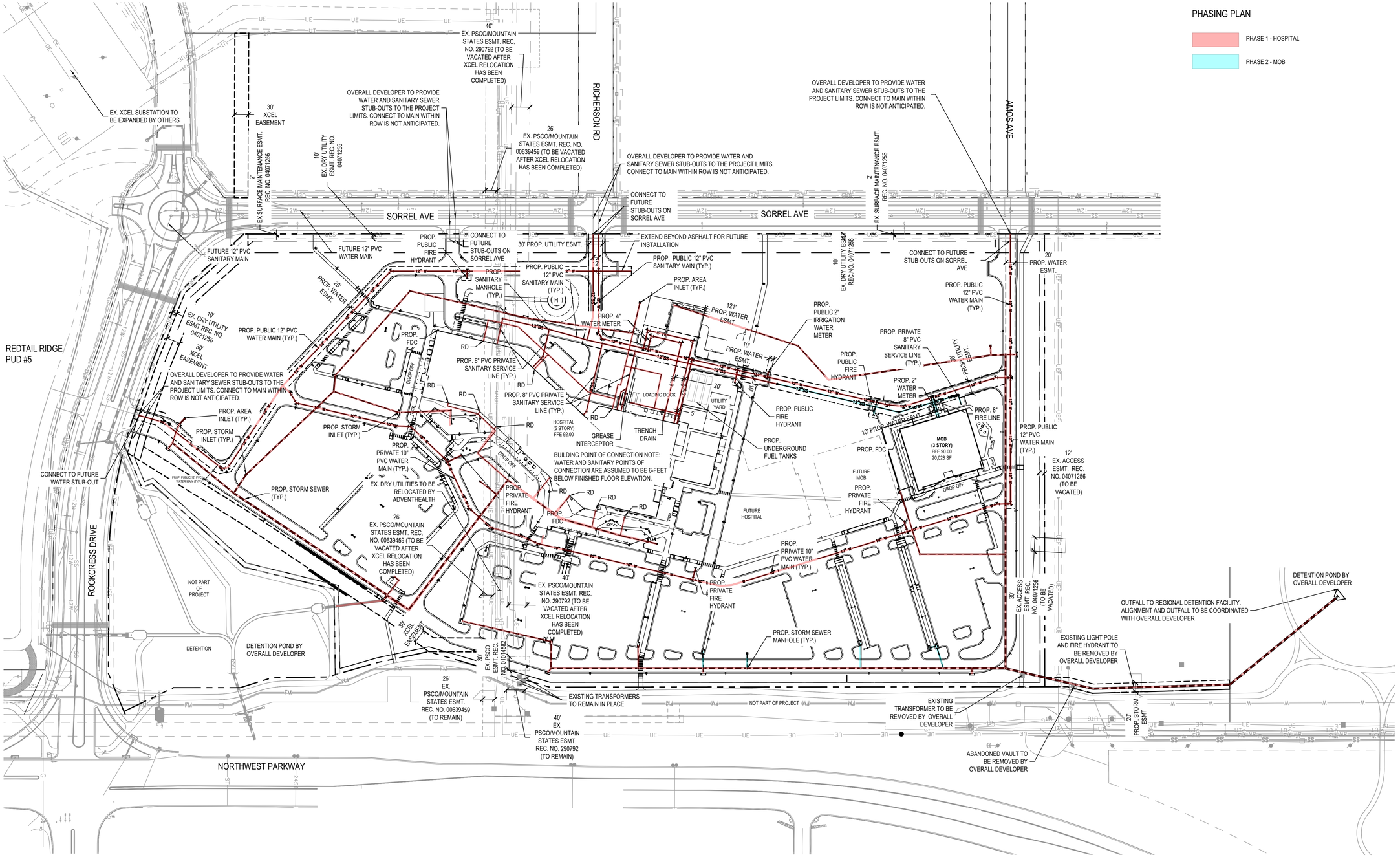

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REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT # 1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

SMITHGROUP
1675 LARIMER STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

Kimley»Horn
6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2300
kimley-horn.com

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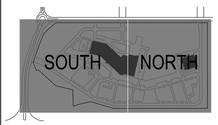

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SHEET TITLE

OVERALL UTILITY PHASING PLAN

PUD SHEET NUMBER	SG SHEET NUMBER
37 of 39	PH-03

PROJECT NUMBER 196315001

Keynote Legend

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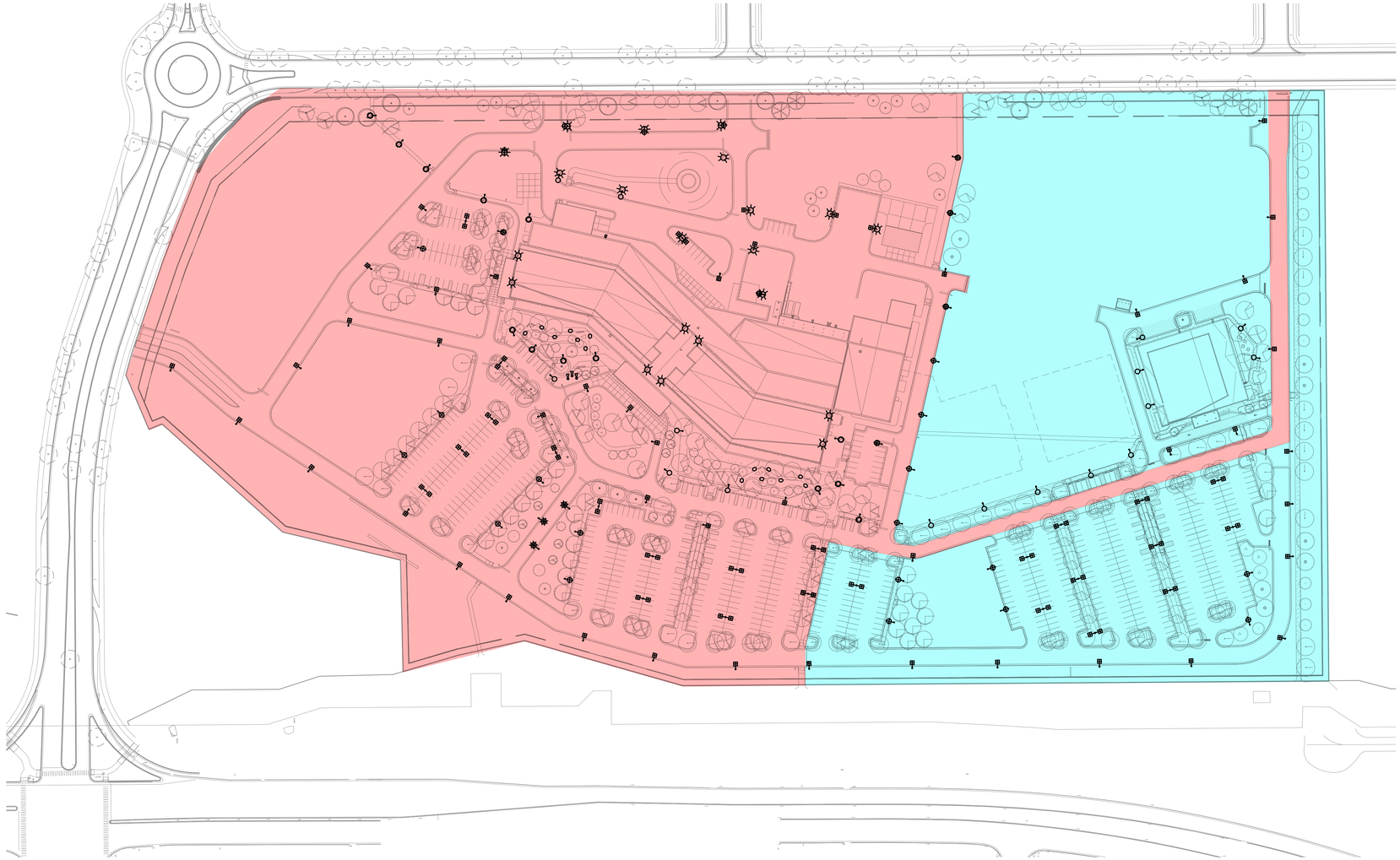
S3A - 5 FIXTURES
S5A - 1 FIXTURE
TOTAL - 6 FIXTURES



1 SITE PLAN - LIGHTING
1" = 100'-0"

PHASING PLAN

PHASE 1 - HOSPITAL

PHASE 2 - MOB

REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
LOT #1, BLOCK 2, REDTAIL RIDGE PUD #6
CITY OF LOUISVILLE, COUNTY OF BOULDER, COLORADO
CASE #

ADVENT HEALTH LOUISVILLE
100 HEALTH PARK DRIVE
LOUISVILLE, CO 80027
303.673.1000
www.adventhealth.com

SMITHGROUP
1675 LARIMER STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

Kimley»Horn
6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2307
kimley-horn.com

WSP
2000 SOUTH COLORADO BOULEVARD
SUITE 2-1000
DENVER, CO 80222
WWW.WSP.com

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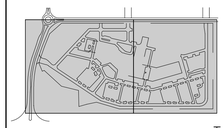

TRUE NORTH

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1" = 100'-0"

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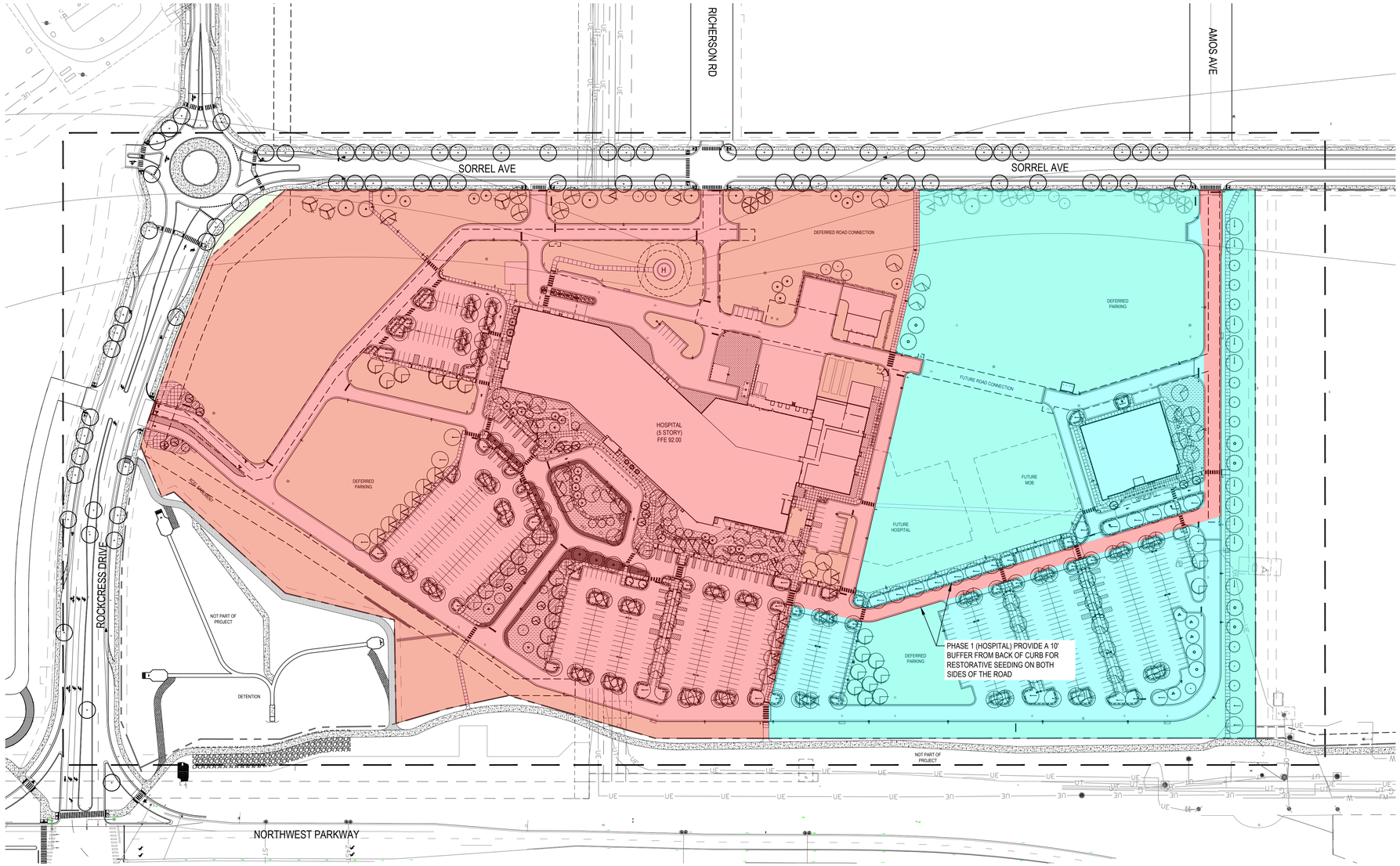
OVERALL LIGHTING PHASING PLAN - 100

PUD SHEET NUMBER	SG SHEET NUMBER
39 OF 39	PH-05

PROJECT NUMBER
15696.00



LEGEND

- PERENNIALS
- LOW SHRUBS
- ORNAMENTAL GRASS/PERENNIALS MIX
- SHORT GRASS PRAIRIE
- ENHANCED SHORT GRASS PRAIRIE
- 4' HT. DECORATIVE FENCE
- BENCH
- BIKE RACK
- LITTER/RECYCLING
- BOLLARDS
- BOULDER

PHASING PLAN

- PHASE 1 - HOSPITAL
- PHASE 2 - MOB

REDTAIL RIDGE PUD #6

PLANNED UNIT DEVELOPMENT AND SPECIAL REVIEW USE
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CASE #

SMITHGROUP

1675 LARIMER STREET
SUITE 500
DENVER, CO 80202
303.832.3272
smithgroup.com

Kimley»Horn

6200 SOUTH SYRACUSE WAY
SUITE 300
GREENWOOD VILLAGE, CO 80111
303.228.2307
kimley-horn.com

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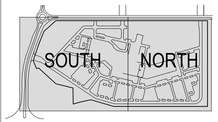


PROJECT NORTH

SCALE

0' 50' 100' 200'

SCALE: 1"=100'

SHEET TITLE

OVERALL LANDSCAPE PHASING PLAN

PUD SHEET NUMBER	SHEET ID
39 of 39	PH-04

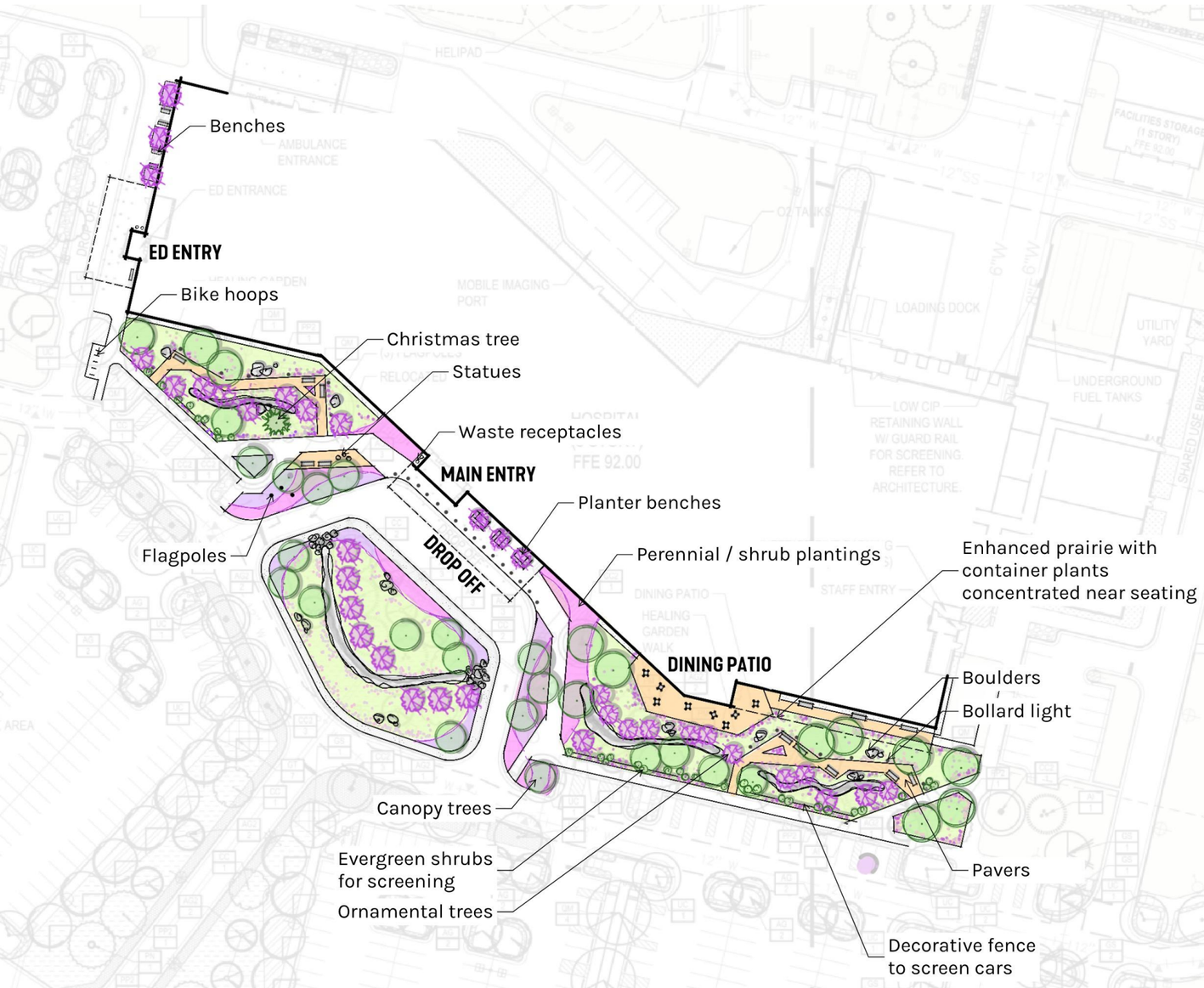
PROJECT NUMBER 15696

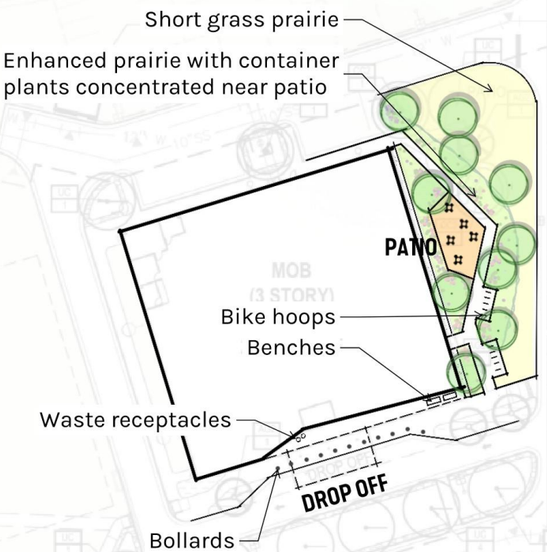
REDTAIL RIDGE PUD #6

Plot Date:

ADVENT HEALTH LOUISVILLE

OUTDOOR AMENITY SPACES





N

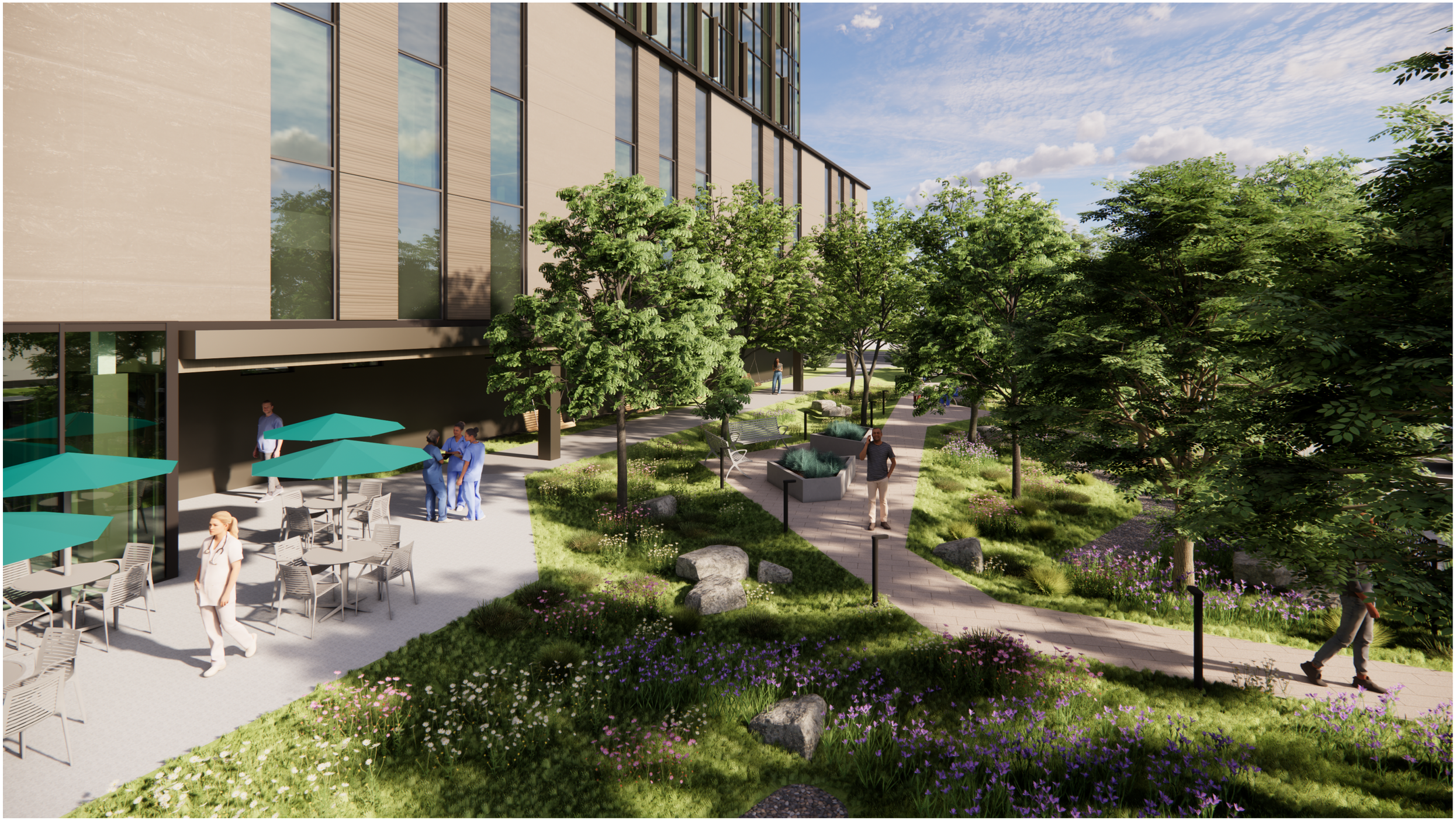
ADVENT HEALTH LOUISVILLE

OUTDOOR AMENITY SPACES



ADVENT HEALTH LOUISVILLE

OUTDOOR AMENITY SPACES



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OUTDOOR AMENITY SPACES



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OUTDOOR AMENITY SPACES



ADVENT HEALTH LOUISVILLE

OUTDOOR AMENITY SPACES



ADVENT HEALTH LOUISVILLE

OUTDOOR AMENITY SPACES



TRAFFIC IMPACT STUDY

AdventHealth Louisville

City of Louisville, Colorado

Prepared for:

SmithGroup

Kimley»Horn

T R A F F I C I M P A C T S T U D Y

AdventHealth Louisville

City of Louisville, Colorado

Prepared for
SmithGroup
1675 Larimer Street
Suite 500
Denver, Colorado 80202

Prepared by
Tanner J. Daines, PE
Kimley-Horn and Associates, Inc.
6200 South Syracuse Way
Suite 300
Greenwood Village, Colorado 80111
(303) 228-2300



January 2026

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1.0 EXECUTIVE SUMMARY

AdventHealth Louisville is proposed to be located on the northwest corner of the Via Varra & Northwest Parkway intersection in Louisville, Colorado. At full buildout, the project is proposed to include a hospital and additional medical office buildings totaling approximately 800,000 square feet. By approximately the 2030 horizon, Phase 1 of the hospital and medical office buildings is expected to be complete. It is understood that Phase 1 will include an approximate 371,600 square-foot hospital (with 153 beds, 30 of which will be shelled for later use) and approximately 62,000 square feet of medical office space. To be conservative, Phase 1 traffic analysis was conducted assuming up to 200 beds would be available in the hospital while up to 80,000 square feet of medical office building uses was also assumed. For purposes of this study, full buildout of this site is expected to be complete by approximately 2040. At full buildout, it is understood the site will provide an approximately 639,600 square-foot hospital with a total of 300 beds while medical office buildings onsite are expected to total approximately 160,000 square feet. Based on coordination with the City of Louisville staff, the initial 2030 short-term Phase 1 horizon was analyzed, while the 2040 buildout horizon was also analyzed. At the request of City staff, the major intersections in the study area were also analyzed for the twenty-year 2045 long-term traffic conditions.

The purpose of this traffic study is to identify project traffic generation characteristics to determine potential project traffic related impacts on the local street system and to develop the necessary mitigation measures required for the identified traffic impacts. The following existing and future intersections were incorporated into this traffic study based on the City of Louisville, Colorado requested scope:

- Campus Drive & Sorrel Avenue (#1) – Future Intersection
- Campus Drive & 96th Street (#2)
- 96th Street/Via Varra & Northwest Parkway (#3)
- Rockcress Drive & Sorrel Avenue (#4) – Future Intersection
- Rockcress Drive/Via Varra & Northwest Parkway (#5)

In addition, the proposed full movement access on the north side of Rockcress Drive and the proposed three full movement accesses on the east side of Sorrel Avenue were also evaluated. The access along Rockcress Drive is anticipated to be located approximately 775 feet to the west

of the Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection, measured center to center; a future south leg at this location is also proposed when development to the south of Rockcress Drive occurs. The two northernmost accesses on Sorrel Avenue are anticipated to align with two future accesses on the west side of Sorrel Avenue, creating two four-leg intersections. The third and southernmost access is expected to operate as a 'T'-intersection.

Regional access to the site will be provided by US-36, US-287, and Northwest Parkway, while primary access to the site will be provided by US-36, 96th Street, and Northwest Parkway. Direct access to the site will be provided by one full movement access on the north side of Rockcress Parkway to the west of Northwest Parkway, and three full movement accesses along the east side of Sorrel Avenue.

In the 2030 Phase 1 buildout, AdventHealth Louisville is expected to generate approximately 6,268 weekday daily trips, with 474 of these trips occurring during the morning peak hour and 557 of these trips occurring during the afternoon peak hour. With full buildout of the site by 2040, the project is anticipated to generate 10,632 weekday daily trips, with 772 of these trips occurring during the morning peak hour and 970 of these trips occurring during the afternoon peak hour.

Based on the analysis presented in this report, Kimley-Horn believes AdventHealth Louisville will be successfully incorporated into the existing and future roadway network. There is an existing AdventHealth hospital located at the intersection of Campus Drive and 88th Street approximately 1.25 miles to the west of this proposed site. This existing site includes approximately 400,000 square feet of hospital/medical office building uses and is approved with an expansion of an additional 350,000 square feet to include up to 750,000 square feet at full buildout. The currently proposed AdventHealth site within the Redtail Ridge development area is expected to include up to 799,600 square feet of hospital/medical office building uses. As such, this increase of 49,600 square feet of additional uses with relocation of the existing hospital with approved expansion to the new site is expected to result in approximately 658 additional weekday daily trips, with 47 more trips during the morning peak hour and 61 more trips during the afternoon peak hour compared to the traffic the existing site could generate. This results in approximately one additional vehicle every 75 seconds during the morning peak hour and one additional vehicle every minute (60 seconds) during the afternoon peak hour on the surrounding street network compared to the existing project site. This study assessed the additional improvements that could

be needed due to the additional square footage of this proposed site, and any vehicle rerouting that could occur with the site being located further to the east. Analysis of the existing street network, the proposed project development, and expected traffic volumes resulted in the following recommendations:

2030 Recommendations

All offsite transportation recommendations identified as being needed within this horizon are consistent with the findings of the master traffic study. Those improvements are already being proposed and constructed to serve the entire development area. As such, the following outlines the recommendations found to be needed by the 2030 horizon:

- The Campus Drive & Sorrel Avenue (#1) intersection is anticipated to be constructed prior to AdventHealth Louisville construction. Based on currently proposed construction plans, it will be a 'T'-roundabout controlled intersection, with eastbound Campus Drive operating with a shared through/right turn lane, westbound Campus Drive providing separate left and through lanes, and the northbound Sorrel Avenue approach providing one lane for shared left/right turning movements. R1-2 "YIELD" signs should be posted on all three approaches to the roundabout.
- The Campus Drive & 96th Street (#2) intersection is anticipated to become a signalized 'T'-intersection with full movements allowed by the 2030 horizon prior to AdventHealth construction. For purposes of this study, the eastbound Campus Drive approach was based on the proposed construction plans, which would have dual continuous eastbound left turn lanes and a separate right turn lane approximately 500 feet in length. The northbound 96th Street approach was conservatively assumed to provide a single 200-foot left turn lane and two through lanes in this horizon. However, at full buildout based on construction plans, it is anticipated to provide dual left turn lanes and three through lanes northbound. The southbound 96th Street approach should provide two through lanes and a 200-foot right turn lane.
- The 96th Street/Via Varra & Northwest Parkway (#3) intersection may require extension of the eastbound right turn lane from 375 feet to approximately 475 feet by this horizon to meet expected vehicle queues. However, if not improved, it is believed any additional vehicles can safely queue in the southernmost eastbound through lane if these queues are experienced.
- The future Rockcress Drive & Sorrel Avenue (#4) intersection is proposed to be constructed as a four-leg roundabout prior to AdventHealth construction. The eastbound, northbound, and

southbound approaches are all expected to provide one approach lane for shared left/through/right turning movements, while the westbound approach would provide a shared left/through lane and a separate right turn lane. Each approach should provide R1-2 “YIELD” signs on approach to the intersection.

- The Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection is expected to be improved on the eastbound approach to the intersection with dual left turn lanes, one of which would provide 400 feet in length while the other would be a continuous turn lane. These improvements are based on the currently proposed improvement plans. Although it is understood that three southbound through lanes are eventually proposed at this intersection, it was conservatively analyzed with the existing two southbound through lanes during this horizon.

The following recommendations are specific to accesses proposed for Phase 1 of the AdventHealth Louisville Hospital Campus to be constructed by the development:

- Two full movement accesses are proposed along the east side of Sorrel Avenue that will align with two proposed accesses on the west side of Sorrel Avenue. R1-1 “STOP” signs are proposed on the eastbound and westbound approaches to Sorrel Avenue at both accesses. These accesses should operate well with one approach lane for shared left/through/right turning movements. The northbound and southbound approaches of Sorrel Avenue to both accesses are recommended to provide 150-foot left turn lanes and shared through/right turn lanes.
- A third full movement access along the east side of Sorrel Avenue is also proposed, which is anticipated to be constructed as a ‘T’-intersection. An R1-1 “STOP” sign should be constructed on the westbound approach for vehicles exiting the site. A southbound left turn lane 150 feet in length should also be provided.
- The primary access into the proposed site is anticipated to be along Rockcress Drive, approximately 775 feet to the west of Northwest Parkway, measured center to center. This intersection is anticipated to operate well under minor street stop control through the 2030 horizon with Phase 1 construction of AdventHealth Louisville. The Rockcress Access (#8) is recommended to provide a 150-foot left turn lane, one through lane, and one shared through/right turn lane along both eastbound and westbound Rockcress Drive. The northbound approach to the intersection is anticipated to operate well with one lane for shared left/through/right turning movements while the southbound approach exiting the hospital

should provide a 200-foot left turn lane and a separate through/right lane. Of note, dual southbound left turn lanes are recommended at this access at full buildout and as such, it is recommended that pavement width be provided for the future second left turn lane, but that it be striped out with chevron striping to allow only one southbound left turn lane until full buildout of the hospital site. During this horizon, R1-1 "STOP" signs should be posted on the northbound and southbound approaches.

2040 & 2045 Recommendations

The offsite transportation recommendations identified in the 2040 and 2045 horizons are also consistent with the findings of the master traffic study. All of the improvements identified herein are anticipated to result in the study intersections and surrounding street network operating acceptably in both the 2040 and 2045 horizons. The improvements already being proposed and constructed to serve the entire development area as follows:

- By the 2040 horizon, it was assumed that the Campus Drive & 96th Street (#2) intersection would provide dual northbound left turn lanes 200 feet in length while a third northbound through lane would also be provided. This third northbound through lane would provide the third required receiving lane for the proposed triple northbound left turn lanes at Northwest Parkway just to the southeast.
- The 96th Street/Via Varra & Northwest Parkway (#3) intersection is anticipated to provide triple northbound left turn lanes on Northwest Parkway and triple eastbound left turn lanes on 96th Street based on proposed improvement plans. For purposes of this study, the third northbound left turn lane was assumed to provide 600 feet in length while the third eastbound left turn was assumed to provide 250 feet in length. It should be noted the third eastbound left turn lane will require three receiving lanes on Northwest Parkway to the north of this intersection.
- The Rockcress Parkway/Via Varra & Northwest Parkway (#5) intersection should provide three southbound through lanes by this horizon.

The following identified improvements are recommended in association with development of full buildout of the AdventHealth Louisville hospital and medical campus. These improvements are in addition to improvements already being planned and constructed.

- To meet expected vehicle queues, the inner northbound left turn lane at the Rockcress Parkway/Via Varra & Northwest Parkway (#5) intersection may need to be extended from 250

feet to 375 feet to meet expected vehicle queues. It is believed this northbound left turn lane extension can be accomplished with minor median reconstruction.

- With full buildout of the AdventHealth site, the Rockcress Access (#8) is recommended to be signalized and is expected to meet warrants for signalization. When signalized, the southbound approach exiting the hospital is recommended to be improved to provide dual left turn lanes 200 feet in length, with the westernmost left turn lane also providing through movement, while a separate right turn lane should be provided.

General Recommendations

- Any onsite or offsite improvements should be incorporated into the Civil Drawings and conform to standards of the City of Louisville and the Manual on Uniform Traffic Control Devices (MUTCD) – 11th Edition, 2023.

2.0 INTRODUCTION

Kimley-Horn has prepared this report to document the results of a Traffic Impact Study for AdventHealth Louisville proposed to be located on the northwest corner of the Via Varra and Northwest Parkway intersection in the City of Louisville, Colorado. A vicinity map illustrating the project development location is shown in **Figure 1**. At full buildout, the project is proposed to include a hospital and additional medical office buildings totaling approximately 800,000 square feet. By approximately the 2030 horizon, Phase 1 of the hospital and medical office buildings is expected to be complete. It is understood that Phase 1 will include an approximate 371,600 square-foot hospital (with 153 beds, 30 of which will be shelled for later use) and approximately 62,000 square feet of medical office space. To be conservative, Phase 1 traffic analysis was conducted assuming up to 200 beds would be available in the hospital while up to 80,000 square feet of medical office building uses was also assumed. For purposes of this study, full buildout of this site is expected to be complete by approximately 2040. At full buildout, it is understood the site will provide an approximately 639,600 square-foot hospital with a total of 300 beds while medical office buildings onsite are expected to total approximately 160,000 square feet. A conceptual plan for the site is attached in **Appendix A**. Based on coordination with the City of Louisville staff, the initial 2030 short-term Phase 1 horizon was analyzed, while the 2040 buildout horizon was also analyzed. At the request of City staff, the major intersections in the study area were also analyzed for the twenty-year 2045 long-term traffic conditions.

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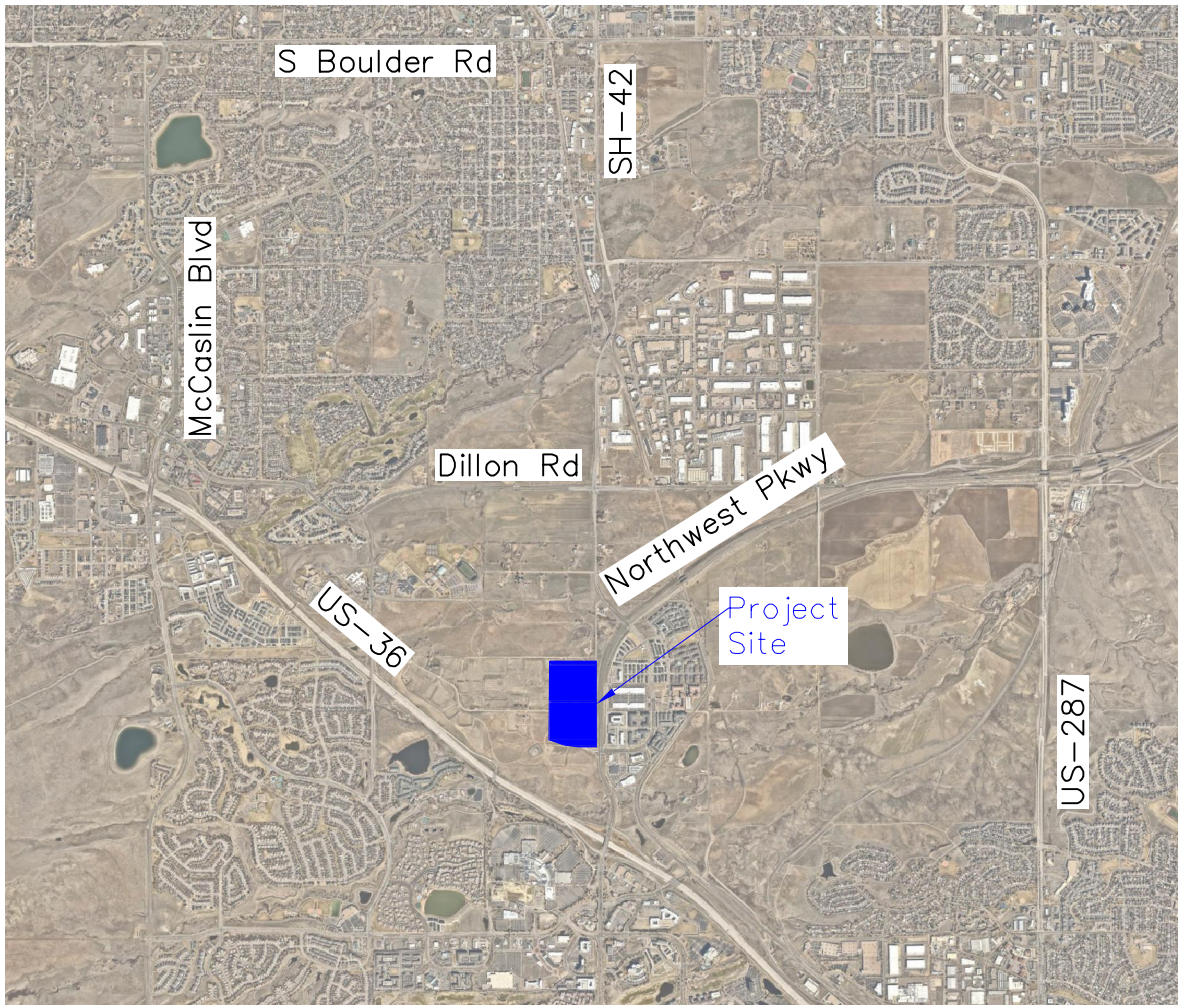


FIGURE 1
AdventHealth Louisville
Louisville, Colorado
Vicinity Map

3.0 EXISTING AND FUTURE CONDITIONS

3.1 Existing Study Area

The existing site is comprised of vacant land. The site is part of a larger future development known as Redtail Ridge, which is expected to include several other uses, including industrial/manufacturing, general office space, research/development buildings, and some local retail uses as well. The North Metro Fire Rescue Station 67 is located just to the north of the project site. The broader vicinity is generally comprised of additional vacant land, with Monarch High School to the northwest, and some additional retail/residential uses to the east and south of the site.

3.2 Existing and Proposed Roadway Network

Northwest Parkway is a divided highway that extends in the north/south direction adjacent to the study area and provides two continuous through lanes in each direction with acceleration and deceleration lanes provided at the intersections with 96th Street/Via Varra to the north and Via Varra to the south. The posted speed limit in this area is 45 miles per hour.

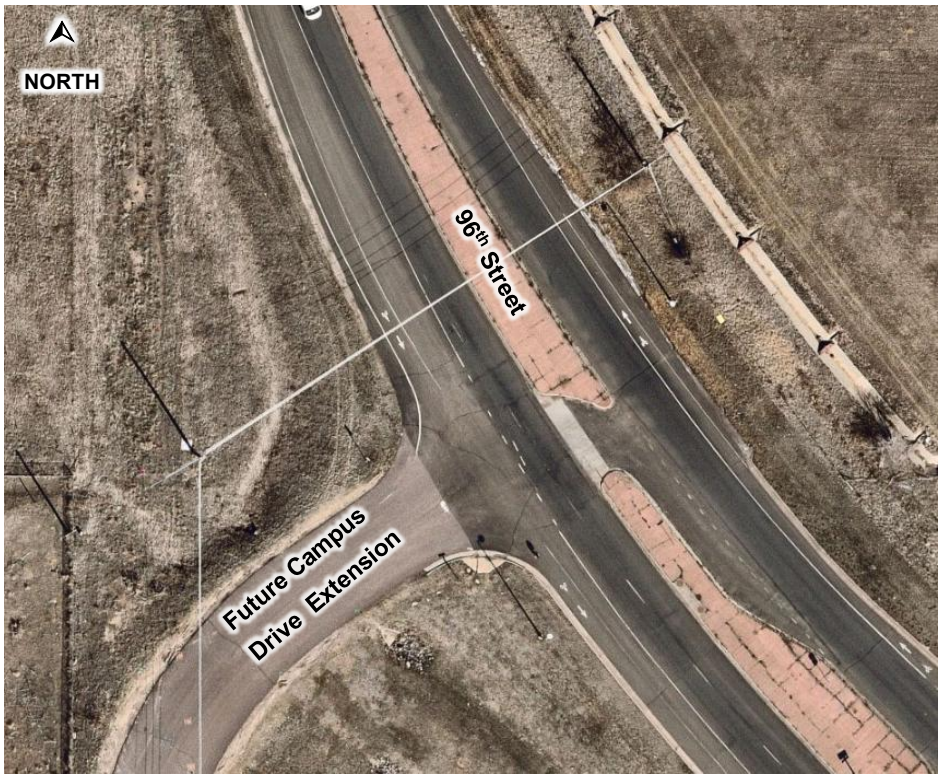
96th Street generally exists in the north/south direction, but it connects to Northwest Parkway with vehicles traveling eastbound/westbound. Two through lanes are provided in each direction nearest to the study area, which soon reduces to one through lane in each direction further to the north. The posted speed limit is 40 miles per hour within the study area. Via Varra loops from the intersection of Northwest Parkway and 96th Street/Via Varra and again connects to Northwest Parkway approximately 0.60 miles further to the south. Two through lanes are provided in each direction and the posted speed limit is 35 miles per hour.

Sorrel Avenue is proposed to be a north/south roadway with one through lane in each direction, approximately 1,150 feet to the west of Northwest Parkway. Rockcress Drive is proposed to be the west leg of the Northwest Parkway & south Via Varra (#5) intersection. Two through lanes in each direction along Rockcress Drive are anticipated to be provided between Sorrel Avenue and Northwest Parkway, and one through lane in each direction to the west of Sorrel Avenue.

Campus Drive is proposed to exist along the northern side of the project, traveling in the east/west direction. It is anticipated that two through lanes will exist to the east of Sorrel Avenue within the

study area, while just to the west of Sorrel Avenue one lane in each direction will be provided. A roundabout is proposed to be constructed at the future intersections of Campus Drive & Sorrel Avenue (#1) as well as at Rockcress Drive & Sorrel Avenue (#4). Based on current project understanding, the initial phases of other Redtail Ridge development will be constructed prior to Phase 1 of AdventHealth Louisville development. As such, for purposes of this study it is assumed that Campus Drive, Rockcress Drive, and Sorrel Avenue will be constructed prior to the 2030 short-term horizon.

The existing 'T'-intersection just to the north of the North Metro Fire Rescue Station 67 is a ¾-movement intersection. This location is proposed to become the connection point for the Campus Drive extension, which is anticipated to be completed prior to Phase 1 of AdventHealth development. When this extension is complete, it is understood this 'T'-intersection will become a full movement signalized intersection. The existing northbound 96th Street approach provides a left turn lane and one through lane while the southbound 96th Street approach provides a shared through/right turn lane. The existing minor street approach is restricted to right-out only movements. An aerial photo of the existing intersection configuration is provided below.



Future Campus Drive & 96th Street (#1)

The existing signalized intersection of 96th Street/Via Varra & Northwest Parkway (#2) operates with protected-only left turn phasing on all four approaches to the intersection. Each of the four approaches provide dual left turn lanes, two through lanes, and a right turn lane, with the right turning movements operating with free turning movement in channelized right turn lanes. For purposes of this study, Northwest Parkway was identified to be the northbound/southbound approach to the intersection while 96th Street is the eastbound approach and Via Varra is the westbound approach. An aerial photo of the existing intersection configuration is provided below.



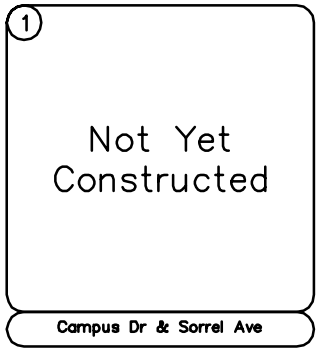
96th Street/Via Varra & Northwest Parkway (#2)

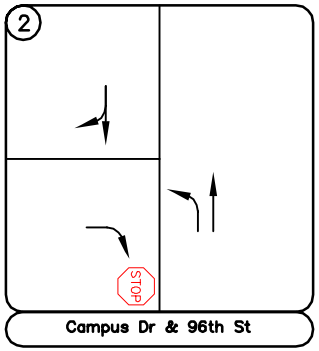
The Via Varra & Northwest Parkway (#5) intersection is signalized and operates with protected-only left turn phasing on all four approaches to the intersection. The northbound and southbound approaches to the intersection provide dual left turn lanes, two through lanes, and a right turn lane. The southbound right turning movement is channelized and operates with yield control. The eastbound approach operates with dual left turn lanes, one through lane, and a channelized right turn lane—that opens from the eastbound through lane just prior to the intersection—operates with free movement. The westbound approach provides dual left turn lanes, one through lane, and a shared through/right turn lane. An aerial photo of the existing intersection configuration is below.

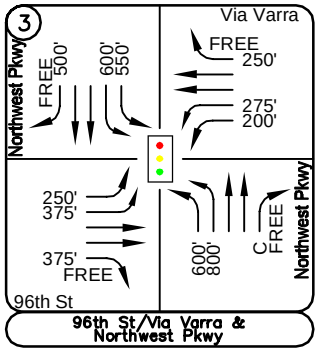


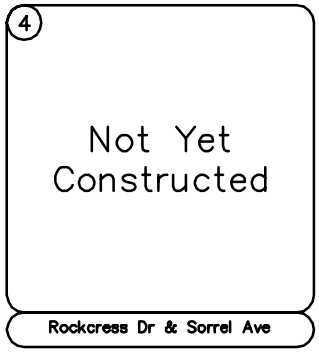
Via Varra & Northwest Parkway (#3)

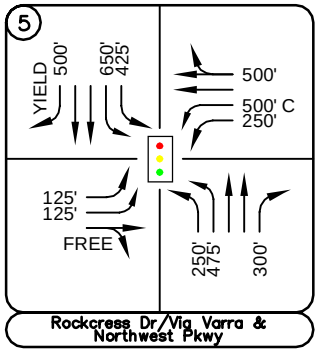
The intersection lane configuration and control for the existing study area intersections are shown in **Figure 2**.

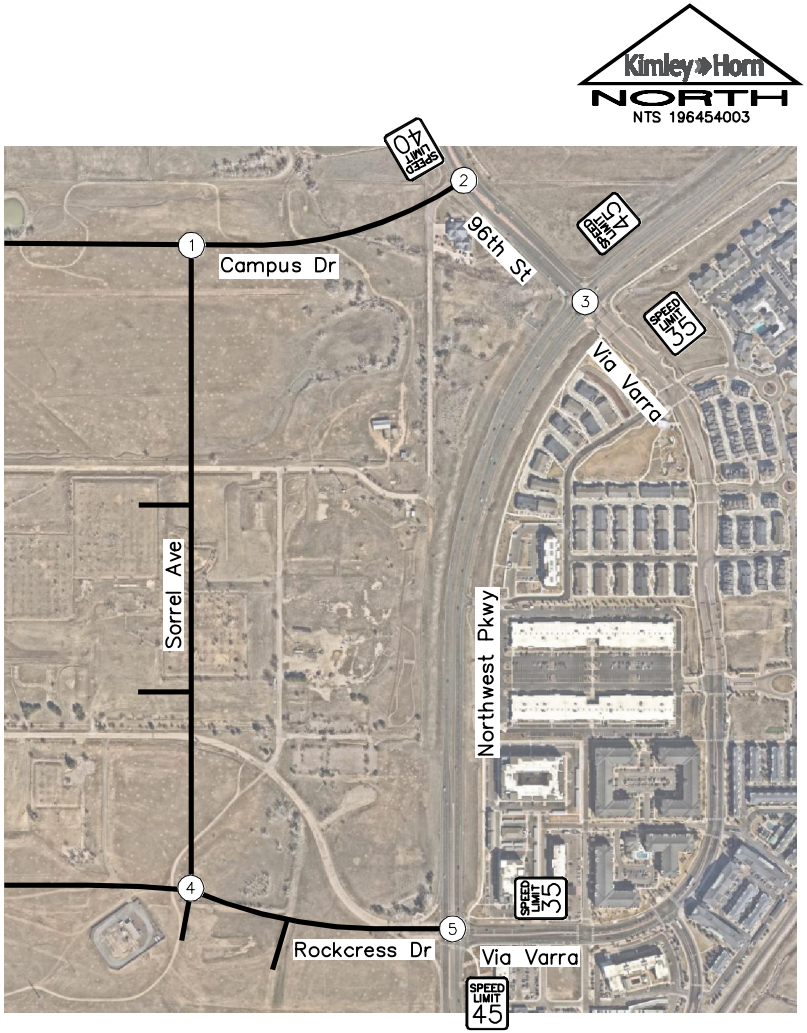












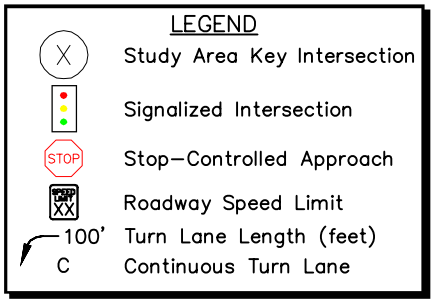


FIGURE 2
AdventHealth Louisville
Louisville, Colorado
Existing Geometry and Control

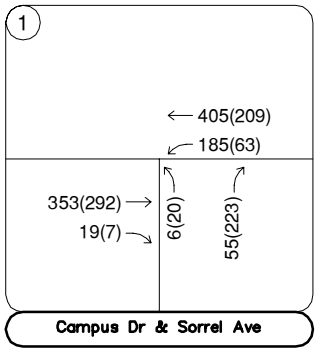
Kimley»Horn

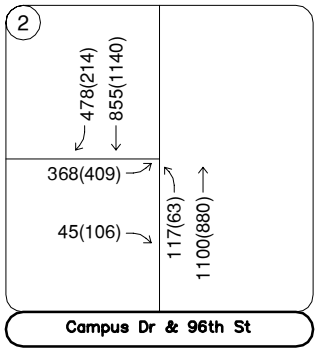
3.3 Future Traffic Volumes and Unspecified Development Traffic Growth

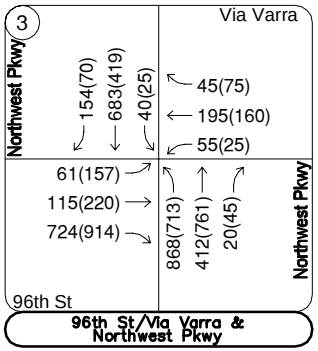
Future projected traffic volumes used in this study were based on the Redtail Ridge Traffic and Mobility Study completed by Fox Tuttle Transportation Group in July 2024. The Redtail Ridge study serves as a master study that analyzed full buildout of the entire Redtail Ridge development area, which includes additional development nearby the hospital, such as additional office uses, industrial/manufacturing buildings, research/development buildings, and some general retail uses. The master study included the entire AdventHealth parcel, which also assumed a hospital land use with adjoining medical office buildings; the hospital was assumed to house 160 beds while the medical office buildings were assumed to comprise approximately 150,000 square feet.

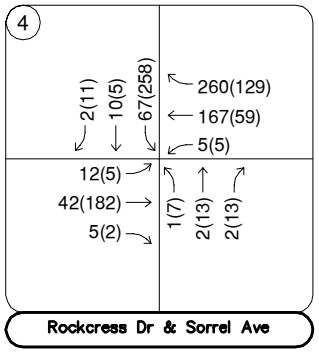
The Redtail Ridge master traffic study analyzed a 2025 short-term buildout year for some developments, with additional land uses constructed by a 2030 mid-year horizon—including full buildout of the hospital and medical office buildings—and a 2040 full buildout horizon. The 2030 and 2040 total traffic volumes from the Redtail Ridge study were used as a basis to generate traffic volumes in this study. However, because the currently proposed land use on the AdventHealth parcel is anticipated to generate more traffic than the originally studied intensities, this AdventHealth traffic study removed the traffic originally projected to be generated by this site to generate 2030 and 2040 background traffic volumes to represent the expected traffic volumes in the area if the hospital/medical office building construction did not occur. Applicable documents from the Fox Tuttle study are included in **Appendix B**.

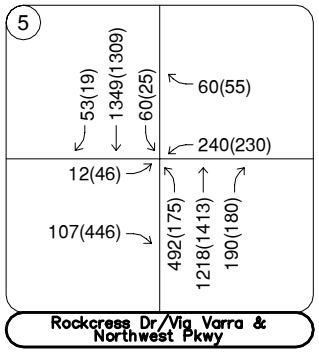
Based on communication with City staff, a twenty-year 2045 long-term horizon was also analyzed for the major external intersections, including Campus Drive & 96th Street (#1), 96th Street/Via Varra & Northwest Parkway (#2), and Rockcress Drive/Via Varra & Northwest Parkway (#3). To develop traffic projections for these intersections, the 2040 existing traffic volumes were grown by an annual growth rate of 0.50 percent per year to account for any additional future development traffic in the area. Of note, traffic volumes entering/exiting the east Via Varra legs of the Northwest Parkway intersections (#2 and #3) were not grown further, as this area is expected to be fully built out by the 2040 horizon. The calculated background traffic volumes for 2030, 2040, and 2045 are shown in **Figure 3**, **Figure 4,** and **Figure 5**, respectively.

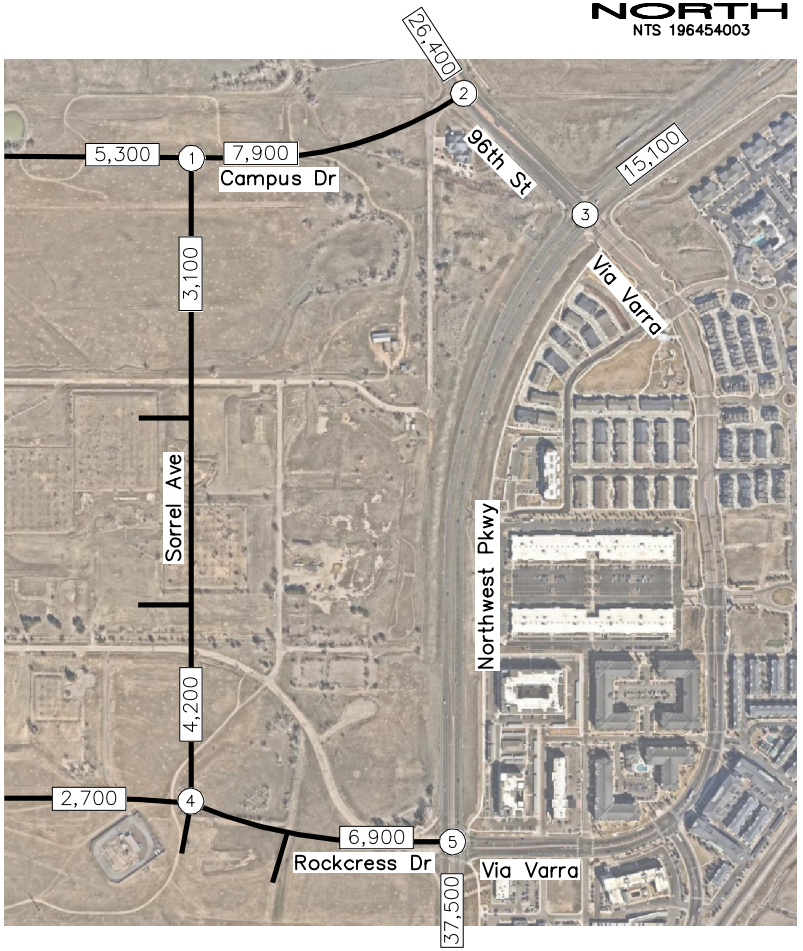










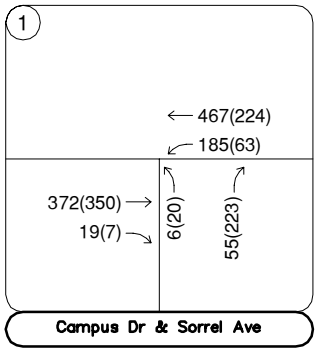


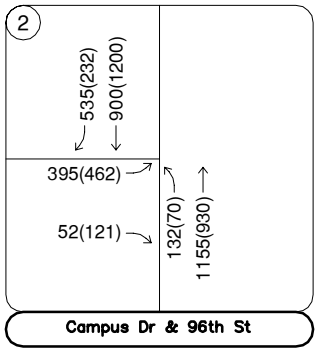
LEGEND

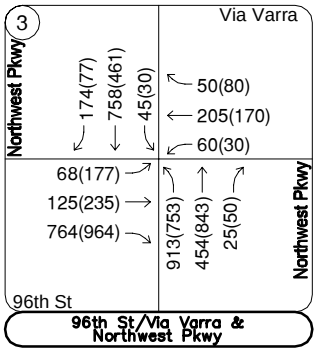
(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

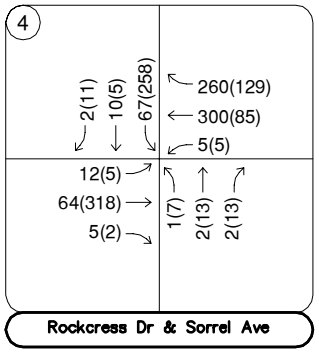
FIGURE 3
AdventHealth Louisville
Louisville, Colorado
2030 Background Traffic Volumes

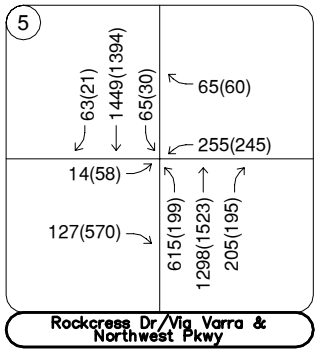
Kimley»Horn

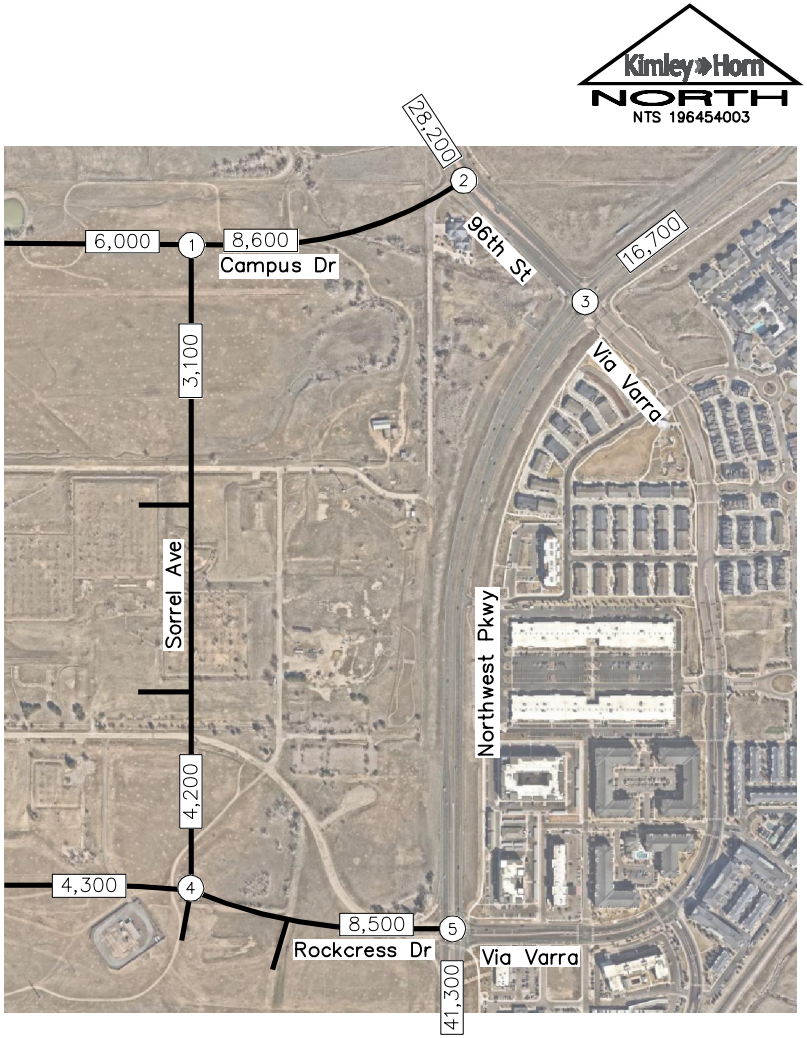












LEGEND

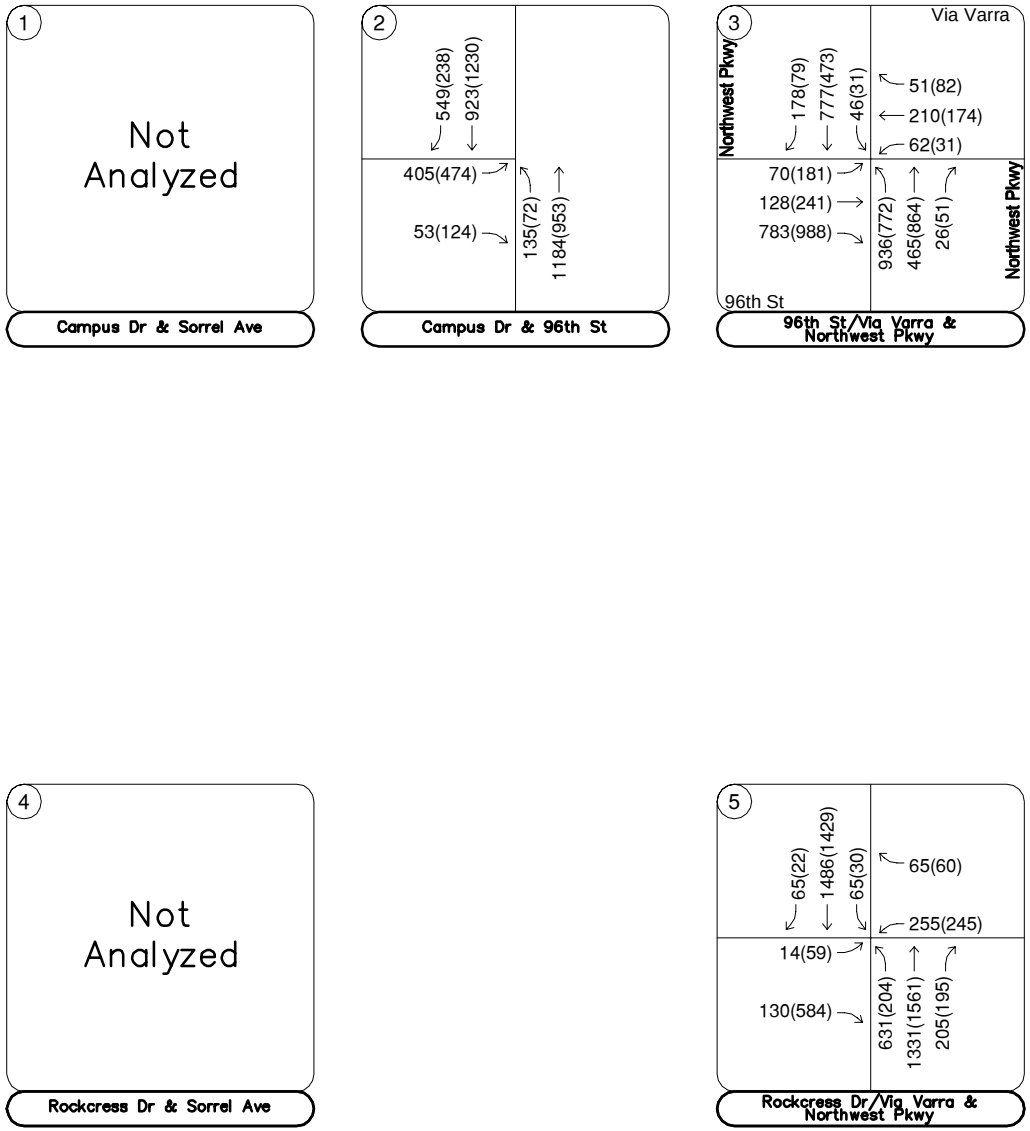
(X) Study Area Key Intersection

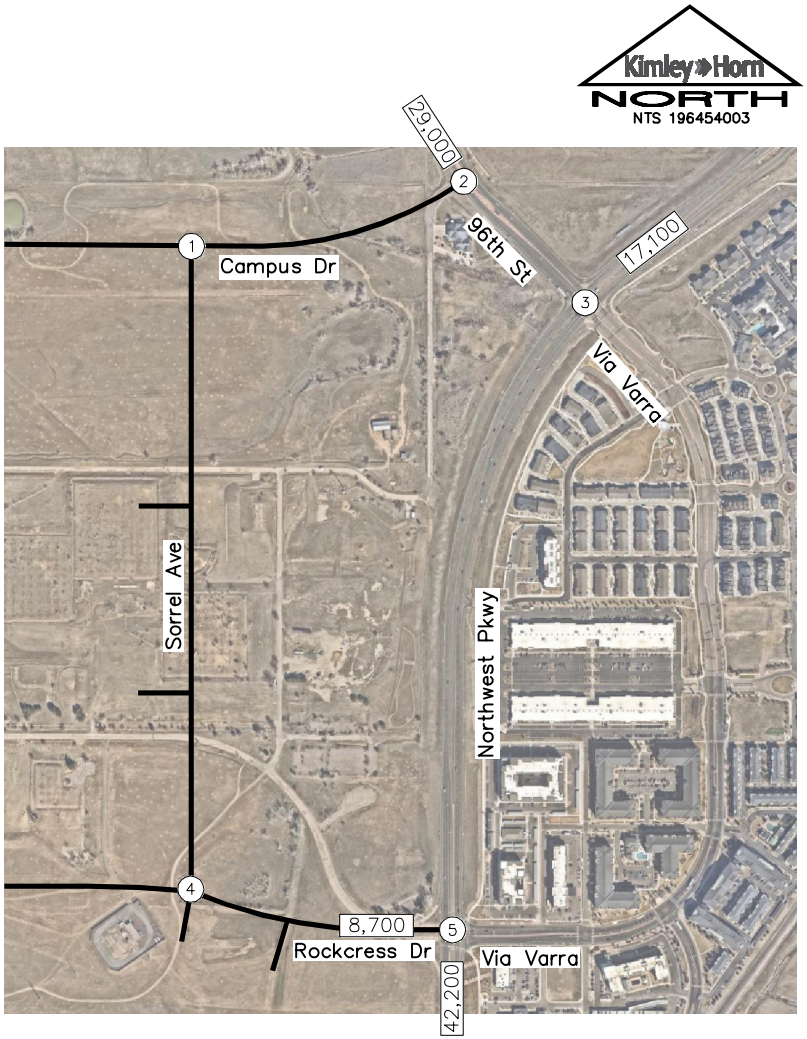
XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes

XX,X00 Estimated Daily Traffic Volume

FIGURE 4
AdventHealth Louisville
Louisville, Colorado
2040 Background Traffic Volumes

Kimley»Horn





LEGEND

(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 5
AdventHealth Louisville
Louisville, Colorado
2045 Background Traffic Volumes

Kimley»Horn

4.1 Trip Generation

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*[1] published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. For this study, Kimley-Horn chose to use the ITE Trip Generation Manual average rates and fitted curve equations that apply to Hospital (ITE Land Use Code 610) and Medical-Dental Office Building (ITE Land Use Code 720) and that match what was previously used in the Fox Tuttle study as best as possible for traffic associated with this development.

In the 2030 Phase 1 buildout assuming 200 hospital beds and 80,000 square feet of medical office building uses, AdventHealth Louisville is expected to generate approximately 6,268 weekday daily trips, with 474 of these trips occurring during the morning peak hour and 557 of these trips occurring during the afternoon peak hour. With full buildout of the site by 2040, the project is anticipated to generate 10,632 weekday daily trips, with 772 of these trips occurring during the morning peak hour and 970 of these trips occurring during the afternoon peak hour.

There is an existing AdventHealth hospital in Louisville at the Campus Drive and 88th Street intersection approximately 1.25 miles to the west of the proposed site. This existing site includes approximately 400,000 square feet of hospital/medical office building uses and is approved with an expansion of an additional 350,000 square feet to include up to 750,000 total square feet at full buildout. Thus, a traffic generation comparison is provided to assess the net difference in trips between the proposed site with approximately 799,600 total square feet at full buildout within the Redtail Ridge development area versus the 750,000 total square feet that could be constructed at the existing hospital site. To provide a uniform comparison between these two sites, the traffic generation of the proposed site with the 799,600 square feet of hospital/medical office building uses was prorated to the up to 750,000 total square feet of the existing site, assuming that approximately 93.8 percent (750,000 / 799,600 square feet = 93.8 percent) of the traffic

[1] Institute of Transportation Engineers, *Trip Generation Manual*, Eleventh Edition, Washington DC, 2021.

generation of the proposed site within Redtail Ridge would have been generated if the existing hospital site were to be developed to the full 750,000 square feet that is already approved to be constructed there. As such, the currently proposed hospital site located within the Redtail Ridge development area could generate approximately 658 additional weekday daily trips, with 47 additional trips during the morning peak hour and 61 additional trips during afternoon peak hour. This results in approximately one additional vehicle every 75 seconds during the morning peak hour and one additional vehicle every minute (60 seconds) during the afternoon peak hour on the surrounding street network compared to the existing project site.

Calculations were based on the procedure and information provided in the ITE *Trip Generation Manual, 11th Edition – Volume 1: User's Guide and Handbook*, 2021. **Table 1** summarizes the estimated trip generation and traffic comparison for the site. The trip generation worksheets are included in **Appendix D**.

Table 1 – AdventHealth Louisville Traffic Generation

Land Use and Size	Weekday Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
2030 – Phase 1 Development							
Hospital (ITE 610) – 200 Beds	3,810	220	86	306	95	193	289
Medical/Dental Office Building (ITE 720) – 80,000 Square Feet	2,458	133	35	168	81	188	268
Total Phase 1 Trips	**6,268**	**353**	**121**	**474**	**176**	**381**	**557**
2040 – Full Buildout Development							
Hospital (ITE 610) – 300 Beds	5,716	330	128	458	143	290	433
Medical/Dental Office Building (ITE 720) – 160,000 Square Feet	4,916	248	66	314	161	376	537
Full Buildout Total Project Trips	**10,632**	**578**	**194**	**772**	**304**	**666**	**970**
Existing AdventHealth Hospital Site – Estimated Traffic Generation at 750,000 SF Buildout							
Hospital (ITE 610) – 281 Beds	5,362	310	120	430	134	272	406
Medical/Dental Office Building (ITE 720) – 150,100 Square Feet	4,612	233	62	295	151	352	503
Total Trips	**9,974**	**543**	**182**	**725**	**285**	**624**	**909**
Net Difference in Trips	***+658***	***+35***	***+12***	***+47***	***+19***	***+42***	***+61***

4.2 Trip Distribution

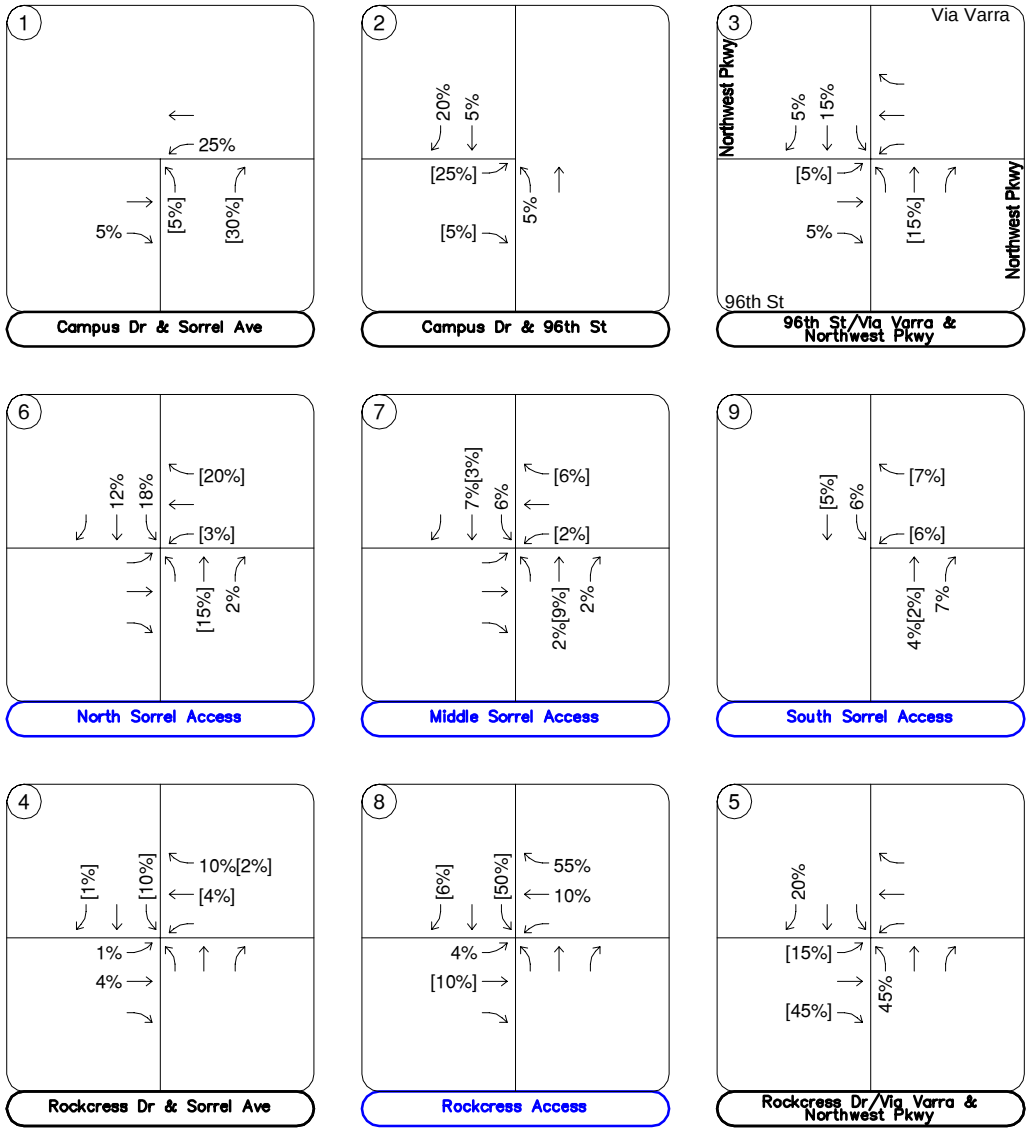
Distribution of site traffic on the street system was based on the area street system characteristics, existing traffic patterns, existing and anticipated surrounding demographic information, and the proposed access system for the project. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site back to the original source. The project trip distribution for the proposed development is illustrated in **Figure 6**.

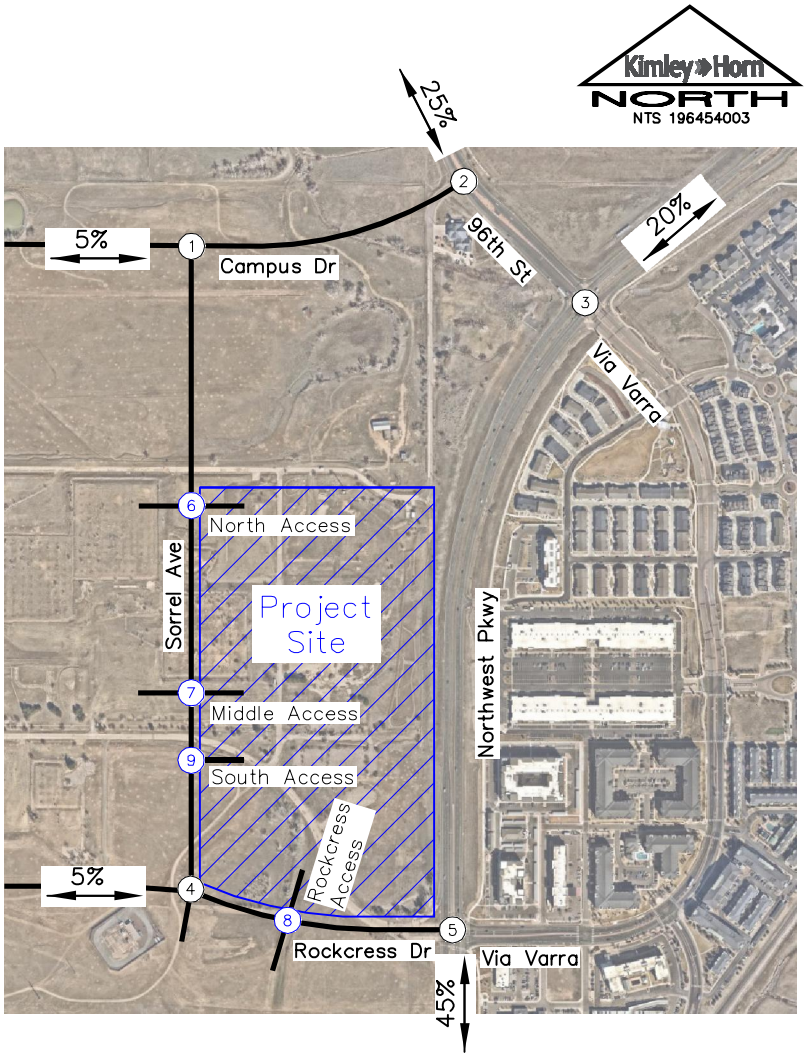
4.3 Traffic Assignment

The project's traffic assignment was obtained by applying the project trip distribution to the estimated traffic generation of the development shown in **Table 1**. Traffic assignment for the 2030 short-term Phase 1 horizon is shown in **Figure 7**, while 2040 full buildout traffic assignment is provided in **Figure 8**.

4.4 Total (Background Plus Project) Traffic

Site traffic volumes were added to the background volumes to represent estimated traffic conditions for the short-term 2030 Phase 1, 2040 buildout, and long-term 2045 twenty-year planning horizon. These total traffic volumes for the study area are illustrated for the 2030, 2040, and 2045 horizon years in **Figure 9**, **Figure 10**, and **Figure 11** respectively.



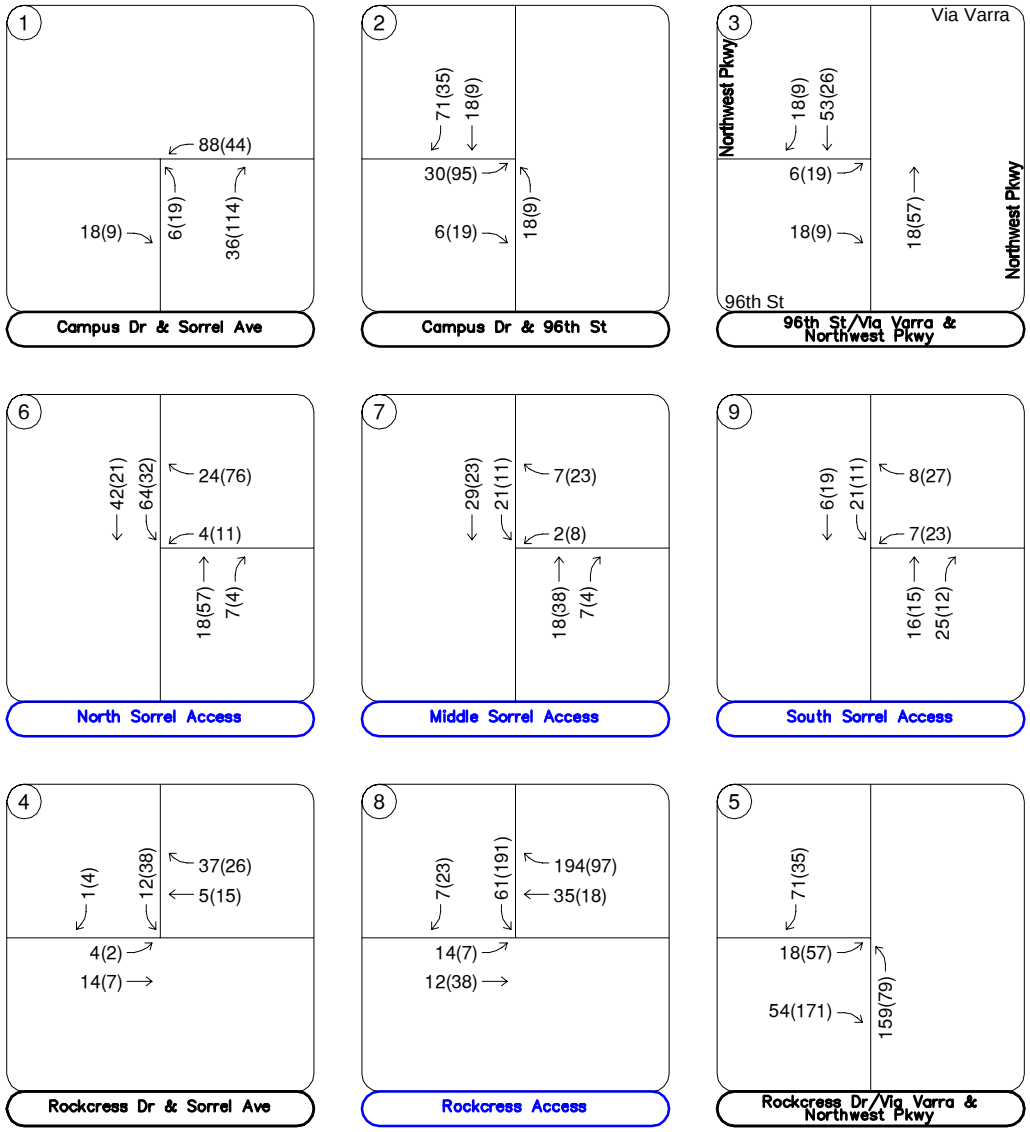


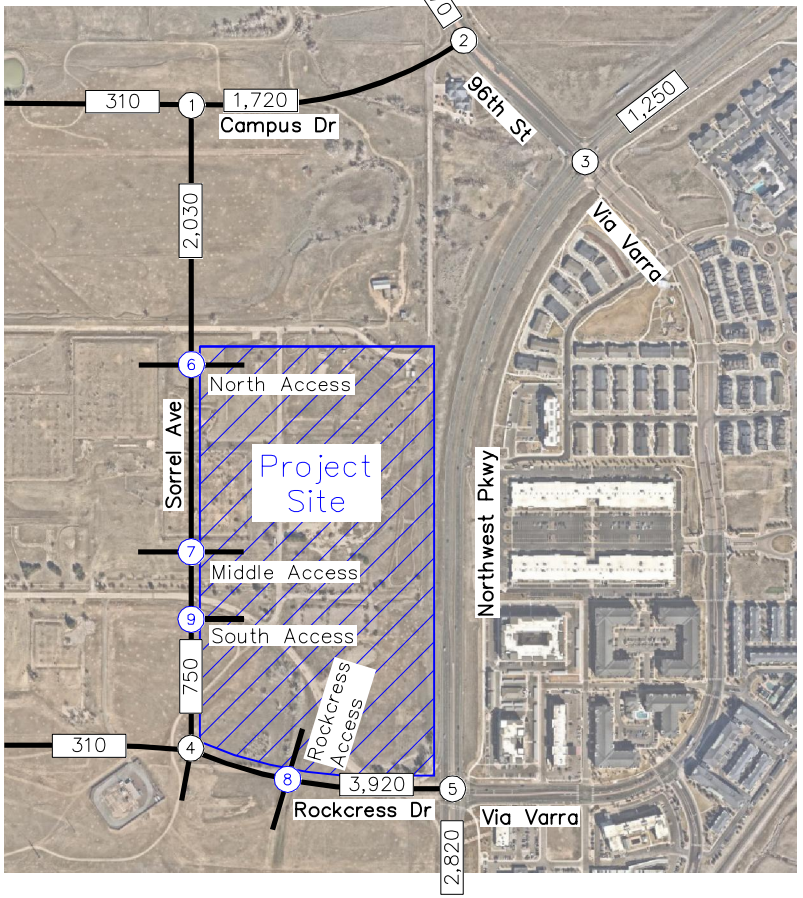
LEGEND

X	Study Area Key Intersection
X	Project Access Intersection
XX%	External Trip Distribution Percentage
XX%[XX%]	Entering[Exiting] Trip Distribution Percentage

FIGURE 6
AdventHealth Louisville
Louisville, Colorado
Project Trip Distribution

Kimley»Horn

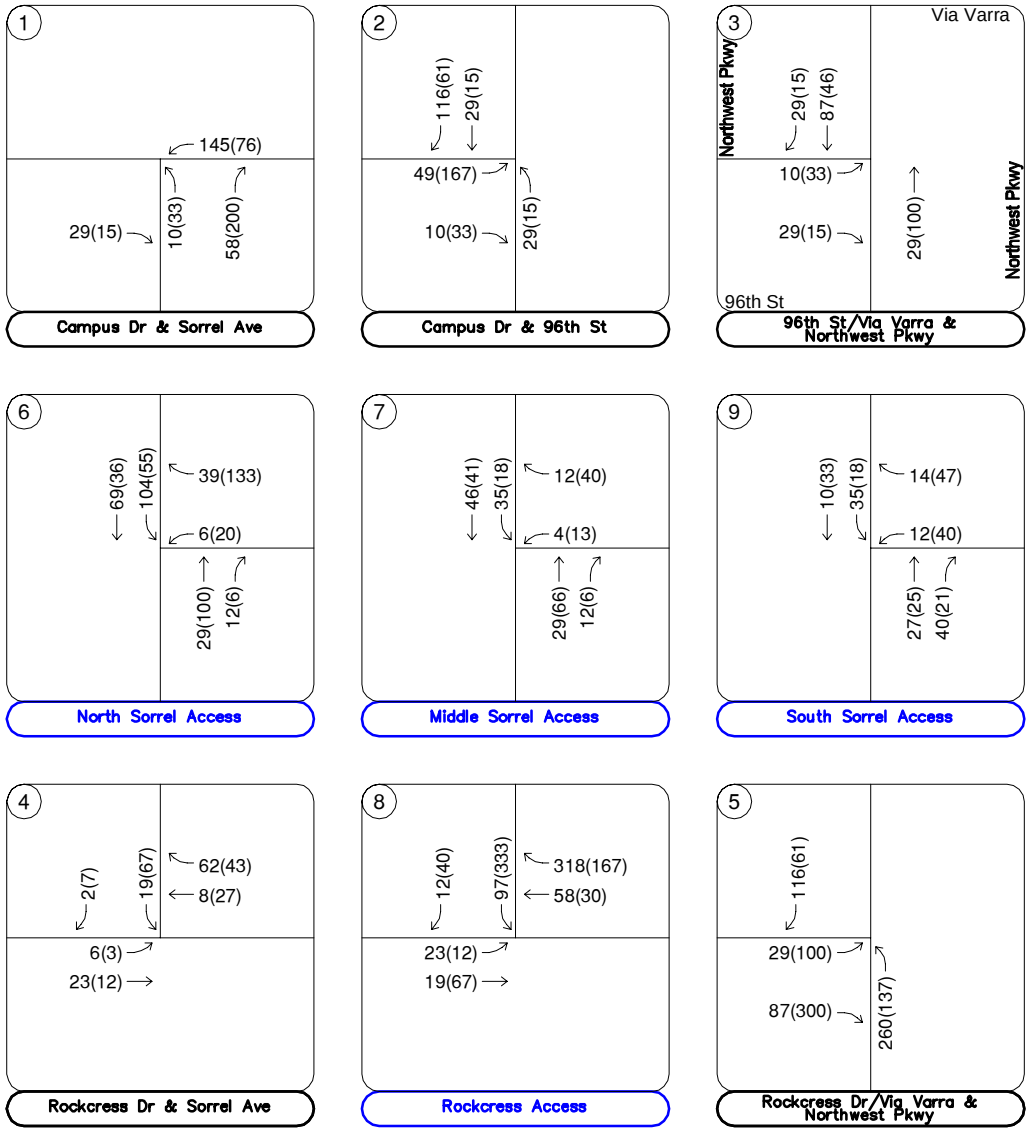


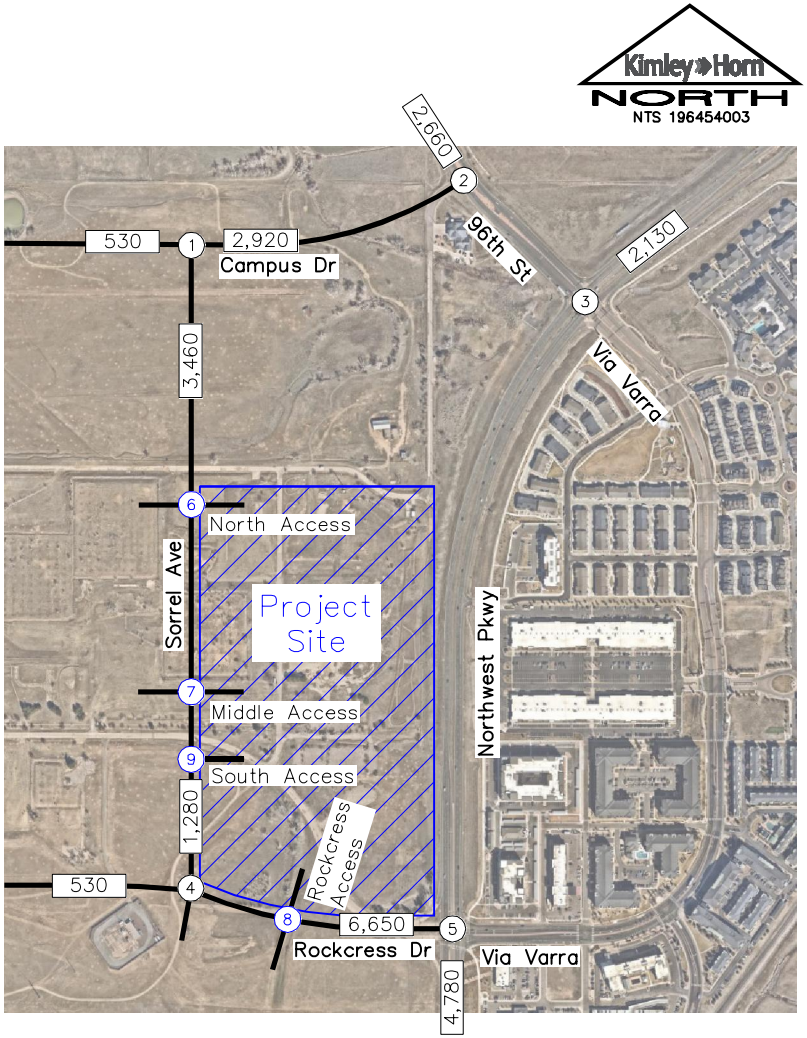


LEGEND

X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 7
AdventHealth Louisville
Louisville, Colorado
2030 Project Traffic Assignment



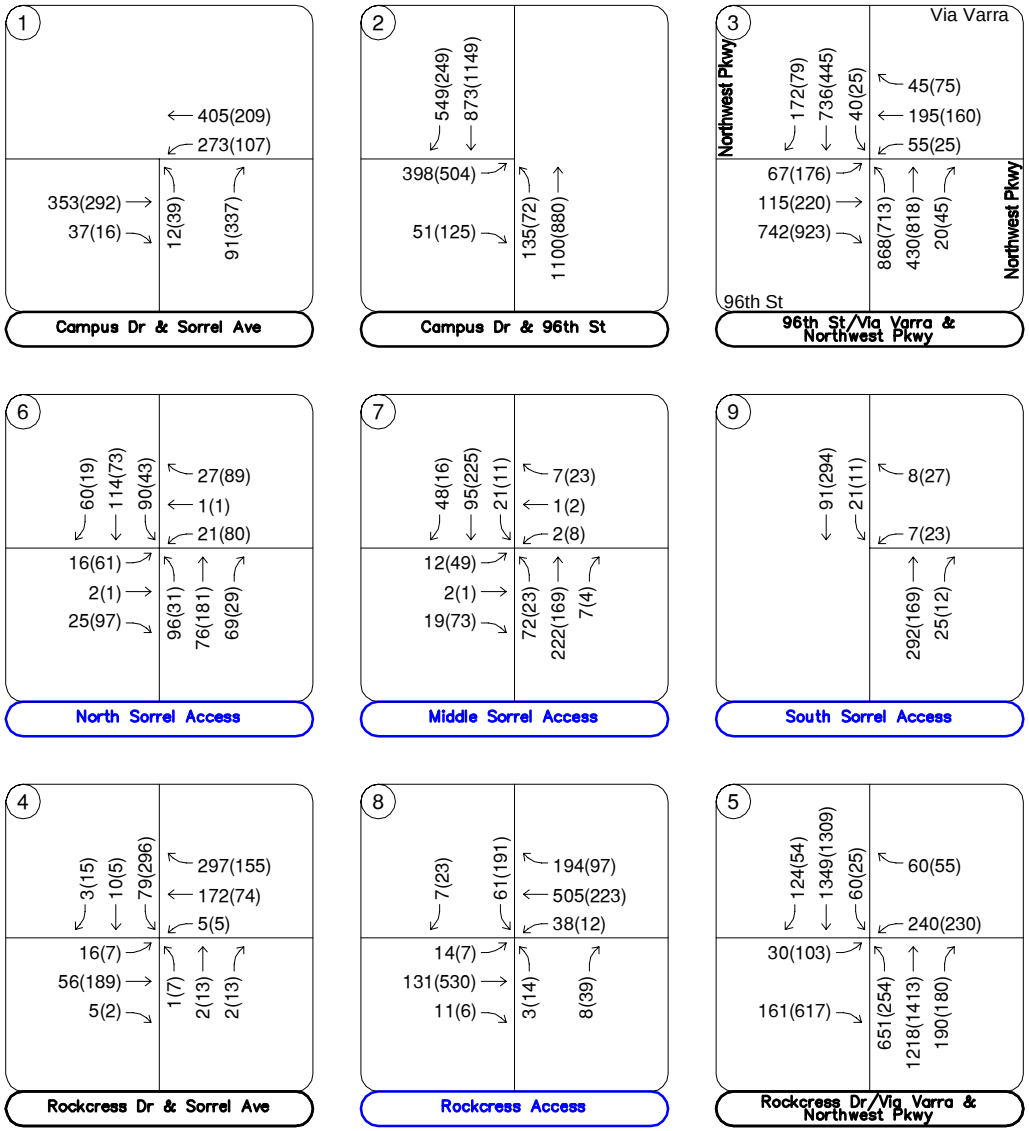


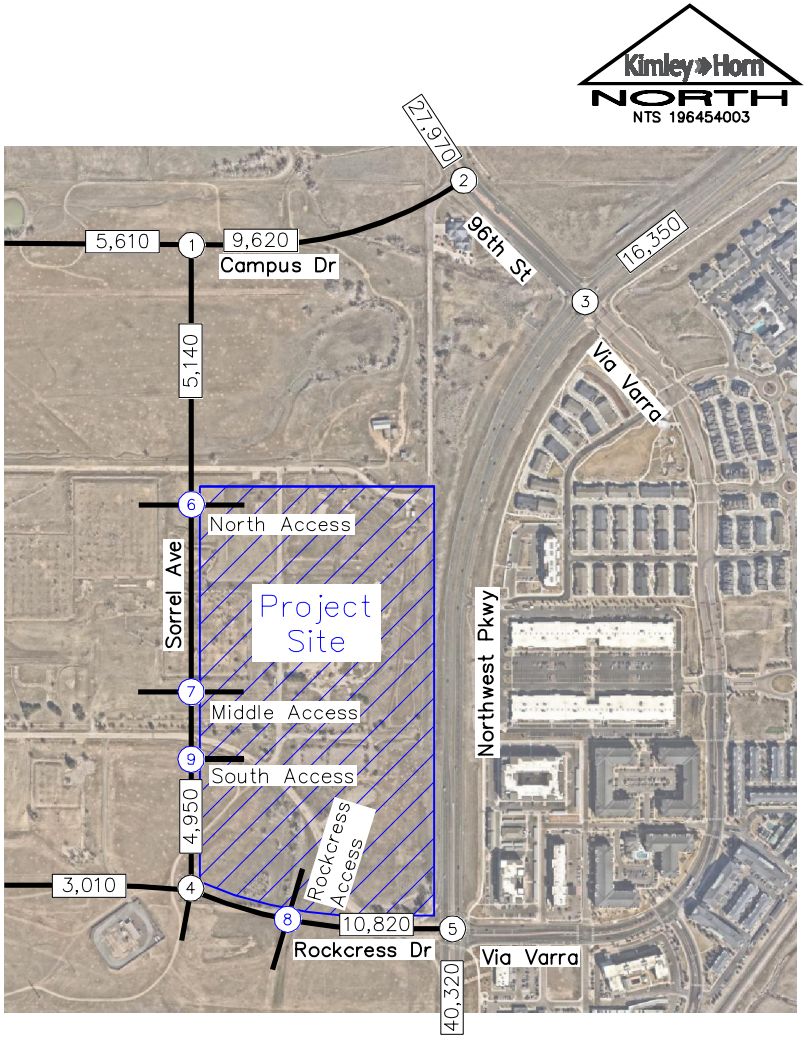
LEGEND

X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 8
AdventHealth Louisville
Louisville, Colorado
2040 Project Traffic Assignment

Kimley»Horn



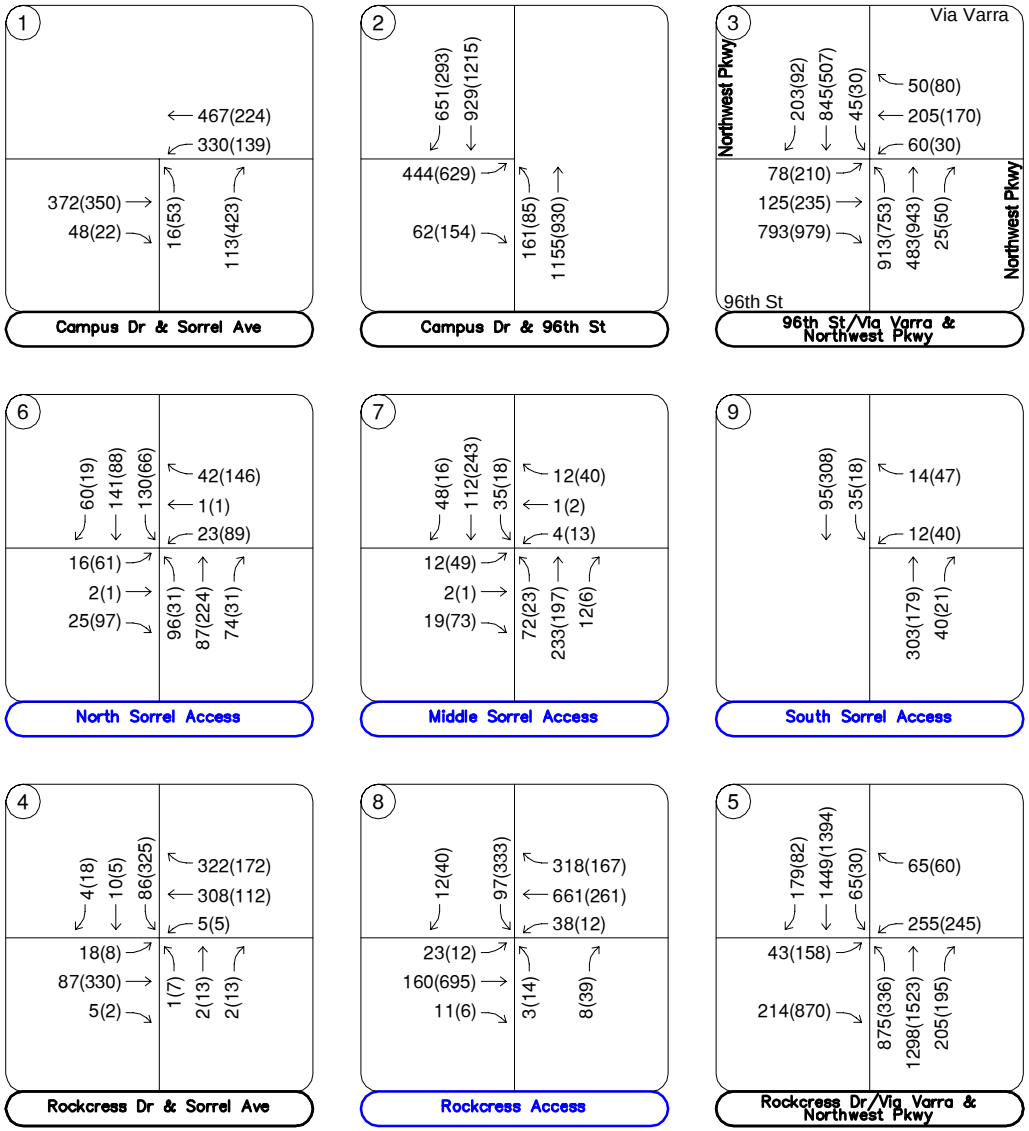


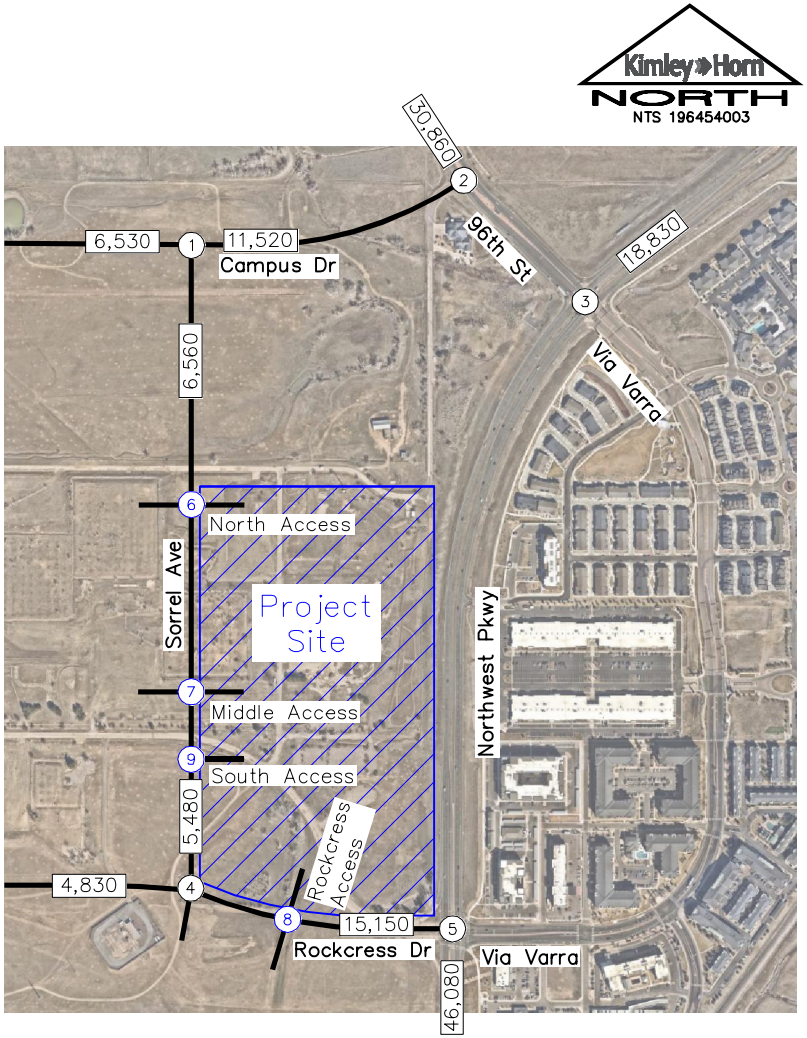
LEGEND

- X — Study Area Key Intersection
- X — Project Access Intersection
- XXX(XXX) — Weekday AM(PM) Peak Hour Traffic Volumes
- XX,X00 — Estimated Daily Traffic Volume

FIGURE 9
AdventHealth Louisville
Louisville, Colorado
2030 Total Traffic Volumes

Kimley»Horn



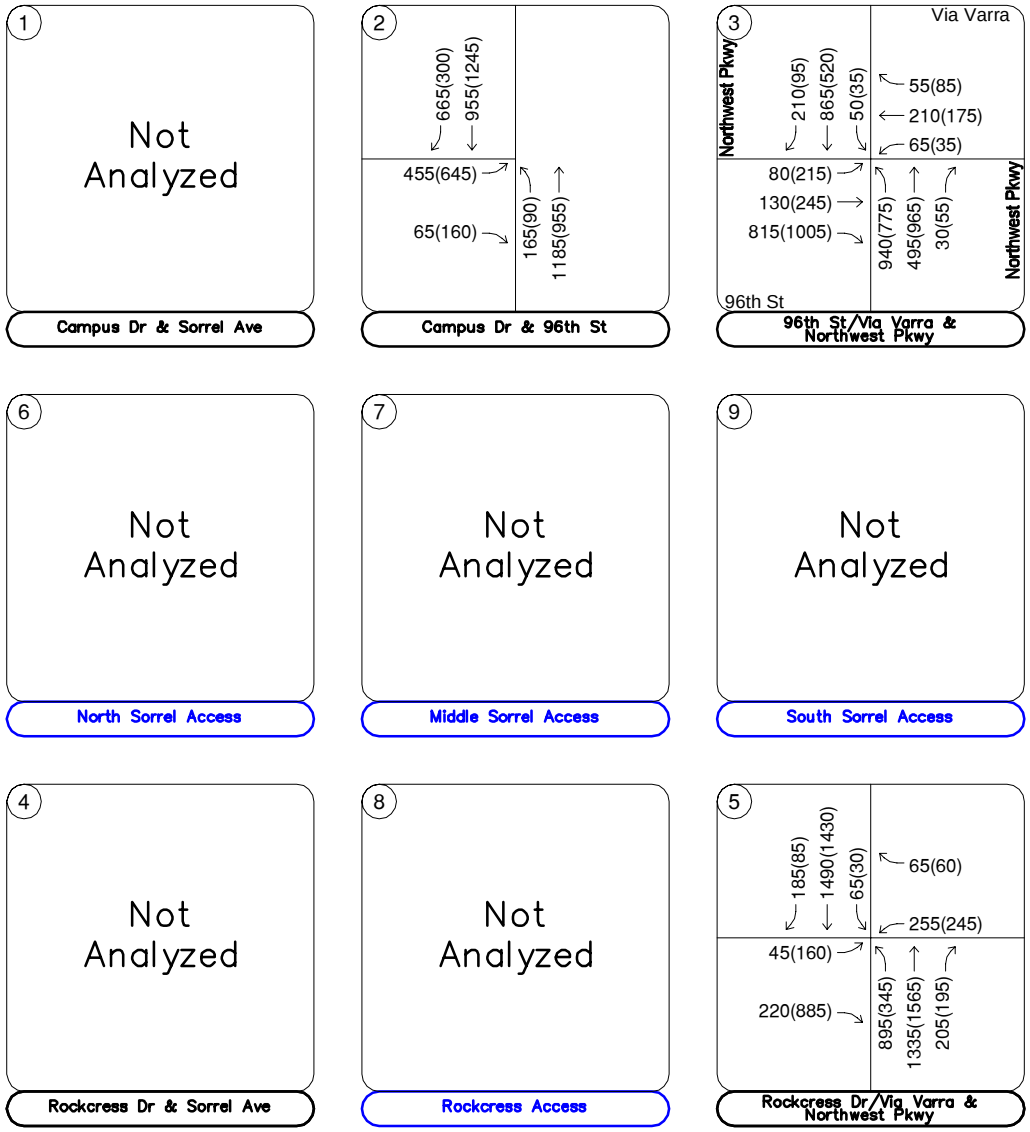


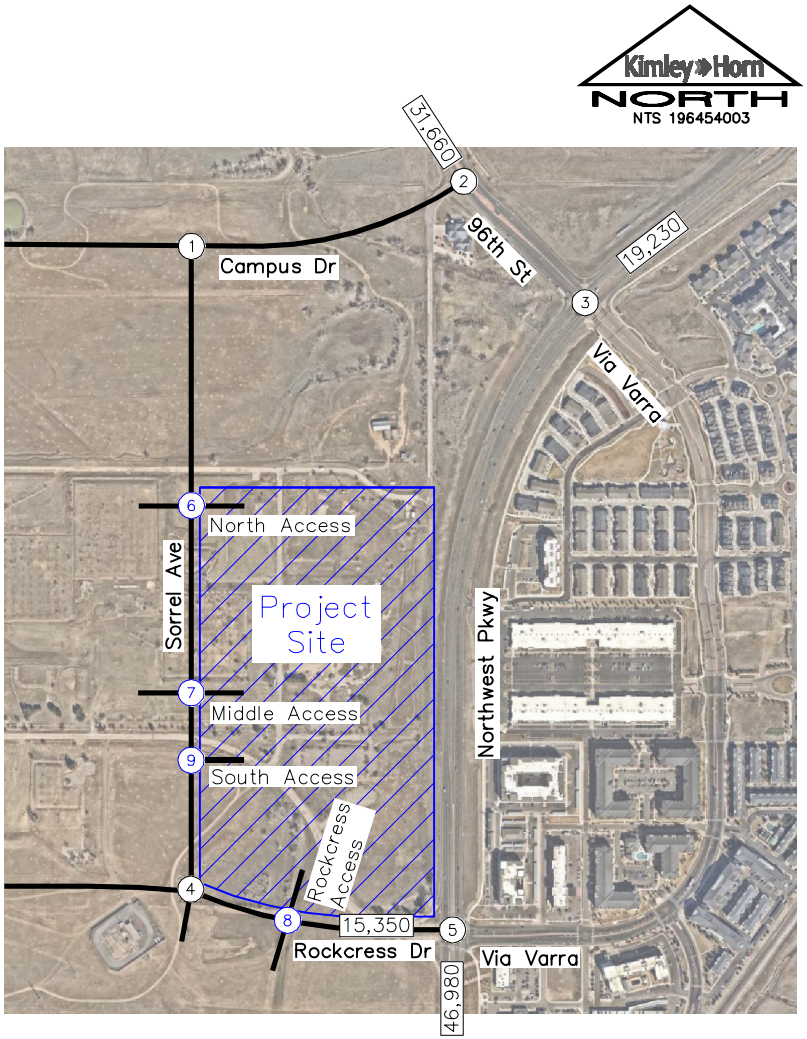
LEGEND

X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 10
AdventHealth Louisville
Louisville, Colorado
2040 Total Traffic Volumes

Kimley»Horn





LEGEND

X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 11
AdventHealth Louisville
Louisville, Colorado
2045 Total Traffic Volumes

Kimley»Horn

Kimley-Horn's analysis of traffic operations in the site vicinity was conducted to determine potential capacity deficiencies in the 2030, 2040, and 2045 development horizons at the identified key intersections. The acknowledged source for determining overall capacity is the *Highway Capacity Manual (HCM)*[2].

5.1 Analysis Methodology

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). For intersections and roadways in this study area, standard traffic engineering practice recommends overall intersection LOS D and movement/approach LOS E as the minimum desirable thresholds for acceptable operations. **Table 2** shows the definition of level of service for signalized and unsignalized intersections.

Table 2 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Definitions provided from the Highway Capacity Manual, Seventh Edition, Transportation Research Board, 2022.

Study area intersections were analyzed based on average total delay analysis for signalized and unsignalized intersections. Under the unsignalized analysis, the LOS for a two-way stop-controlled intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS for a two-way stop-controlled intersection is not defined for the whole intersection. LOS for signalized, roundabout, and all-way stop controlled intersections are defined for each approach and for the overall intersection.

[2] Transportation Research Board, *Highway Capacity Manual*, Seventh Edition, Washington DC, 2022.

5.2 Key Intersection Operational Analysis

Calculations for the operational level of service at the key intersections for the study area are provided in **Appendix E**. The existing year analysis is based on the lane geometry and intersection control shown in **Figure 2**. Synchro traffic analysis software was used to analyze the signalized and unsignalized key intersections for HCM level of service.

Campus Drive & Sorrel Avenue (#1)

The Campus Drive & Sorrel Avenue (#1) intersection is proposed to be a 'T'-intersection operating with roundabout control. Based on current improvement plans, it is understood that eastbound Campus Drive will provide one shared through/right turn lane, northbound Sorrel Avenue will provide a shared left/right turn lane, while westbound Sorrel Avenue will provide one left turn lane and a separate through lane. The intersection is anticipated to operate acceptably at LOS A in this configuration through the 2040 horizon with the addition of project traffic. **Table 3** provides the results of the LOS analysis conducted at this intersection.

Table 3 – Campus Drive & Sorrel Avenue (#1) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2030 Background – Overall	5.7	A	5.1	A
Eastbound Approach	7.0	A	5.1	A
Westbound Approach	4.9	A	3.8	A
Northbound Approach	4.6	A	6.4	A
2030 Total – Overall	6.2	A	6.1	A
Eastbound Approach	8.4	A	5.5	A
Westbound Approach	5.0	A	3.8	A
Northbound Approach	5.1	A	8.4	A
2040 Background – Overall	6.0	A	5.4	A
Eastbound Approach	7.3	A	5.7	A
Westbound Approach	5.3	A	3.9	A
Northbound Approach	4.7	A	7.0	A
2040 Total – Overall	6.9	A	7.9	A
Eastbound Approach	10.0	A	6.5	A
Westbound Approach	5.5	A	4.0	A
Northbound Approach	5.6	A	11.9	B

Campus Drive & 96th Street (#2)

The future Campus Drive & 96th Street 'T'-intersection is understood to be signalized by the 2030 horizon with development of other land uses in the overall Redtail Ridge area. Based on proposed construction from the improvement plans, it is understood that dual northbound left turn lanes and three through lanes will be provided at full buildout along 96th Street. However, to be conservative in this study, it was assumed that by 2030, the northbound approach would provide one left turn lane and two through lanes. The eastbound Campus Drive approach is proposed to provide dual left turn lanes and a right turn lane, while southbound 96th Street is proposed to provide two through lanes and a right turn lane. As requested by the City of Louisville, a signal warrant analysis was performed and is expected to be warranted in the 2030 horizon with or without the addition of project traffic. The warrant analysis has been provided for this intersection and is included in **Appendix E**. By the 2040 horizon, it was assumed that the improvement plans for dual northbound left turn lanes and three northbound through lanes would be provided.

Table 4 provides the results of the LOS analysis conducted at this intersection with these improvements. As shown, the intersection is anticipated to operate acceptably at LOS C or better during the studied peak hours throughout 2045 with the anticipated improvements.

Table 4 – Campus Drive & 96th Street (#2) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2030 Background	14.3	B	21.2	C
2030 Total	15.4	B	23.2	C
2040 Background[1]	21.5	C	22.1	C
2040 Total[1]	25.3	C	26.3	C
2045 Total[1]	25.9	C	26.6	C

[1]Dual NBL Turn Lanes and Three NBT Lanes

96th Street/Via Varra & Northwest Parkway (#3)

The 96th Street/Via Varra & Northwest Parkway (#3) intersection is signalized and operates with protected-only left turn phasing on all four approaches to the intersection. According to currently proposed improvement plans for this intersection, it is understood that the northbound dual left turn lanes on Northwest Parkway and dual eastbound left turn lanes on 96th Street will both be improved to provide triple left turn lanes. As such, this would require three receiving lanes on both westbound 96th Street to the west of Northwest Parkway as well as northbound Northwest Parkway to the north of 96th Street. However, to be conservative, it was assumed that this improvement would not be completed until the 2040 full buildout horizon to assess the intersection operation under 2030 Phase 1 conditions if no improvements are completed by 2030. As such, the intersection operates well at LOS C with the existing configuration in 2030 and continues to operate acceptably at LOS C in 2040 and 2045 with the proposed improvements. **Table 5** provides the results of the LOS analysis conducted at this intersection.

Table 5 – 96th Street/Via Varra & Northwest Parkway (#3) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2030 Background	29.0	C	29.3	C
2030 Total	29.9	C	29.6	C
2040 Background[1]	28.5	C	22.3	C
2040 Total[1]	29.3	C	22.4	C
2045 Total[1]	29.7	C	22.7	C

[1]Dual NBL Turn Lanes and Three NBT Lanes

Rockcress Drive & Sorrel Avenue (#4)

The Rockress Drive & Sorrel Avenue (#4) intersection is proposed to be constructed a four-leg single-lane roundabout. The northbound, southbound, and eastbound approaches would all provide one lane for shared turning movements while the westbound approach would provide one left/through lane and a right turn only lane. The south leg of the roundabout is anticipated to serve as an access into a future development to the south of Rockcress Drive. In this proposed configuration, the intersection is anticipated to operate at an acceptable level of service A through the 2040 horizon with the addition of project traffic. **Table 6** provides the results of the LOS analysis at this intersection.

Table 6 – Rockcress & Sorrel Avenue (#4) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2030 Background – Overall	4.0	A	4.7	A
Eastbound Approach	3.3	A	5.5	A
Westbound Approach	4.1	A	3.3	A
Northbound Approach	3.0	A	4.8	A
Southbound Approach	3.9	A	5.0	A
2030 Total – Overall	4.2	A	5.0	A
Eastbound Approach	3.5	A	6.0	A
Westbound Approach	4.3	A	3.5	A
Northbound Approach	3.2	A	5.0	A
Southbound Approach	4.0	A	5.4	A
2040 Background – Overall	4.4	A	5.5	A
Eastbound Approach	3.5	A	7.3	A
Westbound Approach	4.5	A	3.4	A
Northbound Approach	3.1	A	5.6	A
Southbound Approach	4.5	A	5.2	A
2040 Total – Overall	4.7	A	6.2	A
Eastbound Approach	3.8	A	8.4	A
Westbound Approach	4.8	A	3.6	A
Northbound Approach	3.3	A	6.2	A
Southbound Approach	4.9	A	6.1	A

Rockcress Drive/Via Varra & Northwest Parkway (#5)

The Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection is signalized and operates with protected-only left turn phasing on all four approaches to the intersection. Based on currently proposed improvement plans and the results of the Fox Tuttle study, it is understood that the southbound Northwest Parkway approach to this intersection will provide three through lanes in the future. The results of this analysis further confirm that this improvement is anticipated to be needed in the future. However, to be conservative, it was assumed that the intersection would remain in its current configuration through the 2030 horizon and that the third southbound through lane would not be implemented until the 2040 horizon. In 2030, the intersection is anticipated to operate acceptably at LOS C or better during the peak hours with the existing configuration and control. Based on these proposed improvements, the intersection is anticipated to operate at an acceptable level of service through the 2045 horizon with the addition of project traffic. **Table 7** provides the results of the LOS analysis conducted at this intersection.

Table 7 – Rockcress Drive/Via Varra & Northwest Parkway (#5) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2030 Background	19.9	B	16.2	B
2030 Total	27.7	C	18.2	B
2040 Background[1]	29.0	C	16.6	B
2040 Total[1]	30.4	C	29.8	C
2045 Total[1]	31.4	C	31.1	C

[1]Three SBT lanes

Project Accesses

With completion of the project, a full movement access is proposed along the north side of Rockcress Drive, approximately 775 feet west of the Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection, measured center to center. Three full movement accesses are also proposed along Sorrel Avenue, the two northernmost of which are anticipated to align with future accesses to other developments to the west of Sorrel Avenue. A third access along Sorrel Avenue is proposed into the hospital—located between Rockcress Drive and the Middle Sorrel Access (#7). This third southernmost access is expected to operate as a 'T'-intersection.

Sorrel Avenue Accesses (#6, #7, and #9)

The two northernmost full movement accesses (#6 and #7) proposed along the east side of Sorrel Avenue are anticipated to align with two accesses to the west of Sorrel Avenue that will serve other developments. At both access intersection locations, the northbound and southbound approaches are recommended to provide a left turn lane and a shared through/right turn lane, while the eastbound/westbound minor street access approaches would operate with stop control and one lane for shared left/through/right turning movements. R1-1 "STOP" signs should be posted on the minor street eastbound/westbound approaches to Sorrel Avenue at both access locations. Additionally, the third and southernmost access is expected to operate as a 'T'-intersection with an R1-1 "STOP" sign also posted on the westbound approach for vehicles exiting the site. A southbound left turn lane is also recommended at this intersection. A four-hour signal warrant analysis was conducted at the North Access (#6) to assess whether this intersection would meet warrants for a traffic signal. Based on the 2040 background plus project traffic volumes, a signal is not expected to be warranted at full buildout of the overall Redtail Ridge development area, with none of the four major peak hours on a typical day meeting warrants for a traffic signal. The signal warrant analysis for this intersection is included in **Appendix E**.

Rockcress Drive Access (#8)

The Rockcress Drive Access (#8) is anticipated to align with a future south leg for a development south of Rockcress Drive. This access is anticipated to serve as a primary entrance to the development. In the 2030 Phase 1 horizon, the intersection movements are anticipated to operate acceptably under stop control; only with full buildout traffic volumes by the 2040 horizon is a signal anticipated to be warranted and needed at this intersection. A signal warrant analysis was completed for this intersection, which is included in **Appendix E**. As such, this access is proposed

to operate under stop control with R1-1 “STOP” signs on the exiting access approaches to the intersection. During this horizon, the eastbound and westbound Rockcress Drive approaches to this access intersection are recommended to provide a left turn lane, one through lane, and a shared through/right turn lane. The northbound approach is anticipated to require only one lane for shared left/through/right turning movements. The southbound approach exiting the hospital would be recommended to provide a left turn lane and a shared through/right turn lane during this horizon.

By the 2040 horizon and full buildout of the AdventHealth site, signalization is recommended at this access location. When full buildout is complete and signalization occurs, the southbound approach would be recommended to provide dual left turn lanes, with the westernmost left turn lane also providing through movement, and a separate right turn lane. Because this improvement is anticipated to be needed at full buildout, it would be recommended that the pavement width be allocated during Phase 1 development to allow for eventual dual southbound left turn lanes. To be conservative, this intersection was analyzed with split phase operations on the northbound/southbound approaches to the intersection because of the difference in approach lane configurations.

At the request of City of Louisville staff, this intersection was also analyzed with roundabout control in the 2040 background plus project traffic scenario. The roundabout was assumed to provide two approach lanes on the eastbound/westbound Rockcress Drive approaches while the northbound and southbound access approaches were assumed to both be a single-lane approach. Based on the results of this analysis, a roundabout in this configuration would be expected to operate well through the 2040 horizon. However, as this access is expected to be the primary access into the hospital site, a signal is recommended to be constructed at this location as traffic signals allow for emergency vehicle preemption and offer more intuitive navigability for drivers unfamiliar with the area. **Table 8** provides the results of the level of service for these accesses. As shown in the table, the project access intersections are anticipated to operate at an acceptable level of service through the 2040 horizon.

Table 8 – Project Access Level of Service Results

Intersection	2030 Total				2040 Total			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS
Sorrel North Access (#6)								
Northbound Left	7.8	A	7.5	A	7.9	A	7.5	A
Eastbound Approach	12.8	B	12.5	B	14.6	B	14.8	B
Westbound Approach	13.1	B	14.1	B	14.2	B	17.8	C
Southbound Left	7.7	A	7.8	A	7.9	A	8.0	A
Sorrel Middle Access (#7)								
Northbound Left	7.7	A	7.8	A	7.7	A	7.9	A
Eastbound Approach	11.5	B	12.7	B	12.1	B	13.6	B
Westbound Approach	11.0	B	10.8	B	11.4	B	11.4	B
Southbound Left	7.8	A	7.6	A	7.9	A	7.7	A
Rockcress Access (#8) – Unsignalized								
Northbound Approach	9.4	A	12.3	B				
Eastbound Left	8.8	A	7.8	A				
Westbound Left	7.6	A	8.7	A	-	-	-	-
Southbound Left	17.6	C	23.0	C				
Southbound Through/Right	8.9	A	8.7	A				
Rockcress Access (#8) – Signalized	-	-	-	-	12.1	B	29.5	C
Rockcress Access (#8) – Roundabout	-	-	-	-	6.2	A	7.1	A
Sorrel South Access (#9)								
Westbound Approach	10.6	B	10.6	B	11.0	B	11.2	B
Southbound Left	8.0	A	7.6	A	8.1	A	7.7	A

5.3 Vehicle Queuing Analysis

A vehicle queuing analysis was conducted for the study area intersections. The queuing analysis was performed using Synchro presenting the results of the 95th percentile queue lengths. Results are shown in the following **Table 9** with calculations provided within the level of service operational sheets of **Appendix D** for unsignalized intersections and **Appendix F** for signalized intersections. Of note, vehicle queues were assumed to be a minimum of 25 feet (approximately one vehicle).

Table 9 – Turn Lane Queuing Analysis Results

Intersection Turn Lane	Existing Turn Lane Length	2030 Calculated Queue (AM/PM)	2030 Recommended Length	2040/2045* Calculated Queue (AM/PM)	2040/2045* Recommended Length
Campus & 96th (#2)					
Eastbound Left	DNE	214'/260' DL	**C DL**	239'/330'	C DL
Eastbound Right	C	36'/51'	**500'**	39'/79'	500'
Northbound Left	75'	25'/25'	**200'**	103'/67'	200' **DL**
Southbound Right	DNE	52'/39'	**200'**	60'/51'	200'
96th/Via Varra & Northwest Pkwy (#3)					
Eastbound Left	250'/375' DL	45'/95' DL	250'/375' DL	36'/79' TL	**250'**/250'/375' TL
Eastbound Right	375' Free	450'/468'	**475'** Free	475'/430'	475' Free
Westbound Left	200'/275' DL	47'/27' DL	200'/275' DL	54'/34' DL	200'/275' DL
Westbound Right	250' Free	25'/25'	250' Free	25'/25'	250' Free
Northbound Left	600'/800' DL	477'/355' DL	600'/800' DL	352'/244' TL	**600'**/600'/800' TL
Northbound Right	C Free	25'/25'	C Free	25'/25'	C Free
Southbound Left	550'/600' DL	25'/25' DL	550'/600' DL	29'/25' DL	550'/600' DL
Southbound Right	500' Free	25'/25'	500' Free	25'/25'	500' Free
Rockcress/Via Varra & Northwest Pkwy (#5)					
Eastbound Left	125' DL	30'/73'	**400'/C** DL	42'/87'	400'/C DL
Eastbound Right	Free	25'/25'	Free	25'/284'	Free
Westbound Left	250'/500'C DL	141'/129'	250'/500'C DL	150'/133'	250'/500'C DL
Northbound Left	250'/475' DL	324'/202'	250'/475' DL	421'/197'	**375'**/475' DL
Northbound Right	300'	26'/30'	300'	26'/39'	300'
Southbound Left	425'/650' DL	42'/25'	425'/650' DL	42'/25'	425'/650' DL
Southbound Right	500' Yield	25'/25'	500' Yield	25'/25'	500' Yield
Sorrel North Access (#6)					
Northbound Left	DNE	25'/25'	**150'**	25'/25'	150'
Southbound Left	DNE	25'/25'	**150'**	25'/25'	150'
Sorrel Middle Access (#7)					
Northbound Left	DNE	25'/25'	**150'**	25'/25'	150'
Southbound Left	DNE	25'/25'	**150'**	25'/25'	150'
Rockcress Access (#8)					
Eastbound Left	DNE	25'/25'	**150'**	36'/25'	150'
Westbound Left	DNE	25'/25'	**150'**	25'/25'	150'
Southbound Left	DNE	25'/100'	**200'**	84'/184'	200' **DL**
Sorrel South Access (#9)					
Southbound Left	DNE	25'/25'	**150'**	25'/25'	150'

DNE = Does Not Exist; C = Continuous Turn Lane; DL = Dual Left Turn Lanes; TL = Triple Left Turn Lanes; **Blue** Text = Recommendation; * = 2040 horizon year used for internal intersections (#6, 7, 8, 9) while 2045 horizon year is used for major external intersections (#2, 3, 5)

All queues are anticipated to remain within the existing or recommended turn lane lengths through 2045. The recommended turn lane lengths provided in this table are generally based on the currently proposed construction improvement plans at the major external intersections of Campus Drive & 96th Street (#2), 96th Street/Via Varra & Northwest Parkway (#3), and Rockcress Parkway/Via Varra & Northwest Parkway (#5), where available, while the internal intersection turn

lane recommendations at the project accesses are based on a minimum assumed turn lane length of 150 feet, with additional storage provided to meet expected vehicle queues.

As noted previously, to be conservative it was assumed that the northbound left turning movement at Campus Drive & 96th Street (#2) would operate from a single lane in the 2030 horizon and would not be improved to dual left turn lanes until the 2040 horizon. It was also assumed that the triple northbound left turn lanes on Northwest Parkway and triple eastbound left turn lanes on 96th Street at the 96th Street/Via Varra & Northwest Parkway (#3) would not be implemented until the 2040 horizon. There is approximately 725 feet of spacing between the Campus Drive extension and Northwest Parkway along 96th Street available for left turn lane storage. Based on the proposed dual northbound left turn lanes at Campus Drive & 96th Street (#2) intersection providing 200 feet of storage and the triple southeast-bound left turn lanes at 96th Street/Via Varra & Northwest Parkway (#3) providing 250 to 375 feet of storage, there is space for a shared taper length of approximately 150 feet for these back-to-back left turn lanes. Vehicle queues are easily accommodated the left turn lanes at both of these locations, with the northbound dual left turn lanes at Campus Drive & 96th Street (#2) expected to have 95th percentile queues approximately 100 feet or less through the 2045 horizon, while the southeast-bound triple left turn lanes at 96th Street/Via Varra & Northwest Parkway (#3) are expected to experience 95th percentile queues under 80 feet through the 2045 horizon.

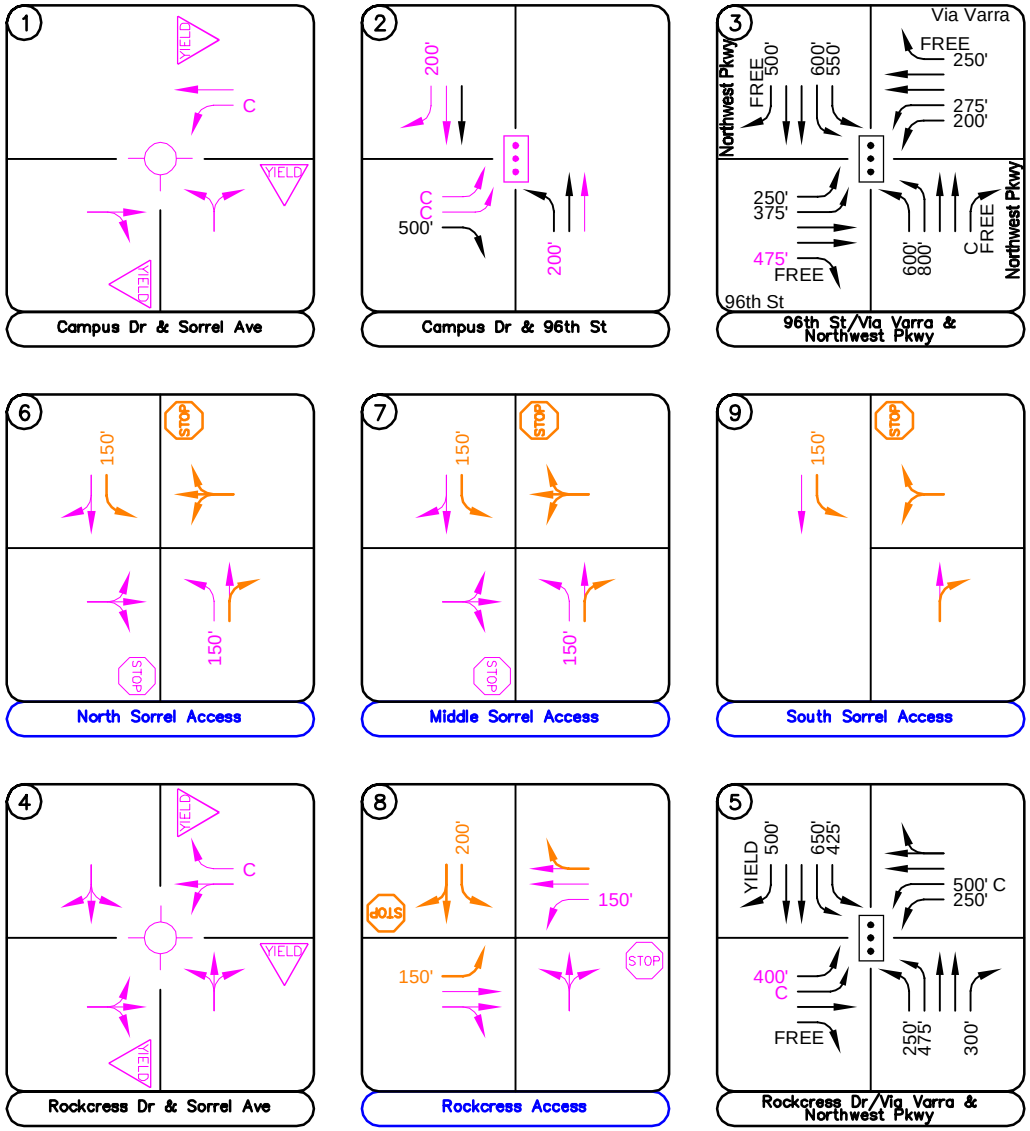
Additionally, because the Rockcress Access (#8) is proposed to operate with two-way stop control exiting the hospital in the 2030 horizon, the southbound approach is proposed to operate with only one southbound left turn lane in this horizon. By the 2040 horizon at full buildout and with signalization of this access, the dual left turn lanes, each proposed as 200 feet in length, should be provided. Because dual southbound left turn lanes are anticipated to be needed at full buildout at the Rockcress Access (#8), it would be recommended that pavement width be provided to allow for these dual left turn lanes, and that in the 2030 short-term horizon the second left turn lane be striped out with chevron striping to restrict its use until the intersection is signalized.

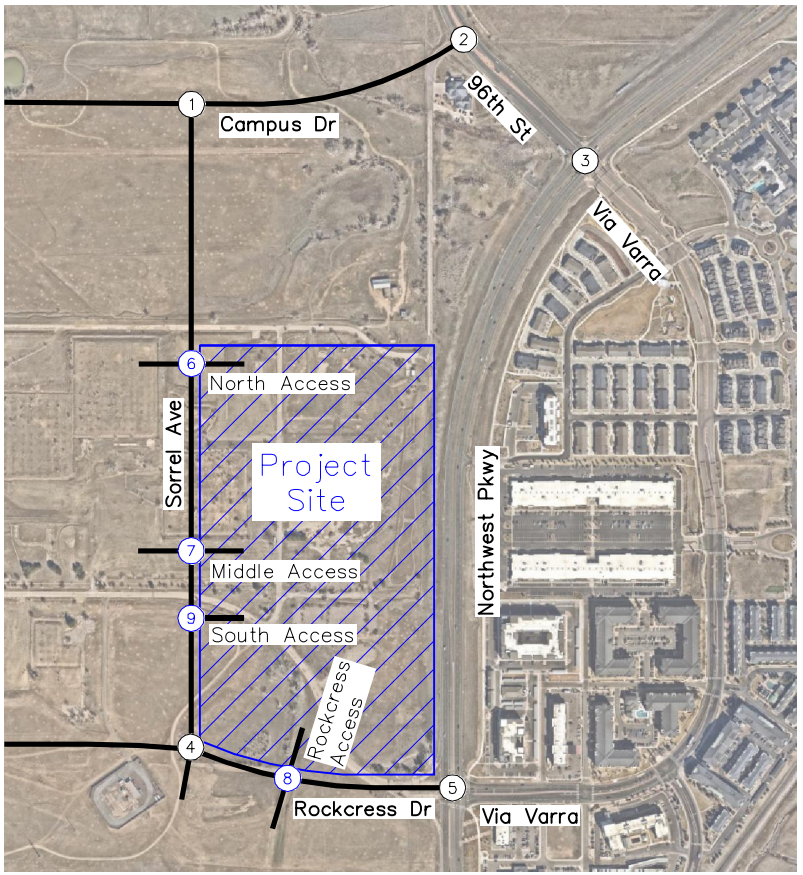
Rockcress Drive is proposed to provide two through lanes eastbound and westbound between Sorrel Avenue and Northwest Parkway. The second eastbound through lane is anticipated to become a forced left turn only lane at the Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection, while a second left turn lane 400 feet in length will also be provided. There is

anticipated to be approximately 700 feet of spacing available for left turn lane storage. The westbound left turn lane at the Rockcress Access (#8) is proposed to provide 150 feet in length. This leaves 150 feet of additional length available between the Rockcress Access (#8) and Northwest Parkway available for a shared taper length for these back-to-back left turn lanes. The 95th percentile queue in the eastbound dual left turn lanes at Rockcress Drive/Via Varra & Northwest Parkway (#5) is expected to be approximately 87 feet or less through the 2045 horizon, while the westbound left turn queue at the Rockcress Access (#8) is anticipated to be 25 feet or less. As such, the provided left turn storage and taper length for these turn lanes are expected to easily accommodate projected traffic volumes through the 2045 horizon.

5.4 Improvement Summary

Based on the results of the intersection operational and vehicle queuing analysis, the key intersection recommended improvements and control are shown in **Figure 12** and **Figure 13** for the 2030 and 2040 horizons, respectively. Of note, the recommendations provided in **Figure 13** are anticipated to be needed by the 2040 horizon but are expected to provide acceptable operations through the 2045 horizon. These recommendations are distinguished by improvements expected to be needed due to the hospital site versus improvements that would be expected to be constructed by others as part of the master Redtail Ridge development.

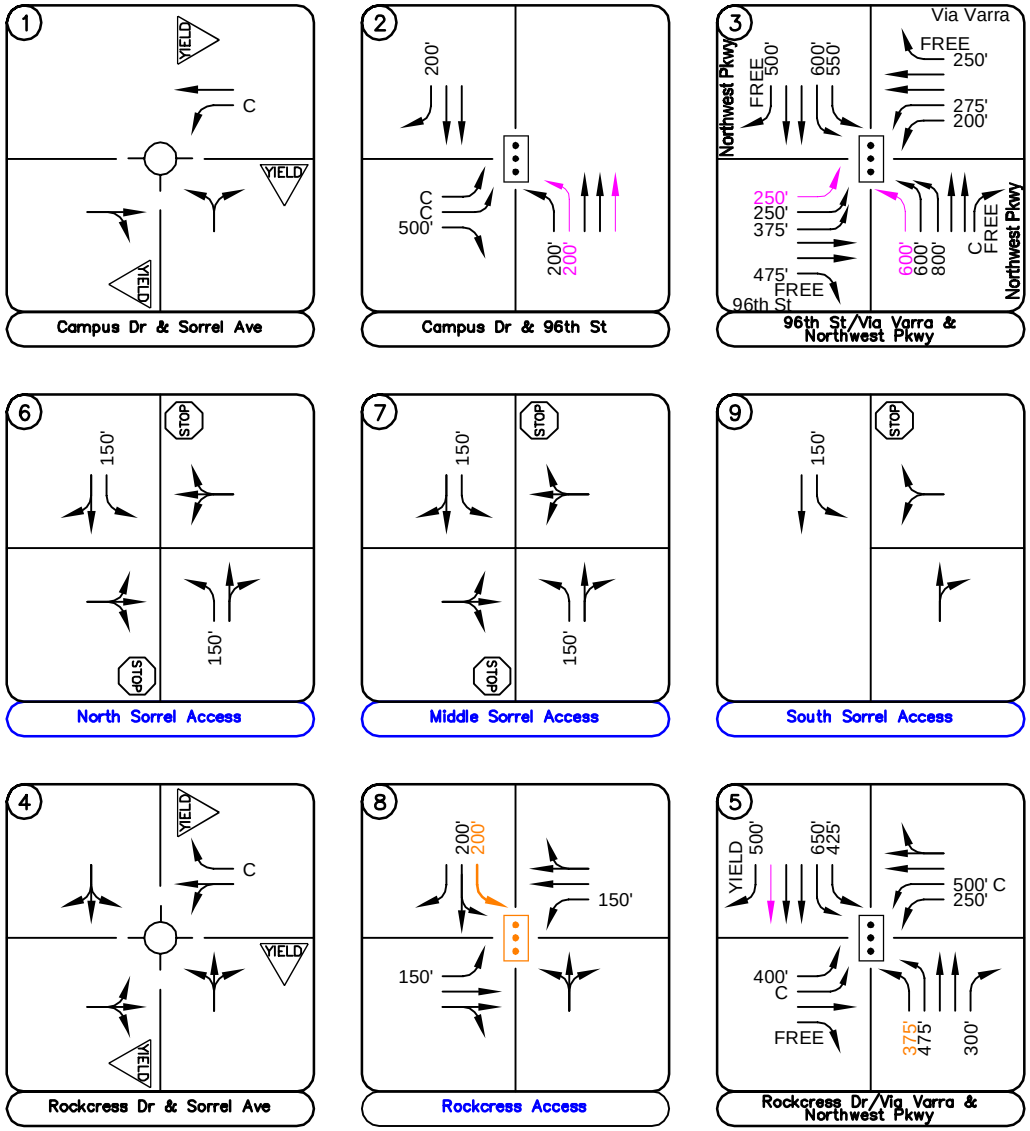


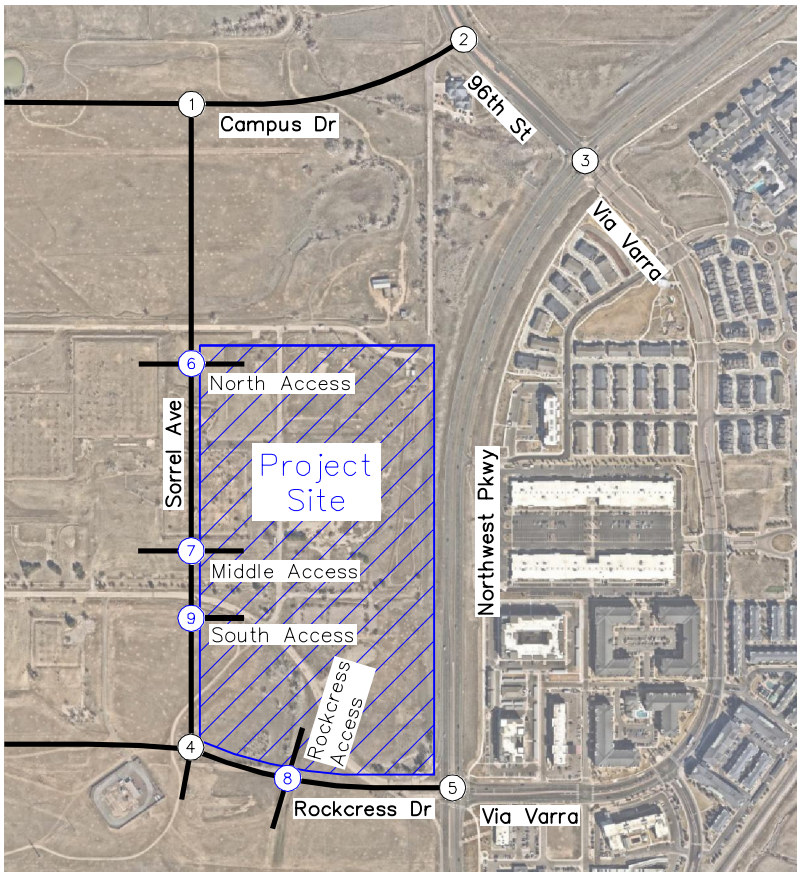


LEGEND

- Study Area Key Intersection
- Roundabout
- Yield-Controlled Approach
- Signalized Intersection
- Stop-Controlled Approach
- Hospital-Specific Improvement
- Improvement by Others
- 100' Turn Lane Length (feet)
- C Continuous Turn Lane

FIGURE 12
AdventHealth Louisville
Louisville, Colorado
2030 Recommended Geometry and Control





LEGEND

- Study Area Key Intersection
- Roundabout
- Yield–Controlled Approach
- Signalized Intersection
- Stop–Controlled Approach
- Hospital–Specific Improvement
- Improvement by Others
- 100' Turn Lane Length (feet)
- C Continuous Turn Lane

FIGURE 13
AdventHealth Louisville
Louisville, Colorado
2040 Recommended Geometry and Control

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis presented in this report, Kimley-Horn believes AdventHealth Louisville will be successfully incorporated into the existing and future roadway network. There is an existing AdventHealth hospital located at the intersection of Campus Drive and 88th Street approximately 1.25 miles to the west of this proposed site. This existing site includes approximately 400,000 square feet of hospital/medical office building uses and is approved with an expansion of an additional 350,000 square feet to include up to 750,000 square feet at full buildout. The currently proposed AdventHealth site within the Redtail Ridge development area is expected to include up to 799,600 square feet of hospital/medical office building uses. As such, this increase of 49,600 square feet of additional uses with relocation of the existing hospital with approved expansion to the new site is expected to result in approximately 658 additional weekday daily trips, with 47 more trips during the morning peak hour and 61 more trips during the afternoon peak hour compared to the traffic the existing site could generate. This results in approximately one additional vehicle every 75 seconds during the morning peak hour and one additional vehicle every minute (60 seconds) during the afternoon peak hour on the surrounding street network compared to the existing project site. This study assessed the additional improvements that could be needed due to the additional square footage of this proposed site, and any vehicle rerouting that could occur with the site being located further to the east. Analysis of the existing street network, the proposed project development, and expected traffic volumes resulted in the following recommendations:

2030 Recommendations

All offsite transportation recommendations identified as being needed within this horizon are consistent with the findings of the master traffic study. Those improvements are already being proposed and constructed to serve the entire development area. As such, the following outlines the recommendations found to be needed by the 2030 horizon:

- The Campus Drive & Sorrel Avenue (#1) intersection is anticipated to be constructed prior to AdventHealth Louisville construction. Based on currently proposed construction plans, it will be a 'T'-roundabout controlled intersection, with eastbound Campus Drive operating with a shared through/right turn lane, westbound Campus Drive providing separate left and through lanes, and the northbound Sorrel Avenue approach providing one lane for shared left/right

turning movements. R1-2 “YIELD” signs should be posted on all three approaches to the roundabout.

- The Campus Drive & 96th Street (#2) intersection is anticipated to become a signalized ‘T’-intersection with full movements allowed by the 2030 horizon prior to AdventHealth construction. For purposes of this study, the eastbound Campus Drive approach was based on the proposed construction plans, which would have dual continuous eastbound left turn lanes and a separate right turn lane approximately 500 feet in length. The northbound 96th Street approach was conservatively assumed to provide a single 200-foot left turn lane and two through lanes in this horizon. However, at full buildout based on construction plans, it is anticipated to provide dual left turn lanes and three through lanes northbound. The southbound 96th Street approach should provide two through lanes and a 200-foot right turn lane.
- The 96th Street/Via Varra & Northwest Parkway (#3) intersection may require extension of the eastbound right turn lane from 375 feet to approximately 475 feet by this horizon to meet expected vehicle queues. However, if not improved, it is believed any additional vehicles can safely queue in the southernmost eastbound through lane if these queues are experienced.
- The future Rockcress Drive & Sorrel Avenue (#4) intersection is proposed to be constructed as a four-leg roundabout prior to AdventHealth construction. The eastbound, northbound, and southbound approaches are all expected to provide one approach lane for shared left/through/right turning movements, while the westbound approach would provide a shared left/through lane and a separate right turn lane. Each approach should provide R1-2 “YIELD” signs on approach to the intersection.
- The Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection is expected to be improved on the eastbound approach to the intersection with dual left turn lanes, one of which would provide 400 feet in length while the other would be a continuous turn lane. These improvements are based on the currently proposed improvement plans. Although it is understood that three southbound through lanes are eventually proposed at this intersection, it was conservatively analyzed with the existing two southbound through lanes during this horizon.

The following recommendations are specific to accesses proposed for Phase 1 of the AdventHealth Louisville Hospital Campus to be constructed by the development:

- Two full movement accesses are proposed along the east side of Sorrel Avenue that will align with two proposed accesses on the west side of Sorrel Avenue. R1-1 “STOP” signs are proposed on the eastbound and westbound approaches to Sorrel Avenue at both accesses. These accesses should operate well with one approach lane for shared left/through/right turning movements. The northbound and southbound approaches of Sorrel Avenue to both accesses are recommended to provide 150-foot left turn lanes and shared through/right turn lanes.
- A third full movement access along the east side of Sorrel Avenue is also proposed, which is anticipated to be constructed as a ‘T’-intersection. An R1-1 “STOP” sign should be constructed on the westbound approach for vehicles exiting the site. A southbound left turn lane 150 feet in length should also be provided.
- The primary access into the proposed site is anticipated to be along Rockcress Drive, approximately 775 feet to the west of Northwest Parkway, measured center to center. This intersection is anticipated to operate well under minor street stop control through the 2030 horizon with Phase 1 construction of AdventHealth Louisville. The Rockcress Access (#8) is recommended to provide a 150-foot left turn lane, one through lane, and one shared through/right turn lane along both eastbound and westbound Rockcress Drive. The northbound approach to the intersection is anticipated to operate well with one lane for shared left/through/right turning movements while the southbound approach exiting the hospital should provide a 200-foot left turn lane and a separate through/right lane. Of note, dual southbound left turn lanes are recommended at this access at full buildout and as such, it is recommended that pavement width be provided for the future second left turn lane, but that it be striped out with chevron striping to allow only one southbound left turn lane until full buildout of the hospital site. During this horizon, R1-1 “STOP” signs should be posted on the northbound and southbound approaches.

2040 & 2045 Recommendations

The offsite transportation recommendations identified in the 2040 and 2045 horizons are also consistent with the findings of the master traffic study. All of the improvements identified herein are anticipated to result in the study intersections and surrounding street network operating acceptably in both the 2040 and 2045 horizons. The improvements already being proposed and constructed to serve the entire development area as follows:

- By the 2040 horizon, it was assumed that the Campus Drive & 96th Street (#2) intersection would provide dual northbound left turn lanes 200 feet in length while a third northbound through lane would also be provided. This third northbound through lane would provide the third required receiving lane for the proposed triple northbound left turn lanes at Northwest Parkway just to the southeast.
- The 96th Street/Via Varra & Northwest Parkway (#3) intersection is anticipated to provide triple northbound left turn lanes on Northwest Parkway and triple eastbound left turn lanes on 96th Street based on proposed improvement plans. For purposes of this study, the third northbound left turn lane was assumed to provide 600 feet in length while the third eastbound left turn was assumed to provide 250 feet in length. It should be noted the third eastbound left turn lane will require three receiving lanes on Northwest Parkway to the north of this intersection.
- The Rockcress Parkway/Via Varra & Northwest Parkway (#5) intersection should provide three southbound through lanes by this horizon.

The following identified improvements are recommended in association with development of full buildout of the AdventHealth Louisville hospital and medical campus. These improvements are in addition to improvements already being planned and constructed.

- To meet expected vehicle queues, the inner northbound left turn lane at the Rockcress Parkway/Via Varra & Northwest Parkway (#5) intersection may need to be extended from 250 feet to 375 feet to meet expected vehicle queues. It is believed this northbound left turn lane extension can be accomplished with minor median reconstruction.
- With full buildout of the AdventHealth site, the Rockcress Access (#8) is recommended to be signalized and is expected to meet warrants for signalization. When signalized, the southbound approach exiting the hospital is recommended to be improved to provide dual left turn lanes 200 feet in length, with the westernmost left turn lane also providing through movement, while a separate right turn lane should be provided.

General Recommendations

- Any onsite or offsite improvements should be incorporated into the Civil Drawings and conform to standards of the City of Louisville and the Manual on Uniform Traffic Control Devices (MUTCD) – 11th Edition, 2023.

DEVELOPMENT AGREEMENT
AdventHealth Planned Unit Development and Special Review Use
Lot 1, Block 2, Redtail Ridge Filing No. 1

THIS DEVELOPMENT AGREEMENT ("Agreement") is made and entered into this _____ day of _____, 2026, by and between the **CITY OF LOUISVILLE**, a Colorado home rule municipal corporation ("City"), and **PORTERCARE ADVENTIST HEALTH SYSTEM,** a Colorado nonprofit corporation ("Developer").

WHEREAS, Developer has submitted an application for a Planned Unit Development Plan Amendment and Special Review Use (the "Plan") for development of real property located within the Redtail Ridge PUD #6 legally described as Lot 1, Block 2, Redtail Ridge Filing No. 1 (the "Development"), which Plan has been reviewed and approved by the Planning Commission and the City Council by Resolution No. _____, Series 2026 and recorded with the Boulder County Clerk and Recorder on _____, 2026 at Reception No. _____; and

WHEREAS, the development regulations of the City require that the public improvement obligations for the Development be guaranteed in a form acceptable to the City; and

WHEREAS, the Developer and City desire to enter into this Agreement relative to the completion of certain improvements and other matters related to the Development.

NOW, THEREFORE, in consideration of the foregoing, the parties hereto promise, covenant and agree as follows:

1.0 GENERAL CONDITIONS

1.1 Development Obligation. Developer shall be responsible for performance of the covenants set forth herein.

1.2 Engineering Services. Developer agrees to furnish, at its expense, all necessary engineering services relating to the design and construction of the improvements as set forth on the Schedule of Improvements described in **Exhibit A** (the "public improvements" or "improvements"), attached hereto and incorporated herein by this reference. The engineering services shall be performed by or under the supervision of a Registered Professional Engineer or Registered Land Surveyor, or other professionals as appropriate, licensed by the State of Colorado, and in accordance with applicable Colorado law; and shall conform to the standards and criteria for public improvements as established and approved by the City as of the date of submittal to the City.

1.3 Construction Standards. Developer shall construct all improvements required by this Agreement, and any other improvements constructed by Developer in relation to the Development, in accordance with plans and specifications approved in writing by the

City, and with the Plan, and in full conformity with the City's construction specifications applicable at the time of construction plan approval.

1.4 Development Coordination. Unless specifically provided in this Agreement to the contrary, all submittals to the City or approvals required of the City in connection with this Agreement shall be submitted to the Planning Division of the City, who shall have general responsibility for coordinating development with Developer.

1.5 Timing of Development. Pursuant to Section 17.28.200 of the Louisville Municipal Code, Developer has three (3) years from City Council approval of the Plan on _____, within which to secure a building permit or building permits for the Development, subject to any extensions that may be granted by the Planning Commission and City Council. In addition to the foregoing, the Developer agrees that it shall complete the improvements for the Development and obtain Construction Acceptance thereof prior to the issuance of the first certificate of occupancy for any portion of the Development. In the event that Developer determines to not proceed with any portion of the Development and no building permits have been issued within three (3) years from City Council approval, or any extension thereof, then pursuant to Section 17.28.200, no building permits shall be issued for the Development and, notwithstanding any other section of this agreement relating to the design and construction of the public improvements set forth in **Exhibit A**, the Developer shall be relieved of all obligations to complete improvements under this Agreement and the Improvement Guarantee provided pursuant to Section 1.12 shall be released; provided however that, in such event, the Developer shall be required to obtain approval of a new PUD development plan, execute a new development agreement with the City, and provide a new Improvement Guarantee prior to receiving any building permits for or proceeding with any development of the property, excepting only work for which no PUD plan is required.

1.6 Plan Submission and Approval. Developer shall furnish to the City complete plans for all public improvements required for the Development and obtain approval thereof prior to commencing any construction work thereon. The City shall issue its written approval or disapproval of said plans as expeditiously as reasonably possible, and said approval shall not unreasonably be withheld, conditioned or delayed. Said approval or disapproval shall be based upon the standards and criteria for public improvements as established and approved by the City, and the City shall notify Developer of all deficiencies which must be corrected prior to approval. All deficiencies shall be corrected and plans shall be resubmitted to and approved by the City prior to construction.

1.7 Phasing; Completion Deadline; Construction Acceptance.

(a) Public improvements for the Development shall be completed in two phases. Phase 1 consists of those public improvements required to serve the Hospital and Phase 2 consists of those public improvements required to serve the Medical Office Building.

(1) Construction of public improvements for Phase 1 shall be complete, and construction acceptance for the public improvements shall be requested in accordance with subsection (b) of this Section 1.7, by no later than

_____ (completion deadline may not be during winter season, November 1 – March 1).

(2) Construction of public improvements for Phase 2 shall be complete, and construction acceptance for the public improvements shall be requested in accordance with subsection (b) of this Section 1.7, within _____ of construction acceptance for the Phase 1 public improvements being granted by the City.

(b) No later than ten (10) days after the public improvements are completed for each phase, Developer shall request inspection by the City, which request shall be in writing to the City Department of Public Works. If Developer does not request this inspection within ten (10) days of completion of the public improvements, the City may conduct the inspection without the approval of Developer and provide written notice to Developer of reasonable repairs, replacements, construction or other work required. Developer shall provide "as-built" drawings, both hard copy and electronic file format acceptable to the City, and a certified statement of construction costs no later than thirty (30) days after the public improvements are completed. The certification shall be signed by an officer, member or agent on behalf of the Developer representing that amounts stated are the actual costs incurred. If Developer has not completed the public improvements on or before either of the completion deadlines set forth in subsection (a) of this Section, the City may exercise its rights to secure performance as provided in this Agreement. If improvements completed by Developer are satisfactory, the City shall grant "Construction Acceptance" after which the Developer shall provide a warranty for the improvements and the same shall be subject to "Final Acceptance" as set forth herein. If improvements completed by Developer are unsatisfactory, the City shall provide written notice to Developer of the repairs, replacements, construction or other work required to receive Construction Acceptance. Developer shall complete all needed repairs, replacements, construction or other work within thirty (30) days of said notice, weather permitting. After Developer completes the repairs, replacements, construction or other work required, Developer shall request of the City a re-inspection of such work to determine if Construction Acceptance can be granted, and the City shall provide written notice to Developer of the acceptability or unacceptability of such work prior to completing any such work at Developer's expense. If Developer does not complete the repairs, replacements, construction or other work required within the time frame set forth in this Section, the City may exercise its rights to secure performance as provided in this Agreement. The City reserves the right to schedule re-inspections, depending upon scope of deficiencies. **No certificate of occupancy within each phase of the Development shall be issued by the Building Division prior to Construction Acceptance of the public improvements for such phase.**

1.8 Warranty & Maintenance of Improvements. For a two (2) year period from the date of Construction Acceptance of each phase of the Development, Developer shall, at its own expense, take all actions necessary to maintain said improvements and make all needed repairs or replacements which, in the reasonable opinion of the City, shall become necessary. If within thirty (30) days of Developer's receipt of written notice from the City requesting such repairs or replacements, the Developer has not completed such

repairs, the City may exercise its rights to secure performance as provided in this Agreement. Notwithstanding the above, the Developer and each successor owner of the Development property shall be responsible for the warranty and maintenance obligations provided for herein, subject to Section 3.4 of this Agreement.

1.9 Final Acceptance. At least sixty (60) days before two (2) years have elapsed from the issuance of Construction Acceptance for each phase, or as soon thereafter as weather permits, Developer shall request a Final Acceptance inspection. The City shall inspect the improvements and shall notify the Developer in writing of all deficiencies and necessary repairs. After Developer has corrected all deficiencies and made all necessary repairs identified in said written notice, the City shall promptly issue to Developer a letter of Final Acceptance. If Developer does not correct all deficiencies and make repairs identified in said inspection to the City's reasonable satisfaction within thirty (30) days after receipt of said notice, weather permitting, the City may exercise its rights to secure performance as is provided in this Agreement. If any mechanic's liens have been filed with respect to the public improvements, the City may retain all or a portion of the Improvement Guarantee up to the amount of such liens. If Developer fails to have improvements finally accepted within two (2) years of the date of the issuance of Construction Acceptance for each phase or any improvements are found not to conform to this Agreement, or to applicable City standards and specifications, then Developer shall be in default of the Agreement and the City may exercise its rights under this Agreement.

1.10 Reimbursement to City. Upon Developer's breach of any of its obligations beyond any applicable cure period, the City may complete construction, repairs, replacements, or other work of Developer pursuant to this Agreement in which event Developer shall reimburse the City within thirty (30) days after receipt of written demand and reasonable supporting documentation from the City. If Developer fails to so reimburse City, then Developer shall be in default of the Agreement and the City may exercise its rights to enforce the Agreement.

1.11 Testing and Inspection. Developer shall employ, at its own expense, a licensed and registered testing company, previously approved by the City in writing, to perform all testing of materials or construction that may be reasonably required by the City, and shall furnish copies of test results to the City together with maps clearly indicating the horizontal and vertical test locations on a timely basis for City review and approval prior to commencement or continuation of that particular phase of construction. In addition, at all times during said construction the City shall have reasonable access to inspect the materials and workmanship of said construction and all materials and work not conforming to the approved plans and specifications shall be repaired or removed and replaced at Developer's expense so as to conform to the approved plans and specifications.

All work shown on the approved public improvement plans requires inspection by the Public Works Department, Engineering Division. Inspection services are provided Monday through Friday, except legal holidays, from 8:00 a.m. to 4:00 p.m., November 1 through March 31, and from 7:00 a.m. to 5:00 p.m., April 1 through October 31. During the hours listed above, inspections shall be scheduled a minimum of 24 hours in advance

with the Engineering Division. Requests for inspection services beyond the hours listed above shall be submitted a minimum of 48 hours in advance to the Director of Public Works for approval. All requests for after hours inspection services shall be made on a form provided by the Engineering Division. If the request is approved, the Developer shall reimburse the City for all direct costs of the after-hours inspection services. If the request is denied, the work shall not proceed until after the inspection is conducted during the hours listed above.

1.12 Improvement Guarantee.

(a) Developer shall install and pay for all improvements described and depicted in **Exhibit A** or otherwise required by the Development as shown on the approved Plan, utility plans, and other approved documents on file with the City.

(b) Developer shall submit to the City an Improvement Guarantee for all improvements, as set forth in **Exhibit A**. The guarantee may be in cash, certified funds, or a letter of credit in form and substance of **Exhibit B** attached hereto and incorporated herein by this reference. The Plan shall not be recorded and construction of Public Improvements shall not be commenced until the City has approved and accepted the Improvement Guarantee for the Phase 1 public improvements.

(c) Said Improvement Guarantee, if a letter of credit, shall not expire during the winter season (November 1 - March 1). The Improvement Guarantee for public improvements shall include, but not by way of limitation, any street construction, landscaping and seeding, fencing, street lights, street signs, pavement markings, water, sewer, storm sewer, trail and trailhead improvements, and irrigation and drainage improvements. The total amount of the Improvement Guarantee provided prior to recording the Plan shall be 120% of the total estimated cost including labor and materials of all public improvements to be constructed in Phase 1 of the Development, which costs are set forth on **Exhibit A** (Hospital). The Improvement Guarantee shall only be reduced as follows:

(1) Upon Construction Acceptance and prior to Final Acceptance of the Phase 1 public improvements: Improvement Guarantee reduced to 20% of the total estimated cost of the Phase 1 public improvements plus 120% of the total estimated cost of the Phase 2 public improvements (Medical Office Building);

(2) After Final Acceptance of the Phase 1 public improvements: Improvement guarantee reduced to 120% of the Phase 2 public improvements.

(3) Upon Construction Acceptance and prior to Final Acceptance of the Phase 2 public improvements: Improvement guarantee reduced to 20% of the total estimated cost of the Phase 2 public improvements.

(4) After Final Acceptance of the Phase 2 public improvements: Remainder of improvement guarantee released, subject to the terms and conditions of this Agreement.

(d) In addition to any other remedies it may have, the City may, at any time prior to Final Acceptance, and upon thirty (30) days prior written notice to Developer (pursuant to this Agreement), draw on any Improvement Guarantee issued pursuant to this Agreement if Developer fails to extend or replace any such Improvement Guarantee at least forty-five (45) days prior to expiration of such Improvement Guarantee. Except to the extent the City draws on the Improvement Guarantee to correct deficiencies and complete improvements as provided herein, any portion of said Guarantee not utilized in correcting the deficiencies and/or completing the same shall be released or returned to Developer within thirty (30) days after said Final Acceptance. In the event that the Improvement Guarantee expires or the entity issuing the Improvement Guarantee becomes non-qualifying, or the cost of the public improvements and construction thereof is reasonably determined by the City to be substantially greater than the amount of the Improvement Guarantee provided, then the City shall furnish written notice to Developer of the condition, and within thirty (30) days of receipt of such notice Developer shall provide the City with a substituted qualifying Improvement Guarantee, or augment the deficient security as necessary to bring the security into compliance with the requirements of this Agreement. If such an Improvement Guarantee is not submitted or maintained for the Development as required herein, then Developer is in default of this Agreement, and the City may exercise its rights and remedies hereunder, in equity, and at law to secure performance.

1.13 Indemnification and Release of Liability. Developer agrees to indemnify and hold harmless the City, its officers, employees, agents, or servants, and to pay any and all judgments rendered against said persons on account of any suit, action, or claim caused by, arising from, or on account of acts or omissions by the Developer, its officers, employees, agents, consultants, contractors, and subcontractors, and to pay to the City and said persons their reasonable expenses, including, but not limited to, reasonable attorneys' fees and reasonable expert witness fees, incurred in defending any such suit, action or claim; provided however that, Developer's obligations herein shall not apply to the extent said suit, action or claim results from the acts or omissions of officers, employees, agents or servants of the City. Developer acknowledges that the City's review and approval of plans for the Development is done in furtherance of the general public's health, safety and welfare and that no immunity is waived and no specific relationship with, or duty of care to, the Developer or third parties is assumed by such review approval.

1.14 Insurance OSHA. Developer shall, through contract requirements and other normal means, guarantee and furnish to the City proof thereof that all employees and contractors engaged in the construction of improvements are covered by adequate Worker's Compensation Insurance and Public Liability Insurance, and shall require the

faithful compliance with all provisions of the Federal Occupational Safety and Health Act (OSHA).

2.0 IMPROVEMENTS

2.1 Construction. Developer shall furnish and install, at its own expense, the improvements listed on the Schedule of Improvements attached as **Exhibit A,** in conformance with the Plan and all additional drawings, plans and specifications approved by the City prior to construction, and in accordance with the completion deadlines set forth in this Agreement. If Developer does not meet the above obligations then Developer shall be in default of the Agreement and the City may exercise its rights under this Agreement.

2.2 Sidewalks & Streets. All sidewalks, curb cuts, street improvements, and appurtenances thereto shall be constructed and installed by Developer pursuant to City approved plans and specifications and the Plan.

2.3 Landscaping. All landscaping, irrigation, and appurtenances thereto in the public right-of-way adjacent the Development property shall be constructed and installed by Developer pursuant to the City approved plans and specifications and the Plan. All landscape plans shall include construction plan details for irrigation system improvements. Developer shall obtain and pay all tap fees and other fees for any irrigation taps required for the Development.

2.4 Drainage Improvements and Owner Maintenance Obligations.

(a) Drainage improvements for the Development shall be constructed by Developer and, at the minimum, in accordance with plans and specifications approved by the City. No overlot grading shall be initiated by Developer until the City has granted written approval of drainage improvement plans. Developer shall provide temporary erosion control during overlot grading until drainage improvements are installed.

(b) All stormwater facilities for the Development shall be constructed by Developer according to plans and specifications approved by the City prior to the commencement of construction. All stormwater facilities owned by Developer will be operated and maintained by Developer and its successors in title, at no expense to the City. Such maintenance shall include but not be limited to, repair and replacement of detention pond structures, mowing, control of weeds, removal of trash and debris, and other activities necessary to keep the stormwater facilities in proper working order. The Developer shall execute a Stormwater Best Management Practices (BMP) agreement for such facilities consistent with the requirements of the Louisville Municipal Code (Section 13.36.160) prior to Construction Acceptance.

(c) The City shall have the right but not the obligation, in its sole discretion, to maintain the improvements and facilities required to be maintained by Developer pursuant to subsections (a) and (b) above. If Developer fails to adequately maintain the improvements or facilities and, within fourteen (14) days after the date of written notice from City, fails to correct the maintenance problem, or fails to begin to clean, cure or

correct such problem within fourteen (14) days if such problem cannot be reasonably cleaned, cured or corrected within fourteen (14) days, and fails to diligently prosecute such cleaning, cure or correction to completion, then City may do so at Developer's expense, and the City, its employees, agents and contactors shall have the right to enter, over, through and across the properties upon which such facilities are located for purposes of exercising the City's rights hereunder. Notwithstanding the foregoing, the City may, in the event of an emergency, as determined by the City in its sole discretion, clean, cure or correct any damage or condition caused by Developer's failure to adequately maintain the improvements or facilities. Developer shall reimburse the City for the cost of such maintenance. If Developer fails to reimburse the City for the cost of such maintenance, within thirty (30) days after receipt of an invoice from the City describing the corrective or maintenance action taken, the unpaid amount shall constitute a lien upon the property where the work occurred until paid in full, with priority over all other liens, except general tax liens, and which lien shall be certified to the County treasurer and collected in the same manner as other liens are collected. Developer further agrees that the City may also pursue any and all other remedies available at law or in equity.

2.7 Trash, Debris, Mud. Developer agrees that during construction of the Development and improvements described herein, Developer shall take any and all steps necessary to control trash, debris and wind or water erosion in the Development. If the City determines that said trash, debris or wind or water erosion causes damage or injury or creates a nuisance, Developer agrees to abate said nuisance and/or to correct any damage or injury within five working days after notification by City. If Developer does not abate said nuisance or if an emergency situation exists, to be determined by the City in its sole discretion, the City may abate the nuisance and/or correct any damage or injury without notice to Developer at Developer's expense. Developer also agrees to take any and all reasonable steps designed to prevent the transfer of mud or debris from the construction site onto public rights-of-way and to immediately remove such mud and debris from public rights-of-way after notification by the City. If Developer does not abate, or if an emergency exists, City may abate at Developer's expense.

2.8 Operation of Construction Equipment.

(a) Pursuant to Section 9.34.040 of the Louisville Municipal Code the operation of construction equipment outside an enclosed structure shall be prohibited between the hours of 8:00 p.m. and, on weekdays, the hour of 7:00 a.m. or, on legal holidays and weekends, the hour of 8:00 a.m. The Planning Director may, upon written application from Developer, alter the hours of operation for good cause.

(b) The operation of construction equipment for the purpose of grading or constructing either surface improvements or underground utilities, either public or private, shall be prohibited between the hours of 8:00 p.m. and 7:00 a.m. on weekdays and 4:00 p.m. and 8:00 a.m. on legal holidays and weekends. Upon written request from Developer, the hours of operations may be altered by the Director of Public Works.

3.0 MISCELLANEOUS TERMS

3.1 Breach of Agreement. In the event that the Developer should fail to timely comply with any of the terms, conditions, covenants and undertakings of the Agreement, and if such noncompliance is not cured and brought into compliance within thirty (30) days of written notice of breach of the Developer by the City, unless the City in writing and in its sole discretion designates a longer cure period, then the City has the right to begin work on some or all of the improvements at the expense of the Developer, and further may draw upon the Improvement Guarantee to complete the necessary improvements or such other action is necessary to cure the default, at Developer's expense. Developer's expenses shall be limited to the costs incurred by the City, as defined herein. Notice by the City to the Developer will specify the conditions of default. If the City determines in its sole discretion that an emergency exists, such that the improvement must be completed in less than seven (7) days, the City may immediately draw upon the Improvement Guarantee, if available, and may complete the improvements at Developer's expense even if the Improvement Guarantee is not available; in such event, the City shall use its best efforts to notify Developer at the earliest practical date and time. The City may also, during the cure period and until completion of the improvements in compliance with this Agreement, withhold any additional building permits, certificates of occupancy, or provision of new utilities fixtures or services. Nothing herein shall be construed to limit the City from pursuing any other remedy at law or in equity which may be appropriate under city, state or federal law. Failure to timely complete construction of improvements which is due to inclement weather, unavailability of labor or materials, or force majeure shall not be considered a breach of the Agreement. Any costs incurred by the City, including, but not limited to, reasonable administrative costs and reasonable attorney's fees, in pursuit of any remedies due to the breach by the Developer shall be the responsibility of the Developer.

3.2 Recording of Agreement. The City shall record this Agreement at Developer's expense in the office of the Clerk and Recorder, County of Boulder, State of Colorado, and the City shall retain the recorded Agreement and promptly provide a recorded copy to Developer.

3.3 Binding Effect of Agreement. This Agreement shall run with the land included within the Development and shall inure to the benefit of and be binding upon the successors and assigns of the parties hereto.

3.4 Assignment, Delegation and Notice. This Agreement, or any part of this Agreement, may not be assigned by the Developer to any other party without the prior written approval of the City, which approval shall not be unreasonably withheld, conditioned or delayed. Developer shall provide to the City for approval written notice of any proposed assignment of any obligations under this Agreement to any successor, as well as arrangements, if any, for delegation of the obligations hereunder. Developer and any successor shall, until written City approval of the proposed assignment and delegation of obligations, be jointly and severally liable for the obligations of Developer under this Agreement; following such approval, Developer shall be released from such obligations from and after the date of such approval, but such approval shall not release

any previously accrued liabilities unless expressly agreed by the City. The City may require as part of any such approval that the successor execute its consent to be bound by specified terms and conditions hereof and/or of applicable provisions of the Plan and other applicable documents.

3.5 Modification and Waiver. No modification of the terms of this Agreement shall be valid unless in writing and executed with the same formality as this Agreement, and no waiver of the breach of the provisions of any section of this Agreement shall be construed as a waiver of any subsequent breach of the same section or any other sections which are contained herein.

3.6 Addresses for Notice. Any notice or communication required or permitted hereunder shall be given in writing and shall be personally delivered, or sent by United States mail, postage prepaid, registered or certified mail, return receipt requested, addressed as follows:

CITY:

City of Louisville
City Manager
749 Main Street
Louisville, CO 80027

With a copy to:

City of Louisville
City Attorney
749 Main Street
Louisville, CO 80027

DEVELOPER:

PorterCare Adventist Health System
6061 S. Willow Dr.
Greenwood Village, CO 80112
Attn: Regional Chief Legal Officer

With a copy to:

Kutak Rock LLP
2001 16th Street, Suite 1800
Denver, CO 80202
Attn: Katie Crane

or to such other address or the attention of such other person(s) as hereafter designated in writing by the applicable parties in conformance with this procedure. Notices shall be effective three (3) days after mailing, one (1) business day after deposit with a nationally recognized overnight courier service, or upon personal delivery in compliance with this paragraph.

3.7 Force Majeure. Whenever Developer is required to complete construction, maintenance, repair, or replacement of improvements by a given or agreed-upon deadline, such deadline shall be reasonably extended if Developer cannot as a practical matter, complete such performance by such deadline due to Acts of God or other circumstances constituting force majeure or beyond the reasonable control of Developer, including, without limitation, strikes, walk-outs, or work stoppages.

3.8 Approvals. Whenever approval or acceptance of a matter is required or requested of the City pursuant to any provisions of this Agreement, the City shall act reasonably in responding to such matter.

3.9 Previous Agreements. All previous written and recorded agreements between the parties or their predecessors, including, but not limited to, any Annexation Agreement, Subdivision Agreement or Development Agreement, shall remain in full force and effect and shall control this Development. If any prior agreements conflict with this Agreement, then this Agreement controls.

3.10 Title and Authority. Developer warrants to the City that it is the record owner of the Development property or is acting in accordance with the currently valid and unrevoked power of attorney of the record owner hereto attached. The undersigned further warrant to have full power and authority to enter into this Agreement.

3.11 Governing Law; Venue; Severability. This Agreement and all matters arising hereunder or in connection herewith shall be governed by and construed and enforced in accordance with the laws of the State of Colorado. Any disputes regarding or arising out of this Agreement shall be brought in the courts of Boulder County, Colorado, and in no other court. In the event that any provision of the Agreement is held to be violative of the city, state, or federal laws and hereby rendered unenforceable, the City, in its sole discretion, may determine whether the remaining provisions will or will not remain in force.

IN WITNESS WHEREOF, the parties have executed this Development Agreement as of the date first set forth above.

CITY OF LOUISVILLE

By:_____
Christopher M. Leh, Mayor

ATTEST:

By:_____
Genny Kline, City Clerk

DEVELOPER:
PORTERCARE ADVENTIST HEALTH SYSTEM, a Colorado nonprofit corporation

By:_____
Jeremy Pittman, Regional CFO

ACKNOWLEDGMENT

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing signature of Jeremy Pittman, as Regional CFO of PorterCare Adventist Health System, was subscribed and sworn to before me this ____day of _____, 2026.

Witness my hand and official seal.

_____
Notary Public

My commission expires:_____

EXHIBIT A

SCHEDULE OF IMPROVEMENTS

Kimley-Horn and Associates, Inc. **Opinion of Probable Construction Cost**

Client:	Adventhealth	**Date:**	5/6/2026
Project:	AH Louisville	**Prepared By:**	FRJ
KHA No.:	196315001	**Checked By:**	ELG

Summary of Costs

Kimley-Horn and Associates, Inc. has not prepared fully engineered construction drawings for this entire site; therefore, the final quantities are subject to change. Additionally, the final land plan could change significantly through the development process. Review all notes and assumptions. Since Kimley-Horn and Associates, Inc. has no control over the cost of labor, materials, equipment, or services furnished by others, or over methods of determining price, or over competitive bidding or market conditions, any and all opinions as to the cost herein, including but not limited to opinions as to the costs of construction materials, shall be made on the basis of experience and best available data. Kimley-Horn and Associates, Inc. cannot and does not guarantee that proposals, bids, or actual costs will not vary from the opinions on costs shown herein. The total costs and other numbers in this Opinion of Probable Cost have been rounded.

Sheet No.	Item Description	Item Cost
2	Hospital	$1,258,610
3	Medical Office Building	$141,862
	Total:	**$1,400,472**

Basis for Cost Projection:

- ☐ No Design Completed
- ☐ Preliminary Design
- ☑ Final Design

Design Engineer: Kimley-Horn

COLORADO REGISTERED ERIN LEIGH GRIFFIN 42694 PROFESSIONAL ENGINEER

Erin Griffin, PE
Registered Professional Engineer, State of Colorado No. 42694

ESTIMATE ASSUMPTIONS / NOTES

1. Project consists of two phases, hospital and medical office building. Each phase has been detailed on Sheets 2 and 3, respectively.
2. Cost Opinion captures only public improvements for the Project. This consists of water, sanitary, and offsite storm.
3. Units costs used in this cost opinion are derived from readily available information and do not account for inflationary cost escalation.
4. This cost opinion does not include permitting and review fees, contractor's bonding, insurance, and geotechnical/materials testing.
5. The design contingency captures the estimated progression of civil site design and the correlated increase in pricing.
6. The Engineer has no control over the cost of labor, materials, or equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs, as provided here, are made on the basis of the Engineer's experience and qualifications and represent the Engineer's judgement as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable cost prepared for the Owner.

PROJECT NAME:	AH Louisville
PROJECT NO:	196315001
DATE PREPARED:	May 6, 2026
TOTAL SITE ACREAGE:	39.90

CIVIL ESTIMATE - HOSPITAL

	QUANTITY	UNIT	UNIT COST	TOTAL
SEWER				
8" PVC SEWER LINE	30	LF	$90	$2,700
12" PVC SEWER LINE	660	LF	$115	$75,900
4' DIAMETER MANHOLES	5	EA	$10,000	$50,000
CONNECT TO EXISTING	1	EA	$10,000	$10,000
			SEWER SUB-TOTAL	$138,600
WATER				
6" PVC-LINE	40	LF	$120	$4,800
12" PVC-LINE	3,030	LF	$170	$515,100
6" PVC HYDRANT LATERAL	150	LF	$120	$18,000
TEE	13	EA	$3,000	$39,000
FIRE HYDRANT ASSEMBLY	6	EA	$6,000	$36,000
4" DOMESTIC METER	2	EA	$25,000	$50,000
12" GATE VALVE	11	EA	$4,700	$51,700
10" GATE VALVE	1	EA	$3,800	$3,800
8" GATE VALVE	1	EA	$3,500	$3,500
6" GATE VALVE	8	EA	$3,000	$24,000
12" BEND MJ	11	EA	$1,100	$12,100
2" IRRGATION METER	1	EA	$15,000.00	$15,000
CONNECT TO EXISTING	3	EA	$10,000	$30,000
			WATER SUB-TOTAL	$803,000
STORM				
48" RCP	403	LF	$400	$161,200
4' DIAMETER MANHOLES	2	EA	$15,000	$30,000
Forebay	1	EA	$38,000	$38,000
			SEWER SUB-TOTAL	$229,200
			HOSPITAL SUB-TOTAL	$1,170,800
			ESTIMATE CONTINGENCY 5%	$58,540
			CONSTRUCTION CONTINGENCY 2.5%	$29,270
			TOTAL ESTIMATE FOR HOSPITAL COSTS:	$1,258,610

PROJECT NAME:	AH Louisville
PROJECT NO:	196315001
DATE PREPARED:	May 6, 2026
TOTAL SITE ACREAGE:	39.90

CIVIL ESTIMATE - MEDICAL OFFICE BUILDING

	QUANTITY	UNIT	UNIT COST	TOTAL
SEWER				
10" PVC SEWER LINE	134	LF	$110	$14,740
12" PVC SEWER LINE	275	LF	$115	$31,625
4' DIAMETER MANHOLES	2	EA	$10,000	$20,000
CONNECT TO EXISTING	1	EA	$10,000	$10,000
			SEWER SUB-TOTAL	$76,365
WATER				
6" PVC-LINE	25	LF	$120	$3,000
6" PVC HYDRANT LATERAL	30	LF	$120	$3,600
TEE	3	EA	$3,000	$9,000
FIRE HYDRANT ASSEMBLY	1	EA	$6,000	$6,000
2" DOMESTIC METER	1	EA	$15,000	$15,000
6" GATE VALVE	3	EA	$3,000	$9,000
CONNECT TO EXISTING	1	EA	$10,000	$10,000
			WATER SUB-TOTAL	$55,600
			MEDICAL OFFICE BUILDING SUB-TOTAL	$131,965
			ESTIMATE CONTINGENCY 5%	$6,598
			CONSTRUCTION CONTINGENCY 2.5%	$3,299
			TOTAL ESTIMATE FOR MOB COSTS:	$141,862

EXHIBIT B

IRREVOCABLE LETTER OF CREDIT
REQUIRED FORM

[date of Letter of Credit - the date the credit is opened]

City of Louisville
749 Main St
Louisville, CO 80027

Attn: City Clerk:

We hereby issue our Irrevocable Letter of Credit Number in your favor for the account of _____, in an amount not to exceed _____ effective immediately and expiring at our counters on (except November 1 - March 1) or any extended expiration date as indicated below.

Funds under this Letter of Credit are available for payment by sight, by presentation of your sight draft(s) substantially in the form of Exhibit "1" accompanied by your written certificate substantially in the form of Exhibit "2".

Partial and multiple drawings are permitted.

This Letter of Credit will automatically be extended for a period of sixty (60) days from the present or any future expiration date unless we notify you in writing by certified mail thirty (30) days prior to any expiration date that we elect not to renew this Letter of Credit for any additional period.

We hereby engage with you that all drawings in conformity with terms and conditions of the Letter of Credit will be duly honored upon presentation to our counters on or before any expiration date as indicated above.

All bank charges, including any advising bank charges, are to be charged to (account party's name).

If a demand for payment by you hereunder does not, in any instance, conform to the terms and conditions of this Letter of Credit, the bank shall give the City written notice, and send copy of this notice by FAX to the City of Louisville (Attn: City Clerk), within three business days of presentment of any nonconforming draft that the purported negotiation was not effective in accordance with the terms and conditions of the Letter of Credit, stating with particularity the reasons therefore. The bank will hold all documents at the bank for the City, or send them to the City, at the City's option. Any such nonconforming demand may be corrected and resubmitted within three (3) business days of receipt of the bank's mailed

notice of nonconformity. A resubmittal will be deemed to have been presented to the bank on the date of the original demand for payment.

We are a current member of (FDIC) (FSLIC).

This credit is subject to the Uniform Customs and Practice for Documentary Credits, 1993 revision, ICC publication number 500.

This Irrevocable Letter of Credit sets forth in full the terms of our undertaking and such undertaking shall not in any way be modified, amended or amplified by reference to any document or instrument referred to herein or in which the Irrevocable Letter of Credit relates and any such reference shall not be deemed to incorporate herein by reference any document or instrument.

Sincerely,

(Bank)

EXHIBIT 1 TO LETTER OF CREDIT

DRAFT FOR PAYMENT DRAWN UNDER

_____

IRREVOCABLE LETTER OF CREDIT NO._____

DATE:_____, 20__.

_____

PAY TO: The account of the City of Louisville, Colorado, Account

No. _____, at _____,

Colorado, THE SUM OF _____DOLLARS

($_____._____).

CITY OF LOUISVILLE, COLORADO

By:_____
City Clerk

EXHIBIT 2 TO LETTER OF CREDIT

To: _____
_____
_____

CERTIFICATE FOR PAYMENT

The undersigned, a duly appointed officer of the City of Louisville, Colorado (the "City"), hereby certifies to _____ (the "Bank"), with reference to the Bank's Irrevocable Letter of Credit No. _____ (the "Letter of Credit"), issued by the Bank in favor of the City, that:

(1) The undersigned is the City Clerk for the City.

(2) The City is authorized to make a drawing under the Letter of Credit.

(3) The amount which is due and payable from the Letter of Credit is $_____, and the amount of the sight draft accompanying this certificate does not exceed such amount.

IN WITNESS WHEREOF, the undersigned has executed and delivered this certificate as of the _____ day of _____, 20___.

CITY OF LOUISVILLE, COLORADO

By:_____
City Clerk

November 17, 2025
Revised February 10, 2026
Revised May 6, 2026

City of Louisville
Community Development Department
749 Main St
Louisville, CO 80027

RE: AdventHealth Louisville
NW Corner Northwest Parkway and Rockcress Drive, Louisville, CO
Transportation Demand Management (TDM) Plan Memo

To Whom it may Concern,
The purpose of this letter is to accompany the Traffic Impact Study for AdventHealth Louisville prepared by Kimley-Horn and Associates, Inc. dated November 17, 2025 ("AdventHealth TIS") and outline the anticipated Transportation Demand Management (TDM) Plan strategies anticipated within the AdventHealth Louisville development.

The first phase of the development consists of a fully operational hospital totaling 371,600 SF including 153 inpatient beds (30 of those beds are shelled for future buildout) and an emergency department and imaging, helipad, trash and utility yard, an 62,000 SF medical office building, and a 2,000 SF facility storage shed with associated parking, utilities, and landscaping (the "Project"). The Project (first phase) consists of the development of a portion of the overall 39.94-acre site located northwest of Northwest Parkway and future Rockcress Drive in the City of Louisville, County of Boulder, Colorado (the "Site"). More specifically the Site is Lot 1, Block 2 Redtail Ridge Filing No. 1. The Site is surrounded by future Sorrel Avenue and future development beyond to the west, future development and a regional water quality and detention pond beyond to the north, open space tracts and Northwest Parkway to the east, and future Rockcress Drive and a regional water quality and detention pond to the south.

The Site is part of the Redtail Ridge Subdivision which is under the Redtail Ridge Subdivision Improvements and Development Agreement (Reception No. 04071341) recorded December 24, 2024 (hereon referred to as SIA). Section 9.5 of the SIA requires that "*Each PUD request shall detail how the development proposed in such PUD will meet the applicable minimum commitments of the TDM and will detail how such PUD will, to the extent applicable to such PUD, achieve the applicable goals of the TDM. The City and owner of such property subject to the PUD may agree on alternative methods based on best available technology and industry accepted best practices as long as the original intended commitments of the TDM are met."* The TDM referenced in the SIA is the Redtail Ridge Transportation and Demand Management Plan prepared by Fox Tuttle Transportation Group, LLC dated March 8, 2024.

The TDM provides an overview of the City of Louisville's Transportation Master Plan (TMP) which outlines how Louisville and the surrounding communities travel to and from work and possible strategies to reduce trips. It is not documented how many of those trips by a single occupant vehicle are to/from the existing Avista campus. The travel habits of staff and patients/visitors at the existing Avista campus are mostly by car due to the locations where staff live and their commute distance and the inherent nature of patients/visitors that are seeking medical care at the campus.

TDM STRATEGIES

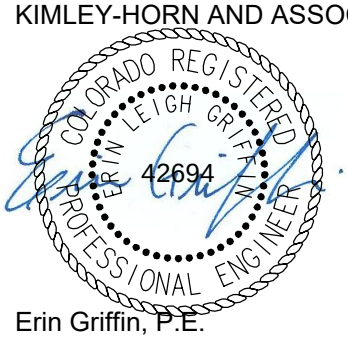
Below outlines the applicable strategies or solutions included in the TDM or in addition to those in the TDM that the Project anticipates as part of the first phase and/or the full buildout of the campus. AdventHealth Louisville anticipates the following alternative transportation solutions to support the goals identified in the TDM where appropriate and applicable.

- Bicycle Amenities – The Project consists of a total of 50 bicycle parking spaces for both staff and patients/visitor bicycle travelers. Forty (40) exterior bicycle spaces are located throughout the campus to accommodate travel from one of the many sidewalk and trail connections. In addition to the exterior bicycle spaces, 10 additional spaces are also provided within the interior of the hospital for staff. Showers and changing rooms are also anticipated to be provided for staff.
- EV Charging Stations – EV charging stations and parking spaces are available throughout the campus to offer environmentally friendly modes of transportation and to support the City with their sustainable goals.
- Carpool / Ride-Share – Encouragement of carpool and ride-share through internal communications and shift coordination will be continued at the new AdventHealth Louisville campus. Three (3) ride share parking spaces is designated within the parking lot near the staff entry for ride-share vehicles.
- Telework – AdventHealth will continue their support of limited work-from-home flexibility, further reducing commute traffic of staff.
- Transportation Related Event Support – Participation in community transportation related events, such as “Bike to Work Day,” or other contributions to support local transportation initiatives.
- Transit Support to Staff – Commitment to Employee communication around transit options, i.e., onboarding materials (last mile connections). This may include employer-subsidized transit passes when transit becomes available adjacent to the Project.

In addition to the above, AdventHealth is contributing to the Redtail Ridge District’s Operations and Maintenance Expenses of which includes the District’s implementation of the Redtail Ridge Transportation and Demand Management Plan prepared by Fox Tuttle Transportation Group, LLC dated March 8, 2024. The TDM strategies identified within these expenses includes shuttles to transit, EcoPasses, a TDM Coordinator, Walk and Bike Month, and Guaranteed Ride Home Program.

Please contact me at 303-228-2300 or erin.griffin@kimley-horn.com should you have any questions.

Sincerely,
KIMLEY-HORN AND ASSOCIATES, INC.



Erin Griffin, P.E.
Project Manager

Redtail Ridge
Transportation Demand Management Plan



Date: March 8, 2024

Submitted To:
Sterling Bay
5910 Pacific Center Blvd, Suite 200
San Diego, CA 92121

Submitted By:
Fox Tuttle Transportation Group, LLC
1580 Logan Street, 6th Floor
Denver, CO 80203

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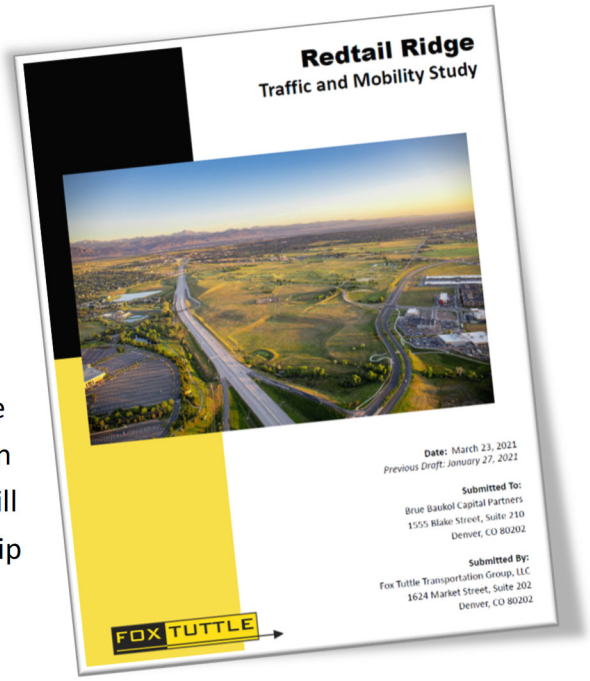
1. Introduction

Transportation Demand Management (TDM) is the application of strategies and policies to reduce travel demand in general and single occupant vehicle (SOV) travel specifically. It can also mean redistributing this demand to occur at less impactful times. TDM measures help people use the transportation system more efficiently, while reducing traffic congestion, vehicle emissions and fuel consumption in support of a larger sustainability plan. TDM activities maximize the value of transportation infrastructure and services by making options for non-SOV trip making easier to use and more readily available.

This TDM Plan was requested by City of Louisville staff as a supplemental submittal to the *Redtail Ridge Traffic and Mobility Study (Study),* to outline possible strategies to reduce SOV traffic generated by the proposed development. Sterling Bay and its development partners are planning to encourage and support non-SOV trips by employees to and from the development. This TDM plan was created to detail the identified strategies and tools which will be implemented as part of the Redtail Ridge development. The elements of this TDM plan in combination with existing programs and facilities within the area, will ensure that non-SOV trips are encouraged and that the trip reduction used in the *Study* is reasonable.



2. Development Overview

Sterling Bay and its development partners are proposing to build a mix of office, industrial, retail and commercial buildings on the former StorageTek campus in the City of Louisville, as detailed in the *Study*. The site is generally bounded by S. 88th Street to the west, Campus Drive to the north, S. 96th Street/Northwest Parkway to the east, and US-36 to the south. The project area is currently vacant but was previously occupied by Storage Tek, which was an active site until the 1990's. The *Study* provides a detailed comparison of potential trip making from the prior Storage Tek uses, the previously approved land uses associated with the ConocoPhillips development and the proposed land use associated with the Redtail Ridge development. In summary, the *Study* estimates that the Redtail Ridge development will generate approximately 28% fewer trips than the formally approved

ConocoPhillips development.

Trip generation of new land use is a significant part of the *Study* as they are modelled as additional trips within the community, and *Study* area roadways and intersections are evaluated for existing and future performance. The *Study* included a motor vehicle trip reduction of 12% to account for the presumed number of external non-single occupant vehicle trips (non-SOV trips)[1]. These trips would be made by walking, biking, carpool, vanpool, shared ride mobility service and/or transit service.



Exhibit 1: Sketch of Redtail Ridge Development and Multi-Modal Facilities (Source: Sterling Bay)

3. Current and Future Non-SOV Mode Share Goals

The new *City of Louisville Transportation Master Plan (TMP)* documented how commuters in Louisville and nearby communities travel to work. This data is based on US Census American Community Survey (https://www.census.gov/programs-surveys/acs) and is summarized in ***Figure 1***. This data is commonly used by agencies across the Denver region as a baseline for TDM programs. The current data is shown below and is the most current estimates available. Based on this data, approximately 28% of people who work in Louisville travel to work by non-SOV modes.

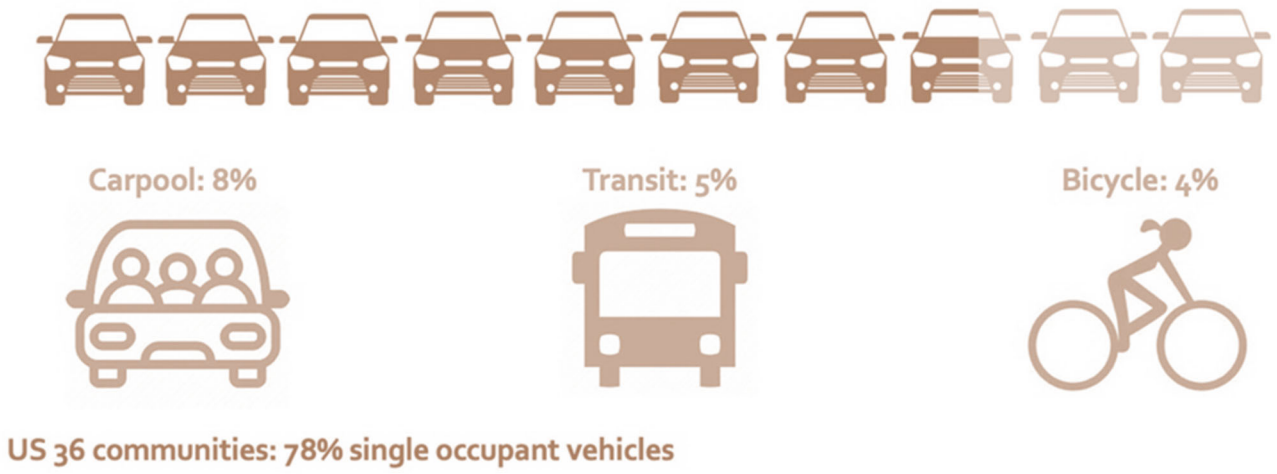
[1] City staff have required that a 12% reduction of SOV trip making potential be used in the *Study*. Analyses in the TDM study suggest this is conservative and the reduction could be as high as 28%.

Figure 1: Louisville and Comparison Area Commute Mode Share (from TMP)

	Drive Alone	Carpool	Transit	Bike	Walk	Work at Home	Other
City of Louisville	72.3%	4.7%	5.9%	2.3%	1.7%	12.7%	0.5%
City of Boulder	51.3%	4.9%	8.3%	10.3%	11.4%	12.5%	1.2%
Boulder County	65.2%	7.6%	5.0%	4.4%	5.3%	11.3%	1.3%
Denver Region	74.8%	8.5%	4.4%	1.2%	2.5%	7.5%	1.0%

The mode share data shown in ***Figure 2*** below is based on survey data from the *2016 Northwest Metro Region Mobility Report*, final draft dated July 2018, prepared by Commuting Solutions. This data shows the mode share for communities along the US 36 corridor, including the City of Louisville. The current data is shown below and is the most current estimates available. Based on this data, approximately 22% of people who work in the US 36 corridor travel to work by non-SOV modes.

Figure 2: US 36 Corridor Commute Mode Shares (from Commuting Solutions)



The anticipated effectiveness of TDM programs is based on their ability to serve commuters of different types of land uses and support trip making through means other than SOV. For the general office, industrial and retail land uses, the *Study* estimated the project would have 12% fewer SOV trips during the peak periods during all development phases.

Redtail Ridge's goal for multi-modal trip reduction is 25%. While substantially higher than the percentage reduction used in the *Study*, it is supported by the information outlined in **Figures 1 and 2**.

While the project team believes that the project's TDM efforts, coupled with existing TDM resources, will result in greater automobile trip reduction, the traffic analysis in the *Study* assumed a conservative trip reduction of 12% for all site uses based on feedback provided by City staff.

4. Planned Land Uses

The Redtail Ridge development at build-out is planning to include the following uses:

- 14,000 square feet of Retail Space (predominantly supporting other internal land use)
- 30,000 square feet of Amenity Space
- 118,750 square feet of Research and Development Space
- 435,000 square foot Hospital/Medical Office space
- 510,000 square feet of Industrial Space
- 534,000 square feet of Life Science Space
- 598,250 square feet of GMP Manufacturing Space
- 360,000 square feet of General Office Space

These land uses are anticipated to be constructed in a series of phases and culminating in full buildout. ***Figure 3*** illustrates the Redtail Ridge site plan to show locations of different land uses[2].

[2] Figure 3 depicts an estimated build out and it is subject to change

Figure 3: Redtail Ridge Development Site Plan



As noted in the site plan, there is a large pad dedicated to the future site of a hospital. The final location, implementation and design are expected to be finalized at the PUD level.

5. Existing Multi-Modal Network

The City of Louisville, Boulder County and the Colorado Department of Transportation (CDOT) have consistently invested in the development of a multi-modal transportation system in this region. The transportation system which serves the project area is a well-balanced mix of local, collector and arterial roadways, intersections with appropriate traffic control, bicycle facilities, pedestrian sidewalks, paths and crossing treatments and frequent transit service connecting to the larger front range area. New travel demand and trip making will be created by the Redtail Ridge development, but the existing and planned multi-modal programs and facilities in this area will ensure that many people can access the site using non-SOV modes of transportation.

The following is a summary of existing multi-modal programs and facilities.

Transit Service

The Redtail Ridge site is located within one mile of the RTD US 36 and East Flatiron Station (see **Photo 1**). This station is serviced by the Flatiron Flyer (routes FF1 and FF2) and the Sky Ride service to Denver International Airport (DEN) via route AB. The station has an underpass under US 36 and is connected to a network of first and final mile destinations. There are approximately 265 parking spaces and eight (8) bike racks at the station. This station is connected to the project site via the Northwest Parkway underpass and it's connecting multi-use path system.



Photo 1: US 36 and East Flatiron Station

The Flatiron Flyer BRT system provides fast and efficient service between Boulder and Denver. Buses are available at the US 36 and East Flatiron Station every 15 minutes during peak and every 30 minutes off peak (on average). Large air conditioned and air ride over the road coaches can serve approximately 50 passengers per vehicle. There is capacity for six (6) to eight (8) bikes on board depending on luggage and other passenger storage needs. The buses are equipped with charging for mobile devices.

The vehicles travel in the High Occupancy Vehicle (HOV) lanes on US 36 and I-25. The trip between the US 36 and East Flatiron Station and Denver Union Station is 28 minutes. The trip between downtown Boulder and the US 36 and East Flatiron Station is 23 minutes. The AB route that provides service to DEN is available every 30 minutes during most hours of the day. Large air conditioned and air ride over the road coaches can serve approximately 50 passengers per vehicle also service this route. The trip between DEN and the US 36 and East Flatiron Station is 34 minutes via the Northwest Parkway.

Walking

Most of the existing sidewalk and multi-use path network near the Redtail Ridge project is in the S. 88th Street corridor. This is due to the open lands that mostly front Dillon Road and S. 96th Street in the study area. The S. 88th Street sidewalks and multi-use paths connect the Monarch school campus to neighborhoods in Louisville and Superior. There is an existing underpass under S. 88th Street just south of Dillon Road. This underpass connects the Monarch school campus to the sidewalks on Dillon Road west of S. 88th Street. There are missing sidewalk and trail connections along S. 88th Street, Dillon Road, and S. 96th Street, with an example shown in **Photo 2**.

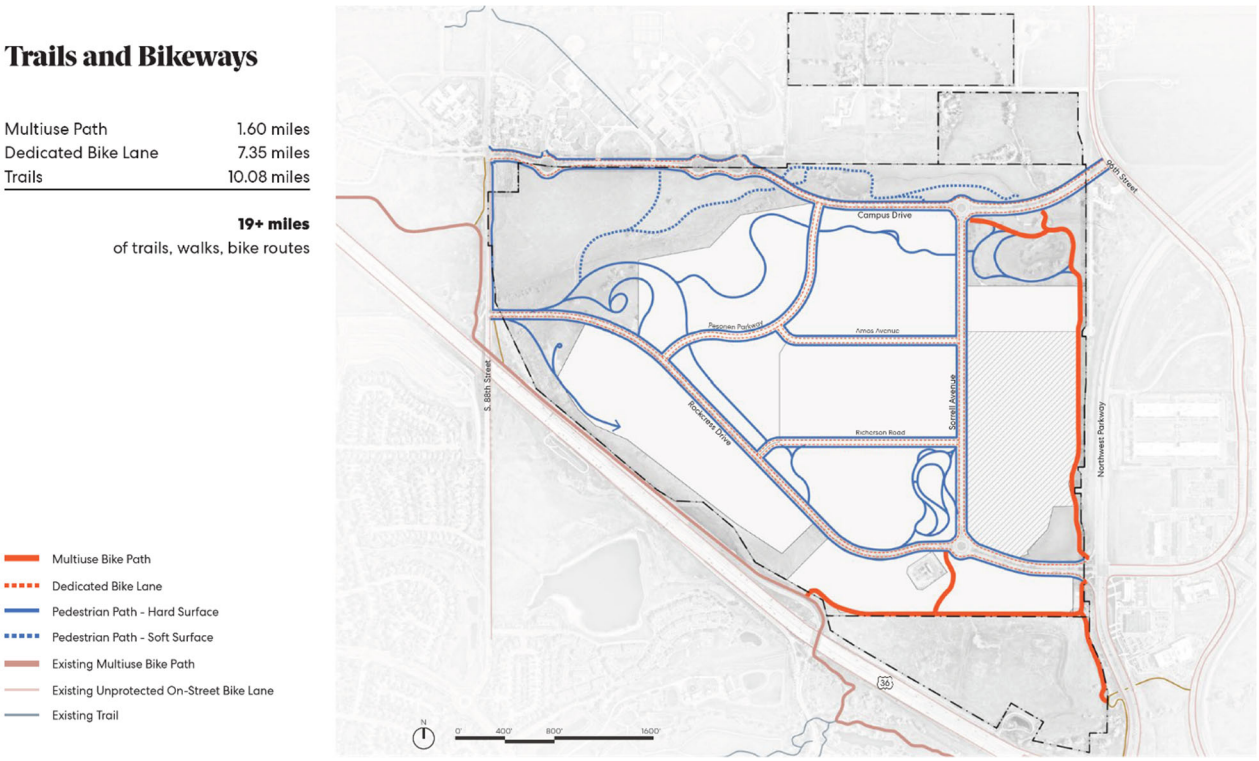


Photo 2: Coal Creek Regional Trail Informal Connection

It is anticipated that the demand to complete the sidewalk and multi-use path network between the CTC Campus, Redtail Ridge, Monarch school campus, residential areas, and retail centers will be increasingly important in the future as the TMP priorities are implemented. Specifically, new sidewalks and pathways will be necessary given future plans for shared ride mobility and BRT near Dillon Road and in the S. 96th Street corridor.

Figure 4 shows the proposed pedestrian and biking system internal to the site.

Figure 4: Pedestrian and Biking System Exhibit



The southeast corner of the Redtail Ridge site has an existing underpass that connects under Northwest Parkway (a photo of the underpass is shown in **Photo 3**). This connects sidewalks and multi-use pathways on the westside of Northwest Parkway to the new Broomfield sidewalk network on the eastside of Northwest Parkway. This underpass is also a critical part of the future walking connections to the Rock Creek and Broomfield Trails.

Photo 3: Northwest Parkway Multi-Use Path Underpass



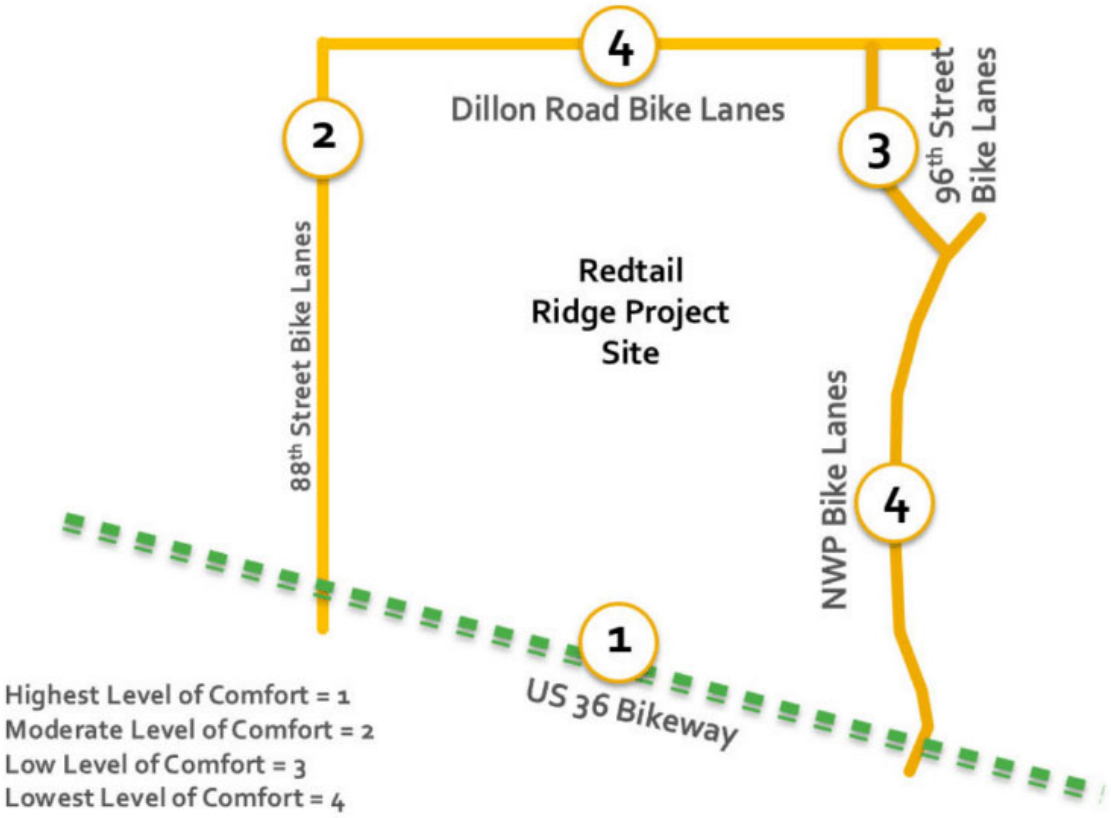
Bicycling

The Redtail Ridge site is located at the confluence of many off-street trails and on-street bicycle lanes. The Coal Creek Trail, Rock Creek Trail and the US 36 Bikeway are located within a short bike ride (5 minutes or less than one mile) of the project site. S. 88th Street, Dillon Road and S. 96th Street currently have on-street bicycle lanes that provide connections to the Coal/Rock Creek Regional Trails and the US 36 Bikeway.

The City of Boulder is located within a six-mile bike ride on the US 36 Bikeway and the RTD US 36 and East Flatiron Station is located within a one-mile bike ride of the project site. Each intersection in the study area has approaches and departures that have accommodations for people on bicycles. The S. 88th Street underpass provides access to the Monarch school campus from Dillon Road.

The City of Louisville TMP evaluated the S. 88th Street, Dillon Road and S. 96th Street corridors/intersections for the level of bicycling comfort (a map summarizing the results of the bicycle level of comfort is illustrated in **Figure 5**). Based on the TMP analysis, the current design of the corridors and intersections have a high level of stress. This appears to be correlated to the high number of crashes at these locations. The high posted speed limits in these corridors and significant peak hour traffic volumes also contribute to the low level of comfort people experience.

Figure 5: Bicycle level of Comfort ratings from City of Louisville TMP



The City plans for future implementation of Great/Complete Street design treatments for the S. 88th Street, Dillon Road, and S. 96th Street corridors and intersections consistent with the TMP's policies. This includes the installing protected bike lanes, multi-use pathways, and intersection treatments throughout the project site and connect to the adjacent arterial roadways, which will provide greater opportunity and protection for all skill levels. Implementation on the public roadways by the City will be subject to public input, topographic limitations, right of way availability, conflicts with utilities and accesses, and construction costs.

6. Future Multi-Modal Network Assumptions

The future multi-modal network improvements around Redtail Ridge project are outlined in the City of Louisville TMP and shown in **Figure 6**. They include a series of bike lanes, transit stops, underpasses, and multiuse trail connections. The TMP also recommends a partnership with the City of Louisville and the business community to provide a shuttle circulator that connects employment areas to regional transit, retail, and other destinations. CTC, Centennial Valley, and Redtail Ridge were identified as service areas for the route. The transit network also includes Bus Rapid Transit (BRT) service in the S. 96th street corridor and two Northwest Rail stations within a mile of Redtail Ridge (see Figure 7). The Northwest Rail stations are planned to be located near the CTC and at the Flatiron and US 36 Park-n-Ride.

Figure 6: Future Multi-modal Network Identified in the City of Louisville TMP



- A — Bicycle facility connecting Dillon Rd to the US 36 bikeway
- B — New underpasses at proposed locations along Dillon Road
- C — Trail connections to provide increased access to the schools and hospital
- D — Proposed future transit connecting McCaslin Station to the hospital, schools, and CTC
- E — On-street shoulder bikeway improvements
- F — Dillon Road capacity improvements to improve intersection operations
- G — Campus Drive Extension to improve school circulation and improve emergency access
- H — Paradise Lane realignment to eliminate intersection at S 96th Street. (*Note: Paradise Lane is on County property).
- I — New signal at Campus Drive and S 96th Street near fire house

Potential Future Transit Service

The *Northwest Area Mobility Study (NAMS)* study identified the S. 96th Street/Highway 42 as one of the six (6) candidate Arterial Bus Rapid Transit (BRT) corridors. All corridors were evaluated, and recommendations were made for transit priority elements such as transit signal priority, queue jump lanes and headway-based scheduling. Operations and maintenance costs for the corridors were also prepared. The NAMS Policy Advisory Committee (PAC) recommended that all six (6) arterial BRT projects be implemented with system-wide service improvements. This corridor was recently identified as a Priority 3 corridor in the *RTD Regional Bus Rapid Transit Study*, the Metro Mayors Caucus is reviewing a ballot initiative to fund this corridor as part of regional ballot initiative, and the City of Louisville has applied for a grant to further study this service as part of a revised Highway 42 corridor study. Refer to **Figure 7** for a map of the identified transit network within the City.

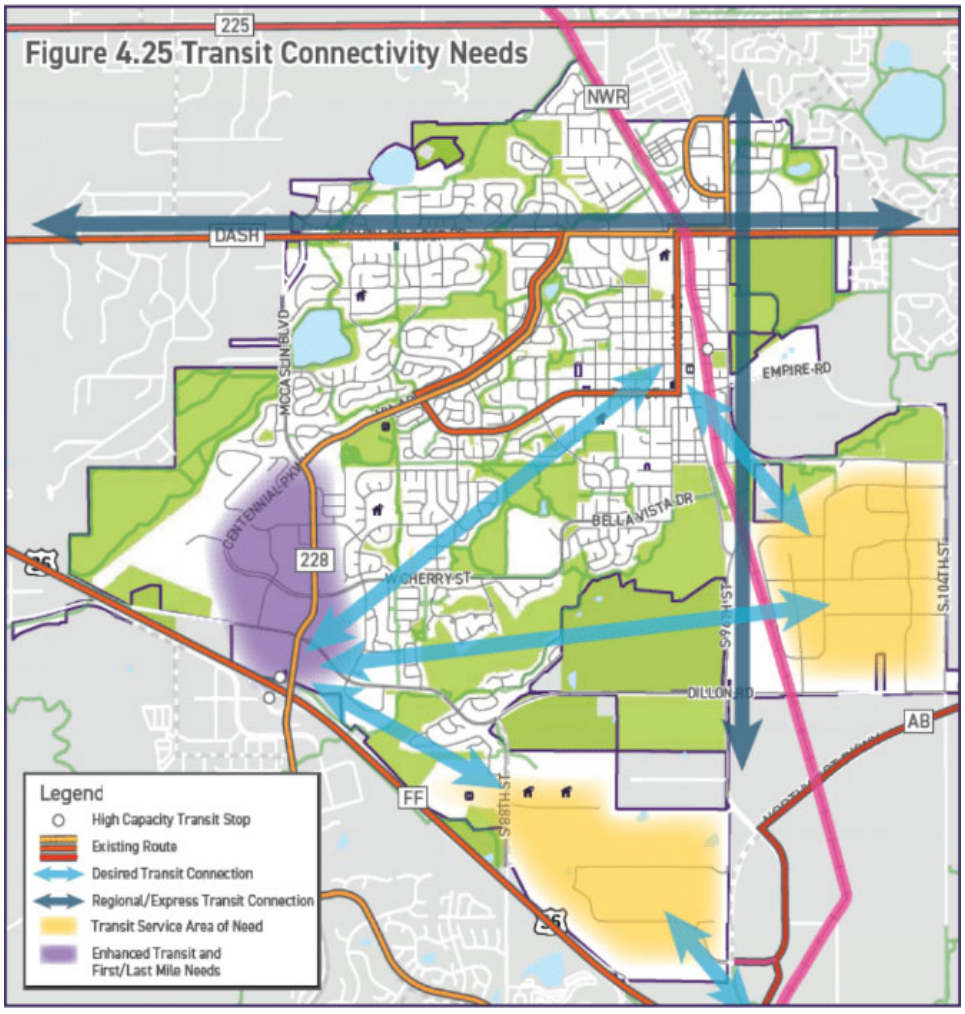


Figure 7: Future Transit Network Identified in the City of Louisville TMP

Proposed Walking and Biking

The Redtail Ridge project will be built over the next 10 years. During this time major shifts in transportation mobility and regional transportation project completion are expected to take place. Transit projects such Northwest Rail, SH 42 BRT, and the RTD local circulator will potentially be operating before Year 2040. In addition, as previously noted, the city's construction of complete streets on S. 88th Street, Dillon Road, and S. 96th Street as well as the new connections within the Red Tail Ridge project on Campus Drive, Rockcress Drive, and Sorrel Avenue will be a major part of the multi-modal transformation in Louisville. These corridors will serve many more travelers and modes in the future and the transformations will use the current right of way to move more people using safe, reliable, connected and sustainable transportation options. **Photo 4** shows an existing on-street bike lane within the study area.



Photo 4: On-Street Bike Lane

The enhanced-future multimodal network that is anticipated to be constructed by the City of Louisville in the vicinity of the Redtail Ridge project is shown in **Table 1**.

hese two items don't have funding by the City and aren't currently planned. These improvements may not be constructed by the full build out of Redtail.

Table 1: Enhanced Future Multi-Modal Network Assumptions with Redtail Ridge Project

Schedule	Corridor	Bike Lanes	Multi-use pathways	Sidewalks	Bus Lanes
Background (without Redtail Ridge)	**S. 88th Street** (US 36 to Dillon Road)	buffered or protected	westside or eastside	westside and eastside	none
	Dillon Road (S. 88th to S. 96th Street)	buffered or protected	northside	northside and southside	none
	S. 96th Street (Northwest Parkway to County Road)	buffered or protected	westside	westside and eastside	yes
	Northwest Parkway (S. 96th Street to US 36)	None	eastside	eastside	shoulder running
With Redtail Ridge	**Campus Drive** (S. 88th Street to S. 96th Street)	buffered or protected	southside	northside	none
	Rockcress Drive (S. 88th Street to Northwest Parkway)	buffered or protected	none	northside and southside	none
	Sorrel Avenue (Campus Drive to Rockcress Drive)	buffered or protected	none	eastside and westside	none

** Expanded future multimodal network will include on-site and off-site improvements including connections beyond Louisville that do not exist today but have been identified. See the links to the documents in the "Previous Studies" Section for additional details.*

7. Existing TDM Resources

Redtail Ridge is located within an area that has several existing and proposed TDM measures, and the project will benefit from these existing resources. Along the US 36 corridor, TDM services are provided by 36 Commuting Solutions in partnership with Way to Go.

36 Commuting Solutions is a non-profit organization focused on enhancing mobility along US 36 for all commuting types, with a focus on non-auto travel. The organization is member-driven and advocates for and supports businesses, commuters, and municipalities along the corridor, including the City of Louisville. The program offers numerous services to help travelers, to provide alternative transportation options, and to reduce congestion along the roadways and through communities. The current programs provided by 36 Commuting Solutions for employers and residents within the US 36 corridor are as follows:

- **Free & subsidized transit passes:** The US 36 Master EcoPass Pilot Program subsidizes employers' purchases of EcoPasses for their employees. Eligible commuters can also receive a free 10-ride ticket booklet to try transit.

- **Carpool & Vanpool:** Travelers can use Way to Go services to find carpool and vanpool partners. There is a $75 incentive to individuals who form a new carpool or join a vanpool.

- **Bike & Walk:** In addition to the local and regional multi-use paths, there are interactive maps and education for people that walk and bike.

- **Telework:** In partnership with DRCOG, employers can receive free assistance to establish or expand their telework program.

- **Employer Outreach:** 36 Commuting Solutions staff works with employers to help encourage their employees to commute using sustainable travel modes and to develop commuter programs.

- **Marketing:** Encourages travelers to commute sustainably and participate in the available programs.



waytogo
A program of DRCOG



Commuting Solutions



- **Advocacy:** 36 Commuting Solutions staff work with local municipalities, businesses, and other stakeholders to develop support for transportation improvements and secure funding for these improvements.

8. TDM Strategies

TDM measures will be an important part of managing safe and efficient transportation operations within and in the areas around the project site. The goal of implementing TDM is to:

- Eliminate or shorten trips,
- Change the mode of travel,
- Change the time of day for a trip,
- Increase participation of carpooling, vanpooling, and transit, and
- Encourage bicycling and walking in place of driving.

TDM strategies also include employer-based programs such as alternative work schedules, which could shift demand away from peak travel times, and telework, which could reduce the need for trips entirely. There are local transportation management solution organizations that coordinate funding and service efforts that the Metro District should consider partnering with to help facilitate and encourage non-SOV travel.

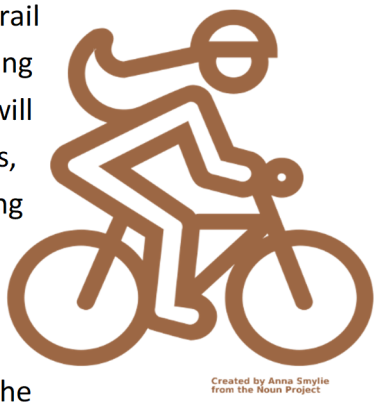
Program summaries are outlined below.

Walking Trips

Walking trips are a key part of the non-SOV mode share goals. The walking trips would likely occur between neighborhood homes, parks and schools. New walking trips will be made on the Complete Street sidewalk and trail network proposed internal to the development. The forecasted typical walk trip will be less than 1/4 mile or 5-minute walk from a home/work to a destination. It is likely that most of the walking trips will be single or multi-purpose trips within the site context. In the future, walking to shared ride mobility and transit services is also likely to increase. This is commonly referred to as the "first and last mile" of a shared ride or transit trip.



Cycling Trips



Cycling trips will increase in the future as the Complete Street and trail network is completed within the development. The future cycling trips will be made by people of all ages and cycling abilities. They will be connecting between neighborhood homes, parks, schools, commercial uses, and transit on and off site. Most of the new cycling trips would be a result of new people making a choice to cycle because of the protected cycle network and underpasses. That network is focused on removing conflicts with motor vehicles and providing safe access from neighborhoods to destinations in the adjacent area. These cycling trips will be approximately 4 to 6 miles and up to a 20-minute ride.

Carpool, Vanpool and Shared Ride Trips



Employers will have access to programs that match people to carpool services and on-demand rideshare opportunities. The commute carpools and shared rides are typically less than 30 miles.

Transit Trips



In the future, "High-Capacity Transit" services will be available within a 10-minute walk or bike ride as outlined in the City of Louisville and Boulder County Transportation Master Plans. These transit services will be accessible via a 10-minute walk or bike ride using the Complete Streets and underpasses. Local transit shuttles to High Capacity Transit stations will also be provided by partnership with the City of Louisville and private business using the operating models being piloted at the 61st and Pena Station (https://www.fulenwider.com/autonomous-shuttle-launches-in-denver.html) and the Lone Tree Link (http://www.lonetreelink.com).

Telecommute/Work From Home



Working hours which do not require commuting during peak periods (full time or part time work) as well as working from home is considered a valuable TDM strategy and this reduction in trip making is included in the non-SOV goals. As a result of changing work conditions and environments resulting from the COVID 19 pandemic, this will be an even larger reduction in historic trip making then in pre-COVID conditions.

9. Proposed TDM Program

Listed below are the TDM programs, tools and funding sources that the Redtail Ridge development will implement to achieve the project's non-SOV mode share goals. The TDM measures are explained within this letter to the detail available for the phase of development at this time. Future submittals will provide supplementary information when additional details on tenants, employees, and building locations are known. The Metro District is partnering with 36 Commuting Solutions, a local expert in transportation management solutions, to help facilitate these TDM measures.

Transit

Shuttles to High-Capacity Transit: The City of Louisville's TMP highly encourages developments to leverage existing and futures investments in transit. With this goal in mind, the Metro District will be contributing funds for a shuttle service that connects the project area to the Flatiron Flyer BRT station and to downtown Louisville. In addition, representatives of the Metro District will participate in the process which develops this shuttle service and will seek additional public and private partners, including RTD as well as neighboring entities such as Avista, Crocs and the CTC. The shuttle service could be operated with an on-demand application and/or be a fixed route service. The funds provided may be used to help contribute to the creation of the service and/or fund a portion of its initial operations. The Metro District will dedicate a fixed amount of funding at the time of building development completion and tenant occupancy. In addition, it will be a requirement of each subsequent building specific TDM program that the tenant occupying space in the development take on their proportional financial obligation in subsequent years for the operation of the shuttle service.

Employee EcoPasses: Regional Transportation District's (RTD) EcoPass is a bulk-rate, discounted

transit pass that is purchased from RTD and provides unlimited usage of RTD services including local and regional bus routes, the Skyride bus service to the airport, light rail and commuter rail. Access to free transit service has proven to be one of the most effective TDM programs for changing travel behavior and reducing the need to own a vehicle or multiple vehicles. Building on the availability of the US-36 Flatiron Flyer service and the intended future transit service planned for this area, the Metro District will encourage employee transit use by financially securing RTD EcoPasses to all employees for a period of two years. To accomplish this, the development will enter into an agreement with RTD to develop a Master Contract for all land uses within the project area. The cost of these EcoPasses through the Master Contract will be determined using RTD's regional formulas based on total number of employees within the Master Contract area. This will ensure that all employees working within the project area have access to free EcoPasses for the first two years of initial occupancy. In addition, it will be a Covenants, Conditions and Restrictions (CC&R) requirement that the tenant occupying space in the development take on their proportional financial obligation of the TDM program in subsequent years. This will ensure that employee EcoPasses are made available for all employees after the initial two years of funding is spent. Access to the *Guaranteed Ride Home Program* will be included in the Master Contract developed with RTD.

Programming and Education

TDM Coordinator: The Metro District will hire and fund, either independently or in partnership with other benefited parties, a TDM Coordinator or work with a local transportation management organization (such as 36 Commuting Solutions) to act as the TDM Coordinator, to manage the TDM program for the project area. The TDM Coordinator will provide employees with important travel information including transit maps and schedules, bicycle maps, local and regional marketing campaigns, and information on the commute benefits provided to employees. The TDM Coordinator's efforts will assist in ensuring the project's non-SOV mode share goals. In addition, the TDM coordinator would be responsible for coordinating the following programs/tools:

- *TDM Plan evaluation*: Provide periodic surveys of employee travel behavior to evaluate the TDM Plan. The survey is designed to collect anonymous travel information and takes less than 10 minutes to complete.

- *Orientation packets*: Prepare electronic orientation packets to employers that will include non-SOV program information and incentives. This information will be located on the

district website.

- *Flexible work schedules and telecommuting:* The Metro District and the TDM Coordinator will work with employers to encourage this program. Each building specific TDM plan will be encouraged to include language which supports this program. Working conditions in the Front Range, after the COVID 19 Pandemic have resulted in a much higher prevalence of telecommuting for jobs where that is possible.

Carpooling and Vanpooling

Employee Carpools and Vanpools: work with vertical developer/employers to encourage use and to implement dedicated parking for these programs on-site.

Carshare: There are a number of programs across the front range which allow persons to make use of carshare or vanpool vehicles. Use of these vehicles can limit the need for motor vehicle ownership and be a valuable component of a TDM program. Employment centers can support the use of these vehicles by provided dedicated space for these vehicles. Within the development, any land use with over 100,000 square feet of building space will allocate up to three parking spaces for dedicated carshare and/or vanpool vehicle parking. It is not intended that the development or the subsequent businesses occupying the buildings will operate either carshare or vanpool programs. Instead, the allocation of these parking spaces will be based on requests from employees who are using these services. The utilization of this service will be monitored to determine the appropriate number of spaces to allocate for carshare.

Walking and Biking

Walk and Bike Month: actively encourage employees and residents to register and participate in Bike to Work Day (June) or Winter Bike to Work Day (January).

Bicycle Access: Bicycle access to the site will be provided via Complete Streets and multi-use trails as shown on the Redtail Ridge Filing 1 Plat and supporting construction documents which connect to the existing and future bicycle infrastructure in the City of Louisville. Every structure will be accessible by bicycle.

Bicycle Parking: Future site plans will include outdoor short-term bicycle parking at a ratio consistent with Leadership in Energy and Environmental Design (LEED) commitments. Long-term bicycle

parking inside buildings or in covered parking areas will be provided at a rate of at least one secure area per building that is over 75,000 square feet of office space. The long-term parking should be a bicycle room with limited access or a caged secure area within a parking area protected from the weather, as appropriate to the use of the facility/building. At least one long-term bike parking area within the development will include a bicycle maintenance area complete with tools and air pumps for employee use. The specific design of long-term bike parking racks will be determined during final site plan development.

On-Site Bicycle Commuter Amenities: Office buildings will include showers and changing facilities for employees within the building consistent with LEED commitments. Future submittals will include detailed designs and access.

Note that all developers in the project will be required to submit a customized TDM plan for their building identifying what programs will be implemented to meet the non-SOV goals of the project and how they comply with the commitments outlined in this TDM report. Periodic surveys will be conducted by the Metro District to evaluate the TDM program effectiveness and adjustments will be made, if needed, to reach the project non-SOV goals.

10. Timeline and Funding for TDM measures

Metropolitan (Metro) Districts are a type of Colorado special district which is formed to provide services, such as Transportation, Water, Solid Waste Disposal, Sanitation and Street Maintenance and Improvement. Metro Districts are independent governmental entities formed to provide services which finance, design, install, construct, operate and or maintain public improvements not otherwise being provided. The existing Metro District will, amongst other things, manage the funding, operations, and maintenance of the TDM plan. A summation of the timeline for implementing recommended TDM strategies at different Phases of development is provided in **Table 2**. Only TDM Strategies with one-time or annual costs are included.

Table 2: Redtail Ridge TDM Plan Funding and Timeline Summation

TDM Strategy	*Timeline and Frequency*	*Amount*
Develop shuttle service	Metro District to contribute a one-time allocation for the planning and implementation of the shuttle service as a condition of Phase I occupancy permits.	Metro District paid through public RFP
Proportional yearly operational costs for shuttle service	Metro District to secure fees from property owners and/or leasees for annual allocation of proportional share of shuttle service operation. Fees provided to whomever is managing the shuttle service.	$75,000/Year
Employee EcoPasses upfront	Metro District to provide one-time allocation to secure employee EcoPasses, through Master Contract with RTD, for all employee in the initial, Phase 1. Fees paid directly to RTD.	$18,000
Long-term Employee EcoPasses	Metro District to secure funds to pay for EcoPasses through an RTD Master Contract fees in subsequent years.	$75,000/Year
Hire TDM Coordinator	Metro District to secure and maintain TDM Coordinator services	$100,000 annually - Metro District fees

City Council

August 4, 2026

AdventHealth Louisville

Approval of Resolution XX, Series 2026 Approval of a Final Planned Unit Development (PUD) to allow a 371,600 square-foot hospital building, a 62,000 square-foot medical office building and a Special Review Use (SRU) to allow a helicopter pad on 39.9 acres at 900 Rockcress Drive.

Presented by Matt Post, AICP, Senior Planner

City of Louisville

Summary: AdventHealth Louisville

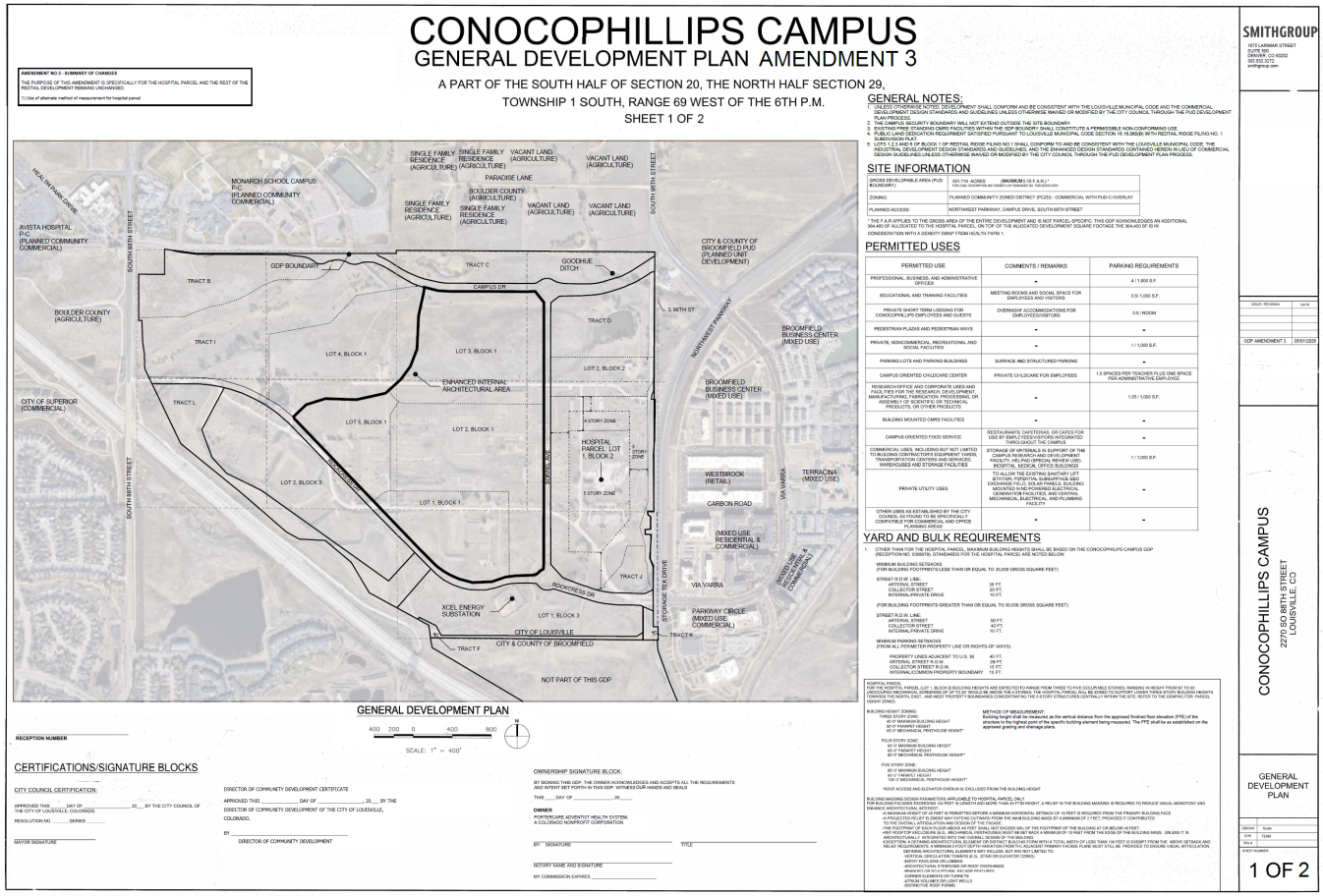
- 900 Rockcress Drive – Redtail Ridge
- Applicant: SmithGroup / AdventHealth Avista
- **Request:**
  - Final PUD Approval
  - Special Review Use (SRU) for helipad
- **Proposal Includes:**
  - 371,600 SF hospital
  - 62,000 SF medical office building (MOB)
  - Parking, landscaping, pedestrian amenities
  - Helipad and supporting infrastructure



City of Louisville

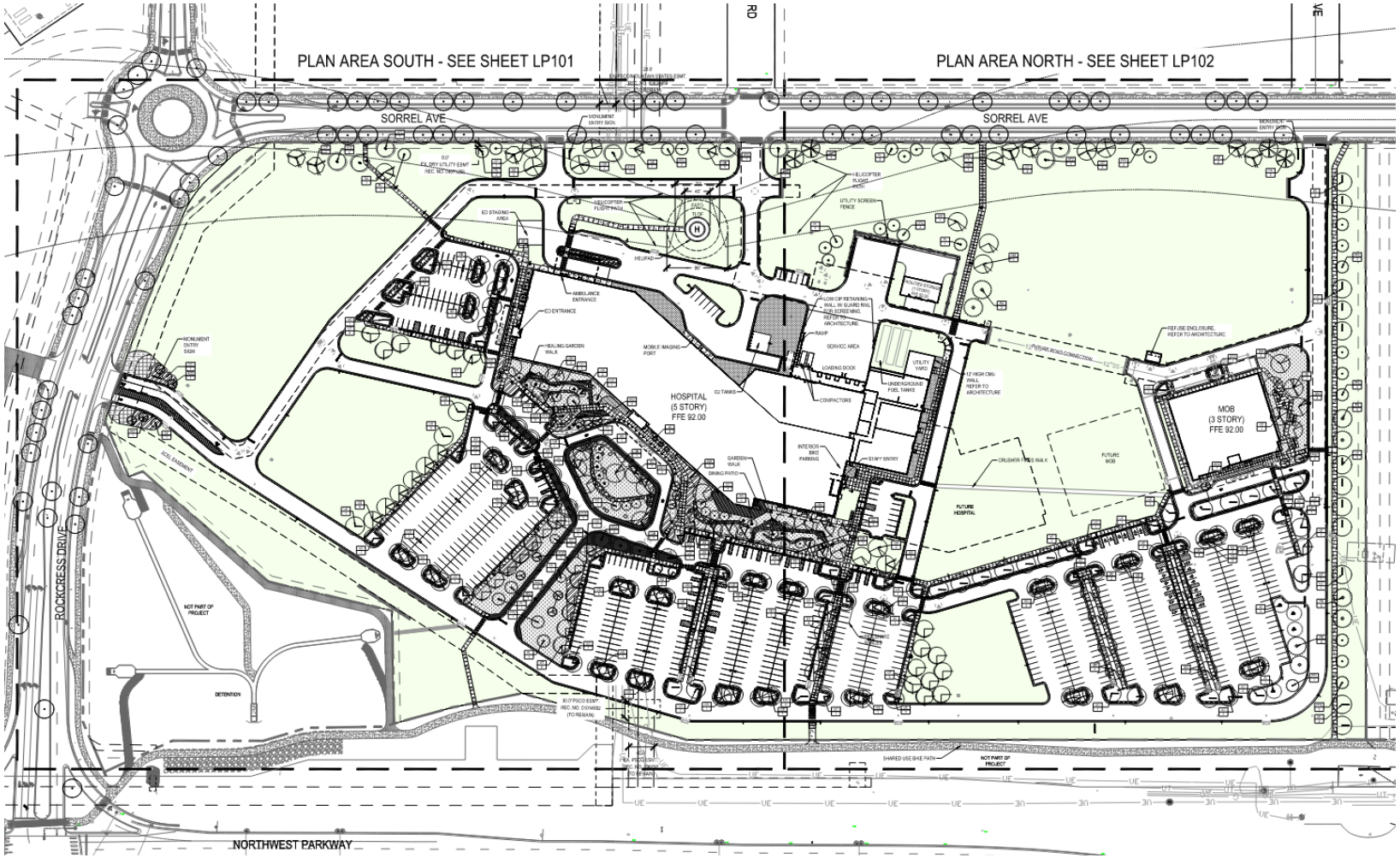
Background: AdventHealth Louisville

- Located within ConocoPhillips Campus GDP area
- Zoned PCZD-C (Planned Community Commercial)
- Former StorageTek / ConocoPhillips campus
- Part of broader Redtail Ridge development
- GDP amended in 2025 to:
  - Allow hospital and MOB uses
  - Establish medical campus height zones
  - Transfer additional development density



Proposal: AdventHealth Louisville

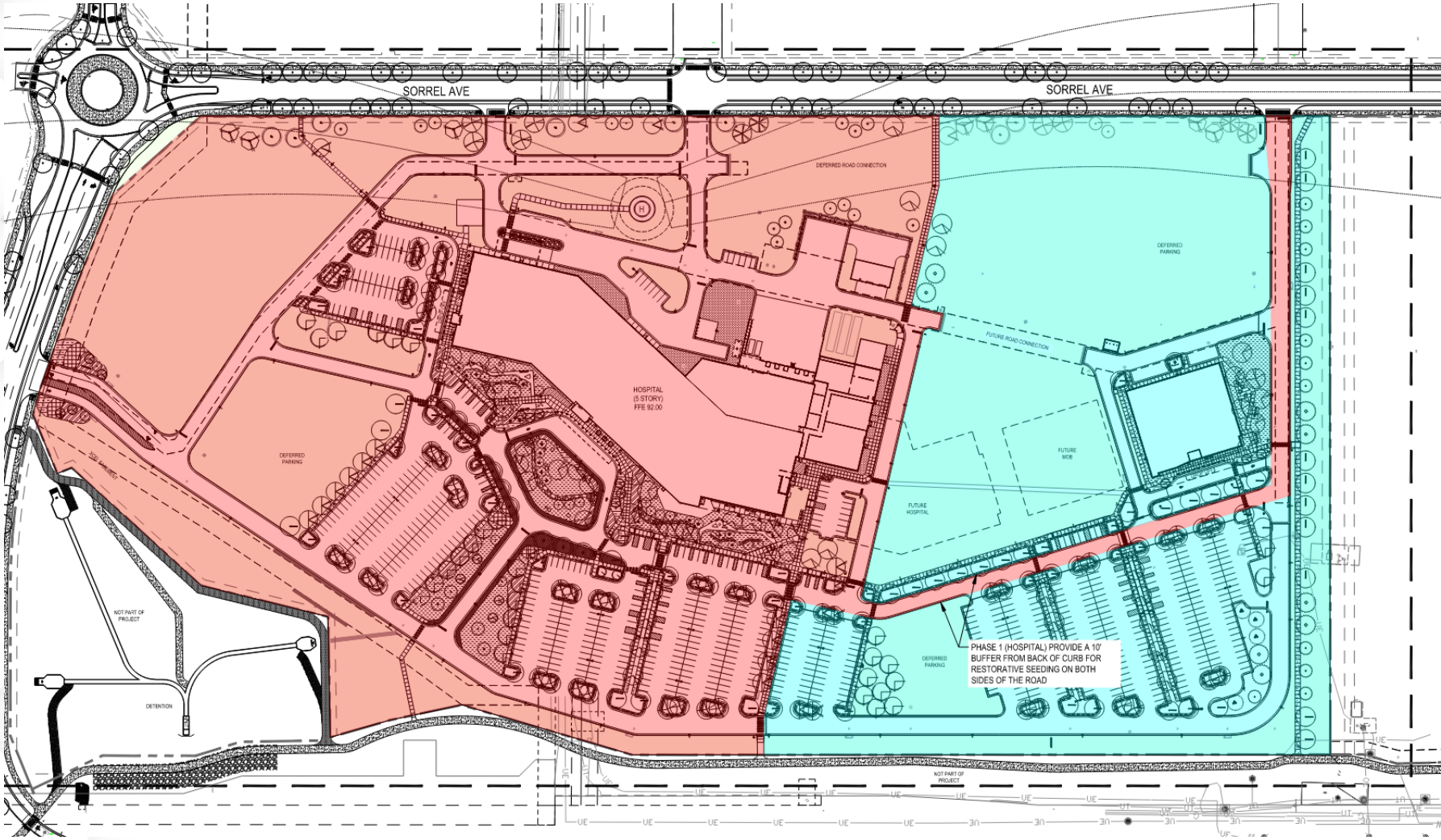
- 39.9-acre medical campus
- 5-story regional hospital
- 3-story medical office building
- Integrated emergency operations
- Future expansion areas reserved
- Pedestrian-focused site design
- Healing gardens and outdoor amenities



City of Louisville

Proposal: AdventHealth Louisville – Phasing

- Phase 1 includes construction of the hospital and associated site improvements
- Phase 2 includes construction of the MOB and associated site improvements, concurrent with hospital development
- Phasing allows hospital operations to begin while MOB construction continues
- City may issue acceptance for infrastructure and horizontal improvements independently
- Hospital Certificate of Occupancy may be issued prior to MOB completion

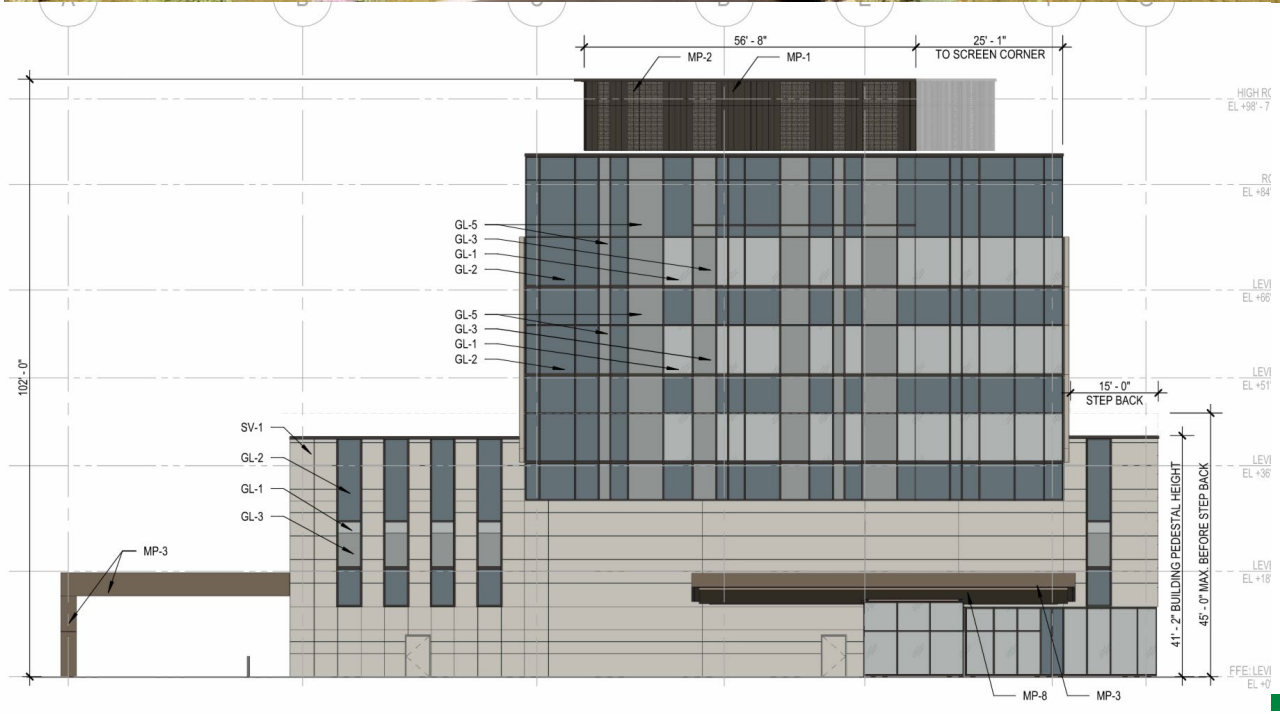


City of Louisville

Proposal: Hospital Buiding

- 371,600 SF / 5 stories
- Primary entrance oriented to US 36
- Emergency department on south side
- Dedicated ambulance access and staging
- Upper-story stepbacks reduce perceived mass
- Rooftop mechanical equipment fully screened



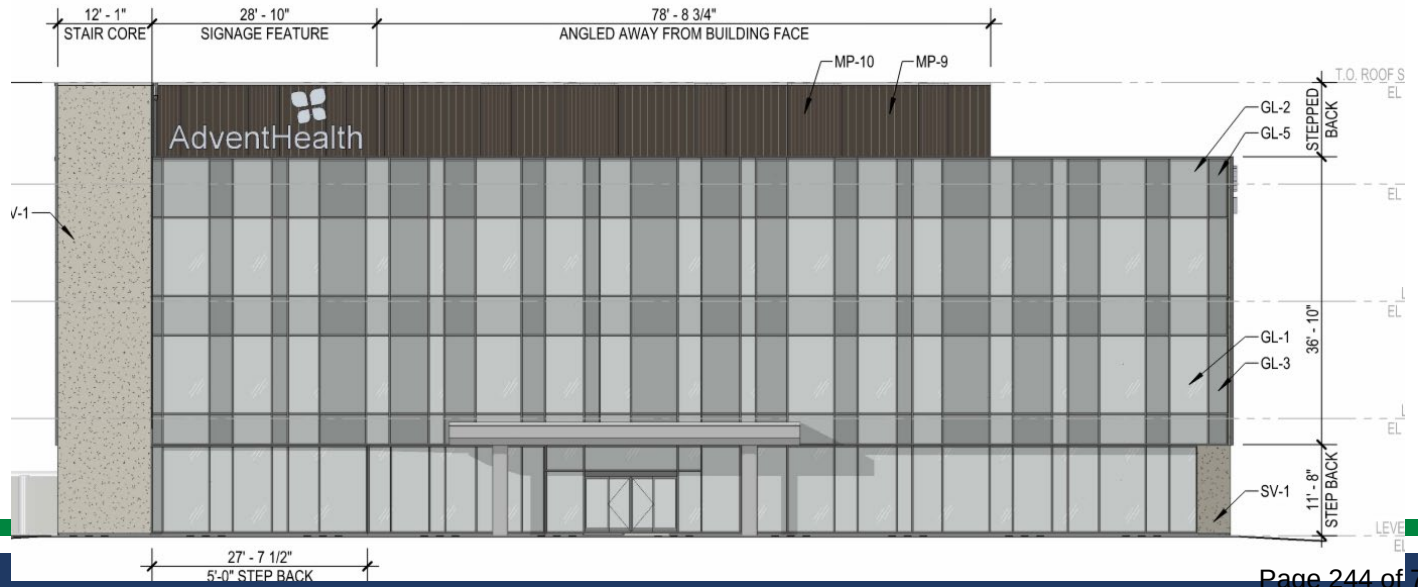


City of Louisville

Proposal: Medical Office Building (MOB)

- 62,000 SF / 3 stories
- Located north of hospital
- East-facing primary entrance
- Drop-off lane and pedestrian plaza
- Enhanced landscaping and seating areas
- Mechanical equipment fully screened





City of Louisville

Proposal: Parking and Circulation

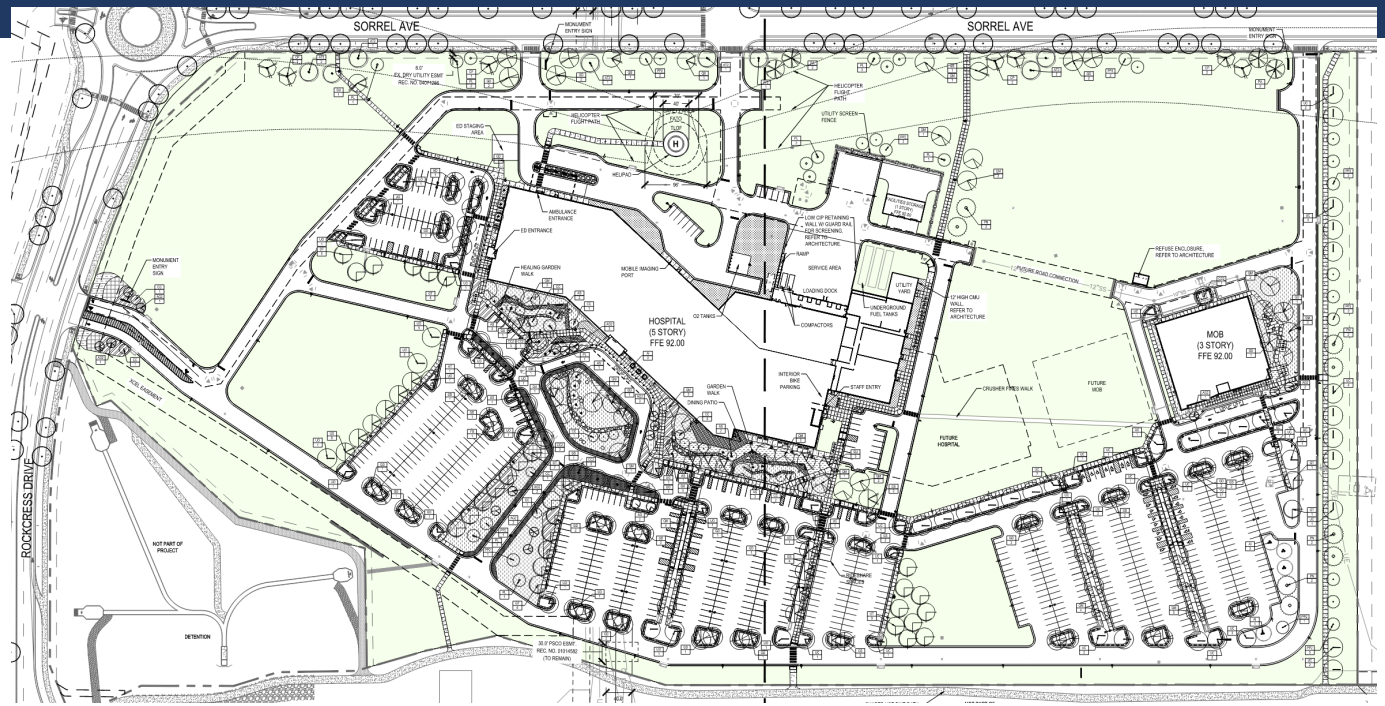
- 773 total parking spaces
  - 306 hospital
  - 467 MOB
- 4 site access points
- Internal pedestrian circulation throughout site
- Raised crosswalks for pedestrian safety
- 10-foot shared-use path through site
- Bicycle and regional trail connectivity
- EV charging infrastructure included



City of Louisville

Proposal: Landscaping

- 63% of site preserved as open space/landscaping
- 393 trees proposed
- Nearly 4,000 low-water plantings
- Native shortgrass prairie restoration
- Two waivers requested from relief from street tree and shrub plantings on south side, shrub plantings on west side



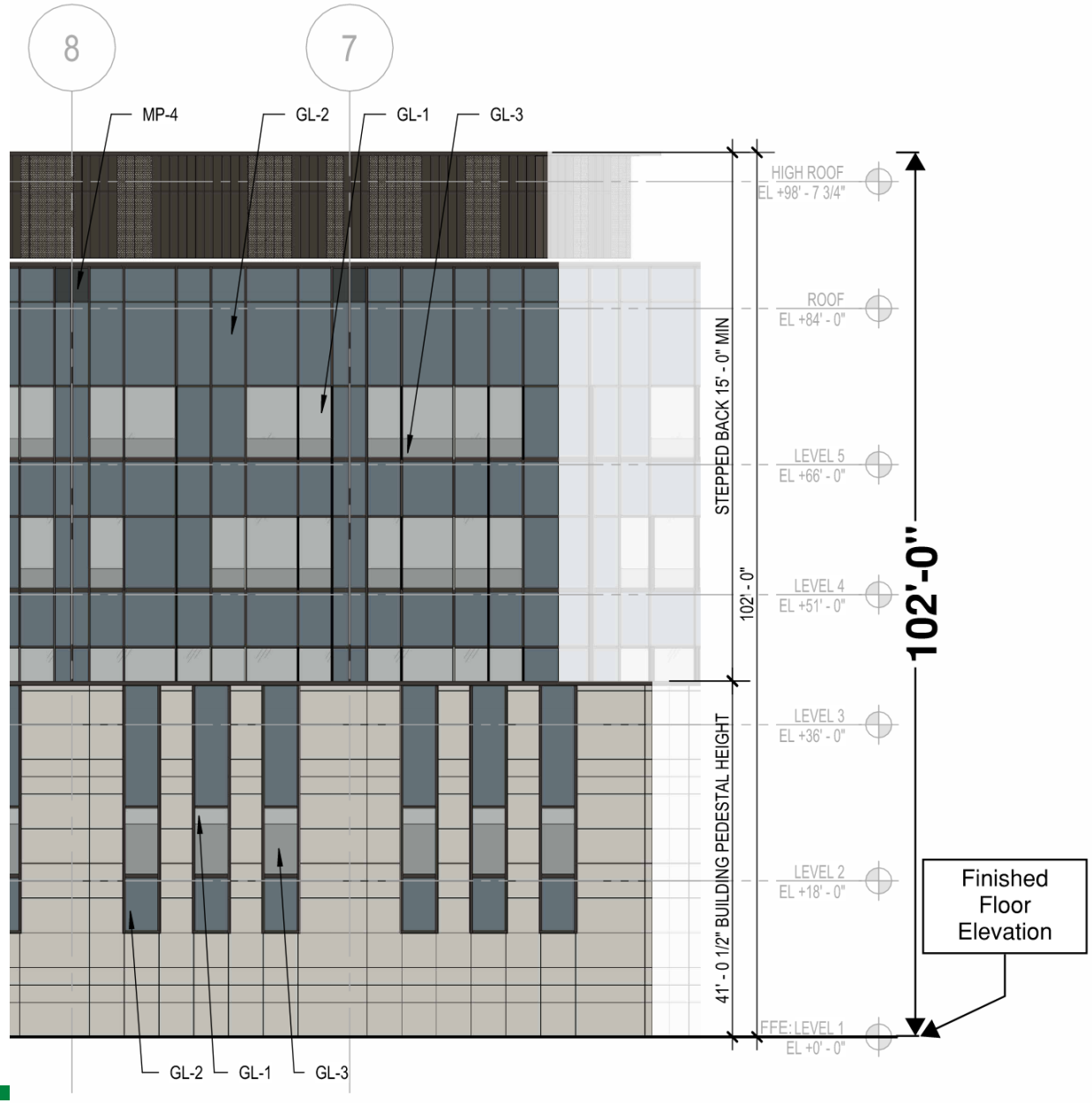
ADVENT HEALTH LOUISVILLE
OUTDOOR AMENITY SPACES



City of Louisville

Proposal: GDP Amendment

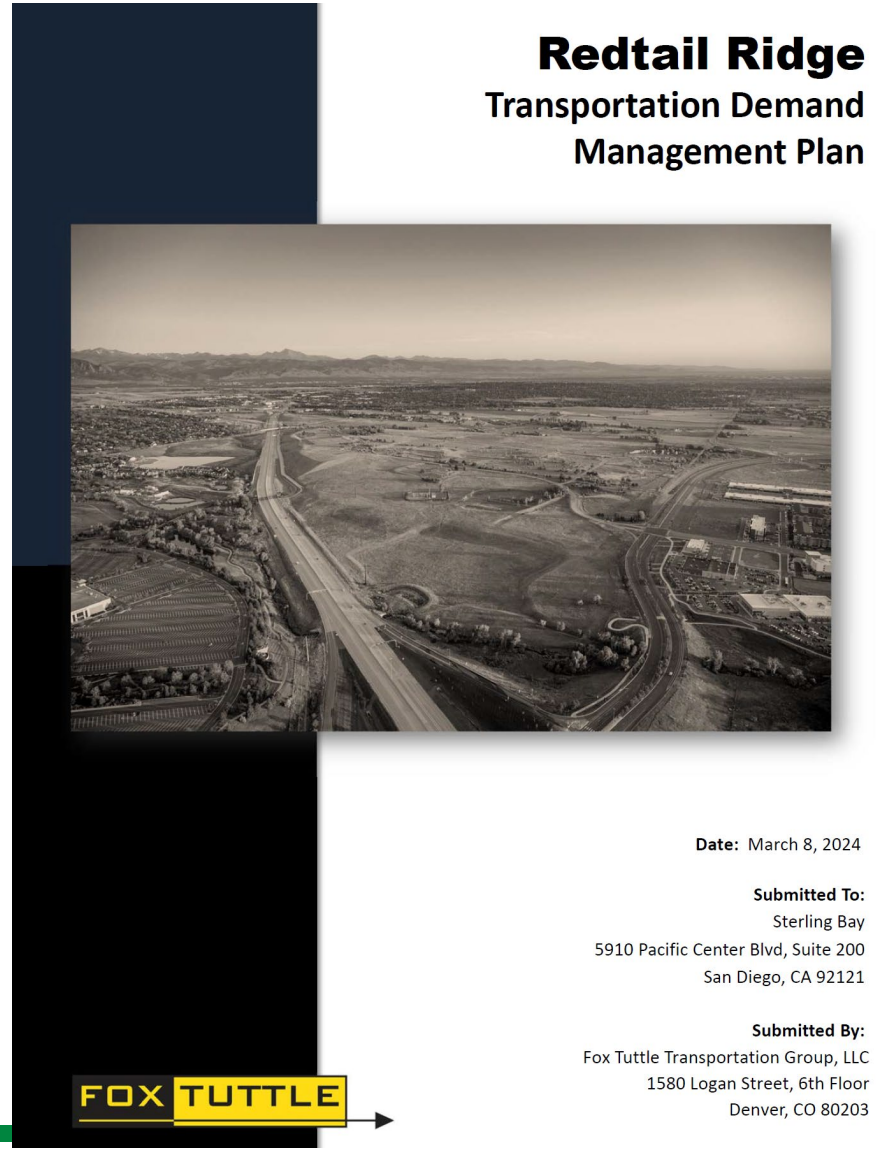
- Proposed GDP 3rd Amendment
- Revises building height measurement method
- Height measured from Finished Floor Elevation (FFE)
  - *Method of Measurement – Height: Building height shall be measured as the vertical distance from the approved finished floor elevation (FFE) of the structure to the highest point of the specific building element being measured. The FFE shall be as established on the approved grading and drainage plans*
- No material change to building massing or character
- Amendment reviewed administratively
- Requires City Council acceptance



City of Louisville

Analysis: AdventHealth Louisville

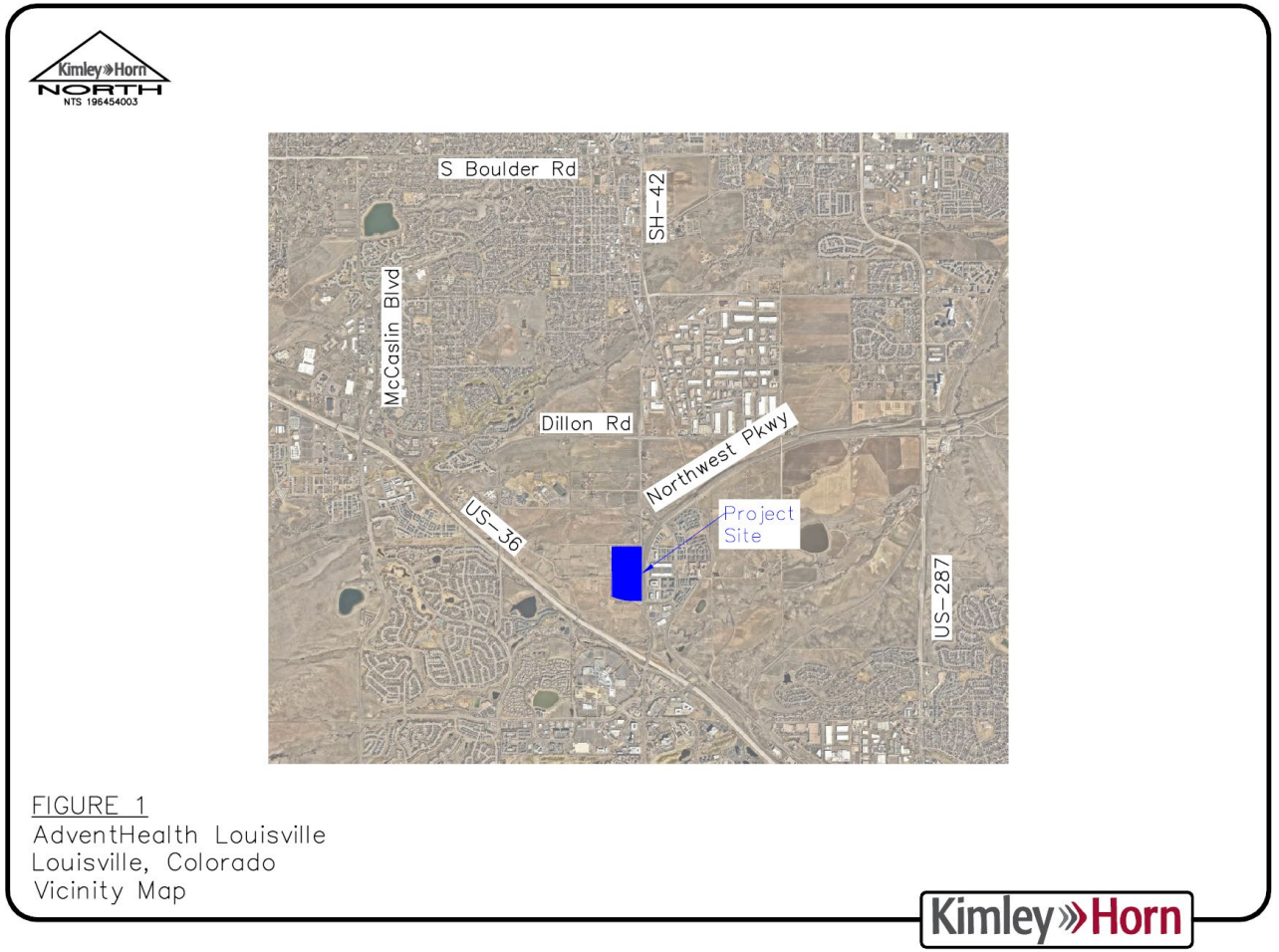
- TDM plan consistent with Redtail Ridge requirements
- Includes:
  - Bike facilities
  - EV infrastructure
  - Carpool/ride-share spaces
  - Employee transportation programs
- Supports reduction in single-occupancy vehicle trips
- Connected to broader multimodal network



City of Louisville

Analysis: Traffic Study

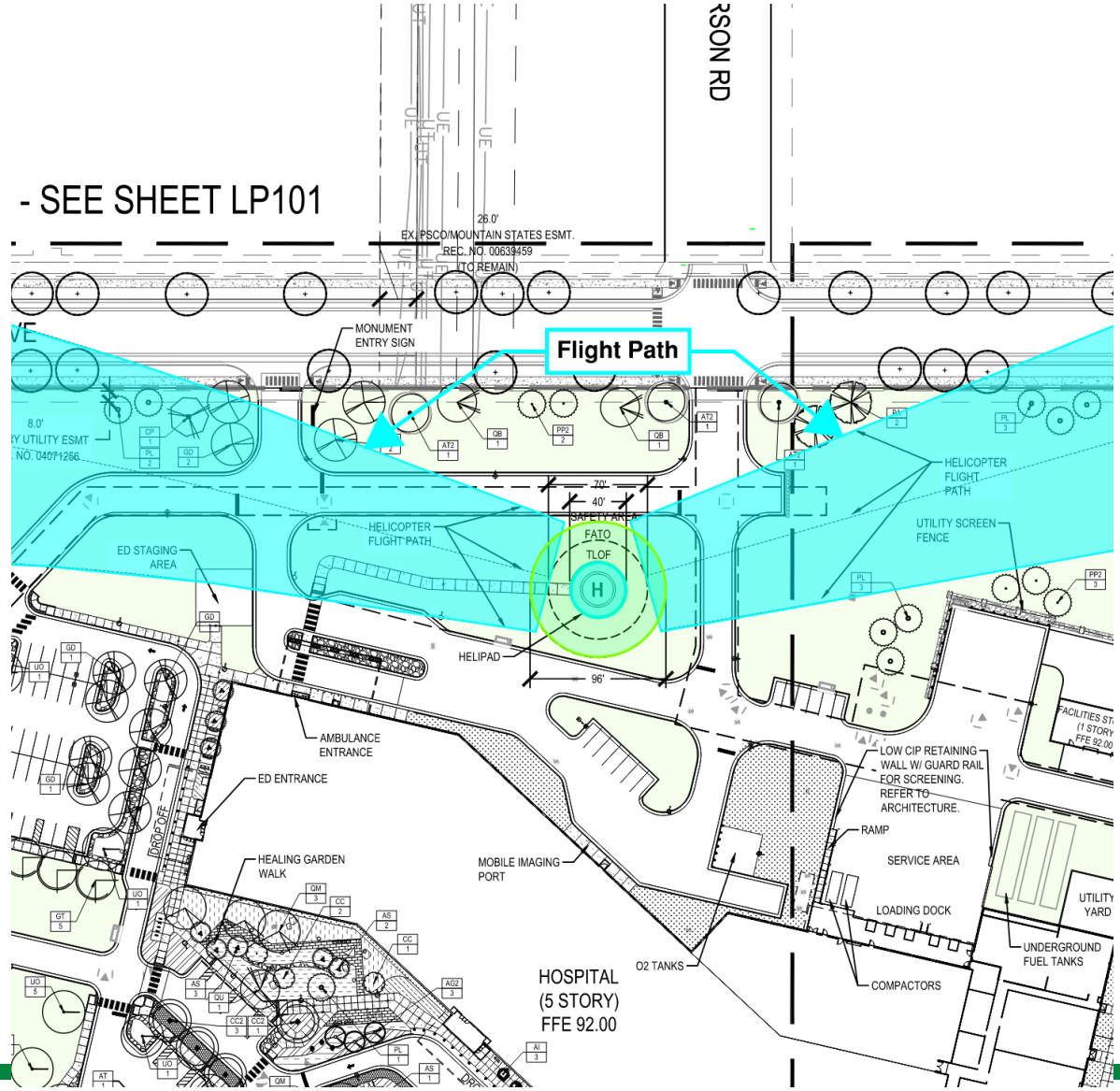
- 2030 projected trips: ~6,268 daily trips
- Full buildout: ~10,632 daily trips
- Study concludes transportation network can accommodate development
- Improvements include:
  - Roundabouts
  - Signal upgrades
  - Additional turn lanes
  - Site access improvements



City of Louisville

Analysis: Special Review Use

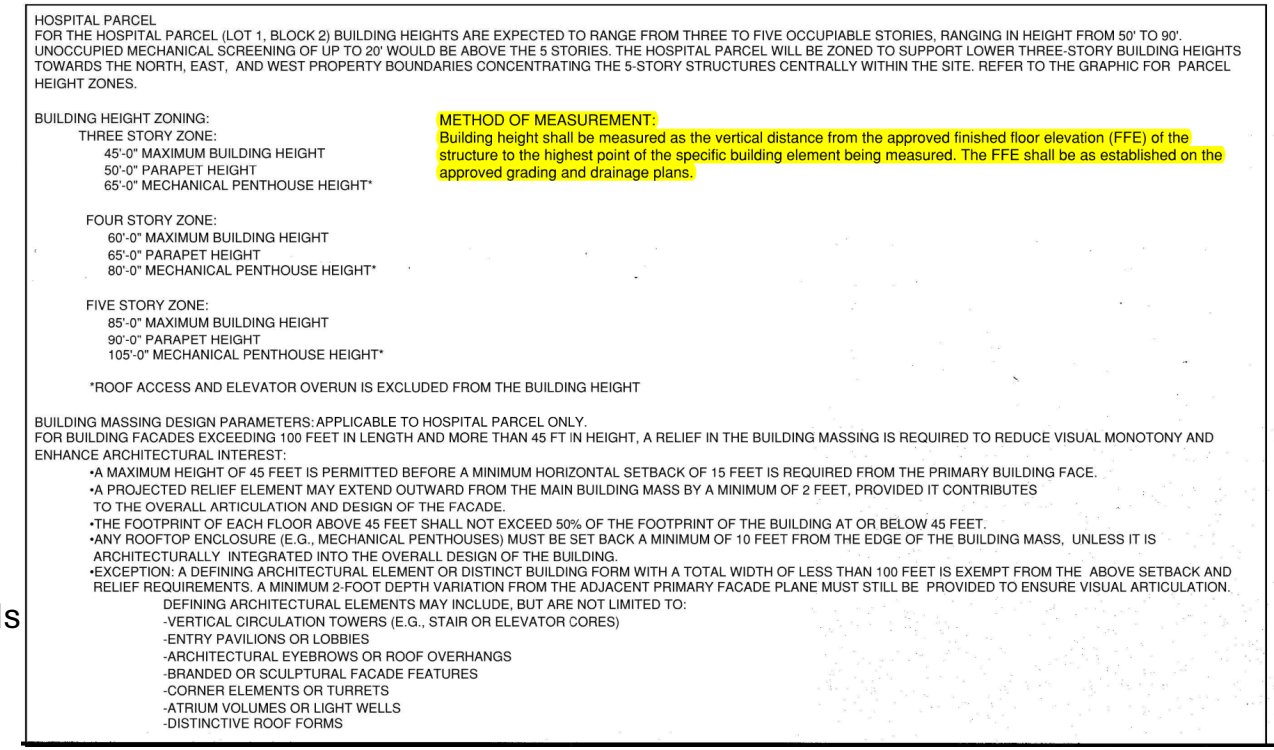
- Helipad permitted as Special Review Use
- Supports regional emergency healthcare operations
- Compatible with planned commercial/employment area
- Located to minimize pedestrian and traffic conflicts
- Integrated safely into overall campus design
- Staff finds all SRU criteria satisfied



City of Louisville

Analysis: GDP Amendment

- GDP Amendment establishes alternate height measurement method (FFE vs. average grade)
- Existing GDP height limits approved in 2025 for hospital and MOB zones
- Proposed hospital exceeds roof/parapet limits by 2.86 feet under average grade method
- Proposed MOB exceeds roof/parapet/mechanical limits by 3.53 feet under average grade method
- Mechanical screen height for hospital remains below approved 105-foot maximum
- No changes to density, overall scale, or development character
- Buildings remain compliant with GDP massing and stepback standards
- GDP Amendment qualifies for administrative approval per LMC 17.72.060.B
- **Planning Commission not taking action on GDP Amendment**
- City Council acceptance required prior to associated PUD approval



HOSPITAL PARCEL
FOR THE HOSPITAL PARCEL (LOT 1, BLOCK 2) BUILDING HEIGHTS ARE EXPECTED TO RANGE FROM THREE TO FIVE OCCUPIABLE STORIES, RANGING IN HEIGHT FROM 50' TO 90'. UNOCCUPIED MECHANICAL SCREENING OF UP TO 20' WOULD BE ABOVE THE 5 STORIES. THE HOSPITAL PARCEL WILL BE ZONED TO SUPPORT LOWER THREE-STORY BUILDING HEIGHTS TOWARDS THE NORTH, EAST, AND WEST PROPERTY BOUNDARIES CONCENTRATING THE 5-STORY STRUCTURES CENTRALLY WITHIN THE SITE. REFER TO THE GRAPHIC FOR PARCEL HEIGHT ZONES.

BUILDING HEIGHT ZONING:
THREE STORY ZONE:
45'-0" MAXIMUM BUILDING HEIGHT
50'-0" PARAPET HEIGHT
65'-0" MECHANICAL PENTHOUSE HEIGHT*

FOUR STORY ZONE:
60'-0" MAXIMUM BUILDING HEIGHT
65'-0" PARAPET HEIGHT
80'-0" MECHANICAL PENTHOUSE HEIGHT*

FIVE STORY ZONE:
85'-0" MAXIMUM BUILDING HEIGHT
90'-0" PARAPET HEIGHT
105'-0" MECHANICAL PENTHOUSE HEIGHT*

*ROOF ACCESS AND ELEVATOR OVERUN IS EXCLUDED FROM THE BUILDING HEIGHT

METHOD OF MEASUREMENT:
Building height shall be measured as the vertical distance from the approved finished floor elevation (FFE) of the structure to the highest point of the specific building element being measured. The FFE shall be as established on the approved grading and drainage plans.

BUILDING MASSING DESIGN PARAMETERS: APPLICABLE TO HOSPITAL PARCEL ONLY.
FOR BUILDING FACADES EXCEEDING 100 FEET IN LENGTH AND MORE THAN 45 FT IN HEIGHT, A RELIEF IN THE BUILDING MASSING IS REQUIRED TO REDUCE VISUAL MONOTONY AND ENHANCE ARCHITECTURAL INTEREST:
- A MAXIMUM HEIGHT OF 45 FEET IS PERMITTED BEFORE A MINIMUM HORIZONTAL SETBACK OF 15 FEET IS REQUIRED FROM THE PRIMARY BUILDING FACE.
- A PROJECTED RELIEF ELEMENT MAY EXTEND OUTWARD FROM THE MAIN BUILDING MASS BY A MINIMUM OF 2 FEET, PROVIDED IT CONTRIBUTES TO THE OVERALL ARTICULATION AND DESIGN OF THE FACADE.
- THE FOOTPRINT OF EACH FLOOR ABOVE 45 FEET SHALL NOT EXCEED 50% OF THE FOOTPRINT OF THE BUILDING AT OR BELOW 45 FEET.
- ANY ROOFTOP ENCLOSURE (E.G., MECHANICAL PENTHOUSES) MUST BE SET BACK A MINIMUM OF 10 FEET FROM THE EDGE OF THE BUILDING MASS, UNLESS IT IS ARCHITECTURALLY INTEGRATED INTO THE OVERALL DESIGN OF THE BUILDING.
- EXCEPTION: A DEFINING ARCHITECTURAL ELEMENT OR DISTINCT BUILDING FORM WITH A TOTAL WIDTH OF LESS THAN 100 FEET IS EXEMPT FROM THE ABOVE SETBACK AND RELIEF REQUIREMENTS. A MINIMUM 2-FOOT DEPTH VARIATION FROM THE ADJACENT PRIMARY FACADE PLANE MUST STILL BE PROVIDED TO ENSURE VISUAL ARTICULATION.

DEFINING ARCHITECTURAL ELEMENTS MAY INCLUDE, BUT ARE NOT LIMITED TO:
-VERTICAL CIRCULATION TOWERS (E.G., STAIR OR ELEVATOR CORES)
-ENTRY PAVILIONS OR LOBBIES
-ARCHITECTURAL EYEBROWS OR ROOF OVERHANGS
-BRANDED OR SCULPTURAL FACADE FEATURES
-CORNER ELEMENTS OR TURRETS
-ATRIUM VOLUMES OR LIGHT WELLS
-DISTINCTIVE ROOF FORMS

City of Louisville

Analysis: Planned Unit Development

- **Complies with:**
  - ✓ ConocoPhillips Campus GDP, 3rd Amendment, as proposed
  - ✓ Commercial Development Design Standards & Guidelines, with waivers
  - ✓ Louisville Municipal Code
- **Meets:**
  - ✓ Siting Requirements
  - ✓ Massing and stepback standards
  - ✓ Parking and circulation standards
  - ✓ Architectural design standards

- **Requested Waivers:**
  - Waiver for shrub requirements along west side street frontage
    - Native prairie landscape proposed
  - Waiver for street tree requirement along south side street frontage
    - Existing Xcel easement restricts planting

Staff supports both waivers as proposed

City of Louisville

Recommendation: AdventHealth Louisville

Staff recommend approval of Resolution XX, Series 2026, approval, with waivers, of a Final Planned Unit Development (PUD) to allow a 371,600 square-foot hospital building, a 62,000 square-foot medical office building and a Special Review Use (SRU) to allow a helicopter pad on 39.9 acres at 900 Rockcress Drive, subject to the following conditions:

1. Prior to recordation of the Final PUD, SRU, and associated Development Agreement, the applicant shall address any remaining City staff technical review comments related to the Final PUD and SRU that do not materially alter the development approved by City Council.

2. Prior to recordation of the Final PUD, SRU, and associated Development Agreement, the applicant shall address all remaining City review comments related to the public improvements cost estimate, to be included as Exhibit A to the Development Agreement.

City of Louisville
COLORADO • SINCE 1878

City Council Communication
Agenda Item 8.B.

Subject: Ordinance No. 1935, Series 2026 — An Ordinance Approving a Centennial Valley General Development Plan Amendment for Lot A of the Centennial Valley Business Park Filing No. 8 Final Plat — 2nd Reading, Public Hearing (advertised City of Louisville Website 07/21/2026)

The Public Hearing will be held and 2 rounds of public comment will be taken, along with Council questions and discussion. Final action may be taken on this item.

Date: August 4, 2026

Prepared By: Jeff Hirt, Planning Manager
Rob Zuccaro, Director

Presented By: Jeff Hirt, Planning Manager
Rob Zuccaro, Director

Summary:
The City, in coordination with the property owner - Koelbel and Company, is requesting an amendment to the Centennial Valley General Development Plan (GDP) for a 2.8-acre property to allow permanently affordable (deed-restricted) multifamily housing with a maximum height of 45 feet and a density of up to 37 dwelling units per acre. The City is the applicant, with the proposal intended to implement the housing policies of the City's Comprehensive Plan and Housing Plan.

Attachment 3 includes the project narrative and information regarding a potential affordable housing project; however, this application does not approve a specific development proposal. This application would approve the allowed uses, maximum building heights, and maximum residential density for the subject site. Any future project would require separate PUD approvals and public hearings before the Planning Commission and City Council.

Background / Prior Discussions:
The subject property is zoned Planned Community Zone District (PCZD) and is governed by the Centennial Valley General Development Plan (GDP), which establishes allowable land uses and development intensity throughout the approximately 487-acre GDP area. The site is currently vacant and is located within the “L2” subarea, which currently allows only commercial land uses. The surrounding area includes a mix of office uses, undeveloped land, and nearby commercial development along the McCaslin Boulevard corridor.

The GDP establishes permitted land uses and maximum development intensity by subarea, including allowable building square footage. Residential areas within the GDP

have largely developed as planned. The GDP does not establish maximum building heights; building height is instead governed by the residential height standards in the municipal code, which is limited to 35 feet in height for residential development, and the Commercial Development Design Standards and Guidelines, which limits height to 35 feet to the rooftop and 42 feet to mechanical screens for commercial development.

The subject property is well served by existing infrastructure and transportation access. The site has vehicular access from Centennial Parkway and is located approximately one block from the McCaslin Boulevard commercial corridor, including the new King Soopers Marketplace. Existing sidewalks and multi-use paths connect the site to nearby commercial areas and the US 36 and McCaslin Park-n-Ride, located less than one-half mile away with regional transit connections to Boulder and Denver.

Koelbel and Company has also indicated that it intends to pursue a broader future amendment to the Centennial Valley GDP to allow residential uses on additional sites, consistent with the recently adopted Comprehensive Plan, which supports residential and mixed-use development in portions of the area. This proposal is being processed separately in order for Koelbel and Company to meet a deadline for an August 2026 application for Low-Income Housing Tax Credits (LIHTC). This is discussed in more detail under the Development Proposal section below.

City Council Concept Plan Feedback June 2026, July 21, 2026 First Reading
City Council held a Concept Plan public hearing for the proposed project and associated GDP amendment on June 2, 2026. The purpose of the hearing was to provide an opportunity for City Council and staff to review the proposal and offer preliminary feedback before the applicant proceeds with formal development applications. While no formal findings or recommendations are made at the Concept Plan stage, City Council did not express concerns regarding the proposed land use, building heights, number of stories, or residential density and generally supported the project moving forward as proposed. No public comments were received during the hearing.

City Council also voted to advance this case to public hearing on July 21, 2026.

Planning Commission
Planning Commission evaluated the request at its June 11, 2026 public hearing and unanimously recommended approval of the proposed GDP amendment with no conditions. The Commission did, however, recommend that any future affordable housing agreement clearly define the circumstances under which the project's affordable housing units could be used to satisfy the City's Inclusionary Housing Ordinance through off-site compliance. This is addressed through Note No. 2 on the proposed GDP that states an alternative agreement would be executed with an anticipated future GDP amendment to formalize the terms of how the planned affordable housing on Parcel L2A would be credited for future planned residential development in Centennial Valley.

Development Proposal:

The proposal is to amend the Centennial Valley General Development Plan (GDP) for an approximately 2.8-acre site to allow multifamily residential development with all dwelling units permanently affordable through deed restrictions. The amendment would establish a maximum building height of 45 feet to accommodate a four-story building and a maximum residential density of 37 dwelling units per acre. The current GDP does not allow residential uses on the site.

This request does not seek approval of a specific development project. Rather, it would establish the land use, affordability, density, and building height parameters necessary to allow future consideration of affordable housing on the site. Any future development proposal would require separate review and approval through the Planned Unit Development (PUD) process, including public hearings before the Planning Commission and City Council.

The amendment is being pursued to facilitate a concept proposed by the property owner, Koelbel and Company, for approximately 100 deed-restricted, permanently affordable rental housing units serving households earning up to 80 percent of Area Median Income (AMI), with affordability levels ranging from 30 percent to 80 percent AMI and averaging 60 percent AMI across the project. The current concept includes a four-story building at a density consistent with the proposed GDP amendment.

Because the proposal would support a 100 percent affordable housing development and directly advance adopted City housing goals, the City is partnering with Koelbel and Company, the property owner, and is serving as the applicant for the GDP amendment. The proposed timeline is intended to support Koelbel and Company’s anticipated August 2026 application for Low-Income Housing Tax Credits (LIHTC) through the Colorado Housing and Finance Authority (CHFA), which requires applicable land use approvals to be in place. The City is also supporting the project through a Proposition 123 Land Banking Grant application to CHFA.

As previously noted, this GDP amendment request is being processed in order to meet the August 2026 application deadline, and Koelbel and Company and Staff intend to process a broader GDP amendment to allow residential uses on additional sites in Centennail Valley. Part of the current GDP amendment request is to acknowledge that future affordable housing developed on the proposed Parcel L2A will satisfy the City's Inclusional Housing Ordinance (IHO) requirements for residential development on the other property that they own and plan to develop in Centennail Valley. This is addressed through Note No. 2 on the proposed GDP document, and states that any future affordable housing development on Parcel L2A will be credited towards IHO requirements on the other parcels through an alternative agreement that would be executed with the anticipated future GDP amendment.

Figure 1 provides a conceptual rendering of the type of affordable housing development that the proposed GDP amendment would support. The rendering is illustrative only and is not subject to approval as part of this application. Attachment 3 includes additional project information prepared by Koelbel and Company for context.



Figure 1: Conceptual Image of Proposed Project

Analysis:
The analysis of this application is limited to the proposed GDP amendment, which would allow multifamily residential development on the subject property with all dwelling units permanently affordable through deed restrictions, and would establish maximum building height and residential density standards. This application does not approve a specific development project, site plan, building design, or infrastructure improvements. Those project-specific details would be reviewed through a subsequent Planned Unit Development (PUD) process, including additional public hearings before the Planning Commission and City Council.

Consistency with Planned Community Zone District Purpose and GDP Requirements
Louisville Municipal Code Section 17.72.060 allows a GDP to be amended subject to the same procedures as original approval. The proposed amendment is consistent with the purpose of the Planned Community Zone District, which is intended to encourage coordinated community design and integrated development patterns that include a mix of housing types, commercial uses, services, recreation, public facilities, and other complementary land uses.

The proposed amendment would allow permanently affordable multifamily housing in an area with existing streets, utilities, services, employment, commercial activity, transit access, and bicycle and pedestrian infrastructure. Locating affordable housing in this context supports coordinated community planning by adding housing choice within an

established mixed-use area rather than requiring extension of new infrastructure to an undeveloped location. The amendment also supports adopted Comprehensive Plan policies that identify Centennial Valley as an appropriate area for integrated development and future residential opportunities.

LMC Section 17.72.030 requires a GDP to address the proposed use of land, the type and character of development, residential density, public and quasi-public facilities, and street coordination. The proposed amendment addresses these requirements by identifying the allowable residential use, establishing maximum density and building height, and preserving the requirement for future site-specific PUD review. The Centennial Valley GDP includes a mix of residential and commercial land uses, and this amendment will extend the area where residential multifamily land uses are allowed, consistent with adopted city policies and the Comprehensive Plan.

Building Height
The proposed GDP amendment would allow a maximum building height of 45 feet, accommodating a four-story building on the subject property. While the Comprehensive Plan's Integrated Development/FLEX placetype identifies building heights of up to three stories, it also notes that density ranges and height guidance may vary based on project context and community benefits, including affordable housing (p. 37).

Although a four-story building would be uncommon in Louisville, the proposed height is generally consistent with the surrounding height context. The property immediately south allows buildings up to 35 feet and two stories and two other properties further to the south allow up to 46 feet in height. The property to the west contains a one-story industrial building and allows a maximum height of 26 feet, while several nearby properties remain undeveloped. In addition, the Comprehensive Plan contemplates building heights of up to five stories within the Regional Center place type south of Dillon Road.



Figure 2: Illustration of Surrounding Building Heights

On balance, staff finds the proposed height appropriate given the project's provision of permanently affordable housing, its location within an area planned for integrated development, and the requirement for future PUD review to address building design, massing, transitions, and compatibility.



Figure 3: Image of conceptual project looking west from Centennial Parkway

Residential Density
The proposed GDP amendment would allow a maximum residential density of 37 dwelling units per acre. While this exceeds the 18–30 dwelling units per acre range identified for the Integrated Development/FLEX placetype, the Comprehensive Plan recognizes that density ranges are intended as guidance and may vary based on project context and community benefits. In this case, the requested density is directly tied to the provision of permanently affordable housing and is intended to facilitate approximately 100 deed-restricted affordable rental units.

Staff also finds the requested density appropriate given the site's location within an area characterized primarily by commercial, industrial, and undeveloped properties rather than established residential neighborhoods. The addition of new residents in this location would support nearby commercial uses, increase housing opportunities near employment and services, and advance Comprehensive Plan policies related to mixed-use and integrated development patterns (see Attachment 5, Comprehensive Plan applicable policies).

The proposed density should also be considered in the context of the limited scope of the GDP amendment. Staff anticipates processing an additional GDP amendment in cooperation with Koelbel and Company for additional properties that they own in

Centennial Valley that will include lower density ranges, and anticipates that overall density on average will be within the Comprehensive Plan range for the Integrated Development/Flex place type.

Comprehensive Plan Consistency
Staff finds the proposed GDP amendment is consistent with the Comprehensive Plan when applicable policies are considered on balance. The subject property is located within the Integrated Development/FLEX placetype, which supports a mix of residential, employment, and commercial uses and identifies multifamily residential as an appropriate land use. The Comprehensive Plan also identifies portions of Centennial Valley as an opportunity area for future residential and mixed-use development and includes policies supporting affordable housing, housing diversity, redevelopment of underutilized commercial land, and residential development near services, employment centers, and transit.

The proposal would advance these objectives by allowing approximately 100 permanently affordable dwelling units on an underutilized site near existing commercial and employment areas. The amendment would expand housing opportunities, increase the City's supply of permanently affordable housing, and support the development of a more complete mixed-use Centennial Valley.

The proposal exceeds the FLEX placetype's general guidance of three stories and 18–30 dwelling units per acre. However, the Comprehensive Plan states that placetype height and density ranges are intended as guidance and may vary based on project context and the extent to which a development provides community benefits, including affordable housing. Staff finds that the proposed permanently affordable housing represents a significant community benefit that supports consideration of additional height and density in this location. As previously discussed, Staff also anticipates processing a second GDP amendment in cooperation with Koelbel and Company for additional residential development in the area that will be at a lower average density consistent with the Comprehensive Plan range for the Integrated Development/Flex place type.

On balance, staff finds the proposal is generally consistent with the Comprehensive Plan. Future PUD review would evaluate project-specific issues such as building massing, transitions, site design, parking, and compatibility with surrounding development.

Attachment 5 provides a list of all the applicable Comprehensive Plan policies.

Housing Plan Consistency
The proposed GDP amendment is consistent with the Louisville Housing Plan goals to increase residential development opportunities, expand and maintain access to affordable housing, and diversify the City’s housing stock. The amendment would facilitate redevelopment of the site with multifamily residential development, creating additional housing opportunities while expanding the range of housing types available

in Louisville. The proposal also aligns with the Housing Plan's direction to accommodate future housing growth in appropriate locations and increase housing options for households that may otherwise be priced out of the community.

The proposal most directly advances the Housing Plan's affordable housing objectives because all residential units on the subject property would be permanently affordable through deed restrictions. The Housing Plan identifies the creation and preservation of income-restricted affordable housing as one of the most effective tools for addressing housing affordability challenges and encourages partnerships that support new affordable housing development. By requiring long-term affordability for all units and reflecting a partnership between the City and Koelbel and Company, the amendment would make a meaningful contribution toward the City's affordable housing goals and increase the supply of permanently affordable housing in Louisville.

Attachment 5 provides a list of all the applicable Housing Plan policies.

Proposition 123 Commitment
The City's Proposition 123 commitment includes a goal of creating 77 new affordable housing units by the end of 2026. The affordable housing concept associated with this GDP amendment includes approximately 100 deed-restricted affordable units. If developed, the project would exceed the City's Proposition 123 unit commitment and represent a significant contribution toward local affordable housing goals. While the GDP amendment does not approve a specific development proposal, it would establish the land use framework necessary to support future consideration of a project that could help fulfill this commitment.

Traffic and Transportation
The applicant submitted a traffic impact study prepared by Kimley-Horn that evaluates a broader potential residential redevelopment scenario for Centennial Valley, including the subject property (Attachment 4). That broader scenario is not part of this application and would require separate future approvals. However, the study's assumptions for the subject property are generally consistent with the land use, density, and building scale contemplated by the proposed GDP amendment.

The study concluded that the broader residential redevelopment scenario could be accommodated within the existing and planned roadway network and would generate substantially fewer AM and PM peak-hour trips than the office development previously contemplated for the area.

In addition, a project-specific traffic analysis would be required with any future PUD application to evaluate site access, circulation, parking, roadway operations, and any necessary improvements.

Council Work Plan:
This item directly advances several 2026 City Council Work Plan housing priorities. A future GDP amendment with the City as applicant would advance the work plan priority

of considering City-initiated rezonings to support housing development. The proposed project would also satisfy the City's Proposition 123 housing commitment goals and advance implementation of the Housing Plan, both identified as Council work plan priorities.

Fiscal Impact:
There is no direct fiscal impact associated with this Concept Plan review. Any future City financial participation or funding commitments associated with the proposed development would require separate City Council consideration and approval.

Alternatives:
Approval of the proposed GDP amendment as presented, approval with modifications, or denial.

Recommendation:
Staff recommends approval of Ordinance No. 1935, Series 2026, approving a Centennial Valley General Development Plan amendment for Lot A of the Centennial Valley Business Park Filing No. 8 Final Plat to allow multifamily, permanently affordable residential development with a maximum building height of 45 feet and a maximum residential density of 37 dwelling units per acre.

Attachments:
1. Ordinance No. 1935, Series 2026
2. PC Reso 7 signed
3. Application Materials and Proposed GDP
4. Centennial Valley Residential Traffic Study_2026-05-28
5. Applicable Comprehensive and Housing Plan Policies
6. CC Presentation - CV GDP Amendment 8.4.26

ORDINANCE NO. 1935
SERIES 2026

AN ORDINANCE APPROVING A CENTENNIAL VALLEY GENERAL DEVELOPMENT PLAN AMENDMENT FOR LOT A OF THE CENTENNIAL VALLEY BUSINESS PARK FILING NO. 8 FINAL PLAT

WHEREAS, the City of Louisville (the "City"), is a Colorado home rule municipal corporation duly organized and existing under laws of the State of Colorado and the City of Louisville Home Rule Charter (the "City Charter"); and

WHEREAS, the subject property is Lot A of the Centennial Valley Business Park Filing No. 8 Final Plat and is located within the Centennial Valley General Development Plan (GDP) and Planned Community Commercial zone district; and

WHEREAS, the Centennial Valley GDP currently allows commercial development on the subject property but does not allow residential uses; and

WHEREAS, the City, in coordination with Koelbel and Company, has applied for an amendment to the Centennial Valley General Development Plan, attached hereto as Exhibit A (the "GDP Amendment"), to allow multifamily residential development with all dwelling units permanently affordable through deed restrictions, establish a maximum building height of 45 feet, and establish a maximum residential density of 37 dwelling units per acre on Lot A of the Centennial Valley Business Park Filing No. 8 Final Plat; and

WHEREAS, the proposed amendment is intended to facilitate the development of permanently affordable housing and advance adopted City housing goals, including goals and policies contained in the Louisville Comprehensive Plan and Louisville Housing Plan; and

WHEREAS, after a duly noticed public hearing held on June 11, 2026, at which evidence and testimony were entered into the record, including the Louisville Planning Commission Staff Report dated June 11, 2026, the Planning Commission forwarded a recommendation to the City Council to approve the proposed GDP amendment; and

WHEREAS, City Council has provided notice of a public hearing on this ordinance by publication as provided by law and has held a public hearing as provided in said notice; and

WHEREAS, the City Council finds the proposed GDP amendment is consistent with the requirements of the Planned Community Zone District chapter of the Louisville Municipal Code, the criteria and requirements applicable to General Development Plans, and the applicable goals and policies of the Louisville Comprehensive Plan and Louisville Housing Plan.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves the Centennial Valley General Development Plan Amendment for Lot A of the Centennial Valley Business Park Filing No. 8 Final Plat, allowing multifamily residential development with all dwelling units permanently affordable through deed restrictions, a maximum building height of 45 feet, and a maximum residential density of 37 dwelling units per acre, substantially as depicted in Exhibit A attached hereto.

Section 2. Approval of the GDP amendment does not constitute approval of a specific development proposal. Any future development of the property shall be subject to applicable review and approval in accordance with the Louisville Municipal Code.

INTRODUCED, READ, PASSED ON FIRST READING AND ORDERED PUBLISHED this __ day of _____ 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

PUBLIC HEARING AND SECOND READING WILL BE THE _____ DAY OF _____, 2026, AT 6:00 P.M. AT LOUISVILLE CITY HALL, 749 MAIN STREET, LOUISVILLE, CO 80027.

PASSED AND ADOPTED ON SECOND AND FINAL READING, this __ day of _____, 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

APPROVED AS TO FORM:
Kelly PC

_____
Kathleen M. Kelly, City Attorney

RESOLUTION NO. 7
SERIES 2026

A RESOLUTION RECOMMENDING TO THE CITY COUNCIL APPROVAL OF A CENTENNIAL VALLEY GENERAL DEVELOPMENT PLAN AMENDMENT FOR LOT A OF THE CENTENNIAL VALLEY BUSINESS PARK FILING NO. 8 FINAL PLAT

WHEREAS, the City of Louisville has applied for an amendment to the Centennial Valley General Development Plan (GDP) for Lot A of the Centennial Valley Business Park Filing No. 8 Final Plat to allow multifamily residential development with all dwelling units permanently affordable through deed restrictions, establish a maximum building height of 45 feet, and establish a maximum residential density of 37 dwelling units per acre; and

WHEREAS, the Planning Commission finds that the proposed GDP amendment is consistent with the purpose of the Planned Community Zone District and satisfies the applicable requirements of Chapter 17.72 of the Louisville Municipal Code; and

WHEREAS, the Planning Commission finds that the proposed GDP amendment supports adopted Comprehensive Plan and Housing Plan policies related to affordable housing, housing diversity, residential development opportunities, and integrated mixed-use development; and

WHEREAS, the Planning Commission has considered the application at a duly noticed public hearing on June 11, 2026, where evidence and testimony were entered into the record, including the findings contained in the Louisville Planning Commission Staff Report dated June 11, 2026.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Louisville, Colorado, does hereby recommend that the City Council approve the Centennial Valley General Development Plan Amendment for Lot A of the Centennial Valley Business Park Filing No. 8 Final Plat to allow multifamily residential development with all dwelling units permanently affordable through deed restrictions, a maximum building height of 45 feet, and a maximum residential density of 37 dwelling units per acre.

PASSED AND ADOPTED this 11th day of June, 2026.

By: Steve Brauneis
Steve Brauneis, Chair
Planning Commission

Attest: Cullen Choi
Cullen Choi, Secretary
Planning Commission

Development Review Application Form

Please complete this form and include it with the submittal documents for your development review application. Applications will not be processed until all required information is provided to the satisfaction of the City of Louisville Planning Department.

Property Information

Common Address(es): 365 Centennial Parkway, 0 Dyer Road
Legal Description:
Lot A (including Outlot A) Block _____ Subdivision Centennial Valley Business Park Filing No. 8
Lot Area: approx. 122,404 SF Sq. Ft. or approx. 2.81 Acres

LAND USE PROCESS (check all that apply)

- ☐ Annexation
- ☐ Concept Plan
- ☐ Easement Vacation
- ☐ Oil and Gas
- ■ General Development Plan (GDP)
  - ■ Amendment
  - ☐ New GDP
- ☐ Planned Unit Development (PUD)
  - ☐ Amendment
  - ☐ Preliminary
  - ☐ New PUD
- ☐ Rezoning
- ☐ Special Review Use (SRU)
  - ☐ Amendment
  - ☐ New SRU
- ☐ Subdivision
  - ☐ Final or Replat
  - ☐ Preliminary Plat
- ☐ Temporary Use Permit
- ☐ Variance
- ☐ Vested Property Right
- ☐ Wireless Facility
- ☐ Other: _____

PROJECT DESCRIPTION:

A request to amend the Centennial Valley General Development Plan (GDP) to allow multifamily, permanently affordable residential development on the subject property and establish related maximum residential density and building height standards.

Property Owner Information

Name: City of Louisville Entity (if applicable) _____
Address: 749 Main Street
Phone: 303-666-6565 Email: planning@louisvilleco.gov

Application Representative Information

Name: Rob Zuccaro, Community Development Director Entity (if applicable) City of Louisville
Address: 749 Main Street
Phone: 303-666-6565 Email: planning@louisvilleco.gov

Certification/Signature

I certify that the information I have submitted is true and correct to the best of my knowledge and in filing the application and submittal documents, I am acting as and/or with the knowledge and consent of those persons who are owners of the subject property or are parties to this application.

Rob Zuccaro	Rob Zuccaro	5/27/26
Signature*	Print Name	Date

***If acting as a representative/agent of the owner, include written authorization from the owner that certifies the agent's right to submit this application**

Date: May 27, 2026

To: Louisville Planning Commission and City Council

From: Community Development Department

Re: General Development Plan Amendment – Centennial Valley Affordable Housing

Purpose of the Request

The City of Louisville is the applicant, on behalf of the property owner, for a General Development Plan (GDP) amendment affecting the properties commonly known as 365 Centennial Parkway and 0 Dyer Road, legally described as Lot A (including Outlot A), Centennial Valley Business Park Filing No. 8. The proposed amendment would allow multifamily residential use on the subject property and establish residential density and building height standards necessary to support permanently affordable housing.

This application is a City-initiated land use action intended to implement adopted affordable housing policies and priorities of the City of Louisville.

Background and Policy Context

The City is acting as applicant because advancing affordable housing is an adopted City priority and specific implementation objective of multiple City policy documents. The City Council's 2026 Work Plan identifies city-initiated rezonings and land use actions that support affordable housing goals as a priority action item. The proposed amendment also directly implements the Louisville Housing Plan, which calls for regulatory and land use actions that expand the supply and diversity of affordable housing opportunities within the community.

In addition, the amendment advances the recently adopted Comprehensive Plan, which identifies affordable housing as a top community priority and supports mixed-use and residential development patterns in appropriate locations. The proposed GDP amendment is therefore a direct implementation measure advancing adopted City policies related to housing affordability, housing diversity, transportation access, and sustainable land use patterns.

The subject property is particularly appropriate for affordable multifamily residential development due to its proximity to regional transit, employment centers, commercial services, schools, childcare, and bicycle and pedestrian infrastructure. The applicant materials note the site is located near the US 36 and McCaslin regional transit corridor and within walking distance of commercial services and

multimodal transportation connections. These site characteristics align with the City's adopted goals of locating housing opportunities in areas with access to transportation, services, and employment.

Affordable Housing Commitment
The amendment is intended to facilitate development of a 100% permanently affordable multifamily residential community serving low- and moderate-income households. The applicant materials contemplate approximately 100 affordable housing units on the subject property. The development team has committed that all residential units developed on the property will remain permanently affordable through applicable affordability restrictions and agreements.

The City acknowledges that the amendment request includes consideration of residential density and building height standards necessary to support affordable multifamily housing on the site. Those standards will continue to be evaluated through the public review process, including public hearings before the Planning Commission and City Council.

Conclusion
The proposed GDP amendment advances adopted City Council direction and implements the City's Comprehensive Plan and Housing Plan objectives related to permanently affordable housing, housing diversity, and transit-supportive residential development. The amendment represents an intentional and policy-driven effort to address identified community housing needs through implementation of the City's adopted plans and priorities.

Respectfully submitted,

Community Development Department
City of Louisville

Rob Zuccaro
Community Development Director

CENTENNIAL VALLEY

May 21, 2026

Dear Sirs:

Koelbel and Company, the Manager for all vacant properties located in Centennial Valley, Louisville, CO, hereby consents to allow the City and its Planning Staff represent it. The City will be initiating an amendment to the existing GDP, adding residential uses to the properties. We look forward to working hand in hand with the City to carry out the vision Louisville has laid out in its Comprehensive Plan.

Sincerely,

Jeffrey G. Sheets
Vice President
Koelbel and Company

Managed by Koelbel and Company, 5291 East Yale Avenue, Denver, Colorado 80222, Phone 303/758-3500, Fax 303/758-6632

PLANNING COMMISION CERTIFICATE

RECOMMENDED APPROVAL THIS _____ DAY OF _____, 20__ BY THE PLANNING COMMISSION OF THE CITY OF LOUISVILLE, COLORADO.
RESOLUTION NO. _____ SERIES _____

CITY COUNCIL CERTIFICATE

APPROVED THIS _____ DAY OF _____, 20__ BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO.
ORDINANCE NO. _____ SERIES _____

_____ _____
MAYOR CITY CLERK

CLERK AND RECORDER CERTIFICATE

(COUNTY OF BOULDER
STATE OF COLORADO)

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED IN MY OFFICE AT _____ O'CLOCK, ___ . M., THIS _____ DAY OF _____, 20__, AND IS RECORDED IN PLAN FILE _____, FEE _____ PAID _____ FILM NO. _____, RECEPTION

_____ _____
CLERK & RECORDER DEPUTY

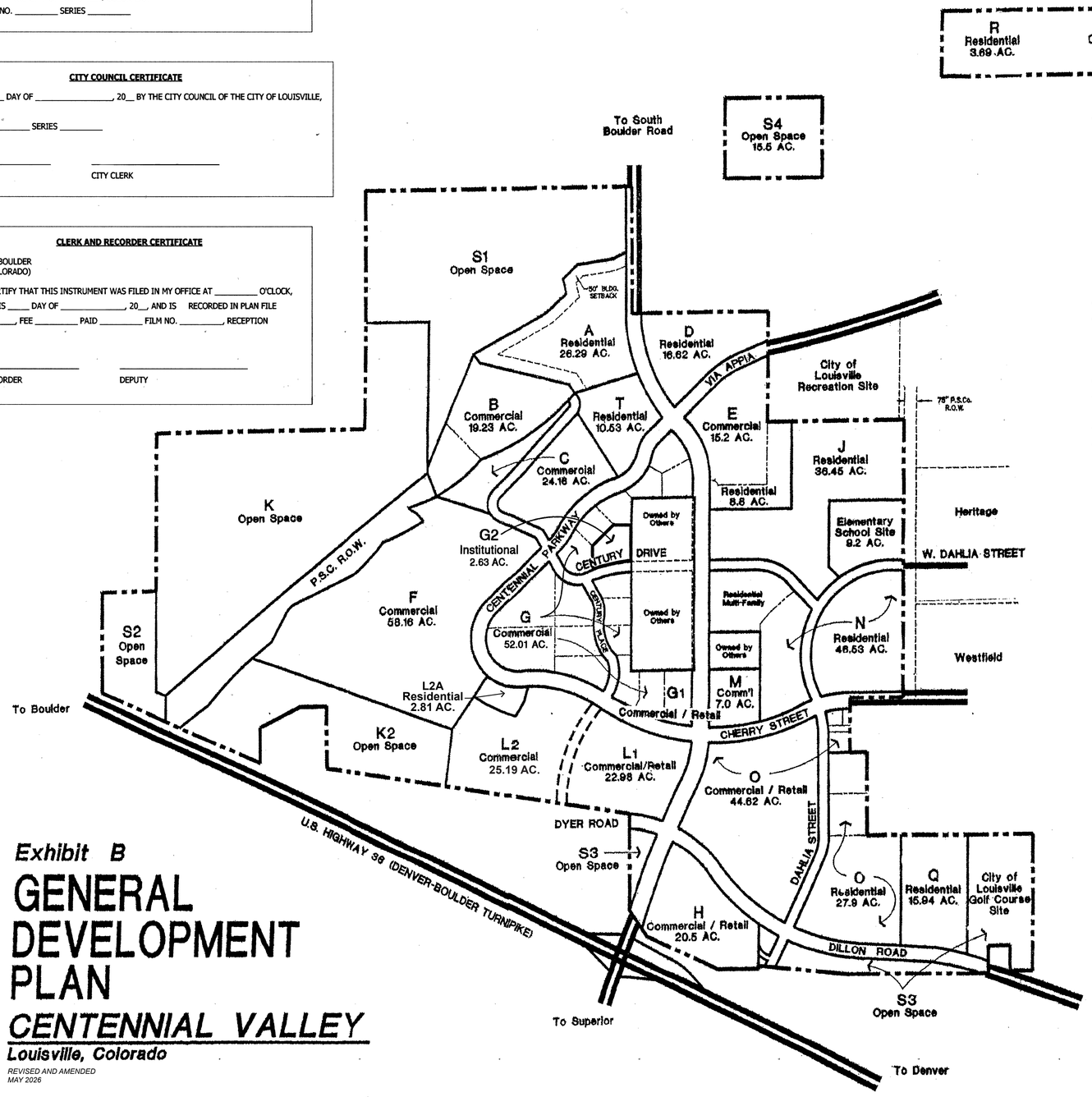


Exhibit B

GENERAL DEVELOPMENT PLAN

CENTENNIAL VALLEY

Louisville, Colorado

REVISED AND AMENDED
MAY 2026

DESIGNATED USES	PLANNING AREAS	ACREAGE	AVERAGE DENSITY	DWELLING UNITS	GROSS BUILDING AREA
RESIDENTIAL					
SINGLE FAMILY	A D E J N Q R T	155.46	3.92	609	-
MULTI-FAMILY	N O	37.29	13.70	511	-
MULTI-FAMILY (AFFORDABLE)	L2	2.81	37.00	104	-
TOTAL RESIDENTIAL		195.56	6.26	1224	N/A
NON-RESIDENTIAL					
RETAIL	H L M O G1	62.98	0.20	-	515,000 SF
RESEARCH / OFFICE	B C F G L	178.75	0.36	-	2,841,400 SF
INSTITUTIONAL	G2	2.63	0.41	-	47,000 SF
MIXED USE (EXCLUDING RESIDENTIAL)	O E H M	47.39	0.36	-	477,500 SF
TOTAL NON-RESIDENTIAL		291.75	0.31	N/A	3,880,900 SF
TOTAL DEVELOPMENT		**487.31**	**N/A**	**1224**	**3,880,900 SF**

OPEN SPACE	
OPEN SPACE PARCELS K, K2, S1-S5	295.01
ARTERIAL ROADS	90.46
TOTAL OPEN SPACE	**385.47**
SCHOOL SITE	9.22
TOTAL LAND	**882.00 AC.**

USE FOR EACH PARCEL ALLOWABLE UNDER DESIGNATED USES (1)

PARCEL L	CORPORATE USER / RETAIL / MIXED USE
PARCEL B C F G	RESEARCH / OFFICE / RETAIL
PARCEL G2	INSTITUTIONAL
PARCEL E	MIXED USE / COMMERCIAL
PARCEL M	RETAIL / OFFICE
PARCEL O	MIXED USE / RETAIL
PARCEL H	HOTEL / MIXED USE / RETAIL
PARCEL N O	TOWNHOUSE AND MULTI-FAMILY
PARCEL A D E J N Q R T	SINGLE FAMILY DETACHED
PARCEL K - K2	OPEN SPACE
PARCEL S1 - S5	OPEN SPACE
PARCEL L2A	AFFORDABLE MULTI-FAMILY (2)

(1) SPECIFIC DESCRIPTIONS OF PERMITTED LAND USES AND DENSITIES FOR EACH PARCEL IDENTIFIED ON THE GDP MAY BE FOUND IN THE CENTENNIAL VALLEY AMENDED AND RESTATED DEVELOPMENT AGREEMENT AS AMENDED.

(2) PARCEL L2A IS DESIGNATED FOR 100% AFFORDABLE MULTI-FAMILY RESIDENTIAL. ALL DWELLING UNITS WITHIN L2A SHALL BE DEED-RESTRICTED AFFORDABLE HOUSING UNITS. IT IS ANTICIPATED THAT THE PROPERTY OWNER OR CITY MAY MAKE ONE OR MORE APPLICATIONS TO THE CITY FOR FURTHER AMENDMENT OF THIS GDP TO ALLOW FOR RESIDENTIAL LAND USES WITHIN OTHER PARCELS SUBJECT TO THIS GDP OWNED BY KOELBEL AND COMPANY ON [DATE OF GDP AMENDMENT APPROVAL]. SUCH FUTURE APPLICATIONS SHALL BE SUBJECT TO ALL APPLICABLE CITY REQUIREMENTS UNDER CHAPTERS 16 AND 17 OF THE LOUISVILLE MUNICIPAL CODE. IN CONNECTION WITH ANY SUCH FUTURE APPROVALS, FOR DEED-RESTRICTED AFFORDABLE HOUSING UNITS ACTUALLY DEVELOPED WITHIN L2A, AS DEMONSTRATED BY ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR SUCH AFFORDABLE HOUSING UNITS, CREDIT SHALL BE PROVIDED TOWARD INCLUSIONARY HOUSING REQUIREMENTS SET FORTH IN CHAPTER 17.76 OF THE LOUISVILLE MUNICIPAL CODE, AS THE SAME IS IN EFFECT AT THE TIME OF SUCH FUTURE APPLICATION. SUCH CREDITS TO BE SET FORTH IN AN ALTERNATIVE AGREEMENT PURSUANT TO SECTION 17.76.050.F OF THE LOUISVILLE MUNICIPAL CODE, AS THE SAME MAY FROM TIME TO TIME BE AMENDED, BETWEEN THE CITY OF LOUISVILLE AND THE PROPERTY OWNER FOR SUCH FUTURE APPROVAL. REFER TO THE CENTENNIAL VALLEY AMENDED AND RESTATED DEVELOPMENT AGREEMENT, AS AMENDED, FOR ADDITIONAL REQUIREMENTS. AFFORDABLE HOUSING UNITS DEVELOPED WITHIN CENTENNIAL VALLEY SHALL BE CREDITED TOWARD THE CITY'S INCLUSIONARY HOUSING ORDINANCE REQUIREMENTS, AS APPLICABLE. REFER TO THE TABLE BELOW FOR ADDITIONAL DEVELOPMENT STANDARDS ASSOCIATED WITH PARCEL L2A.

NEW RESIDENTIAL PARCEL USE STANDARDS

RESIDENTIAL PARCEL	USE TYPE	ACREAGE	MAX. DENSITY	MAX. UNITS	MAX. BUILDING HEIGHT	POCKET PARK PROPOSED
L2A	MF	2.81	37 DU/AC	104	45 FT	NO

GENERAL DEVELOPMENT PLAN - AMENDMENT

CENTENNIAL VALLEY

CITY OF LOUISVILLE, COLORADO

KOELBEL

DATE: MAY 27, 2026
CLIENT: KOELBEL
PROJECT NO: 260026
AUTHOR: JF, SW

NOT TO SCALE.

North

Redland
WHERE GREAT PLACES BEGIN
720.283.6783 Office
1500 West Canal Court
Littleton, Colorado 80120
REDLAND.COM

KOELBEL

5291 E. YALE AVENUE
DENVER, COLORADO 80222
P 303 758 3500
KOELBELCO.COM

Centennial Valley – Affordable Family Housing



Koelbel and Company is pleased to present to the City of Louisville this application for Centennial Valley Affordable Apartments (CVA), a new family oriented affordable housing project in Louisville, CO. Located in the Centennial Valley Business Park, CVA will be situated within walking distance of regional transit, local employment centers, a grocery store, childcare facilities, restaurants, shops and more.

CVA is proposed to consist of one hundred (100) affordable family housing units in a single building. The building will be constructed with five levels of Type V fully sprinkled wood frame construction. The building is contemplated to be designed with an envelope consisting of some or all of the following materials: masonry, pre-manufactured stone veneer, metal-clad siding, fiber cement siding, punched windows, and storefront. The site will be fully surface parked at a 1:1 parking to unit ratio. Vertical circulation of the building will consist of two elevators and two stair cores.

This proposed development will meaningfully surpass the minimum 77 units required as part of the City's 2024 Proposition 123 Commitment to increase the affordable housing supply by December of 2026. While these units will not be delivered by the end of 2026, we believe that securing the Land Banking Grant as well as submitting for Tax Credits in August will demonstrate a strong, continued effort, to deliver these housing units. We believe this effort will satisfy the Prop 123 commitment and ensure the City of Louisville and Koelbel will remain eligible for additional Prop 123 subsidy, which is contemplated in our proforma.

Each residential unit will be individually temperature controlled and include a full kitchen (with dishwasher, oven/range, microwave, refrigerator/freezer, and garbage disposal), coat closet, washer and dryer, and cable and internet wiring. Community amenities will consist of a community room, fitness room, bicycle storage, on-site property management, controlled access entries, and security cameras. The exterior amenities will include a community space such as a picnic area with outdoor dining and seating areas and/or a playground facility.

KOELBEL

5291 E. YALE AVENUE
DENVER, COLORADO 80222
P 303 758 3500
KOELBELCO.COM

CVA will follow, at a minimum, the sustainability criteria as set forth by the National Green Building Standards. Some of the energy efficiencies included in the project are the use of Energy Star appliances, all LED lighting, and advanced water conserving appliances. Additionally, at least 10% of the parking on site will be EV-ready and the project is designed to be electrification ready. We propose joint pursuit of state and federal energy grants that can be loaned into the project to secure the necessary funding for additional energy efficiencies such as a fully electric community utilizing electric resistance heat pumps or geothermal heating and cooling.

The proposed unit mix will contain sixty-three (65) one-bed / one-bath units, twenty-four (24) two-bed / one-bath units, and eleven (11) three-bed / two-bath units. The project targets low-to-moderate income families and utilizing the income averaging approach of AMI levels between 30%-80% with the average AMI below the 60% AMI threshold per the unit mix below:

Centennial Valley Affordable Apartments - Unit Mix				
AMI	**1 Bed / 1 Bath**	**2 Bed / 1 Bath**	**3 Bed / 2 Bath**	**Total**
30%	4	1	1	6
40%	4	1	1	6
50%	4	2	1	7
60%	44	16	6	66
70%	6	3	1	10
80%	3	1	1	5
Total	**65**	**24**	**11**	**100**

The project site is located less than a half mile from the US 36 and McCaslin Blvd. regional transit stations. From there, residents will have easy access to Boulder and greater Denver and Denver Metro areas via RTD's Flatiron Flyer. Locally, residents will have immediate access to multiple childcare facilities, schools, grocery centers and pharmacies. In addition, residents are within minutes of the US 36 Bikeway that provides an off-street route for safe and pleasant pedestrian or bicycle travel that is connected to the entire community.



Unit Tabulations

UNITS	Garden	Level 1	Level 2	Level 3	Grand Totals	%
1 BED	8	19	19	19	**65**	65.00%
2 BED	3	7	7	7	**24**	24.00%
3 BED	2	3	3	3	**11**	11.00%
Total	**13**	**29**	**29**	**29**	**100**	**100.00%**

Parking

Compact	17	17.00%
ADA	5	
Standard	43	
(E) Standard	35	
Total	100	
Per Unit	1.00	

Building Square Footages

	Circulation	Amenity	Utility	Net SF	Gross SF
Garden	3,000	1,590	1,850	13,400	18,250
Level 1	3,390	0	250	25,410	29,050
Level 2	3,390	0	250	25,410	29,050
Level 3	3,375	0	250	24,570	28,210
Grand Totals	13,155	1,590	2,600	88,790	**104,560**
% of Gross	12.58%	1.52%	2.49%	84.92%	

Key Notes

1. Tenant Parking
2. Tenant Entrance
3. Wireless Pedestals
4. (E) Detention Amenity
5. Landscape Amenity
6. Compact Parking
7. Surface Parking
8. Standard Parking

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BF AD

KOELBEL

Louisville Affordable Housing
Louisville, Colorado

May 12th, 2026

MULTIFAMILY TEST FIT
3 levels Type V / 1 Garden level

TYPICAL FLOOR PLAN
SCALE 1” = 40’

NORTH



©2026 **BRYANT FLINK** ARCHITECTURE + DESIGN

BF AD

KOELBEL

Louisville Affordable Housing
Louisville, Colorado

May 12th, 2026

MULTIFAMILY TEST FIT
3 levels Type V / 1 Garden level

FLOOR PLAN
SCALE 1” = 40’

NORTH

©2026 **BRYANT FLINK** ARCHITECTURE + DESIGN

BF AD

KOELBEL

Louisville Affordable Housing
Louisville, Colorado

May 12th, 2026

MULTIFAMILY TEST FIT
3 levels Type V / 1 Garden level

View From South Centennial Parkway - 3 story

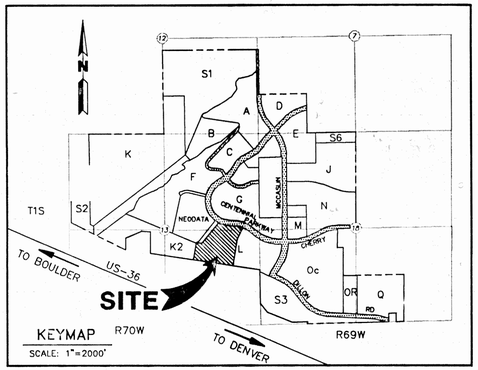
NORTH

FINAL PLAT

CENTENNIAL VALLEY BUSINESS PARK
FILING NO. 8

A PART OF THE EAST HALF OF SECTION 13, TOWNSHIP 1 SOUTH, RANGE 70 WEST, OF THE 6th. P.M. CITY OF LOUISVILLE, COUNTY OF BOULDER STATE OF COLORADO

SHEET 1 OF 2



DEDICATION

KNOW ALL MEN BY THESE PRESENTS, THAT THE UNDERSIGNED BEING THE OWNER OF A TRACT OF LAND LOCATED IN THE EAST HALF OF SECTION 13, TOWNSHIP 1 SOUTH, RANGE 70 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEIND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEASTERLY CORNER OF CENTENNIAL VALLEY BUSINESS PARK, FILING NO. 5 AND THE SOUTHERLY RIGHT-OF-WAY LINE OF CENTENNIAL PARKWAY FROM WHENCE THE EAST QUARTER CORNER OF SAID SECTION 13 BEARS N79°37'40"E, 1,163.93 FEET; THENCE ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE THE FOLLOWING THREE (3) CONSECUTIVE COURSES: 1) THENCE 277.65 FEET ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 675.00 FEET, A CENTRAL ANGLE OF 23°34'16", AND A CHORD WHICH BEARS S73°28'11"E, 275.74 FEET TO A POINT OF TANGENCY; 2) THENCE S85°15'19"E, 225.00 FEET TO A POINT OF CURVATURE; 3) THENCE 300.35 FEET ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 625.00 FEET, A CENTRAL ANGLE OF 27°32'02" AND A CHORD WHICH BEARS S71°29'18"E, 297.47 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF CENTURY PLACE; THENCE ALONG SAID WESTERLY RIGHT-OF-WAY LINE THE FOLLOWING THREE (3) CONSECUTIVE COURSES: 1) THENCE S35°01'47"W, 100.00 FEET TO A POINT OF CURVATURE; 2) THENCE 199.34 FEET ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 505.00 FEET, A CENTRAL ANGLE OF 21°35'43" AND A CHORD WHICH BEARS S24°13'55"W, 189.21 FEET TO A POINT OF TANGENCY; 3) THENCE S13°26'04"W, 782.50 FEET TO THE NORTHERLY RIGHT-OF-WAY LINE OF DILLON ROAD; THENCE ALONG SAID NORTHERLY LINE N81°11'36"W, 1,151.96 FEET; THENCE LEAVING SAID NORTHERLY LINE N08°48'24"E, 475.00 FEET TO THE SOUTHWESTERLY CORNER OF SAID FILING NO. 5; THENCE ALONG THE EASTERLY LINE OF SAID FILING NO. 5 THE FOLLOWING TWO (2) CONSECUTIVE COURSES: 1) THENCE N81°12'08"E, 133.73 FEET; 2) THENCE N41°35'56"E, 722.44 FEET TO THE TRUE POINT OF BEGINNING. SAID PARCEL CONTAINS 26.03 ACRES (1,134,020 SQUARE FEET), MORE OR LESS.

HAS LAID OUT, SUBDIVIDED AND PLATTED SAID LAND AS PER DRAWING HEREON CONTAINED UNDER THE NAME AND STYLE OF "CENTENNIAL VALLEY BUSINESS PARK, FILING NO. 8, A SUBDIVISION OF A PART OF THE CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO AND BY THESE PRESENTS DO HEREBY DEDICATE TO THE CITY OF LOUISVILLE AND THE PUBLIC, THE INGRESS-EGRESS AND FIRE LANE EASEMENTS AS SHOWN ON THE ACCOMPANYING PLAT FOR VEHICULAR, PEDESTRIAN AND EMERGENCY ACCESS, AS SHOWN ON THE ACCOMPANYING PLAT FOR THE PUBLIC USE THEREOF FOREVER AND DOES FURTHER DEDICATE TO THE USE OF THE CITY OF LOUISVILLE AND ALL MUNICIPALLY OWNED AND/OR FRANCHISED UTILITIES AND SERVICES THOSE PORTIONS OF SAID REAL PROPERTY WHICH ARE SO DESIGNATED AS EASEMENTS AND RIGHT-OF-WAYS FOR THE CONSTRUCTION, INSTALLATION, OPERATION, MAINTENANCE, REPAIR AND REPLACEMENT FOR ALL SERVICES, INCLUDING WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, TELEPHONE AND ELECTRIC LINES, WORKS, POLES AND UNDERGROUND CABLES, GAS PIPELINES, WATER PIPELINES, SANITARY SEWER LINES, STREET LIGHTS, CULVERTS, HYDRANTS, DRAINAGE DITCHES AND DRAINS AND ALL APPURTENANCES THERETO, IT BEING EXPRESSLY UNDERSTOOD AND AGREED BY THE UNDERSIGNED THAT ALL EXPENSES AND COSTS INVOLVED IN CONSTRUCTING AND INSTALLING SANITARY SEWER SYSTEM WORKS AND LINES, GAS SERVICE LINES, ELECTRICAL SERVICE WORKS AND LINES, STORM SEWERS AND DRAINS, STREET LIGHTING, GRADING AND LANDSCAPING, CURBS, GUTTERS, STREET PAVEMENT, SIDEWALKS AND OTHER SUCH UTILITIES AND SERVICES SHALL BE GUARANTEED AND PAID FOR BY THE SUBDIVIDER OR ARRANGEMENTS MADE BY THE SUBDIVIDER THEREOF WHICH ARE APPROVED BY THE CITY OF LOUISVILLE, COLORADO, AND SUCH SUMS SHALL NOT BE PAID BY THE CITY OF LOUISVILLE, COLORADO, AND THAT ANY ITEM SO CONSTRUCTED OR INSTALLED WHEN ACCEPTED BY THE CITY OF LOUISVILLE, COLORADO, SHALL BECOME THE SOLE PROPERTY OF SAID CITY OF LOUISVILLE, COLORADO, EXCEPT PRIVATE ROADWAY CURBS, GUTTER AND PAVEMENT AND ITEMS OWNED BY MUNICIPALLY FRANCHISED UTILITIES AND/OR U.S. WEST COMMUNICATIONS, INC. WHICH WHEN CONSTRUCTED OR INSTALLED, SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL NOT BECOME THE PROPERTY OF THE CITY OF LOUISVILLE, COLORADO.

WITNESS OUR HANDS AND SEALS THIS 11 DAY OF June, 1998.

OWNER: Walter A. Koelbel Jr. ATTEST:

CENTENNIAL VALLEY PROPERTIES II, LLC
BY; KOELBEL & COMPANY AS MANAGER
A COLORADO CORPORATION
BY; WALTER A. KOELBEL JR.
PRESIDENT

NOTARY

STATE OF COLORADO)
COUNTY OF ~~BOULDER~~ Denver)SS

THE FOREGOING INSTRUMENT WAS ACKNOWLEGED BEFORE ME THIS 11 DAY OF June, 1998
BY Walter A. Koelbel, Jr., President of Koelbel and Company

WITNESS MY HAND AND SEAL. MY COMMISSION EXPIRES THE 2nd DAY OF July, 2001

Marilyn Peter
NOTARY PUBLIC

MARILYN PETER NOTARY PUBLIC STATE OF COLORADO

OWNER

CENTENNIAL VALLEY PROPERTIES II, LLC
BY; KOELBEL & COMPANY AS MANAGER
A COLORADO CORPORATION
BY; WALTER A. KOELBEL JR.
PRESIDENT
5291 YALE CIRCLE
DENVER, COLORADO 80222
CONTACT: JEFF SHEETS
PHONE: (303) 758-3500

NOTES

1. CROSS ACCESS IS HEREBY GRANTED OVER AND ACROSS ALL LOTS WITHIN THIS SUBDIVISION FOR THE BENEFIT OF ALL PARTIES, SUCCESSORS, ASSIGNS, INVITEES, CUSTOMERS, TENANTS AND GUESTS.
2. OUTLOTS A, B, E AND F ARE OUTLETS FOR COMMON STORM WATER DETENTION AND ARE TO BE MAINTAINED BY THE OWNERS' ASSOCIATION.

BASIS OF BEARING

BASIS OF BEARINGS: THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 13, TOWNSHIP 1 SOUTH, RANGE 70 WEST OF THE SIXTH PRINCIPAL MERIDIAN IS ASSUMED TO BEAR N00°26'33"W. SAID LINE BEING ESTABLISHED BY THE NORTHWEST CORNER (A 3 3/4" ALUMINUM CAP IN A RANGE BOX LS # 5429) AND THE EAST QUARTER CORNER (A 3 1/4" ALUMINUM CAP LS # 10945) OF SAID SECTION 13.

PLANNING COMMISSION CERTIFICATE

APPROVED THIS 9th DAY OF Dec, 1997 BY THE PLANNING COMMISSION OF THE CITY OF LOUISVILLE, COLORADO. RESOLUTION NO. 52 SERIES 1997.

CHAIRMAN SECRETARY

CITY COUNCIL CERTIFICATE

APPROVED THIS 6th DAY OF JAN., 1998 BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO. RESOLUTION NO. 2 SERIES 1998.

Tom Davidson
MAYOR

CITY CLERK

SURVEYORS CERTIFICATE

I, WAYNE W. HARRIS, A REGISTERED LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY OF CENTENNIAL VALLEY BUSINESS PARK FILING 8 WAS MADE BY ME OR UNDER MY SUPERVISION ON OR ABOUT THE ___ OF _____, 19___, AND THAT THE ACCOMPANYING PLAT ACCURATELY AND PROPERLY SHOWS SAID SUBDIVISION AND SURVEY THEREOF.

Wayne W. Harris
REGISTERED COLORADO LAND SURVEYOR, LS# 18548
6-10-98

REGISTERED 18548 LAND SURVEYOR

CLERK AND RECORDER CERTIFICATE

COUNTY OF BOULDER)
STATE OF COLORADO)

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED IN MY OFFICE AT 3:50 O'CLOCK, P .M
THIS 12th DAY OF AUGUST, 1998, AND IS DULY RECORDED IN PLAN FILE P-44 F-4 #48 & 49
FEE $21.00 PAID $21.00, FILM NO. N/A RECEPTION NO. 1834434

CHARLOTTE HOUSTON
RECORDER

Carol Jacobsen
DEPUTY

REV: 08-10-98
REV: 05-04-98
REV: 01-08-98
REV: 12-29-97
REV: 12-17-97
REV: 11-24-97
REV: 10-27-97
REV: 10-03-97
DATE: 08-19-97

P-44 F-4 # 48 (182)

MARTIN/MARTIN
Consulting Engineers
4251 Kipling St.
Wheat Ridge, CO 80033
(303) 431-6100

1834434
Page 1 of 2
08/12/1998 03:55P
R 21.00 D 0.00
Boulder County Clerk, CO

DRAWING NUMBER
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
RECORDER'S NUMBER 07/549
REVISIONS AS OF 1993 (N.T.S.)

DRAWING NUMBER
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
RECORDER'S NUMBER 07/549

DRAWING NUMBER
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
RECORDER'S NUMBER 07/549

CEN. VALLEY BUS. PARK #8
PARCEL L2
1 OF 2

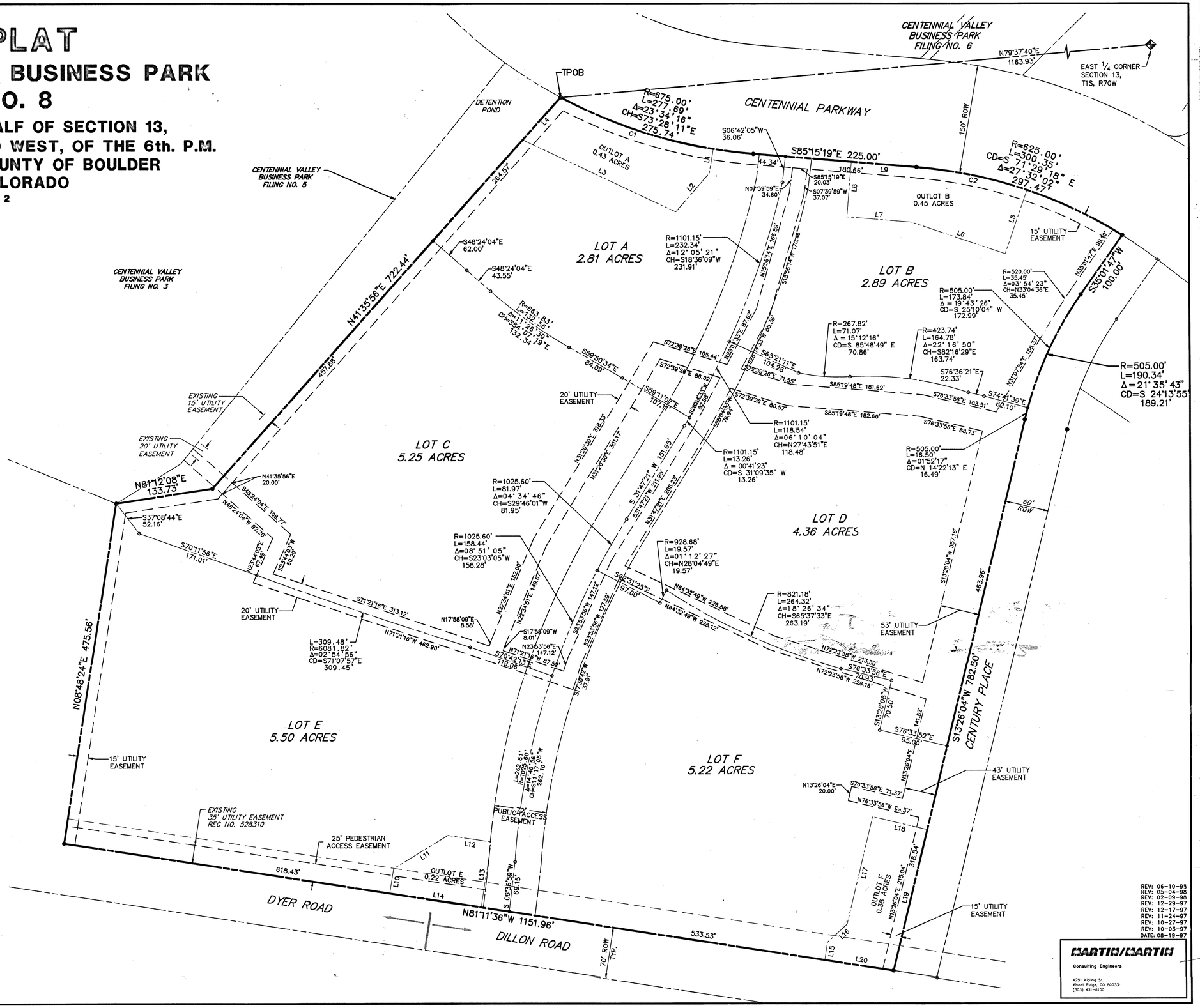
G:\JANSEN1\PLAT.DWG
BEW
BEW
LWP
PLAN
PLAT.DWG
06/09/98 STC
PLOT
..\BASE\BASE.DWG

FINAL PLAT

CENTENNIAL VALLEY BUSINESS PARK FILING NO. 8

A PART OF THE EAST HALF OF SECTION 13, TOWNSHIP 1 SOUTH, RANGE 70 WEST, OF THE 6th. P.M. CITY OF LOUISVILLE, COUNTY OF BOULDER STATE OF COLORADO

SHEET 2 OF 2



OUTLOT CURVE & LINE TABLES

OUTLOT A

	DELTA	R='	L='	CH B=	CH L='
C1	18°51'48"	675.00	222.23	S71°06'58"E	221.23

NUMBER	DIRECTION	DISTANCE
L1	S09°27'08"W	33.69'
L2	S40°47'10"W	70.52'
L3	N64°34'23"W	232.18'
L4	N41°35'56"E	78.28'

OUTLOT B

	DELTA	R='	L='	CH B=	CH L='
C2	14°13'39"	625.00	155.20	N78°08'29"W	154.80

NUMBER	DIRECTION	DISTANCE
L5	S18°58'20"W	93.20'
L6	N71°10'05"W	135.93'
L7	N85°15'19"W	88.86'
L8	N04°44'41"E	76.43'
L9	S85°15'19"E	90.00'

OUTLOT E

	DIRECTION	DISTANCE
L10	N08°48'24"E	34.61'
L11	N58°30'48"E	87.67'
L12	S81°11'36"E	60.38'
L13	S08°48'24"W	91.31'
L14	N81°11'36"W	127.25'

OUTLOT F

	DIRECTION	DISTANCE
L15	N08°48'24"E	24.68'
L16	N47°25'53"E	36.68'
L17	N13°15'04"E	152.69'
L18	S76°33'56"E	77.00'
L19	S13°26'04"W	200.00'
L20	N81°11'36"W	95.34'

LEGEND

EXISTING		PROPOSED
———	PROPERTY LINE	———
- - - -	EASEMENT	- - - - AND
.....	FLOWLINE	
o	MONUMENTS	

N

100 50 0 100 200

SCALE 1"= 100'

MARTIN/MARTIN assumes no responsibility for utility locations. The utilities shown on this drawing have been plotted from the best available information. It is, however, the contractors responsibility to field verify the location of all utilities prior to the commencement of any construction.

REV: 06-10-93
REV: 03-04-98
REV: 02-09-98
REV: 12-29-97
REV: 12-17-97
REV: 11-24-97
REV: 10-27-97
REV: 10-03-97
DATE: 08-19-97

MARTIN/MARTIN
Consulting Engineers
4251 Kipling St.
Wheat Ridge, CO. 80033
(303) 431-6100

CEN. VALLEY BUS. PARK # 8
PARCEL L2
2 OF 2

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
RECORDER'S NUMBER 0725361

DRAWING NUMBER

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134060.01
PLAT
BEW
BEW
LMP
06/09/98 STC
PLOT
PLAN
PLAT.DWG
...\BASE\BASE.DWG

CENTENNIAL VALLEY BUSINESS PARK
FILING NO. 8
A PART OF THE EAST HALF OF SECTION 13, TOWNSHIP 1 SOUTH, RANGE 70 WEST, OF THE 6th. P.M.

DEDICATION

KNOW ALL MEN BY THESE PRESENTS, THAT THE UNDERSIGNED BEING THE OWNER OF A TRACT OF LAND LOCATED IN THE EAST HALF OF SECTION 13, TOWNSHIP 1 SOUTH, RANGE 70 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEIND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEASTERLY CORNER OF CENTENNIAL VALLEY BUSINESS PARK, FILING NO. 5 AND THE SOUTHERLY RIGHT-OF-WAY LINE OF CENTENNIAL PARKWAY FROM WHENCE THE EAST QUARTER CORNER OF SAID SECTION 13 BEARS N79°37'40"E, 1,163.93 FEET; THENCE ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE THE FOLLOWING THREE (3) CONSECUTIVE COURSES: 1) THENCE 277.69 FEET ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 675.00 FEET, A CENTRAL ANGLE OF 23°34'16", AND A CHORD WHICH BEARS S73°28'11"E, 275.74 FEET TO A POINT OF TANGENCY; 2) THENCE S85°15'19"E, 225.00 FEET TO A POINT OF CURVATURE; 3) THENCE 300.35 FEET ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 625.00 FEET, A CENTRAL ANGLE OF 27°32'02" AND A CHORD WHICH BEARS S71°29'18"E, 297.47 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF CENTURY PLACE; THENCE ALONG SAID WESTERLY RIGHT-OF-WAY LINE THE FOLLOWING THREE (3) CONSECUTIVE COURSES: 1) THENCE S35°01'47"W, 100.00 FEET TO A POINT OF CURVATURE; 2) THENCE 190.34 FEET ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 505.00 FEET, A CENTRAL ANGLE OF 21°35'43" AND A CHORD WHICH BEARS S24°13'55"W, 189.21 FEET TO A POINT OF TANGENCY; 3) THENCE S13°26'04"W, 782.50 FEET TO THE NORTHERLY RIGHT-OF-WAY LINE OF DILLON ROAD; THENCE ALONG SAID NORTHERLY LINE N81°11'36"W, 1,151.96 FEET; THENCE LEAVING SAID NORTHERLY LINE N08°48'24"E, 475.50 FEET TO THE SOUTHWESTERLY CORNER OF SAID FILING NO. 5; THENCE ALONG THE EASTERLY LINE OF SAID FILING NO. 5 THE FOLLOWING TWO (2) CONSECUTIVE COURSES: 1) THENCE N81°12'08"E, 133.73 FEET; 2) THENCE N41°35'56"E, 722.44 FEET TO THE TRUE POINT OF BEGINNING. SAID PARCEL CONTAINS 26.03 ACRES (1,134,020 SQUARE FEET), MORE OR LESS.

HAS LAID OUT, SUBDIVIDED AND PLATTED SAID LAND AS PER DRAWING HEREON CONTAINED UNDER THE NAME AND STYLE OF CENTENNIAL VALLEY BUSINESS PARK, FILING NO. 8, A SUBDIVISION OF A PART OF THE CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO AND BY THESE PRESENTS DO HEREBY DEDICATE TO THE CITY OF LOUISVILLE AND THE PUBLIC, THE INGRESS-EGRESS AND FIRE LANE EASEMENTS AS SHOWN ON THE ACCOMPANYING PLAT FOR VEHICULAR, PEDESTRIAN AND EMERGENCY ACCESS, AS SHOWN ON THE ACCOMPANYING PLAT FOR THE PUBLIC USE THEREOF FOREVER AND DOES FURTHER DEDICATE TO THE USE OF THE CITY OF LOUISVILLE AND ALL MUNICIPALLY OWNED AND/OR FRANCHISED UTILITIES AND SERVICES THOSE PORTIONS OF SAID REAL PROPERTY WHICH ARE SO DESIGNATED AS EASEMENTS AND RIGHT-OF-WAYS FOR THE CONSTRUCTION, INSTALLATION, OPERATION, MAINTENANCE, REPAIR AND REPLACEMENT FOR ALL SERVICES, INCLUDING WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, TELEPHONE AND ELECTRIC LINES, WORKS, POLES AND UNDERGROUND CABLES, GAS PIPELINES, WATER PIPELINES, SANITARY SEWER LINES, STREET LIGHTS, CULVERTS, HYDRANTS, DRAINAGE DITCHES AND DRAINS AND ALL APPURTENANCES THERETO, IT BEING EXPRESSLY UNDERSTOOD AND AGREED BY THE UNDERSIGNED THAT ALL EXPENSES AND COSTS INVOLVED IN CONSTRUCTING AND INSTALLING SANITARY SEWER SYSTEM WORKS AND LINES, GAS SERVICE LINES, ELECTRICAL SERVICE WORKS AND LINES, STORM SEWERS AND DRAINS, STREET LIGHTING, GRADING AND LANDSCAPING, CURBS, GUTTERS, STREET PAVEMENT, SIDEWALKS AND OTHER SUCH UTILITIES AND SERVICES SHALL BE GUARANTEED AND PAID FOR BY THE SUBDIVIDER OR ARRANGEMENTS MADE BY THE SUBDIVIDER THEREOF WHICH ARE APPROVED BY THE CITY OF LOUISVILLE, COLORADO, AND SUCH SUMS SHALL NOT BE PAID BY THE CITY OF LOUISVILLE, COLORADO, AND THAT ANY ITEM SO CONSTRUCTED OR INSTALLED WHEN ACCEPTED BY THE CITY OF LOUISVILLE, COLORADO, SHALL BECOME THE SOLE PROPERTY OF SAID CITY OF LOUISVILLE, COLORADO, EXCEPT PRIVATE ROADWAY CURBS, GUTTER AND PAVEMENT AND ITEMS OWNED BY MUNICIPALLY FRANCHISED UTILITIES AND/OR U.S. WEST COMMUNICATIONS, INC. WHICH WHEN CONSTRUCTED OR INSTALLED, SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL NOT BECOME THE PROPERTY OF THE CITY OF LOUISVILLE, COLORADO.

WITNESS OUR HANDS AND SEALS THIS 11 DAY OF June, 1998.

OWNER: Walter A Koelbel Jr. ATTEST: [signature]

CENTENNIAL VALLEY PROPERTIES II, LLC
BY; KOELBEL & COMPANY AS MANAGER
A COLORADO CORPORATION
BY; WALTER A. KOELBEL JR.
PRESIDENT

Centennial Valley Business Park Filing 8 Subdivision Mylar

PLANNING COMMISSION CERTIFICATE

APPROVED THIS 9th DAY OF Dec, 1997 BY THE PLANNING COMMISSION OF THE CITY OF LOUISVILLE, COLORADO. RESOLUTION NO. 52 SERIES 1997.

CHAIRMAN

Betty Solde
SECRETARY

CITY COUNCIL CERTIFICATE

APPROVED THIS 6TH DAY OF JAN., 1998 BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO. RESOLUTION NO. 2 SERIES 1998.

Tom Davidson
MAYOR

CITY CLERK

SURVEYORS CERTIFICATE

, WAYNE W. HARRIS, A REGISTERED LAND SURVEYOR IN THE STATE OF COLORADO,)O HEREBY CERTIFY THAT THE SURVEY OF CENTENNIAL VALLEY BUSINESS PARK FILING 8 WAS MADE BY ME OR UNDER MY SUPERVISION ON OR ABOUT THE ___ OF _____, 19___, AND THAT THE ACCOMPANYING PLAT ACCURATELY AND PROPERLY SHOWS SAID SUBDIVISION AND SURVEY THEREOF.

Wayne W. Harris
REGISTERED COLORADO LAND SURVEYOR, LS# 18548
6-10-98

CLERK AND RECORDER CERTIFICATE

COUNTY OF BOULDER)
STATE OF COLORADO)

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED IN MY OFFICE AT 3:56 O'CLOCK, P .M THIS 12TH DAY OF AUGUST, 1998, AND IS DULY RECORDED IN PLAN FILE P-44 F-4 #48 & 49

FEE $21.00 PAID $21.00, FILM NO. N/A RECEPTION NO. 1834434

CHARLOTTE HOUSTON
RECORDER

Carol Jacobsen
DEPUTY

OWNER

CENTENNIAL VALLEY PROPERTIES II, LLC
BY; KOELBEL & COMPANY AS MANAGER
A COLORADO CORPORATION
BY; WALTER A. KOELBEL JR.
PRESIDENT
5291 YALE CIRCLE
DENVER, COLORADO 80222
CONTACT: JEFF SHEETS
PHONE: (303) 758-3500

NOTES

1. CROSS ACCESS IS HEREBY GRANTED OVER AND ACROSS ALL LOTS WITHIN THIS SUBDIVISION FOR THE BENEFIT OF ALL PARTIES, SUCCESSORS, ASSIGNS, INVITEES, CUSTOMERS, TENANTS AND GUESTS.

2. OUTLOTS A, B, E AND F ARE OUTLETS FOR COMMON STORM WATER DETENTION AND ARE TO BE MAINTAINED BY THE OWNERS' ASSOCIATION.

BASIS OF BEARING

BASIS OF BEARINGS: THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 13, TOWNSHIP 1 SOUTH, RANGE 70 WEST OF THE SIXTH PRINCIPAL MERIDIAN IS ASSUMED TO BEAR N00°26'33"W. SAID LINE BEING ESTABLISHED BY THE NORTHWEST CORNER (A 3 3/4 " ALUMINUM CAP IN A RANGE BOX LS # 5429) AND THE EAST QUARTER CORNER (A 3 1/4" ALUMINUM CAP LS # 10945) OF SAID SECTION 13.

LOUISVILLE AFFORDABLE HOUSING

CENTENNIAL VALLEY, LOT A

ARCHITECTURAL TEST FIT

BRYANT FLINK
ARCHITECTURE & DESIGN





BEFORE



AFTER

©2026 **BRYANT FLINK** ARCHITECTURE + DESIGN

BF AD

KOELBEL

Louisville Affordable Housing
Louisville, Colorado

May 7th, 2026

MULTIFAMILY TEST FIT
3 levels Type V / 1 Garden level

View From Off Ramp Before

2 OF 6





BEFORE



AFTER

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BF AD

KOELBEL

Louisville Affordable Housing
Louisville, Colorado

May 7th, 2026

MULTIFAMILY TEST FIT
3 levels Type V / 1 Garden level

View From W. Dillon Rd Before





BEFORE



AFTER

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BF AD

KOELBEL

Louisville Affordable Housing
Louisville, Colorado

May 7th, 2026

MULTIFAMILY TEST FIT
3 levels Type V / 1 Garden level

View From Centennial Pkwy





BEFORE



AFTER

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KOELBEL

Louisville Affordable Housing
Louisville, Colorado

May 7th, 2026

MULTIFAMILY TEST FIT
3 levels Type V / 1 Garden level

View from Centennial Parkway and Century Place

5 OF 6





BEFORE



AFTER

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BF AD

KOELBEL

Louisville Affordable Housing
Louisville, Colorado

May 7th, 2026

MULTIFAMILY TEST FIT
3 levels Type V / 1 Garden level

View From Century Place

6 OF 6

THANK YOU

BRYANT FLINK
ARCHITECTURE & DESIGN

TRAFFIC IMPACT STUDY

Centennial Valley Residential

Louisville, Colorado

Prepared for:

Centennial Valley Properties VII, LLC by Koelbel and Company Manager

Kimley»Horn

T R A F F I C I M P A C T S T U D Y

Centennial Valley Residential

Louisville, Colorado

Prepared for
Centennial Valley Properties VII, LLC by Koelbel and Company Manager
5291 E. Yale Avenue
Denver, Colorado 80222

Prepared by
Jeffrey R. Planck, P.E.
Kimley-Horn and Associates, Inc.
6200 South Syracuse Way
Suite 300
Greenwood Village, Colorado 80111
(303) 228-2300



May 2026

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

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1.0 EXECUTIVE SUMMARY

Centennial Valley Residential is proposed to be located on the northwest and southwest corners of the Century Drive & Centennial Parkway intersection, the southwest and northwest corners of the Centennial Parkway Access approximately 550 feet west of the Century Place & Centennial Parkway intersection, and the northeast corner of the Dillon Road Access approximately 600 feet east of the Dillon Road and McCaslin Boulevard intersection in Louisville, Colorado. For the purposes of this analysis, the project is anticipated to include approximately 925 multifamily housing units, 121 single-family attached units, and 102 multifamily affordable housing units. It is expected that the project will be completed in the next several years. Therefore, analysis was conducted for the 2030 short-term buildout horizon as well as the 2050 long-term twenty-year planning horizon.

The purpose of this traffic study is to identify project traffic generation characteristics to determine potential project traffic related impacts on the local street system and to develop the necessary mitigation measures required for the identified traffic impacts. The following intersections were incorporated into this traffic study based on the Louisville, Colorado requested scope:

1. Centennial Parkway/Via Appia & McCaslin Boulevard
2. Century Drive & McCaslin Boulevard
3. Centennial Parkway/Cherry Street & McCaslin Boulevard
4. Dillon Road & McCaslin Boulevard
5. Centennial Parkway & Century Drive
6. Infinite Drive and Centennial Parkway
7. Centennial Parkway & Century Place

In addition, three existing accesses along Centennial Parkway, one existing access along McCaslin Boulevard, and one existing access along Dillon Road were evaluated.

Regional access to the site will be provided by the Denver Boulder Turnpike (US-36) and Northwest Parkway. Primary access will be provided by McCaslin Boulevard, Centennial Parkway, and Dillon Road. Direct access will be provided by the three existing accesses along Centennial Parkway, an existing three-quarter access along McCaslin Boulevard, and one existing access along Dillon Road.

Centennial Parkway, with multimodal reduction, is expected to generate approximately 6,398 weekday daily trips, with 420 of these trips occurring during the morning peak hour and 542 of these trips occurring during the afternoon peak hour.

Based on the analysis presented in this report, Kimley-Horn believes the Centennial Valley Residential project will be successfully incorporated into the existing and future roadway network. Analysis of the existing street network, the proposed project development, and expected traffic volumes resulted in the following recommendations:

- With the completion of the project, a north leg is proposed at the North Centennial Parkway Access (#8) to serve the residential development. It is recommended that an R1-1 “STOP” sign is installed on the southbound approach, exiting the development.

- The eastbound left-turn lane at Centennial Parkway/Cherry Street and McCaslin Boulevard (#3) experiences queueing that exceeds available storage and is influenced by existing geometric constraints and wide median widths rather than project-generated traffic. It is recommended that the eastbound left turn lane be extended to the maximum feasible length of approximately 325 feet to better accommodate anticipated queues. Alternatively, the intersection could be further analyzed by modifying the median geometry to align opposing left-turn lanes. The realignment would allow for protected–permissive signal phasing and eliminate overlapping vehicle paths. Under protected–permissive phasing, eastbound left-turn queues are reduced during the afternoon peak hour, with corresponding improvements in overall intersection delay. This finding is consistent with other development traffic studies in the area and should be noted that project-generated traffic contributes negligible impacts to the need for this extension.

- Any onsite or offsite improvements should be incorporated into the Civil Drawings and conform to standards of the City of Louisville and the Manual on Uniform Traffic Control Devices (MUTCD) – 11th Edition, 2023.

2.0 INTRODUCTION

Kimley-Horn has prepared this report to document the results of a Traffic Impact Study for the Centennial Valley Residential project proposed to be located on the northwest and southwest corners of the Century Drive & Centennial Parkway intersection, the southwest and northwest corners of the Centennial Parkway Access approximately 550 feet west of the Century Place & Centennial Parkway intersection, and the northeast corner of the Dillon Road Access approximately 600 feet east of the Dillon Road and McCaslin Boulevard intersection in Louisville, Colorado. There are seven total distinct plots of land in this development. B1, C1, F1, and F2 are located on the northwest corner of the Infinite Drive & Centennial Parkway intersection. G3 is proposed on the north side of Centennial Parkway approximately 550 feet east of Century Place. L7 is proposed on the south side of Centennial Parkway approximately 550 feet east of Century Place. O2 is proposed on the west side of an existing parking lot located on the north side of Dillon Road approximately 600 feet east of McCaslin Boulevard. A vicinity map illustrating the project development location is shown in **Figure 1**. The project is proposed to include multifamily housing, single-family attached housing, and affordable multifamily housing. A conceptual site plan is attached in **Appendix A**. It is expected that the project will be completed in the next several years; therefore, analysis was conducted for the 2030 short-term buildout horizon as well as the 2050 long-term twenty-year planning horizon.

The purpose of this traffic study is to identify project traffic generation characteristics to determine potential project traffic related impacts on the local street system and to develop the necessary mitigation measures required for the identified traffic impacts. The following intersections were incorporated into this traffic study based on the Louisville, Colorado requested scope:

1. Centennial Parkway/Via Appia & McCaslin Boulevard
2. Century Drive & McCaslin Boulevard
3. Centennial Parkway/Cherry Street & McCaslin Boulevard
4. Dillon Road & McCaslin Boulevard
5. Centennial Parkway & Century Drive
6. Infinite Drive and Centennial Parkway
7. Centennial Parkway & Century Place

In addition, three existing accesses along Centennial Parkway, one existing access along McCaslin Boulevard, and one existing access along Dillon Road were evaluated.

Regional access to the site will be provided by the Denver Boulder Turnpike (US-36) and Northwest Parkway. Primary access will be provided by McCaslin Boulevard, Centennial Parkway, and Dillon Road. Direct access will be provided by the three existing accesses along Centennial Parkway, an existing three-quarter access along McCaslin Bouelvard, and one existing access along Dillon Road.

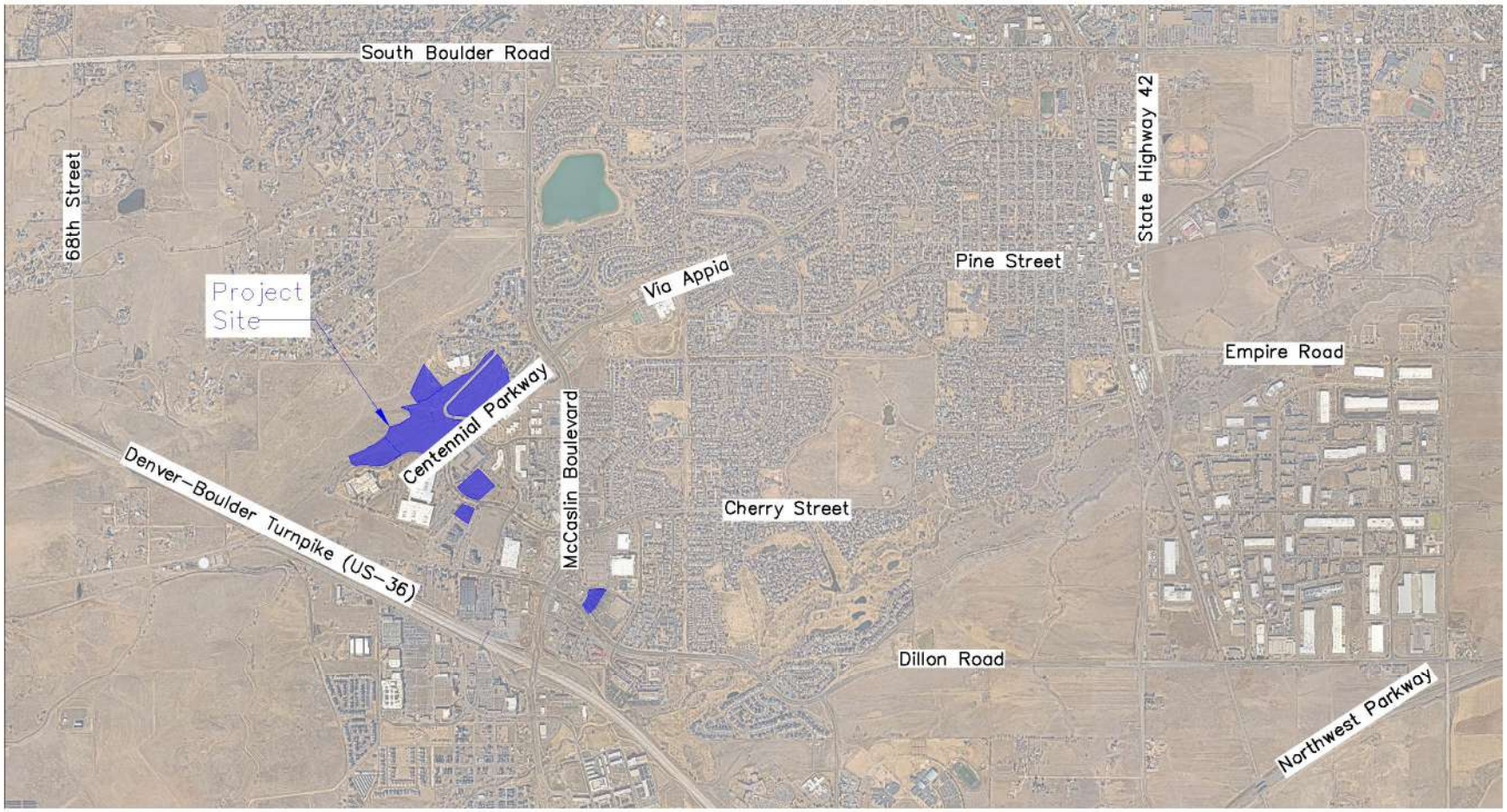


FIGURE 1
Centennial Valley Residential
Louisville, Colorado
Vicinity Map

3.0 EXISTING AND FUTURE CONDITIONS

3.1 Existing Study Area

The existing site is comprised of vacant land except the O2 Site where there is currently a parking lot for an office building. The surrounding area has mixed uses including housing, office buildings, and multifamily and single-family residential housing. Commercial uses are located south of Dillon Road while retail centers are located south of US-36. To the north of the B1, C1, F1 and F2 plots there is additional vacant land. The Centennial Parkway loop has restaurants and office buildings while east of McCaslin Boulevard there is both multifamily and single-family housing.

3.2 Existing Roadway Network

McCaslin Boulevard extends north/south with three through lanes in each direction with a raised median south of its intersection with Centennial Parkway/Via Appia and two through lanes in each direction with a raised median north of its intersection with Centennial Parkway/Via Appia. The posted speed limit near the site is 35 miles per hour south of its intersection with Centennial Parkway/Cherry Street and 40 miles per hour north of that intersection. The City of Louisville Transportation Master Plan (TMP) from 2019 identifies McCaslin Boulevard as a “Key Corridor” with an existing level of service (LOS) D.

Centennial Parkway extends west of McCaslin Boulevard in a loop connection to Via Appia (north) and Cherry Street (south) east of McCaslin Boulevard. Centennial Parkway provides one through lane in each direction with an approximate 50-foot wide raised center median. The posted speed limit in the study area is 30 miles per hour. The City of Louisville TMP identifies Centennial Parkway as a “Key Corridor” with an existing LOS C.

Via Appia extends primarily in the northeast/southwest direction with one through lane in each direction and a raised center median but for the purposes of this analysis was evaluated as an east/west roadway. Via Appia extends east from McCaslin Boulevard to its intersection with Lafayette Street where it bends and becomes north/south until its terminus at South Boulder Road. The speed limit near the site is 35 miles per hour. The City of Louisville TMP identifies Via Appia as a “Key Corridor” with an existing LOS D.

Century Drive is a two-lane local roadway with one through lane in each direction. The roadway primarily extends east–west, terminating at a T-intersection with Dahlia Street on the east end. On the west end, Century Drive curves terminated to a cul-de-sac serving the Global Healthcare Exchange (GHX) office building. Century Drive extends primarily east/west to its terminus with Dahlia Street. The City of Louisville TMP documents an existing LOS C.

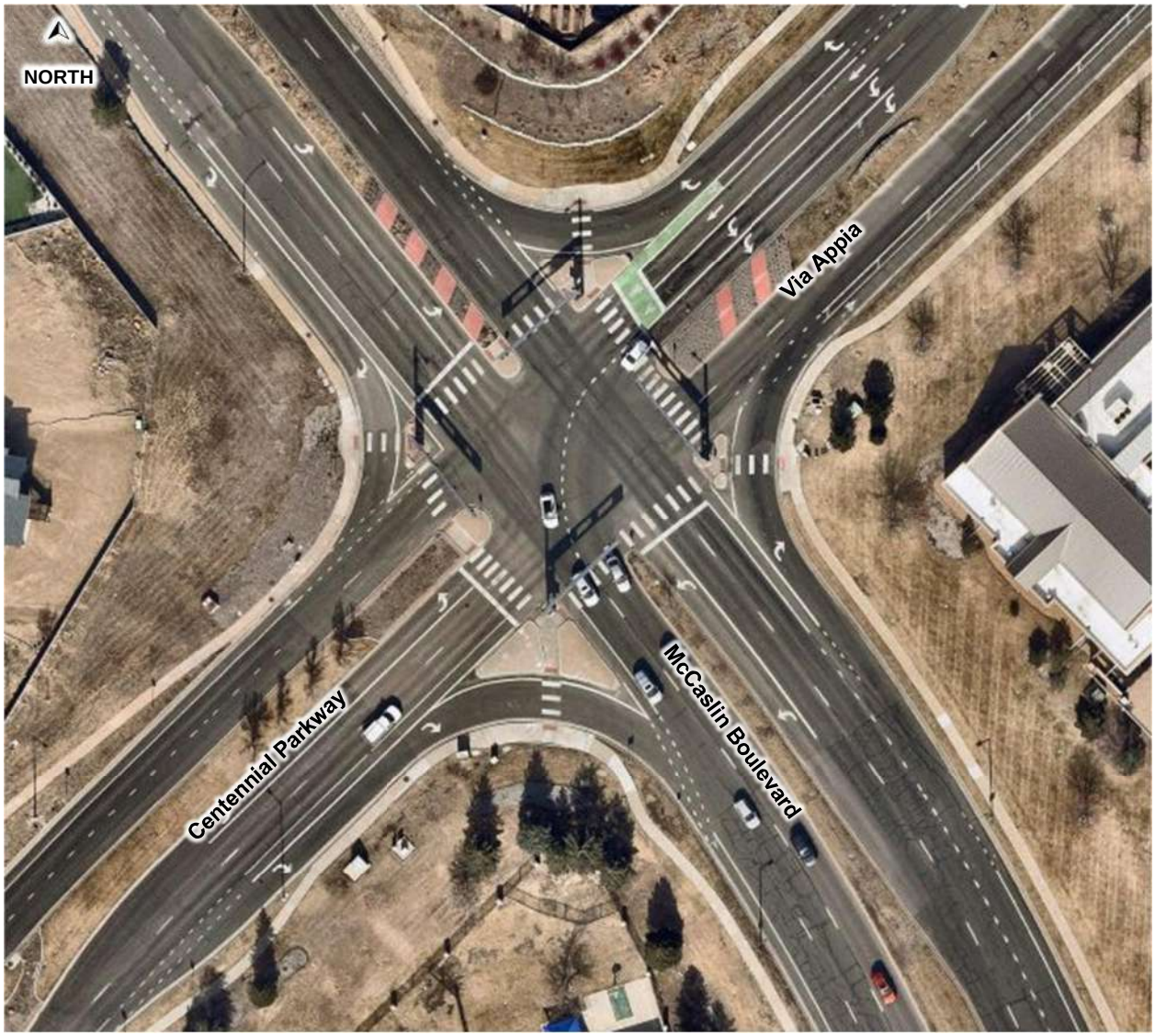
Cherry Street extends in the east/west direction east from its intersection with McCaslin Boulevard to its eastern terminus where it becomes Bella Vista Drive at its intersection with Adams Drive. Cherry Street provides two through lanes in each direction with a raised center median within the study limits while transitioning to one through lane in each direction east of Dahlia Street. The speed limit near the site is 35 miles per hour. The City of Louisville TMP identifies Cherry Street as a "Key Corridor" with an existing LOS C.

Dillon Road extends in the east/west direction providing two through lanes in each direction with a raised center median from its start at Dyer Road to its intersection with 88th Street. East of its intersection with 88th Street, Dillon Road provides one through lane in each direction. The speed limit near the site is 30 miles per hour. The City of Louisville TMP identifies Cherry Street as a "Key Corridor" with an existing LOS D west of McCaslin Boulevard and east of Dahlia Street with an LOS C between McCaslin Boulevard and Dahlia Street.

Century Place extends north/south from Century Drive to Dillon Road with one through lane in each direction. The City of Louisville TMP documents an existing LOS C along Century Place.

Infinite Drive extends west from Centennial Parkway for less than half a mile before terminating at an office building.

The signalized intersection of Centennial Parkway/Via Appia and McCaslin Boulevard (#1) operates with protected-permissive left turn phasing on the north-south McCaslin Boulevard legs while the eastbound and westbound along Centennial Parkway/Via Appia operate with split phasing. The northbound, southbound, and eastbound approaches provide a left turn lane, two through lanes, and a channelized right turn lane. The westbound approach along Via Appia provides dual left turn lanes, one through lane, and a channelized right turn lane. An aerial photo of the existing configuration is below.



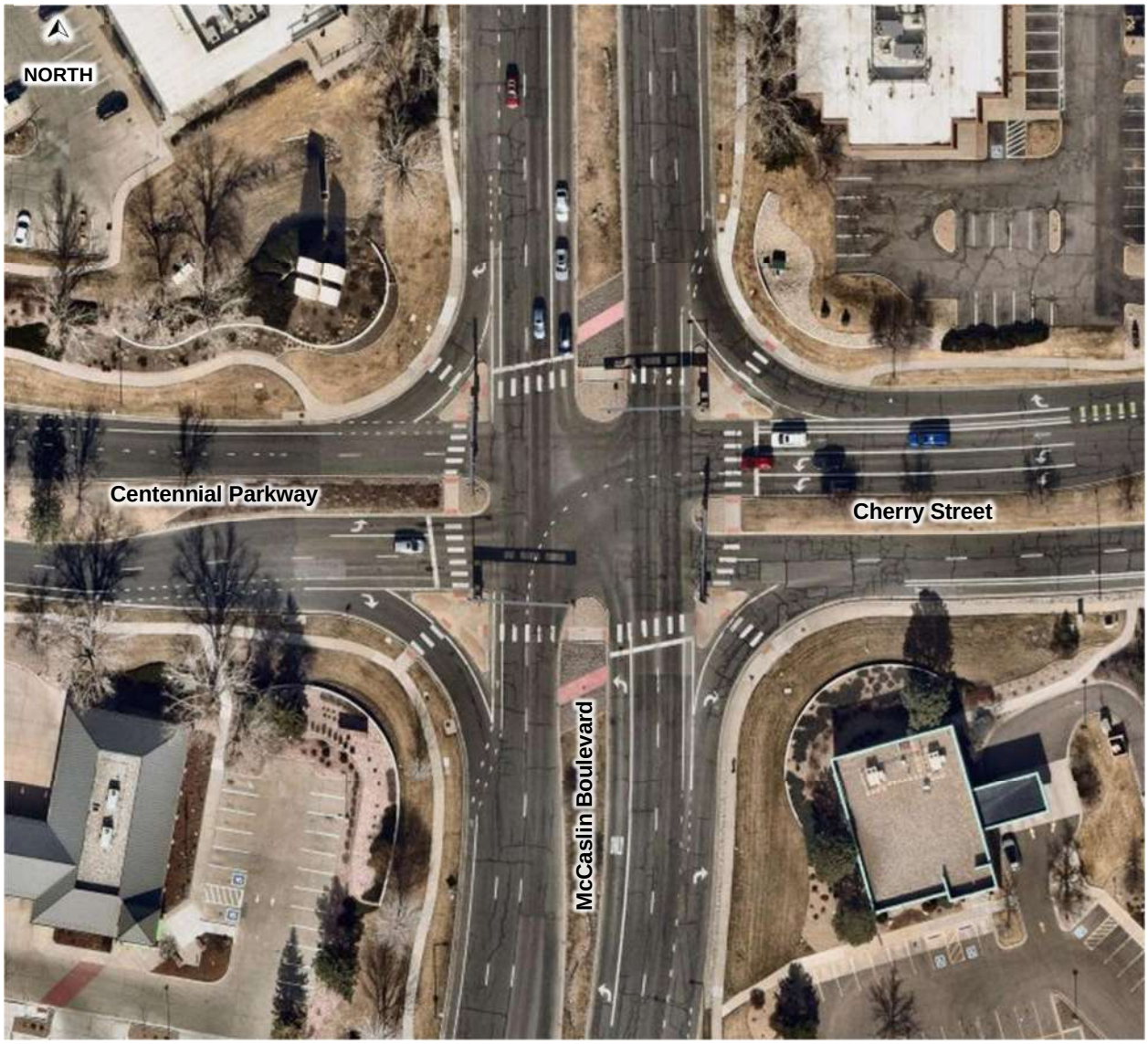
Centennial Parkway/Via Appia & McCaslin Boulevard (#1)

The signalized intersection of Century Drive and McCaslin Boulevard (#2) operates with protected-permissive left turn phasing on all approaches. The northbound approach provides a left turn lane, three through lanes, and a right turn lane while the southbound approach provides a left turn lane and three through lanes with the outside lane being a shared through/right turn lane. The eastbound and westbound approaches provide a left turn lane and a shared through/right turn lane. An aerial photo of the existing configuration is below.



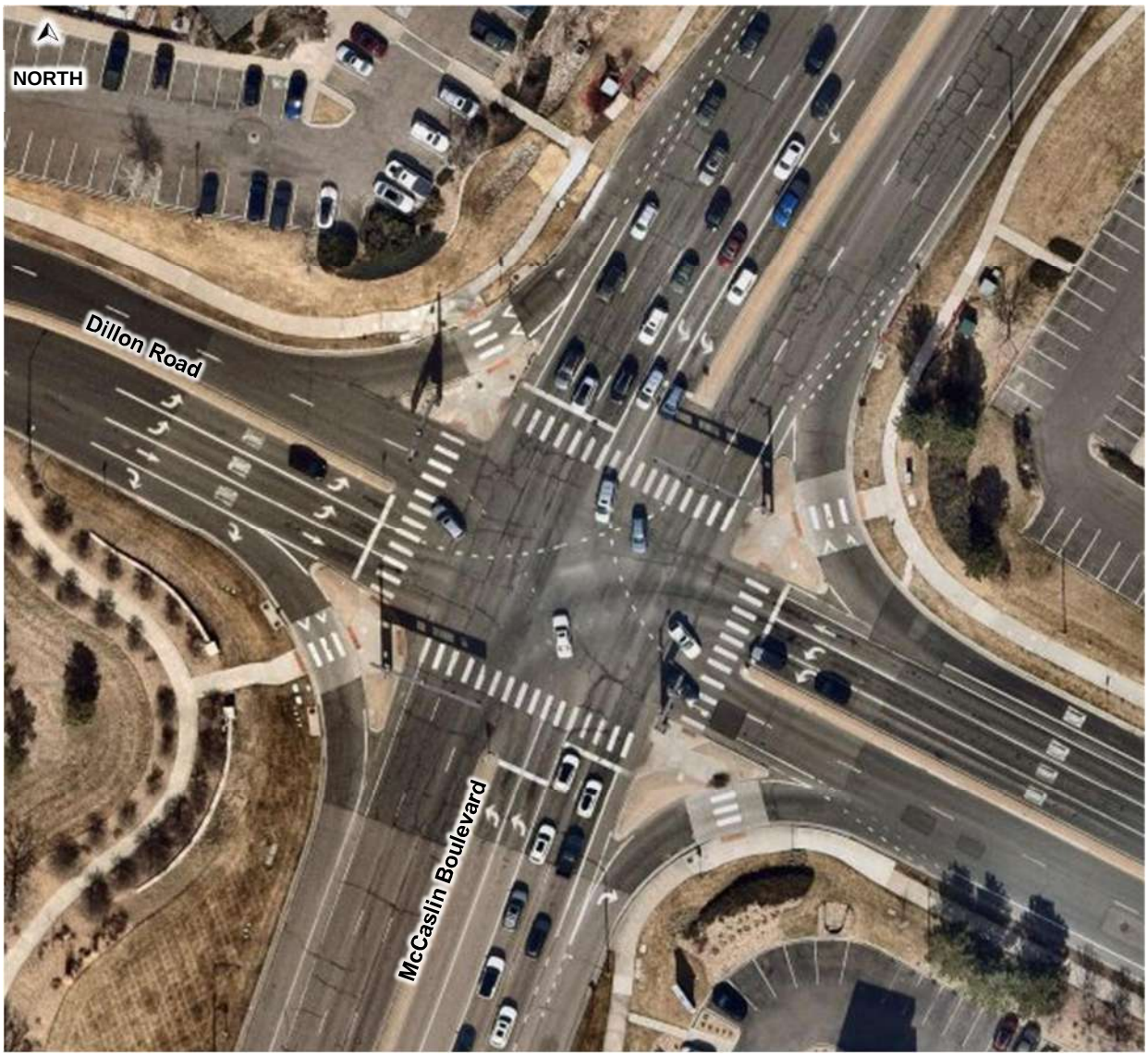
Century Drive & McCaslin Boulevard (#2)

The signalized intersection of Centennial Parkway/Cherry Street and McCaslin Boulevard (#3) operates with protected-permissive left turn phasing on the north-south McCaslin Boulevard legs while the eastbound and westbound along Centennial Parkway/Cherry Street operate with split phasing. The northbound, southbound, and eastbound approaches provide a left turn lane, two through lanes, and a channelized right turn lane. The westbound approach along Cherry Street provides dual left turn lanes, a through lane, and a channelized right turn lane. An aerial photo of the existing configuration is below.



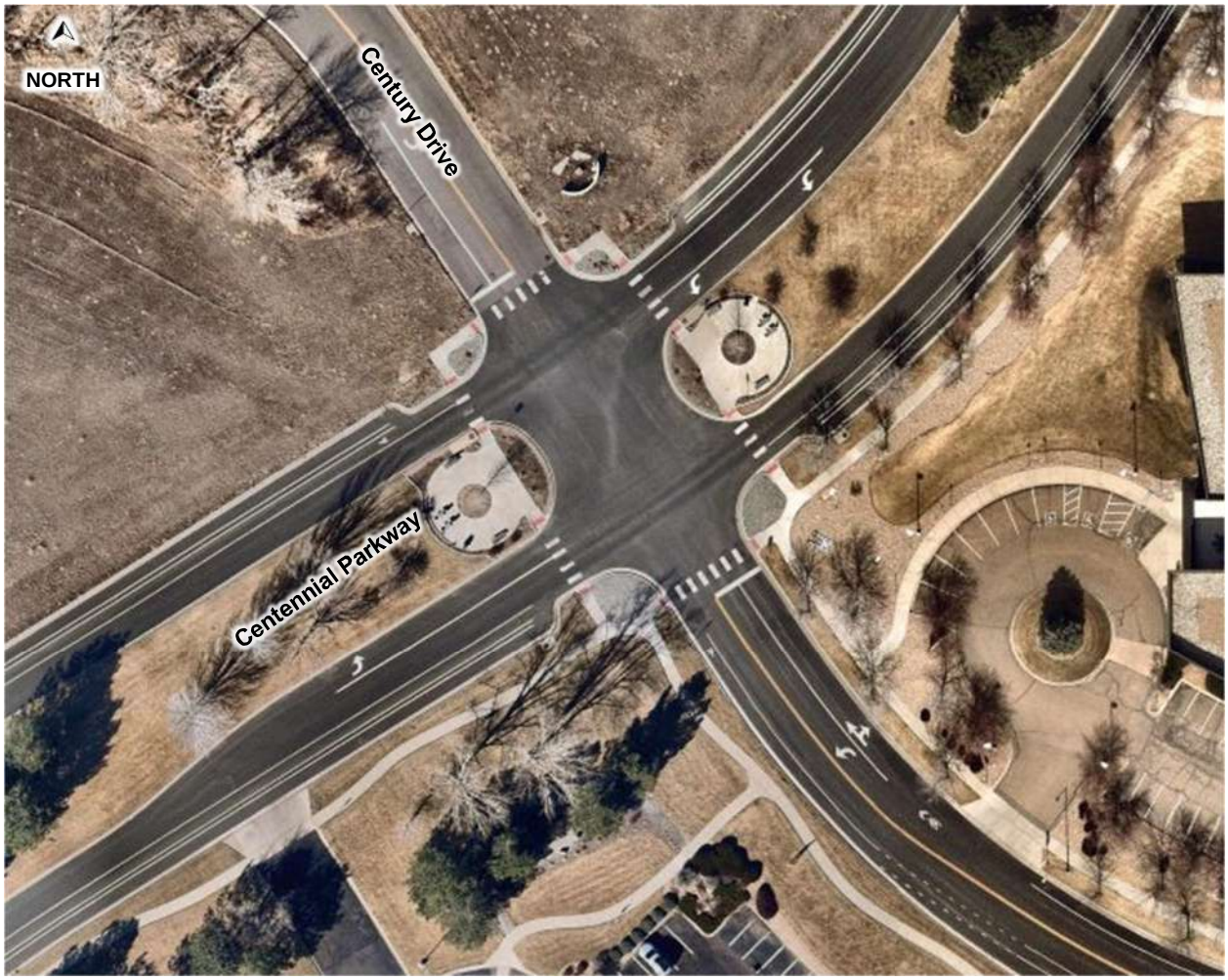
Centennial Parkway/Cherry Street & McCaslin Boulevard (#3)

The signalized intersection of Dillon Road and McCaslin Boulevard (#4) operates with protected-only left turn phasing on all approaches. The northbound approach provides dual left turn lanes, two through lanes, and a channelized right turn lane while the southbound approach provides dual left turn lanes, three through lanes, and a channelized right turn. The eastbound and westbound approaches provide dual left turn lanes, one through lane, and a channelized right turn lane. An aerial photo of the existing configuration is below.



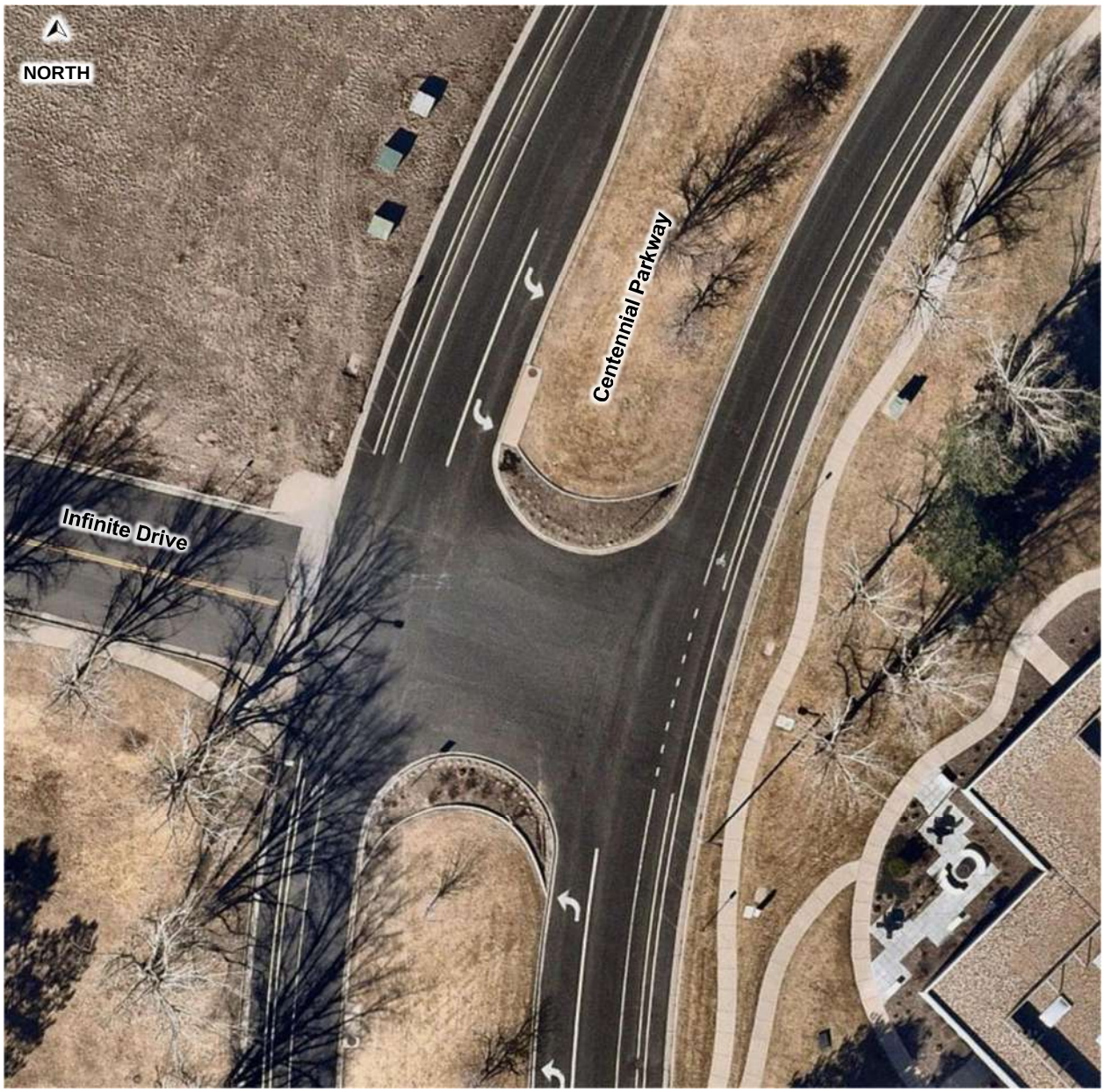
Dillon Road & McCaslin Boulevard (#4)

The unsignalized intersection of Centennial Parkway and Century Drive (#5) operates with stop control on the northbound and southbound Century Drive approaches. All approaches provide a left turn lane and a shared through/right turn lane. Of note, the center median is 50 feet wide. An aerial photo of the existing intersection configuration is below.



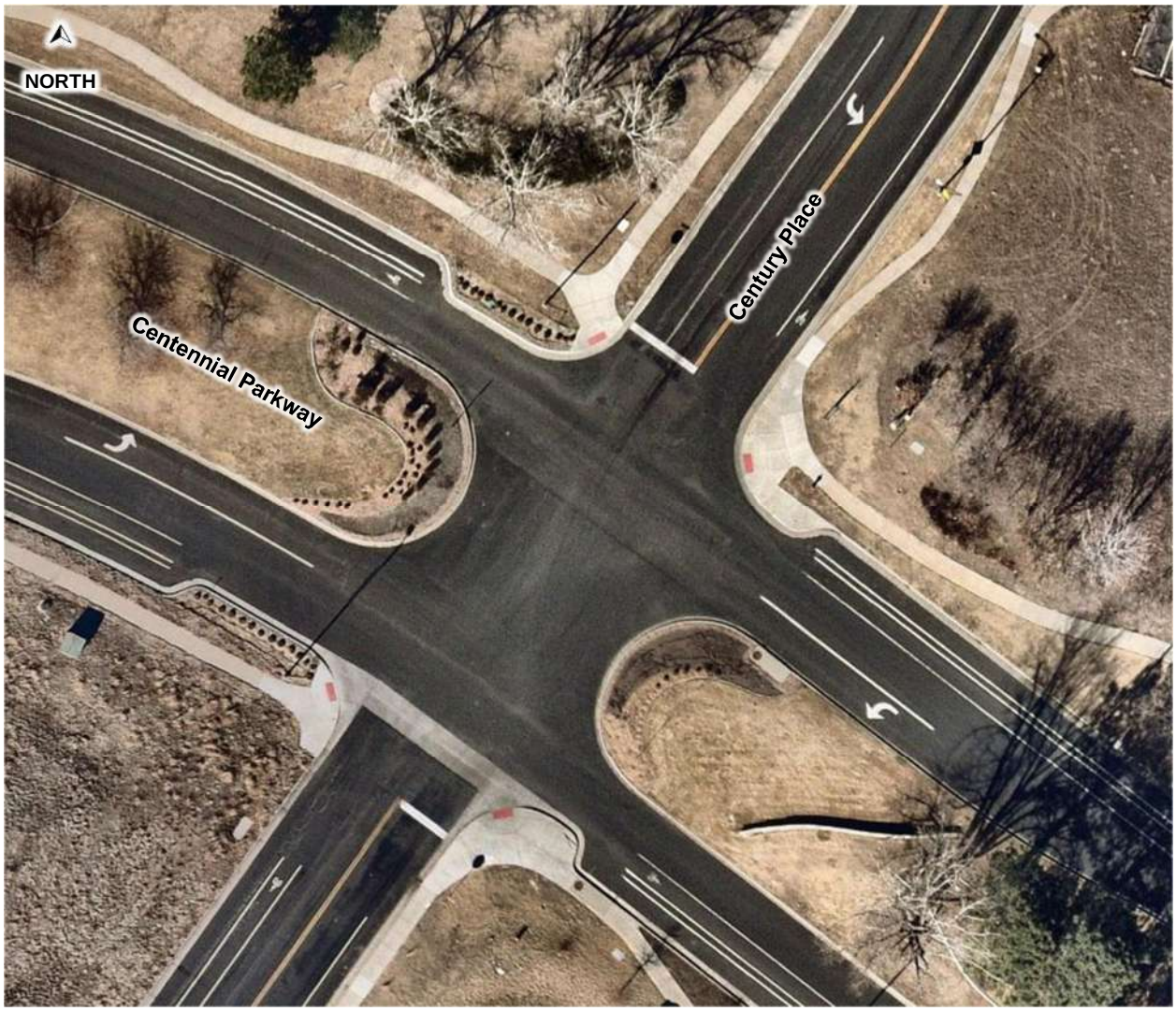
Centennial Parkway & Century Drive (#5)

The unsignalized ‘T’-intersection of Infinite Drive and Centennial Parkway (#6) operates with stop control on the eastbound Infinite Drive approach. The northbound and southbound approaches provide a left turn lane, and a shared through/right turn lane. The eastbound approach provides one lane shared for left and right turning movements. Of note, the center median is 50 feet wide and the southbound left turn lane is designated for U-turns due to not having an east leg at this intersection. An aerial photo of the existing intersection configuration is below.



Infinite Drive & Centennial Parkway (#6)

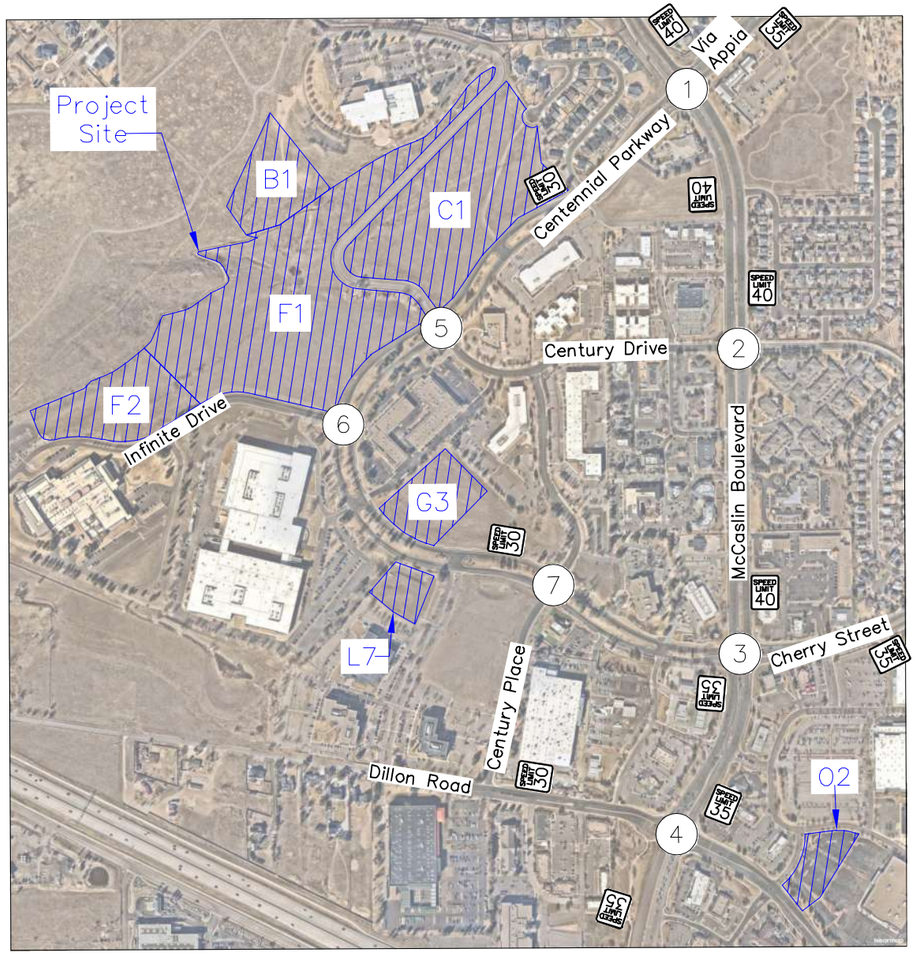
The unsignalized intersection of Centennial Parkway and Century Place (#7) operates with stop control on the northbound and southbound approaches along Century Place. The northbound approach of Century Place provides a single lane shared for all movements. The southbound, eastbound, and westbound approaches provide a left turn lane and a shared through/right turn lane. Of note, the center median is 50 feet wide. An aerial photo of the existing intersection configuration is below.



Centennial Parkway & Century Place (#7)

The intersection lane configuration and control for the study area intersections are shown in **Figure 2**.

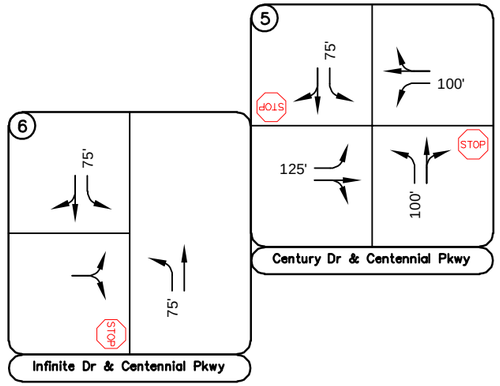
Kimley»Horn
NORTH
NTS 296402000

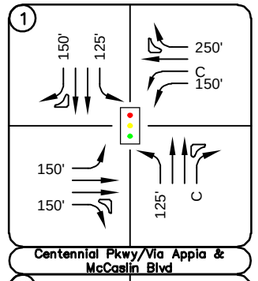


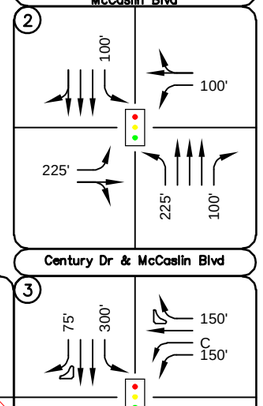
LEGEND

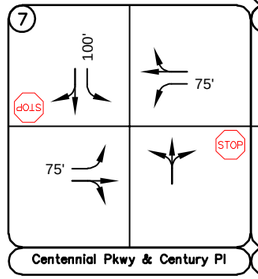
- X — Study Area Key Intersection
- Signalized Intersection
- STOP — Stop-Controlled Approach
- SPEED LIMIT XX — Roadway Speed Limit
- 100' — Turn Lane Length (feet)

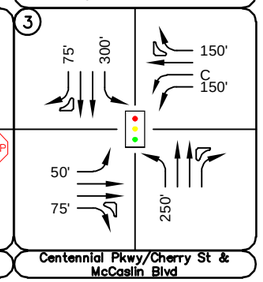
FIGURE 2
Centennial Valley Residential
Louisville, Colorado
Existing Geometry and Control

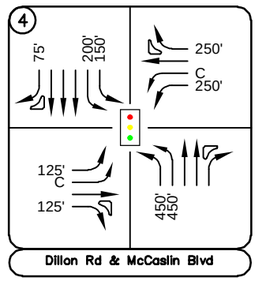












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3.3 Existing Traffic Volumes

Existing turning movement counts were conducted at the study intersections on Wednesday, March 11, 2026 during the weekday morning and afternoon peak hours. The counts were conducted during the morning and afternoon peak hours of adjacent street traffic in 15-minute intervals from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM on this count date. The existing intersection traffic volumes are shown in **Figure 3** with count sheets provided in **Appendix B.**

3.4 Unspecified Development Traffic Growth

According to traffic projections from the Denver Regional Council of Governments (DRCOG) traffic model, the area surrounding the site is expected to have an average 30-year growth factor of 1.33. This growth factor equates to an annual growth rate of 0.96 percent. Future traffic volume projections and growth rate calculations are provided in **Appendix C**. As such, a one (1) percent annual traffic growth rate was used to estimate short-term 2030 and long-term 2050 traffic volume projections at the key intersections. In addition, project traffic volumes from the King Soopers 142 Traffic Impact Study completed in February 2025 were included as background traffic in 2030 and 2050. Further, CU Boulder Faculty Housing is proposed at 1164 W Dillon Road on the site of the vacant Cinebarre. As no development plans have been submitted to the City, the site was assumed to be Multi-Family Housing (Low-Rise) consistent with the King Soopers Traffic Impact Study, with 50 dwelling units based on the existing building footprint. This development was included in the background analysis for 2050 conditions only, using the same trip generation, distribution, and assignment methodology applied in the King Soopers Traffic Impact Study. Background study information is included in **Appendix C**. The calculated background traffic volumes for 2030 and 2050 are shown in **Figure 4** and **Figure 5**, respectively.

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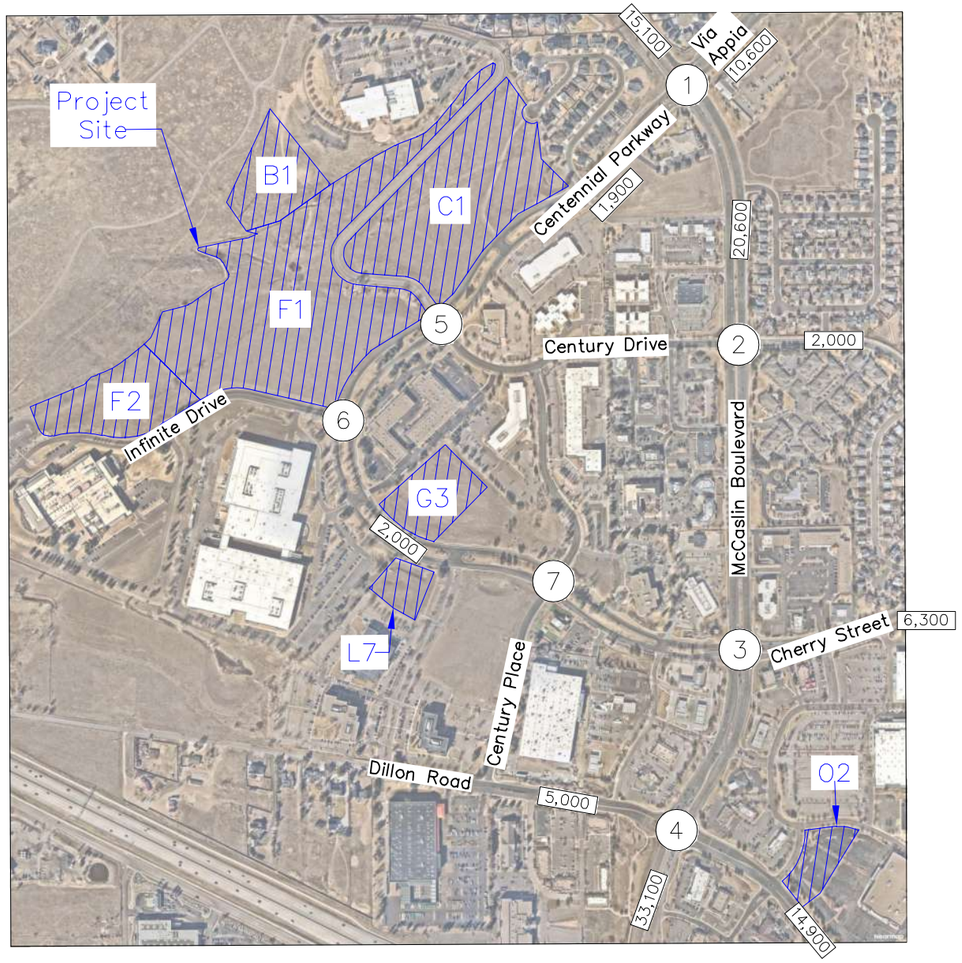


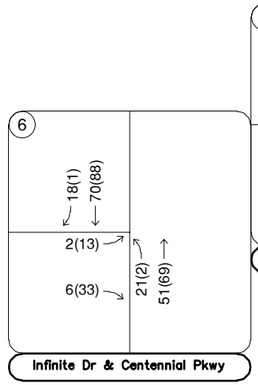
LEGEND

(X) Study Area Key Intersection

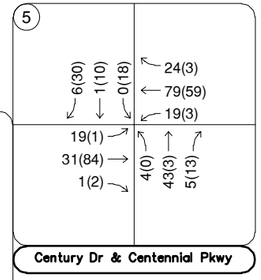
XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes

[XX,X00] Estimated Daily Traffic Volume

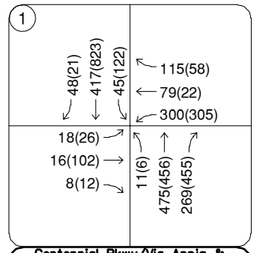
FIGURE 3
Centennial Valley Residential
Louisville, Colorado
2026 Existing Traffic Volumes



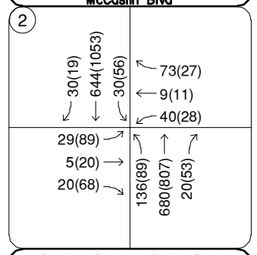
Wed, Mar 11, 2026
7:45 to 8:45AM
(4:15 to 5:15PM)



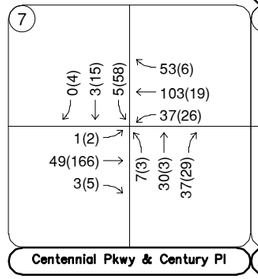
Wed, Mar 11, 2026
7:45 to 8:45AM
(4:15 to 5:15PM)



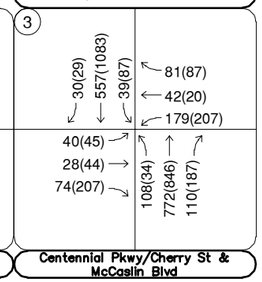
Wed, Mar 11, 2026
8:00 to 9:00AM
(4:30 to 5:30PM)



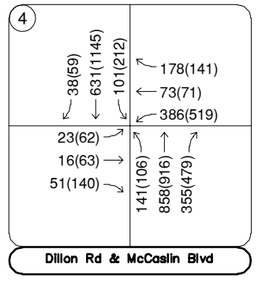
Wed, Mar 11, 2026
8:00 to 9:00AM
(4:45 to 5:45PM)



Wed, Mar 11, 2026
8:00 to 9:00AM
(4:15 to 5:15PM)



Wed, Mar 11, 2026
8:00 to 9:00AM
(4:30 to 5:30PM)



Wed, Mar 11, 2026
8:00 to 9:00AM
(4:15 to 5:15PM)

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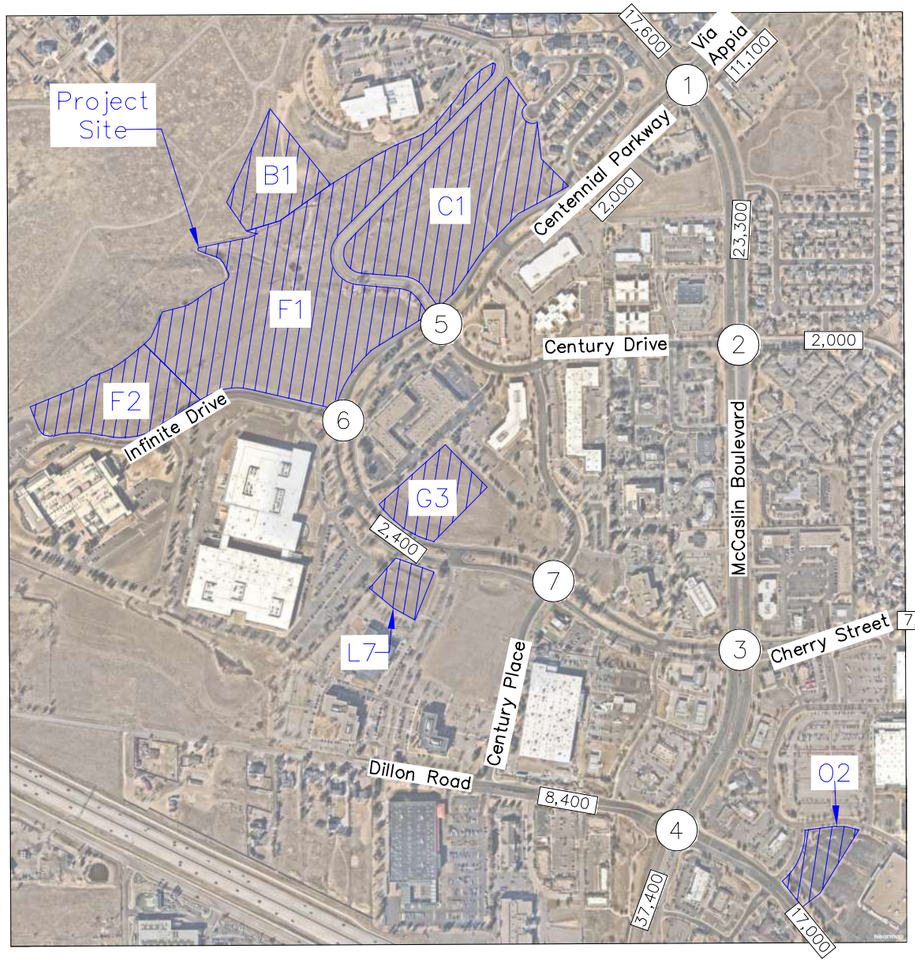
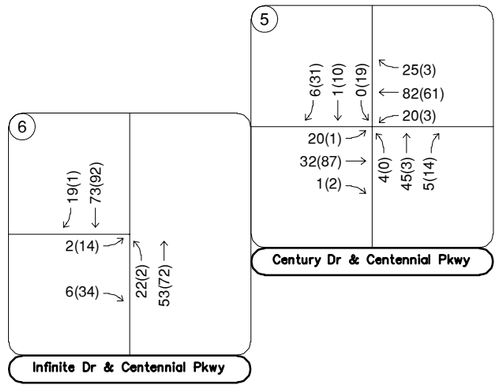
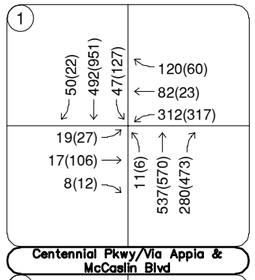
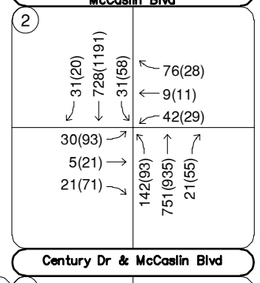
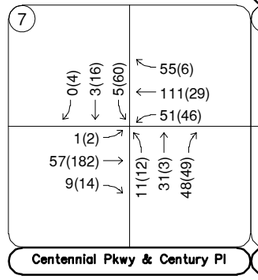
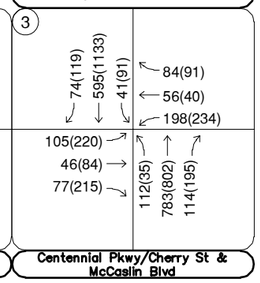


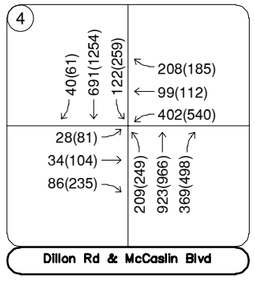












LEGEND

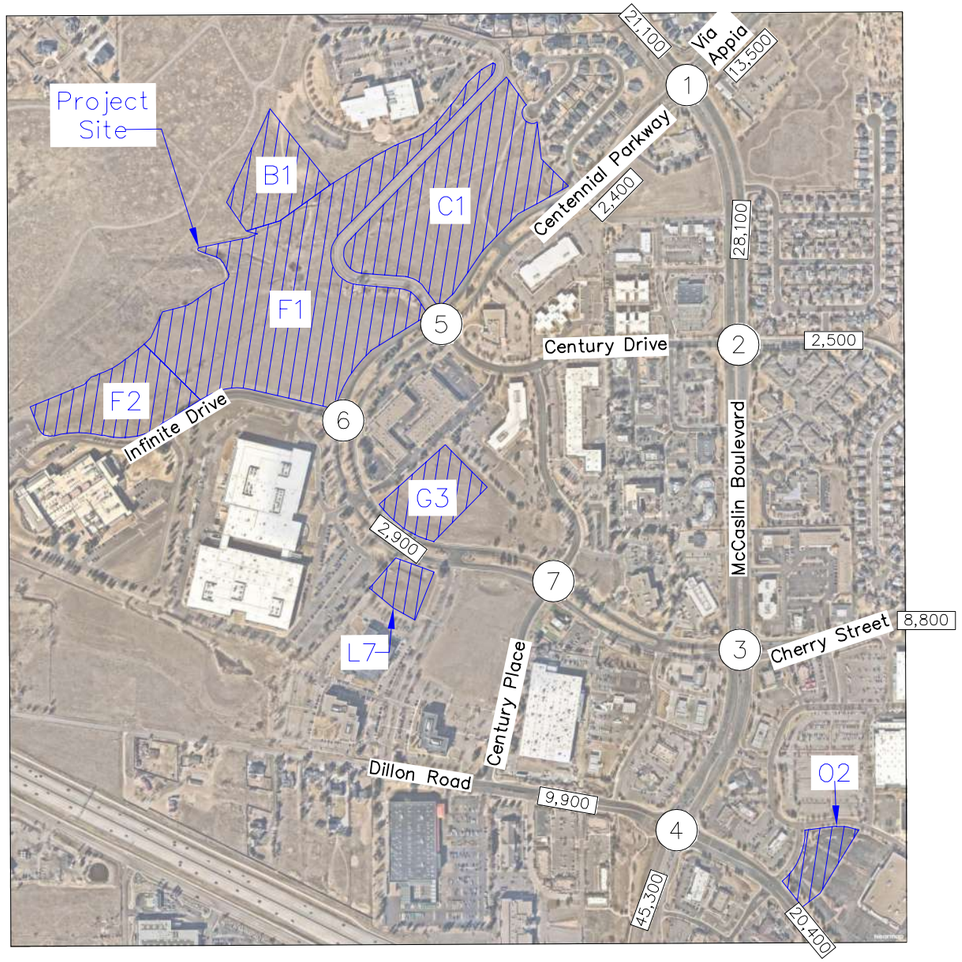
(X) Study Area Key Intersection

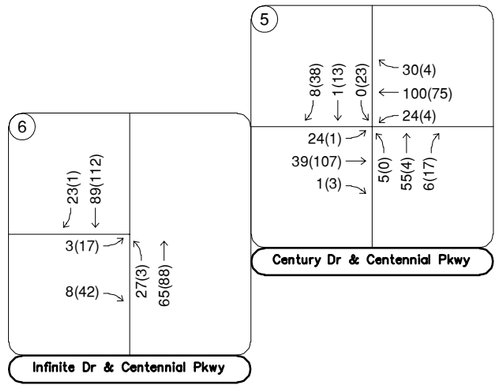
XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes

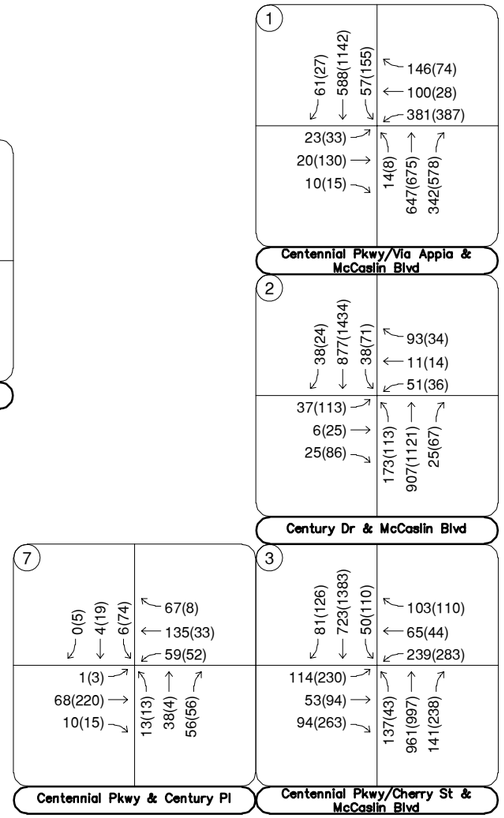
[XX,X00] Estimated Daily Traffic Volume

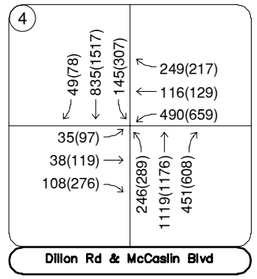
FIGURE 4
Centennial Valley Residential
Louisville, Colorado
2030 Background Traffic Volumes

Kimley»Horn NORTH
NTS 296402000









LEGEND

(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 4
Centennial Valley Residential
Louisville, Colorado
2050 Background Traffic Volumes

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4.0 PROJECT TRAFFIC CHARACTERISTICS

4.1 Trip Generation

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*[1] published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. For this study, Kimley-Horn used the ITE Trip Generation Report average rates/fitted curve equations that apply to Single-Family Attached Housing (ITE Land Use Code 215), Multifamily Low-Rise Housing (ITE Land Use Code 220), and Affordable Housing (ITE Lane Use Code 223). for traffic associated with the development.

With the Centennial Parkway project being constructed near McCaslin Boulevard and the Denver-Boulder Turnpike (US-36), a five (5) percent reduction of trips has been applied to the residential uses. The proposed five (5) percent multimodal reduction is supported by the project's proximity to established transit services, bicycle facilities, and pedestrian infrastructure, as well as planned connections that enhance accessibility. The site is located near McCaslin Station, which serves the Flatiron Flyer BRT and multiple RTD routes, providing regional transit access. McCaslin Boulevard and Centennial Parkway provide existing on-street bicycle facilities and connections to a broader network identified in the City of Louisville Transportation Master Plan, including planned multi-use paths and regional trail connections. Pedestrian facilities are also well established, with detached sidewalks along key corridors and signalized crossings on McCaslin Boulevard supporting safe access to nearby destinations and transit stops. **Figure 6** displays the existing pedestrian, bicycle, and transit infrastructure in the nearby area. The project will integrate with these multimodal facilities through internal sidewalks and direct connections to adjacent corridors, bike lanes, and transit stops. The surrounding area also includes a mix of residential, office, and retail uses which supports capture among the uses and multimodal usage. These characteristics support multimodal travel opportunities; therefore, it is anticipated that the development will utilize alternative modes of transportation.

[1] Institute of Transportation Engineers, *Trip Generation Manual*, Twelfth Edition, Washington DC, 2025.

Centennial Parkway, with multimodal reduction, is expected to generate approximately 6,398 weekday daily trips, with 420 of these trips occurring during the morning peak hour and 542 of these trips occurring during the afternoon peak hour. Calculations were based on the procedure and information provided in the ITE *Trip Generation Manual, 12th Edition – Volume 1: User's Guide and Handbook*, 2025. **Table 1** summarizes the estimated trip generation for the site. The trip generation worksheets are included in **Appendix D**.

Table 1 – Centennial Valley Residential Traffic Generation

Land Use and Size	Weekday Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Single-Family Attached Housing (ITE 215) – B1, F2: 96 Dwelling Units	632	11	34	45	27	20	47
Multifamily Low-Rise Housing (ITE 220) – C1, F1: 850 Dwelling Units	4,906	74	236	310	257	158	415
Single-Family Attached Housing (ITE 215) – G3: 25 Dwelling Units	164	3	9	12	7	6	13
Affordable Housing (ITE 223) – L7: 102 Dwelling Units	492	11	26	37	31	22	53
Multifamily Low-Rise Housing (ITE 220) – O2: 75 Dwelling Units	544	9	30	39	27	16	43
Total Project Trips	**6,738**	**108**	**335**	**443**	**349**	**222**	**571**
Total Project Trips with TOD Reduction	**6,398**	**103**	**317**	**420**	**331**	**211**	**542**

With development of this project, the parcels will be rezoned from P-C: Planning Community Commercial to residential land use. Further, it should be noted that the McCaslin Boulevard Small Area Plan identified all the project parcels to be developed as office use while parcel O2 was planned as retail/office. As such, a trip generation comparison of a potential uses from the McCaslin Boulevard Small Area Plan evaluated as office use (calculated using the 12th Edition fitted curve equations for General Office Building - ITE Land Use Code 710) was compared to the current proposal evaluated specifically above which is a mix of residential uses (ITE Land Use Code 215/220/223). It should be noted that general retail generates more trips than general office; therefore, to provide a conservative trip generation comparison, general office was utilized for the O2 area that could develop as either office or retail. The following **Table 2** compares the trip generation of the McCaslin Boulevard Small Area Plan office use to the proposed residential land uses. The trip generation worksheets are included in **Appendix D**.

Table 2 – Trip Generation Comparison: Existing Zoning vs Proposed Land Uses

Land Use and Size	Weekday Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Existing Zoning / McCaslin Small Area Plan							
Office (ITE 710 – 0.4 FAR) – 1,050,000 Square Feet	6,698	1,052	144	1,196	171	900	1,071
Proposed Land Uses							
Residential (Mix of ITE 215/220/223) – 1,148 Dwelling Units	6,738	108	335	443	349	222	571
Net Difference in Trips	**+40**	**-944**	**+191**	**-753**	**+178**	**-678**	**-500**

As summarized in **Table 2**, the McCaslin Boulevard Small Area Plan office use is anticipated to generate approximately 6,698 weekday daily trips with 1,196 of these trips occurring during the morning peak hour and 1,071 of these trips occurring during the afternoon peak hour. Therefore, the proposed mix of residential development is calculated to generate approximately 40 more daily trips, 753 fewer trips in the morning peak hour, and 500 fewer trips in the afternoon peak hour compared to a use that could be developed in the existing zoning.

4.2 Trip Distribution

Distribution of site traffic on the street system was based on the area street system characteristics, existing traffic patterns, existing and anticipated surrounding demographic information, and the proposed access system for the project. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site back to the original source. The distribution was divided into four zones, including the B1, C1, F1, F2 sites, the G3 site, the L7 site, and the O2 site. The overall project trip distribution for the proposed development is illustrated in **Figure 7** while the trip distribution for each zone can be found in **Appendix E.**

4.3 Traffic Assignment

The project's traffic assignment was obtained by applying the project trip distribution to the estimated traffic generation of the development shown in **Table 1**. Total traffic assignment is shown in **Figure 8** while zone traffic assignments are in **Appendix E**.

4.4 Total (Background Plus Project) Traffic

Site traffic volumes were added to the background volumes to represent estimated traffic conditions for the short-term 2030 buildout horizon and long-term 2050 twenty-year planning horizon. These total traffic volumes for the study area are illustrated for the 2030 and 2050 horizon years in **Figure 9** and **Figure 10**, respectively.

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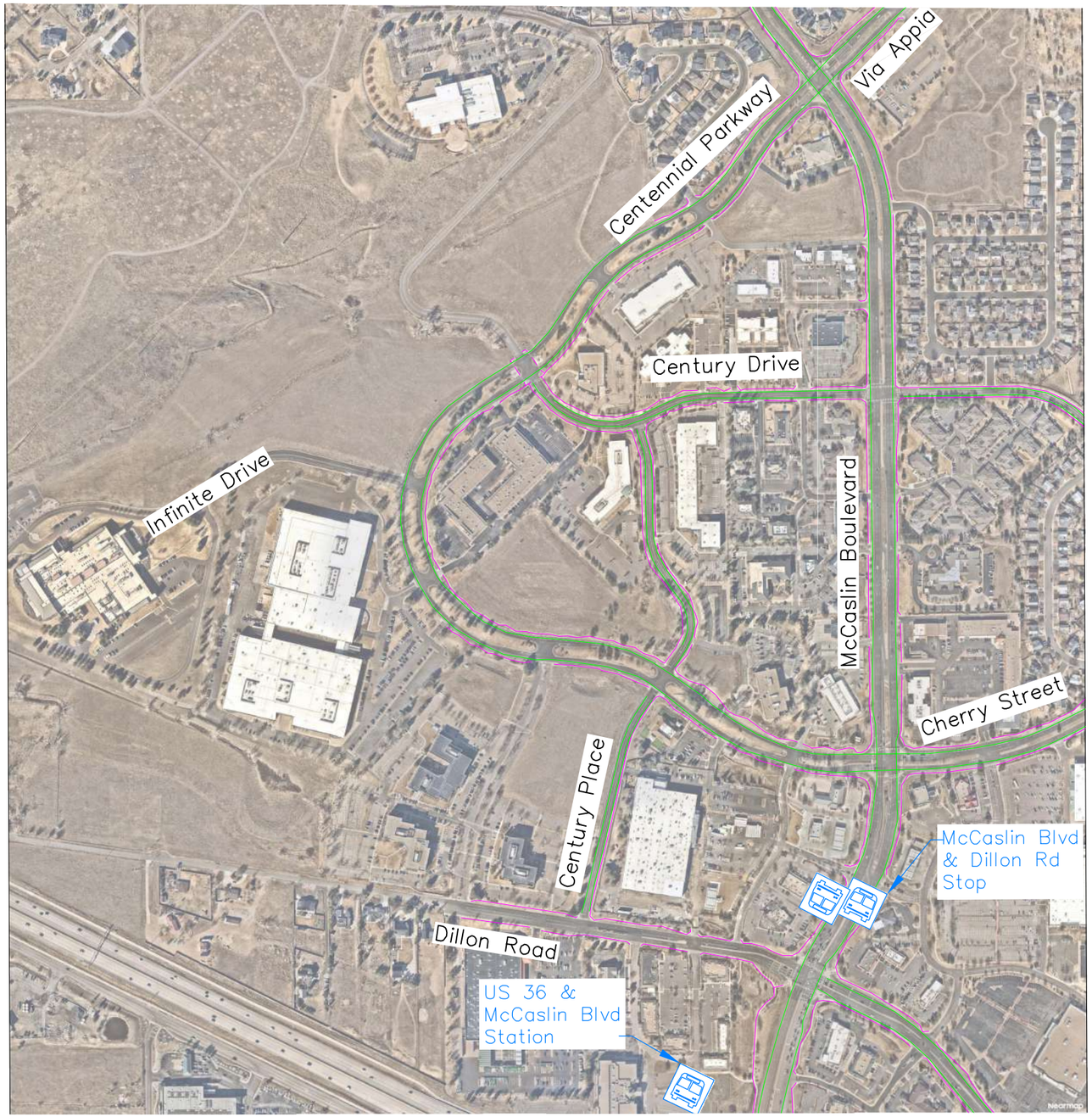
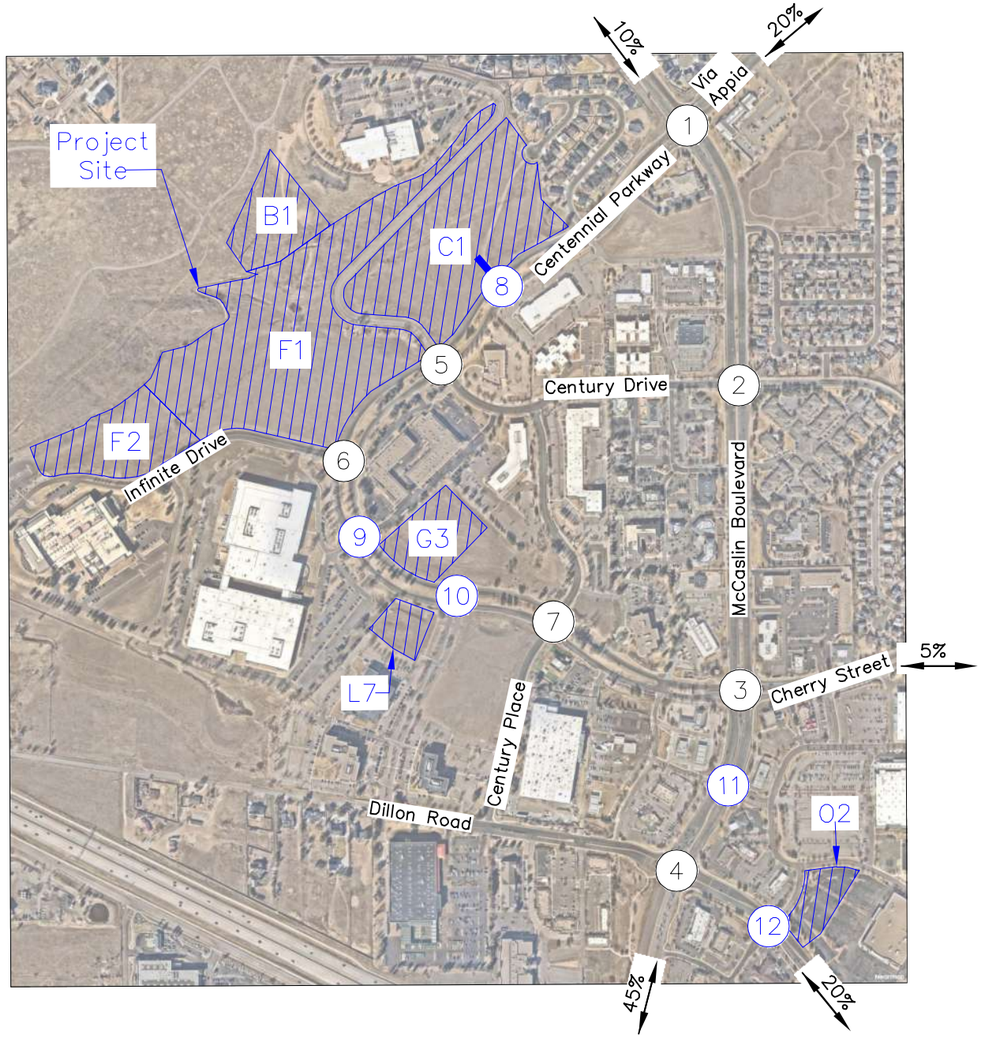


LEGEND

- Bus Stop
- Pedestrian Sidewalk
- Designated Bike Lane

FIGURE 6
Centennial Valley Residential
Louisville, Colorado
Multimodal Facilities

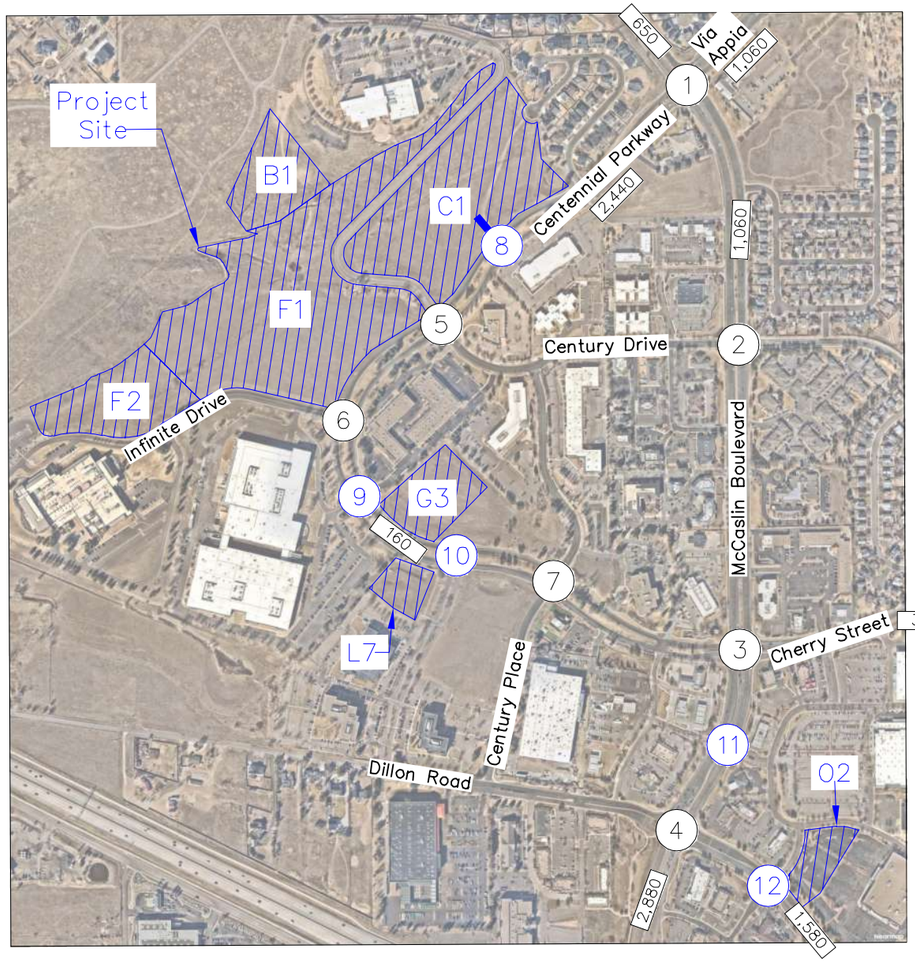
Kimley»Horn

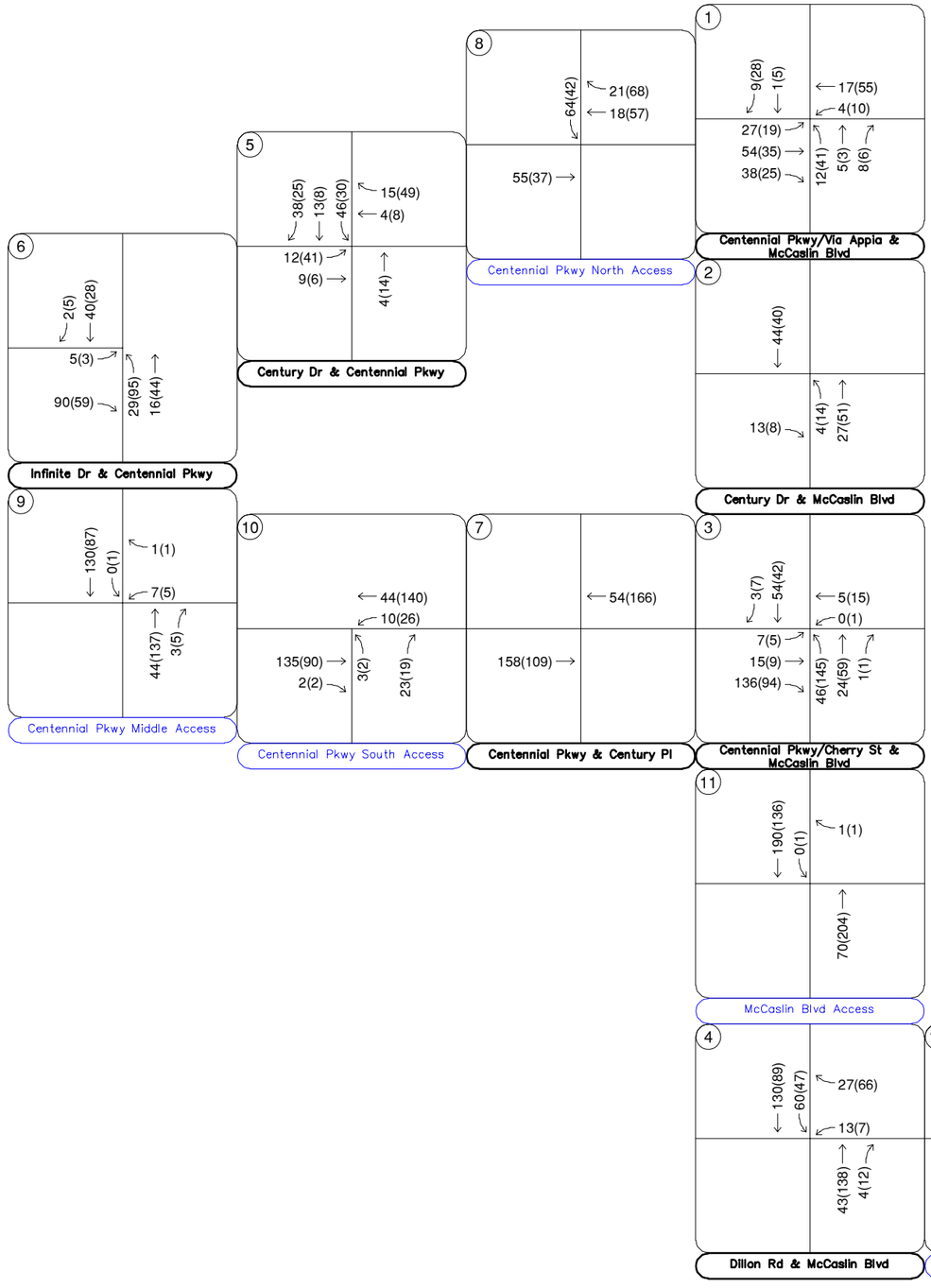


LEGEND

- X — Study Area Key Intersection
- X — Project Access Intersection
- XX% — External Trip Distribution Percentage
- XX%[XX%] — Entering[Exiting] Trip Distribution Percentage

FIGURE 7
Centennial Valley Residential
Louisville, Colorado
Project Trip Distribution

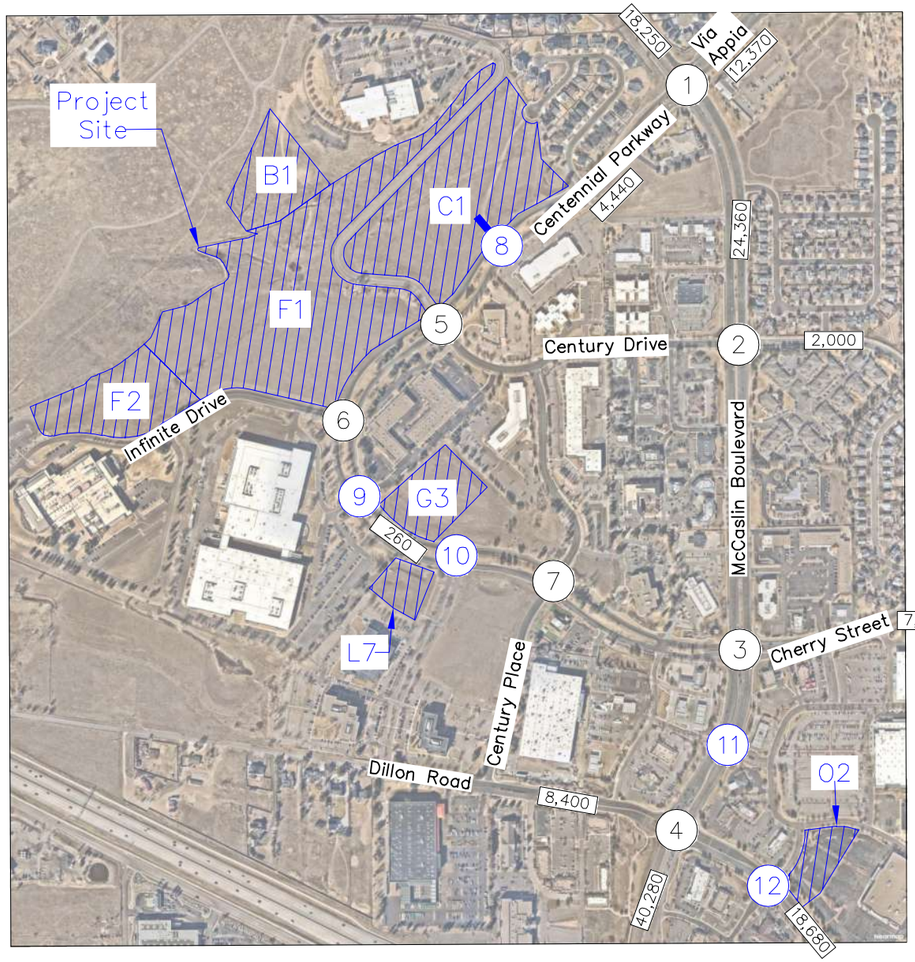




LEGEND

X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 8
Centennial Valley Residential
Louisville, Colorado
Project Traffic Assignment



LEGEND

(X)	Study Area Key Intersection
(X)	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

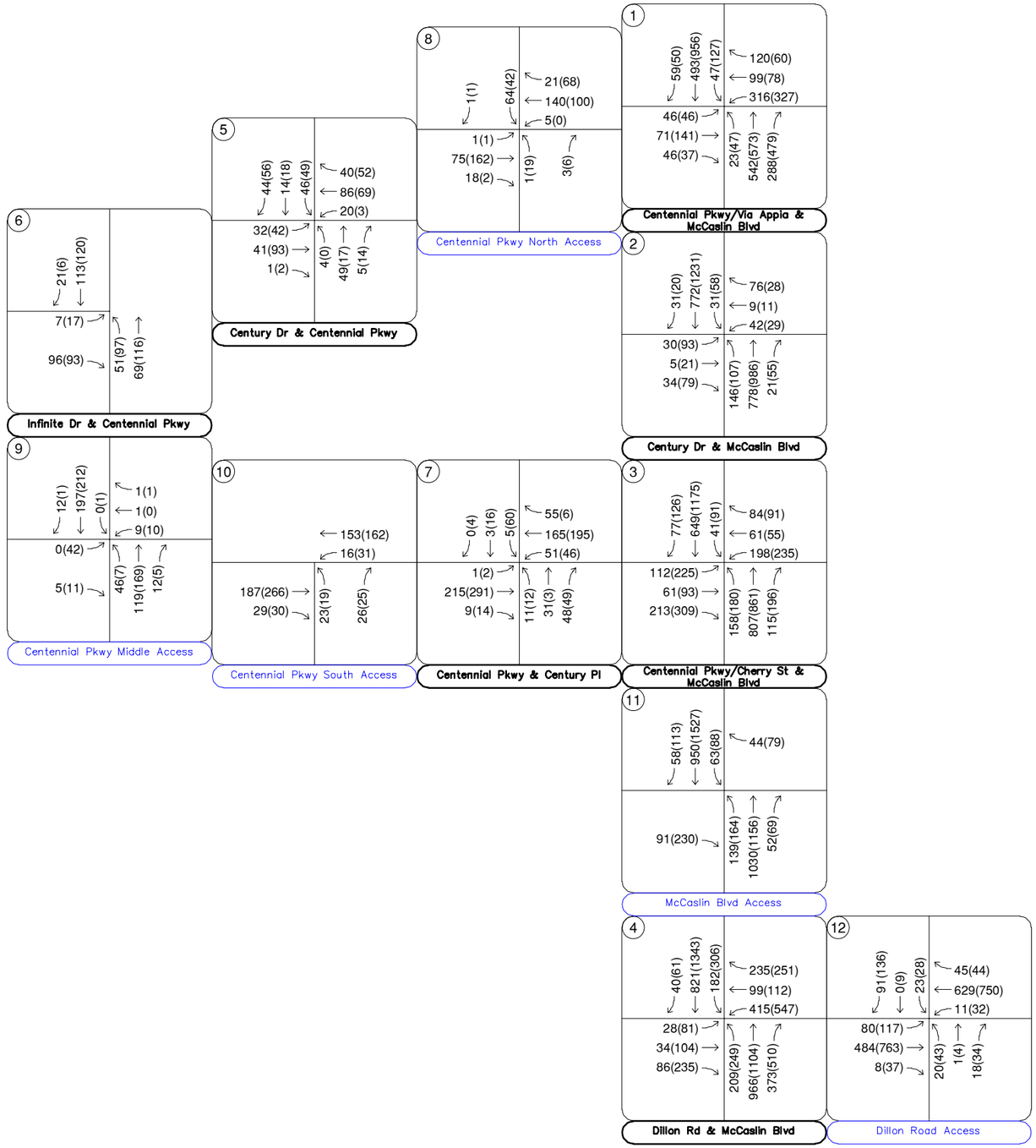
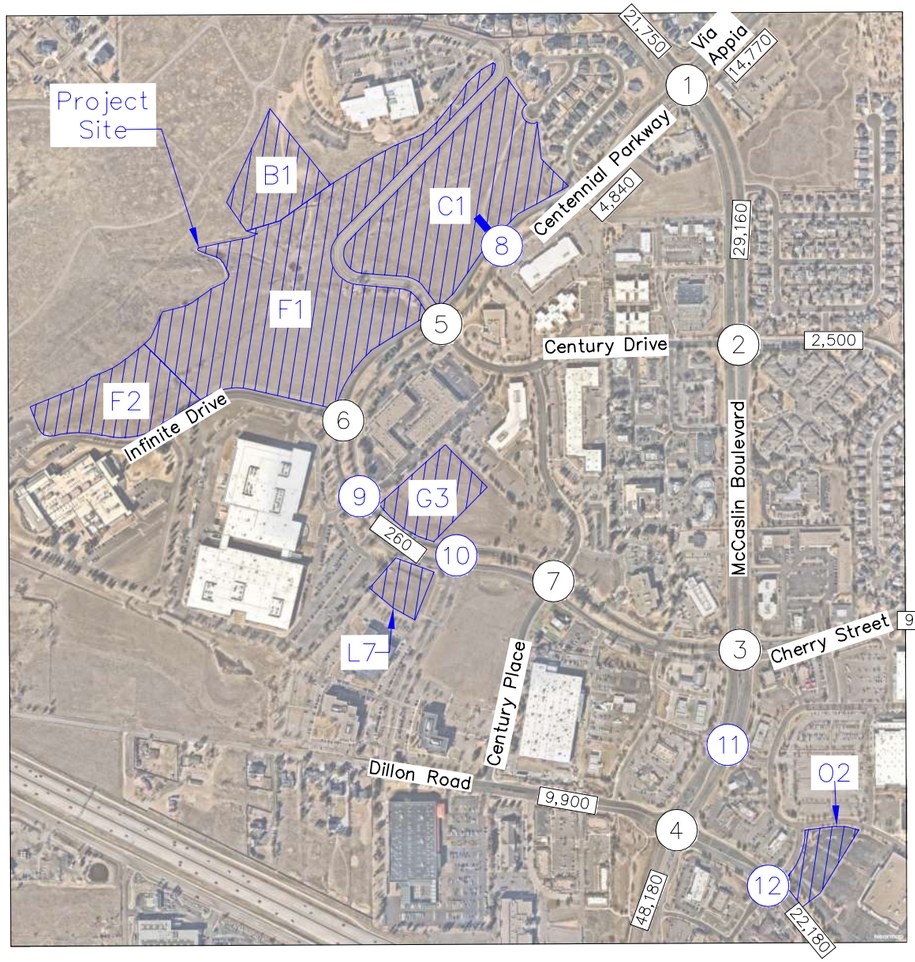
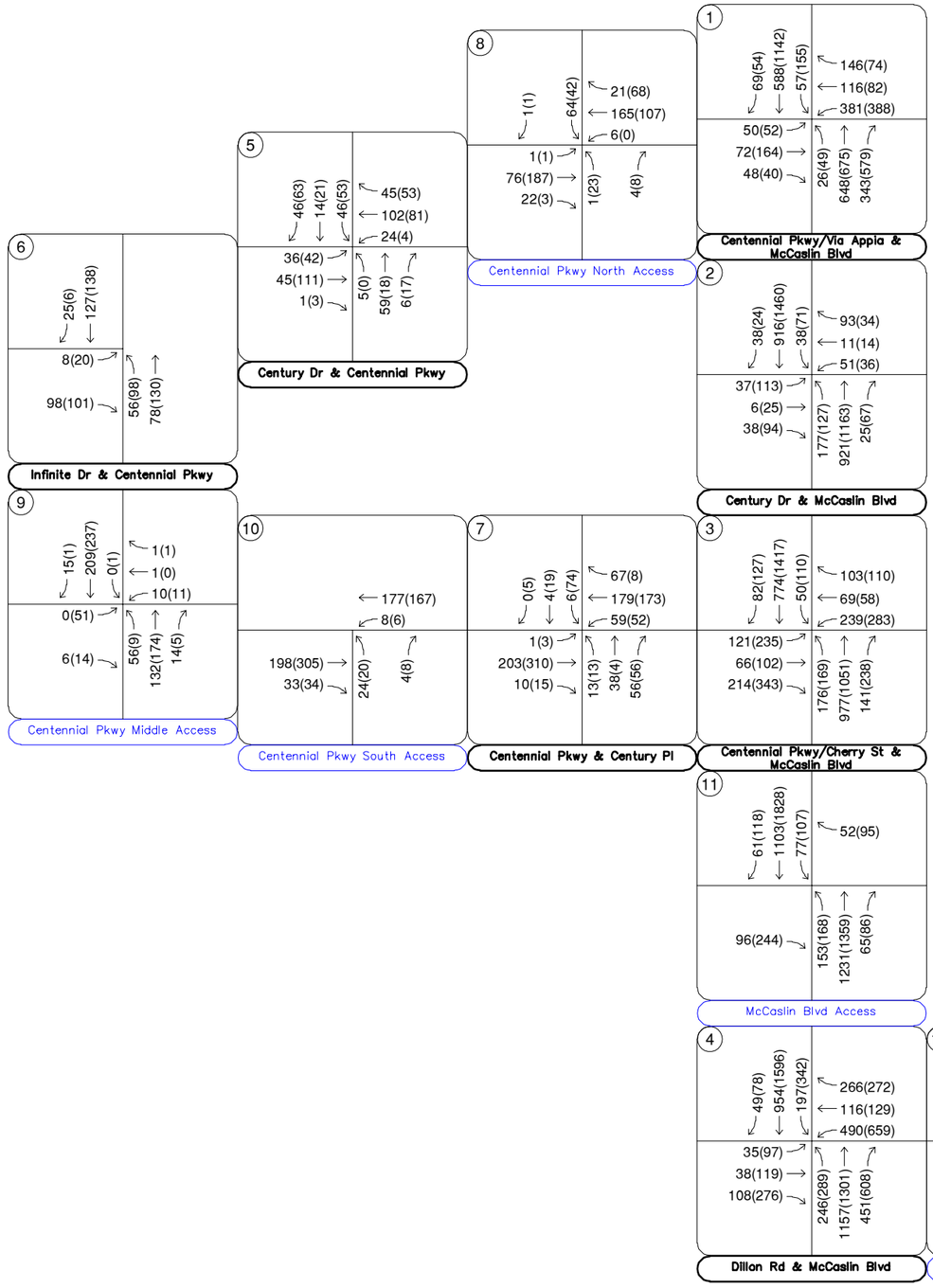


FIGURE 9
Centennial Valley Residential
Louisville, Colorado
2030 Total Traffic Volumes

Kimley»Horn
NORTH
NTS 296402000





LEGEND

X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 10
Centennial Valley Residential
Louisville, Colorado
2050 Total Traffic Volumes

Kimley»Horn

5.0 TRAFFIC OPERATIONS ANALYSIS

Kimley-Horn's analysis of traffic operations in the site vicinity was conducted to determine potential capacity deficiencies in the 2030 and 2050 development horizons at the identified key intersections. The acknowledged source for determining overall capacity is the *Highway Capacity Manual (HCM)*[2].

5.1 Analysis Methodology

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). For intersections and roadways in this study area, standard traffic engineering practice recommends overall intersection LOS D and movement/approach LOS E as the minimum desirable thresholds for acceptable operations. **Table 3** shows the definition of level of service for signalized and unsignalized intersections.

Table 3 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Definitions provided from the Highway Capacity Manual, Seventh Edition, Transportation Research Board, 2022.

Study area intersections were analyzed based on average total delay analysis for signalized and unsignalized intersections. Under the unsignalized analysis, the LOS for a two-way stop-controlled intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS for a two-way stop-controlled intersection is not defined for the intersection as a whole. LOS for signalized, roundabout, and all-way stop controlled intersections are defined for each approach and for the overall intersection.

[2] Transportation Research Board, *Highway Capacity Manual*, Seventh Edition, Washington DC, 2022.

5.2 Key Intersection Operational Analysis

Calculations for the operational level of service at the key intersections for the study area are provided in **Appendix F**. The existing year analysis is based on the lane geometry and intersection control shown in **Figure 2**. Existing peak hour factors were utilized in the existing and 2030 horizon analysis years while the HCM urban standard of 0.92 was used for the long-term 2050 horizon analysis at intersections where this peak hour was not yet achieved in existing conditions. The existing heavy vehicle percentages obtained from the turning movement counts were also used in each horizon year. The signalized intersection analysis utilizes the observed cycle lengths and timing with optimized phasing. Synchro traffic analysis software was used to analyze the signalized and unsignalized key intersections for HCM level of service.

Centennial Parkway/Via Appia and McCaslin Boulevard (#1)

The signalized intersection of Centennial Parkway/Via Appia and McCaslin Boulevard (#1) operates with protected-permissive left turn phasing on the north-south McCaslin Boulevard legs while the eastbound and westbound along Centennial Parkway/Via Appia operate with split phasing. The intersection operates acceptably at LOS C or better during both peak hours under existing conditions. With project traffic, the intersection is anticipated to continue operating at an acceptable level of service throughout the 2050 horizon. Notably, the overall intersection delay decreases from the 2026 existing conditions to the 2030 background conditions. The decrease in delays is a result of additional north/south through traffic that better utilizes the signal splits and traffic being added to movements that have less delay than the average intersection delay, therefore decreasing the north/south through delays and thus the overall intersection delay. Therefore, no improvements or modifications are anticipated to be needed at this intersection based on the addition of project traffic and this operational level of service analysis. **Table 4** provides the results of the LOS analysis conducted at this intersection.

Table 4 – Centennial Parkway/Via Appia and McCaslin Boulevard LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2026 Existing	22.1	C	20.3	C
2030 Background	21.4	C	19.5	B
2030 Background Plus Project	24.2	C	22.4	C
2050 Background	28.3	C	22.2	C
2050 Background Plus Project	30.2	C	24.6	C

Century Drive and McCaslin Boulevard (#2)

The signalized intersection of Century Drive and McCaslin Boulevard (#2) operates with protected-permissive left turn phasing on all approaches. Of note, the observed timings operated with permissive-only left turn phasing on the east-west Century Drive legs during the morning peak hour. During the afternoon peak hour, all four approaches operated with protected-permissive phasing. The intersection operates acceptably at LOS A or better during both peak hours under existing conditions. With project traffic, the intersection is anticipated to continue operating at an acceptable level of service throughout the 2050 horizon. Notably, the overall intersection delay decreases from the 2026 existing conditions to the 2030 background conditions. The decrease in delays is a result of additional north/south through traffic that better utilizes the signal splits and traffic being added to movements that have less delay than the average intersection delay, therefore decreasing the north/south through delays and thus the overall intersection delay. Therefore, no improvements or modifications are anticipated to be needed at this intersection based on the addition of project traffic and this operational level of service analysis. **Table 5** provides the results of the LOS analysis conducted at this intersection.

Table 5 – Century Drive and McCaslin Boulevard LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2026 Existing	6.8	A	8.7	A
2030 Background	6.6	A	8.6	A
2030 Background Plus Project	6.7	A	9.4	A
2050 Background	8.3	A	12.7	B
2050 Background Plus Project	8.4	A	14.0	B

Centennial Parkway/Cherry Street and McCaslin Boulevard (#3)

The signalized intersection of Centennial Parkway/Cherry Street and McCaslin Boulevard (#3) operates with protected-permissive left turn phasing on the north-south McCaslin Boulevard legs while the eastbound and westbound along Centennial Parkway/Cherry Street operate with split phasing. The intersection operates acceptably at LOS C or better during both peak hours under existing conditions. With project traffic and optimized signal splits, the intersection is anticipated to continue operating at an acceptable level of service throughout the 2050 horizon. Therefore, no improvements or modifications are anticipated to be needed at this intersection based on the addition of project traffic and this operational level of service analysis. **Table 6** provides the results of the LOS analysis conducted at this intersection.

Table 6 – Centennial Parkway/Cherry Street and McCaslin Boulevard LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2026 Existing	32.3	C	11.1	B
2030 Background	38.0	D	32.8	C
2030 Background Plus Project	59.2	E	51.1	D
2030 Background Plus Project[1]	18.2	B	35.4	D
2050 Background	43.5	D	37.7	D
2050 Background Plus Project[1]	21.6	C	40.2	D

1 = Optimized timings

Dillon Road and McCaslin Boulevard (#4)

The signalized intersection of Dillon Road and McCaslin Boulevard (#4) operates with protected-only left turn phasing on all approaches. The intersection operates acceptably at LOS D or better during both peak hours under existing conditions. With project traffic and optimized signal splits, the intersection is anticipated to continue operating at an acceptable level of service throughout the 2050 horizon. Therefore, no lane improvements or modifications are anticipated to be needed at this intersection based on the addition of project traffic and this operational level of service analysis. **Table 7** provides the results of the LOS analysis conducted at this intersection.

Table 7 – Dillon Road and McCaslin Boulevard LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2026 Existing	46.8	D	26.8	C
2030 Background	49.9	D	39.8	D
2030 Background Plus Project	51.1	D	41.3	D
2050 Background	71.0	E	55.9	E
2050 Background Plus Project	67.9	E	58.0	E
2050 Background Plus Project[1]	27.4	C	46.0	D

1 = Optimized Timings

Centennial Parkway and Century Drive (#5)

The unsignalized intersection of Centennial Parkway and Century Drive (#5) operates with stop control on the northbound and southbound Century Drive approaches. The intersection movements operate acceptably at LOS B or better during both peak hours under existing conditions. With project traffic, all movements are anticipated to continue operating at an acceptable level of service throughout the 2050 horizon. Therefore, no improvements or modifications are anticipated to be needed at this intersection based on the addition of project traffic and this operational level of service analysis. **Table 8** provides the results of the LOS.

Table 8 – Centennial Parkway and Century Drive LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2026 Existing				
Northbound Left	9.8	A	-	A
Northbound Through/Right	10.6	B	9.4	A
Eastbound Left	7.5	A	7.4	A
Westbound Left	7.3	A	7.5	A
Southbound Left	-	A	9.9	A
Southbound Through/Right	9.1	A	9.4	A
2030 Background				
Northbound Left	9.8	A	-	A
Northbound Through/Right	10.7	B	9.4	A
Eastbound Left	7.5	A	7.4	A
Westbound Left	7.3	A	7.5	A
Southbound Left	-	A	10.0	A
Southbound Through/Right	9.1	A	9.4	A
2030 Background Plus Project				
Northbound Left	10.5	B	-	A
Northbound Through/Right	11.1	B	11.0	B
Eastbound Left	7.6	A	7.7	A
Westbound Left	7.4	A	7.5	A
Southbound Left	11.1	B	12.2	B
Southbound Through/Right	9.7	A	10.3	B
2050 Background				
Northbound Left	10.0	A	-	A
Northbound Through/Right	10.9	B	9.3	B
Eastbound Left	7.6	A	7.4	A
Westbound Left	7.3	A	7.5	A
Southbound Left	-	A	9.7	B
Southbound Through/Right	9.1	A	9.3	B
2050 Background Plus Project				
Northbound Left	10.5	B	-	A
Northbound Through/Right	11.3	B	10.3	A
Eastbound Left	7.6	A	7.6	A
Westbound Left	7.4	A	7.5	A
Southbound Left	11.1	B	11.0	A
Southbound Through/Right	9.7	A	9.8	A

Infinite Drive and Centennial Parkway (#6)

The unsignalized 'T'-intersection of Infinite Drive and Centennial Parkway (#6) operates with stop control on the eastbound Infinite Drive approach. The intersection movements operate acceptably at LOS A during both peak hours under existing conditions. With project traffic, all movements are anticipated to continue operating at an acceptable level of service throughout the 2050 horizon. Therefore, no improvements or modifications are anticipated to be needed at this intersection based on the addition of project traffic and this operational level of service analysis. **Table 9** provides the results of the LOS analysis conducted at this intersection.

Table 9 – Infinite Drive and Centennial Parkway LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2026 Existing				
Northbound Left	7.5	A	7.5	A
Eastbound Approach	9.0	A	9.6	A
2030 Background				
Northbound Left	7.5	A	7.5	A
Eastbound Approach	9.0	A	9.7	A
2030 Background Plus Project				
Northbound Left	7.7	A	8.0	A
Eastbound Approach	9.9	A	11.3	B
2050 Background				
Northbound Left	7.5	A	7.5	A
Eastbound Approach	9.1	A	9.3	A
2050 Background Plus Project				
Northbound Left	7.7	A	7.7	A
Eastbound Approach	9.7	A	10.1	B

Centennial Parkway and Century Place (#7)

The unsignalized intersection of Centennial Parkway and Century Place (#7) operates with stop control on the northbound approach along Century Place provides one lane for all movements. The intersection movements operate acceptably at LOS B or better during both peak hours under existing conditions. With project traffic, all movements are anticipated to continue operating at an acceptable level of service throughout the 2050 horizon. Therefore, no improvements or modifications are anticipated to be needed at this intersection based on the addition of project traffic and this operational level of service analysis. **Table 10** provides the results of the LOS analysis conducted at this intersection.

Table 10 – Centennial Parkway and Century Place LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2026 Existing				
Northbound Approach	10.5	B	10.0	B
Eastbound Left	7.6	A	7.3	A
Westbound Left	7.4	A	7.8	A
Southbound Left	11.7	B	12.3	B
Southbound Through/Right	11.3	B	11.0	B
2030 Background				
Northbound Approach	10.9	B	11.0	B
Eastbound Left	7.6	A	7.3	A
Westbound Left	7.5	A	7.9	A
Southbound Left	12.6	B	14.2	B
Southbound Through/Right	11.9	B	11.9	B
2030 Background Plus Project				
Northbound Approach	13.6	B	13.8	B
Eastbound Left	7.8	A	7.8	A
Westbound Left	7.9	A	8.3	A
Southbound Left	16.7	C	24.9	C
Southbound Through/Right	14.6	B	16.5	C
2050 Background				
Northbound Approach	11.4	B	10.8	B
Eastbound Left	7.7	A	7.3	A
Westbound Left	7.5	A	7.9	A
Southbound Left	13.3	B	13.9	B
Southbound Through/Right	12.3	B	11.7	B
2050 Background Plus Project				
Northbound Approach	13.7	B	12.5	B
Eastbound Left	7.8	A	7.6	A
Westbound Left	7.8	A	8.1	A
Southbound Left	16.8	C	19.7	C
Southbound Through/Right	14.5	B	14.4	B

Project Accesses

Five existing accesses were analyzed that will serve the residential developments. Of the five accesses, three accesses are located along Centennial Parkway, a three-quarter access is located along McCaslin Boulevard, and one access is located along Dillon Road. With completion of the project, a north leg is proposed at the North Access along Centennial Parkway, located approximately a quarter of a mile southwest of the intersection of Centennial Parkway/ Via Appia and McCaslin Boulevard. It is recommended that a R1-1 “STOP” sign be installed on the southbound approach for vehicles exiting the development. **Table 11** provides the results of the level of service for these project accesses. As shown in the table, the project access intersections are anticipated to have all movements operating acceptably during the peak hours in the buildout year 2030 horizon. Similarly, the access movements are anticipated to operate acceptably in the 2050 long-term horizon except for Dillon Road Access (#12). If 2050 traffic volumes are realized, it is expected that the northbound left turning movement at the Dillon Road Access will operate with a failing level of service. However, project traffic does not contribute to the failing movement, and the long delay only occurs during the afternoon peak hour of the long-term twenty-year planning level horizon. Further, it is common for minor movements to have failing levels of service during peak hours along major roadways. Additionally, there is sufficient connection within the area to the south that vehicles can reroute and utilize other routes, including the intersection of Dillon Road and Dahlia Street. If the anticipated volumes are reached, the City of Louisville could consider restricting this access to operate with three-quarters movements either full-time or during the peak hours with posted signage or otherwise realize the vehicle delays would only be for limited period of time in the afternoon peak hour.

Table 11 – Project Access Level of Service Results

Intersection	2030 Total				2050 Total			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS
Centennial Parkway North Access (#8)								
Northbound Approach	9.0	A	10.7	B	9.0	A	10.0	B
Eastbound Left	7.6	A	7.8	A	7.6	A	7.6	A
Westbound Left	7.4	A	-	A	7.4	A	-	A
Southbound Approach	10.2	B	11.5	B	10.4	B	10.5	B
Centennial Parkway Middle Access (#9)								
Northbound Left	7.8	A	8.0	A	7.9	A	7.8	A
Eastbound Approach	9.8	A	12.2	B	9.8	A	11.1	B
Westbound Approach	10.9	B	11.6	B	11.1	B	10.7	B
Southbound Left	-	A	7.8	A	-	A	7.6	A
Centennial Parkway South Access (#10)								
Northbound Left	10.5	B	12.1	B	10.4	B	10.9	B
Northbound Right	9.7	A	11.2	B	9.5	A	10.3	B
Westbound Left	7.8	A	8.5	A	7.8	A	8.1	A
McCaslin Boulevard Access (#11)								
Northbound Left	12.8	B	24.3	C	14.8	B	44.4	E
Eastbound Right	10.6	B	13.5	B	10.8	B	14.9	B
Westbound Right	10.0	B	10.6	B	10.4	B	11.0	B
Southbound Left	12.4	B	13.4	B	13.6	B	16.5	C
Dillon Road Access (#12)								
Northbound Left	18.5	C	34.4	D	22.9	C	69.6	F
Northbound Thru/Right	9.5	A	11.7	B	9.7	A	13.7	B
Eastbound Left	9.6	A	10.3	B	10.4	B	11.4	B
Westbound Left	8.0	A	8.7	A	8.2	A	9.2	A
Southbound Approach	14.3	B	19.8	C	15.9	C	28.4	D

5.3 Vehicle Queuing Analysis

A vehicle queuing analysis was conducted for the study area intersections. The queuing analysis was performed using Synchro presenting the results of the 95th percentile queue lengths. Results are shown in the following **Table 12** with calculations provided within the level of service operational sheets of **Appendix F** for unsignalized intersections and **Appendix G** for signalized intersections.

Table 12 – Turn Lane Queuing Analysis Results

Intersection Turn Lane	Existing Turn Lane Length	2030 Calculated Queue (AM/PM)	2030 Recommended Length	2050 Calculated Queue (AM/PM)	2050 Recommended Length
Centennial Pkwy/Via Appia & McCaslin (#1)					
Eastbound Left	150’	77’/76’	150’	82’/83’	150’
Eastbound Right	150’	25’/25’	150’	25’/25’	150’
Westbound Left	C/150’	210’/186’	C/150’	275’/227’	C/150’
Westbound Right	250’	59’/25’	250’	63’/25’	250’
Northbound Left	125’	25’/32’	125’	25’/33’	125’
Northbound Right	350’	135’/83’	350’	128’/102’	350’
Southbound Left	125’	29’/77’	125’	33’/93’	125’
Southbound Right	150’	25’/25’	150’	25’/25’	150’
Century Dr & McCaslin (#2)					
Eastbound Left	225’	58’/155’	225’	69’/172’	225’
Westbound Left	100’	73’/54’	100’	92’/62’	100’
Northbound Left	225’	25’/46’	225’	35’/76’	225’
Northbound Right	100’	25’/25’	100’	25’/25’	100’
Southbound Left	100’	25’/25’	100’	25’25’	100’
Centennial Pkwy/Cherry St & McCaslin (#3)					
Eastbound Left	50’	156’/**339’**	**325’**	166’/**346’**	**325’**
Eastbound Right	75’	25’/25’	75’	25’/25’	75’
Westbound Left	C/150’	125’/144’	C/150’	146’/184’	C/150’
Westbound Right	150’	25’/25’	150’	25’/25’	150’
Northbound Left	250’	209’/206’	250’	217’/169’	250’
Northbound Right	C	38’/61’	C	51’/35’	C
Southbound Left	300’	78’/131’	300’	87’/181’	300’
Southbound Right	75’	25’/56’	75’	25’/64’	75’
Dillon Rd & McCaslin (#4)					
Eastbound Left	125’/C	27’/34’	125’/C	32’/71’	125’/C
Eastbound Right	150’	25’/25’	150’	25’/25’	150’
Westbound Left	C/250’	334’/341’	C/250’	179’/446’	C/250’
Westbound Right	250’	25’/25’	250’	25’/25’	250’
Northbound Left	450’ DL	124’/154’	450’ DL	143’/291’	450’ DL
Northbound Right	C	48’/165’	C	84’/293’	C
Southbound Left	200’/150’	115’/175’	200’/150’	124’/157’	200’/150’
Southbound Right	75’	25’/25’	75’	25’/25’	75’
Centennial Pkwy & Century Dr (#5)	125’ 100’	25’/25’ 25’/25’	125’ 100’	25’/25’ 25’/25’	125’ 100’
Eastbound Left	100’	25’/25’	100’	25’/25’	100’
Westbound Left	75’	25’/25’	75’	25’/25’	75’

Intersection Turn Lane	Existing Turn Lane Length	2030 Calculated Queue (AM/PM)	2030 Recommended Length	2050 Calculated Queue (AM/PM)	2050 Recommended Length
Northbound Left					
Southbound Left					
Infinite Dr & Centennial Pkwy (#6)					
Northbound Left	75’	25’/25’	75’	25’/25’	75’
Centennial Pkwy & Century Pl (#7)					
Eastbound Left	75’	25’/25’	75’	25’/25’	75’
Westbound Left	75’	25’/25’	75’	25’/25’	75’
Southbound Left	100’	25’/25’	100’	25’/25’	100’
Centennial Pkwy North Access (#8)					
Eastbound Left	100’	25’/25’	100’	25’/25’	100’
Westbound Left	50’	25’/25’	50’	25’/25’	50’
Centennial Pkwy Middle Access (#9)					
Northbound Left	75’	25’/25’	75’	25’/25’	75’
Southbound Left	75’	25’/25’	75’	25’/25’	75’
Centennial Pkwy South Access (#10)					
Northbound Left	C	25’/25’	C	25’/25’	C
Northbound Right	C	25’/25’	C	25’/25’	C
Westbound Left	75’	25’/25’	75’	25’/25’	75’
McCaslin Blvd Access (#11)					
Northbound Left	125’	50’/75’	125’	50’/125’	125’
Southbound Left	200’	25’/25’	200’	25’/50’	200’
Dillon Rd Access (#12)					
Eastbound Left	75’	25’/25’	75’	25’/25’	75’
Westbound Left	75’	25’/25’	75’	25’/25’	75’

DL = Dual Left; C = Continuous Lane; **Blue** Text = Recommendation; **Red Text** = Turn Lane constraint

All queues are anticipated to remain within the existing or recommended turn lane lengths through 2050 except for the eastbound left turn lane at the intersection of Centennial Parkway/Cherry Street and McCaslin Boulevard.

It is recommended that the eastbound left at the intersection of Centennial Parkway/Cherry Street and McCaslin Boulevard be extended to the maximum length of 325 feet to approximately accommodate anticipated vehicle queues. It is important to note that project-generated traffic does not contribute to the need for this extension. Further, evaluation of this intersection may be appropriate, as existing operational challenges are primarily related to geometric constraints and wide median widths. Adjustments to the median geometry to better align the opposing eastbound and westbound left-turn lanes could be considered and would allow for protected–permissive

signal phasing by eliminating overlapping vehicle paths. When evaluated with protected–permissive phasing, eastbound left-turn queues decrease from approximately 350 feet to approximately 250 feet during the afternoon peak hour. Overall intersection operations also improve under this phasing strategy, with reduced delay observed for the minor street approaches along Centennial Parkway and Cherry Street. Given the complexity of the intersection geometry and the influence of wide medians on operations, this location may warrant further operational evaluation to improve efficiency. Although the intersection of Centennial Parkway/Via Appia and McCaslin Boulevard operates accepting and vehicle queues are contained in existing turn lanes (westbound continuous left turn lane has a long vehicle queue), the same wide median modifications could be explored at this intersection to align left turn lanes and potentially remove the inefficient split phasing signal timings on the minor approaches.

5.4 Crash Analysis

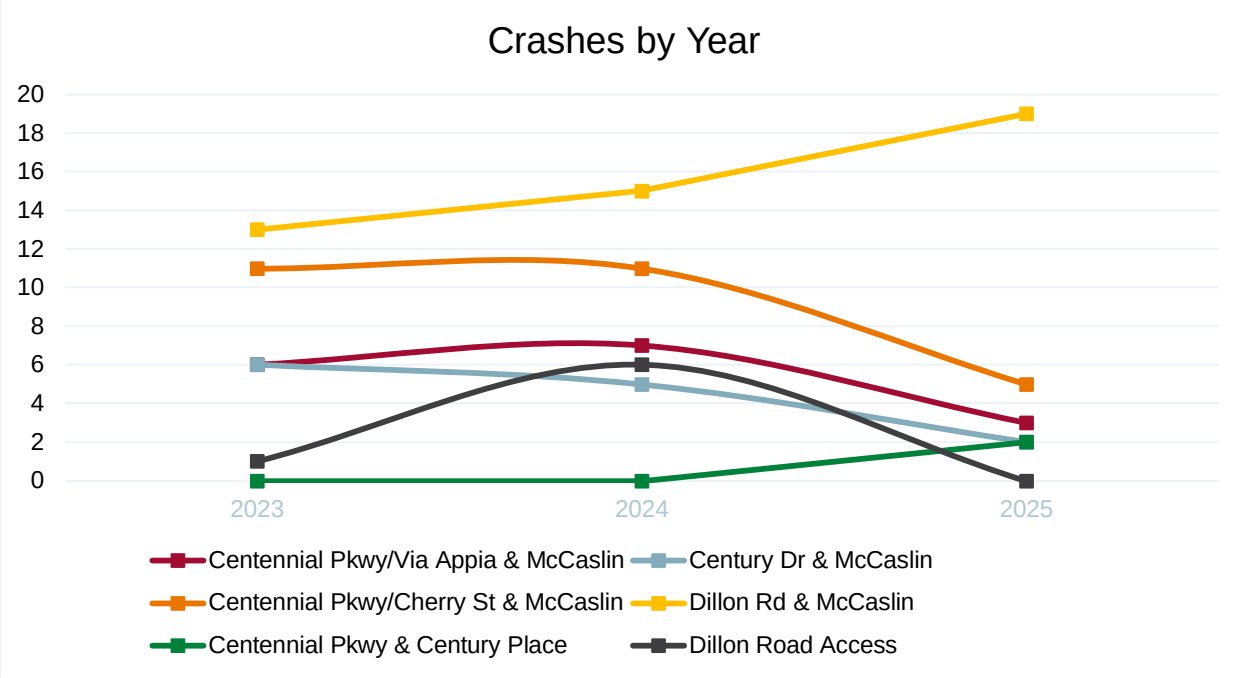
Existing crash data reported between 2023 and 2025 adjacent to the project site were evaluated as part of this study. Data was obtained from the Colorado Department of Transportation (CDOT) Crash Data Consortium. The data includes the crash time and date, crash type, crash severity, weather, roadway, lighting conditions, and crash location, among other relevant crash information. The crash data was reported by the City of Louisville Police Department. The raw crash data used in this analysis are included in **Appendix H**. A map of the crash data can be seen below.



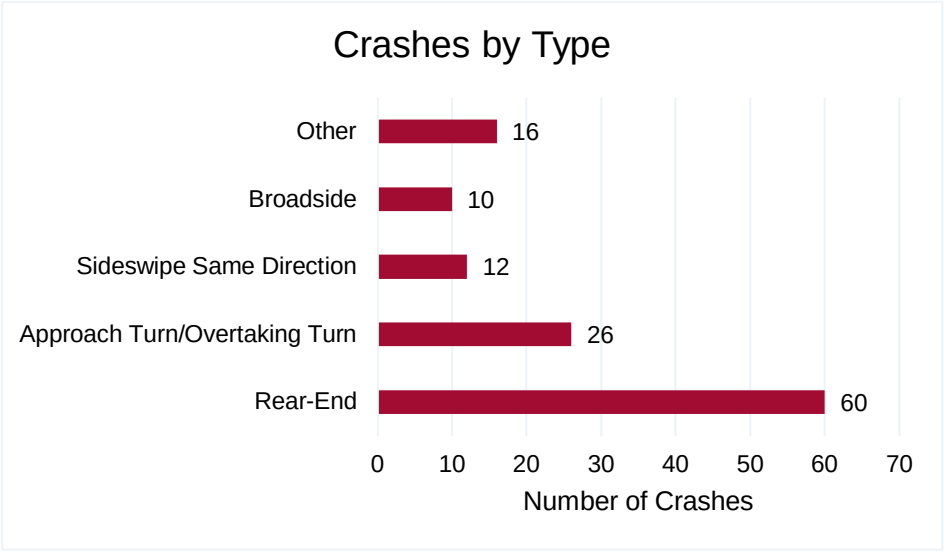
CDOT Crash Data (2023-2025)

There was a total of 124 crashes within the study area in the studied roadways between 2023 and 2025. Of these 124 crashes, 16 crashes occurred at the Centennial Parkway/Via Appia & McCaslin Boulevard intersection, 13 occurred at the Century Drive & McCaslin Boulevard intersection, 27 occurred at the Centennial Parkway/Cherry Street & McCaslin Boulevard intersection, and 47 occurred at the Dillon Road & McCaslin Boulevard intersection. Further, of the 124 crashes, 7 crashes occurred at the Dillon Road Access and two (2) crashes occurred at the Centennial Parkway and Century Place intersection. The remaining 12 crashes occurred elsewhere within the area, not at an intersection.

The number of crashes reported by intersection each year is illustrated by below. As shown in the chart, crashes have varied year to year at each intersection. However, there were a total of 44 crashes reported in 2024 compared to 37 in 2023 and 31 in 2025.



The number of crashes by the most common crash type at each intersection is included in the chart below. As shown in the chart, rear-end collisions comprise the majority of crashes within the study area. Rear-end collisions are typically caused by distracted driving, following too closely, speeding, weather conditions, and can also be caused by excessive and unexpected vehicle queues or stoppages.



The crashes by severity are shown in **Table 13** below. As shown in the table, approximately 80 percent of crashes experienced no reported injury, while roughly 10 percent of crashes were a possible suspected injury, and eight percent of crashes reported a minor injury. Between 2023 and 2025, there were two reported crashes with major injuries. One major injury was in 2023 at the intersection of Century Drive and McCaslin Boulevard and occurred due to an approach turn collision, the front of one car into the side of the other. The other serious injury was in 2024 at the intersection of Dillon Road and McCaslin Boulevard and occurred due to a broadside collision where one vehicle rolled over. There were no fatalities in the area within the studied time period.

Table 13 – Crashes by Severity Summary

Severity	Year			# of Crashes	%
	2023	2024	2025		
Fatality	0	0	0	0	0%
Serious Injury	1	1	0	2	2%
Minor Injury	6	2	2	10	8%
Possible Injury	4	4	4	12	10%
Property Damage Only/No Injury	33	38	29	100	80%
Total	**44**	**45**	**35**	**124**	100%

5.5 Transit, Bicycle, and Pedestrian Evaluation

Transit, bicycle, and pedestrian evaluations were conducted to ensure all aspects of transportation are addressed within the study area. Existing conditions and planned improvements were reviewed based on the City of Louisville's 2019 Transportation Master Plan (TMP) and existing infrastructure along the key corridors of McCaslin Boulevard, Centennial Parkway, and Dillon Road.

Along McCaslin Boulevard south of Centennial Parkway/Via Appia, the Transportation Master Plan (TMP) identifies this segment as a critical transit corridor due to its proximity to McCaslin Station, a major regional hub serving the Flatiron Flyer Bus Rapid Transit (BRT) on US-36 and local Regional Transportation District (RTD) routes including the 228A and 228F. The TMP notes that improving internal circulation and connectivity is a priority to further access to the transit stations. Along Dillon Road west of Dahlia Street, there is no existing transit infrastructure. It is

anticipated that the proposed Centennial Valley Residential development will utilize nearby bus facilities, including McCaslin Station, to support transit access.

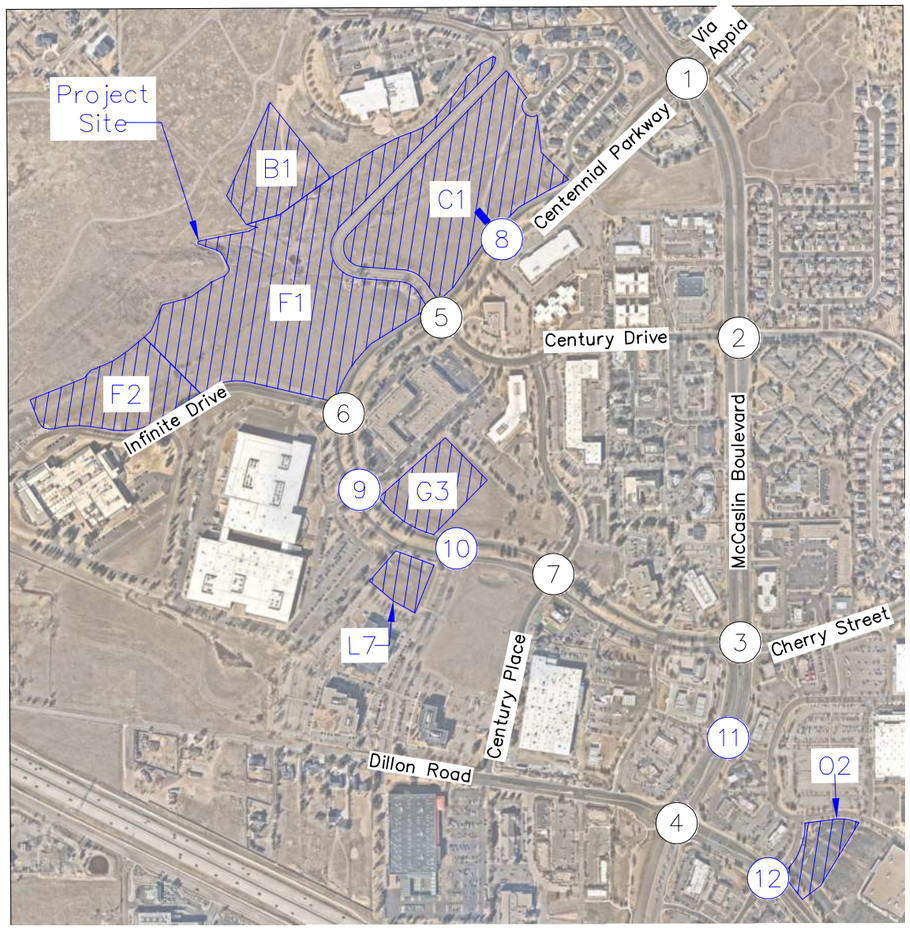
McCaslin Boulevard and Centennial Parkway both currently have dedicated bicycle lanes in both directions. Cherry Street, Via Appia, Century Drive, and Century Place also provide designated bike lanes while Dillon Road only provides bicycle lanes to the east of its intersection with McCaslin Boulevard. Infinite Drive does not provide designated bicycle lanes. The TMP identifies McCaslin Boulevard south of Centennial Parkway/Via Appia as a challenging bicycling environment due to traffic volumes and speeds and looks to prioritize greater separation between bicyclists and vehicles through parallel multi-use paths and secondary network connections. Along Centennial Parkway, the TMP documents that the existing on-street bicycle facilities a key east–west connection. For Dillon Road east of McCaslin Boulevard, the TMP emphasizes regional trail connectivity and bicycle access to medical facilities and McCaslin Station. The proposed Centennial Valley Residential development is anticipated to maintain bicycle connectivity, with Centennial Parkway serving as the primary access route.

From a pedestrian perspective, there are existing detached sidewalks along McCaslin Boulevard, Centennial Parkway, Century Drive, Century Place, and Dillon Road while Cherry Street and Via Appia provide attached sidewalks for pedestrian use. Additionally, the four signalized intersections along McCaslin Boulevard provide designated crosswalks. Notably, the TMP highlights McCaslin Boulevard south of Centennial Parkway/Via Appia as an area where wide crossings, large parcels, and auto-oriented site design reduce comfort and direct access to destinations and transit. Along Centennial Parkway, the plan notes opportunities to strengthen pedestrian connections between commercial uses and the broader sidewalk and trail system with targeted improvements rather than corridor-wide capacity changes. The Centennial Valley Residential development is anticipated to connect to existing pedestrian infrastructure with sidewalks within the development areas.

5.6 Improvement Summary

Based on the results of the intersection operational and vehicle queuing analysis, the key intersection recommended improvements and control are shown in **Figure 11**.

Kimley»Horn
NORTH
NTS 296402000



LEGEND

- Study Area Key Intersection
- Project Access Intersection
- Signalized Intersection
- Stop-Controlled Approach
- Improvement
- 100' Turn Lane Length (feet)

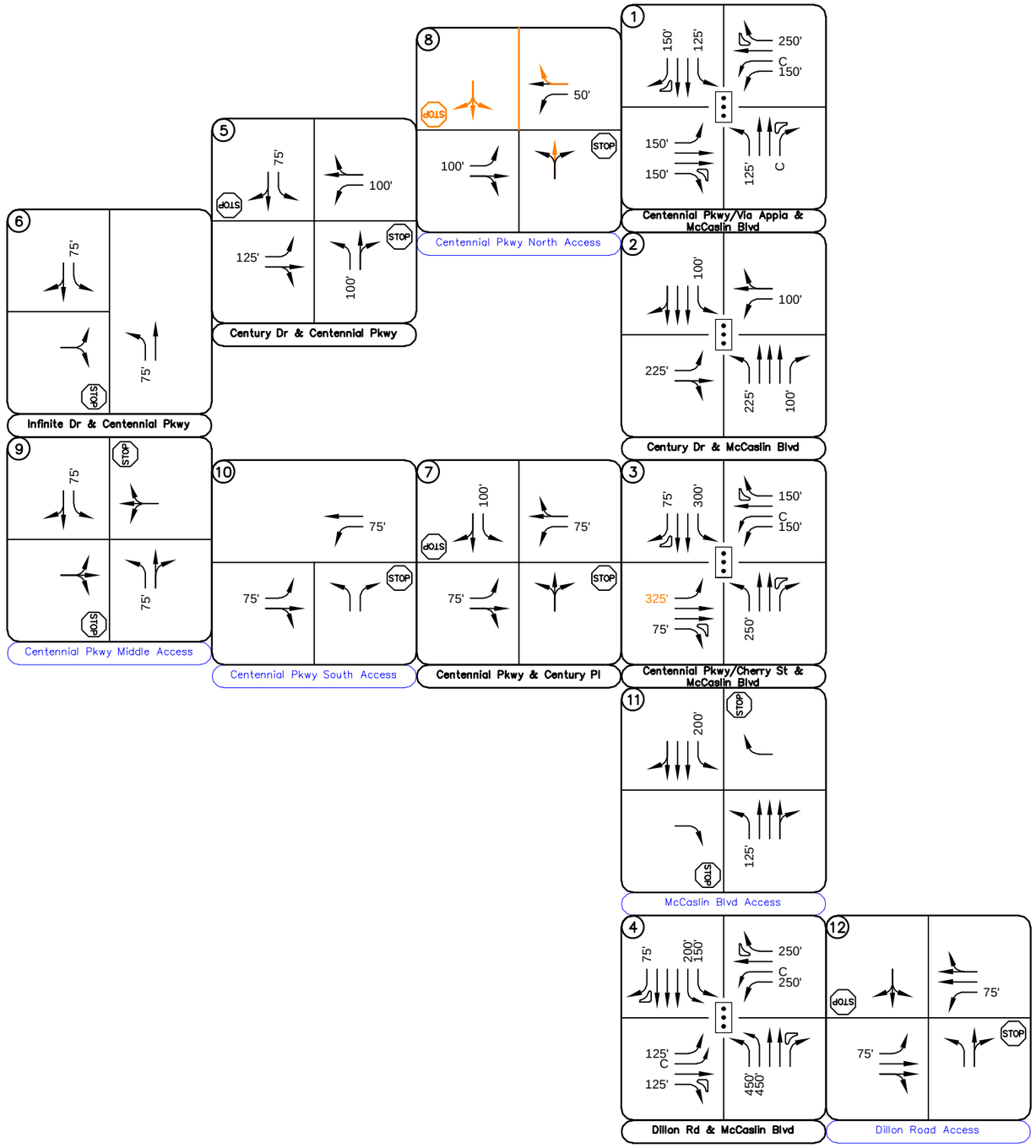


FIGURE 11
Centennial Valley Residential
Louisville, Colorado
Recommended Geometry & Control

Kimley»Horn

6.0 CONCLUSIONS AND RECOMMENDATIONS

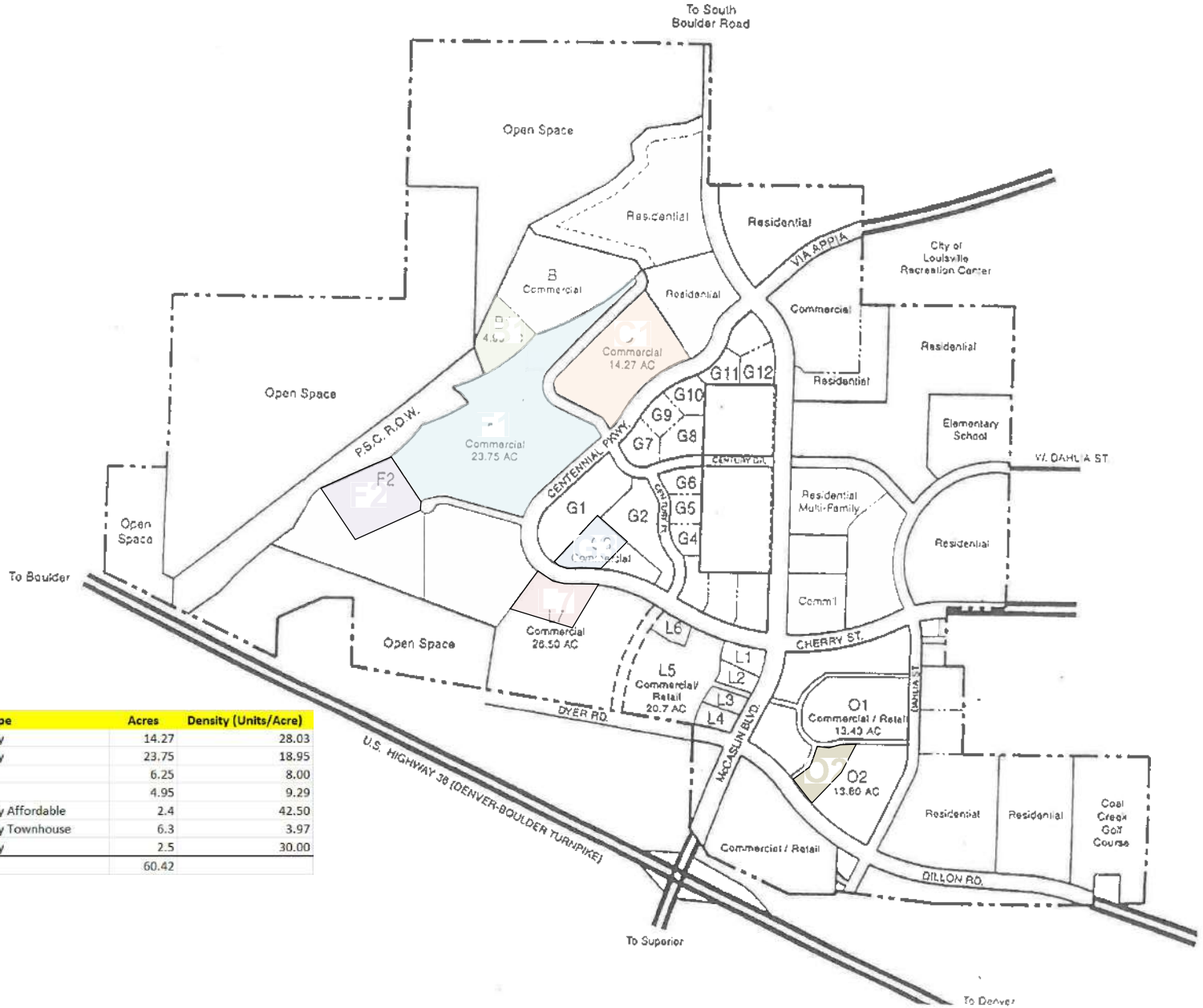
Based on the analysis presented in this report, Kimley-Horn believes the Centennial Valley Residential project will be successfully incorporated into the existing and future roadway network. Analysis of the existing street network, the proposed project development, and expected traffic volumes resulted in the following recommendations:

- With the completion of the project, a north leg is proposed at the North Centennial Parkway Access (#8) to serve the residential development. It is recommended that an R1-1 “STOP” sign is installed on the southbound approach, exiting the development.

- The eastbound left-turn lane at Centennial Parkway/Cherry Street and McCaslin Boulevard experiences queueing that exceeds available storage and is influenced by existing geometric constraints and wide median widths rather than project-generated traffic. It is recommended that the eastbound left turn lane be extended to the maximum feasible length of approximately 325 feet to better accommodate anticipated queues. Alternatively, the intersection could be further analyzed by modifying the median geometry to align opposing left-turn lanes. The realignment would allow for protected–permissive signal phasing and eliminate overlapping vehicle paths. Under protected–permissive phasing, eastbound left-turn queues are reduced during the afternoon peak hour, with corresponding improvements in overall intersection delay. This finding is consistent with other development traffic studies in the area and should be noted that project-generated traffic contributes negligible impacts to the need for this extension.

- Any onsite or offsite improvements should be incorporated into the Civil Drawings and conform to standards of the City of Louisville and the Manual on Uniform Traffic Control Devices (MUTCD) – 11th Edition, 2023.

Appendix A: Conceptual Site Plan

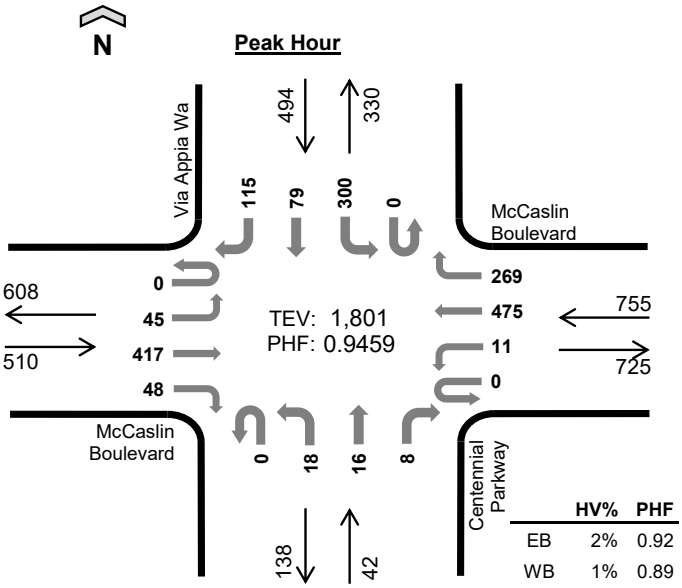


Area	Units	Product Type	Acres	Density (Units/Acre)
C-1	400	Multi-Family	14.27	28.03
F-1	450	Multi-Family	23.75	18.95
F-2	50	Paired	6.25	8.00
B-1	46	Paired	4.95	9.29
L-7	102	Multi-Family Affordable	2.4	42.50
G-3	25	Multi-Family Townhouse	6.3	3.97
O-2	75	Multi-Family	2.5	30.00
Totals	1148		60.42	

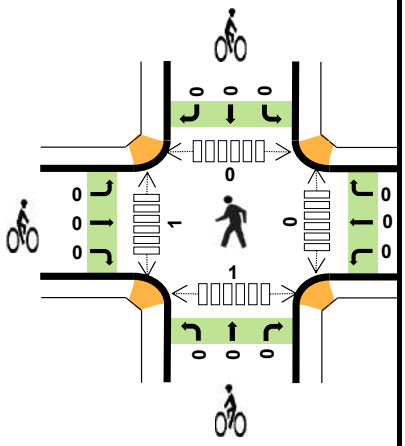
Appendix B: Intersection Count Sheets

Centennial Parkway
McCaslin Boulevard

Date: 3/11/2026
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV%	PHF
EB	2%	0.92
WB	1%	0.89
NB	5%	0.81
SB	1%	0.94
TOTAL	2%	0.95



Peak Hour Count Summaries

Peak Hour Interval Start	McCaslin Boulevard Eastbound				McCaslin Boulevard Westbound				Centennial Parkway Northbound				Via Appia Wa Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM	0	6	106	8	0	2	116	57	0	5	4	1	0	81	28	22	436	0
8:15 AM	0	10	104	9	0	2	114	52	0	3	3	4	0	78	19	30	428	0
8:30 AM	0	15	107	17	0	3	119	77	0	6	5	2	0	76	18	31	476	0
8:45 AM	0	14	100	14	0	4	126	83	0	4	4	1	0	65	14	32	461	1,801
Pk Hr All	0	45	417	48	0	11	475	269	0	18	16	8	0	300	79	115	1,801	
Pk Hr HV	0	2	9	1	0	0	5	6	0	1	1	0	0	5	1	0	31	
Pk Hr HV%	-	4%	2%	2%	-	0%	1%	2%	-	6%	6%	0%	-	2%	1%	0%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	1	1	0	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	2	4	1	2	*9*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	7	5	0	3	*15*	0	0	0	0	*0*	0	0	0	1	*1*
8:45 AM	2	1	1	0	*4*	0	0	0	0	*0*	0	1	0	0	*1*
Peak Hour	12	11	2	6	*31*	0	0	0	0	*0*	0	1	0	1	*2*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	McCaslin Boulevard Eastbound				McCaslin Boulevard Westbound				Centennial Parkway Northbound				Via Appia Wa Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	2	45	1	0	1	82	27	0	1	1	0	0	41	6	13	220	0
7:15 AM	0	6	66	4	0	1	81	32	0	0	1	0	0	38	7	17	253	0
7:30 AM	0	8	71	7	0	2	96	32	0	1	1	0	0	63	13	22	316	0
7:45 AM	0	10	77	10	0	2	106	49	0	1	2	0	0	56	24	25	362	1,151
8:00 AM	**0**	**6**	**106**	**8**	**0**	**2**	**116**	**57**	**0**	**5**	**4**	**1**	**0**	**81**	**28**	**22**	**436**	**1,367**
8:15 AM	**0**	**10**	**104**	**9**	**0**	**2**	**114**	**52**	**0**	**3**	**3**	**4**	**0**	**78**	**19**	**30**	**428**	**1,542**
8:30 AM	**0**	**15**	**107**	**17**	**0**	**3**	**119**	**77**	**0**	**6**	**5**	**2**	**0**	**76**	**18**	**31**	**476**	**1,702**
8:45 AM	**0**	**14**	**100**	**14**	**0**	**4**	**126**	**83**	**0**	**4**	**4**	**1**	**0**	**65**	**14**	**32**	**461**	**1,801**
Count Total	0	71	676	70	0	17	840	409	0	21	21	8	0	498	129	192	2,952	
Pk Hr All	**0**	**45**	**417**	**48**	**0**	**11**	**475**	**269**	**0**	**18**	**16**	**8**	**0**	**300**	**79**	**115**	**1,801**	
Pk Hr HV	**0**	**2**	**9**	**1**	**0**	**0**	**5**	**6**	**0**	**1**	**1**	**0**	**0**	**5**	**1**	**0**	**31**	
Pk Hr HV%	**-**	**4%**	**2%**	**2%**	**-**	**0%**	**1%**	**2%**	**-**	**6%**	**6%**	**0%**	**-**	**2%**	**1%**	**0%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	2	0	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	1	2	0	3	*6*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	2	6	0	2	*10*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	3	5	0	1	*9*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**1**	**1**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**2**	**4**	**1**	**2**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**7**	**5**	**0**	**3**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
8:45 AM	**2**	**1**	**1**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
Count Total	18	26	2	13	*59*	0	0	0	0	*0*	0	1	0	1	*2*
Peak Hour	**12**	**11**	**2**	**6**	***31***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**1**	**2**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	McCaslin Boulevard				McCaslin Boulevard				Centennial Parkway				Via Appia Wa				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	3	0
7:15 AM	0	0	1	0	0	0	1	1	0	0	0	0	0	3	0	0	6	0
7:30 AM	0	0	2	0	0	1	2	3	0	0	0	0	0	1	0	1	10	0
7:45 AM	0	0	3	0	0	0	4	1	0	0	0	0	0	1	0	0	9	28
8:00 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**28**
8:15 AM	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**9**	**31**
8:30 AM	**0**	**2**	**5**	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**15**	**36**
8:45 AM	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**31**
Count Total	0	2	15	1	0	1	13	12	0	1	1	0	0	11	1	1	59	
Pk Hr Heavy	**0**	**2**	**9**	**1**	**0**	**0**	**5**	**6**	**0**	**1**	**1**	**0**	**0**	**5**	**1**	**0**	**31**	

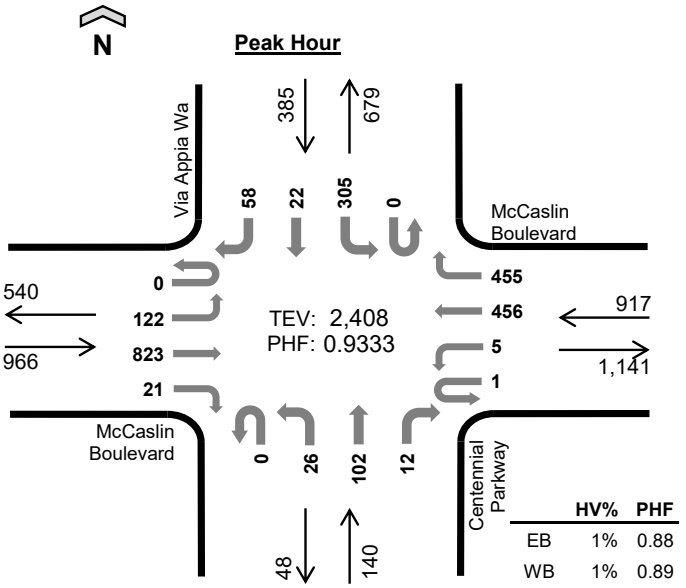
Count Summaries - Bikes

Interval Start	McCaslin Boulevard				McCaslin Boulevard				Centennial Parkway				Via Appia Wa				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

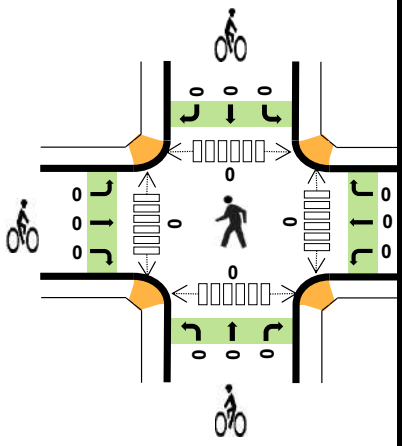
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Centennial Parkway
McCaslin Boulevard

Date: 3/11/2026
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV%	PHF
EB	1%	0.88
WB	1%	0.89
NB	1%	0.74
SB	1%	0.89
TOTAL	1%	0.93



Peak Hour Count Summaries

Peak Hour Interval Start	McCaslin Boulevard Eastbound				McCaslin Boulevard Westbound				Centennial Parkway Northbound				Via Appia Wa Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM	0	26	159	3	0	0	104	96	0	8	23	6	0	86	6	16	533	0
4:45 PM	0	31	236	9	0	2	122	124	0	3	44	0	0	56	8	10	645	0
5:00 PM	0	35	208	5	0	1	120	137	0	6	22	5	0	80	4	14	637	0
5:15 PM	0	30	220	4	1	2	110	98	0	9	13	1	0	83	4	18	593	2,408
Pk Hr All	0	122	823	21	1	5	456	455	0	26	102	12	0	305	22	58	2,408	
Pk Hr HV	0	0	10	0	0	1	3	4	0	0	1	0	0	3	0	0	22	
Pk Hr HV%	-	0%	1%	0%	0%	20%	1%	1%	-	0%	1%	0%	-	1%	0%	0%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:30 PM	1	2	0	2	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	2	4	1	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	3	2	0	1	*6*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	4	0	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	10	8	1	3	*22*	0	0	0	0	*0*	0	0	0	0	*0*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	McCaslin Boulevard Eastbound				McCaslin Boulevard Westbound				Centennial Parkway Northbound				Via Appia Wa Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	21	161	5	0	1	104	100	0	10	4	4	0	70	4	17	501	0
4:15 PM	0	23	156	7	0	2	117	133	0	5	17	3	0	61	5	10	539	0
4:30 PM	**0**	**26**	**159**	**3**	**0**	**0**	**104**	**96**	**0**	**8**	**23**	**6**	**0**	**86**	**6**	**16**	**533**	**0**
4:45 PM	**0**	**31**	**236**	**9**	**0**	**2**	**122**	**124**	**0**	**3**	**44**	**0**	**0**	**56**	**8**	**10**	**645**	**2,218**
5:00 PM	**0**	**35**	**208**	**5**	**0**	**1**	**120**	**137**	**0**	**6**	**22**	**5**	**0**	**80**	**4**	**14**	**637**	**2,354**
5:15 PM	**0**	**30**	**220**	**4**	**1**	**2**	**110**	**98**	**0**	**9**	**13**	**1**	**0**	**83**	**4**	**18**	**593**	**2,408**
5:30 PM	0	28	156	3	0	2	96	101	0	4	7	1	0	82	4	14	498	2,373
5:45 PM	0	32	144	1	0	1	123	119	0	5	13	1	0	52	4	16	511	2,239
Count Total	0	226	1,440	37	1	11	896	908	0	50	143	21	0	570	39	115	4,457	
Pk Hr All	**0**	**122**	**823**	**21**	**1**	**5**	**456**	**455**	**0**	**26**	**102**	**12**	**0**	**305**	**22**	**58**	**2,408**	
Pk Hr HV	**0**	**0**	**10**	**0**	**0**	**1**	**3**	**4**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**22**	
Pk Hr HV%	**-**	**0%**	**1%**	**0%**	**0%**	**20%**	**1%**	**1%**	**-**	**0%**	**1%**	**0%**	**-**	**1%**	**0%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	3	3	0	1	*7*	0	0	0	2	*2*	0	2	0	0	*2*
4:15 PM	2	3	0	5	*10*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**1**	**2**	**0**	**2**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**2**	**4**	**1**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**3**	**2**	**0**	**1**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	**4**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	3	0	2	*5*	0	0	0	0	*0*	0	0	0	22	*22*
5:45 PM	2	0	0	0	*2*	1	0	0	0	*1*	1	0	0	1	*2*
Count Total	17	17	1	11	*46*	1	0	0	2	*3*	1	2	0	23	*26*
Peak Hour	**10**	**8**	**1**	**3**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

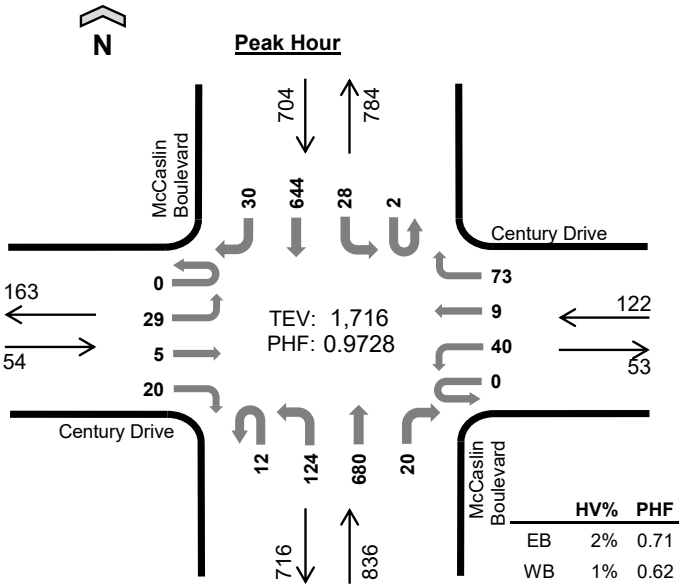
Interval Start	McCaslin Boulevard				McCaslin Boulevard				Centennial Parkway				Via Appia Wa				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	3	0	0	0	2	1	0	0	0	0	0	1	0	0	7	0
4:15 PM	0	0	2	0	0	0	2	1	0	0	0	0	0	3	1	1	10	0
4:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**5**	**0**
4:45 PM	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	**29**
5:00 PM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**6**	**28**
5:15 PM	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**22**
5:30 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	2	0	0	5	22
5:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	17
Count Total	0	0	17	0	0	1	8	8	0	0	1	0	0	9	1	1	46	
Pk Hr Heavy	**0**	**0**	**10**	**0**	**0**	**1**	**3**	**4**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**22**	

Count Summaries - Bikes

Interval Start	McCaslin Boulevard				McCaslin Boulevard				Centennial Parkway				Via Appia Wa				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

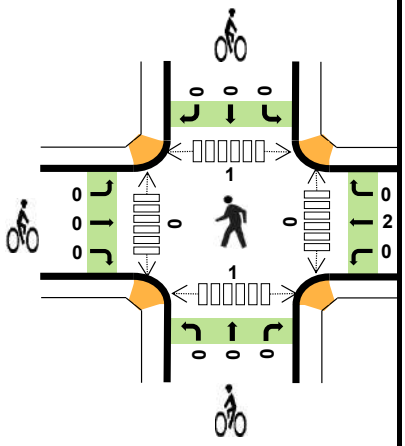
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

McCaslin Boulevard
Century Drive



	HV%	PHF
EB	2%	0.71
WB	1%	0.62
NB	1%	0.93
SB	2%	0.91
TOTAL	2%	0.97

Date: 3/11/2026
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



Peak Hour Count Summaries

Peak Hour Interval Start		Century Drive Eastbound				Century Drive Westbound				McCaslin Boulevard Northbound				McCaslin Boulevard Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	2	1	5	0	7	2	13	2	24	163	5	0	5	160	5	394	0
8:15 AM		0	5	1	6	0	12	3	7	1	44	166	2	1	5	180	8	441	0
8:30 AM		0	9	3	3	0	6	3	20	4	29	188	3	0	10	155	7	440	0
8:45 AM		0	13	0	6	0	15	1	33	5	27	163	10	1	8	149	10	441	1,716
Pk Hr	All	0	29	5	20	0	40	9	73	12	124	680	20	2	28	644	30	1,716	
	HV	0	0	1	0	0	0	0	1	0	2	10	0	0	2	13	0	29	
	HV%	-	0%	20%	0%	-	0%	0%	1%	0%	2%	1%	0%	0%	7%	2%	0%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	0	0	1	3	*4*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	0	0	4	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	1	0	6	8	*15*	0	1	0	0	*1*	0	0	0	0	*0*
8:45 AM	0	1	1	2	*4*	0	1	0	0	*1*	0	0	1	1	*2*
Peak Hour	1	1	12	15	*29*	0	2	0	0	*2*	0	0	1	1	*2*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Century Drive				Century Drive				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	4	1	2	0	1	0	4	0	8	101	0	0	3	72	4	200	0
7:15 AM	0	4	2	1	0	3	0	7	3	12	108	1	1	3	101	5	251	0
7:30 AM	0	4	0	6	0	4	0	10	6	18	114	2	0	5	118	4	291	0
7:45 AM	0	4	2	1	0	5	1	9	1	21	152	1	0	7	126	5	335	1,077
8:00 AM	**0**	**2**	**1**	**5**	**0**	**7**	**2**	**13**	**2**	**24**	**163**	**5**	**0**	**5**	**160**	**5**	**394**	**1,271**
8:15 AM	**0**	**5**	**1**	**6**	**0**	**12**	**3**	**7**	**1**	**44**	**166**	**2**	**1**	**5**	**180**	**8**	**441**	**1,461**
8:30 AM	**0**	**9**	**3**	**3**	**0**	**6**	**3**	**20**	**4**	**29**	**188**	**3**	**0**	**10**	**155**	**7**	**440**	**1,610**
8:45 AM	**0**	**13**	**0**	**6**	**0**	**15**	**1**	**33**	**5**	**27**	**163**	**10**	**1**	**8**	**149**	**10**	**441**	**1,716**
Count Total	0	45	10	30	0	53	10	103	22	183	1,155	24	3	46	1,061	48	2,793	
Pk Hr All	**0**	**29**	**5**	**20**	**0**	**40**	**9**	**73**	**12**	**124**	**680**	**20**	**2**	**28**	**644**	**30**	**1,716**	
Pk Hr HV	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**10**	**0**	**0**	**2**	**13**	**0**	**29**	
Pk Hr HV%	**-**	**0%**	**20%**	**0%**	**-**	**0%**	**0%**	**1%**	**0%**	**2%**	**1%**	**0%**	**0%**	**7%**	**2%**	**0%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	3	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	2	2	*4*	0	0	0	0	*0*	1	0	0	0	*1*
7:30 AM	0	1	7	3	*11*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	0	6	5	*11*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**0**	**0**	**1**	**3**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**4**	**2**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**1**	**0**	**6**	**8**	**15**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**1**	**1**	**2**	**4**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**2**
Count Total	1	2	30	26	*59*	0	2	0	0	*2*	1	0	1	1	*3*
Peak Hour	**1**	**1**	**12**	**15**	***29***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**1**	**1**	**2**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Century Drive				Century Drive				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	1	2	0	0	1	0	0	4	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4	0
7:30 AM	0	0	0	0	0	1	0	0	1	0	6	0	0	0	3	0	11	0
7:45 AM	0	0	0	0	0	0	0	0	0	1	5	0	0	0	5	0	11	30
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**4**	**30**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**6**	**32**
8:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**	**0**	**2**	**6**	**0**	**15**	**36**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**4**	**29**
Count Total	0	0	1	0	0	1	0	1	1	4	25	0	0	3	23	0	59	
Pk Hr Heavy	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**10**	**0**	**0**	**2**	**13**	**0**	**29**	

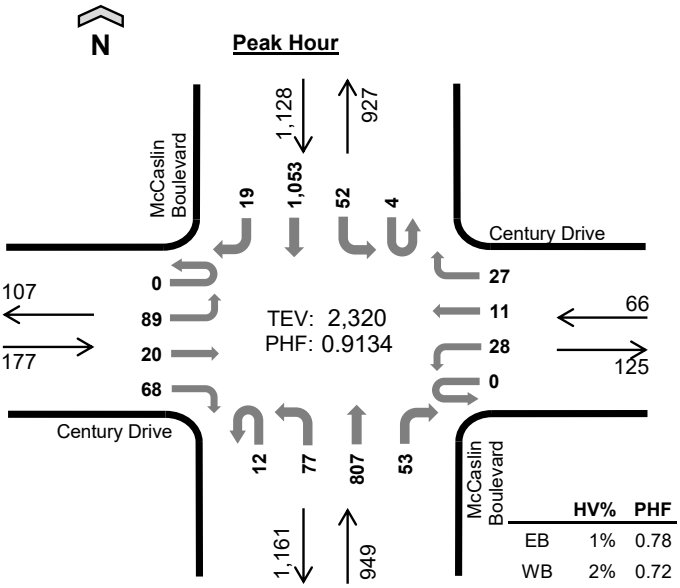
Count Summaries - Bikes

Interval Start	Century Drive				Century Drive				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
Count Total	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	

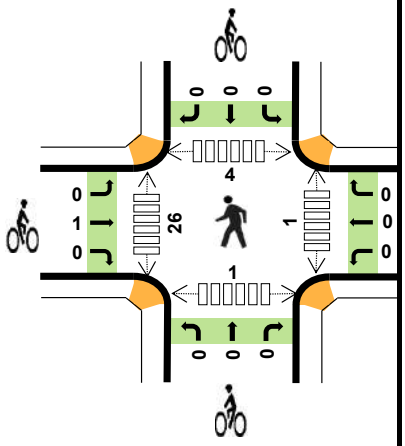
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

McCaslin Boulevard
Century Drive

Date: 3/11/2026
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV%	PHF
EB	1%	0.78
WB	2%	0.72
NB	1%	0.86
SB	1%	0.94
TOTAL	1%	0.91



Peak Hour Count Summaries

Peak Hour Interval Start		Century Drive Eastbound				Century Drive Westbound				McCaslin Boulevard Northbound				McCaslin Boulevard Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:45 PM		0	21	3	15	0	6	2	8	1	17	199	7	0	11	271	6	567	0
5:00 PM		0	29	6	22	0	8	2	7	5	19	237	16	1	12	269	2	635	0
5:15 PM		0	24	5	17	0	8	5	10	1	19	168	17	3	11	279	6	573	0
5:30 PM		0	15	6	14	0	6	2	2	5	22	203	13	0	18	234	5	545	2,320
Pk Hr	All	0	89	20	68	0	28	11	27	12	77	807	53	4	52	1,053	19	2,320	
	HV	0	0	0	1	0	1	0	0	0	0	7	0	0	0	11	1	21	
	HV%	-	0%	0%	1%	-	4%	0%	0%	0%	0%	1%	0%	0%	0%	1%	5%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:45 PM	1	0	3	2	*6*	1	0	0	0	*1*	0	0	1	0	*1*
5:00 PM	0	0	2	4	*6*	0	0	0	0	*0*	1	0	1	1	*3*
5:15 PM	0	0	0	4	*4*	0	0	0	0	*0*	0	0	1	0	*1*
5:30 PM	0	1	2	2	*5*	0	0	0	0	*0*	0	26	1	0	*27*
Peak Hour	1	1	7	12	*21*	1	0	0	0	*1*	1	26	4	1	*32*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Century Drive				Century Drive				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	13	4	19	0	5	3	5	2	17	194	7	2	10	210	6	497	0
4:15 PM	0	23	4	21	0	6	2	6	2	10	224	8	0	6	214	7	533	0
4:30 PM	0	19	1	10	0	9	1	6	2	16	183	7	1	7	226	8	496	0
4:45 PM	**0**	**21**	**3**	**15**	**0**	**6**	**2**	**8**	**1**	**17**	**199**	**7**	**0**	**11**	**271**	**6**	**567**	**2,093**
5:00 PM	**0**	**29**	**6**	**22**	**0**	**8**	**2**	**7**	**5**	**19**	**237**	**16**	**1**	**12**	**269**	**2**	**635**	**2,231**
5:15 PM	**0**	**24**	**5**	**17**	**0**	**8**	**5**	**10**	**1**	**19**	**168**	**17**	**3**	**11**	**279**	**6**	**573**	**2,271**
5:30 PM	**0**	**15**	**6**	**14**	**0**	**6**	**2**	**2**	**5**	**22**	**203**	**13**	**0**	**18**	**234**	**5**	**545**	**2,320**
5:45 PM	0	19	5	10	0	11	5	4	0	17	205	10	1	12	178	3	480	2,233
Count Total	0	163	34	128	0	59	22	48	18	137	1,613	85	8	87	1,881	43	4,326	
Pk Hr All	**0**	**89**	**20**	**68**	**0**	**28**	**11**	**27**	**12**	**77**	**807**	**53**	**4**	**52**	**1,053**	**19**	**2,320**	
Pk Hr HV	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**11**	**1**	**21**	
Pk Hr HV%	**-**	**0%**	**0%**	**1%**	**-**	**4%**	**0%**	**0%**	**0%**	**0%**	**1%**	**0%**	**0%**	**0%**	**1%**	**5%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	3	4	*7*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	1	0	3	5	*9*	0	0	0	1	*1*	0	0	0	1	*1*
4:30 PM	0	1	1	2	*4*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**1**	**0**	**3**	**2**	**6**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**1**
5:00 PM	**0**	**0**	**2**	**4**	**6**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**3**
5:15 PM	**0**	**0**	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
5:30 PM	**0**	**1**	**2**	**2**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**26**	**1**	**0**	**27**
5:45 PM	0	1	1	3	*5*	0	0	0	0	*0*	0	0	0	1	*1*
Count Total	2	3	15	26	*46*	1	0	0	1	*2*	1	26	4	3	*34*
Peak Hour	**1**	**1**	**7**	**12**	***21***	**1**	**0**	**0**	**0**	***1***	**1**	**26**	**4**	**1**	**32**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

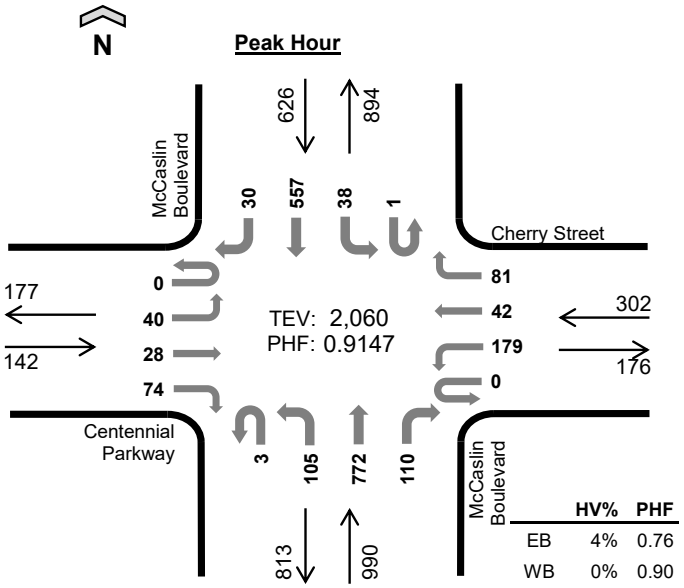
Interval Start	Century Drive				Century Drive				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	7	0
4:15 PM	0	0	0	1	0	0	0	0	0	0	3	0	0	1	4	0	9	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	1	4	0
4:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**6**	**26**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**1**	**6**	**25**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**4**	**20**
5:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**5**	**21**
5:45 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	3	0	5	20
Count Total	0	0	0	2	0	2	0	1	0	0	15	0	0	1	23	2	46	
Pk Hr Heavy	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**11**	**1**	**21**	

Count Summaries - Bikes

Interval Start	Century Drive				Century Drive				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2	
Pk Hr Bike	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	

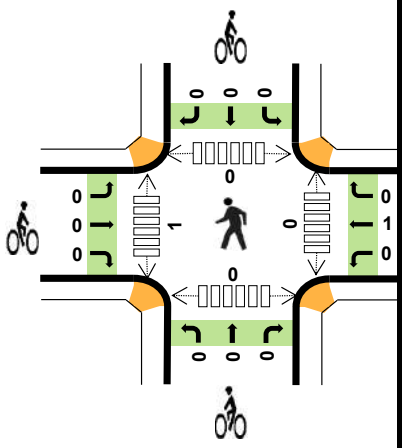
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

McCaslin Boulevard
Centennial Parkway



	HV%	PHF
EB	4%	0.76
WB	0%	0.90
NB	2%	0.88
SB	2%	0.93
TOTAL	2%	0.91

Date: 3/11/2026
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



Peak Hour Count Summaries

Peak Hour Interval Start		Centennial Parkway Eastbound				Cherry Street Westbound				McCaslin Boulevard Northbound				McCaslin Boulevard Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	8	3	19	0	38	9	13	0	22	175	18	1	9	128	8	451	0
8:15 AM		0	5	5	14	0	41	15	22	1	26	213	26	0	6	154	9	537	0
8:30 AM		0	16	13	18	0	53	7	24	1	27	170	30	0	13	131	6	509	0
8:45 AM		0	11	7	23	0	47	11	22	1	30	214	36	0	10	144	7	563	2,060
Pk Hr	All	0	40	28	74	0	179	42	81	3	105	772	110	1	38	557	30	2,060	
	HV	0	2	2	1	0	1	0	0	0	2	13	1	0	1	10	1	34	
	HV%	-	5%	7%	1%	-	1%	0%	0%	0%	2%	2%	1%	0%	3%	2%	3%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	0	0	1	4	*5*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	2	0	3	2	*7*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	1	1	6	2	*10*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	2	0	6	4	*12*	0	1	0	0	*1*	0	1	0	0	*1*
Peak Hour	5	1	16	12	*34*	0	1	0	0	*1*	0	1	0	0	*1*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Centennial Parkway				Cherry Street				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	5	1	6	0	23	4	13	0	7	103	10	0	2	67	1	242	0
7:15 AM	0	3	3	8	0	34	5	11	1	21	126	19	0	7	94	2	334	0
7:30 AM	0	7	3	18	0	46	11	19	1	20	117	21	0	2	106	3	374	0
7:45 AM	0	7	4	17	0	50	8	17	0	31	177	20	0	4	110	4	449	1,399
8:00 AM	**0**	**8**	**3**	**19**	**0**	**38**	**9**	**13**	**0**	**22**	**175**	**18**	**1**	**9**	**128**	**8**	**451**	**1,608**
8:15 AM	**0**	**5**	**5**	**14**	**0**	**41**	**15**	**22**	**1**	**26**	**213**	**26**	**0**	**6**	**154**	**9**	**537**	**1,811**
8:30 AM	**0**	**16**	**13**	**18**	**0**	**53**	**7**	**24**	**1**	**27**	**170**	**30**	**0**	**13**	**131**	**6**	**509**	**1,946**
8:45 AM	**0**	**11**	**7**	**23**	**0**	**47**	**11**	**22**	**1**	**30**	**214**	**36**	**0**	**10**	**144**	**7**	**563**	**2,060**
Count Total	0	62	39	123	0	332	70	141	5	184	1,295	180	1	53	934	40	3,459	
Pk Hr All	**0**	**40**	**28**	**74**	**0**	**179**	**42**	**81**	**3**	**105**	**772**	**110**	**1**	**38**	**557**	**30**	**2,060**	
Pk Hr HV	**0**	**2**	**2**	**1**	**0**	**1**	**0**	**0**	**0**	**2**	**13**	**1**	**0**	**1**	**10**	**1**	**34**	
Pk Hr HV%	**-**	**5%**	**7%**	**1%**	**-**	**1%**	**0%**	**0%**	**0%**	**2%**	**2%**	**1%**	**0%**	**3%**	**2%**	**3%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	2	0	4	1	*7*	0	0	0	0	*0*	0	0	0	1	*1*
7:15 AM	0	0	2	3	*5*	0	0	0	0	*0*	1	1	0	0	*2*
7:30 AM	1	3	7	4	*15*	0	1	0	0	*1*	0	0	1	0	*1*
7:45 AM	1	4	6	3	*14*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**0**	**0**	**1**	**4**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**2**	**0**	**3**	**2**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**1**	**1**	**6**	**2**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**2**	**0**	**6**	**4**	**12**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**
Count Total	9	8	35	23	*75*	0	2	0	0	*2*	1	2	1	1	*5*
Peak Hour	**5**	**1**	**16**	**12**	***34***	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	**1**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Centennial Parkway				Cherry Street				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	1	0	0	0	0	0	0	2	2	0	0	1	0	7	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	1	2	0	5	0
7:30 AM	0	0	0	1	0	2	0	1	0	0	6	1	0	0	4	0	15	0
7:45 AM	0	0	0	1	0	3	1	0	0	1	5	0	0	1	2	0	14	41
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**5**	**39**
8:15 AM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**7**	**41**
8:30 AM	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**5**	**0**	**0**	**1**	**1**	**0**	**10**	**36**
8:45 AM	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**1**	**0**	**0**	**3**	**1**	**12**	**34**
Count Total	0	3	2	4	0	6	1	1	0	3	28	4	0	3	19	1	75	
Pk Hr Heavy	**0**	**2**	**2**	**1**	**0**	**1**	**0**	**0**	**0**	**2**	**13**	**1**	**0**	**1**	**10**	**1**	**34**	

Count Summaries - Bikes

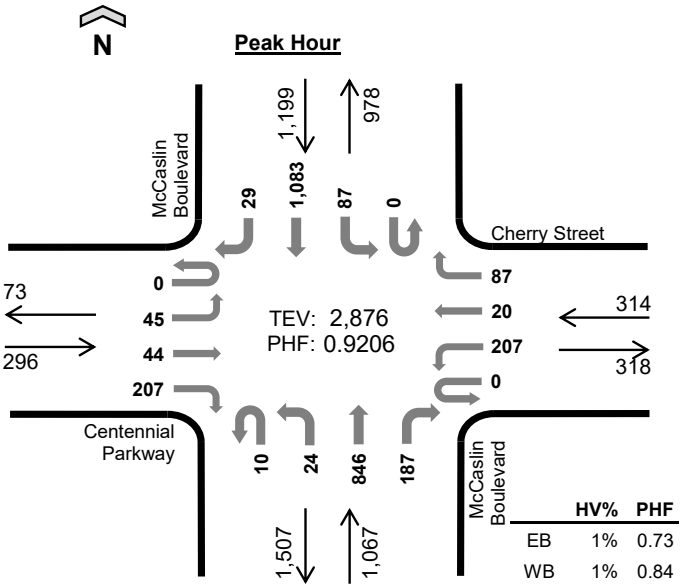
Interval Start	Centennial Parkway				Cherry Street				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
Count Total	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	

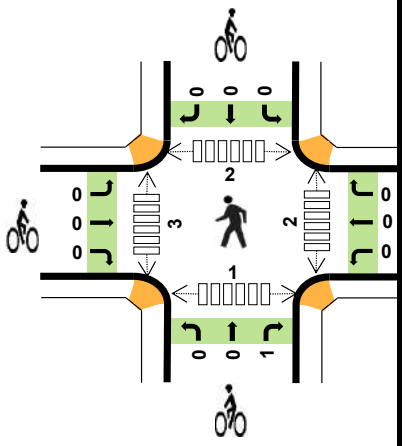
TJ Wethington
(720) 646-1008

tj.wethington@idaxdata.com

McCaslin Boulevard
Centennial Parkway

Date: 3/11/2026
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV%	PHF
EB	1%	0.73
WB	1%	0.84
NB	1%	0.93
SB	1%	0.93
TOTAL	1%	0.92

Peak Hour Count Summaries

Peak Hour Interval Start	Centennial Parkway				Cherry Street				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM	0	13	8	40	0	58	10	15	1	5	197	44	0	18	230	5	644	0
4:45 PM	0	13	16	73	0	35	3	27	2	3	209	56	0	24	268	7	736	0
5:00 PM	0	9	10	58	0	65	2	26	3	9	236	40	0	22	293	8	781	0
5:15 PM	0	10	10	36	0	49	5	19	4	7	204	47	0	23	292	9	715	2,876
Pk Hr All	0	45	44	207	0	207	20	87	10	24	846	187	0	87	1,083	29	2,876	
Pk Hr HV	0	0	1	2	0	1	0	1	0	0	7	0	0	0	10	0	22	
Pk Hr HV%	-	0%	2%	1%	-	0%	0%	1%	0%	0%	1%	0%	-	0%	1%	0%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:30 PM	1	0	2	2	*5*	0	0	0	0	*0*	1	0	0	0	*1*
4:45 PM	0	2	4	2	*8*	0	0	0	0	*0*	0	3	0	1	*4*
5:00 PM	2	0	1	3	*6*	0	0	1	0	*1*	1	0	0	0	*1*
5:15 PM	0	0	0	3	*3*	0	0	0	0	*0*	0	0	2	0	*2*
Peak Hour	3	2	7	10	*22*	0	0	1	0	*1*	2	3	2	1	*8*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Centennial Parkway				Cherry Street				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	7	5	27	0	63	2	21	2	4	212	47	0	16	209	3	618	0
4:15 PM	0	5	12	33	0	42	5	25	4	6	232	50	0	28	221	7	670	0
4:30 PM	**0**	**13**	**8**	**40**	**0**	**58**	**10**	**15**	**1**	**5**	**197**	**44**	**0**	**18**	**230**	**5**	**644**	**0**
4:45 PM	**0**	**13**	**16**	**73**	**0**	**35**	**3**	**27**	**2**	**3**	**209**	**56**	**0**	**24**	**268**	**7**	**736**	**2,668**
5:00 PM	**0**	**9**	**10**	**58**	**0**	**65**	**2**	**26**	**3**	**9**	**236**	**40**	**0**	**22**	**293**	**8**	**781**	**2,831**
5:15 PM	**0**	**10**	**10**	**36**	**0**	**49**	**5**	**19**	**4**	**7**	**204**	**47**	**0**	**23**	**292**	**9**	**715**	**2,876**
5:30 PM	0	15	6	27	0	48	3	19	0	2	218	51	1	21	226	4	641	2,873
5:45 PM	0	7	5	28	0	45	1	24	1	2	223	49	0	16	212	7	620	2,757
Count Total	0	79	72	322	0	405	31	176	17	38	1,731	384	1	168	1,951	50	5,425	
Pk Hr All	**0**	**45**	**44**	**207**	**0**	**207**	**20**	**87**	**10**	**24**	**846**	**187**	**0**	**87**	**1,083**	**29**	**2,876**	
Pk Hr HV	**0**	**0**	**1**	**2**	**0**	**1**	**0**	**1**	**0**	**0**	**7**	**0**	**0**	**0**	**10**	**0**	**22**	
Pk Hr HV%	**-**	**0%**	**2%**	**1%**	**-**	**0%**	**0%**	**1%**	**0%**	**0%**	**1%**	**0%**	**-**	**0%**	**1%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	4	5	*9*	0	0	1	0	*1*	1	0	0	0	*1*
4:15 PM	0	0	3	5	*8*	0	0	1	0	*1*	1	0	0	1	*2*
4:30 PM	**1**	**0**	**2**	**2**	**5**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
4:45 PM	**0**	**2**	**4**	**2**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**4**
5:00 PM	**2**	**0**	**1**	**3**	**6**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**1**
5:15 PM	**0**	**0**	**0**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**
5:30 PM	1	0	1	4	*6*	0	0	0	0	*0*	0	1	2	0	*3*
5:45 PM	0	0	1	3	*4*	0	0	0	0	*0*	0	0	2	0	*2*
Count Total	4	2	16	27	*49*	0	0	3	0	*3*	4	4	6	2	*16*
Peak Hour	**3**	**2**	**7**	**10**	***22***	**0**	**0**	**1**	**0**	***1***	**2**	**3**	**2**	**1**	**8**

TJ Wethington
(720) 646-1008

tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Centennial Parkway				Cherry Street				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	1	3	0	0	0	5	0	9	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	5	0	8	0
4:30 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**5**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**8**	**30**
5:00 PM	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**6**	**27**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**22**
5:30 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	4	0	6	23
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	19
Count Total	0	1	1	2	0	1	0	1	0	1	15	0	0	0	27	0	49	
Pk Hr Heavy	**0**	**0**	**1**	**2**	**0**	**1**	**0**	**1**	**0**	**0**	**7**	**0**	**0**	**0**	**10**	**0**	**22**	

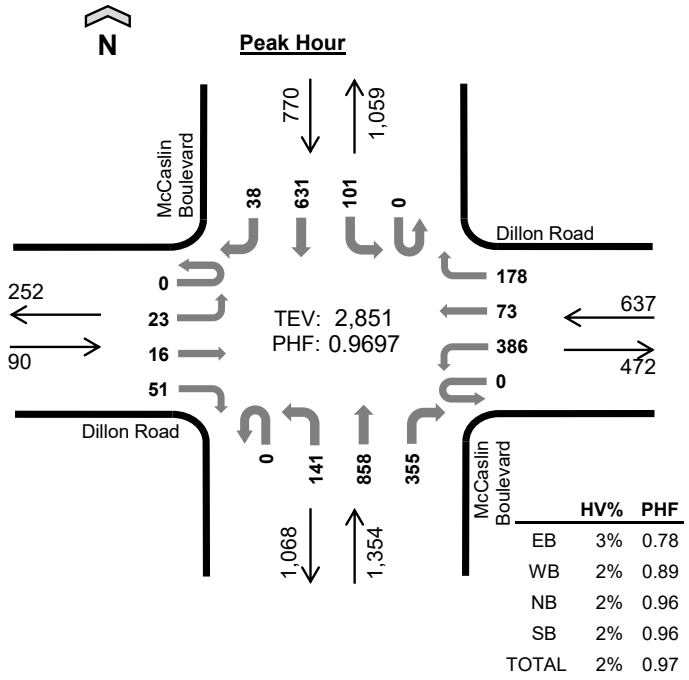
Count Summaries - Bikes

Interval Start	Centennial Parkway				Cherry Street				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**2**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	

TJ Wethington
(720) 646-1008

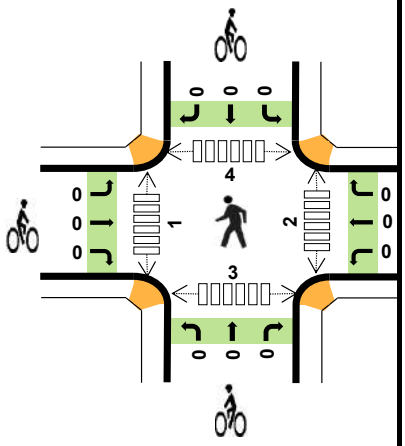
tj.wethington@idaxdata.com

McCaslin Boulevard
Dillon Road



	HV%	PHF
EB	3%	0.78
WB	2%	0.89
NB	2%	0.96
SB	2%	0.96
TOTAL	2%	0.97

Date: 3/11/2026
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



Peak Hour Count Summaries

Peak Hour Interval Start		Dillon Road Eastbound				Dillon Road Westbound				McCaslin Boulevard Northbound				McCaslin Boulevard Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	3	6	7	0	75	11	39	0	44	207	90	0	20	157	8	667	0
8:15 AM		0	8	0	10	0	115	21	42	0	34	212	75	0	26	164	10	717	0
8:30 AM		0	7	4	16	0	96	18	55	0	40	215	98	0	28	148	10	735	0
8:45 AM		0	5	6	18	0	100	23	42	0	23	224	92	0	27	162	10	732	2,851
Pk Hr	All	0	23	16	51	0	386	73	178	0	141	858	355	0	101	631	38	2,851	
	HV	0	1	0	2	0	9	1	3	0	5	13	10	0	1	13	0	58	
	HV%	-	4%	0%	4%	-	2%	1%	2%	-	4%	2%	3%	-	1%	2%	0%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	0	2	7	4	*13*	0	0	0	0	*0*	0	0	1	1	*2*
8:15 AM	1	5	6	2	*14*	0	0	0	0	*0*	1	0	0	0	*1*
8:30 AM	0	3	6	4	*13*	0	0	0	0	*0*	1	1	3	1	*6*
8:45 AM	2	3	9	4	*18*	0	0	0	0	*0*	0	0	0	1	*1*
Peak Hour	3	13	28	14	*58*	0	0	0	0	*0*	2	1	4	3	*10*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Dillon Road Eastbound				Dillon Road Westbound				McCaslin Boulevard Northbound				McCaslin Boulevard Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	4	3	9	0	38	8	25	0	18	134	51	0	9	82	5	386	0
7:15 AM	0	8	3	8	0	53	6	21	0	19	143	61	0	16	104	11	453	0
7:30 AM	0	4	2	6	0	88	7	36	0	27	159	81	0	20	134	9	573	0
7:45 AM	0	3	3	7	0	80	13	40	0	24	179	102	0	23	137	11	622	2,034
8:00 AM	**0**	**3**	**6**	**7**	**0**	**75**	**11**	**39**	**0**	**44**	**207**	**90**	**0**	**20**	**157**	**8**	**667**	**2,315**
8:15 AM	**0**	**8**	**0**	**10**	**0**	**115**	**21**	**42**	**0**	**34**	**212**	**75**	**0**	**26**	**164**	**10**	**717**	**2,579**
8:30 AM	**0**	**7**	**4**	**16**	**0**	**96**	**18**	**55**	**0**	**40**	**215**	**98**	**0**	**28**	**148**	**10**	**735**	**2,741**
8:45 AM	**0**	**5**	**6**	**18**	**0**	**100**	**23**	**42**	**0**	**23**	**224**	**92**	**0**	**27**	**162**	**10**	**732**	**2,851**
Count Total	0	42	27	81	0	645	107	300	0	229	1,473	650	0	169	1,088	74	4,885	
Pk Hr All	**0**	**23**	**16**	**51**	**0**	**386**	**73**	**178**	**0**	**141**	**858**	**355**	**0**	**101**	**631**	**38**	**2,851**	
Pk Hr HV	**0**	**1**	**0**	**2**	**0**	**9**	**1**	**3**	**0**	**5**	**13**	**10**	**0**	**1**	**13**	**0**	**58**	
Pk Hr HV%	**-**	**4%**	**0%**	**4%**	**-**	**2%**	**1%**	**2%**	**-**	**4%**	**2%**	**3%**	**-**	**1%**	**2%**	**0%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	4	4	2	*10*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	1	3	3	2	*9*	0	0	0	0	*0*	0	1	0	1	*2*
7:30 AM	2	3	9	7	*21*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	1	5	7	6	*19*	0	0	0	0	*0*	1	0	0	1	*2*
8:00 AM	**0**	**2**	**7**	**4**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**
8:15 AM	**1**	**5**	**6**	**2**	**14**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
8:30 AM	**0**	**3**	**6**	**4**	**13**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**3**	**1**	**6**
8:45 AM	**2**	**3**	**9**	**4**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
Count Total	7	28	51	31	*117*	0	0	0	0	*0*	3	2	4	5	*14*
Peak Hour	**3**	**13**	**28**	**14**	***58***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**4**	**3**	**10**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Dillon Road				Dillon Road				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	3	1	0	0	0	4	0	0	1	1	0	10	0
7:15 AM	0	0	1	0	0	2	1	0	0	1	2	0	0	1	1	0	9	0
7:30 AM	0	1	1	0	0	0	0	3	0	2	5	2	0	1	5	1	21	0
7:45 AM	0	1	0	0	0	3	0	2	0	1	3	3	0	1	4	1	19	59
8:00 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**2**	**3**	**0**	**0**	**4**	**0**	**13**	**62**
8:15 AM	**0**	**0**	**0**	**1**	**0**	**4**	**1**	**0**	**0**	**1**	**3**	**2**	**0**	**0**	**2**	**0**	**14**	**67**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**2**	**3**	**1**	**0**	**0**	**4**	**0**	**13**	**59**
8:45 AM	**0**	**1**	**0**	**1**	**0**	**2**	**0**	**1**	**0**	**0**	**5**	**4**	**0**	**1**	**3**	**0**	**18**	**58**
Count Total	0	3	2	2	0	17	3	8	0	9	27	15	0	5	24	2	117	
Pk Hr Heavy	**0**	**1**	**0**	**2**	**0**	**9**	**1**	**3**	**0**	**5**	**13**	**10**	**0**	**1**	**13**	**0**	**58**	

Count Summaries - Bikes

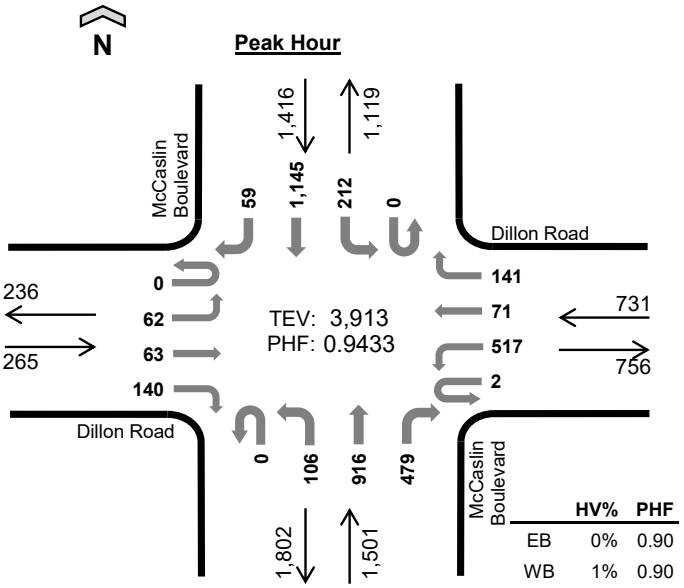
Interval Start	Dillon Road				Dillon Road				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

TJ Wethington
(720) 646-1008

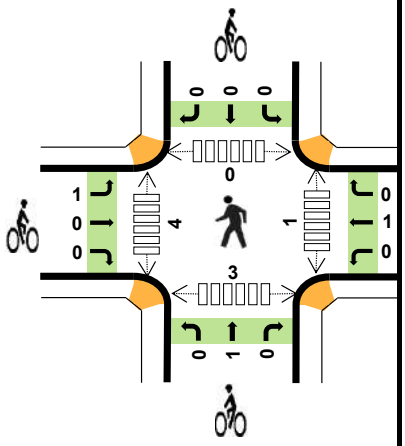
tj.wethington@idaxdata.com

McCaslin Boulevard
Dillon Road

Date: 3/11/2026
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV%	PHF
EB	0%	0.90
WB	1%	0.90
NB	1%	0.93
SB	1%	0.84
TOTAL	1%	0.94



Peak Hour Count Summaries

Peak Hour Interval Start		Dillon Road Eastbound				Dillon Road Westbound				McCaslin Boulevard Northbound				McCaslin Boulevard Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		**0**	**11**	**19**	**37**	**1**	**129**	**22**	**50**	**0**	**19**	**245**	**123**	**0**	**33**	**260**	**11**	**960**	**0**
4:30 PM		**0**	**15**	**21**	**38**	**0**	**142**	**19**	**26**	**0**	**24**	**203**	**107**	**0**	**61**	**252**	**17**	**925**	**0**
4:45 PM		**0**	**18**	**8**	**31**	**1**	**125**	**13**	**30**	**0**	**34**	**251**	**119**	**0**	**58**	**286**	**17**	**991**	**0**
5:00 PM		**0**	**18**	**15**	**34**	**0**	**121**	**17**	**35**	**0**	**29**	**217**	**130**	**0**	**60**	**347**	**14**	**1,037**	**3,913**
Pk Hr	All	**0**	**62**	**63**	**140**	**2**	**517**	**71**	**141**	**0**	**106**	**916**	**479**	**0**	**212**	**1,145**	**59**	**3,913**	
	HV	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**3**	**0**	**0**	**6**	**7**	**0**	**3**	**11**	**1**	**36**	
	HV%	-	**2%**	**0%**	**0%**	**0%**	**1%**	**0%**	**2%**	-	**0%**	**1%**	**1%**	-	**1%**	**1%**	**2%**	**1%**	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:15 PM	**0**	**1**	**5**	**6**	***12***	**1**	**0**	**0**	**0**	***1***	**1**	**1**	**0**	**1**	***3***
4:30 PM	**0**	**2**	**3**	**3**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***
4:45 PM	**1**	**2**	**2**	**3**	***8***	**0**	**0**	**1**	**0**	***1***	**0**	**1**	**0**	**1**	***2***
5:00 PM	**0**	**2**	**3**	**3**	***8***	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**0**	**1**	***2***
Peak Hour	**1**	**7**	**13**	**15**	***36***	**1**	**1**	**1**	**0**	***3***	**1**	**4**	**0**	**3**	***8***

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Dillon Road				Dillon Road				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	11	22	57	0	131	17	50	0	22	219	155	0	41	253	14	992	0
4:15 PM	**0**	**11**	**19**	**37**	**1**	**129**	**22**	**50**	**0**	**19**	**245**	**123**	**0**	**33**	**260**	**11**	**960**	**0**
4:30 PM	**0**	**15**	**21**	**38**	**0**	**142**	**19**	**26**	**0**	**24**	**203**	**107**	**0**	**61**	**252**	**17**	**925**	**0**
4:45 PM	**0**	**18**	**8**	**31**	**1**	**125**	**13**	**30**	**0**	**34**	**251**	**119**	**0**	**58**	**286**	**17**	**991**	**3,868**
5:00 PM	**0**	**18**	**15**	**34**	**0**	**121**	**17**	**35**	**0**	**29**	**217**	**130**	**0**	**60**	**347**	**14**	**1,037**	**3,913**
5:15 PM	0	18	13	28	0	118	6	31	2	24	209	127	0	57	278	20	931	3,884
5:30 PM	0	10	6	24	0	110	21	33	1	26	225	136	0	57	218	16	883	3,842
5:45 PM	0	24	13	23	0	114	14	30	0	21	217	133	0	46	188	13	836	3,687
Count Total	0	125	117	272	2	990	129	285	3	199	1,786	1,030	0	413	2,082	122	7,555	
Pk Hr All	**0**	**62**	**63**	**140**	**2**	**517**	**71**	**141**	**0**	**106**	**916**	**479**	**0**	**212**	**1,145**	**59**	**3,913**	
Pk Hr HV	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**3**	**0**	**0**	**6**	**7**	**0**	**3**	**11**	**1**	**36**	
Pk Hr HV%	**-**	**2%**	**0%**	**0%**	**0%**	**1%**	**0%**	**2%**	**-**	**0%**	**1%**	**1%**	**-**	**1%**	**1%**	**2%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	1	2	3	4	*10*	0	0	0	0	*0*	0	1	0	0	*1*
4:15 PM	**0**	**1**	**5**	**6**	**12**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**1**	**3**
4:30 PM	**0**	**2**	**3**	**3**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
4:45 PM	**1**	**2**	**2**	**3**	**8**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**2**
5:00 PM	**0**	**2**	**3**	**3**	**8**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**2**
5:15 PM	0	3	2	3	*8*	0	0	0	0	*0*	0	2	2	1	*5*
5:30 PM	0	1	1	4	*6*	0	1	0	0	*1*	0	2	0	2	*4*
5:45 PM	1	0	1	3	*5*	0	0	0	0	*0*	0	3	1	0	*4*
Count Total	3	13	20	29	*65*	1	2	1	0	*4*	1	12	3	6	*22*
Peak Hour	**1**	**7**	**13**	**15**	***36***	**1**	**1**	**1**	**0**	***3***	**1**	**4**	**0**	**3**	**8**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Dillon Road				Dillon Road				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	0	2	0	0	3	0	0	0	3	1	10	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**6**	**0**	**12**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**2**	**0**	**2**	**1**	**0**	**8**	**0**
4:45 PM	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**1**	**8**	**38**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**2**	**0**	**0**	**3**	**0**	**8**	**36**
5:15 PM	0	0	0	0	0	3	0	0	0	0	1	1	0	0	3	0	8	32
5:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	3	0	6	30
5:45 PM	0	0	0	1	0	0	0	0	0	0	1	0	0	2	1	0	5	27
Count Total	0	1	1	1	0	8	0	5	0	1	11	8	0	6	21	2	65	
Pk Hr Heavy	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**3**	**0**	**0**	**6**	**7**	**0**	**3**	**11**	**1**	**36**	

Count Summaries - Bikes

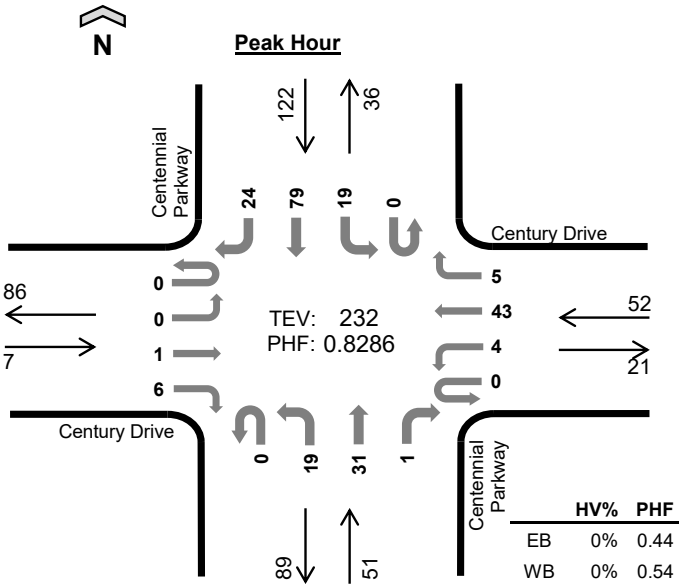
Interval Start	Dillon Road				Dillon Road				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0	4	
Pk Hr Bike	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	

TJ Wethington
(720) 646-1008

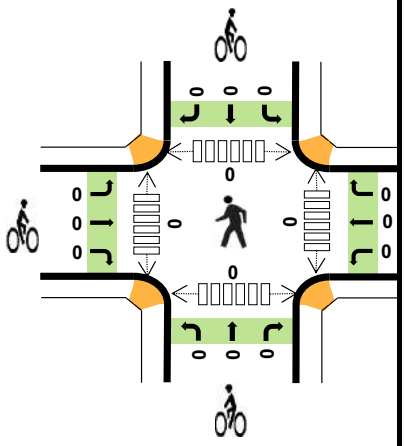
tj.wethington@idaxdata.com

Centennial Parkway
Century Drive

Date: 3/11/2026
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV%	PHF
EB	0%	0.44
WB	0%	0.54
NB	4%	0.71
SB	1%	0.80
TOTAL	1%	0.83



Peak Hour Count Summaries

Peak Hour Interval Start	Century Drive Eastbound				Century Drive Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:45 AM	0	0	1	3	0	1	8	1	0	11	6	1	0	4	25	9	70	0
8:00 AM	0	0	0	2	0	1	7	1	0	3	7	0	0	3	17	3	44	0
8:15 AM	0	0	0	0	0	0	23	1	0	0	10	0	0	7	14	6	61	0
8:30 AM	0	0	0	1	0	2	5	2	0	5	8	0	0	5	23	6	57	232
Pk Hr All	0	0	1	6	0	4	43	5	0	19	31	1	0	19	79	24	232	
Pk Hr HV	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	3	
Pk Hr HV%	-	-	0%	0%	-	0%	0%	0%	-	0%	6%	0%	-	5%	0%	0%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	0	2	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Century Drive				Century Drive				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	1	3	0	0	1	1	1	0	3	4	0	14	0
7:15 AM	0	0	0	1	0	0	1	1	0	3	7	2	0	3	5	2	25	0
7:30 AM	0	0	0	0	0	0	2	1	0	4	1	1	0	4	12	1	26	0
7:45 AM	**0**	**0**	**1**	**3**	**0**	**1**	**8**	**1**	**0**	**11**	**6**	**1**	**0**	**4**	**25**	**9**	**70**	**135**
8:00 AM	**0**	**0**	**0**	**2**	**0**	**1**	**7**	**1**	**0**	**3**	**7**	**0**	**0**	**3**	**17**	**3**	**44**	**165**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**1**	**0**	**0**	**10**	**0**	**0**	**7**	**14**	**6**	**61**	**201**
8:30 AM	**0**	**0**	**0**	**1**	**0**	**2**	**5**	**2**	**0**	**5**	**8**	**0**	**0**	**5**	**23**	**6**	**57**	**232**
8:45 AM	0	1	0	1	0	1	6	3	0	5	8	0	0	6	9	5	45	207
Count Total	0	1	1	8	0	6	55	10	0	32	48	5	0	35	109	32	342	
Pk Hr All	**0**	**0**	**1**	**6**	**0**	**4**	**43**	**5**	**0**	**19**	**31**	**1**	**0**	**19**	**79**	**24**	**232**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**3**	
Pk Hr HV%	**-**	**-**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**6%**	**0%**	**-**	**5%**	**0%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	1	*1*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	1	0	0	*2*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	1	*1*	0	0	1	0	*1*	0	0	0	0	*0*
Count Total	0	0	2	2	*4*	0	0	1	0	*1*	1	1	0	1	*3*
Peak Hour	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Century Drive				Century Drive				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**2**	**3**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
Count Total	0	0	0	0	0	0	0	0	0	0	2	0	0	1	1	0	4	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**3**	

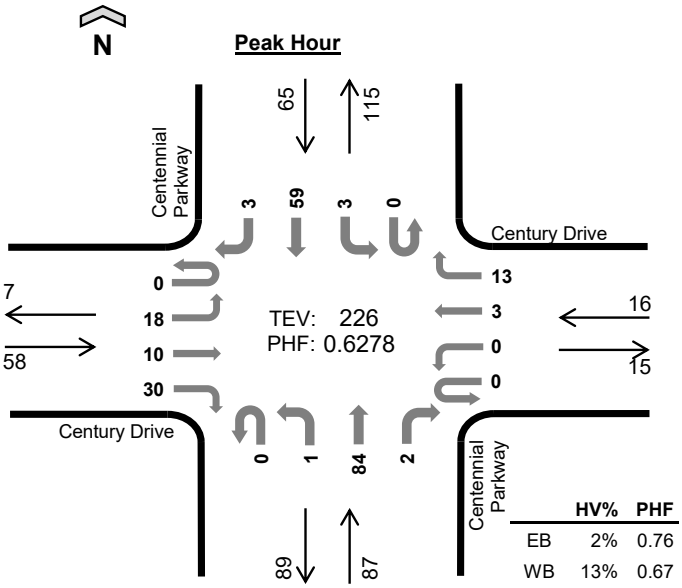
Count Summaries - Bikes

Interval Start	Century Drive				Century Drive				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
Count Total	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

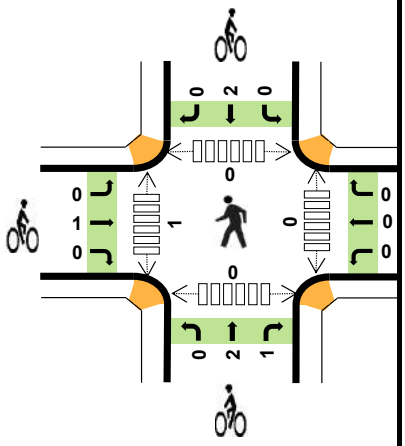
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Centennial Parkway
Century Drive

Date: 3/11/2026
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV%	PHF
EB	2%	0.76
WB	13%	0.67
NB	0%	0.48
SB	3%	0.74
TOTAL	2%	0.63



Peak Hour Count Summaries

Peak Hour Interval Start	Century Drive Eastbound				Century Drive Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM	0	1	6	5	0	0	1	5	0	0	16	1	0	2	15	0	52	0
4:30 PM	0	9	2	4	0	0	1	2	0	1	13	0	0	0	10	0	42	0
4:45 PM	0	7	0	12	0	0	1	3	0	0	44	1	0	1	19	2	90	0
5:00 PM	0	1	2	9	0	0	0	3	0	0	11	0	0	0	15	1	42	226
Pk Hr All	0	18	10	30	0	0	3	13	0	1	84	2	0	3	59	3	226	
Pk Hr HV	0	0	1	0	0	0	1	1	0	0	0	0	0	1	1	0	5	
Pk Hr HV%	-	0%	10%	0%	-	-	33%	8%	-	0%	0%	0%	-	33%	2%	0%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:15 PM	1	1	0	1	*3*	0	0	1	2	*3*	0	1	0	0	*1*
4:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	1	0	1	*2*	1	0	2	0	*3*	0	0	0	0	*0*
5:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	1	2	0	2	*5*	1	0	3	2	*6*	0	1	0	0	*1*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Century Drive Eastbound				Century Drive Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	5	1	3	0	2	1	2	2	0	15	0	0	0	10	0	41	0
4:15 PM	**0**	**1**	**6**	**5**	**0**	**0**	**1**	**5**	**0**	**0**	**16**	**1**	**0**	**2**	**15**	**0**	**52**	**0**
4:30 PM	**0**	**9**	**2**	**4**	**0**	**0**	**1**	**2**	**0**	**1**	**13**	**0**	**0**	**0**	**10**	**0**	**42**	**0**
4:45 PM	**0**	**7**	**0**	**12**	**0**	**0**	**1**	**3**	**0**	**0**	**44**	**1**	**0**	**1**	**19**	**2**	**90**	**225**
5:00 PM	**0**	**1**	**2**	**9**	**0**	**0**	**0**	**3**	**0**	**0**	**11**	**0**	**0**	**0**	**15**	**1**	**42**	**226**
5:15 PM	0	4	2	9	0	2	0	3	0	1	10	1	0	2	7	0	41	215
5:30 PM	0	1	1	10	0	0	1	5	0	2	3	1	0	0	6	0	30	203
5:45 PM	0	4	1	3	0	0	1	1	0	1	7	0	0	1	5	0	24	137
Count Total	0	32	15	55	0	4	6	24	2	5	119	4	0	6	87	3	362	
Pk Hr All	**0**	**18**	**10**	**30**	**0**	**0**	**3**	**13**	**0**	**1**	**84**	**2**	**0**	**3**	**59**	**3**	**226**	
Pk Hr HV	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**5**	
Pk Hr HV%	**-**	**0%**	**10%**	**0%**	**-**	**-**	**33%**	**8%**	**-**	**0%**	**0%**	**0%**	**-**	**33%**	**2%**	**0%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	0	0	*0*	0	0	0	2	*2*	0	2	0	0	*2*
4:15 PM	**1**	**1**	**0**	**1**	**3**	**0**	**0**	**1**	**2**	**3**	**0**	**1**	**0**	**0**	**1**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**1**	**0**	**1**	**2**	**1**	**0**	**2**	**0**	**3**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	1	*2*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	2	0	*2*	0	1	0	0	*1*
Count Total	1	2	0	2	*5*	1	0	5	4	*10*	0	5	0	1	*6*
Peak Hour	**1**	**2**	**0**	**2**	***5***	**1**	**0**	**3**	**2**	***6***	**0**	**1**	**0**	**0**	**1**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Century Drive				Century Drive				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**5**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	1	0	0	0	1	1	0	0	0	0	0	1	1	0	5	
Pk Hr Heavy	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**5**	

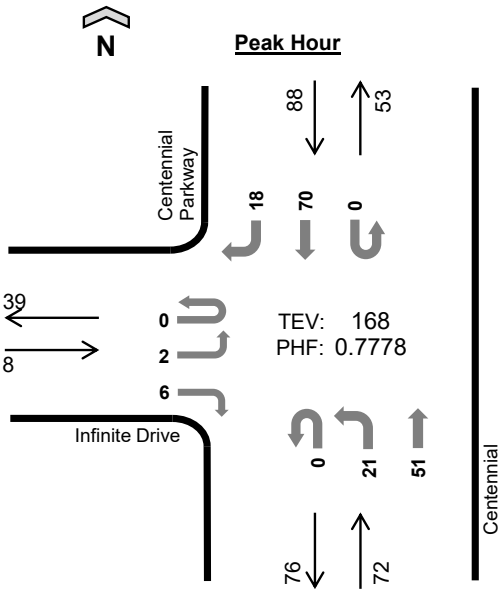
Count Summaries - Bikes

Interval Start	Century Drive				Century Drive				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**3**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**3**	**8**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
Count Total	0	0	1	0	0	0	0	0	0	0	4	1	0	0	4	0	10	
Pk Hr Bike	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**2**	**0**	**6**	

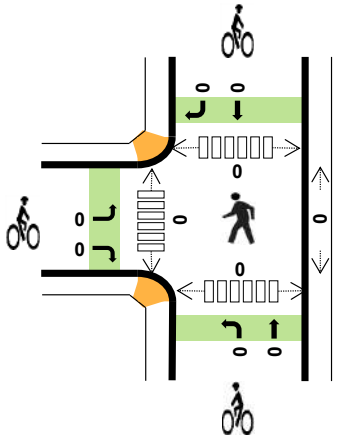
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Centennial Parkway
Infinite Drive

Date: 3/11/2026
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV%	PHF
EB	0%	0.50
WB	--	--
NB	3%	0.75
SB	0%	0.76
TOTAL	1%	0.78



Peak Hour Count Summaries

Peak Hour Interval Start		Infinite Drive				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:45 AM		**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	**19**	**0**	**0**	**0**	**24**	**5**	**54**	**0**
8:00 AM		**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**5**	**10**	**0**	**0**	**0**	**16**	**3**	**36**	**0**
8:15 AM		**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**11**	**0**	**0**	**0**	**12**	**3**	**32**	**0**
8:30 AM		**0**	**1**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**6**	**11**	**0**	**0**	**0**	**18**	**7**	**46**	**168**
Pk Hr	All	**0**	**2**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**21**	**51**	**0**	**0**	**0**	**70**	**18**	**168**	
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	
	HV%	-	**0%**	-	**0%**	-	-	-	-	-	**0%**	**4%**	-	-	-	**0%**	**0%**	**1%**	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:45 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Peak Hour	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Infinite Drive				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	0	0	3	2	0	1	0	3	1	11	0
7:15 AM	0	0	0	0	0	0	0	0	0	2	12	0	0	0	7	0	21	0
7:30 AM	0	0	0	1	0	0	0	0	0	3	5	0	0	0	11	1	21	0
7:45 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	**19**	**0**	**0**	**0**	**24**	**5**	**54**	**107**
8:00 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**5**	**10**	**0**	**0**	**0**	**16**	**3**	**36**	**132**
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**11**	**0**	**0**	**0**	**12**	**3**	**32**	**143**
8:30 AM	**0**	**1**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**6**	**11**	**0**	**0**	**0**	**18**	**7**	**46**	**168**
8:45 AM	0	1	0	1	0	0	0	0	0	8	16	0	0	0	9	2	37	151
Count Total	0	4	0	8	0	0	0	0	0	37	86	0	1	0	100	22	258	
Pk Hr All	**0**	**2**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**21**	**51**	**0**	**0**	**0**	**70**	**18**	**168**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	
Pk Hr HV%	**-**	**0%**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**4%**	**-**	**-**	**-**	**0%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	1	0	0	*2*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	1	1	*2*	0	0	1	0	*1*	0	0	0	0	*0*
Count Total	0	0	3	1	*4*	0	0	1	0	*1*	1	1	0	0	*2*
Peak Hour	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Infinite Drive				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	4
Count Total	0	0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	4	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	

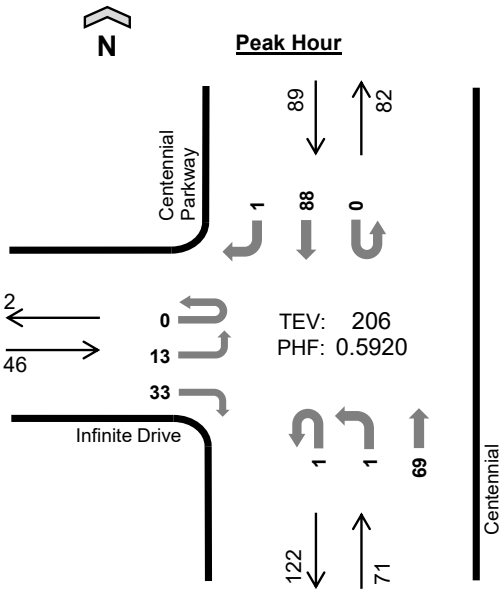
Count Summaries - Bikes

Interval Start	Infinite Drive				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
Count Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

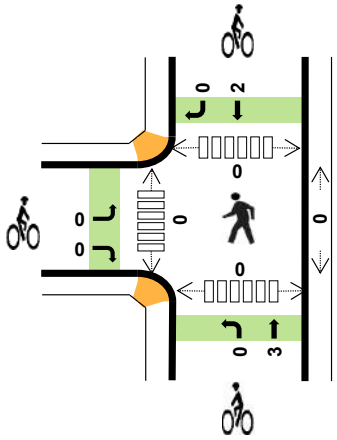
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Centennial Parkway
Infinite Drive

Date: 3/11/2026
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV%	PHF
EB	0%	0.82
WB	--	--
NB	0%	0.42
SB	1%	0.72
TOTAL	0%	0.59



Peak Hour Count Summaries

Peak Hour Interval Start		Infinite Drive				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	3	0	7	0	0	0	0	1	1	11	0	0	0	20	0	43	0
4:30 PM		0	1	0	10	0	0	0	0	0	0	11	0	0	0	13	0	35	0
4:45 PM		0	5	0	9	0	0	0	0	0	0	42	0	0	0	30	1	87	0
5:00 PM		0	4	0	7	0	0	0	0	0	0	5	0	0	0	25	0	41	206
Pk Hr	All	0	13	0	33	0	0	0	0	1	1	69	0	0	0	88	1	206	
	HV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
	HV%	-	0%	-	0%	-	-	-	-	0%	0%	0%	-	-	-	1%	0%	0%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:15 PM	0	0	0	0	*0*	0	0	1	2	*3*	0	0	0	0	*0*
4:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	0	0	1	*1*	0	0	2	0	*2*	0	0	0	0	*0*
5:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	0	0	1	*1*	0	0	3	2	*5*	0	0	0	0	*0*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Infinite Drive				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	8	0	3	0	0	0	0	0	0	9	0	0	0	17	0	37	0
4:15 PM	**0**	**3**	**0**	**7**	**0**	**0**	**0**	**0**	**1**	**1**	**11**	**0**	**0**	**0**	**20**	**0**	**43**	**0**
4:30 PM	**0**	**1**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**13**	**0**	**35**	**0**
4:45 PM	**0**	**5**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**42**	**0**	**0**	**0**	**30**	**1**	**87**	**202**
5:00 PM	**0**	**4**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**25**	**0**	**41**	**206**
5:15 PM	0	1	0	1	0	0	0	0	0	0	12	0	0	0	18	0	32	195
5:30 PM	0	3	0	1	0	0	0	0	0	0	2	0	0	0	16	0	22	182
5:45 PM	0	3	0	2	0	0	0	0	0	0	5	0	0	0	7	1	18	113
Count Total	0	28	0	40	0	0	0	0	1	1	97	0	0	0	146	2	315	
Pk Hr All	**0**	**13**	**0**	**33**	**0**	**0**	**0**	**0**	**1**	**1**	**69**	**0**	**0**	**0**	**88**	**1**	**206**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	
Pk Hr HV%	**-**	**0%**	**-**	**0%**	**-**	**-**	**-**	**-**	**0%**	**0%**	**0%**	**-**	**-**	**-**	**1%**	**0%**	**0%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	0	0	*0*	0	0	0	2	*2*	0	0	0	0	*0*
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**3**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
5:45 PM	0	0	0	0	*0*	0	0	2	0	*2*	1	0	0	0	*1*
Count Total	0	0	0	1	*1*	0	0	5	4	*9*	3	0	0	0	*3*
Peak Hour	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**3**	**2**	***5***	**0**	**0**	**0**	**0**	**0**

TJ Wethington
(720) 646-1008

tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Infinite Drive				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**1**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	

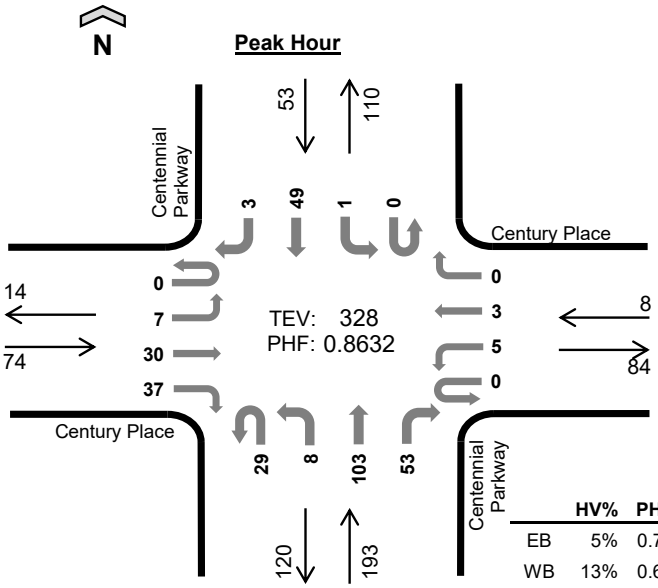
Count Summaries - Bikes

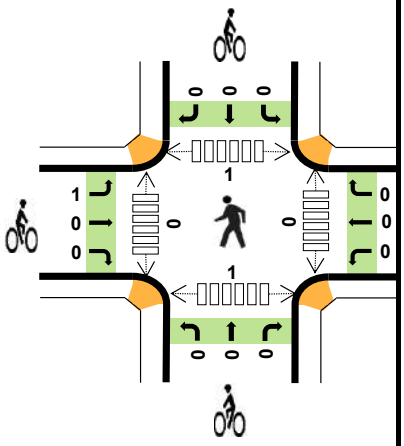
Interval Start	Infinite Drive				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**3**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**7**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
Count Total	0	0	0	0	0	0	0	0	0	0	5	0	0	0	4	0	9	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**5**	

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Centennial Parkway
Century Place

Date: 3/11/2026
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV%	PHF
EB	5%	0.77
WB	13%	0.67
NB	2%	0.98
SB	2%	0.58
TOTAL	3%	0.86

Peak Hour Count Summaries

Peak Hour Interval Start	Century Place Eastbound				Century Place Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM	0	4	2	9	0	1	1	0	9	1	26	12	0	0	6	1	72	0
8:15 AM	0	1	12	11	0	2	0	0	12	2	22	11	0	0	8	2	83	0
8:30 AM	0	1	7	12	0	2	1	0	3	5	26	15	0	1	22	0	95	0
8:45 AM	0	1	9	5	0	0	1	0	5	0	29	15	0	0	13	0	78	328
Pk Hr All	0	7	30	37	0	5	3	0	29	8	103	53	0	1	49	3	328	
Pk Hr HV	0	0	0	4	0	1	0	0	0	0	2	1	0	0	1	0	9	
Pk Hr HV%	-	0%	0%	11%	-	20%	0%	-	0%	0%	2%	2%	-	0%	2%	0%	3%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	2	0	0	0	*2*	0	0	0	0	*0*	0	0	1	0	*1*
8:30 AM	1	1	2	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	1	0	1	0	*2*	1	0	0	0	*1*	0	0	0	1	*1*
Peak Hour	4	1	3	1	*9*	1	0	0	0	*1*	0	0	1	1	*2*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Century Place Eastbound				Century Place Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	1	0	1	1	0	2	3	11	5	0	0	6	0	31	0
7:15 AM	0	1	1	2	0	0	2	0	3	0	22	3	0	1	3	0	38	0
7:30 AM	0	1	4	6	0	0	0	0	5	2	15	5	0	0	4	0	42	0
7:45 AM	0	2	4	5	0	2	2	0	6	2	29	11	0	0	12	1	76	187
8:00 AM	**0**	**4**	**2**	**9**	**0**	**1**	**1**	**0**	**9**	**1**	**26**	**12**	**0**	**0**	**6**	**1**	**72**	**228**
8:15 AM	**0**	**1**	**12**	**11**	**0**	**2**	**0**	**0**	**12**	**2**	**22**	**11**	**0**	**0**	**8**	**2**	**83**	**273**
8:30 AM	**0**	**1**	**7**	**12**	**0**	**2**	**1**	**0**	**3**	**5**	**26**	**15**	**0**	**1**	**22**	**0**	**95**	**326**
8:45 AM	**0**	**1**	**9**	**5**	**0**	**0**	**1**	**0**	**5**	**0**	**29**	**15**	**0**	**0**	**13**	**0**	**78**	**328**
Count Total	0	12	39	51	0	8	8	0	45	15	180	77	0	2	74	4	515	
Pk Hr All	**0**	**7**	**30**	**37**	**0**	**5**	**3**	**0**	**29**	**8**	**103**	**53**	**0**	**1**	**49**	**3**	**328**	
Pk Hr HV	**0**	**0**	**0**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**9**	
Pk Hr HV%	**-**	**0%**	**0%**	**11%**	**-**	**20%**	**0%**	**-**	**0%**	**0%**	**2%**	**2%**	**-**	**0%**	**2%**	**0%**	**3%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	2	0	1	*3*	0	0	0	0	*0*	1	0	0	0	*1*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
7:30 AM	4	0	0	0	*4*	0	0	1	0	*1*	0	0	0	0	*0*
7:45 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
8:30 AM	**1**	**1**	**2**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**1**	**0**	**1**	**0**	**2**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**
Count Total	9	3	3	2	*17*	1	0	1	0	*2*	2	0	1	1	*4*
Peak Hour	**4**	**1**	**3**	**1**	***9***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**1**	**1**	**2**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Century Place				Century Place				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	3	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	0
7:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	8
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
8:15 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**7**
8:30 AM	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**5**	**8**
8:45 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**9**
Count Total	0	0	0	9	0	2	1	0	0	0	2	1	0	0	2	0	17	
Pk Hr Heavy	**0**	**0**	**0**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**9**	

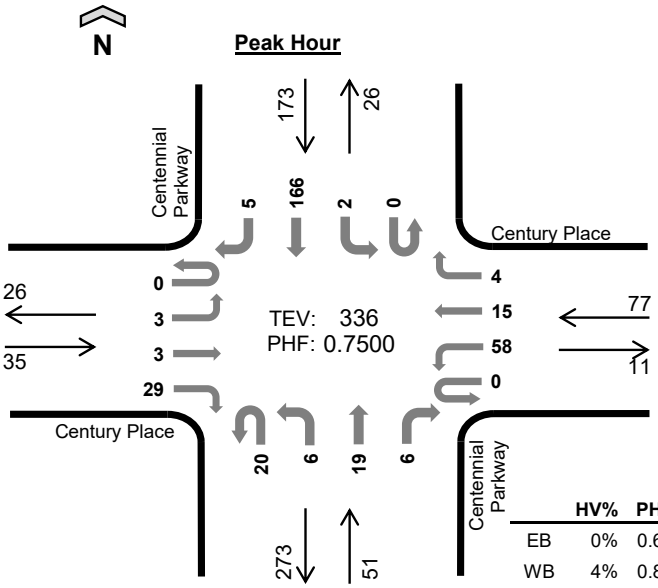
Count Summaries - Bikes

Interval Start	Century Place				Century Place				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
Count Total	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	
Pk Hr Bike	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	

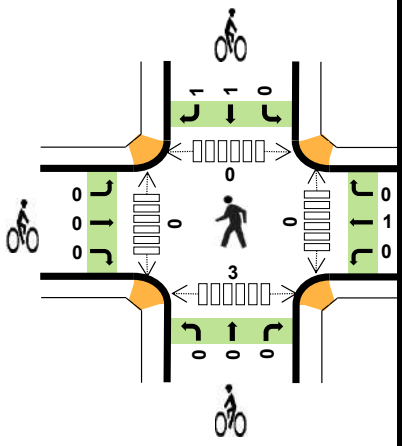
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Centennial Parkway
Century Place

Date: 3/11/2026
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV%	PHF
EB	0%	0.67
WB	4%	0.84
NB	0%	0.85
SB	1%	0.59
TOTAL	1%	0.75



Peak Hour Count Summaries

Peak Hour Interval Start		Century Place Eastbound				Century Place Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	0	1	4	0	13	3	1	6	2	6	1	0	0	26	3	66	0
4:30 PM		0	2	1	6	0	11	8	1	4	2	5	2	0	0	29	2	73	0
4:45 PM		0	0	0	8	0	15	1	1	6	2	5	1	0	1	72	0	112	0
5:00 PM		0	1	1	11	0	19	3	1	4	0	3	2	0	1	39	0	85	336
Pk Hr	All	0	3	3	29	0	58	15	4	20	6	19	6	0	2	166	5	336	
	HV	0	0	0	0	0	1	0	2	0	0	0	0	0	0	2	0	5	
	HV%	-	0%	0%	0%	-	2%	0%	50%	0%	0%	0%	0%	-	0%	1%	0%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:15 PM	0	0	0	0	*0*	0	1	0	1	*2*	0	0	0	0	*0*
4:30 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	2	*2*
4:45 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	1	*1*
5:00 PM	0	1	0	2	*3*	0	0	0	1	*1*	0	0	0	0	*0*
Peak Hour	0	3	0	2	*5*	0	1	0	2	*3*	0	0	0	3	*3*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Century Place Eastbound				Century Place Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	3	6	0	10	4	0	1	2	3	2	0	0	34	1	66	0
4:15 PM	**0**	**0**	**1**	**4**	**0**	**13**	**3**	**1**	**6**	**2**	**6**	**1**	**0**	**0**	**26**	**3**	**66**	**0**
4:30 PM	**0**	**2**	**1**	**6**	**0**	**11**	**8**	**1**	**4**	**2**	**5**	**2**	**0**	**0**	**29**	**2**	**73**	**0**
4:45 PM	**0**	**0**	**0**	**8**	**0**	**15**	**1**	**1**	**6**	**2**	**5**	**1**	**0**	**1**	**72**	**0**	**112**	**317**
5:00 PM	**0**	**1**	**1**	**11**	**0**	**19**	**3**	**1**	**4**	**0**	**3**	**2**	**0**	**1**	**39**	**0**	**85**	**336**
5:15 PM	0	0	0	10	0	14	3	0	5	0	5	1	0	0	20	3	61	331
5:30 PM	0	0	1	3	0	5	0	0	1	0	1	1	0	0	22	0	34	292
5:45 PM	0	1	0	1	0	10	1	0	1	2	1	1	0	1	10	0	29	209
Count Total	0	4	7	49	0	97	23	4	28	10	29	11	0	3	252	9	526	
Pk Hr All	**0**	**3**	**3**	**29**	**0**	**58**	**15**	**4**	**20**	**6**	**19**	**6**	**0**	**2**	**166**	**5**	**336**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	
Pk Hr HV%	**-**	**0%**	**0%**	**0%**	**-**	**2%**	**0%**	**50%**	**0%**	**0%**	**0%**	**0%**	**-**	**0%**	**1%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	1	0	*1*	2	0	0	2	*4*	0	1	1	0	*2*
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**
4:45 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
5:00 PM	**0**	**1**	**0**	**2**	**3**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	0	0	*2*
Count Total	0	3	1	3	*7*	2	1	0	4	*7*	2	1	1	3	*7*
Peak Hour	**0**	**3**	**0**	**2**	***5***	**0**	**1**	**0**	**2**	***3***	**0**	**0**	**0**	**3**	**3**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Century Place				Century Place				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	**5**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	0	0	0	0	1	0	2	0	0	0	1	0	0	3	0	7	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	

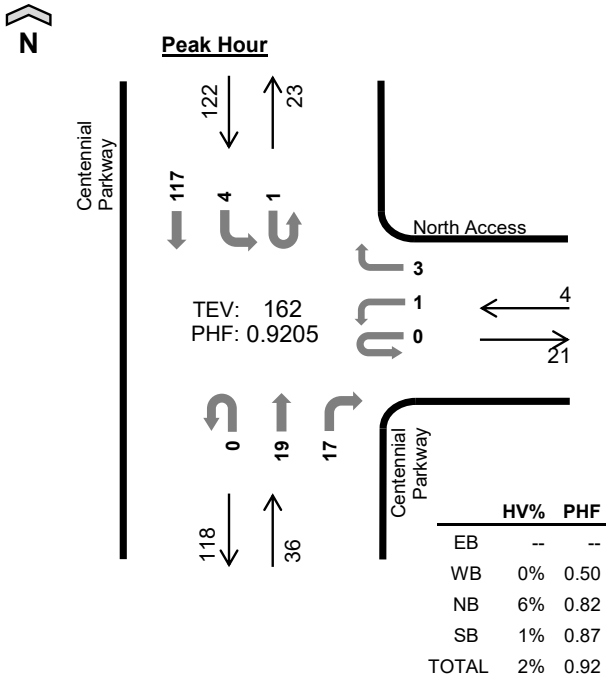
Count Summaries - Bikes

Interval Start	Century Place				Century Place				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	4	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**3**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	2	0	0	0	1	0	0	0	0	0	0	0	3	1	7	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**3**	

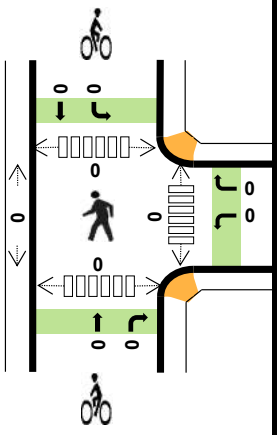
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Centennial Parkway
North Access

Date: 3/11/2026
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV%	PHF
EB	--	--
WB	0%	0.50
NB	6%	0.82
SB	1%	0.87
TOTAL	2%	0.92



Peak Hour Count Summaries

Peak Hour Interval Start		n/a				North Access				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:45 AM		0	0	0	0	0	0	0	0	0	0	4	3	0	0	35	0	42	0
8:00 AM		0	0	0	0	0	0	0	1	0	0	6	2	0	3	27	0	39	0
8:15 AM		0	0	0	0	0	0	0	1	0	0	6	5	0	0	25	0	37	0
8:30 AM		0	0	0	0	0	1	0	1	0	0	3	7	1	1	30	0	44	162
Pk Hr	All	0	0	0	0	0	1	0	3	0	0	19	17	1	4	117	0	162	
	HV	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	
	HV%	-	-	-	-	-	0%	-	0%	-	-	11%	0%	0%	0%	1%	-	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	0	2	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	n/a				North Access				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	7	0	9	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	3	4	0	0	10	0	17	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	20	0	22	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**3**	**0**	**0**	**35**	**0**	**42**	**90**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**6**	**2**	**0**	**3**	**27**	**0**	**39**	**120**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**6**	**5**	**0**	**0**	**25**	**0**	**37**	**140**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**3**	**7**	**1**	**1**	**30**	**0**	**44**	**162**
8:45 AM	0	0	0	0	0	0	0	1	0	0	4	9	0	0	21	0	35	155
Count Total	0	0	0	0	0	1	0	4	0	0	28	31	1	5	175	0	245	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**0**	**0**	**19**	**17**	**1**	**4**	**117**	**0**	**162**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**11%**	**0%**	**0%**	**0%**	**1%**	**-**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	0	0	*2*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	0	2	2	*4*	0	0	0	0	*0*	2	1	0	0	*3*
Peak Hour	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	n/a				North Access				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	**2**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**3**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
Count Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	

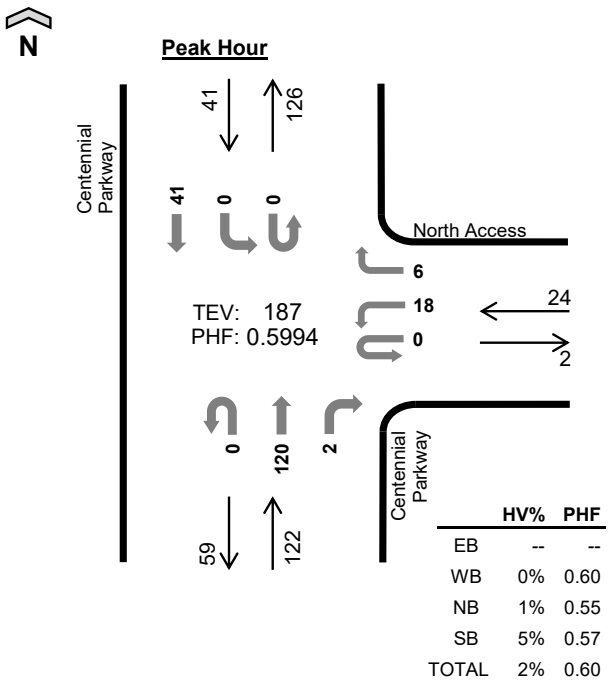
Count Summaries - Bikes

Interval Start	n/a				North Access				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

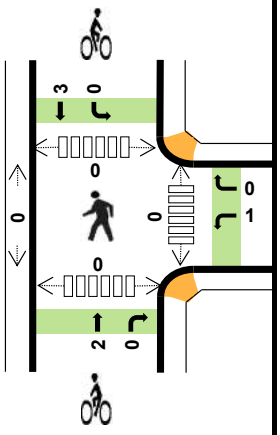
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Centennial Parkway
North Access

Date: 3/11/2026
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV%	PHF
EB	--	--
WB	0%	0.60
NB	1%	0.55
SB	5%	0.57
TOTAL	2%	0.60



Peak Hour Count Summaries

Peak Hour Interval Start		n/a				North Access				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	2	0	3	0	0	22	1	0	0	8	0	36	0
4:15 PM		0	0	0	0	0	9	0	1	0	0	20	1	0	0	8	0	39	0
4:30 PM		0	0	0	0	0	3	0	1	0	0	23	0	0	0	7	0	34	0
4:45 PM		0	0	0	0	0	4	0	1	0	0	55	0	0	0	18	0	78	187
Pk Hr	All	0	0	0	0	0	18	0	6	0	0	120	2	0	0	41	0	187	
	HV	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	
	HV%	-	-	-	-	-	0%	-	0%	-	-	1%	0%	-	-	5%	-	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	0	0	*0*	0	0	0	2	*2*	0	0	0	0	*0*
4:15 PM	0	0	0	1	*1*	0	1	0	1	*2*	0	0	0	0	*0*
4:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	0	1	1	*2*	0	0	2	0	*2*	0	0	0	0	*0*
Peak Hour	0	0	1	2	*3*	0	1	2	3	*6*	0	0	0	0	*0*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	n/a				North Access				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	**0**	**0**	**22**	**1**	**0**	**0**	**8**	**0**	**36**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**1**	**0**	**0**	**20**	**1**	**0**	**0**	**8**	**0**	**39**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**23**	**0**	**0**	**0**	**7**	**0**	**34**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**1**	**0**	**0**	**55**	**0**	**0**	**0**	**18**	**0**	**78**	**187**
5:00 PM	0	0	0	0	0	6	0	1	0	0	14	1	0	0	10	0	32	183
5:15 PM	0	0	0	0	0	2	0	1	0	0	16	1	0	0	7	0	27	171
5:30 PM	0	0	0	0	0	1	0	1	0	0	8	0	0	0	5	0	15	152
5:45 PM	0	0	0	0	0	1	0	0	0	0	13	0	0	0	5	0	19	93
Count Total	0	0	0	0	0	28	0	9	0	0	171	4	0	0	68	0	280	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**18**	**0**	**6**	**0**	**0**	**120**	**2**	**0**	**0**	**41**	**0**	**187**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**3**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**1%**	**0%**	**-**	**-**	**5%**	**-**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**
4:15 PM	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	2	0	*2*	2	1	0	0	*3*
Count Total	0	0	1	2	*3*	0	1	4	3	*8*	2	2	0	0	*4*
Peak Hour	**0**	**0**	**1**	**2**	***3***	**0**	**1**	**2**	**3**	***6***	**0**	**0**	**0**	**0**	**0**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	n/a				North Access				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	**3**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**3**	

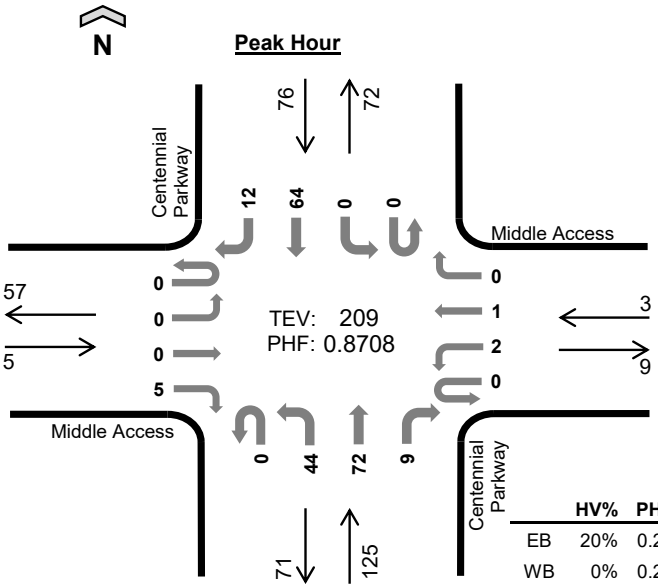
Count Summaries - Bikes

Interval Start	n/a				North Access				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**6**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
Count Total	0	0	0	0	0	1	0	0	0	0	4	0	0	0	3	0	8	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**6**	

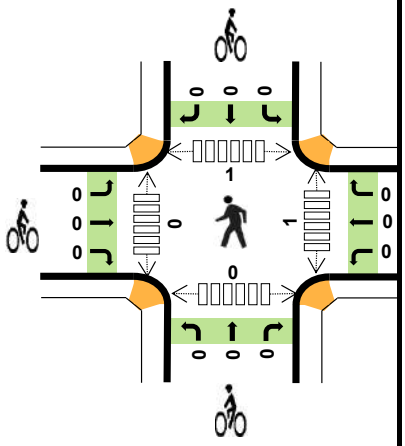
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Centennial Parkway
Middle Access

Date: 3/11/2026
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV%	PHF
EB	20%	0.25
WB	0%	0.25
NB	2%	0.89
SB	0%	0.76
TOTAL	1%	0.87



Peak Hour Count Summaries

Peak Hour Interval Start	Middle Access Eastbound				Middle Access Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:45 AM	0	0	0	0	0	0	0	0	0	10	24	1	0	0	22	3	60	0
8:00 AM	0	0	0	0	0	0	0	0	0	14	15	5	0	0	13	5	52	0
8:15 AM	0	0	0	0	0	0	0	0	0	7	16	3	0	0	10	2	38	0
8:30 AM	0	0	0	5	0	2	1	0	0	13	17	0	0	0	19	2	59	209
Pk Hr All	0	0	0	5	0	2	1	0	0	44	72	9	0	0	64	12	209	
Pk Hr HV	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	3	
Pk Hr HV%	-	-	-	20%	-	0%	0%	-	-	0%	3%	0%	-	-	0%	0%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	0	0	1	0	*1*	0	0	0	0	*0*	1	0	0	0	*1*
8:30 AM	1	0	1	0	*2*	0	0	0	0	*0*	0	0	1	0	*1*
Peak Hour	1	0	2	0	*3*	0	0	0	0	*0*	1	0	1	0	*2*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Middle Access Eastbound				Middle Access Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	2	0	1	0	0	0	4	5	2	0	0	2	1	17	0
7:15 AM	0	0	0	0	0	0	0	0	1	8	14	1	0	0	6	1	31	0
7:30 AM	0	0	0	0	0	0	0	0	0	7	8	1	0	0	6	6	28	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**24**	**1**	**0**	**0**	**22**	**3**	**60**	**136**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**15**	**5**	**0**	**0**	**13**	**5**	**52**	**171**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**16**	**3**	**0**	**0**	**10**	**2**	**38**	**178**
8:30 AM	**0**	**0**	**0**	**5**	**0**	**2**	**1**	**0**	**0**	**13**	**17**	**0**	**0**	**0**	**19**	**2**	**59**	**209**
8:45 AM	0	0	0	0	0	1	0	0	2	5	24	3	0	0	9	1	45	194
Count Total	0	0	0	7	0	4	1	0	3	68	123	16	0	0	87	21	330	
Pk Hr All	**0**	**0**	**0**	**5**	**0**	**2**	**1**	**0**	**0**	**44**	**72**	**9**	**0**	**0**	**64**	**12**	**209**	
Pk Hr HV	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**3**	
Pk Hr HV%	**-**	**-**	**-**	**20%**	**-**	**0%**	**0%**	**-**	**-**	**0%**	**3%**	**0%**	**-**	**-**	**0%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	1	0	0	*2*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
8:30 AM	**1**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
8:45 AM	0	0	1	1	*2*	0	0	1	0	*1*	0	0	0	0	*0*
Count Total	2	0	3	1	*6*	0	0	1	0	*1*	2	1	1	0	*4*
Peak Hour	**1**	**0**	**2**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**0**	**2**

TJ Wethington
(720) 646-1008

tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Middle Access Eastbound				Middle Access Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
8:30 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**3**
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	5
Count Total	0	0	0	2	0	0	0	0	0	0	3	0	0	0	1	0	6	
Pk Hr Heavy	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**3**	

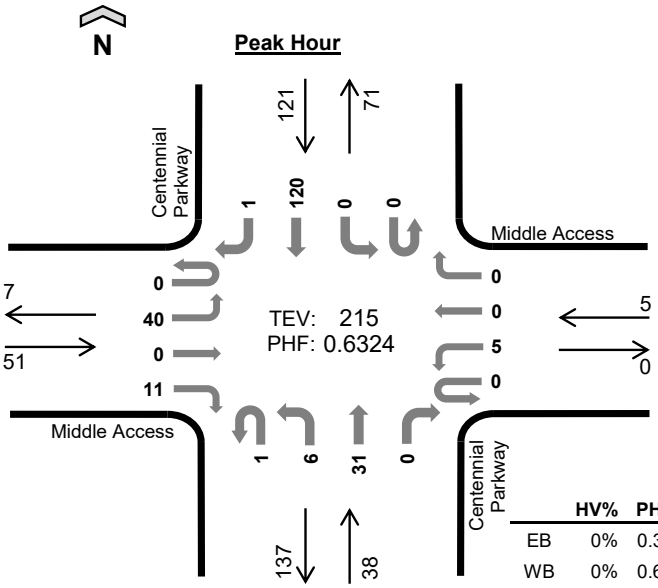
Count Summaries - Bikes

Interval Start	Middle Access Eastbound				Middle Access Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
Count Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

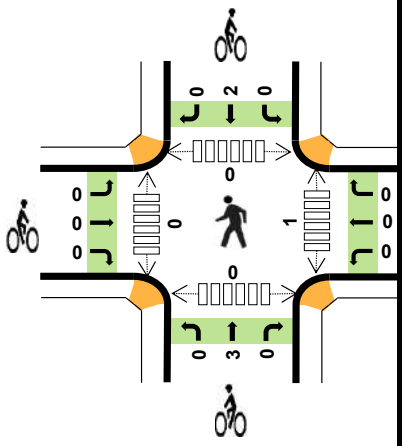
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Centennial Parkway
Middle Access

Date: 3/11/2026
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV%	PHF
EB	0%	0.36
WB	0%	0.63
NB	3%	0.95
SB	1%	0.78
TOTAL	1%	0.63



Peak Hour Count Summaries

Peak Hour Interval Start		Middle Access Eastbound				Middle Access Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	4	0	3	0	1	0	0	0	1	9	0	0	0	26	0	44	0
4:30 PM		0	3	0	3	0	1	0	0	1	1	8	0	0	0	23	1	41	0
4:45 PM		0	32	0	3	0	1	0	0	0	0	10	0	0	0	39	0	85	0
5:00 PM		0	1	0	2	0	2	0	0	0	4	4	0	0	0	32	0	45	215
Pk Hr	All	0	40	0	11	0	5	0	0	1	6	31	0	0	0	120	1	215	
	HV	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	
	HV%	-	0%	-	0%	-	0%	-	-	0%	17%	0%	-	-	-	1%	0%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:15 PM	0	0	0	0	*0*	0	0	1	2	*3*	1	0	0	0	*1*
4:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	0	0	1	*1*	0	0	2	0	*2*	0	0	0	0	*0*
5:00 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	0	1	1	*2*	0	0	3	2	*5*	1	0	0	0	*1*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Middle Access Eastbound				Middle Access Westbound				Centennial Parkway Northbound				Centennial Parkway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	3	0	4	0	5	0	1	0	1	5	0	0	0	22	0	41	0
4:15 PM	**0**	**4**	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**1**	**9**	**0**	**0**	**0**	**26**	**0**	**44**	**0**
4:30 PM	**0**	**3**	**0**	**3**	**0**	**1**	**0**	**0**	**1**	**1**	**8**	**0**	**0**	**0**	**23**	**1**	**41**	**0**
4:45 PM	**0**	**32**	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**39**	**0**	**85**	**211**
5:00 PM	**0**	**1**	**0**	**2**	**0**	**2**	**0**	**0**	**0**	**4**	**4**	**0**	**0**	**0**	**32**	**0**	**45**	**215**
5:15 PM	0	3	0	1	0	2	0	0	0	1	9	0	0	0	17	0	33	204
5:30 PM	0	0	0	0	0	2	0	0	0	1	2	0	0	0	18	0	23	186
5:45 PM	0	0	0	0	0	1	0	0	0	0	5	0	0	0	9	0	15	116
Count Total	0	46	0	16	0	15	0	1	1	9	52	0	0	0	186	1	327	
Pk Hr All	**0**	**40**	**0**	**11**	**0**	**5**	**0**	**0**	**1**	**6**	**31**	**0**	**0**	**0**	**120**	**1**	**215**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	
Pk Hr HV%	**-**	**0%**	**-**	**0%**	**-**	**0%**	**-**	**-**	**0%**	**17%**	**0%**	**-**	**-**	**-**	**1%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	0	0	*0*	0	1	0	3	*4*	0	0	0	0	*0*
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**3**	**1**	**0**	**0**	**0**	**1**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
5:45 PM	0	0	0	0	*0*	0	0	2	0	*2*	1	0	0	0	*1*
Count Total	0	0	1	1	*2*	0	1	5	5	*11*	4	0	0	0	*4*
Peak Hour	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**3**	**2**	***5***	**1**	**0**	**0**	**0**	**1**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Middle Access				Middle Access				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**1**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	

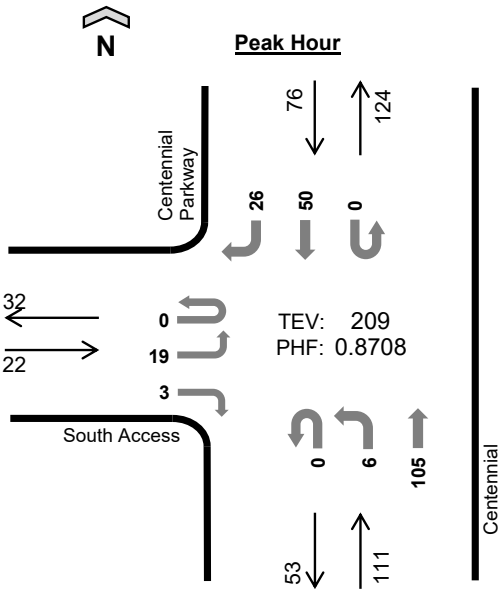
Count Summaries - Bikes

Interval Start	Middle Access				Middle Access				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	4	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**3**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**9**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
Count Total	0	0	0	0	0	1	0	0	0	0	5	0	0	0	5	0	11	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**5**	

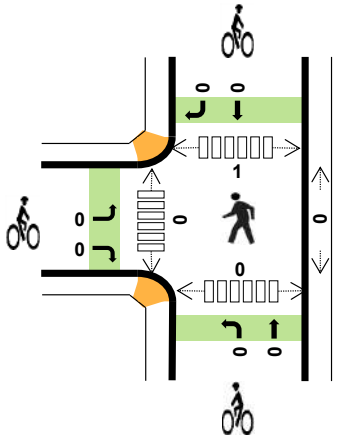
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Centennial Parkway
South Access

Date: 3/11/2026
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV%	PHF
EB	5%	0.79
WB	--	--
NB	1%	0.90
SB	1%	0.70
TOTAL	1%	0.87



Peak Hour Count Summaries

Peak Hour Interval Start		South Access				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:45 AM		**0**	**5**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**29**	**0**	**0**	**0**	**11**	**11**	**60**	**0**
8:00 AM		**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**27**	**0**	**0**	**0**	**7**	**7**	**51**	**0**
8:15 AM		**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**21**	**0**	**0**	**0**	**10**	**3**	**40**	**0**
8:30 AM		**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**28**	**0**	**0**	**0**	**22**	**5**	**58**	**209**
Pk Hr	All	**0**	**19**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**6**	**105**	**0**	**0**	**0**	**50**	**26**	**209**	
	HV	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	
	HV%	**-**	**5%**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**1%**	**-**	**-**	**-**	**2%**	**0%**	**1%**	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:45 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
8:30 AM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Peak Hour	**1**	**0**	**1**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	South Access				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	2	0	0	0	0	0	1	11	0	0	0	4	1	19	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	23	0	0	0	4	1	29	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	16	0	0	0	4	3	24	0
7:45 AM	**0**	**5**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**29**	**0**	**0**	**0**	**11**	**11**	**60**	**132**
8:00 AM	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**27**	**0**	**0**	**0**	**7**	**7**	**51**	**164**
8:15 AM	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**21**	**0**	**0**	**0**	**10**	**3**	**40**	**175**
8:30 AM	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**28**	**0**	**0**	**0**	**22**	**5**	**58**	**209**
8:45 AM	0	4	0	1	0	0	0	0	0	0	30	0	0	0	12	3	50	199
Count Total	0	25	0	6	0	0	0	0	0	7	185	0	0	0	74	34	331	
Pk Hr All	**0**	**19**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**6**	**105**	**0**	**0**	**0**	**50**	**26**	**209**	
Pk Hr HV	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	
Pk Hr HV%	**-**	**5%**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**1%**	**-**	**-**	**-**	**2%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
7:30 AM	0	0	0	0	*0*	0	0	1	0	*1*	0	0	0	0	*0*
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
8:30 AM	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	1	0	*1*	0	0	1	0	*1*	0	0	0	0	*0*
Count Total	1	0	2	2	*5*	0	0	2	0	*2*	1	0	1	0	*2*
Peak Hour	**1**	**0**	**1**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	**1**

TJ Wethington
(720) 646-1008

tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	South Access				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	**3**
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	4
Count Total	0	1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	5	
Pk Hr Heavy	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	

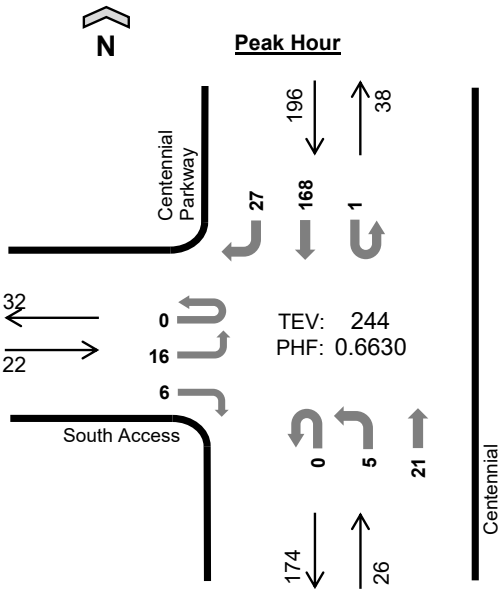
Count Summaries - Bikes

Interval Start	South Access				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
Count Total	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

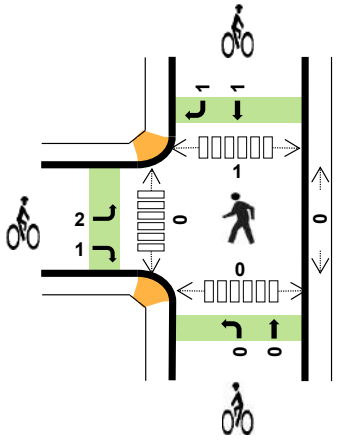
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Centennial Parkway
South Access

Date: 3/11/2026
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV%	PHF
EB	5%	0.69
WB	--	--
NB	8%	0.81
SB	1%	0.63
TOTAL	2%	0.66



Peak Hour Count Summaries

Peak Hour Interval Start		South Access				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	2	0	0	0	0	0	0	0	0	7	0	1	0	31	3	44	0
4:30 PM		0	6	0	1	0	0	0	0	0	3	5	0	0	0	29	8	52	0
4:45 PM		0	4	0	4	0	0	0	0	0	1	5	0	0	0	73	5	92	0
5:00 PM		0	4	0	1	0	0	0	0	0	1	4	0	0	0	35	11	56	244
Pk Hr	All	0	16	0	6	0	0	0	0	0	5	21	0	1	0	168	27	244	
	HV	0	1	0	0	0	0	0	0	0	2	0	0	0	0	2	0	5	
	HV%	-	6%	-	0%	-	-	-	-	-	40%	0%	-	0%	-	1%	0%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:15 PM	0	0	0	0	*0*	0	0	0	2	*2*	0	0	1	0	*1*
4:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	0	1	1	*2*	2	0	0	0	*2*	0	0	0	0	*0*
5:00 PM	1	0	1	1	*3*	1	0	0	0	*1*	0	0	0	0	*0*
Peak Hour	1	0	2	2	*5*	3	0	0	2	*5*	0	0	1	0	*1*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	South Access				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	3	0	3	0	0	0	0	0	0	3	0	0	0	32	12	53	0
4:15 PM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**1**	**0**	**31**	**3**	**44**	**0**
4:30 PM	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**5**	**0**	**0**	**0**	**29**	**8**	**52**	**0**
4:45 PM	**0**	**4**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**	**0**	**0**	**73**	**5**	**92**	**241**
5:00 PM	**0**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**35**	**11**	**56**	**244**
5:15 PM	0	6	0	1	0	0	0	0	0	0	5	0	0	0	21	6	39	239
5:30 PM	0	1	0	1	0	0	0	0	0	0	1	0	0	0	21	3	27	214
5:45 PM	0	3	0	1	0	0	0	0	0	0	2	0	0	0	10	2	18	140
Count Total	0	29	0	12	0	0	0	0	0	5	32	0	1	0	252	50	381	
Pk Hr All	**0**	**16**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**5**	**21**	**0**	**1**	**0**	**168**	**27**	**244**	
Pk Hr HV	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	
Pk Hr HV%	**-**	**6%**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**40%**	**0%**	**-**	**0%**	**-**	**1%**	**0%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	0	0	*0*	2	0	0	3	*5*	1	0	0	0	*1*
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**1**	**0**	**1**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**1**	**1**	**2**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**1**	**0**	**1**	**1**	**3**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
5:15 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	1	0	*1*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
5:45 PM	0	0	0	0	*0*	1	0	1	0	*2*	1	0	0	0	*1*
Count Total	2	0	2	2	*6*	6	0	1	5	*12*	3	0	2	0	*5*
Peak Hour	**1**	**0**	**2**	**2**	***5***	**3**	**0**	**0**	**2**	***5***	**0**	**0**	**1**	**0**	**1**

TJ Wethington
(720) 646-1008

tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

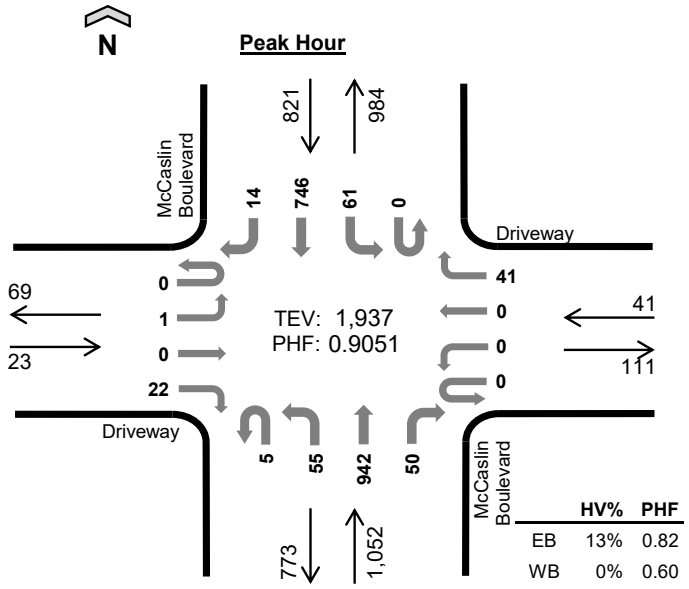
Interval Start	South Access				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**2**
5:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**5**
5:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	1	0	1	0	0	0	0	0	2	0	0	0	0	2	0	6	
Pk Hr Heavy	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	

Count Summaries - Bikes

Interval Start	South Access				n/a				Centennial Parkway				Centennial Parkway				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	2	5	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**9**
5:00 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	3
Count Total	0	4	0	2	0	0	0	0	0	0	1	0	0	0	2	3	12	
Pk Hr Bike	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**5**	

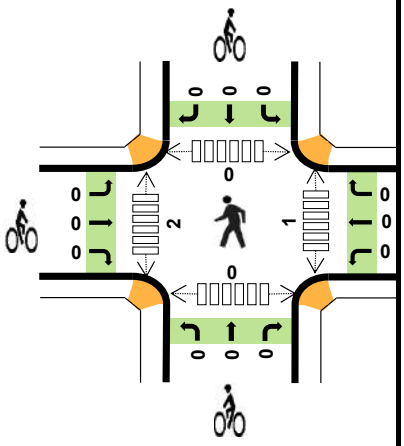
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

McCaslin Boulevard
Driveway



	HV%	PHF
EB	13%	0.82
WB	0%	0.60
NB	2%	0.89
SB	2%	0.95
TOTAL	2%	0.91

Date: 3/11/2026
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



Peak Hour Count Summaries

Peak Hour Interval Start		Driveway Eastbound				Driveway Westbound				McCaslin Boulevard Northbound				McCaslin Boulevard Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	0	0	6	0	0	0	6	0	11	217	9	0	11	176	2	438	0
8:15 AM		0	0	0	6	0	0	0	11	1	11	248	10	0	16	191	1	495	0
8:30 AM		0	0	0	4	0	0	0	7	2	15	218	15	0	15	187	6	469	0
8:45 AM		0	1	0	6	0	0	0	17	2	18	259	16	0	19	192	5	535	1,937
Pk Hr	All	0	1	0	22	0	0	0	41	5	55	942	50	0	61	746	14	1,937	
	HV	0	0	0	3	0	0	0	0	0	2	16	0	0	1	11	1	34	
	HV%	-	0%	-	14%	-	-	-	0%	0%	4%	2%	0%	-	2%	1%	7%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	0	0	2	4	*6*	0	0	0	0	*0*	1	0	0	0	*1*
8:15 AM	0	0	4	4	*8*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	1	0	6	3	*10*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	2	0	6	2	*10*	0	0	0	0	*0*	0	2	0	0	*2*
Peak Hour	3	0	18	13	*34*	0	0	0	0	*0*	1	2	0	0	*3*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Driveway				Driveway				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	4	0	0	0	5	1	23	120	13	0	6	88	0	260	0
7:15 AM	0	0	0	6	0	0	0	8	0	16	151	8	1	4	121	4	319	0
7:30 AM	0	0	0	5	0	0	0	10	0	11	168	12	0	8	161	4	379	0
7:45 AM	0	0	0	3	0	0	0	9	1	16	208	15	0	6	168	2	428	1,386
8:00 AM	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**6**	**0**	**11**	**217**	**9**	**0**	**11**	**176**	**2**	**438**	**1,564**
8:15 AM	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**11**	**1**	**11**	**248**	**10**	**0**	**16**	**191**	**1**	**495**	**1,740**
8:30 AM	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**7**	**2**	**15**	**218**	**15**	**0**	**15**	**187**	**6**	**469**	**1,830**
8:45 AM	**0**	**1**	**0**	**6**	**0**	**0**	**0**	**17**	**2**	**18**	**259**	**16**	**0**	**19**	**192**	**5**	**535**	**1,937**
Count Total	0	1	0	40	0	0	0	73	7	121	1,589	98	1	85	1,284	24	3,323	
Pk Hr All	**0**	**1**	**0**	**22**	**0**	**0**	**0**	**41**	**5**	**55**	**942**	**50**	**0**	**61**	**746**	**14**	**1,937**	
Pk Hr HV	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**2**	**16**	**0**	**0**	**1**	**11**	**1**	**34**	
Pk Hr HV%	**-**	**0%**	**-**	**14%**	**-**	**-**	**-**	**0%**	**0%**	**4%**	**2%**	**0%**	**-**	**2%**	**1%**	**7%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	1	0	4	1	*6*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	2	2	*4*	0	0	0	0	*0*	0	1	0	0	*1*
7:30 AM	0	1	8	6	*15*	0	0	0	0	*0*	1	0	0	0	*1*
7:45 AM	0	0	6	7	*13*	0	0	0	0	*0*	1	0	0	0	*1*
8:00 AM	**0**	**0**	**2**	**4**	**6**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
8:15 AM	**0**	**0**	**4**	**4**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**1**	**0**	**6**	**3**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**2**	**0**	**6**	**2**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**
Count Total	4	1	38	29	*72*	0	0	0	0	*0*	3	3	0	0	*6*
Peak Hour	**3**	**0**	**18**	**13**	***34***	**0**	**0**	**0**	**0**	***0***	**1**	**2**	**0**	**0**	**3**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

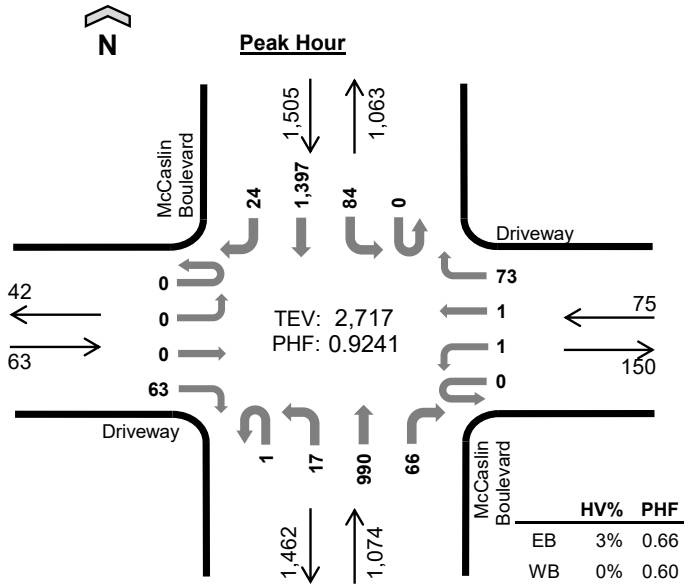
Interval Start	Driveway				Driveway				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	1	0	0	0	0	0	0	3	1	0	0	1	0	6	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	7	1	0	0	6	0	15	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	7	0	13	38
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**6**	**38**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**1**	**3**	**0**	**8**	**42**
8:30 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**	**0**	**0**	**2**	**1**	**10**	**37**
8:45 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**	**0**	**0**	**2**	**0**	**10**	**34**
Count Total	0	0	0	4	0	0	0	1	0	2	34	2	0	1	27	1	72	
Pk Hr Heavy	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**2**	**16**	**0**	**0**	**1**	**11**	**1**	**34**	

Count Summaries - Bikes

Interval Start	Driveway				Driveway				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

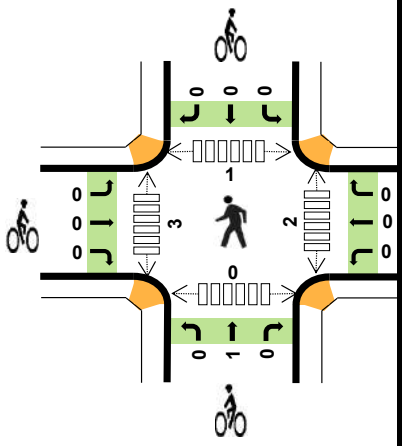
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

McCaslin Boulevard
Driveway



	HV%	PHF
EB	3%	0.66
WB	0%	0.60
NB	1%	0.93
SB	1%	0.89
TOTAL	1%	0.92

Date: 3/11/2026
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



Peak Hour Count Summaries

Peak Hour Interval Start		Driveway Eastbound				Driveway Westbound				McCaslin Boulevard Northbound				McCaslin Boulevard Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	0	0	24	0	0	1	15	0	4	228	14	0	19	305	5	615	0
4:45 PM		0	0	0	13	0	0	0	12	1	3	267	18	0	25	344	3	686	0
5:00 PM		0	0	0	12	0	1	0	30	0	4	245	21	0	22	392	8	735	0
5:15 PM		0	0	0	14	0	0	0	16	0	6	250	13	0	18	356	8	681	2,717
Pk Hr	All	0	0	0	63	0	1	1	73	1	17	990	66	0	84	1,397	24	2,717	
	HV	0	0	0	2	0	0	0	0	0	0	8	0	0	1	10	1	22	
	HV%	-	-	-	3%	-	0%	0%	0%	0%	0%	1%	0%	-	1%	1%	4%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:30 PM	2	0	2	2	*6*	0	0	0	0	*0*	1	0	0	0	*1*
4:45 PM	0	0	4	3	*7*	0	0	1	0	*1*	0	2	0	0	*2*
5:00 PM	0	0	1	3	*4*	0	0	0	0	*0*	1	0	0	0	*1*
5:15 PM	0	0	1	4	*5*	0	0	0	0	*0*	0	1	1	0	*2*
Peak Hour	2	0	8	12	*22*	0	0	1	0	*1*	2	3	1	0	*6*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Driveway				Driveway				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	12	0	0	0	15	0	4	242	19	1	14	285	3	595	0
4:15 PM	0	0	0	10	0	0	0	22	1	4	281	17	0	11	283	10	639	0
4:30 PM	**0**	**0**	**0**	**24**	**0**	**0**	**1**	**15**	**0**	**4**	**228**	**14**	**0**	**19**	**305**	**5**	**615**	**0**
4:45 PM	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**12**	**1**	**3**	**267**	**18**	**0**	**25**	**344**	**3**	**686**	**2,535**
5:00 PM	**0**	**0**	**0**	**12**	**0**	**1**	**0**	**30**	**0**	**4**	**245**	**21**	**0**	**22**	**392**	**8**	**735**	**2,675**
5:15 PM	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**16**	**0**	**6**	**250**	**13**	**0**	**18**	**356**	**8**	**681**	**2,717**
5:30 PM	0	0	0	12	0	0	0	16	2	4	247	17	0	24	276	4	602	2,704
5:45 PM	0	0	0	9	0	0	0	16	1	4	265	14	2	11	264	2	588	2,606
Count Total	0	0	0	106	0	1	1	142	5	33	2,025	133	3	144	2,505	43	5,141	
Pk Hr All	**0**	**0**	**0**	**63**	**0**	**1**	**1**	**73**	**1**	**17**	**990**	**66**	**0**	**84**	**1,397**	**24**	**2,717**	
Pk Hr HV	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**1**	**10**	**1**	**22**	
Pk Hr HV%	**-**	**-**	**-**	**3%**	**-**	**0%**	**0%**	**0%**	**0%**	**0%**	**1%**	**0%**	**-**	**1%**	**1%**	**4%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	5	5	*10*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	1	2	5	*8*	0	0	1	1	*2*	2	0	0	0	*2*
4:30 PM	**2**	**0**	**2**	**2**	**6**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
4:45 PM	**0**	**0**	**4**	**3**	**7**	**0**	**0**	**1**	**0**	**1**	**0**	**2**	**0**	**0**	**2**
5:00 PM	**0**	**0**	**1**	**3**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
5:15 PM	**0**	**0**	**1**	**4**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**
5:30 PM	0	0	1	5	*6*	0	0	0	0	*0*	0	1	0	0	*1*
5:45 PM	0	0	1	3	*4*	0	0	0	0	*0*	0	2	0	0	*2*
Count Total	2	1	17	30	*50*	0	0	2	1	*3*	4	6	1	0	*11*
Peak Hour	**2**	**0**	**8**	**12**	***22***	**0**	**0**	**1**	**0**	***1***	**2**	**3**	**1**	**0**	**6**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Driveway				Driveway				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	4	1	0	1	4	0	10	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	0	5	0	8	0
4:30 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**0**	**6**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**1**	**7**	**31**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**4**	**25**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**5**	**22**
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	5	0	6	22
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	19
Count Total	0	0	0	2	0	0	0	1	0	1	15	1	0	2	27	1	50	
Pk Hr Heavy	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**1**	**10**	**1**	**22**	

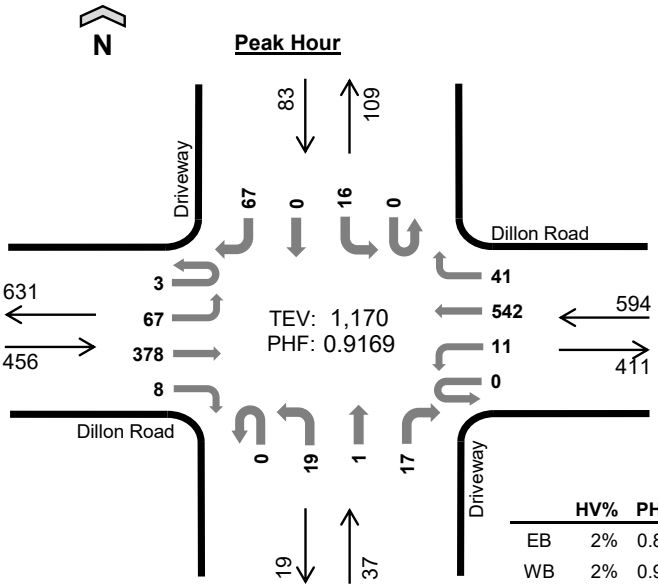
Count Summaries - Bikes

Interval Start	Driveway				Driveway				McCaslin Boulevard				McCaslin Boulevard				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**3**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	

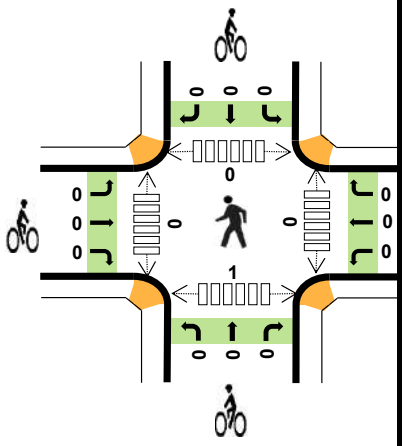
TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Driveway
Dillon Road

Date: 3/11/2026
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV%	PHF
EB	2%	0.88
WB	2%	0.91
NB	3%	0.66
SB	2%	0.80
TOTAL	2%	0.92



Peak Hour Count Summaries

Peak Hour Interval Start	Dillon Road Eastbound				Dillon Road Westbound				Driveway Northbound				Driveway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM	0	17	92	4	0	2	114	10	0	2	0	9	0	4	0	14	268	0
8:15 AM	0	12	80	1	0	3	143	12	0	8	0	6	0	4	0	22	291	0
8:30 AM	2	14	111	2	0	4	152	8	0	6	0	1	0	4	0	15	319	0
8:45 AM	1	24	95	1	0	2	133	11	0	3	1	1	0	4	0	16	292	1,170
Pk Hr All	3	67	378	8	0	11	542	41	0	19	1	17	0	16	0	67	1,170	
Pk Hr HV	0	1	9	0	0	0	12	0	0	0	0	1	0	1	0	1	25	
Pk Hr HV%	0%	1%	2%	0%	-	0%	2%	0%	-	0%	0%	6%	-	6%	-	1%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
8:00 AM	3	1	1	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	2	4	0	1	*7*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	4	0	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	5	3	0	0	*8*	0	0	0	0	*0*	0	0	0	1	*1*
Peak Hour	10	12	1	2	*25*	0	0	0	0	*0*	0	0	0	1	*1*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Dillon Road Eastbound				Dillon Road Westbound				Driveway Northbound				Driveway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	7	57	2	0	2	64	4	0	0	0	1	0	4	0	8	149	0
7:15 AM	0	3	70	3	1	2	69	10	0	2	1	2	0	3	1	10	177	0
7:30 AM	0	4	99	1	0	0	112	7	0	1	1	3	0	5	0	18	251	0
7:45 AM	0	17	111	6	0	2	123	6	0	6	0	7	0	4	0	8	290	867
8:00 AM	**0**	**17**	**92**	**4**	**0**	**2**	**114**	**10**	**0**	**2**	**0**	**9**	**0**	**4**	**0**	**14**	**268**	**986**
8:15 AM	**0**	**12**	**80**	**1**	**0**	**3**	**143**	**12**	**0**	**8**	**0**	**6**	**0**	**4**	**0**	**22**	**291**	**1,100**
8:30 AM	**2**	**14**	**111**	**2**	**0**	**4**	**152**	**8**	**0**	**6**	**0**	**1**	**0**	**4**	**0**	**15**	**319**	**1,168**
8:45 AM	**1**	**24**	**95**	**1**	**0**	**2**	**133**	**11**	**0**	**3**	**1**	**1**	**0**	**4**	**0**	**16**	**292**	**1,170**
Count Total	3	98	715	20	1	17	910	68	0	28	3	30	0	32	1	111	2,037	
Pk Hr All	**3**	**67**	**378**	**8**	**0**	**11**	**542**	**41**	**0**	**19**	**1**	**17**	**0**	**16**	**0**	**67**	**1,170**	
Pk Hr HV	**0**	**1**	**9**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**25**	
Pk Hr HV%	**0%**	**1%**	**2%**	**0%**	**-**	**0%**	**2%**	**0%**	**-**	**0%**	**0%**	**6%**	**-**	**6%**	**-**	**1%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	2	3	0	1	*6*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	3	2	1	0	*6*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	4	3	0	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	3	4	0	1	*8*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**3**	**1**	**1**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**2**	**4**	**0**	**1**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**4**	**0**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**5**	**3**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
Count Total	22	24	2	4	*52*	0	0	0	0	*0*	0	0	0	1	*1*
Peak Hour	**10**	**12**	**1**	**2**	***25***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	**1**

TJ Wethington
(720) 646-1008

tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Dillon Road Eastbound				Dillon Road Westbound				Driveway Northbound				Driveway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	1	0	0	3	0	0	0	0	0	0	0	0	1	6	0
7:15 AM	0	0	2	1	0	0	2	0	0	1	0	0	0	0	0	0	6	0
7:30 AM	0	0	4	0	0	0	3	0	0	0	0	0	0	0	0	0	7	0
7:45 AM	0	0	2	1	0	0	4	0	0	0	0	0	0	0	0	1	8	27
8:00 AM	**0**	**1**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**5**	**26**
8:15 AM	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	**27**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**5**	**25**
8:45 AM	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**25**
Count Total	0	1	18	3	0	0	24	0	0	1	0	1	0	1	0	3	52	
Pk Hr Heavy	**0**	**1**	**9**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**25**	

Count Summaries - Bikes

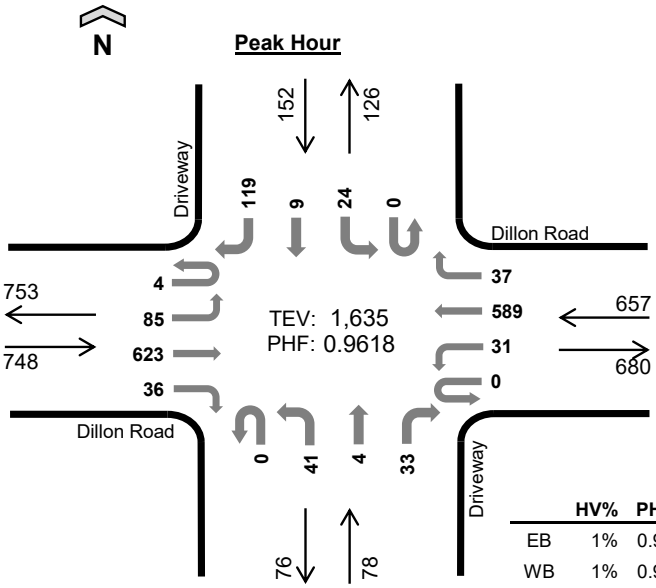
Interval Start	Dillon Road Eastbound				Dillon Road Westbound				Driveway Northbound				Driveway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

TJ Wethington
(720) 646-1008

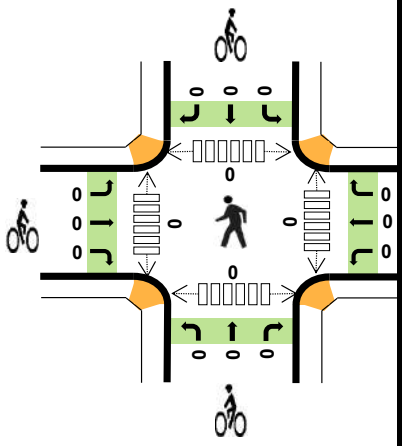
tj.wethington@idaxdata.com

Driveway
Dillon Road

Date: 3/11/2026
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV%	PHF
EB	1%	0.94
WB	1%	0.94
NB	0%	0.81
SB	0%	0.90
TOTAL	1%	0.96



Peak Hour Count Summaries

Peak Hour Interval Start	Dillon Road Eastbound				Dillon Road Westbound				Driveway Northbound				Driveway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**3**	**26**	**163**	**8**	**0**	**9**	**157**	**9**	**0**	**10**	**1**	**10**	**0**	**3**	**1**	**25**	**425**	**0**
4:15 PM	**0**	**19**	**156**	**10**	**0**	**7**	**152**	**11**	**0**	**11**	**1**	**4**	**0**	**6**	**4**	**32**	**413**	**0**
4:30 PM	**0**	**13**	**143**	**11**	**0**	**6**	**155**	**8**	**0**	**8**	**1**	**15**	**0**	**5**	**2**	**33**	**400**	**0**
4:45 PM	**1**	**27**	**161**	**7**	**0**	**9**	**125**	**9**	**0**	**12**	**1**	**4**	**0**	**10**	**2**	**29**	**397**	**1,635**
Pk Hr All	**4**	**85**	**623**	**36**	**0**	**31**	**589**	**37**	**0**	**41**	**4**	**33**	**0**	**24**	**9**	**119**	**1,635**	
Pk Hr HV	**0**	**2**	**6**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	
Pk Hr HV%	**0%**	**2%**	**1%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) E	W	N	S	Total
4:00 PM	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:15 PM	**3**	**1**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:30 PM	**2**	**2**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:45 PM	**2**	**2**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Peak Hour	**8**	**7**	**0**	**0**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Dillon Road Eastbound				Dillon Road Westbound				Driveway Northbound				Driveway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**3**	**26**	**163**	**8**	**0**	**9**	**157**	**9**	**0**	**10**	**1**	**10**	**0**	**3**	**1**	**25**	**425**	0
4:15 PM	**0**	**19**	**156**	**10**	**0**	**7**	**152**	**11**	**0**	**11**	**1**	**4**	**0**	**6**	**4**	**32**	**413**	**0**
4:30 PM	**0**	**13**	**143**	**11**	**0**	**6**	**155**	**8**	**0**	**8**	**1**	**15**	**0**	**5**	**2**	**33**	**400**	**0**
4:45 PM	**1**	**27**	**161**	**7**	**0**	**9**	**125**	**9**	**0**	**12**	**1**	**4**	**0**	**10**	**2**	**29**	**397**	**1,635**
5:00 PM	0	19	161	11	0	2	152	11	0	9	1	13	0	9	3	30	421	1,631
5:15 PM	0	23	181	9	0	6	126	8	0	10	1	15	0	6	1	23	409	1,627
5:30 PM	0	20	164	8	0	9	123	10	0	15	2	10	0	6	2	18	387	1,614
5:45 PM	2	23	154	9	0	5	109	11	0	9	0	13	0	5	0	27	367	1,584
Count Total	6	170	1,283	73	0	53	1,099	77	0	84	8	84	0	50	15	217	3,219	
Pk Hr All	**4**	**85**	**623**	**36**	**0**	**31**	**589**	**37**	**0**	**41**	**4**	**33**	**0**	**24**	**9**	**119**	**1,635**	
Pk Hr HV	**0**	**2**	**6**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	
Pk Hr HV%	**0%**	**2%**	**1%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	**1**	**2**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:15 PM	**3**	**1**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**2**	**2**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**2**	**2**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	2	2	1	0	*5*	0	1	0	0	*1*	0	0	0	0	*0*
5:15 PM	2	2	0	1	*5*	0	0	0	0	*0*	2	0	0	1	*3*
5:30 PM	1	1	0	0	*2*	0	1	0	0	*1*	0	1	1	1	*3*
5:45 PM	2	0	0	0	*2*	0	0	0	0	*0*	1	1	0	0	*2*
Count Total	15	12	1	1	*29*	0	2	0	0	*2*	3	2	1	2	*8*
Peak Hour	**8**	**7**	**0**	**0**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - Heavy Vehicles

Interval Start	Dillon Road Eastbound				Dillon Road Westbound				Driveway Northbound				Driveway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
4:15 PM	**0**	**1**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**
4:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**
4:45 PM	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**15**
5:00 PM	0	1	1	0	0	0	2	0	0	0	0	1	0	0	0	0	5	17
5:15 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	1	5	18
5:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	16
5:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	14
Count Total	0	3	12	0	0	0	12	0	0	0	0	1	0	0	0	1	29	
Pk Hr Heavy	**0**	**2**	**6**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	

Count Summaries - Bikes

Interval Start	Dillon Road Eastbound				Dillon Road Westbound				Driveway Northbound				Driveway Southbound				15-min Total	Rolling Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Appendix C: Future Traffic Projections and Background Traffic Study Excerpts

DRCOG Traffic Projections: Centennial Valley

Location	2020	2050	Growth Factor	Annual Growth
McCaslin N of Centennial Pkwy	25,000	33,000	1.32	0.93%
McCaslin S of Centennial Pkwy	29,000	40,000	1.38	1.08%
McCaslin N of Centennial Pkwy/Cherry St	34,000	44,000	1.29	0.86%
McCaslin S of Centennial Pkwy/Cherry St	38,000	49,000	1.29	0.85%
McCaslin N of Dillon Rd	41,000	55,000	1.34	0.98%
Centennial Pkwy E of McCaslin	6,000	10,000	1.67	1.72%
Cherry St E of McCaslin	5,000	6,000	1.20	0.61%
Dillon Rd E of McCaslin	22,000	29,000	1.32	0.93%
Total	200,000	266,000	1.33	0.96%

TRAFFIC IMPACT STUDY

KING SOOPERS 142

Louisville, CO

PREPARED FOR:
King Soopers

PREPARED BY:
Brian Horan, PE, PTOE
Daniela Gonzalez
Cooper Riddell-Brosig

Galloway & Company, Inc.
5500 Greenwood Plaza Blvd, Suite 200
Greenwood Village, CO 80111



DATE:
February 7, 2025
REVISED: April 14, 2025



FIGURE 1-1
SITE LOCATION

KING SOOPERS
LOUISVILLE, CO

IV. Analysis of Future Conditions without Site Development

Methodology

The future traffic forecasts, without the proposed new use, were developed for 2026 and 2045 conditions based on a composite of existing baseline traffic volumes, regional traffic growth, and pipeline developments. A 1.0% growth factor per year was applied to all movements of existing traffic on the study intersections.

Regional Growth

Increases in traffic associated with regional growth were estimated at 1.0 percent per year compounded for all movements on study intersections up to 2026 as well as to 2045. This growth was determined using CDOT'S Online Transportation Information System's (OTIS) count station #104952 on McCaslin Blvd south of Dillon Rd, and accounts for increases in traffic resulting from influences outside of the immediate study area. The resulting increases in volumes within the study area are reflected in Figure 4-1 for 2026 conditions and Figure 4-2 for 2045 conditions.

Pipeline Developments

One unbuilt/unoccupied (i.e., "pipeline") development was identified for consideration within the study. CU Boulder Faculty Housing is planned to be built at 1164 W Dillon Rd at the site of the vacant Cinebarre. No plans have been submitted to the City for this development, therefore the use for this site was assumed to be Multi-Family Housing (Low-Rise). The existing Cinebarre building is 45,000 square feet (SF), therefore it was assumed that the development could provide 50 dwelling units (DU). With this information, and the proximity to the park and ride, the following development program was included in the background and total future analysis for 2045 conditions:

CU Boulder Faculty Housing

50	DU	Multi-Family Housing (Low-Rise) - Close to Rail Transit

The location of the pipeline developments in relation to the Applicant's property is shown in Figure 4-3. The pipeline development site was assumed to have 80% of its trips going to and from the south on McCaslin Blvd, 10% going to and from the north on McCaslin Blvd, 5% going to and from the east on Centennial Pkwy/Cherry St, and 5% going to and from the east on Dillon Rd. The pipeline site trips are shown in Figure 4-4 for 2045 conditions.

Background Traffic Forecasts

The existing traffic forecasts depicted in Figure 3-1, the regional growth shown in Figure 4-1 (2026) and Figure 4-2 (2045), and the pipeline development site trips shown in Figure 4-4 (2045) were added together to yield the background future traffic forecasts shown in Figure 4-5 for 2026 conditions and Figure 4-6 for 2045 conditions.

Background Future Levels of Service

Capacity analyses of 2026 and 2045 future traffic conditions without the proposed development are provided in Appendix E and summarized in Table 4-1. The forecasted levels of service are also depicted graphically in Figure 4-7 for 2026 conditions and Figure 4-8 for 2045 conditions.

As shown on Table 4-1, under background future 2026 conditions the intersections in the study area are forecasted to operate consistent with existing conditions.

Under background future 2045 conditions the signalized intersections in the study area are forecasted to operate at acceptable overall LOS “D” or better during the weekday peak hours with the exception of the Dillon Rd & McCaslin Blvd intersection which is expected to operate at LOS “E” in the 2045 weekday PM peak hour. The unsignalized intersection movements in the study area are expected to operate at acceptable LOS “C” or better during the weekday peak hours.

Background Future Queueing

An analysis of intersection queues was performed at key locations under background future traffic conditions. The results of the queuing analysis are summarized in Table 4-2.

As shown in the table, queues within the study network will increase due to assumed regional traffic growth. All queues are expected to be contained in their effective storage during background conditions with the exception of the eastbound left movement at the Centennial Pkwy & McCaslin Blvd intersection during the background future long range (2045) weekday AM peak hour.



FIGURE 4-3
PIPELINE LOCATION

KING SOOPERS
LOUISVILLE, CO

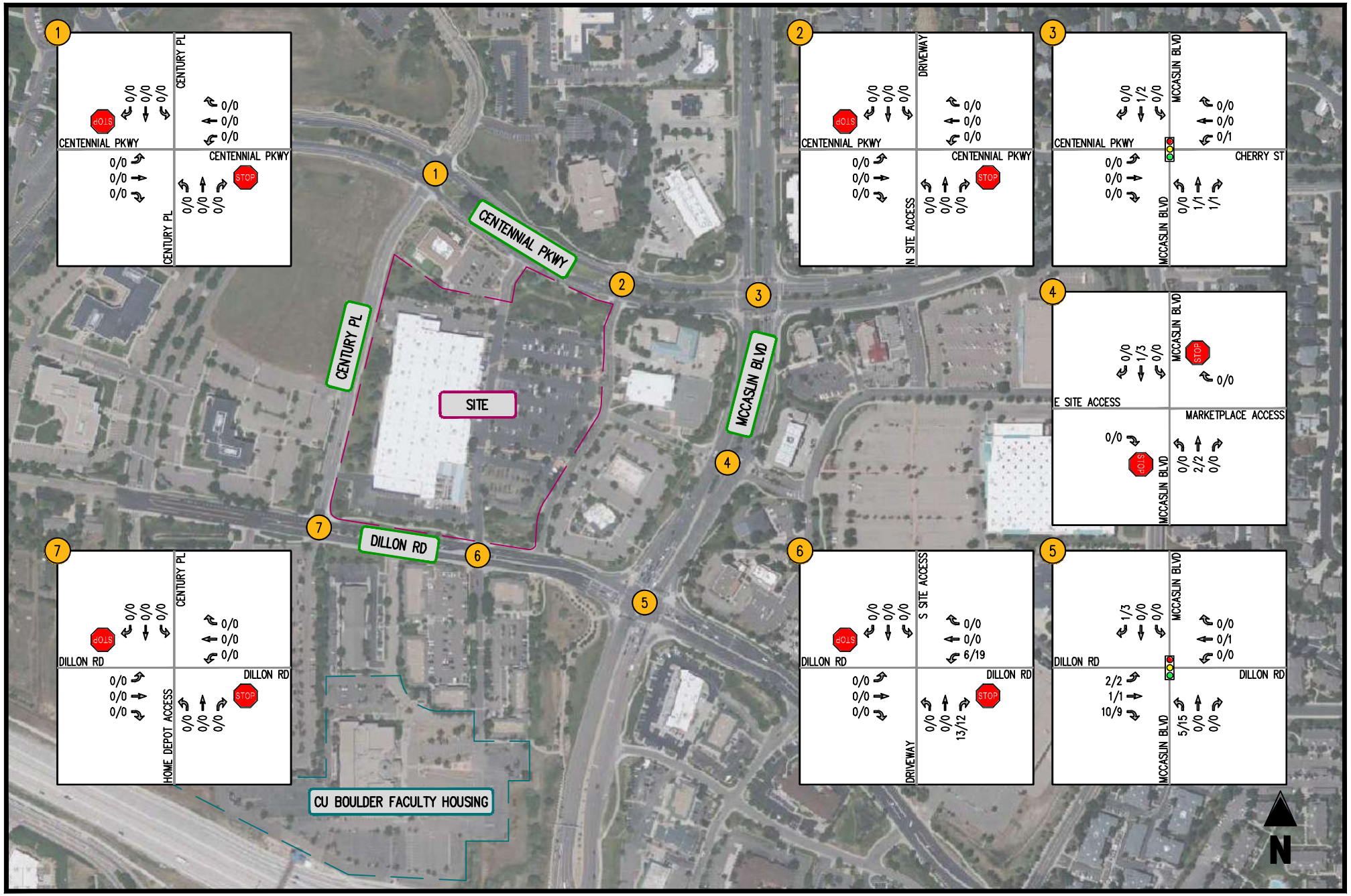


FIGURE 4-4
PIPELINE SITE TRIPS

KING SOOPERS
LOUISVILLE, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

V. Site Analysis

Overview

The Applicant is proposing to redevelop the approximately 13.5-acre site with commercial uses consisting of a supermarket and gas station use. For purposes of this study, the site is assumed complete and occupied in 2026. The following use and development programs were analyzed:

Build-Out 2026:

136,380	SF	Supermarket
14	FP	Gas Station

Proposed Site Access

As shown on the Applicant's conceptual plan (Figure 1-2), access to the development is being proposed via the existing right-in/right-out (RIRO) access on Centennial Pkwy, full movement access on Centennial Pkwy, ¾ movement access on McCaslin Blvd, RIRO access on Dillon Rd, two full movement accesses on Dillon Rd, and two full movement accesses on Century Pl. No change to the lane use and traffic control is being proposed.

Trip Generation

Overview

Trip generation estimates for the weekday AM and PM peak hours, as well as the weekday average daily traffic (ADT), were derived from the standard Institute of Transportation Engineers (ITE) Trip Generation Manual rates/equations, as published in the 11th edition. The trip generation analysis is presented in Table 5-1.

Internal Capture

Due to the mixed-use nature of the proposed development, it is assumed that a number of trips would be shared between the uses. These are trips that are going from one use on site to another use on site and should not be counted as separate trips for each use. An internal capture reduction of 10% was applied to the trip generation analysis consistent with ITE methodologies:

- Internal Capture: 10%

Pass-by Trips

According to ITE, in some cases the driveway volumes at a particular land use are different from the amount of traffic added to the adjacent street system. Uses such as commercial establishments attract a portion of their trips from traffic that is already present on the road network. Pass-by trips are those trips which are made as intermediate stops on the way to a primary destination. An example of a pass-by trip would be one in which a driver stops at a grocery store or a gas station on his/her way from work.

The proposed use would experience pass-by trips consistent with the primary uses located on site. In recognition of this phenomenon and consistent with ITE published data, the following pass-by reductions were applied to the trip generation analysis:

- Supermarket: 0% AM / 24% PM
- Gas Station: 63% AM / 57% PM

As shown in Table 5-1, the site in total is anticipated to generate 82 weekday AM and 315 weekday PM peak hour pass-by trips. Therefore, these trips would be drawn from the existing road network and assigned to the future site entrances accordingly. Trip distributions for pass-by trips were considered only along northbound and southbound McCaslin Blvd. It was assumed that 40% of pass-by trips would come from the north and 60% would come from the south. Pass-by trip assignments at key study intersections are shown in Figure 5-1.

Net Site Trips

The vehicle trips that would be generated by the proposed development plan are summarized in Table 5-1. As shown in Table 5-1, the site would generate upon completion and full occupancy 399 net new weekday AM and 755 net new weekday PM peak hour vehicle trips, as well as 10,301 net new weekday daily trips.

Site Trip Distributions

The distribution of the anticipated trips generated by the completion of the proposed development was based on an examination of existing traffic counts and local knowledge. Existing travel patterns indicate the following distribution is appropriate in the forecasting of net new future site traffic:

- To/from the north on McCaslin Blvd: 25%
- To/from the south on McCaslin Blvd: 40%
- To/from the east on Centennial Pkwy/Cherry St: 10%
- To/from the west on Centennial Pkwy/Cherry St: 5%
- To/from the east on Dillon Rd: 20%

Site Trip Assignments

The assignment of the new vehicle trips generated upon the future build-out of the development project was based on the above distribution. The net new trips assignments are depicted in Figure 5-2.

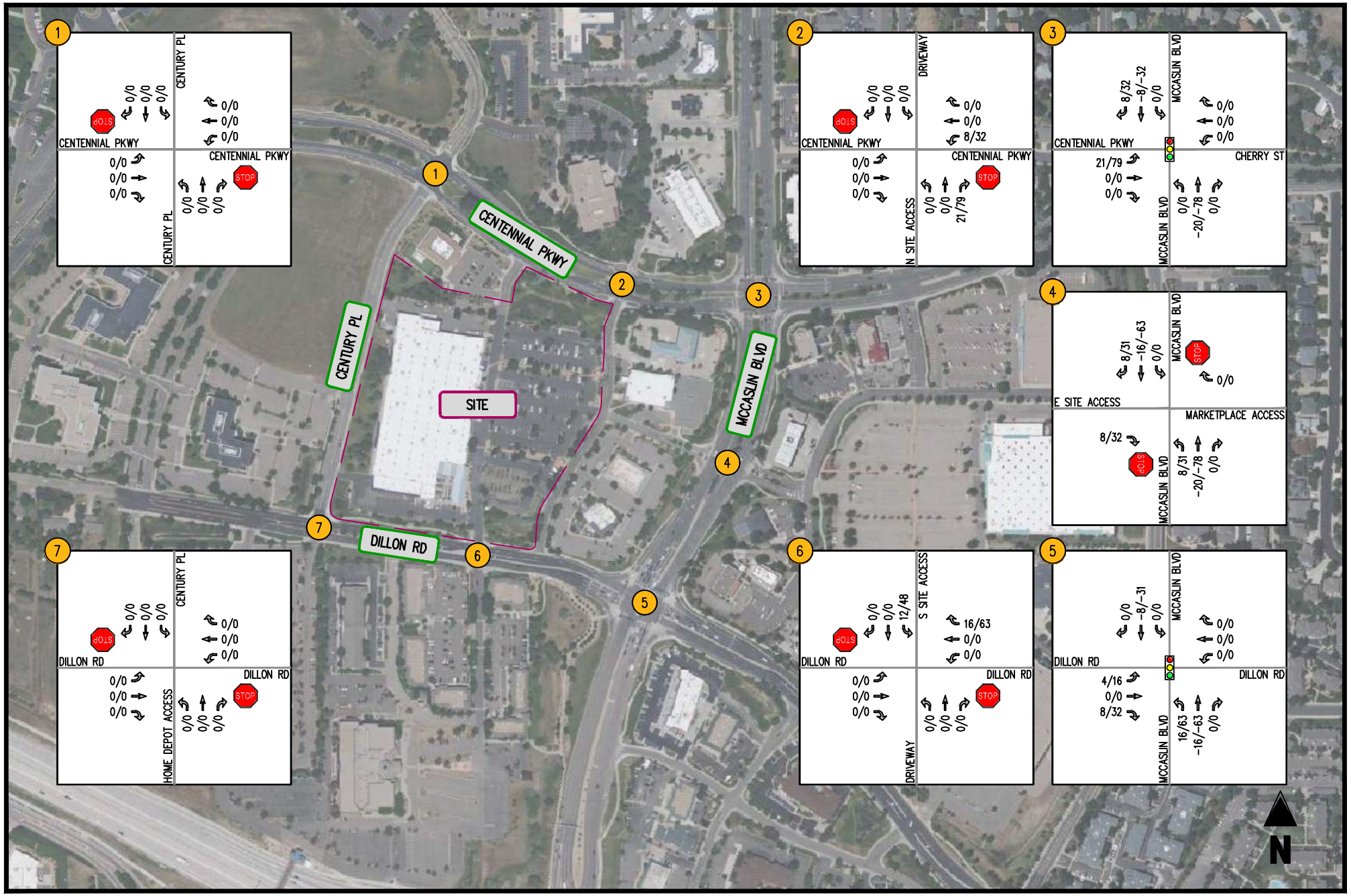


FIGURE 5-1
PASS-BY TRIPS

KING SOOPERS
LOUISVILLE, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP STOP SIGN

YIELD SIGN

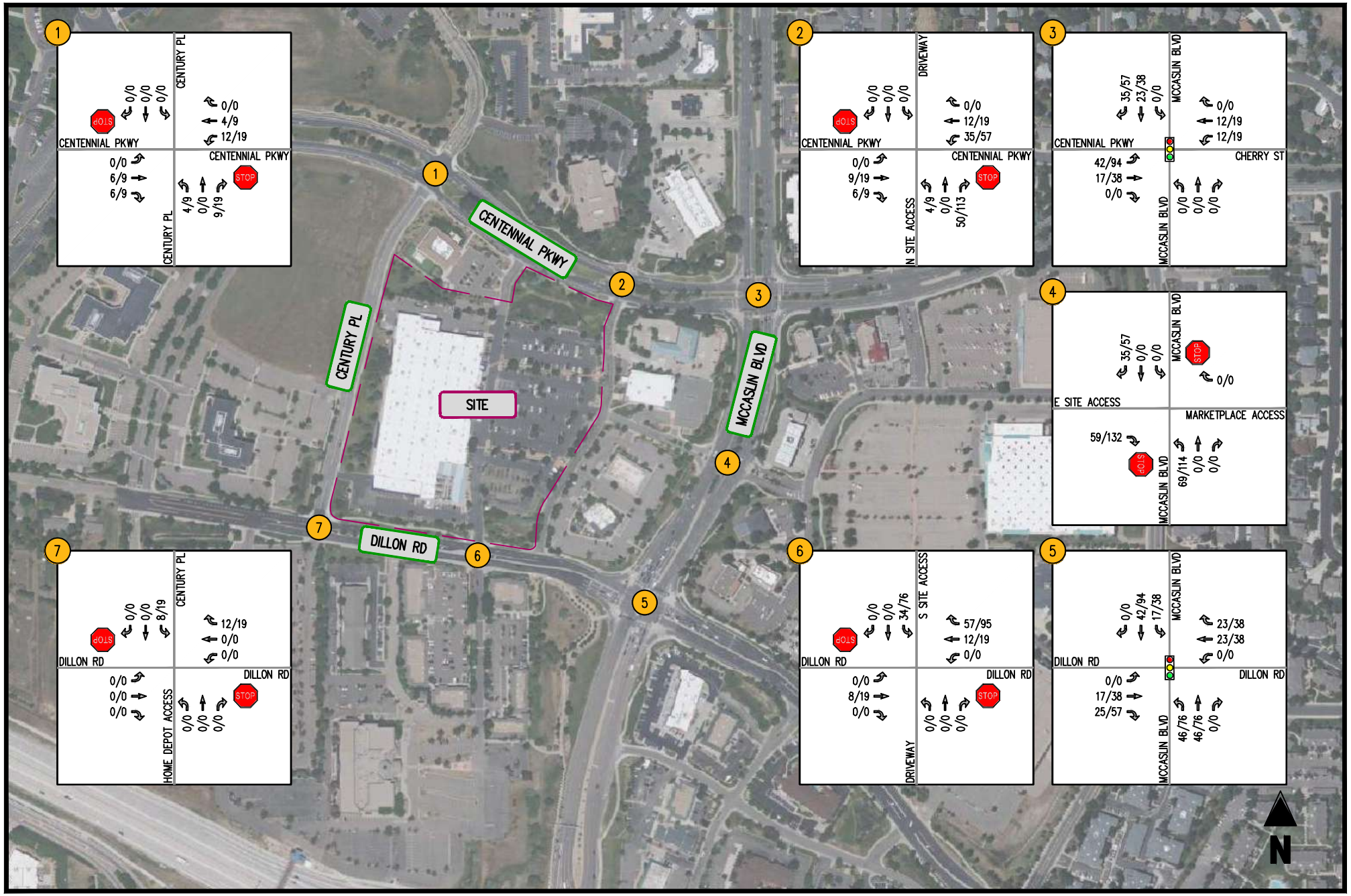


FIGURE 5-2
SITE TRIPS

KING SOOPERS
LOUISVILLE, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP STOP SIGN

YIELD SIGN

Appendix D: Trip Generation Worksheets

Output Summary

ITE LUC	Land Use	Size	Unit	Daily			AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total	In	Out	Total
B1,C1,F2,F1												
220	Multifamily Housing (Low-Rise)	850	DU	2,453	2,453	4,906	74	236	310	257	158	415
215	Single-Family Attached Housing	96	DU	316	316	632	11	34	45	27	20	47
B1,C1,F2,F1 Baseline Trips				**2,769**	**2,769**	**5,538**	**85**	**270**	**355**	**284**	**178**	**462**
			Multimodal Trips	138	140	278	4	14	18	14	9	23
B1,C1,F2,F1 New External Vehicular Trips				**2,631**	**2,629**	**5,260**	**81**	**256**	**337**	**270**	**169**	**439**
G3												
215	Single-Family Attached Housing	25	DU	82	82	164	3	9	12	7	6	13
G3 Baseline Trips				**82**	**82**	**164**	**3**	**9**	**12**	**7**	**6**	**13**
			Multimodal Trips	4	4	8	0	1	1	1	0	0
G3 New External Vehicular Trips				**78**	**78**	**156**	**3**	**8**	**11**	**6**	**6**	**12**
L7												
223	Affordable Housing	102	DU	246	245	491	11	26	37	31	22	53
L7 Baseline Trips				**246**	**245**	**491**	**11**	**26**	**37**	**31**	**22**	**53**
			Multimodal Trips	12	13	25	1	1	2	2	1	3
L7 New External Vehicular Trips				**234**	**232**	**466**	**10**	**25**	**35**	**29**	**21**	**50**
O2												
220	Multifamily Housing (Low-Rise)	75	DU	272	272	544	9	30	39	27	16	43
O2 Baseline Trips				**272**	**272**	**544**	**9**	**30**	**39**	**27**	**16**	**43**
			Multimodal Trips	13	15	28	0	2	2	1	1	2
O2 New External Vehicular Trips				**259**	**257**	**516**	**9**	**28**	**37**	**26**	**15**	**41**
B1,C1,F2,F1,G3,L7,O2												
Total Baseline Trips				3,369	3,368	6,737	108	335	443	349	222	571
			Total Multimodal Trips	167	172	339	5	18	23	18	11	28
Total New External Vehicular Trips				**3,202**	**3,196**	**6,398**	**103**	**317**	**420**	**331**	**211**	**542**

B1,C1,F2,F1 Daily Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total
1	(220) Multifamily Housing (Low-Rise)	ITE 12th Ed	850	DU	T = 5.63(X) + 120.45	50%	50%	2,453	2,453	4,906	5.0%	245	2,331	2,330	4,661
2	(215) Single-Family Attached Housing	ITE 12th Ed	96	DU	T = 6.57(X)	50%	50%	316	315	631	5.0%	32	300	299	599
							Total:	2,769	2,768	5,537	5.0%	277	2,631	2,629	5,260

B1,C1,F2,F1 AM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total
1	(220) Multifamily Housing (Low-Rise)	ITE 12th Ed	850	DU	T = 0.35(X) + 12.93	24%	76%	74	236	310	5.0%	16	70	224	294
2	(215) Single-Family Attached Housing	ITE 12th Ed	96	DU	T = 0.47(X)	25%	75%	11	34	45	5.0%	2	11	32	43
							Total:	85	270	355	5.0%	18	81	256	337

B1,C1,F2,F1 PM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total
1	(220) Multifamily Housing (Low-Rise)	ITE 12th Ed	850	DU	T = 0.48(X) + 7.35	62%	38%	257	158	415	5.0%	21	244	150	394
2	(215) Single-Family Attached Housing	ITE 12th Ed	96	DU	T = 0.57(X) - 7.84	57%	43%	27	20	47	5.0%	2	26	19	45
							Total:	284	178	462	5.0%	23	270	169	439

G3 Daily Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total
1	(215) Single-Family Attached Housing	ITE 12th Ed	25	DU	T = 6.57(X)	50%	50%	82	82	164	5.0%	8	78	78	156
							Total:	82	82	164	5.0%	8	78	78	156

G3 AM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total
1	(215) Single-Family Attached Housing	ITE 12th Ed	25	DU	T = 0.47(X)	25%	75%	3	9	12	5.0%	1	3	8	11
							Total:	3	9	12	5.0%	1	3	8	11

G3 PM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total
1	(215) Single-Family Attached Housing	ITE 12th Ed	25	DU	T = 0.51(X)	57%	43%	7	6	13	5.0%	1	6	6	12
							Total:	7	6	13	5.0%	1	6	6	12

L7 Daily Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total
1	(223) Affordable Housing	ITE 12th Ed	102	DU	T = 4.81(X)	50%	50%	246	245	491	5.0%	25	234	232	466
							Total:	246	245	491	5.0%	25	234	232	466

L7 AM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total
1	(223) Affordable Housing	ITE 12th Ed	102	DU	T = 0.36(X)	29%	71%	11	26	37	5.0%	2	10	25	35
							Total:	11	26	37	5.0%	2	10	25	35

L7 PM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total
1	(223) Affordable Housing	ITE 12th Ed	102	DU	Ln(T) = 0.72 Ln(X) + 0.64	59%	41%	31	22	53	5.0%	3	29	21	50
							Total:	31	22	53	5.0%	3	29	21	50

O2 Daily Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total
1	(220) Multifamily Housing (Low-Rise)	ITE 12th Ed	75	DU	T = 5.63(X) + 120.45	50%	50%	272	271	543	5.0%	27	259	257	516
							Total:	272	271	543	5.0%	27	259	257	516

O2 AM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total
1	(220) Multifamily Housing (Low-Rise)	ITE 12th Ed	75	DU	T = 0.35(X) + 12.93	24%	76%	9	30	39	5.0%	2	9	28	37
							Total:	9	30	39	5.0%	2	9	28	37

O2 PM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total
1	(220) Multifamily Housing (Low-Rise)	ITE 12th Ed	75	DU	T = 0.48(X) + 7.35	62%	38%	27	16	43	5.0%	2	26	15	41
							Total:	27	16	43	5.0%	2	26	15	41

Centennial Valley McCaslin Small Area Plan Uses Daily Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total
1	(710) General Office Building	ITE 12th Ed	1050	KSF	T = 6.18(X) + 207.96	50%	50%	3,349	3,349	6,698
2	(710) General Office Building	ITE 12th Ed	43.6	KSF	T = 6.18(X) + 207.96	50%	50%	239	239	478
3	(822) Strip Retail Plaza (<40k)	ITE 12th Ed	27.2	LKSF	T = 54.45(X)	50%	50%	741	741	1,482
							Total:	4,329	4,329	8,658

Centennial Valley McCaslin Small Area Plan Uses AM Peak Hour Trip Generation Calculations

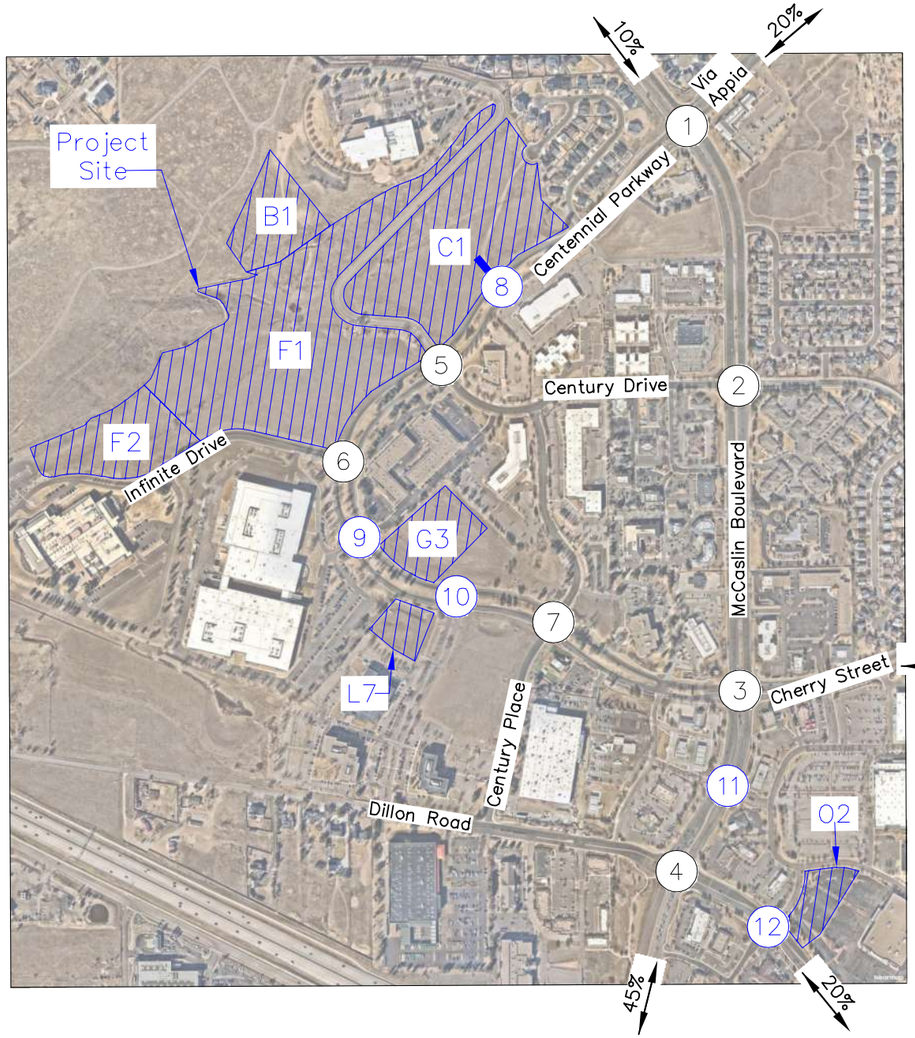
	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total
1	(710) General Office Building	ITE 12th Ed	1050	KSF	T = 1.12(X) + 19.95	88%	12%	1,052	144	1,196
2	(710) General Office Building	ITE 12th Ed	43.6	KSF	T = 1.12(X) + 19.95	88%	12%	61	8	69
3	(822) Strip Retail Plaza (<40k)	ITE 12th Ed	27.2	LKSF	T = 3.93(X)	55%	45%	59	48	107
							Total:	1,172	200	1,372

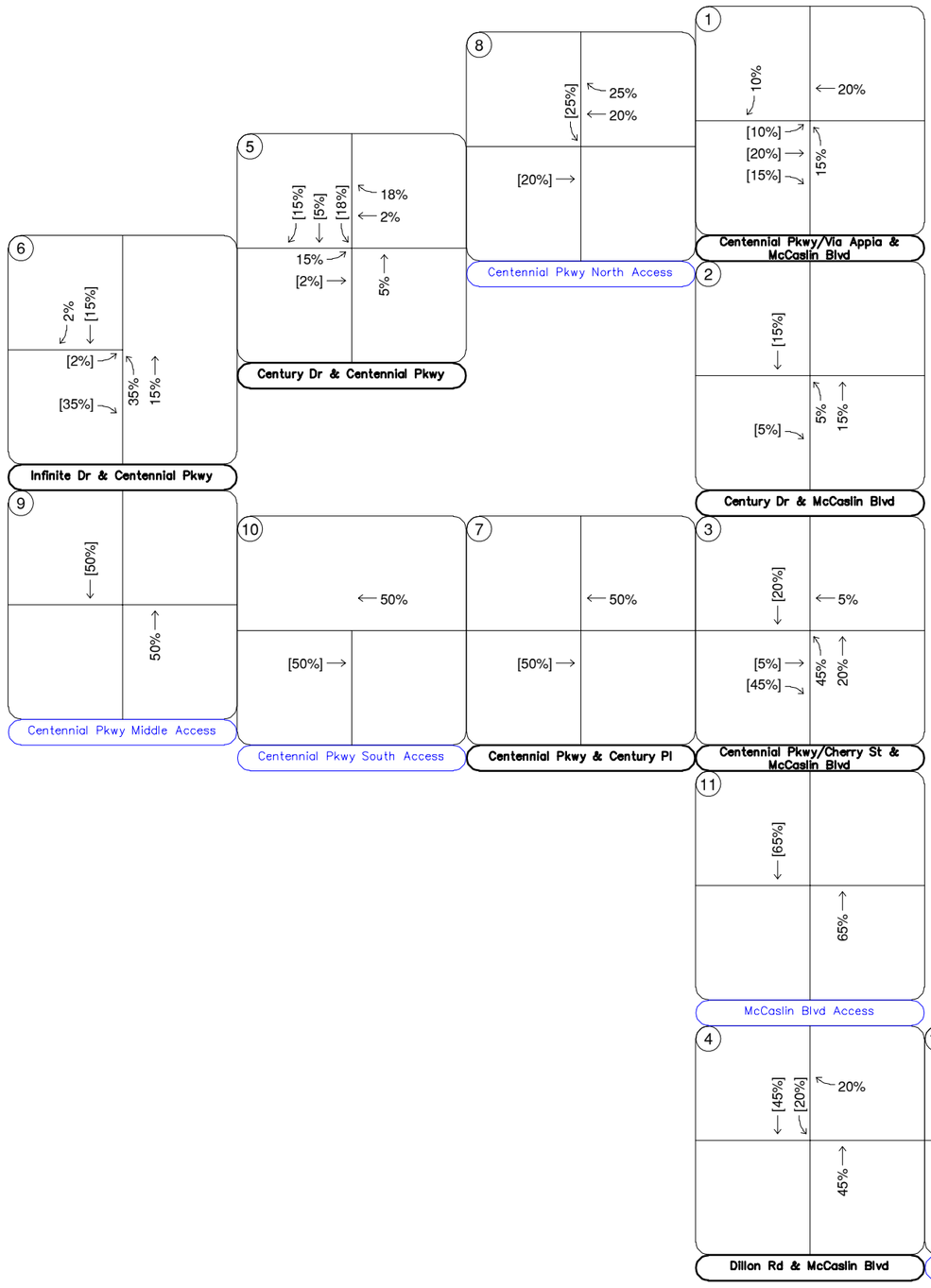
Centennial Valley McCaslin Small Area Plan Uses PM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS		
	Land Use + Code	Source	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total
1	(710) General Office Building	ITE 12th Ed	1050	KSF	T = 0.99(X) + 31.14	16%	84%	171	900	1,071
2	(710) General Office Building	ITE 12th Ed	43.6	KSF	T = 0.99(X) + 31.14	16%	84%	12	62	74
3	(822) Strip Retail Plaza (<40k)	ITE 12th Ed	27.2	LKSF	Ln(T) = 0.68 Ln(X) + 2.77	50%	50%	76	75	151
							Total:	259	1,037	1,296

Appendix E: Zone Distribution and Assignment

Kimley»Horn
NORTH
NTS 296402000





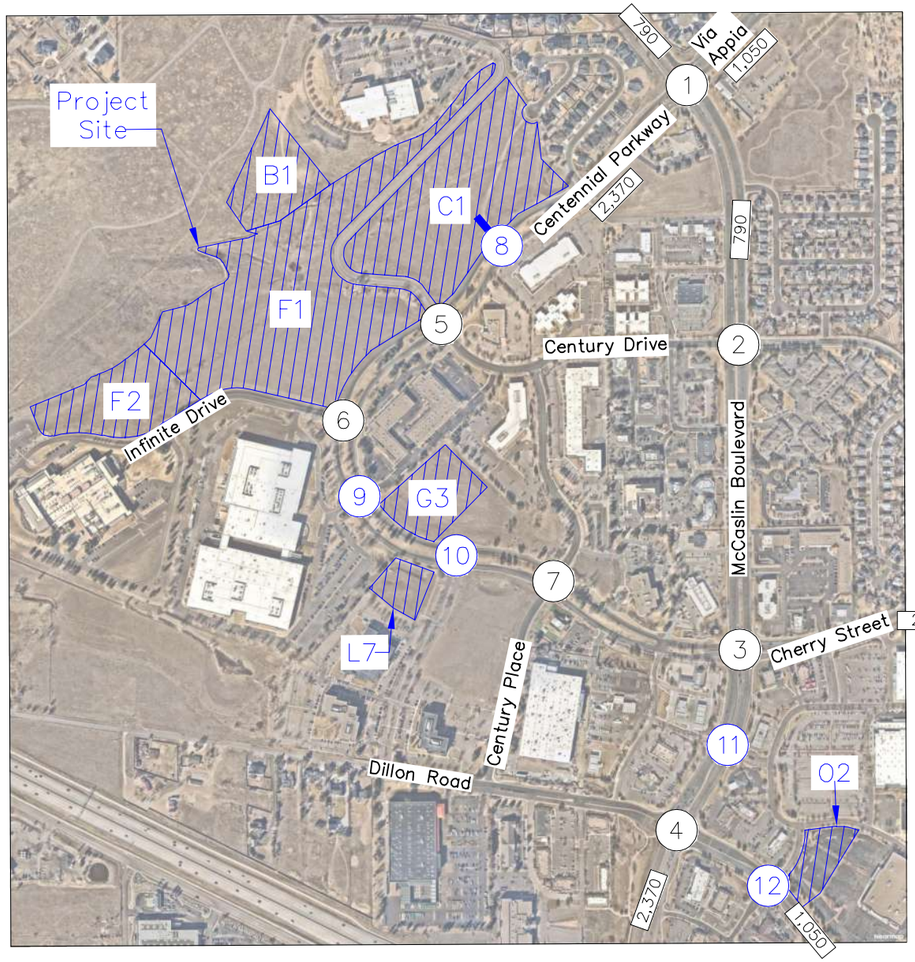
LEGEND

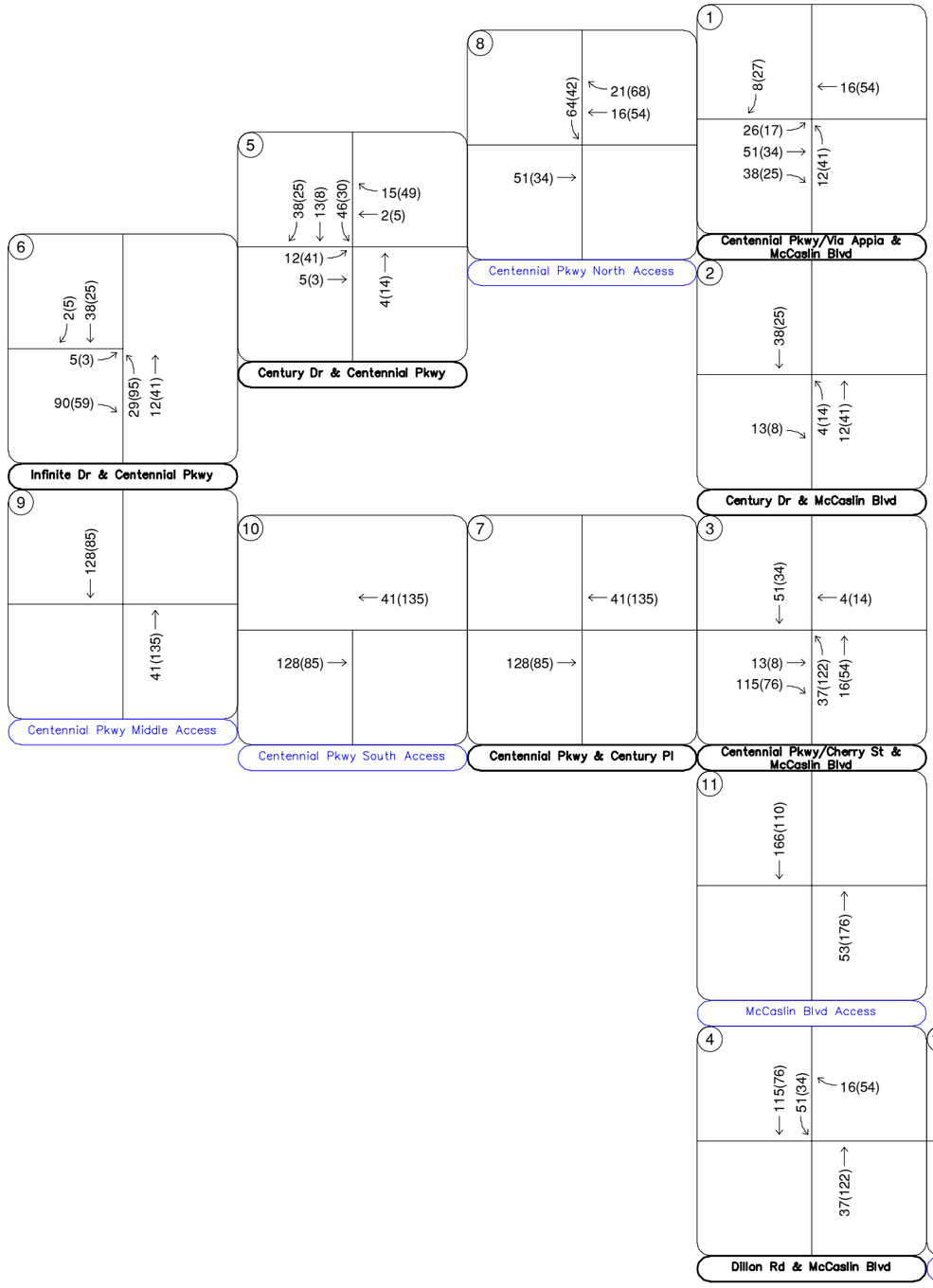
- (X) Study Area Key Intersection
- (X) Project Access Intersection
- XX% External Trip Distribution Percentage
- XX%[XX%] Entering[Exiting] Trip Distribution Percentage

FIGURE A
Centennial Valley Residential
Louisville, Colorado
B1, C1, F1, F2 Trip Distribution

Kimley»Horn

Kimley»Horn
NORTH
NTS 296402000





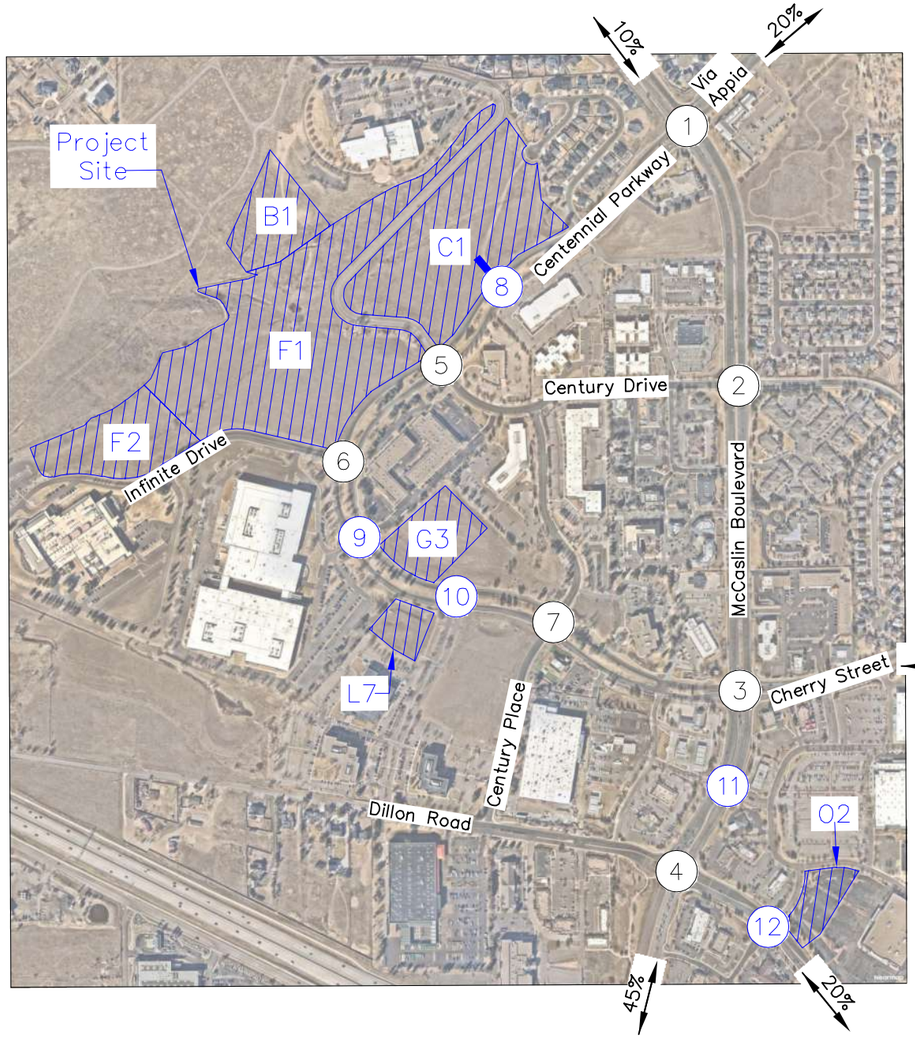
LEGEND

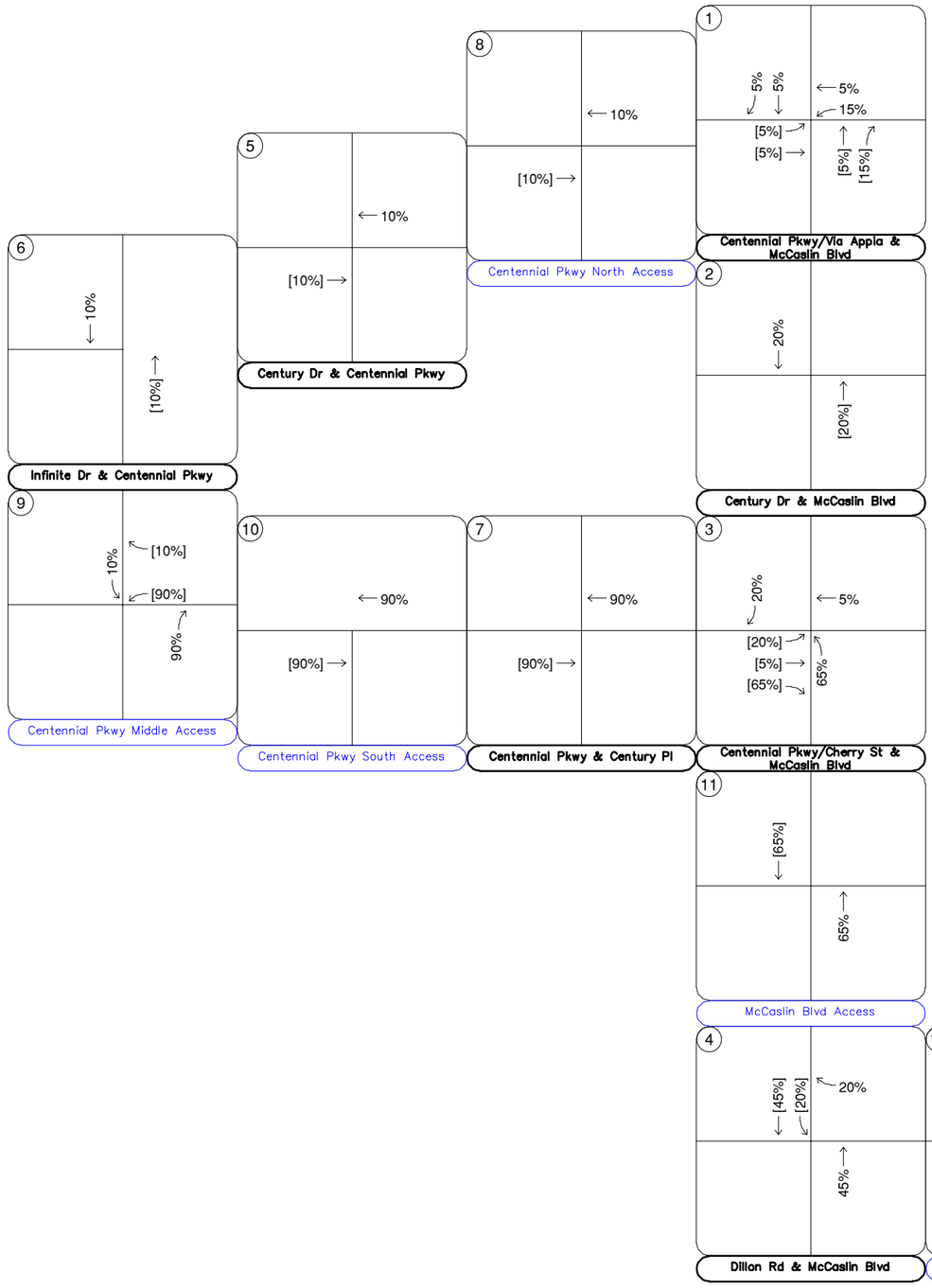
X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE B
Centennial Valley Residential
Louisville, Colorado
B1, C1, F1, F2 Traffic Assignment

Kimley»Horn

Kimley»Horn
NORTH
NTS 296402000



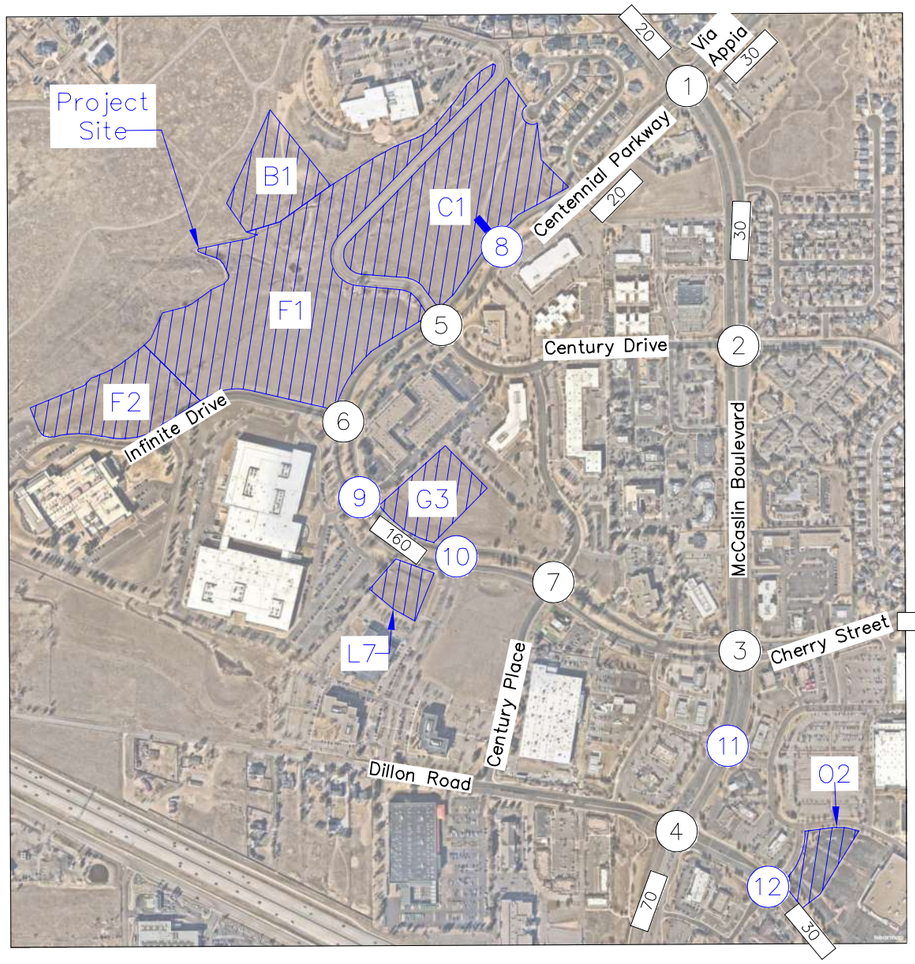


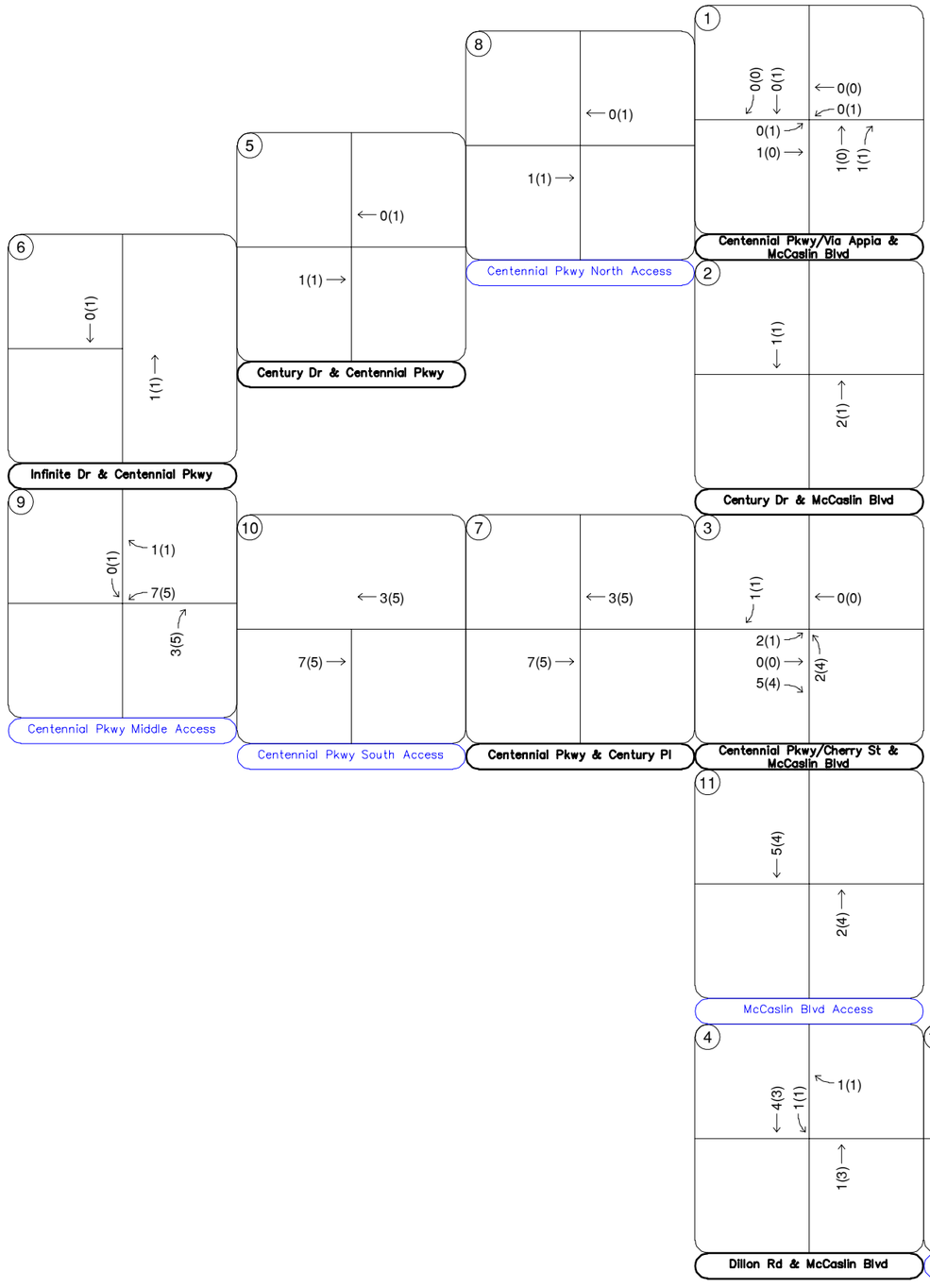
LEGEND

- (X) Study Area Key Intersection
- (X) Project Access Intersection
- XX% External Trip Distribution Percentage
- XX%[XX%] Entering[Exiting] Trip Distribution Percentage

FIGURE C
Centennial Valley Residential
Louisville, Colorado
G3 Project Trip Distribution

Kimley»Horn

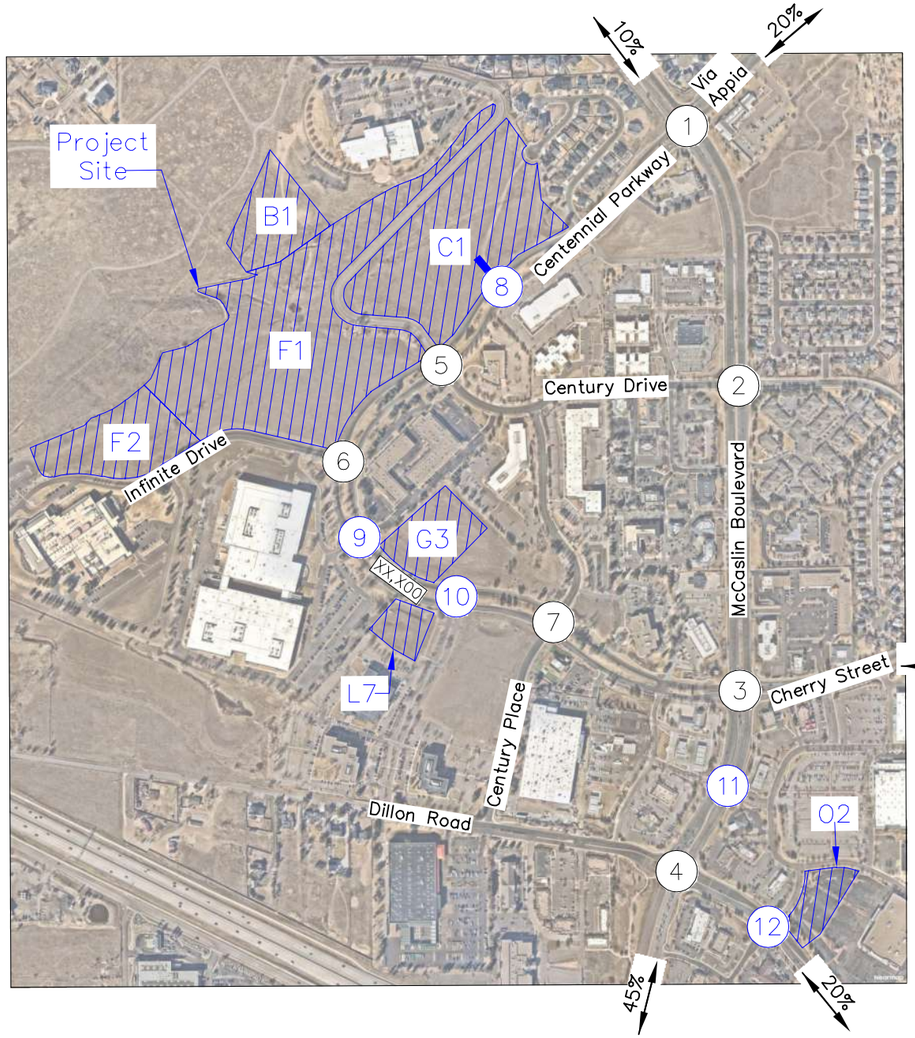


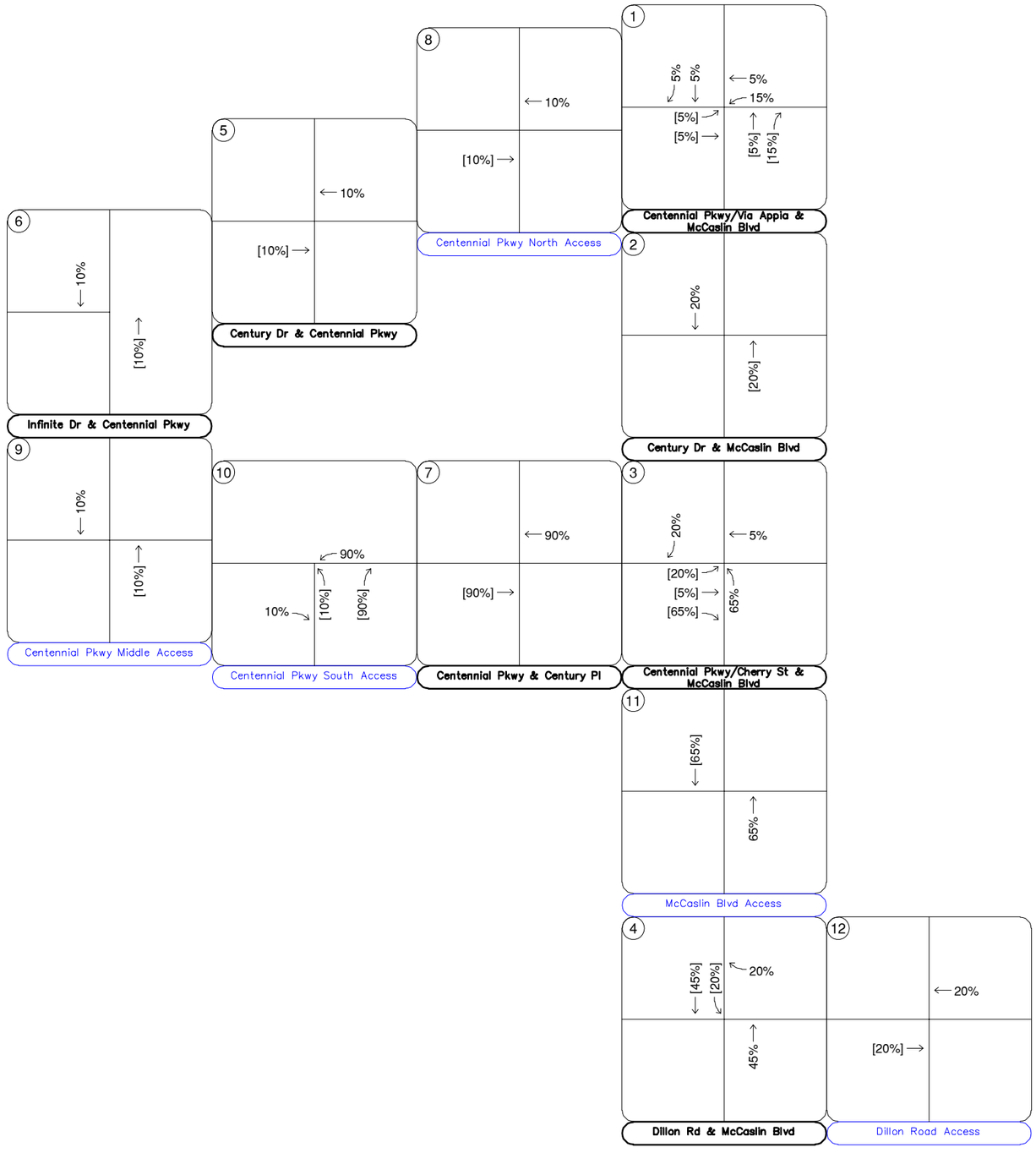


LEGEND

- (X) Study Area Key Intersection
- (X) Project Access Intersection
- XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes
- XX,X00 Estimated Daily Traffic Volume

FIGURE D
Centennial Valley Residential
Louisville, Colorado
G3 Project Traffic Assignment

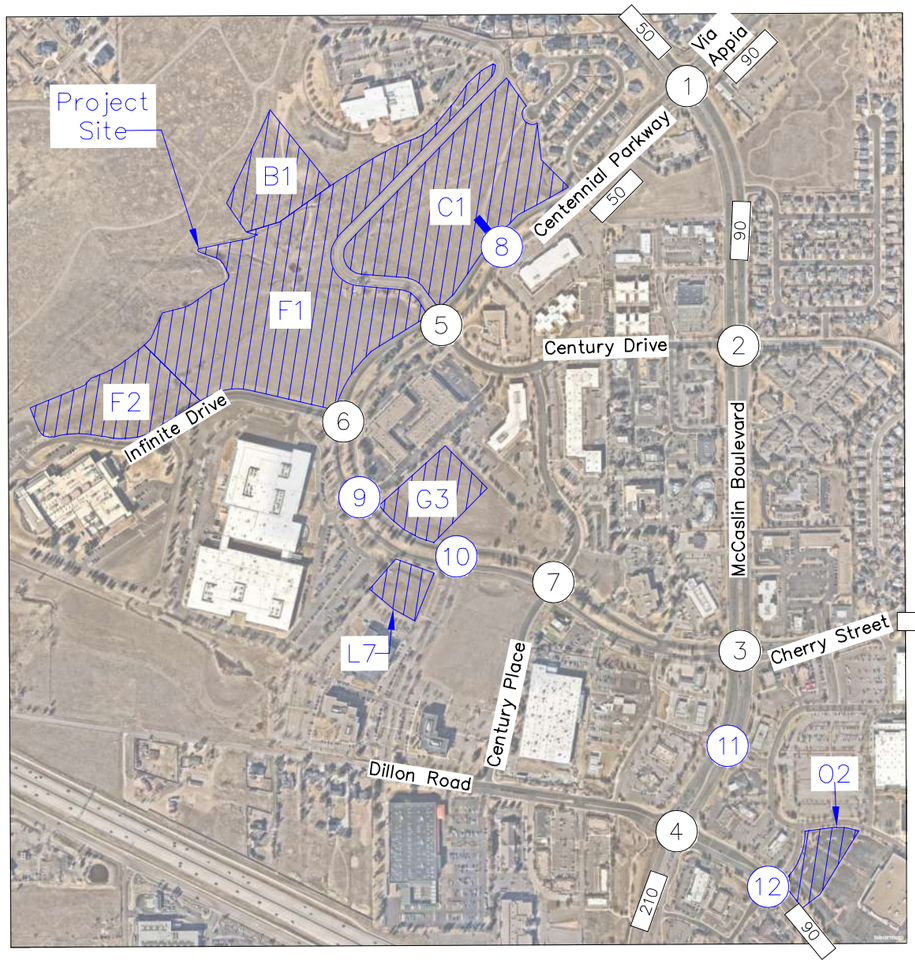


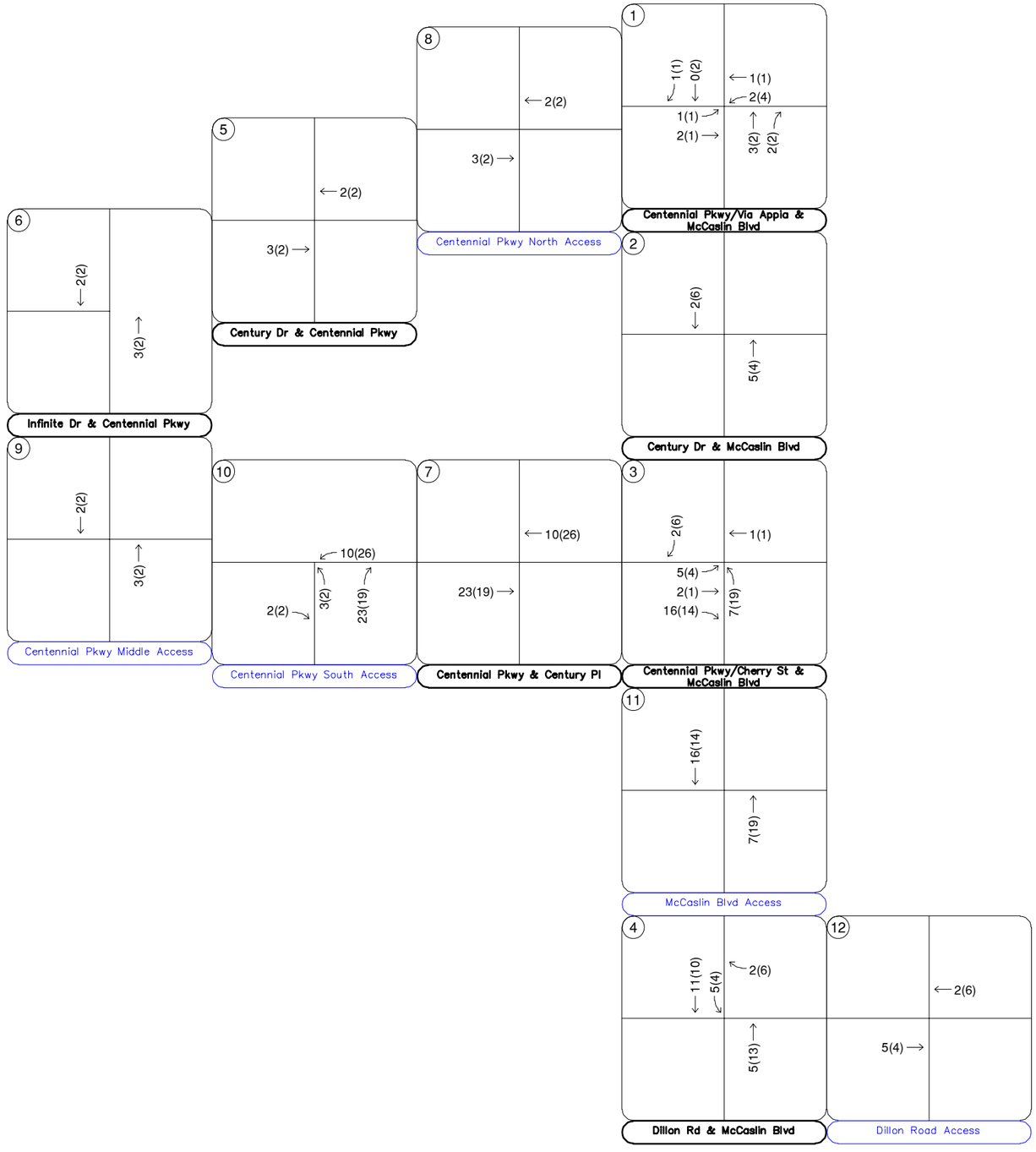


LEGEND

- (X) Study Area Key Intersection
- (X) Project Access Intersection
- XX% External Trip Distribution Percentage
- XX%[XX%] Entering[Exiting] Trip Distribution Percentage

FIGURE E
Centennial Valley Residential
Louisville, Colorado
L7 Project Trip Distribution

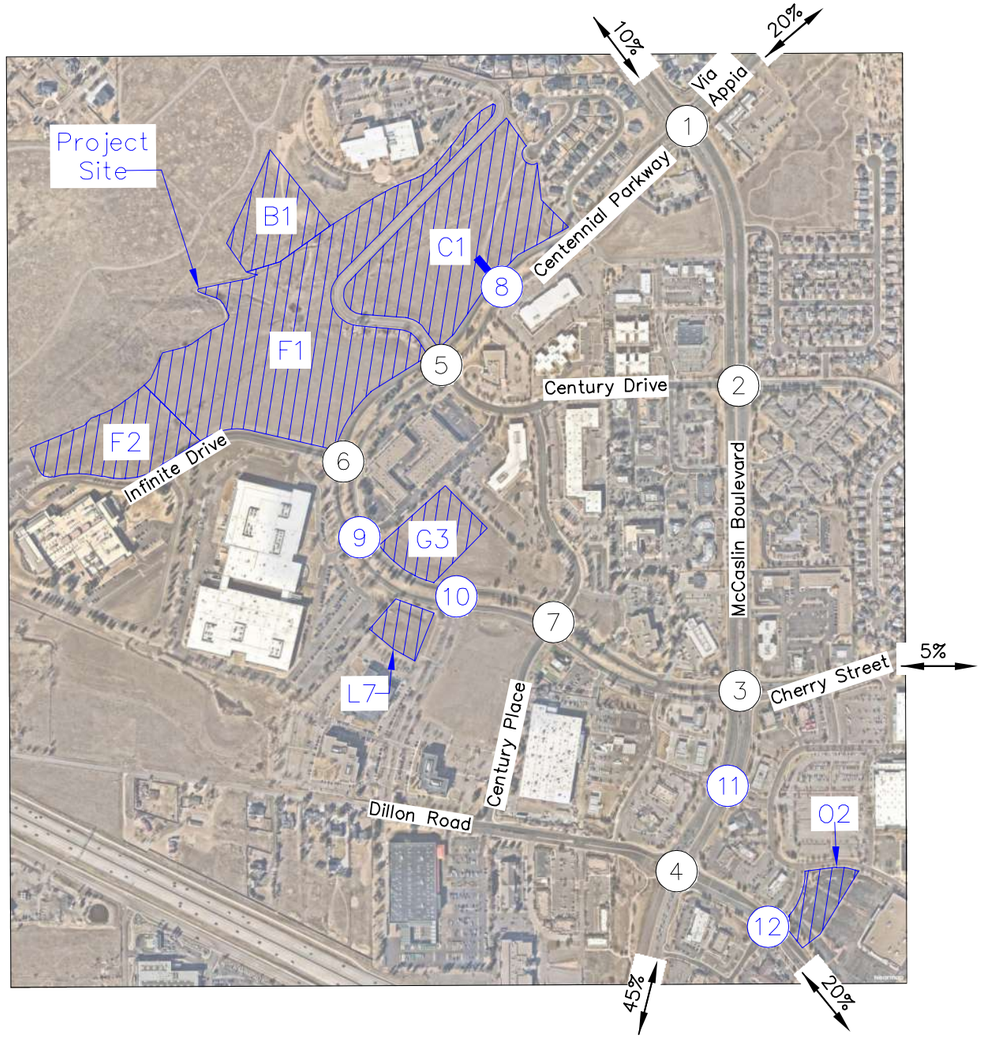




LEGEND

- (X) Study Area Key Intersection
- (X) Project Access Intersection
- XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes
- XX,X00 Estimated Daily Traffic Volume

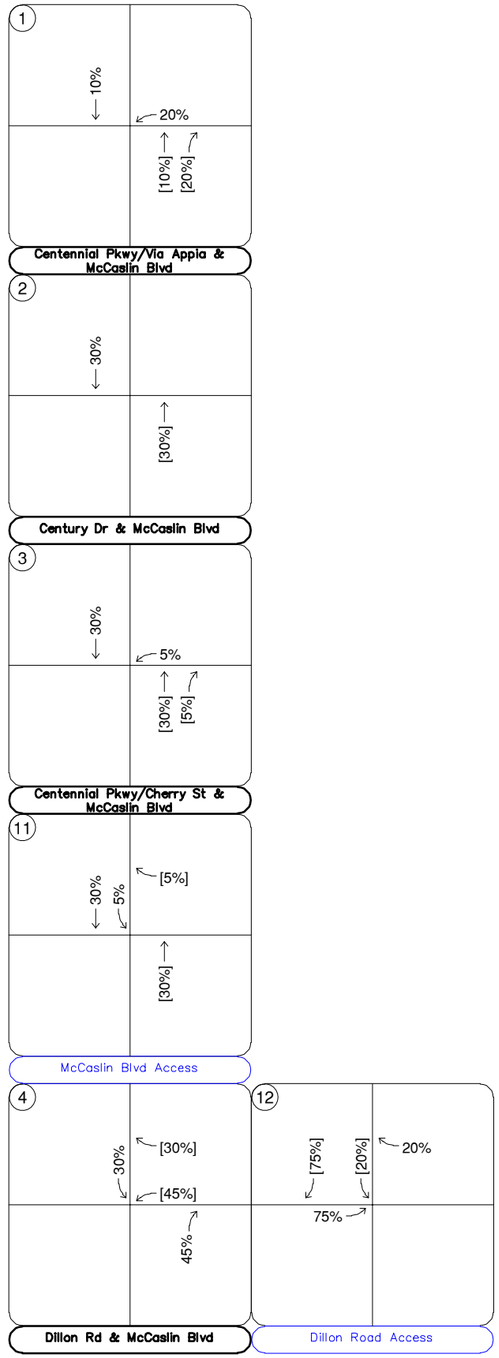
FIGURE F
Centennial Valley Residential
Louisville, Colorado
L7 Project Traffic Assignment

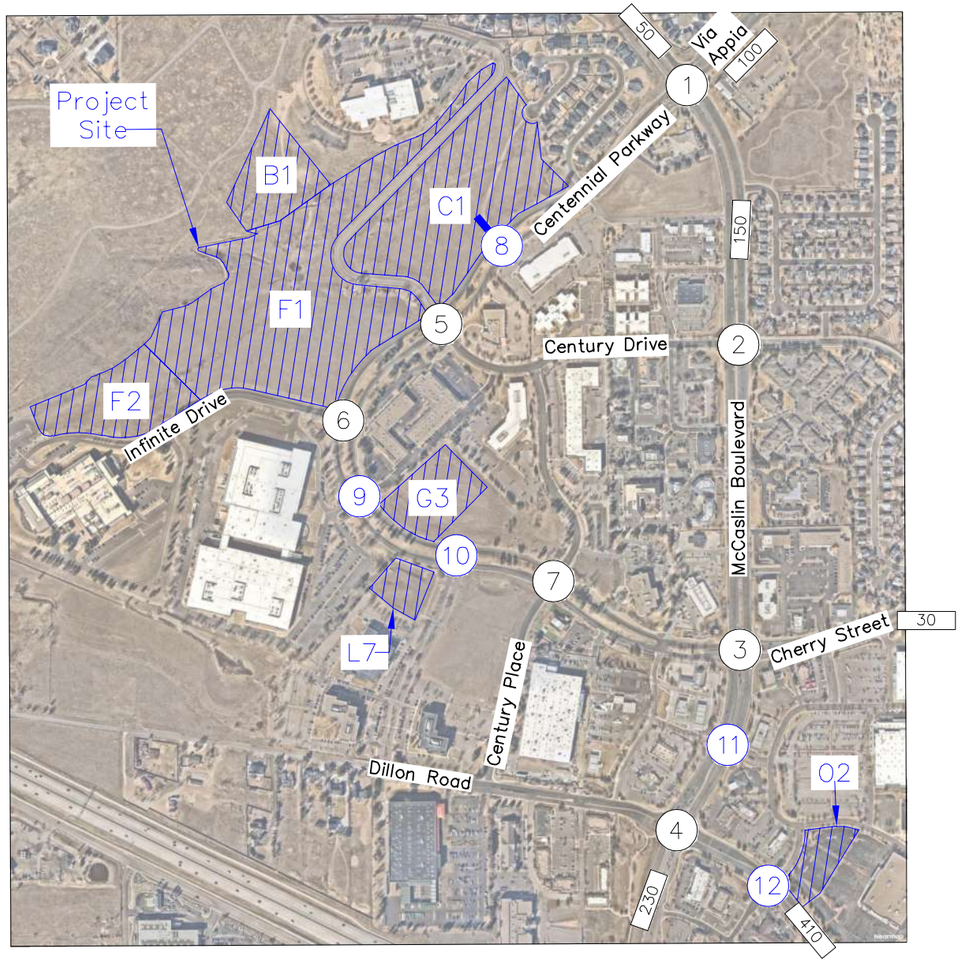


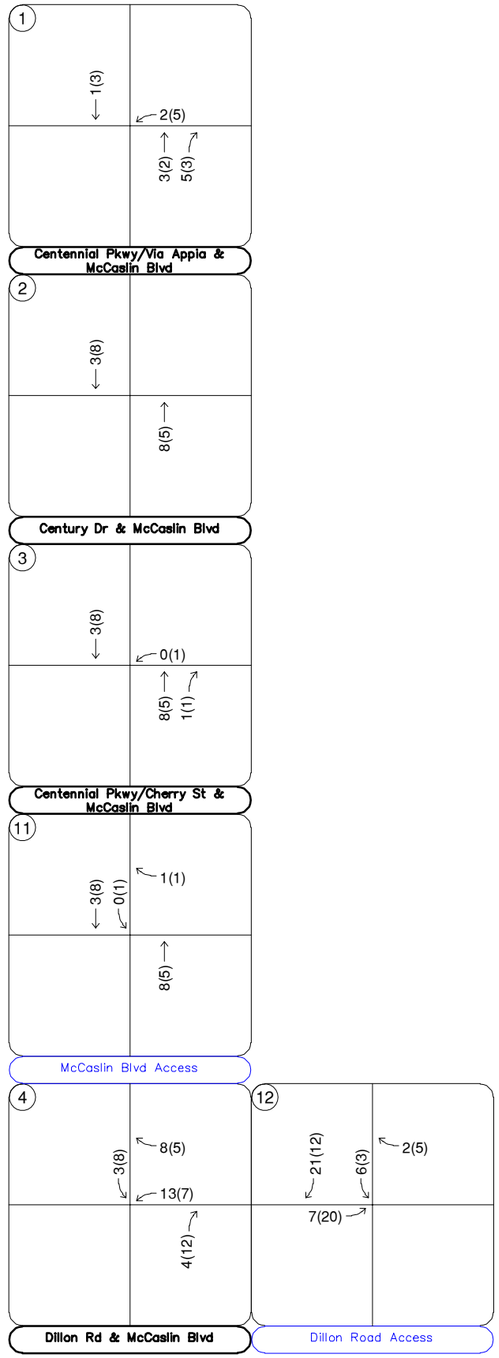
LEGEND

- (X) Study Area Key Intersection
- (X) Project Access Intersection
- XX% External Trip Distribution Percentage
- XX%[XX%] Entering[Exiting] Trip Distribution Percentage

FIGURE G
Centennial Valley Residential
Louisville, Colorado
02 Project Trip Distribution







LEGEND

(X)	Study Area Key Intersection
(X)	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE H
Centennial Valley Residential
Louisville, Colorado
02 Project Traffic Assignment

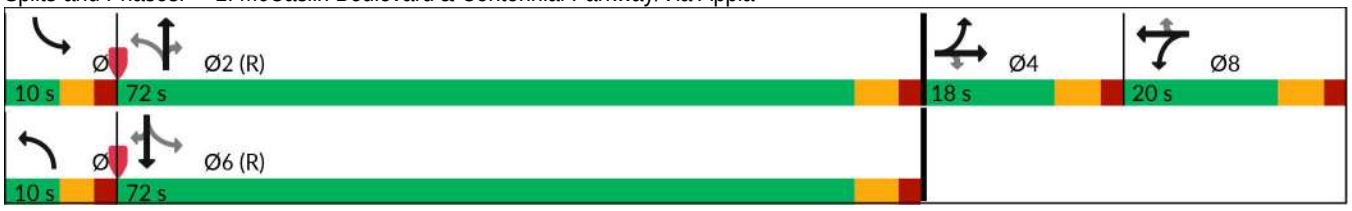
Appendix F: Intersection Analysis Worksheets

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	16	8	300	79	115	11	475	269	45	417	48
Future Volume (vph)	18	16	8	300	79	115	11	475	269	45	417	48
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	72.0	72.0	10.0	72.0	72.0
Total Split (%)	15.0%	15.0%	15.0%	16.7%	16.7%	16.7%	8.3%	60.0%	60.0%	8.3%	60.0%	60.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 1: McCaslin Boulevard & Centennial Parkway/Via Appia





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	16	8	300	79	115	11	475	269	45	417	48
Future Volume (veh/h)	18	16	8	300	79	115	11	475	269	45	417	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	19	17	0	319	84	0	12	505	0	48	444	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	2	2	2
Cap, veh/h	52	103		377	204		645	2210		689	2333	
Arrive On Green	0.03	0.03	0.00	0.11	0.11	0.00	0.03	1.00	0.00	0.03	0.66	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1739	3469	1547	1781	3554	1585
Grp Volume(v), veh/h	19	17	0	319	84	0	12	505	0	48	444	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1739	1735	1547	1781	1777	1585
Q Serve(g_s), s	1.3	0.6	0.0	10.9	5.0	0.0	0.3	0.0	0.0	1.1	5.9	0.0
Cycle Q Clear(g_c), s	1.3	0.6	0.0	10.9	5.0	0.0	0.3	0.0	0.0	1.1	5.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	52	103		377	204		645	2210		689	2333	
V/C Ratio(X)	0.37	0.16		0.85	0.41		0.02	0.23		0.07	0.19	
Avail Cap(c_a), veh/h	178	355		403	218		693	2210		704	2333	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.99	0.99	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.2	56.8	0.0	52.5	49.9	0.0	7.3	0.0	0.0	6.7	8.1	0.0
Incr Delay (d2), s/veh	4.3	0.7	0.0	14.6	1.3	0.0	0.0	0.2	0.0	0.0	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.3	0.0	5.5	2.4	0.0	0.1	0.1	0.0	0.4	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.4	57.6	0.0	67.1	51.2	0.0	7.3	0.2	0.0	6.7	8.3	0.0
LnGrp LOS	E	E		E	D		A	A		A	A	
Approach Vol, veh/h		36			403			517			492	
Approach Delay, s/veh		59.6			63.8			0.4			8.1	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	82.4		9.5	6.6	84.8		19.1				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	66.0		12.0	5.0	66.0		14.0				
Max Q Clear Time (g_c+I1), s	3.1	2.0		3.3	2.3	7.9		12.9				
Green Ext Time (p_c), s	0.0	3.9		0.0	0.0	3.4		0.2				

Intersection Summary		
HCM 7th Control Delay, s/veh	22.1	
HCM 7th LOS	C	

Notes

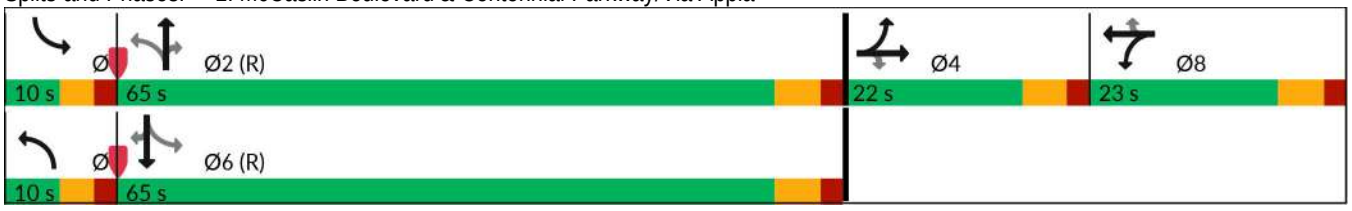
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	102	12	305	22	58	6	456	455	122	823	21
Future Volume (vph)	26	102	12	305	22	58	6	456	455	122	823	21
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	22.0	22.0	22.0	23.0	23.0	23.0	10.0	65.0	65.0	10.0	65.0	65.0
Total Split (%)	18.3%	18.3%	18.3%	19.2%	19.2%	19.2%	8.3%	54.2%	54.2%	8.3%	54.2%	54.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 1: McCaslin Boulevard & Centennial Parkway/Via Appia





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	102	12	305	22	58	6	456	455	122	823	21
Future Volume (veh/h)	26	102	12	305	22	58	6	456	455	122	823	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	110	0	328	24	0	6	490	0	131	885	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	178		393	213		398	2143		681	2264	
Arrive On Green	0.05	0.05	0.00	0.11	0.11	0.00	0.01	1.00	0.00	0.04	0.64	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	28	110	0	328	24	0	6	490	0	131	885	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.8	3.6	0.0	11.2	1.4	0.0	0.2	0.0	0.0	3.3	14.4	0.0
Cycle Q Clear(g_c), s	1.8	3.6	0.0	11.2	1.4	0.0	0.2	0.0	0.0	3.3	14.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	89	178		393	213		398	2143		681	2264	
V/C Ratio(X)	0.31	0.62		0.83	0.11		0.02	0.23		0.19	0.39	
Avail Cap(c_a), veh/h	238	474		490	265		459	2143		681	2264	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.97	0.97	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.0	55.9	0.0	52.1	47.7	0.0	9.5	0.0	0.0	7.8	10.5	0.0
Incr Delay (d2), s/veh	2.0	3.5	0.0	9.9	0.2	0.0	0.0	0.2	0.0	0.1	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.7	0.0	5.4	0.7	0.0	0.1	0.1	0.0	1.2	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.0	59.3	0.0	61.9	48.0	0.0	9.6	0.2	0.0	7.9	11.0	0.0
LnGrp LOS	E	E		E	D		A	A		A	B	
Approach Vol, veh/h		138			352			496			1016	
Approach Delay, s/veh		58.9			61.0			0.4			10.6	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	78.3		12.0	5.9	82.4		19.6				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	59.0		16.0	5.0	59.0		17.0				
Max Q Clear Time (g_c+I1), s	5.3	2.0		5.6	2.2	16.4		13.2				
Green Ext Time (p_c), s	0.0	3.8		0.4	0.0	7.7		0.5				

Intersection Summary		
HCM 7th Control Delay, s/veh	20.3	
HCM 7th LOS	C	

Notes

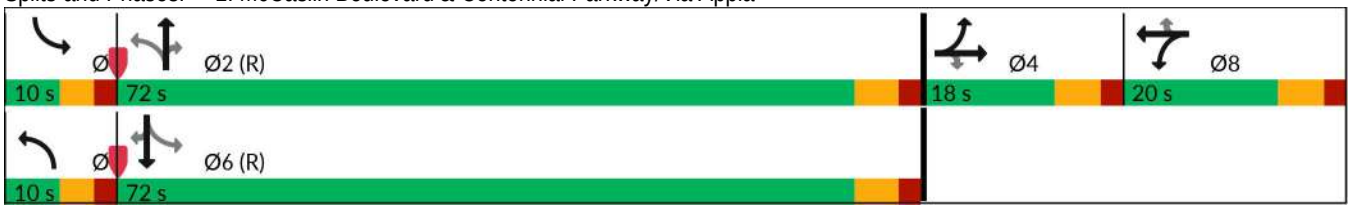
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	17	8	312	82	120	11	537	280	47	492	50
Future Volume (vph)	19	17	8	312	82	120	11	537	280	47	492	50
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	72.0	72.0	10.0	72.0	72.0
Total Split (%)	15.0%	15.0%	15.0%	16.7%	16.7%	16.7%	8.3%	60.0%	60.0%	8.3%	60.0%	60.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 1: McCaslin Boulevard & Centennial Parkway/Via Appia





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	17	8	312	82	120	11	537	280	47	492	50
Future Volume (veh/h)	19	17	8	312	82	120	11	537	280	47	492	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	20	18	0	332	87	0	12	571	0	50	523	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	2	2	2
Cap, veh/h	53	106		388	210		592	2194		652	2319	
Arrive On Green	0.03	0.03	0.00	0.11	0.11	0.00	0.03	1.00	0.00	0.03	0.65	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1739	3469	1547	1781	3554	1585
Grp Volume(v), veh/h	20	18	0	332	87	0	12	571	0	50	523	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1739	1735	1547	1781	1777	1585
Q Serve(g_s), s	1.3	0.6	0.0	11.3	5.2	0.0	0.3	0.0	0.0	1.2	7.2	0.0
Cycle Q Clear(g_c), s	1.3	0.6	0.0	11.3	5.2	0.0	0.3	0.0	0.0	1.2	7.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	53	106		388	210		592	2194		652	2319	
V/C Ratio(X)	0.38	0.17		0.86	0.41		0.02	0.26		0.08	0.23	
Avail Cap(c_a), veh/h	178	355		403	218		641	2194		666	2319	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.99	0.99	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.1	56.8	0.0	52.3	49.6	0.0	7.6	0.0	0.0	6.9	8.5	0.0
Incr Delay (d2), s/veh	4.3	0.7	0.0	16.1	1.3	0.0	0.0	0.3	0.0	0.0	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.3	0.0	5.8	2.5	0.0	0.1	0.1	0.0	0.4	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.4	57.5	0.0	68.4	50.9	0.0	7.6	0.3	0.0	6.9	8.7	0.0
LnGrp LOS	E	E		E	D		A	A		A	A	
Approach Vol, veh/h		38			419			583			573	
Approach Delay, s/veh		59.6			64.8			0.4			8.6	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	81.9		9.6	6.6	84.3		19.5				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	66.0		12.0	5.0	66.0		14.0				
Max Q Clear Time (g_c+I1), s	3.2	2.0		3.3	2.3	9.2		13.3				
Green Ext Time (p_c), s	0.0	4.5		0.0	0.0	4.1		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	21.4
HCM 7th LOS	C

Notes

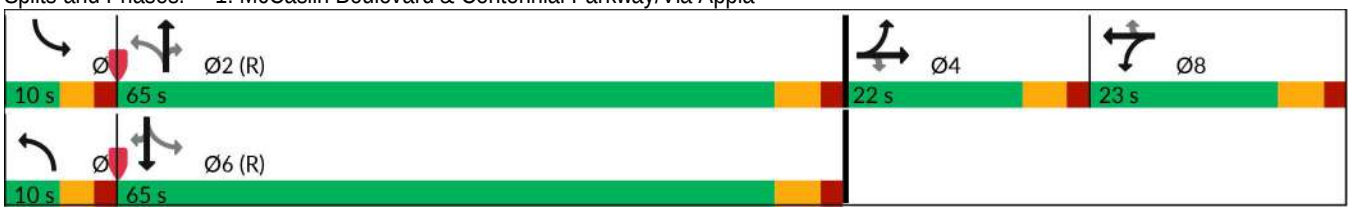
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	106	12	317	23	60	6	570	473	127	951	22
Future Volume (vph)	27	106	12	317	23	60	6	570	473	127	951	22
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	22.0	22.0	22.0	23.0	23.0	23.0	10.0	65.0	65.0	10.0	65.0	65.0
Total Split (%)	18.3%	18.3%	18.3%	19.2%	19.2%	19.2%	8.3%	54.2%	54.2%	8.3%	54.2%	54.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 1: McCaslin Boulevard & Centennial Parkway/Via Appia





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	106	12	317	23	60	6	570	473	127	951	22
Future Volume (veh/h)	27	106	12	317	23	60	6	570	473	127	951	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	114	0	341	25	0	6	613	0	137	1023	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	183		405	219		340	2125		618	2247	
Arrive On Green	0.05	0.05	0.00	0.12	0.12	0.00	0.02	1.00	0.00	0.04	0.63	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	29	114	0	341	25	0	6	613	0	137	1023	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.9	3.8	0.0	11.6	1.4	0.0	0.2	0.0	0.0	3.5	17.8	0.0
Cycle Q Clear(g_c), s	1.9	3.8	0.0	11.6	1.4	0.0	0.2	0.0	0.0	3.5	17.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	92	183		405	219		340	2125		618	2247	
V/C Ratio(X)	0.32	0.62		0.84	0.11		0.02	0.29		0.22	0.46	
Avail Cap(c_a), veh/h	238	474		490	265		401	2125		618	2247	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.96	0.96	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.9	55.8	0.0	51.9	47.4	0.0	10.1	0.0	0.0	8.0	11.4	0.0
Incr Delay (d2), s/veh	2.0	3.5	0.0	10.8	0.2	0.0	0.0	0.3	0.0	0.2	0.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.8	0.0	5.6	0.7	0.0	0.1	0.1	0.0	1.3	6.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.8	59.3	0.0	62.7	47.6	0.0	10.1	0.3	0.0	8.2	12.1	0.0
LnGrp LOS	E	E		E	D		B	A		A	B	
Approach Vol, veh/h		143			366			619			1160	
Approach Delay, s/veh		58.8			61.6			0.4			11.6	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	77.8		12.2	5.9	81.9		20.1				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	59.0		16.0	5.0	59.0		17.0				
Max Q Clear Time (g_c+I1), s	5.5	2.0		5.8	2.2	19.8		13.6				
Green Ext Time (p_c), s	0.0	4.9		0.4	0.0	9.4		0.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	19.5
HCM 7th LOS	B

Notes

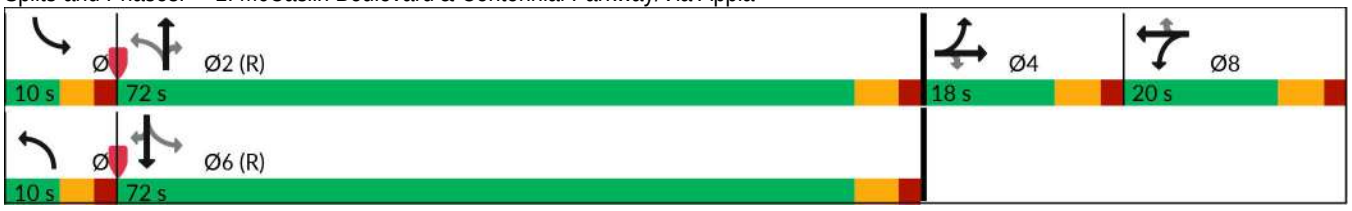
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	71	46	316	99	120	23	542	288	47	493	59
Future Volume (vph)	46	71	46	316	99	120	23	542	288	47	493	59
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	72.0	72.0	10.0	72.0	72.0
Total Split (%)	15.0%	15.0%	15.0%	16.7%	16.7%	16.7%	8.3%	60.0%	60.0%	8.3%	60.0%	60.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 1: McCaslin Boulevard & Centennial Parkway/Via Appia





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	71	46	316	99	120	23	542	288	47	493	59
Future Volume (veh/h)	46	71	46	316	99	120	23	542	288	47	493	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	49	76	0	336	105	0	24	577	0	50	524	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	2	2	2
Cap, veh/h	80	160		391	212		583	2138		636	2229	
Arrive On Green	0.04	0.04	0.00	0.11	0.11	0.00	0.05	1.00	0.00	0.03	0.63	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1739	3469	1547	1781	3554	1585
Grp Volume(v), veh/h	49	76	0	336	105	0	24	577	0	50	524	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1739	1735	1547	1781	1777	1585
Q Serve(g_s), s	3.2	2.5	0.0	11.5	6.3	0.0	0.6	0.0	0.0	1.2	7.7	0.0
Cycle Q Clear(g_c), s	3.2	2.5	0.0	11.5	6.3	0.0	0.6	0.0	0.0	1.2	7.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	160		391	212		583	2138		636	2229	
V/C Ratio(X)	0.61	0.48		0.86	0.50		0.04	0.27		0.08	0.24	
Avail Cap(c_a), veh/h	178	355		403	218		615	2138		650	2229	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.99	0.99	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.3	55.9	0.0	52.3	50.0	0.0	7.9	0.0	0.0	7.6	9.8	0.0
Incr Delay (d2), s/veh	7.3	2.2	0.0	16.5	1.8	0.0	0.0	0.3	0.0	0.1	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.2	0.0	5.9	3.1	0.0	0.2	0.1	0.0	0.5	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.6	58.1	0.0	68.7	51.8	0.0	7.9	0.3	0.0	7.6	10.0	0.0
LnGrp LOS	E	E		E	D		A	A		A	B	
Approach Vol, veh/h		125			441			601			574	
Approach Delay, s/veh		60.3			64.7			0.6			9.8	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	80.0		11.4	7.8	81.3		19.6				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	66.0		12.0	5.0	66.0		14.0				
Max Q Clear Time (g_c+I1), s	3.2	2.0		5.2	2.6	9.7		13.5				
Green Ext Time (p_c), s	0.0	4.6		0.2	0.0	4.1		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	24.2
HCM 7th LOS	C

Notes

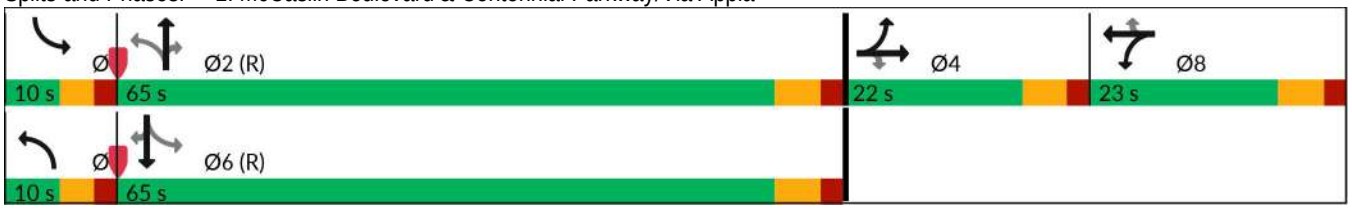
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	141	37	327	78	60	47	573	479	127	956	50
Future Volume (vph)	46	141	37	327	78	60	47	573	479	127	956	50
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	22.0	22.0	22.0	23.0	23.0	23.0	10.0	65.0	65.0	10.0	65.0	65.0
Total Split (%)	18.3%	18.3%	18.3%	19.2%	19.2%	19.2%	8.3%	54.2%	54.2%	8.3%	54.2%	54.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 1: McCaslin Boulevard & Centennial Parkway/Via Appia





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	141	37	327	78	60	47	573	479	127	956	50
Future Volume (veh/h)	46	141	37	327	78	60	47	573	479	127	956	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	152	0	352	84	0	51	616	0	137	1028	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	226		418	226		353	2068		604	2095	
Arrive On Green	0.06	0.06	0.00	0.12	0.12	0.00	0.07	1.00	0.00	0.04	0.59	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	49	152	0	352	84	0	51	616	0	137	1028	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.2	5.0	0.0	12.0	5.0	0.0	1.3	0.0	0.0	3.8	20.0	0.0
Cycle Q Clear(g_c), s	3.2	5.0	0.0	12.0	5.0	0.0	1.3	0.0	0.0	3.8	20.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	226		418	226		353	2068		604	2095	
V/C Ratio(X)	0.43	0.67		0.84	0.37		0.14	0.30		0.23	0.49	
Avail Cap(c_a), veh/h	238	474		490	265		366	2068		604	2095	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.95	0.95	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.1	55.0	0.0	51.6	48.5	0.0	10.4	0.0	0.0	9.2	14.2	0.0
Incr Delay (d2), s/veh	2.6	3.4	0.0	11.1	1.0	0.0	0.2	0.4	0.0	0.2	0.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.4	0.0	5.8	2.4	0.0	0.5	0.1	0.0	1.5	8.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.7	58.4	0.0	62.7	49.6	0.0	10.6	0.4	0.0	9.4	15.0	0.0
LnGrp LOS	E	E		E	D		B	A		A	B	
Approach Vol, veh/h		201			436			667			1165	
Approach Delay, s/veh		58.0			60.2			1.1			14.4	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	75.8		13.6	9.1	76.8		20.5				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	59.0		16.0	5.0	59.0		17.0				
Max Q Clear Time (g_c+I1), s	5.8	2.0		7.0	3.3	22.0		14.0				
Green Ext Time (p_c), s	0.0	4.9		0.6	0.0	9.3		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	22.4
HCM 7th LOS	C

Notes

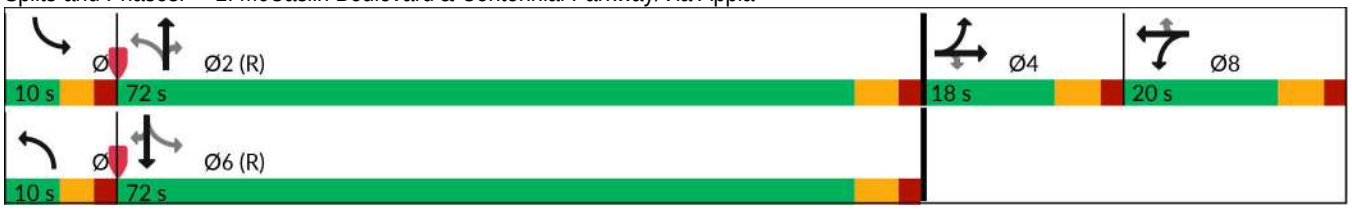
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	20	10	381	100	146	14	647	342	57	588	61
Future Volume (vph)	23	20	10	381	100	146	14	647	342	57	588	61
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	72.0	72.0	10.0	72.0	72.0
Total Split (%)	15.0%	15.0%	15.0%	16.7%	16.7%	16.7%	8.3%	60.0%	60.0%	8.3%	60.0%	60.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 1: McCaslin Boulevard & Centennial Parkway/Via Appia





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	20	10	381	100	146	14	647	342	57	588	61
Future Volume (veh/h)	23	20	10	381	100	146	14	647	342	57	588	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	24	21	0	405	106	0	15	688	0	61	626	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	2	2	2
Cap, veh/h	58	115		403	218		531	2162		595	2285	
Arrive On Green	0.03	0.03	0.00	0.12	0.12	0.00	0.03	1.00	0.00	0.04	0.64	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1739	3469	1547	1781	3554	1585
Grp Volume(v), veh/h	24	21	0	405	106	0	15	688	0	61	626	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1739	1735	1547	1781	1777	1585
Q Serve(g_s), s	1.6	0.7	0.0	14.0	6.4	0.0	0.4	0.0	0.0	1.4	9.2	0.0
Cycle Q Clear(g_c), s	1.6	0.7	0.0	14.0	6.4	0.0	0.4	0.0	0.0	1.4	9.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	58	115		403	218		531	2162		595	2285	
V/C Ratio(X)	0.42	0.18		1.00	0.49		0.03	0.32		0.10	0.27	
Avail Cap(c_a), veh/h	178	355		403	218		575	2162		604	2285	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.98	0.98	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.9	56.5	0.0	53.0	49.6	0.0	7.9	0.0	0.0	7.2	9.3	0.0
Incr Delay (d2), s/veh	4.7	0.8	0.0	46.0	1.7	0.0	0.0	0.4	0.0	0.1	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.3	0.0	8.6	3.1	0.0	0.1	0.1	0.0	0.5	3.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.7	57.3	0.0	99.0	51.3	0.0	7.9	0.4	0.0	7.3	9.6	0.0
LnGrp LOS	E	E		F	D		A	A		A	A	
Approach Vol, veh/h		45			511			703			687	
Approach Delay, s/veh		59.6			89.1			0.5			9.4	
Approach LOS		E			F			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	80.8		9.9	7.0	83.1		20.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	66.0		12.0	5.0	66.0		14.0				
Max Q Clear Time (g_c+I1), s	3.4	2.0		3.6	2.4	11.2		16.0				
Green Ext Time (p_c), s	0.0	5.7		0.1	0.0	5.0		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh	28.3	
HCM 7th LOS	C	

Notes

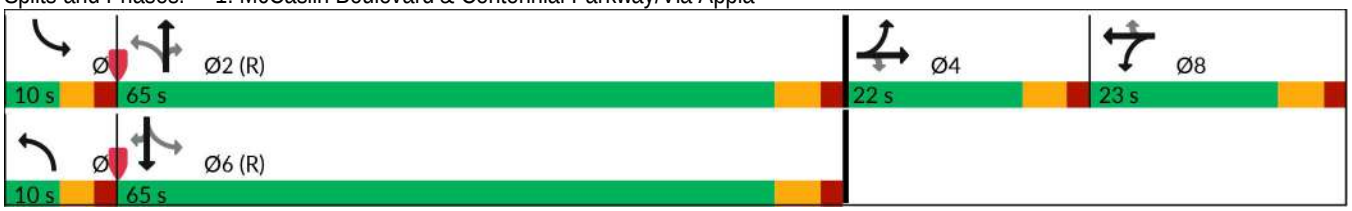
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	130	15	387	28	74	8	675	578	155	1142	27
Future Volume (vph)	33	130	15	387	28	74	8	675	578	155	1142	27
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	22.0	22.0	22.0	23.0	23.0	23.0	10.0	65.0	65.0	10.0	65.0	65.0
Total Split (%)	18.3%	18.3%	18.3%	19.2%	19.2%	19.2%	8.3%	54.2%	54.2%	8.3%	54.2%	54.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 1: McCaslin Boulevard & Centennial Parkway/Via Appia





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	130	15	387	28	74	8	675	578	155	1142	27
Future Volume (veh/h)	33	130	15	387	28	74	8	675	578	155	1142	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	140	0	416	30	0	9	726	0	167	1228	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	212		471	255		257	2028		550	2138	
Arrive On Green	0.06	0.06	0.00	0.14	0.14	0.00	0.02	1.00	0.00	0.04	0.60	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	35	140	0	416	30	0	9	726	0	167	1228	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.3	4.6	0.0	14.2	1.7	0.0	0.3	0.0	0.0	4.7	25.2	0.0
Cycle Q Clear(g_c), s	2.3	4.6	0.0	14.2	1.7	0.0	0.3	0.0	0.0	4.7	25.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	106	212		471	255		257	2028		550	2138	
V/C Ratio(X)	0.33	0.66		0.88	0.12		0.04	0.36		0.30	0.57	
Avail Cap(c_a), veh/h	238	474		490	265		312	2028		550	2138	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.93	0.93	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.1	55.2	0.0	50.9	45.5	0.0	12.4	0.0	0.0	9.6	14.6	0.0
Incr Delay (d2), s/veh	1.8	3.5	0.0	16.8	0.2	0.0	0.1	0.5	0.0	0.3	1.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.2	0.0	7.2	0.8	0.0	0.1	0.1	0.0	1.9	10.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.9	58.7	0.0	67.7	45.7	0.0	12.4	0.5	0.0	10.0	15.7	0.0
LnGrp LOS	E	E		E	D		B	A		A	B	
Approach Vol, veh/h		175			446			735			1395	
Approach Delay, s/veh		58.2			66.2			0.6			15.0	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	74.5		13.2	6.3	78.2		22.4				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	59.0		16.0	5.0	59.0		17.0				
Max Q Clear Time (g_c+I1), s	6.7	2.0		6.6	2.3	27.2		16.2				
Green Ext Time (p_c), s	0.0	6.1		0.6	0.0	11.4		0.2				

Intersection Summary		
HCM 7th Control Delay, s/veh	22.2	
HCM 7th LOS	C	

Notes

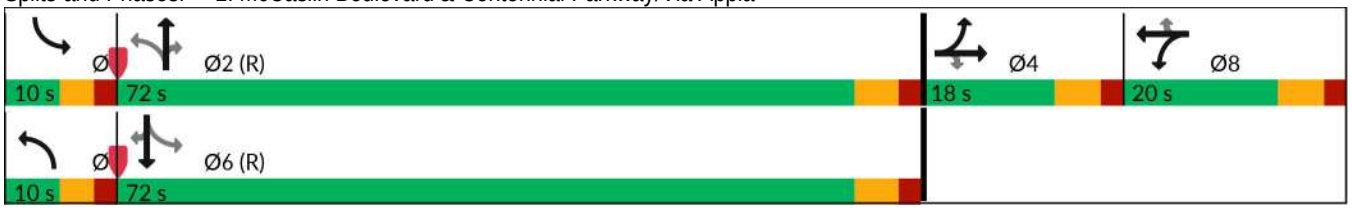
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	72	48	381	116	146	26	648	343	57	588	69
Future Volume (vph)	50	72	48	381	116	146	26	648	343	57	588	69
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	72.0	72.0	10.0	72.0	72.0
Total Split (%)	15.0%	15.0%	15.0%	16.7%	16.7%	16.7%	8.3%	60.0%	60.0%	8.3%	60.0%	60.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 1: McCaslin Boulevard & Centennial Parkway/Via Appia





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	72	48	381	116	146	26	648	343	57	588	69
Future Volume (veh/h)	50	72	48	381	116	146	26	648	343	57	588	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	53	77	0	405	123	0	28	689	0	61	626	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	2	2	2
Cap, veh/h	84	168		403	218		523	2110		583	2200	
Arrive On Green	0.05	0.05	0.00	0.12	0.12	0.00	0.05	1.00	0.00	0.04	0.62	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1739	3469	1547	1781	3554	1585
Grp Volume(v), veh/h	53	77	0	405	123	0	28	689	0	61	626	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1739	1735	1547	1781	1777	1585
Q Serve(g_s), s	3.5	2.5	0.0	14.0	7.5	0.0	0.7	0.0	0.0	1.5	9.8	0.0
Cycle Q Clear(g_c), s	3.5	2.5	0.0	14.0	7.5	0.0	0.7	0.0	0.0	1.5	9.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	84	168		403	218		523	2110		583	2200	
V/C Ratio(X)	0.63	0.46		1.00	0.56		0.05	0.33		0.10	0.28	
Avail Cap(c_a), veh/h	178	355		403	218		552	2110		593	2200	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.98	0.98	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.1	55.7	0.0	53.0	50.1	0.0	8.3	0.0	0.0	7.9	10.6	0.0
Incr Delay (d2), s/veh	7.5	1.9	0.0	46.0	3.3	0.0	0.0	0.4	0.0	0.1	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.2	0.0	8.6	3.7	0.0	0.3	0.1	0.0	0.6	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.6	57.6	0.0	99.0	53.4	0.0	8.3	0.4	0.0	7.9	10.9	0.0
LnGrp LOS	E	E		F	D		A	A		A	B	
Approach Vol, veh/h		130			528			717			687	
Approach Delay, s/veh		60.1			88.4			0.7			10.6	
Approach LOS		E			F			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	79.0		11.7	8.0	80.3		20.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	66.0		12.0	5.0	66.0		14.0				
Max Q Clear Time (g_c+I1), s	3.5	2.0		5.5	2.7	11.8		16.0				
Green Ext Time (p_c), s	0.0	5.7		0.2	0.0	5.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	30.2
HCM 7th LOS	C

Notes

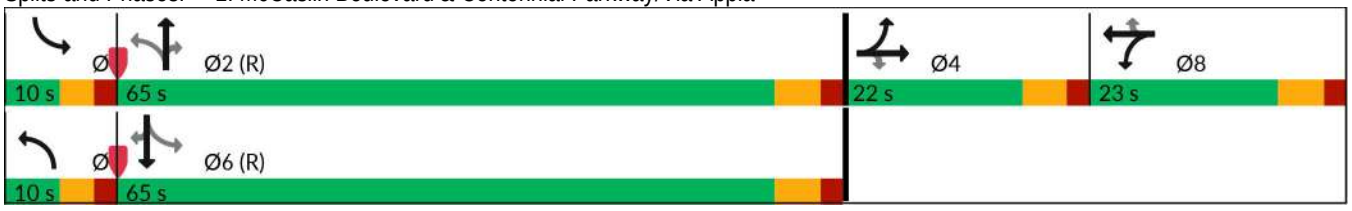
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	164	40	388	82	74	49	675	579	155	1142	54
Future Volume (vph)	52	164	40	388	82	74	49	675	579	155	1142	54
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	18.0	18.0	18.0	20.0	20.0	20.0	10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	22.0	22.0	22.0	23.0	23.0	23.0	10.0	65.0	65.0	10.0	65.0	65.0
Total Split (%)	18.3%	18.3%	18.3%	19.2%	19.2%	19.2%	8.3%	54.2%	54.2%	8.3%	54.2%	54.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 1: McCaslin Boulevard & Centennial Parkway/Via Appia





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	164	40	388	82	74	49	675	579	155	1142	54
Future Volume (veh/h)	52	164	40	388	82	74	49	675	579	155	1142	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	176	0	417	88	0	53	726	0	167	1228	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	126	252		473	256		275	1986		541	2012	
Arrive On Green	0.07	0.07	0.00	0.14	0.14	0.00	0.07	1.00	0.00	0.04	0.57	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	56	176	0	417	88	0	53	726	0	167	1228	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.6	5.8	0.0	14.2	5.1	0.0	1.5	0.0	0.0	5.0	27.5	0.0
Cycle Q Clear(g_c), s	3.6	5.8	0.0	14.2	5.1	0.0	1.5	0.0	0.0	5.0	27.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	252		473	256		275	1986		541	2012	
V/C Ratio(X)	0.44	0.70		0.88	0.34		0.19	0.37		0.31	0.61	
Avail Cap(c_a), veh/h	238	474		490	265		287	1986		541	2012	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.92	0.92	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.5	54.5	0.0	50.8	46.9	0.0	13.1	0.0	0.0	10.6	17.3	0.0
Incr Delay (d2), s/veh	2.4	3.5	0.0	16.7	0.8	0.0	0.3	0.5	0.0	0.3	1.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	2.7	0.0	7.2	2.4	0.0	0.6	0.1	0.0	2.0	11.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.9	58.0	0.0	67.5	47.7	0.0	13.4	0.5	0.0	10.9	18.7	0.0
LnGrp LOS	E	E		E	D		B	A		B	B	
Approach Vol, veh/h		232			505			779			1395	
Approach Delay, s/veh		57.5			64.1			1.4			17.7	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	73.1		14.5	9.1	73.9		22.4				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	59.0		16.0	5.0	59.0		17.0				
Max Q Clear Time (g_c+I1), s	7.0	2.0		7.8	3.5	29.5		16.2				
Green Ext Time (p_c), s	0.0	6.1		0.7	0.0	11.1		0.2				

Intersection Summary		
HCM 7th Control Delay, s/veh		24.6
HCM 7th LOS		C

Notes

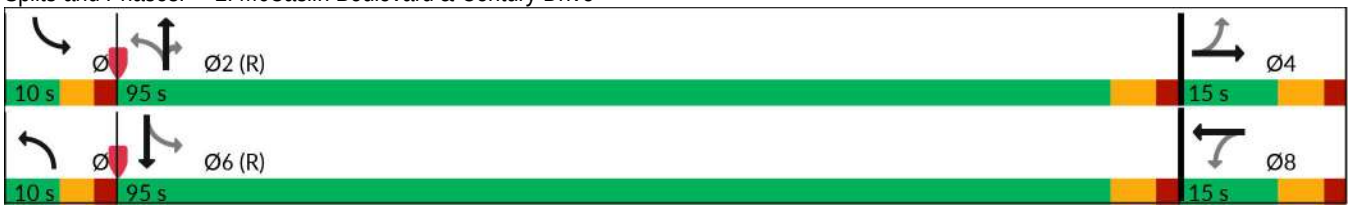
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	29	5	40	9	136	680	20	30	644
Future Volume (vph)	29	5	40	9	136	680	20	30	644
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	15.0	15.0	15.0	15.0	10.0	24.0	24.0	10.0	24.0
Total Split (s)	15.0	15.0	15.0	15.0	10.0	95.0	95.0	10.0	95.0
Total Split (%)	12.5%	12.5%	12.5%	12.5%	8.3%	79.2%	79.2%	8.3%	79.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 2: McCaslin Boulevard & Century Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	5	20	40	9	73	136	680	20	30	644	30
Future Volume (veh/h)	29	5	20	40	9	73	136	680	20	30	644	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	5	21	41	9	75	140	701	21	31	664	31
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	24	99	143	13	108	690	3863	1199	650	3710	173
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.08	1.00	1.00	0.05	1.00	1.00
Sat Flow, veh/h	1314	314	1319	1385	173	1439	1781	5106	1585	1781	5000	232
Grp Volume(v), veh/h	30	0	26	41	0	84	140	701	21	31	451	244
Grp Sat Flow(s),veh/h/ln	1314	0	1633	1385	0	1611	1781	1702	1585	1781	1702	1829
Q Serve(g_s), s	2.7	0.0	1.8	3.4	0.0	6.1	2.3	0.0	0.0	0.5	0.0	0.0
Cycle Q Clear(g_c), s	8.8	0.0	1.8	5.2	0.0	6.1	2.3	0.0	0.0	0.5	0.0	0.0
Prop In Lane	1.00		0.81	1.00		0.89	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	92	0	122	143	0	121	690	3863	1199	650	2526	1357
V/C Ratio(X)	0.33	0.00	0.21	0.29	0.00	0.70	0.20	0.18	0.02	0.05	0.18	0.18
Avail Cap(c_a), veh/h	92	0	122	143	0	121	690	3863	1199	677	2526	1357
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.93	0.93	0.93	0.92	0.92	0.92
Uniform Delay (d), s/veh	58.5	0.0	52.2	54.6	0.0	54.2	2.9	0.0	0.0	3.2	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.9	1.1	0.0	15.9	0.1	0.1	0.0	0.0	0.1	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.8	1.2	0.0	3.0	0.6	0.0	0.0	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.5	0.0	53.0	55.7	0.0	70.0	3.1	0.1	0.0	3.2	0.1	0.3
LnGrp LOS	E		D	E		E	A	A	A	A	A	A
Approach Vol, veh/h		56			125			862			726	
Approach Delay, s/veh		57.0			65.3			0.6			0.3	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	96.8		15.0	10.0	95.0		15.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	89.0		9.0	5.0	89.0		9.0				
Max Q Clear Time (g_c+I1), s	2.5	2.0		10.8	4.3	2.0		8.1				
Green Ext Time (p_c), s	0.0	5.9		0.0	0.0	5.3		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	6.8
HCM 7th LOS	A

Notes

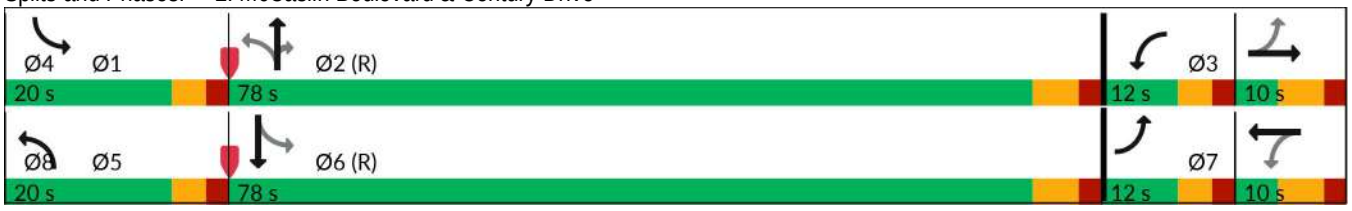
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	89	20	28	11	89	807	53	56	1053
Future Volume (vph)	89	20	28	11	89	807	53	56	1053
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	2.0	2.0	2.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.5	10.0	10.0	10.0	10.5	24.0	24.0	10.5	24.0
Total Split (s)	12.0	10.0	12.0	10.0	20.0	78.0	78.0	20.0	78.0
Total Split (%)	10.0%	8.3%	10.0%	8.3%	16.7%	65.0%	65.0%	16.7%	65.0%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	5.0	6.0	5.0	6.0	6.0	5.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 2: McCaslin Boulevard & Century Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	20	68	28	11	27	89	807	53	56	1053	19
Future Volume (veh/h)	89	20	68	28	11	27	89	807	53	56	1053	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	22	75	31	12	30	98	887	58	62	1157	21
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	26	89	114	16	39	457	3516	1091	531	3537	64
Arrive On Green	0.06	0.07	0.07	0.02	0.03	0.03	0.08	1.00	1.00	0.07	1.00	1.00
Sat Flow, veh/h	1781	372	1269	1781	474	1184	1781	5106	1585	1781	5164	94
Grp Volume(v), veh/h	98	0	97	31	0	42	98	887	58	62	763	415
Grp Sat Flow(s),veh/h/ln	1781	0	1642	1781	0	1657	1781	1702	1585	1781	1702	1853
Q Serve(g_s), s	6.3	0.0	7.0	2.0	0.0	3.0	2.0	0.0	0.0	1.2	0.0	0.0
Cycle Q Clear(g_c), s	6.3	0.0	7.0	2.0	0.0	3.0	2.0	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		0.77	1.00		0.71	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	175	0	115	114	0	55	457	3516	1091	531	2332	1269
V/C Ratio(X)	0.56	0.00	0.84	0.27	0.00	0.76	0.21	0.25	0.05	0.12	0.33	0.33
Avail Cap(c_a), veh/h	175	0	115	179	0	55	609	3516	1091	689	2332	1269
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.88	0.88	0.88	0.88	0.88	0.88
Uniform Delay (d), s/veh	51.1	0.0	55.1	54.6	0.0	57.5	4.6	0.0	0.0	4.6	0.0	0.0
Incr Delay (d2), s/veh	4.0	0.0	40.2	1.3	0.0	45.4	0.2	0.2	0.1	0.1	0.3	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	4.2	0.9	0.0	2.0	0.6	0.0	0.0	0.4	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.1	0.0	95.4	55.9	0.0	102.9	4.8	0.2	0.1	4.7	0.3	0.6
LnGrp LOS	E		F	E		F	A	A	A	A	A	A
Approach Vol, veh/h		195			73			1043			1240	
Approach Delay, s/veh		75.1			82.9			0.6			0.6	
Approach LOS		E			F			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	88.6	7.6	14.4	9.8	88.2	12.0	10.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	15.0	72.0	7.0	4.0	15.0	72.0	7.0	4.0
Max Q Clear Time (g_c+I1), s	3.2	2.0	4.0	9.0	4.0	2.0	8.3	5.0
Green Ext Time (p_c), s	0.1	8.2	0.0	0.0	0.2	11.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	8.7
HCM 7th LOS	A

Notes

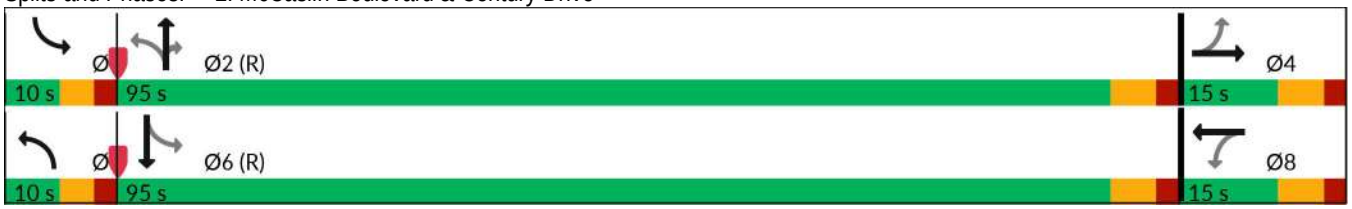
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	30	5	42	9	142	751	21	31	728
Future Volume (vph)	30	5	42	9	142	751	21	31	728
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	15.0	15.0	15.0	15.0	10.0	24.0	24.0	10.0	24.0
Total Split (s)	15.0	15.0	15.0	15.0	10.0	95.0	95.0	10.0	95.0
Total Split (%)	12.5%	12.5%	12.5%	12.5%	8.3%	79.2%	79.2%	8.3%	79.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 2: McCaslin Boulevard & Century Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	5	21	42	9	76	142	751	21	31	728	31
Future Volume (veh/h)	30	5	21	42	9	76	142	751	21	31	728	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	5	22	43	9	78	146	774	22	32	751	32
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	23	100	142	12	108	646	3860	1198	615	3727	158
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.08	1.00	1.00	0.05	1.00	1.00
Sat Flow, veh/h	1310	302	1329	1383	167	1444	1781	5106	1585	1781	5023	213
Grp Volume(v), veh/h	31	0	27	43	0	87	146	774	22	32	508	275
Grp Sat Flow(s),veh/h/ln	1310	0	1631	1383	0	1610	1781	1702	1585	1781	1702	1832
Q Serve(g_s), s	2.7	0.0	1.9	3.6	0.0	6.3	2.4	0.0	0.0	0.5	0.0	0.0
Cycle Q Clear(g_c), s	9.0	0.0	1.9	5.5	0.0	6.3	2.4	0.0	0.0	0.5	0.0	0.0
Prop In Lane	1.00		0.81	1.00		0.90	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	89	0	122	142	0	121	646	3860	1198	615	2526	1359
V/C Ratio(X)	0.35	0.00	0.22	0.30	0.00	0.72	0.23	0.20	0.02	0.05	0.20	0.20
Avail Cap(c_a), veh/h	89	0	122	142	0	121	647	3860	1198	640	2526	1359
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.90	0.90	0.90	0.92	0.92	0.92
Uniform Delay (d), s/veh	58.8	0.0	52.2	54.8	0.0	54.3	2.9	0.0	0.0	3.2	0.0	0.0
Incr Delay (d2), s/veh	2.3	0.0	0.9	1.2	0.0	18.8	0.2	0.1	0.0	0.0	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.8	1.3	0.0	3.2	0.7	0.0	0.0	0.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.1	0.0	53.1	56.0	0.0	73.0	3.1	0.1	0.0	3.2	0.2	0.3
LnGrp LOS	E		D	E		E	A	A	A	A	A	A
Approach Vol, veh/h		58			130			942			815	
Approach Delay, s/veh		57.4			67.4			0.6			0.3	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	96.7		15.0	10.0	95.0		15.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	89.0		9.0	5.0	89.0		9.0				
Max Q Clear Time (g_c+I1), s	2.5	2.0		11.0	4.4	2.0		8.3				
Green Ext Time (p_c), s	0.0	6.7		0.0	0.0	6.2		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	6.6
HCM 7th LOS	A

Notes

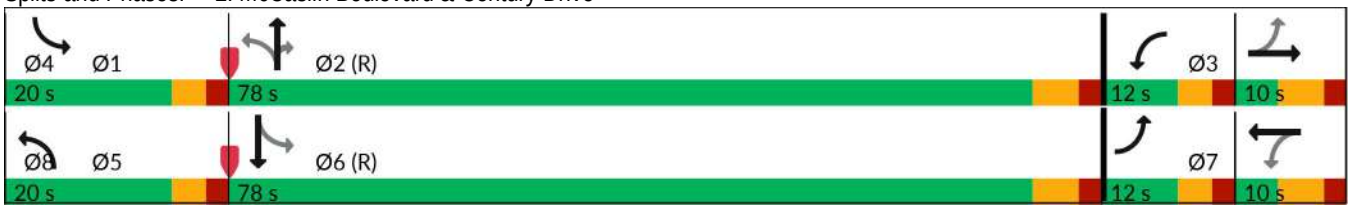
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	93	21	29	11	93	935	55	58	1191
Future Volume (vph)	93	21	29	11	93	935	55	58	1191
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	2.0	2.0	2.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.5	10.0	10.0	10.0	10.5	24.0	24.0	10.5	24.0
Total Split (s)	12.0	10.0	12.0	10.0	20.0	78.0	78.0	20.0	78.0
Total Split (%)	10.0%	8.3%	10.0%	8.3%	16.7%	65.0%	65.0%	16.7%	65.0%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	5.0	6.0	5.0	6.0	6.0	5.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: McCaslin Boulevard & Century Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	21	71	29	11	28	93	935	55	58	1191	20
Future Volume (veh/h)	93	21	71	29	11	28	93	935	55	58	1191	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	23	78	32	12	31	102	1027	60	64	1309	22
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	174	26	88	111	15	40	413	3514	1091	481	3541	60
Arrive On Green	0.06	0.07	0.07	0.02	0.03	0.03	0.08	1.00	1.00	0.07	1.00	1.00
Sat Flow, veh/h	1781	374	1268	1781	462	1194	1781	5106	1585	1781	5172	87
Grp Volume(v), veh/h	102	0	101	32	0	43	102	1027	60	64	862	469
Grp Sat Flow(s),veh/h/ln	1781	0	1642	1781	0	1656	1781	1702	1585	1781	1702	1855
Q Serve(g_s), s	6.5	0.0	7.3	2.1	0.0	3.1	2.0	0.0	0.0	1.2	0.0	0.0
Cycle Q Clear(g_c), s	6.5	0.0	7.3	2.1	0.0	3.1	2.0	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		0.77	1.00		0.72	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	174	0	114	111	0	55	413	3514	1091	481	2331	1270
V/C Ratio(X)	0.59	0.00	0.89	0.29	0.00	0.78	0.25	0.29	0.05	0.13	0.37	0.37
Avail Cap(c_a), veh/h	174	0	114	175	0	55	564	3514	1091	638	2331	1270
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.70	0.70	0.70	0.84	0.84	0.84
Uniform Delay (d), s/veh	51.3	0.0	55.4	54.5	0.0	57.6	4.6	0.0	0.0	4.6	0.0	0.0
Incr Delay (d2), s/veh	5.0	0.0	50.9	1.4	0.0	50.1	0.2	0.1	0.1	0.1	0.4	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	4.6	1.0	0.0	2.1	0.7	0.0	0.0	0.4	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.3	0.0	106.3	56.0	0.0	107.6	4.8	0.1	0.1	4.7	0.4	0.7
LnGrp LOS	E		F	E		F	A	A	A	A	A	A
Approach Vol, veh/h		203			75			1189			1395	
Approach Delay, s/veh		81.2			85.6			0.5			0.7	
Approach LOS		F			F			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	88.6	7.7	14.3	9.8	88.2	12.0	10.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	15.0	72.0	7.0	4.0	15.0	72.0	7.0	4.0
Max Q Clear Time (g_c+I1), s	3.2	2.0	4.1	9.3	4.0	2.0	8.5	5.1
Green Ext Time (p_c), s	0.1	10.0	0.0	0.0	0.2	13.4	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	8.6
HCM 7th LOS	A

Notes

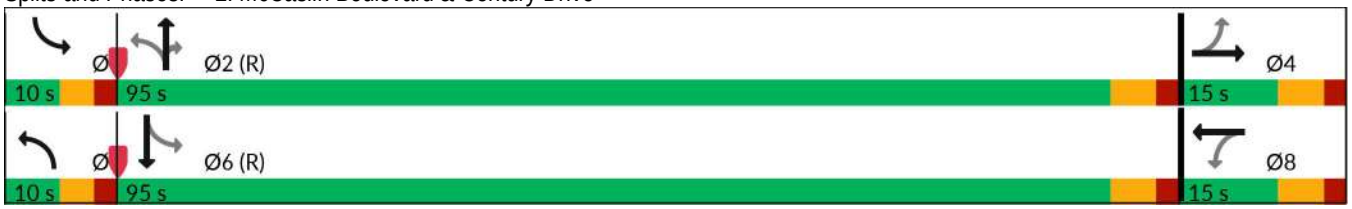
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	30	5	42	9	146	778	21	31	772
Future Volume (vph)	30	5	42	9	146	778	21	31	772
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	15.0	15.0	15.0	15.0	10.0	24.0	24.0	10.0	24.0
Total Split (s)	15.0	15.0	15.0	15.0	10.0	95.0	95.0	10.0	95.0
Total Split (%)	12.5%	12.5%	12.5%	12.5%	8.3%	79.2%	79.2%	8.3%	79.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 2: McCaslin Boulevard & Century Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	5	34	42	9	76	146	778	21	31	772	31
Future Volume (veh/h)	30	5	34	42	9	76	146	778	21	31	772	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	5	35	43	9	78	151	802	22	32	796	32
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	15	106	130	12	108	625	3860	1198	602	3736	150
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.08	1.00	1.00	0.05	1.00	1.00
Sat Flow, veh/h	1310	202	1414	1367	167	1444	1781	5106	1585	1781	5036	202
Grp Volume(v), veh/h	31	0	40	43	0	87	151	802	22	32	537	291
Grp Sat Flow(s),veh/h/ln	1310	0	1616	1367	0	1610	1781	1702	1585	1781	1702	1834
Q Serve(g_s), s	2.7	0.0	2.8	3.7	0.0	6.3	2.5	0.0	0.0	0.5	0.0	0.0
Cycle Q Clear(g_c), s	9.0	0.0	2.8	6.5	0.0	6.3	2.5	0.0	0.0	0.5	0.0	0.0
Prop In Lane	1.00		0.88	1.00		0.90	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	89	0	121	130	0	121	625	3860	1198	602	2526	1361
V/C Ratio(X)	0.35	0.00	0.33	0.33	0.00	0.72	0.24	0.21	0.02	0.05	0.21	0.21
Avail Cap(c_a), veh/h	89	0	121	130	0	121	625	3860	1198	627	2526	1361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.89	0.89	0.89	0.90	0.90	0.90
Uniform Delay (d), s/veh	58.8	0.0	52.6	55.7	0.0	54.3	3.0	0.0	0.0	3.2	0.0	0.0
Incr Delay (d2), s/veh	2.3	0.0	1.6	1.5	0.0	18.8	0.2	0.1	0.0	0.0	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	1.2	1.3	0.0	3.2	0.7	0.0	0.0	0.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.1	0.0	54.2	57.2	0.0	73.0	3.1	0.1	0.0	3.2	0.2	0.3
LnGrp LOS	E		D	E		E	A	A	A	A	A	A
Approach Vol, veh/h		71			130			975			860	
Approach Delay, s/veh		57.2			67.8			0.6			0.3	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	96.7		15.0	10.0	95.0		15.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	89.0		9.0	5.0	89.0		9.0				
Max Q Clear Time (g_c+I1), s	2.5	2.0		11.0	4.5	2.0		8.5				
Green Ext Time (p_c), s	0.0	7.0		0.0	0.0	6.6		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	6.7
HCM 7th LOS	A

Notes

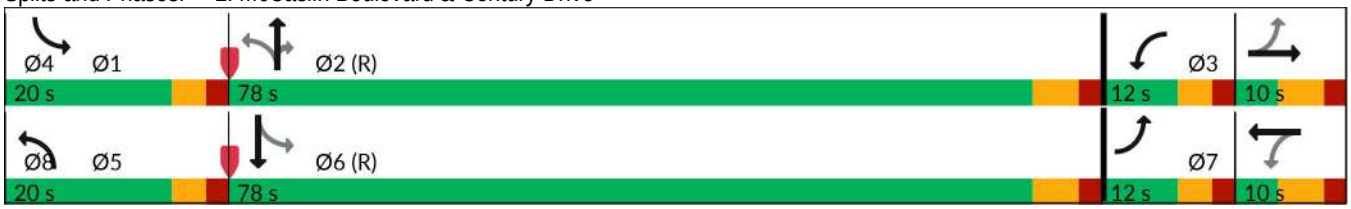
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	93	21	29	11	107	985	55	58	1231
Future Volume (vph)	93	21	29	11	107	985	55	58	1231
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	2.0	2.0	2.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.5	10.0	10.0	10.0	10.5	24.0	24.0	10.5	24.0
Total Split (s)	12.0	10.0	12.0	10.0	20.0	78.0	78.0	20.0	78.0
Total Split (%)	10.0%	8.3%	10.0%	8.3%	16.7%	65.0%	65.0%	16.7%	65.0%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	5.0	6.0	5.0	6.0	6.0	5.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: McCaslin Boulevard & Century Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	21	79	29	11	28	107	985	55	58	1231	20
Future Volume (veh/h)	93	21	79	29	11	28	107	985	55	58	1231	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	23	87	32	12	31	118	1082	60	64	1353	22
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	174	24	90	103	15	40	403	3514	1091	462	3541	58
Arrive On Green	0.06	0.07	0.07	0.02	0.03	0.03	0.08	1.00	1.00	0.07	1.00	1.00
Sat Flow, veh/h	1781	342	1295	1781	462	1194	1781	5106	1585	1781	5175	84
Grp Volume(v), veh/h	102	0	110	32	0	43	118	1082	60	64	890	485
Grp Sat Flow(s),veh/h/ln	1781	0	1637	1781	0	1656	1781	1702	1585	1781	1702	1855
Q Serve(g_s), s	6.5	0.0	8.0	2.1	0.0	3.1	2.4	0.0	0.0	1.2	0.0	0.0
Cycle Q Clear(g_c), s	6.5	0.0	8.0	2.1	0.0	3.1	2.4	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		0.79	1.00		0.72	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	174	0	114	103	0	55	403	3514	1091	462	2329	1269
V/C Ratio(X)	0.59	0.00	0.97	0.31	0.00	0.78	0.29	0.31	0.05	0.14	0.38	0.38
Avail Cap(c_a), veh/h	174	0	114	167	0	55	553	3514	1091	620	2329	1269
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.66	0.66	0.66	0.80	0.80	0.80
Uniform Delay (d), s/veh	51.3	0.0	55.7	54.5	0.0	57.6	4.7	0.0	0.0	4.7	0.0	0.0
Incr Delay (d2), s/veh	5.0	0.0	74.3	1.7	0.0	50.1	0.3	0.2	0.1	0.1	0.4	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	5.7	1.0	0.0	2.1	0.8	0.0	0.0	0.4	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.3	0.0	130.0	56.3	0.0	107.6	4.9	0.2	0.1	4.8	0.4	0.7
LnGrp LOS	E		F	E		F	A	A	A	A	A	A
Approach Vol, veh/h		212			75			1260			1439	
Approach Delay, s/veh		94.5			85.7			0.6			0.7	
Approach LOS		F			F			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	88.6	7.7	14.3	9.9	88.1	12.0	10.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	15.0	72.0	7.0	4.0	15.0	72.0	7.0	4.0
Max Q Clear Time (g_c+I1), s	3.2	2.0	4.1	10.0	4.4	2.0	8.5	5.1
Green Ext Time (p_c), s	0.1	10.9	0.0	0.0	0.2	14.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	9.4
HCM 7th LOS	A

Notes

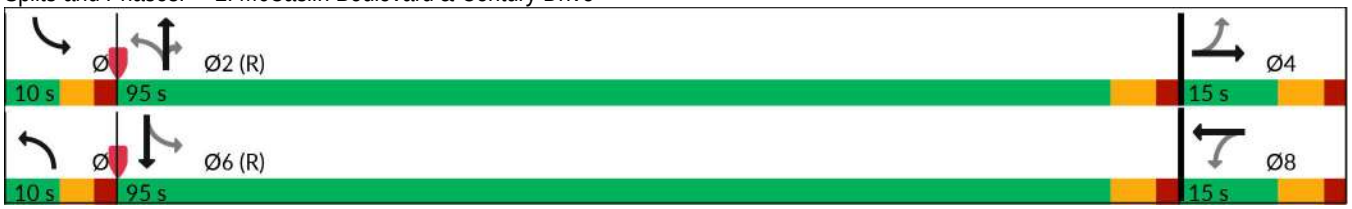
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	37	6	51	11	173	907	25	38	877
Future Volume (vph)	37	6	51	11	173	907	25	38	877
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	15.0	15.0	15.0	15.0	10.0	24.0	24.0	10.0	24.0
Total Split (s)	15.0	15.0	15.0	15.0	10.0	95.0	95.0	10.0	95.0
Total Split (%)	12.5%	12.5%	12.5%	12.5%	8.3%	79.2%	79.2%	8.3%	79.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 2: McCaslin Boulevard & Century Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	6	25	51	11	93	173	907	25	38	877	38
Future Volume (veh/h)	37	6	25	51	11	93	173	907	25	38	877	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	6	26	53	11	96	178	935	26	39	904	39
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	23	99	138	12	108	575	3845	1194	547	3723	160
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.08	1.00	1.00	0.06	1.00	1.00
Sat Flow, veh/h	1287	306	1326	1377	166	1445	1781	5106	1585	1781	5019	216
Grp Volume(v), veh/h	38	0	32	53	0	107	178	935	26	39	613	330
Grp Sat Flow(s),veh/h/ln	1287	0	1632	1377	0	1610	1781	1702	1585	1781	1702	1831
Q Serve(g_s), s	1.1	0.0	2.2	4.5	0.0	7.9	3.1	0.0	0.0	0.6	0.0	0.0
Cycle Q Clear(g_c), s	9.0	0.0	2.2	6.8	0.0	7.9	3.1	0.0	0.0	0.6	0.0	0.0
Prop In Lane	1.00		0.81	1.00		0.90	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	72	0	122	138	0	121	575	3845	1194	547	2525	1358
V/C Ratio(X)	0.53	0.00	0.26	0.38	0.00	0.89	0.31	0.24	0.02	0.07	0.24	0.24
Avail Cap(c_a), veh/h	72	0	122	138	0	121	575	3845	1194	568	2525	1358
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.84	0.84	0.84	0.89	0.89	0.89
Uniform Delay (d), s/veh	59.8	0.0	52.4	55.5	0.0	55.0	3.0	0.0	0.0	3.1	0.0	0.0
Incr Delay (d2), s/veh	7.1	0.0	1.1	1.8	0.0	48.8	0.3	0.1	0.0	0.0	0.2	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.0	1.6	0.0	4.8	0.8	0.0	0.0	0.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.0	0.0	53.5	57.3	0.0	103.7	3.3	0.1	0.0	3.1	0.2	0.4
LnGrp LOS	E		D	E		F	A	A	A	A	A	A
Approach Vol, veh/h		70			160			1139			982	
Approach Delay, s/veh		60.8			88.4			0.6			0.4	
Approach LOS		E			F			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	96.4		15.0	10.0	95.0		15.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	89.0		9.0	5.0	89.0		9.0				
Max Q Clear Time (g_c+I1), s	2.6	2.0		11.0	5.1	2.0		9.9				
Green Ext Time (p_c), s	0.0	8.7		0.0	0.0	7.9		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh	8.3	
HCM 7th LOS	A	

Notes

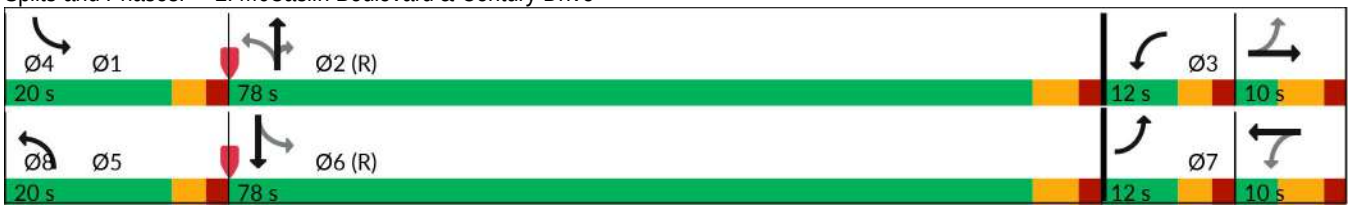
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	113	25	36	14	113	1121	67	71	1434
Future Volume (vph)	113	25	36	14	113	1121	67	71	1434
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	2.0	2.0	2.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.5	10.0	10.0	10.0	10.5	24.0	24.0	10.5	24.0
Total Split (s)	12.0	10.0	12.0	10.0	20.0	78.0	78.0	20.0	78.0
Total Split (%)	10.0%	8.3%	10.0%	8.3%	16.7%	65.0%	65.0%	16.7%	65.0%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	5.0	6.0	5.0	6.0	6.0	5.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: McCaslin Boulevard & Century Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	25	86	36	14	34	113	1121	67	71	1434	24
Future Volume (veh/h)	113	25	86	36	14	34	113	1121	67	71	1434	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	27	93	39	15	37	123	1218	73	77	1559	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	24	82	109	16	39	354	3505	1088	421	3538	59
Arrive On Green	0.06	0.06	0.06	0.03	0.03	0.03	0.08	1.00	1.00	0.08	1.00	1.00
Sat Flow, veh/h	1781	369	1272	1781	478	1180	1781	5106	1585	1781	5173	86
Grp Volume(v), veh/h	123	0	120	39	0	52	123	1218	73	77	1026	559
Grp Sat Flow(s),veh/h/ln	1781	0	1641	1781	0	1658	1781	1702	1585	1781	1702	1855
Q Serve(g_s), s	7.0	0.0	7.7	2.5	0.0	3.8	2.5	0.0	0.0	1.5	0.0	0.0
Cycle Q Clear(g_c), s	7.0	0.0	7.7	2.5	0.0	3.8	2.5	0.0	0.0	1.5	0.0	0.0
Prop In Lane	1.00		0.77	1.00		0.71	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	167	0	105	109	0	55	354	3505	1088	421	2328	1269
V/C Ratio(X)	0.74	0.00	1.14	0.36	0.00	0.94	0.35	0.35	0.07	0.18	0.44	0.44
Avail Cap(c_a), veh/h	167	0	105	164	0	55	503	3505	1088	575	2328	1269
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.57	0.57	0.57	0.74	0.74	0.74
Uniform Delay (d), s/veh	53.1	0.0	56.1	54.2	0.0	57.9	4.7	0.0	0.0	4.6	0.0	0.0
Incr Delay (d2), s/veh	15.8	0.0	129.9	2.0	0.0	99.3	0.3	0.2	0.1	0.2	0.4	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	7.0	1.2	0.0	3.1	0.8	0.1	0.0	0.5	0.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.9	0.0	186.1	56.2	0.0	157.2	5.0	0.2	0.1	4.8	0.4	0.8
LnGrp LOS	E		F	E		F	A	A	A	A	A	A
Approach Vol, veh/h		243			91			1414			1662	
Approach Delay, s/veh		126.8			113.9			0.6			0.8	
Approach LOS		F			F			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	88.4	8.3	13.7	9.9	88.1	12.0	10.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	15.0	72.0	7.0	4.0	15.0	72.0	7.0	4.0
Max Q Clear Time (g_c+I1), s	3.5	2.0	4.5	9.7	4.5	2.0	9.0	5.8
Green Ext Time (p_c), s	0.1	13.1	0.0	0.0	0.2	18.4	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.7
HCM 7th LOS	B

Notes

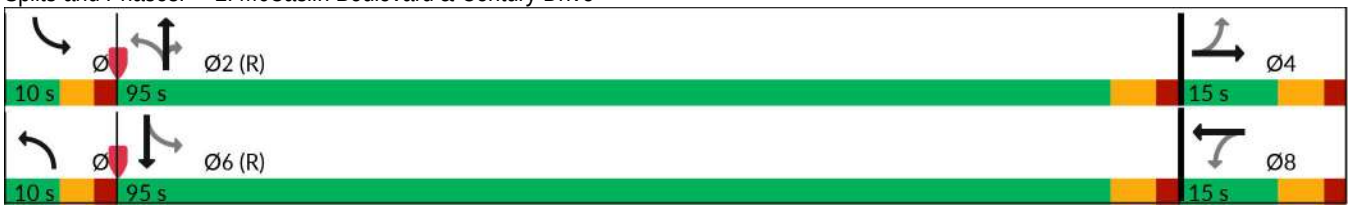
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	37	6	51	11	177	921	25	38	916
Future Volume (vph)	37	6	51	11	177	921	25	38	916
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	15.0	15.0	15.0	15.0	10.0	24.0	24.0	10.0	24.0
Total Split (s)	15.0	15.0	15.0	15.0	10.0	95.0	95.0	10.0	95.0
Total Split (%)	12.5%	12.5%	12.5%	12.5%	8.3%	79.2%	79.2%	8.3%	79.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 2: McCaslin Boulevard & Century Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	6	38	51	11	93	177	921	25	38	916	38
Future Volume (veh/h)	37	6	38	51	11	93	177	921	25	38	916	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	6	39	53	11	96	182	949	26	39	944	39
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	16	105	126	12	108	559	3845	1194	542	3730	154
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.08	1.00	1.00	0.06	1.00	1.00
Sat Flow, veh/h	1287	216	1402	1361	166	1445	1781	5106	1585	1781	5030	207
Grp Volume(v), veh/h	38	0	45	53	0	107	182	949	26	39	638	345
Grp Sat Flow(s),veh/h/ln	1287	0	1618	1361	0	1610	1781	1702	1585	1781	1702	1833
Q Serve(g_s), s	1.1	0.0	3.2	4.6	0.0	7.9	3.2	0.0	0.0	0.6	0.0	0.0
Cycle Q Clear(g_c), s	9.0	0.0	3.2	7.8	0.0	7.9	3.2	0.0	0.0	0.6	0.0	0.0
Prop In Lane	1.00		0.87	1.00		0.90	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	72	0	121	126	0	121	559	3845	1194	542	2525	1359
V/C Ratio(X)	0.53	0.00	0.37	0.42	0.00	0.89	0.33	0.25	0.02	0.07	0.25	0.25
Avail Cap(c_a), veh/h	72	0	121	126	0	121	559	3845	1194	562	2525	1359
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.83	0.83	0.83	0.86	0.86	0.86
Uniform Delay (d), s/veh	59.8	0.0	52.8	56.5	0.0	55.0	3.0	0.0	0.0	3.1	0.0	0.0
Incr Delay (d2), s/veh	7.1	0.0	1.9	2.2	0.0	48.8	0.3	0.1	0.0	0.0	0.2	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.4	1.7	0.0	4.8	0.9	0.0	0.0	0.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.0	0.0	54.7	58.7	0.0	103.7	3.3	0.1	0.0	3.1	0.2	0.4
LnGrp LOS	E		D	E		F	A	A	A	A	A	A
Approach Vol, veh/h		83			160			1157			1022	
Approach Delay, s/veh		60.3			88.8			0.6			0.4	
Approach LOS		E			F			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	96.4		15.0	10.0	95.0		15.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	89.0		9.0	5.0	89.0		9.0				
Max Q Clear Time (g_c+I1), s	2.6	2.0		11.0	5.2	2.0		9.9				
Green Ext Time (p_c), s	0.0	8.9		0.0	0.0	8.4		0.0				

Intersection Summary			
HCM 7th Control Delay, s/veh		8.4	
HCM 7th LOS		A	

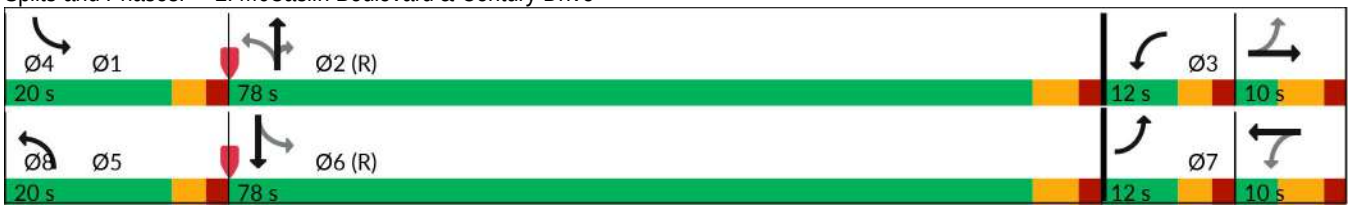
Notes
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	113	25	36	14	127	1163	67	71	1460
Future Volume (vph)	113	25	36	14	127	1163	67	71	1460
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	2.0	2.0	2.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.5	10.0	10.0	10.0	10.5	24.0	24.0	10.5	24.0
Total Split (s)	12.0	10.0	12.0	10.0	20.0	78.0	78.0	20.0	78.0
Total Split (%)	10.0%	8.3%	10.0%	8.3%	16.7%	65.0%	65.0%	16.7%	65.0%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	5.0	6.0	5.0	6.0	6.0	5.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: McCaslin Boulevard & Century Drive





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	25	94	36	14	34	127	1163	67	71	1460	24
Future Volume (veh/h)	113	25	94	36	14	34	127	1163	67	71	1460	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	27	102	39	15	37	138	1264	73	77	1587	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	22	83	109	16	39	350	3505	1088	408	3533	58
Arrive On Green	0.06	0.06	0.06	0.03	0.03	0.03	0.08	1.00	1.00	0.08	1.00	1.00
Sat Flow, veh/h	1781	343	1295	1781	478	1180	1781	5106	1585	1781	5174	85
Grp Volume(v), veh/h	123	0	129	39	0	52	138	1264	73	77	1044	569
Grp Sat Flow(s),veh/h/ln	1781	0	1637	1781	0	1658	1781	1702	1585	1781	1702	1855
Q Serve(g_s), s	7.0	0.0	7.7	2.5	0.0	3.8	2.9	0.0	0.0	1.5	0.0	0.0
Cycle Q Clear(g_c), s	7.0	0.0	7.7	2.5	0.0	3.8	2.9	0.0	0.0	1.5	0.0	0.0
Prop In Lane	1.00		0.79	1.00		0.71	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	167	0	105	109	0	55	350	3505	1088	408	2324	1267
V/C Ratio(X)	0.74	0.00	1.23	0.36	0.00	0.94	0.39	0.36	0.07	0.19	0.45	0.45
Avail Cap(c_a), veh/h	167	0	105	164	0	55	497	3505	1088	562	2324	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.58	0.58	0.58	0.69	0.69	0.69
Uniform Delay (d), s/veh	53.1	0.0	56.1	54.2	0.0	57.9	4.7	0.0	0.0	4.7	0.0	0.0
Incr Delay (d2), s/veh	15.8	0.0	161.1	2.0	0.0	99.3	0.4	0.2	0.1	0.2	0.4	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	7.9	1.2	0.0	3.1	0.9	0.1	0.0	0.5	0.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.9	0.0	217.2	56.2	0.0	157.2	5.1	0.2	0.1	4.8	0.4	0.8
LnGrp LOS	E		F	E		F	A	A	A	A	A	A
Approach Vol, veh/h		252			91			1475			1690	
Approach Delay, s/veh		144.8			113.9			0.6			0.8	
Approach LOS		F			F			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	88.4	8.3	13.7	10.1	87.9	12.0	10.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	15.0	72.0	7.0	4.0	15.0	72.0	7.0	4.0
Max Q Clear Time (g_c+I1), s	3.5	2.0	4.5	9.7	4.9	2.0	9.0	5.8
Green Ext Time (p_c), s	0.1	13.9	0.0	0.0	0.2	19.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	14.0
HCM 7th LOS	B

Notes

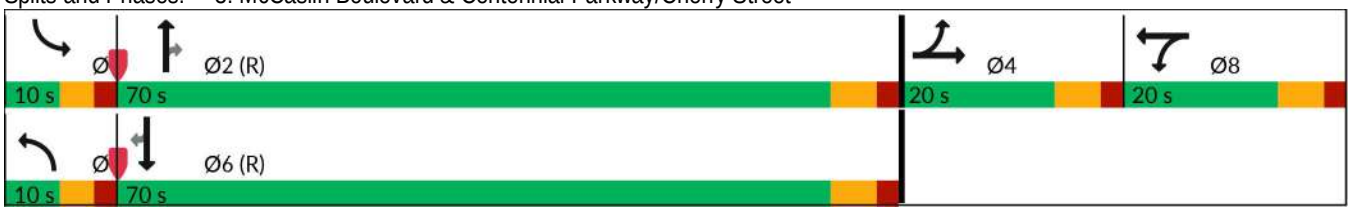
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	28	74	179	42	81	108	772	110	39	557	30
Future Volume (vph)	40	28	74	179	42	81	108	772	110	39	557	30
Turn Type	Split	NA	Free	Split	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	4	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0		20.0	20.0		10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	20.0	20.0		20.0	20.0		10.0	70.0	70.0	10.0	70.0	70.0
Total Split (%)	16.7%	16.7%		16.7%	16.7%		8.3%	58.3%	58.3%	8.3%	58.3%	58.3%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	28	74	179	42	81	108	772	110	39	557	30
Future Volume (veh/h)	40	28	74	179	42	81	108	772	110	39	557	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	31	0	197	46	0	119	848	0	43	612	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	4	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	136		262	142		74	2352		57	2316	
Arrive On Green	0.04	0.04	0.00	0.08	0.08	0.00	0.08	1.00	0.00	0.06	1.00	0.00
Sat Flow, veh/h	1753	3497	1560	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	44	31	0	197	46	0	119	848	0	43	612	0
Grp Sat Flow(s),veh/h/ln	1753	1749	1560	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.0	1.0	0.0	6.7	2.8	0.0	5.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	3.0	1.0	0.0	6.7	2.8	0.0	5.0	0.0	0.0	2.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	68	136		262	142		74	2352		57	2316	
V/C Ratio(X)	0.64	0.23		0.75	0.32		1.60	0.36		0.76	0.26	
Avail Cap(c_a), veh/h	205	408		403	218		74	2352		74	2316	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	56.8	55.9	0.0	54.3	52.5	0.0	55.0	0.0	0.0	55.7	0.0	0.0
Incr Delay (d2), s/veh	9.7	0.8	0.0	4.3	1.3	0.0	325.3	0.4	0.0	27.2	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.5	0.0	3.1	1.4	0.0	8.9	0.1	0.0	1.7	0.1	0.0
Unsig. Movement Delay, s/veh			0.00			0.00						
LnGrp Delay(d), s/veh	66.6	56.7	0.0	58.6	53.8	0.0	380.3	0.4	0.0	83.0	0.3	0.0
LnGrp LOS	E	E	A	E	D	A	F	A		F	A	
Approach Vol, veh/h		156			332			967			655	
Approach Delay, s/veh		30.1			42.3			47.2			5.7	
Approach LOS		C			D			D			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	85.4		10.7	10.0	84.2		15.1				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	64.0		14.0	5.0	64.0		14.0				
Max Q Clear Time (g_c+I1), s	4.9	2.0		5.0	7.0	2.0		8.7				
Green Ext Time (p_c), s	0.0	7.5		0.1	0.0	4.9		0.4				

Intersection Summary		
HCM 7th Control Delay, s/veh		32.3
HCM 7th LOS		C

Notes

Unsignalized Delay for [EBR, WBR] is included in calculations of the approach delay and intersection delay.

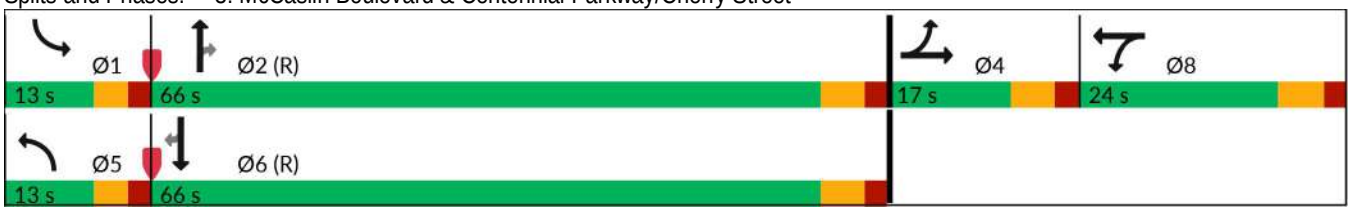
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	44	207	207	20	87	34	846	187	87	1083	29
Future Volume (vph)	45	44	207	207	20	87	34	846	187	87	1083	29
Turn Type	Split	NA	Free	Split	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	4	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	17.0	17.0		24.0	24.0		10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	17.0	17.0		24.0	24.0		13.0	66.0	66.0	13.0	66.0	66.0
Total Split (%)	14.2%	14.2%		20.0%	20.0%		10.8%	55.0%	55.0%	10.8%	55.0%	55.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	44	207	207	20	87	34	846	187	87	1083	29
Future Volume (veh/h)	45	44	207	207	20	87	34	846	187	87	1083	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	48	0	225	22	0	37	920	0	95	1177	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	153		293	159		53	2184		117	2313	
Arrive On Green	0.04	0.04	0.00	0.08	0.08	0.00	0.06	1.00	0.00	0.13	1.00	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	49	48	0	225	22	0	37	920	0	95	1177	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.2	1.6	0.0	7.6	1.3	0.0	2.4	0.0	0.0	6.2	0.0	0.0
Cycle Q Clear(g_c), s	3.2	1.6	0.0	7.6	1.3	0.0	2.4	0.0	0.0	6.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	153		293	159		53	2184		117	2313	
V/C Ratio(X)	0.64	0.31		0.77	0.14		0.70	0.42		0.81	0.51	
Avail Cap(c_a), veh/h	163	326		518	281		119	2184		119	2313	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.95	0.95	0.00
Uniform Delay (d), s/veh	56.5	55.7	0.0	53.7	50.8	0.0	55.9	0.0	0.0	51.4	0.0	0.0
Incr Delay (d2), s/veh	8.5	1.2	0.0	4.2	0.4	0.0	15.7	0.6	0.0	31.6	0.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.7	0.0	3.5	0.6	0.0	1.3	0.2	0.0	3.7	0.2	0.0
Unsig. Movement Delay, s/veh			0.00			0.00						
LnGrp Delay(d), s/veh	65.0	56.8	0.0	57.9	51.2	0.0	71.6	0.6	0.0	83.0	0.8	0.0
LnGrp LOS	E	E	A	E	D	A	E	A		F	A	
Approach Vol, veh/h		322			342			957			1272	
Approach Delay, s/veh		18.4			41.4			3.3			6.9	
Approach LOS		B			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.9	79.8		11.2	8.5	84.1		16.2				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	60.0		11.0	8.0	60.0		18.0				
Max Q Clear Time (g_c+I1), s	8.2	2.0		5.2	4.4	2.0		9.6				
Green Ext Time (p_c), s	0.0	8.4		0.1	0.0	12.3		0.5				

Intersection Summary		
HCM 7th Control Delay, s/veh		11.1
HCM 7th LOS		B

Notes

Unsignalized Delay for [EBR, WBR] is included in calculations of the approach delay and intersection delay.

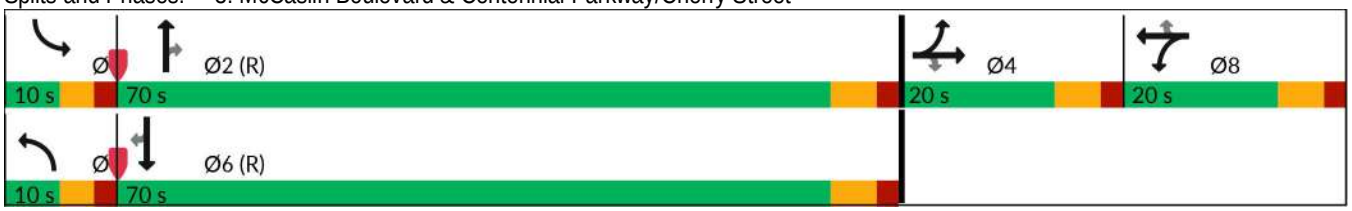
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	46	77	198	56	84	112	783	114	41	595	74
Future Volume (vph)	105	46	77	198	56	84	112	783	114	41	595	74
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	20.0	20.0	20.0	20.0	10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	20.0	20.0	20.0	20.0	20.0	20.0	10.0	70.0	70.0	10.0	70.0	70.0
Total Split (%)	16.7%	16.7%	16.7%	16.7%	16.7%	16.7%	8.3%	58.3%	58.3%	8.3%	58.3%	58.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	46	77	198	56	84	112	783	114	41	595	74
Future Volume (veh/h)	105	46	77	198	56	84	112	783	114	41	595	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	51	0	218	62	0	123	860	0	45	654	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	4	2	2	2	2	2	2	2	2	2
Cap, veh/h	145	288		284	154		74	2173		58	2140	
Arrive On Green	0.08	0.08	0.00	0.08	0.08	0.00	0.08	1.00	0.00	0.06	1.00	0.00
Sat Flow, veh/h	1753	3497	1560	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	115	51	0	218	62	0	123	860	0	45	654	0
Grp Sat Flow(s),veh/h/ln	1753	1749	1560	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	7.7	1.6	0.0	7.4	3.8	0.0	5.0	0.0	0.0	3.0	0.0	0.0
Cycle Q Clear(g_c), s	7.7	1.6	0.0	7.4	3.8	0.0	5.0	0.0	0.0	3.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	288		284	154		74	2173		58	2140	
V/C Ratio(X)	0.80	0.18		0.77	0.40		1.66	0.40		0.78	0.31	
Avail Cap(c_a), veh/h	205	408		403	218		74	2173		74	2140	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.98	0.98	0.00
Uniform Delay (d), s/veh	54.1	51.3	0.0	53.9	52.3	0.0	55.0	0.0	0.0	55.7	0.0	0.0
Incr Delay (d2), s/veh	13.3	0.3	0.0	5.6	1.7	0.0	347.8	0.5	0.0	31.5	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.7	0.0	3.4	1.8	0.0	9.3	0.2	0.0	1.8	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.4	51.6	0.0	59.5	54.0	0.0	402.8	0.5	0.0	87.2	0.4	0.0
LnGrp LOS	E	D		E	D		F	A		F	A	
Approach Vol, veh/h		166			280			983			699	
Approach Delay, s/veh		62.5			58.3			50.9			6.0	
Approach LOS		E			E			D			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	79.4		15.9	10.0	78.2		15.9				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	64.0		14.0	5.0	64.0		14.0				
Max Q Clear Time (g_c+I1), s	5.0	2.0		9.7	7.0	2.0		9.4				
Green Ext Time (p_c), s	0.0	7.7		0.2	0.0	5.3		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	38.0
HCM 7th LOS	D

Notes

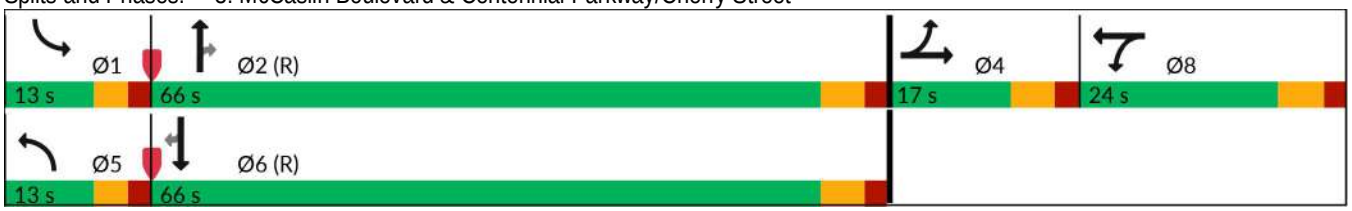
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	84	215	234	40	91	35	802	195	91	1133	119
Future Volume (vph)	220	84	215	234	40	91	35	802	195	91	1133	119
Turn Type	Split	NA	Free	Split	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	4	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	17.0	17.0		24.0	24.0		10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	17.0	17.0		24.0	24.0		13.0	66.0	66.0	13.0	66.0	66.0
Total Split (%)	14.2%	14.2%		20.0%	20.0%		10.8%	55.0%	55.0%	10.8%	55.0%	55.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	84	215	234	40	91	35	802	195	91	1133	119
Future Volume (veh/h)	220	84	215	234	40	91	35	802	195	91	1133	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	239	91	0	254	43	0	38	872	0	99	1232	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	326		325	176		53	1976		119	2106	
Arrive On Green	0.09	0.09	0.00	0.09	0.09	0.00	0.06	1.00	0.00	0.13	1.00	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	239	91	0	254	43	0	38	872	0	99	1232	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	11.0	2.9	0.0	8.6	2.6	0.0	2.5	0.0	0.0	6.5	0.0	0.0
Cycle Q Clear(g_c), s	11.0	2.9	0.0	8.6	2.6	0.0	2.5	0.0	0.0	6.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	326		325	176		53	1976		119	2106	
V/C Ratio(X)	1.46	0.28		0.78	0.24		0.71	0.44		0.83	0.58	
Avail Cap(c_a), veh/h	163	326		518	281		119	1976		119	2106	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.93	0.93	0.00
Uniform Delay (d), s/veh	54.5	50.8	0.0	53.2	50.4	0.0	55.9	0.0	0.0	51.4	0.0	0.0
Incr Delay (d2), s/veh	239.0	0.5	0.0	4.1	0.7	0.0	16.1	0.7	0.0	35.4	1.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.8	1.3	0.0	3.9	1.2	0.0	1.3	0.2	0.0	3.9	0.3	0.0
Unsig. Movement Delay, s/veh			0.00			0.00						
LnGrp Delay(d), s/veh	293.5	51.3	0.0	57.3	51.1	0.0	72.0	0.7	0.0	86.8	1.1	0.0
LnGrp LOS	F	D	A	E	D	A	E	A		F	A	
Approach Vol, veh/h		564			396			910			1331	
Approach Delay, s/veh		132.7			42.3			3.7			7.5	
Approach LOS		F			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	72.7		17.0	8.6	77.1		17.3				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	60.0		11.0	8.0	60.0		18.0				
Max Q Clear Time (g_c+I1), s	8.5	2.0		13.0	4.5	2.0		10.6				
Green Ext Time (p_c), s	0.0	7.8		0.0	0.0	13.3		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	32.8
HCM 7th LOS	C

Notes

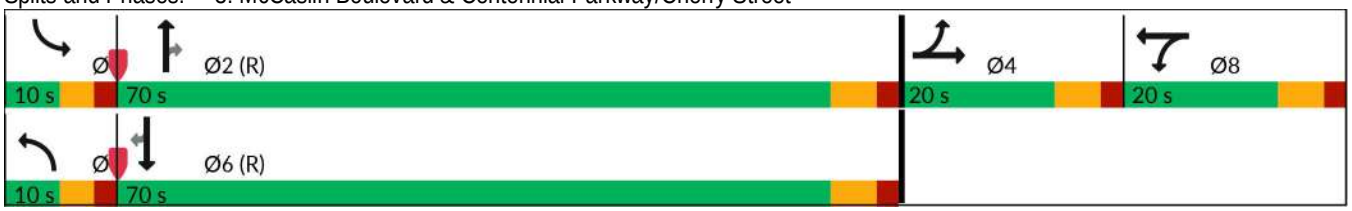
Unsignalized Delay for [EBR, WBR] is included in calculations of the approach delay and intersection delay.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	61	213	198	61	84	158	807	116	41	649	77
Future Volume (vph)	112	61	213	198	61	84	158	807	116	41	649	77
Turn Type	Split	NA	Free	Split	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	4	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0		20.0	20.0		10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	20.0	20.0		20.0	20.0		10.0	70.0	70.0	10.0	70.0	70.0
Total Split (%)	16.7%	16.7%		16.7%	16.7%		8.3%	58.3%	58.3%	8.3%	58.3%	58.3%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	61	213	198	61	84	158	807	116	41	649	77
Future Volume (veh/h)	112	61	213	198	61	84	158	807	116	41	649	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	67	0	218	67	0	174	887	0	45	713	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	4	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	305		284	154		74	2155		58	2122	
Arrive On Green	0.09	0.09	0.00	0.08	0.08	0.00	0.08	1.00	0.00	0.06	1.00	0.00
Sat Flow, veh/h	1753	3497	1560	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	123	67	0	218	67	0	174	887	0	45	713	0
Grp Sat Flow(s),veh/h/ln	1753	1749	1560	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	8.3	2.1	0.0	7.4	4.1	0.0	5.0	0.0	0.0	3.0	0.0	0.0
Cycle Q Clear(g_c), s	8.3	2.1	0.0	7.4	4.1	0.0	5.0	0.0	0.0	3.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	305		284	154		74	2155		58	2122	
V/C Ratio(X)	0.80	0.22		0.77	0.44		2.34	0.41		0.78	0.34	
Avail Cap(c_a), veh/h	205	408		403	218		74	2155		74	2122	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.98	0.98	0.00
Uniform Delay (d), s/veh	53.8	51.0	0.0	53.9	52.4	0.0	55.0	0.0	0.0	55.7	0.0	0.0
Incr Delay (d2), s/veh	15.4	0.4	0.0	5.5	1.9	0.0	644.6	0.6	0.0	31.5	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	1.0	0.0	3.4	2.0	0.0	15.4	0.2	0.0	1.8	0.1	0.0
Unsig. Movement Delay, s/veh			0.00			0.00						
LnGrp Delay(d), s/veh	69.2	51.3	0.0	59.5	54.3	0.0	699.6	0.6	0.0	87.2	0.4	0.0
LnGrp LOS	E	D	A	E	D	A	F	A		F	A	
Approach Vol, veh/h		424			377			1061			758	
Approach Delay, s/veh		28.2			44.1			115.2			5.6	
Approach LOS		C			D			F			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	78.8		16.5	10.0	77.7		15.9				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	64.0		14.0	5.0	64.0		14.0				
Max Q Clear Time (g_c+I1), s	5.0	2.0		10.3	7.0	2.0		9.4				
Green Ext Time (p_c), s	0.0	8.0		0.2	0.0	6.0		0.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	59.2
HCM 7th LOS	E

Notes

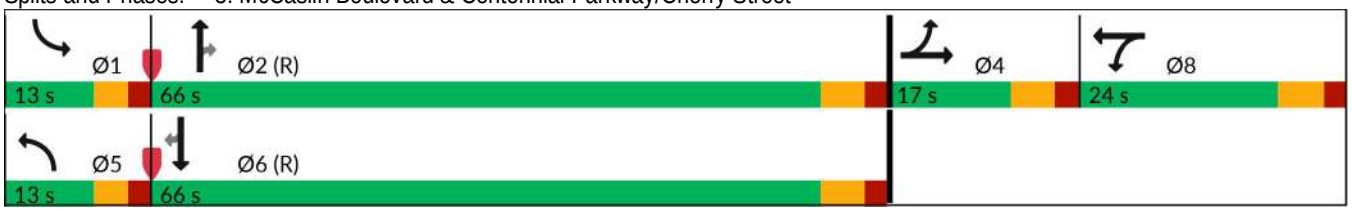
Unsignalized Delay for [EBR, WBR] is included in calculations of the approach delay and intersection delay.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	93	309	235	55	91	180	860	196	91	1175	126
Future Volume (vph)	225	93	309	235	55	91	180	860	196	91	1175	126
Turn Type	Split	NA	Free	Split	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	4	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	17.0	17.0		24.0	24.0		10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	17.0	17.0		24.0	24.0		13.0	66.0	66.0	13.0	66.0	66.0
Total Split (%)	14.2%	14.2%		20.0%	20.0%		10.8%	55.0%	55.0%	10.8%	55.0%	55.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	93	309	235	55	91	180	860	196	91	1175	126
Future Volume (veh/h)	225	93	309	235	55	91	180	860	196	91	1175	126
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	245	101	0	255	60	0	196	935	0	99	1277	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	326		327	177		119	1973		119	1973	
Arrive On Green	0.09	0.09	0.00	0.09	0.09	0.00	0.13	1.00	0.00	0.13	1.00	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	245	101	0	255	60	0	196	935	0	99	1277	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	11.0	3.2	0.0	8.7	3.6	0.0	8.0	0.0	0.0	6.5	0.0	0.0
Cycle Q Clear(g_c), s	11.0	3.2	0.0	8.7	3.6	0.0	8.0	0.0	0.0	6.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	326		327	177		119	1973		119	1973	
V/C Ratio(X)	1.50	0.31		0.78	0.34		1.65	0.47		0.83	0.65	
Avail Cap(c_a), veh/h	163	326		518	281		119	1973		119	1973	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	54.5	51.0	0.0	53.1	50.8	0.0	52.0	0.0	0.0	51.4	0.0	0.0
Incr Delay (d2), s/veh	254.4	0.5	0.0	4.0	1.1	0.0	327.1	0.8	0.0	35.2	1.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.5	1.4	0.0	3.9	1.7	0.0	14.1	0.2	0.0	3.9	0.4	0.0
Unsig. Movement Delay, s/veh			0.00			0.00						
LnGrp Delay(d), s/veh	308.9	51.5	0.0	57.1	51.9	0.0	379.1	0.8	0.0	86.5	1.5	0.0
LnGrp LOS	F	D	A	E	D	A	F	A		F	A	
Approach Vol, veh/h		682			414			1131			1376	
Approach Delay, s/veh		118.6			42.7			66.4			7.6	
Approach LOS		F			D			E			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	72.6		17.0	13.0	72.6		17.4				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	60.0		11.0	8.0	60.0		18.0				
Max Q Clear Time (g_c+I1), s	8.5	2.0		13.0	10.0	2.0		10.7				
Green Ext Time (p_c), s	0.0	8.6		0.0	0.0	14.1		0.7				

Intersection Summary		
HCM 7th Control Delay, s/veh		51.1
HCM 7th LOS		D

Notes

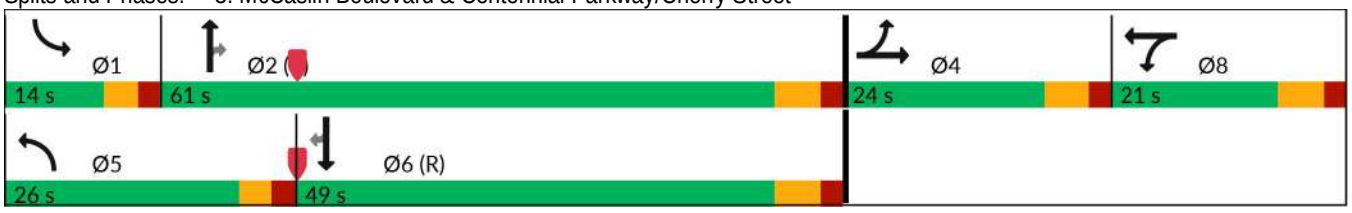
Unsignalized Delay for [EBR, WBR] is included in calculations of the approach delay and intersection delay.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	61	213	198	61	84	158	807	116	41	649	77
Future Volume (vph)	112	61	213	198	61	84	158	807	116	41	649	77
Turn Type	Split	NA	Free	Split	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	4	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0		20.0	20.0		10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	24.0	24.0		21.0	21.0		26.0	61.0	61.0	14.0	49.0	49.0
Total Split (%)	20.0%	20.0%		17.5%	17.5%		21.7%	50.8%	50.8%	11.7%	40.8%	40.8%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	61	213	198	61	84	158	807	116	41	649	77
Future Volume (veh/h)	112	61	213	198	61	84	158	807	116	41	649	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	67	0	218	67	0	174	887	0	45	713	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	4	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	310		286	155		203	2148		58	1859	
Arrive On Green	0.09	0.09	0.00	0.08	0.08	0.00	0.15	0.80	0.00	0.06	1.00	0.00
Sat Flow, veh/h	1753	3497	1560	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	123	67	0	218	67	0	174	887	0	45	713	0
Grp Sat Flow(s),veh/h/ln	1753	1749	1560	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	8.3	2.1	0.0	7.4	4.1	0.0	11.4	8.8	0.0	3.0	0.0	0.0
Cycle Q Clear(g_c), s	8.3	2.1	0.0	7.4	4.1	0.0	11.4	8.8	0.0	3.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	310		286	155		203	2148		58	1859	
V/C Ratio(X)	0.79	0.22		0.76	0.43		0.86	0.41		0.78	0.38	
Avail Cap(c_a), veh/h	263	525		432	234		312	2148		134	1859	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.98	0.98	0.00
Uniform Delay (d), s/veh	53.6	50.8	0.0	53.9	52.3	0.0	50.0	5.5	0.0	55.7	0.0	0.0
Incr Delay (d2), s/veh	8.7	0.3	0.0	4.3	1.9	0.0	13.6	0.6	0.0	19.5	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	1.0	0.0	3.4	2.0	0.0	5.7	2.8	0.0	1.6	0.2	0.0
Unsig. Movement Delay, s/veh			0.00			0.00						
LnGrp Delay(d), s/veh	62.3	51.2	0.0	58.2	54.2	0.0	63.6	6.1	0.0	75.2	0.6	0.0
LnGrp LOS	E	D	A	E	D	A	E	A		E	A	
Approach Vol, veh/h		424			377			1061			758	
Approach Delay, s/veh		26.2			43.3			15.5			5.0	
Approach LOS		C			D			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	78.5		16.6	18.7	68.8		15.9				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	55.0		18.0	21.0	43.0		15.0				
Max Q Clear Time (g_c+I1), s	5.0	10.8		10.3	13.4	2.0		9.4				
Green Ext Time (p_c), s	0.0	7.8		0.4	0.3	5.8		0.5				

Intersection Summary		
HCM 7th Control Delay, s/veh		18.2
HCM 7th LOS		B

Notes

Unsignalized Delay for [EBR, WBR] is included in calculations of the approach delay and intersection delay.

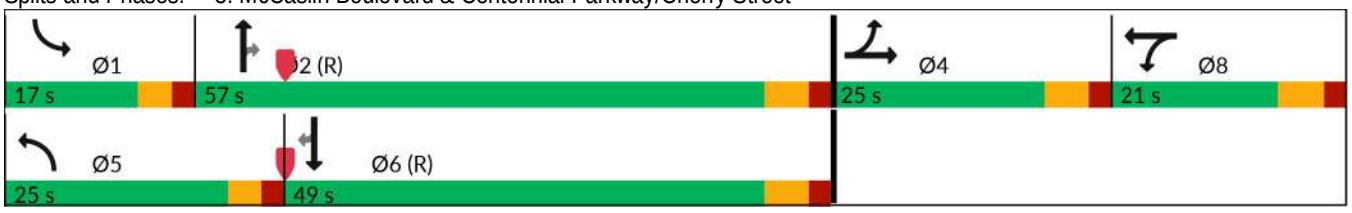
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	93	309	235	55	91	180	860	196	91	1175	126
Future Volume (vph)	225	93	309	235	55	91	180	860	196	91	1175	126
Turn Type	Split	NA	Free	Split	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	4	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	17.0	17.0		24.0	24.0		10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	25.0	25.0		21.0	21.0		25.0	57.0	57.0	17.0	49.0	49.0
Total Split (%)	20.8%	20.8%		17.5%	17.5%		20.8%	47.5%	47.5%	14.2%	40.8%	40.8%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	93	309	235	55	91	180	860	196	91	1175	126
Future Volume (veh/h)	225	93	309	235	55	91	180	860	196	91	1175	126
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	245	101	0	255	60	0	196	935	0	99	1277	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	543		321	174		225	1753		123	1550	
Arrive On Green	0.15	0.15	0.00	0.09	0.09	0.00	0.13	0.49	0.00	0.07	0.44	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	245	101	0	255	60	0	196	935	0	99	1277	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	16.2	3.0	0.0	8.7	3.6	0.0	13.0	21.7	0.0	6.6	38.0	0.0
Cycle Q Clear(g_c), s	16.2	3.0	0.0	8.7	3.6	0.0	13.0	21.7	0.0	6.6	38.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	272	543		321	174		225	1753		123	1550	
V/C Ratio(X)	0.90	0.19		0.79	0.34		0.87	0.53		0.80	0.82	
Avail Cap(c_a), veh/h	282	563		432	234		297	1753		178	1550	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	49.9	44.3	0.0	53.3	51.0	0.0	51.4	20.9	0.0	55.0	29.8	0.0
Incr Delay (d2), s/veh	28.9	0.2	0.0	7.1	1.2	0.0	18.9	1.2	0.0	14.2	4.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	1.3	0.0	4.1	1.8	0.0	7.0	9.2	0.0	3.4	16.9	0.0
Unsig. Movement Delay, s/veh			0.00			0.00						
LnGrp Delay(d), s/veh	78.8	44.5	0.0	60.4	52.2	0.0	70.4	22.1	0.0	69.3	34.5	0.0
LnGrp LOS	E	D	A	E	D	A	E	C		E	C	
Approach Vol, veh/h		682			414			1131			1376	
Approach Delay, s/veh		34.9			44.8			30.4			37.0	
Approach LOS		C			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.3	65.2		24.3	20.2	58.3		17.2				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	12.0	51.0		19.0	20.0	43.0		15.0				
Max Q Clear Time (g_c+I1), s	8.6	23.7		18.2	15.0	40.0		10.7				
Green Ext Time (p_c), s	0.1	7.6		0.1	0.2	2.2		0.5				

Intersection Summary		
HCM 7th Control Delay, s/veh	35.4	
HCM 7th LOS	D	

Notes

User approved pedestrian interval to be less than phase max green.

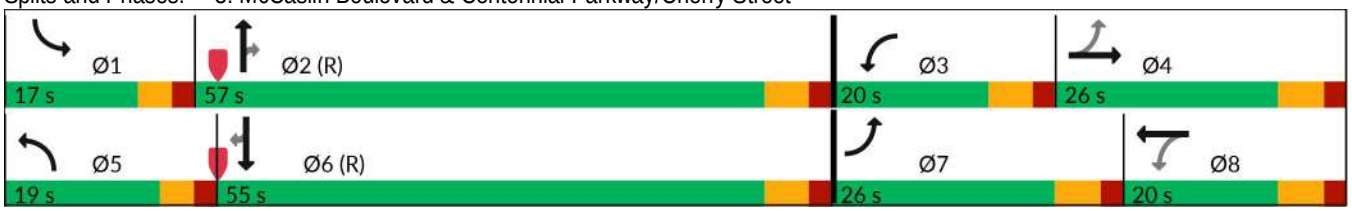
Unsignalized Delay for [EBR, WBR] is included in calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	102	343	283	58	110	169	1051	238	110	1417	127
Future Volume (vph)	235	102	343	283	58	110	169	1051	238	110	1417	127
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	17.0	17.0		24.0	24.0		10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	26.0	26.0		20.0	20.0		19.0	57.0	57.0	17.0	55.0	55.0
Total Split (%)	21.7%	21.7%		16.7%	16.7%		15.8%	47.5%	47.5%	14.2%	45.8%	45.8%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	102	343	283	58	110	169	1051	238	110	1417	127
Future Volume (veh/h)	235	102	343	283	58	110	169	1051	238	110	1417	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	255	111	0	308	63	0	184	1142	0	120	1540	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	350		597	95		207	1871		146	1748	
Arrive On Green	0.15	0.10	0.00	0.10	0.05	0.00	0.23	1.00	0.00	0.08	0.49	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	255	111	0	308	63	0	184	1142	0	120	1540	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	15.7	3.5	0.0	10.0	4.0	0.0	12.0	0.0	0.0	8.0	46.6	0.0
Cycle Q Clear(g_c), s	15.7	3.5	0.0	10.0	4.0	0.0	12.0	0.0	0.0	8.0	46.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	350		597	95		207	1871		146	1748	
V/C Ratio(X)	0.73	0.32		0.52	0.66		0.89	0.61		0.82	0.88	
Avail Cap(c_a), veh/h	380	592		649	218		208	1871		178	1748	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.88	0.88	0.00
Uniform Delay (d), s/veh	43.4	50.3	0.0	47.3	56.0	0.0	45.3	0.0	0.0	54.2	27.3	0.0
Incr Delay (d2), s/veh	6.4	0.5	0.0	0.7	7.7	0.0	33.8	1.5	0.0	19.7	6.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	1.6	0.0	4.3	2.1	0.0	6.6	0.4	0.0	4.4	20.5	0.0
Unsig. Movement Delay, s/veh			0.00			0.00						
LnGrp Delay(d), s/veh	49.7	50.9	0.0	48.0	63.7	0.0	79.1	1.5	0.0	74.0	33.4	0.0
LnGrp LOS	D	D	A	D	E	A	E	A		E	C	
Approach Vol, veh/h		739			491			1326			1660	
Approach Delay, s/veh		24.8			38.3			12.3			36.3	
Approach LOS		C			D			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	69.2	18.2	17.8	19.0	65.0	23.9	12.1
Change Period (Y+Rc), s	5.0	6.0	6.0	6.0	5.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	12.0	51.0	14.0	20.0	14.0	49.0	20.0	14.0
Max Q Clear Time (g_c+I1), s	10.0	2.0	12.0	5.5	14.0	48.6	17.7	6.0
Green Ext Time (p_c), s	0.1	11.5	0.2	0.5	0.0	0.3	0.2	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	27.0
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

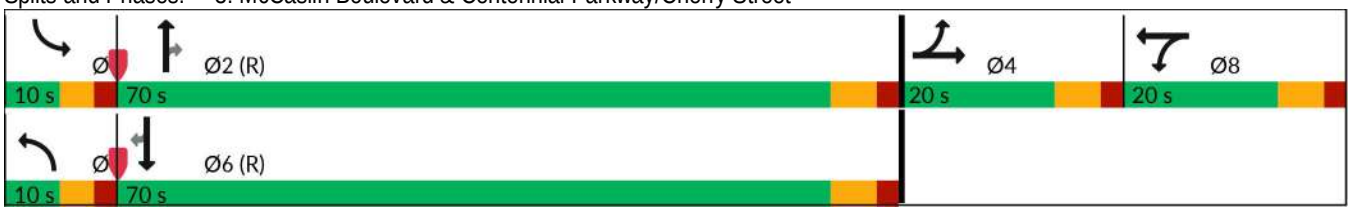
Unsignalized Delay for [EBR, WBR] is included in calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	53	94	239	65	103	137	961	141	50	723	81
Future Volume (vph)	114	53	94	239	65	103	137	961	141	50	723	81
Turn Type	Split	NA	Free	Split	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	4	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0		20.0	20.0		10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	20.0	20.0		20.0	20.0		10.0	70.0	70.0	10.0	70.0	70.0
Total Split (%)	16.7%	16.7%		16.7%	16.7%		8.3%	58.3%	58.3%	8.3%	58.3%	58.3%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	53	94	239	65	103	137	961	141	50	723	81
Future Volume (veh/h)	114	53	94	239	65	103	137	961	141	50	723	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	58	0	260	71	0	149	1045	0	54	786	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	306		324	175		74	2090		69	2080	
Arrive On Green	0.09	0.09	0.00	0.09	0.09	0.00	0.08	1.00	0.00	0.08	1.00	0.00
Sat Flow, veh/h	1753	3497	1560	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	124	58	0	260	71	0	149	1045	0	54	786	0
Grp Sat Flow(s),veh/h/ln	1753	1749	1560	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	8.3	1.8	0.0	8.8	4.3	0.0	5.0	0.0	0.0	3.6	0.0	0.0
Cycle Q Clear(g_c), s	8.3	1.8	0.0	8.8	4.3	0.0	5.0	0.0	0.0	3.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	154	306		324	175		74	2090		69	2080	
V/C Ratio(X)	0.81	0.19		0.80	0.40		2.01	0.50		0.78	0.38	
Avail Cap(c_a), veh/h	205	408		403	218		74	2090		74	2080	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.97	0.97	0.00
Uniform Delay (d), s/veh	53.7	50.8	0.0	53.3	51.2	0.0	55.0	0.0	0.0	54.9	0.0	0.0
Incr Delay (d2), s/veh	15.9	0.3	0.0	9.1	1.5	0.0	497.4	0.9	0.0	37.6	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.8	0.0	4.3	2.1	0.0	12.4	0.2	0.0	2.3	0.1	0.0
Unsig. Movement Delay, s/veh			0.00			0.00						
LnGrp Delay(d), s/veh	69.6	51.1	0.0	62.3	52.7	0.0	552.4	0.9	0.0	92.4	0.5	0.0
LnGrp LOS	E	D	A	E	D	A	F	A		F	A	
Approach Vol, veh/h		284			443			1194			840	
Approach Delay, s/veh		40.8			45.0			69.7			6.4	
Approach LOS		D			D			E			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	76.6		16.5	10.0	76.2		17.3				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	64.0		14.0	5.0	64.0		14.0				
Max Q Clear Time (g_c+I1), s	5.6	2.0		10.3	7.0	2.0		10.8				
Green Ext Time (p_c), s	0.0	10.2		0.2	0.0	6.8		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	43.5
HCM 7th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is included in calculations of the approach delay and intersection delay.

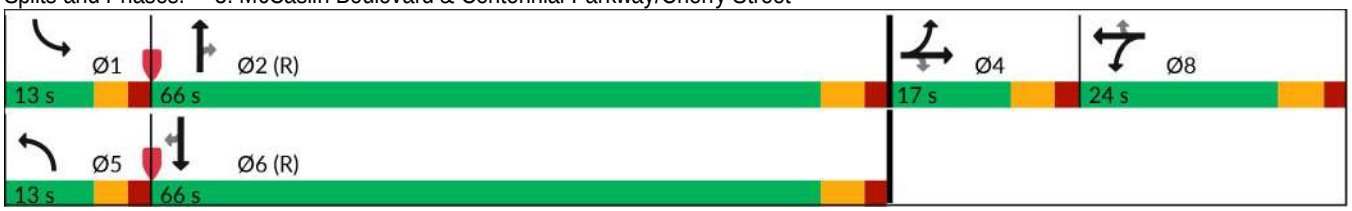
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	94	263	283	44	110	43	997	238	110	1383	126
Future Volume (vph)	230	94	263	283	44	110	43	997	238	110	1383	126
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	17.0	17.0	17.0	24.0	24.0	24.0	10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	17.0	17.0	17.0	24.0	24.0	24.0	13.0	66.0	66.0	13.0	66.0	66.0
Total Split (%)	14.2%	14.2%	14.2%	20.0%	20.0%	20.0%	10.8%	55.0%	55.0%	10.8%	55.0%	55.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	94	263	283	44	110	43	997	238	110	1383	126
Future Volume (veh/h)	230	94	263	283	44	110	43	997	238	110	1383	126
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	250	102	0	308	48	0	47	1084	0	120	1503	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	326		378	205		60	1921		119	2038	
Arrive On Green	0.09	0.09	0.00	0.11	0.11	0.00	0.07	1.00	0.00	0.13	1.00	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	250	102	0	308	48	0	47	1084	0	120	1503	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	11.0	3.2	0.0	10.5	2.8	0.0	3.1	0.0	0.0	8.0	0.0	0.0
Cycle Q Clear(g_c), s	11.0	3.2	0.0	10.5	2.8	0.0	3.1	0.0	0.0	8.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	326		378	205		60	1921		119	2038	
V/C Ratio(X)	1.53	0.31		0.81	0.23		0.78	0.56		1.01	0.74	
Avail Cap(c_a), veh/h	163	326		518	281		119	1921		119	2038	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.89	0.89	0.00
Uniform Delay (d), s/veh	54.5	51.0	0.0	52.2	48.8	0.0	55.5	0.0	0.0	52.0	0.0	0.0
Incr Delay (d2), s/veh	267.4	0.5	0.0	7.0	0.6	0.0	19.1	1.2	0.0	80.7	2.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.0	1.5	0.0	4.9	1.4	0.0	1.7	0.3	0.0	6.0	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	321.9	51.5	0.0	59.3	49.4	0.0	74.6	1.2	0.0	132.7	2.2	0.0
LnGrp LOS	F	D		E	D		E	A		F	A	
Approach Vol, veh/h		352			356			1131			1623	
Approach Delay, s/veh		243.5			57.9			4.3			11.8	
Approach LOS		F			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	70.9		17.0	9.1	74.8		19.1				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	60.0		11.0	8.0	60.0		18.0				
Max Q Clear Time (g_c+I1), s	10.0	2.0		13.0	5.1	2.0		12.5				
Green Ext Time (p_c), s	0.0	10.8		0.0	0.0	18.9		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	37.7
HCM 7th LOS	D

Notes

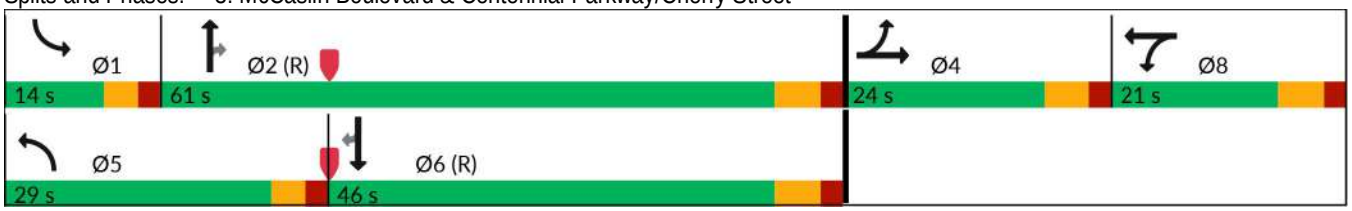
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	66	214	239	69	103	176	977	141	50	774	82
Future Volume (vph)	121	66	214	239	69	103	176	977	141	50	774	82
Turn Type	Split	NA	Free	Split	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	4	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0		20.0	20.0		10.0	24.0	24.0	10.0	24.0	24.0
Total Split (s)	24.0	24.0		21.0	21.0		29.0	61.0	61.0	14.0	46.0	46.0
Total Split (%)	20.0%	20.0%		17.5%	17.5%		24.2%	50.8%	50.8%	11.7%	38.3%	38.3%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	66	214	239	69	103	176	977	141	50	774	82
Future Volume (veh/h)	121	66	214	239	69	103	176	977	141	50	774	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	72	0	260	75	0	191	1062	0	54	841	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	328		327	177		222	2065		69	1760	
Arrive On Green	0.09	0.09	0.00	0.09	0.09	0.00	0.12	0.58	0.00	0.08	0.99	0.00
Sat Flow, veh/h	1753	3497	1560	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	132	72	0	260	75	0	191	1062	0	54	841	0
Grp Sat Flow(s),veh/h/ln	1753	1749	1560	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	8.9	2.3	0.0	8.8	4.5	0.0	12.6	21.4	0.0	3.6	0.5	0.0
Cycle Q Clear(g_c), s	8.9	2.3	0.0	8.8	4.5	0.0	12.6	21.4	0.0	3.6	0.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	328		327	177		222	2065		69	1760	
V/C Ratio(X)	0.80	0.22		0.79	0.42		0.86	0.51		0.78	0.48	
Avail Cap(c_a), veh/h	263	525		432	234		356	2065		134	1760	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.97	0.97	0.00
Uniform Delay (d), s/veh	53.3	50.3	0.0	53.2	51.2	0.0	51.5	15.0	0.0	54.8	0.3	0.0
Incr Delay (d2), s/veh	8.9	0.3	0.0	7.4	1.6	0.0	11.6	0.9	0.0	16.5	0.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	1.0	0.0	4.2	2.2	0.0	6.3	8.7	0.0	1.9	0.3	0.0
Unsig. Movement Delay, s/veh			0.00			0.00						
LnGrp Delay(d), s/veh	62.2	50.6	0.0	60.6	52.8	0.0	63.1	15.9	0.0	71.3	1.2	0.0
LnGrp LOS	E	D	A	E	D	A	E	B		E	A	
Approach Vol, veh/h		437			447			1253			895	
Approach Delay, s/veh		27.1			44.1			23.1			5.4	
Approach LOS		C			D			C			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	75.7		17.3	19.9	65.4		17.4				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	55.0		18.0	24.0	40.0		15.0				
Max Q Clear Time (g_c+I1), s	5.6	23.4		10.9	14.6	2.5		10.8				
Green Ext Time (p_c), s	0.0	9.4		0.4	0.3	7.1		0.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	21.6
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR, WBR] is included in calculations of the approach delay and intersection delay.

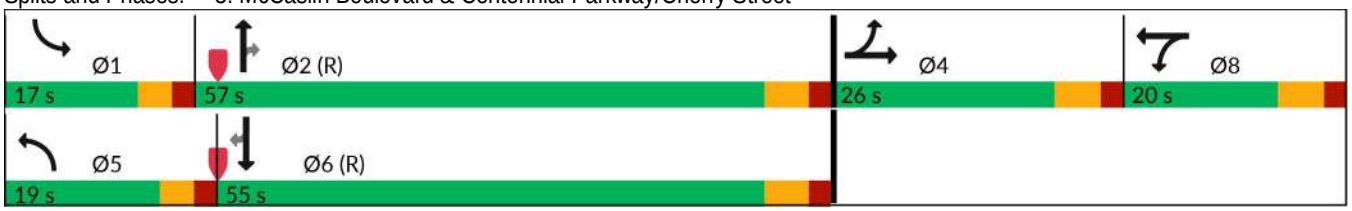
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	102	343	283	58	110	169	1051	238	110	1417	127
Future Volume (vph)	235	102	343	283	58	110	169	1051	238	110	1417	127
Turn Type	Split	NA	Free	Split	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	4	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	17.0	17.0		24.0	24.0		10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	26.0	26.0		20.0	20.0		19.0	57.0	57.0	17.0	55.0	55.0
Total Split (%)	21.7%	21.7%		16.7%	16.7%		15.8%	47.5%	47.5%	14.2%	45.8%	45.8%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 3: McCaslin Boulevard & Centennial Parkway/Cherry Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	102	343	283	58	110	169	1051	238	110	1417	127
Future Volume (veh/h)	235	102	343	283	58	110	169	1051	238	110	1417	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	255	111	0	308	63	0	184	1142	0	120	1540	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	564		367	199		207	1640		146	1518	
Arrive On Green	0.16	0.16	0.00	0.11	0.11	0.00	0.23	0.92	0.00	0.08	0.43	0.00
Sat Flow, veh/h	1781	3554	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	255	111	0	308	63	0	184	1142	0	120	1540	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	16.9	3.3	0.0	10.5	3.7	0.0	12.0	8.3	0.0	8.0	51.3	0.0
Cycle Q Clear(g_c), s	16.9	3.3	0.0	10.5	3.7	0.0	12.0	8.3	0.0	8.0	51.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	283	564		367	199		207	1640		146	1518	
V/C Ratio(X)	0.90	0.20		0.84	0.32		0.89	0.70		0.82	1.01	
Avail Cap(c_a), veh/h	297	592		403	218		208	1640		178	1518	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.88	0.88	0.00
Uniform Delay (d), s/veh	49.6	43.8	0.0	52.6	49.6	0.0	45.3	2.8	0.0	54.2	34.4	0.0
Incr Delay (d2), s/veh	27.9	0.2	0.0	13.6	0.9	0.0	33.8	2.5	0.0	19.7	25.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	1.5	0.0	5.2	1.8	0.0	6.6	1.9	0.0	4.4	26.8	0.0
Unsig. Movement Delay, s/veh			0.00			0.00						
LnGrp Delay(d), s/veh	77.4	44.0	0.0	66.2	50.5	0.0	79.1	5.3	0.0	74.0	59.7	0.0
LnGrp LOS	E	D	A	E	D	A	E	A		E	F	
Approach Vol, veh/h		739			491			1326			1660	
Approach Delay, s/veh		33.3			48.0			15.5			60.8	
Approach LOS		C			D			B			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.8	61.4		25.1	19.0	57.3		18.7				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	12.0	51.0		20.0	14.0	49.0		14.0				
Max Q Clear Time (g_c+I1), s	10.0	10.3		18.9	14.0	53.3		12.5				
Green Ext Time (p_c), s	0.1	11.1		0.2	0.0	0.0		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	40.2
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

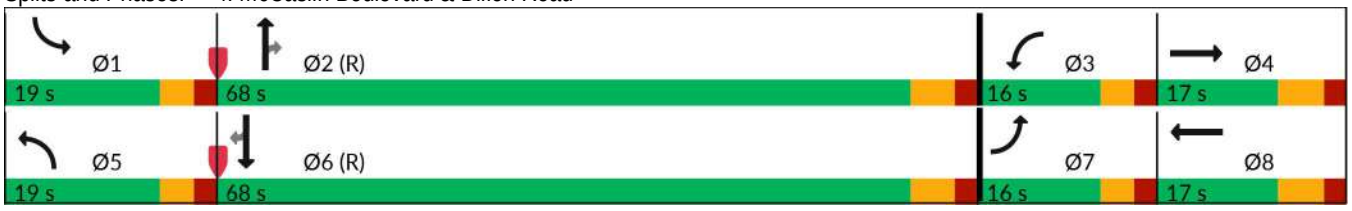
Unsignalized Delay for [EBR, WBR] is included in calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	16	51	386	73	178	141	858	355	101	631	38
Future Volume (vph)	23	16	51	386	73	178	141	858	355	101	631	38
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	17.0		10.0	17.0		10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	16.0	17.0		16.0	17.0		19.0	68.0	68.0	19.0	68.0	68.0
Total Split (%)	13.3%	14.2%		13.3%	14.2%		15.8%	56.7%	56.7%	15.8%	56.7%	56.7%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 4: McCaslin Boulevard & Dillon Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	16	51	386	73	178	141	858	355	101	631	38
Future Volume (veh/h)	23	16	51	386	73	178	141	858	355	101	631	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	16	0	398	75	0	145	885	0	104	651	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	76		317	205		205	2269		158	3191	
Arrive On Green	0.02	0.04	0.00	0.09	0.11	0.00	0.06	0.64	0.00	0.09	1.00	0.00
Sat Flow, veh/h	3428	1856	1572	3456	1870	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	24	16	0	398	75	0	145	885	0	104	651	0
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1728	1870	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	0.8	1.0	0.0	11.0	4.5	0.0	4.9	14.4	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	0.8	1.0	0.0	11.0	4.5	0.0	4.9	14.4	0.0	3.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	79	76		317	205		205	2269		158	3191	
V/C Ratio(X)	0.31	0.21		1.26	0.37		0.71	0.39		0.66	0.20	
Avail Cap(c_a), veh/h	314	170		317	205		403	2269		403	3191	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.7	55.7	0.0	54.5	49.6	0.0	55.4	10.4	0.0	53.6	0.0	0.0
Incr Delay (d2), s/veh	2.2	1.4	0.0	138.6	1.1	0.0	4.4	0.5	0.0	4.6	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.5	0.0	10.9	2.2	0.0	2.3	5.6	0.0	1.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.8	57.1	0.0	193.1	50.7	0.0	59.9	10.9	0.0	58.3	0.1	0.0
LnGrp LOS	E	E		F	D		E	B		E	A	
Approach Vol, veh/h		40			473			1030			755	
Approach Delay, s/veh		58.7			170.5			17.8			8.1	
Approach LOS		E			F			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	82.6	16.0	10.9	12.1	81.0	7.8	19.1
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	14.0	62.0	11.0	11.0	14.0	62.0	11.0	11.0
Max Q Clear Time (g_c+I1), s	5.5	16.4	13.0	3.0	6.9	2.0	2.8	6.5
Green Ext Time (p_c), s	0.2	7.8	0.0	0.0	0.2	5.3	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	46.8
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

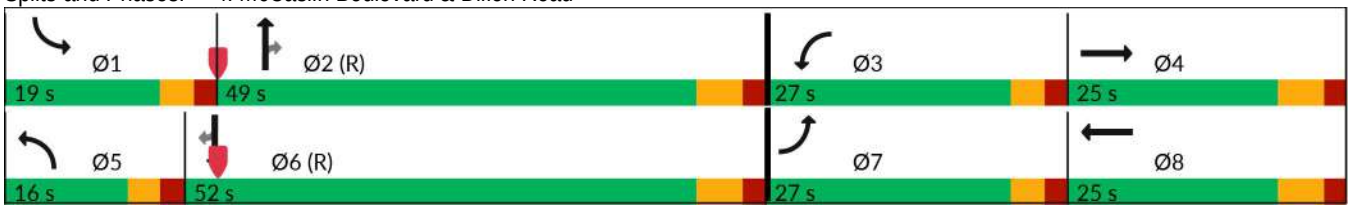
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	63	140	519	71	141	106	916	479	212	1145	59
Future Volume (vph)	62	63	140	519	71	141	106	916	479	212	1145	59
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.5	24.0		10.5	24.0		10.5	24.0	24.0	10.5	30.0	30.0
Total Split (s)	27.0	25.0		27.0	25.0		16.0	49.0	49.0	19.0	52.0	52.0
Total Split (%)	22.5%	20.8%		22.5%	20.8%		13.3%	40.8%	40.8%	15.8%	43.3%	43.3%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 4: McCaslin Boulevard & Dillon Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	63	140	519	71	141	106	916	479	212	1145	59
Future Volume (veh/h)	62	63	140	519	71	141	106	916	479	212	1145	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	67	0	552	76	0	113	974	0	226	1218	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	100		608	359		168	1796		283	2751	
Arrive On Green	0.04	0.05	0.00	0.18	0.19	0.00	0.05	0.51	0.00	0.16	1.00	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	66	67	0	552	76	0	113	974	0	226	1218	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	2.2	4.2	0.0	18.8	4.1	0.0	3.9	22.4	0.0	7.5	0.0	0.0
Cycle Q Clear(g_c), s	2.2	4.2	0.0	18.8	4.1	0.0	3.9	22.4	0.0	7.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	128	100		608	359		168	1796		283	2751	
V/C Ratio(X)	0.52	0.67		0.91	0.21		0.67	0.54		0.80	0.44	
Avail Cap(c_a), veh/h	634	296		634	359		317	1796		403	2751	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.7	55.8	0.0	48.5	40.8	0.0	56.1	20.2	0.0	49.2	0.0	0.0
Incr Delay (d2), s/veh	3.2	7.6	0.0	16.7	0.3	0.0	4.6	1.2	0.0	7.2	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.2	0.0	9.5	1.9	0.0	1.8	9.4	0.0	3.3	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.9	63.4	0.0	65.2	41.1	0.0	60.7	21.4	0.0	56.4	0.5	0.0
LnGrp LOS	E	E		E	D		E	C		E	A	
Approach Vol, veh/h		133			628			1087			1444	
Approach Delay, s/veh		61.7			62.2			25.5			9.3	
Approach LOS		E			E			C			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	66.7	26.1	12.4	10.8	70.7	9.4	29.1
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	14.0	43.0	22.0	19.0	11.0	46.0	22.0	19.0
Max Q Clear Time (g_c+I1), s	9.5	24.4	20.8	6.2	5.9	2.0	4.2	6.1
Green Ext Time (p_c), s	0.3	6.9	0.3	0.2	0.1	11.9	0.1	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	26.8
HCM 7th LOS	C

Notes

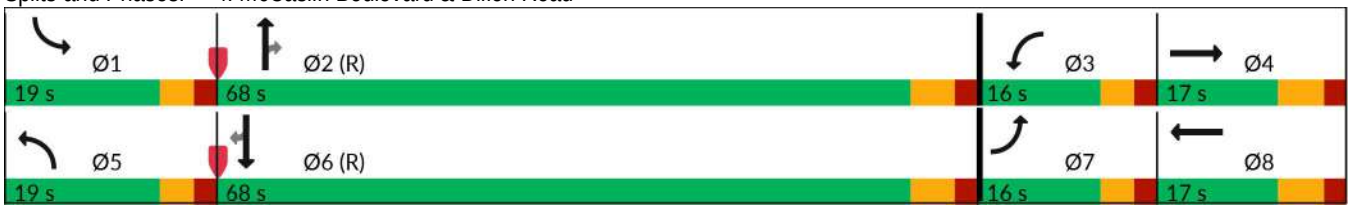
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	34	86	402	99	208	209	923	369	122	691	40
Future Volume (vph)	28	34	86	402	99	208	209	923	369	122	691	40
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	17.0		10.0	17.0		10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	16.0	17.0		16.0	17.0		19.0	68.0	68.0	19.0	68.0	68.0
Total Split (%)	13.3%	14.2%		13.3%	14.2%		15.8%	56.7%	56.7%	15.8%	56.7%	56.7%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 4: McCaslin Boulevard & Dillon Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	34	86	402	99	208	209	923	369	122	691	40
Future Volume (veh/h)	28	34	86	402	99	208	209	923	369	122	691	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	35	0	414	102	0	215	952	0	126	712	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	77		317	201		277	2242		182	3081	
Arrive On Green	0.03	0.04	0.00	0.09	0.11	0.00	0.08	0.63	0.00	0.11	1.00	0.00
Sat Flow, veh/h	3428	1856	1572	3456	1870	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	29	35	0	414	102	0	215	952	0	126	712	0
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1728	1870	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	1.0	2.2	0.0	11.0	6.2	0.0	7.3	16.2	0.0	4.2	0.0	0.0
Cycle Q Clear(g_c), s	1.0	2.2	0.0	11.0	6.2	0.0	7.3	16.2	0.0	4.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	89	77		317	201		277	2242		182	3081	
V/C Ratio(X)	0.33	0.45		1.31	0.51		0.78	0.42		0.69	0.23	
Avail Cap(c_a), veh/h	314	170		317	201		403	2242		403	3081	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.4	56.2	0.0	54.5	50.6	0.0	54.1	11.2	0.0	52.7	0.0	0.0
Incr Delay (d2), s/veh	2.1	4.1	0.0	159.1	2.1	0.0	5.8	0.6	0.0	4.6	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.1	0.0	11.8	3.0	0.0	3.4	6.3	0.0	1.9	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.6	60.3	0.0	213.6	52.7	0.0	59.9	11.8	0.0	57.4	0.2	0.0
LnGrp LOS	E	E		F	D		E	B		E	A	
Approach Vol, veh/h		64			516			1167			838	
Approach Delay, s/veh		60.0			181.8			20.6			8.8	
Approach LOS		E			F			C			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	81.7	16.0	11.0	14.6	78.4	8.1	18.9
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	14.0	62.0	11.0	11.0	14.0	62.0	11.0	11.0
Max Q Clear Time (g_c+I1), s	6.2	18.2	13.0	4.2	9.3	2.0	3.0	8.2
Green Ext Time (p_c), s	0.2	8.6	0.0	0.0	0.3	6.0	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	49.9
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

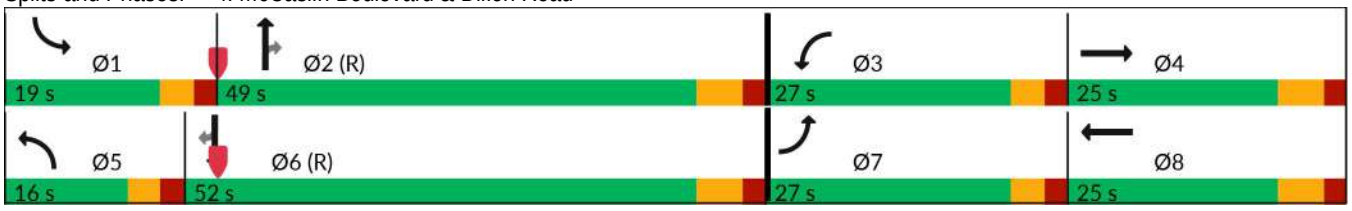
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	104	235	540	112	185	249	966	498	259	1254	61
Future Volume (vph)	81	104	235	540	112	185	249	966	498	259	1254	61
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.5	24.0		10.5	24.0		10.5	24.0	24.0	10.5	30.0	30.0
Total Split (s)	27.0	25.0		27.0	25.0		16.0	49.0	49.0	19.0	52.0	52.0
Total Split (%)	22.5%	20.8%		22.5%	20.8%		13.3%	40.8%	40.8%	15.8%	43.3%	43.3%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 4: McCaslin Boulevard & Dillon Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	104	235	540	112	185	249	966	498	259	1254	61
Future Volume (veh/h)	81	104	235	540	112	185	249	966	498	259	1254	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	111	0	574	119	0	265	1028	0	276	1334	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	145		625	408		317	1639		336	2383	
Arrive On Green	0.04	0.08	0.00	0.18	0.22	0.00	0.09	0.46	0.00	0.10	0.47	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	86	111	0	574	119	0	265	1028	0	276	1334	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	2.9	7.0	0.0	19.6	6.4	0.0	9.1	26.3	0.0	9.4	22.6	0.0
Cycle Q Clear(g_c), s	2.9	7.0	0.0	19.6	6.4	0.0	9.1	26.3	0.0	9.4	22.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	139	145		625	408		317	1639		336	2383	
V/C Ratio(X)	0.62	0.77		0.92	0.29		0.84	0.63		0.82	0.56	
Avail Cap(c_a), veh/h	634	296		634	408		317	1639		403	2383	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.7	54.3	0.0	48.3	39.2	0.0	53.6	24.5	0.0	53.2	23.1	0.0
Incr Delay (d2), s/veh	4.4	8.1	0.0	18.4	0.4	0.0	17.5	1.8	0.0	11.0	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	3.6	0.0	10.0	3.0	0.0	4.7	11.3	0.0	4.6	9.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.0	62.4	0.0	66.7	39.6	0.0	71.1	26.3	0.0	64.2	24.1	0.0
LnGrp LOS	E	E		E	D		E	C		E	C	
Approach Vol, veh/h		197			693			1293			1610	
Approach Delay, s/veh		61.8			62.1			35.5			30.9	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	61.3	26.7	15.3	16.0	62.0	9.8	32.2
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	14.0	43.0	22.0	19.0	11.0	46.0	22.0	19.0
Max Q Clear Time (g_c+I1), s	11.4	28.3	21.6	9.0	11.1	24.6	4.9	8.4
Green Ext Time (p_c), s	0.2	6.4	0.1	0.3	0.0	10.2	0.2	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	39.8
HCM 7th LOS	D

Notes

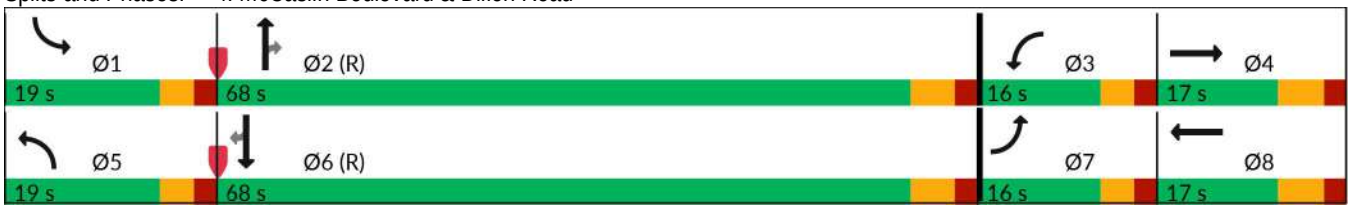
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	34	86	415	99	237	209	966	373	182	821	40
Future Volume (vph)	28	34	86	415	99	237	209	966	373	182	821	40
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	17.0		10.0	17.0		10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	16.0	17.0		16.0	17.0		19.0	68.0	68.0	19.0	68.0	68.0
Total Split (%)	13.3%	14.2%		13.3%	14.2%		15.8%	56.7%	56.7%	15.8%	56.7%	56.7%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 4: McCaslin Boulevard & Dillon Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	34	86	415	99	237	209	966	373	182	821	40
Future Volume (veh/h)	28	34	86	415	99	237	209	966	373	182	821	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	35	0	428	102	0	215	996	0	188	846	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	77		317	201		277	2176		246	3081	
Arrive On Green	0.03	0.04	0.00	0.09	0.11	0.00	0.08	0.61	0.00	0.14	1.00	0.00
Sat Flow, veh/h	3428	1856	1572	3456	1870	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	29	35	0	428	102	0	215	996	0	188	846	0
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1728	1870	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	1.0	2.2	0.0	11.0	6.2	0.0	7.3	18.1	0.0	6.3	0.0	0.0
Cycle Q Clear(g_c), s	1.0	2.2	0.0	11.0	6.2	0.0	7.3	18.1	0.0	6.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	89	77		317	201		277	2176		246	3081	
V/C Ratio(X)	0.33	0.45		1.35	0.51		0.78	0.46		0.76	0.27	
Avail Cap(c_a), veh/h	314	170		317	201		403	2176		403	3081	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.4	56.2	0.0	54.5	50.6	0.0	54.1	12.5	0.0	50.5	0.0	0.0
Incr Delay (d2), s/veh	2.1	4.1	0.0	177.5	2.1	0.0	5.8	0.7	0.0	4.9	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.1	0.0	12.6	3.0	0.0	3.4	7.2	0.0	2.7	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.6	60.3	0.0	232.0	52.7	0.0	59.9	13.2	0.0	55.4	0.2	0.0
LnGrp LOS	E	E		F	D		E	B		E	A	
Approach Vol, veh/h		64			530			1211			1034	
Approach Delay, s/veh		60.0			197.5			21.5			10.2	
Approach LOS		E			F			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	79.5	16.0	11.0	14.6	78.4	8.1	18.9
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	14.0	62.0	11.0	11.0	14.0	62.0	11.0	11.0
Max Q Clear Time (g_c+I1), s	8.3	20.1	13.0	4.2	9.3	2.0	3.0	8.2
Green Ext Time (p_c), s	0.3	9.1	0.0	0.0	0.3	7.4	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	51.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

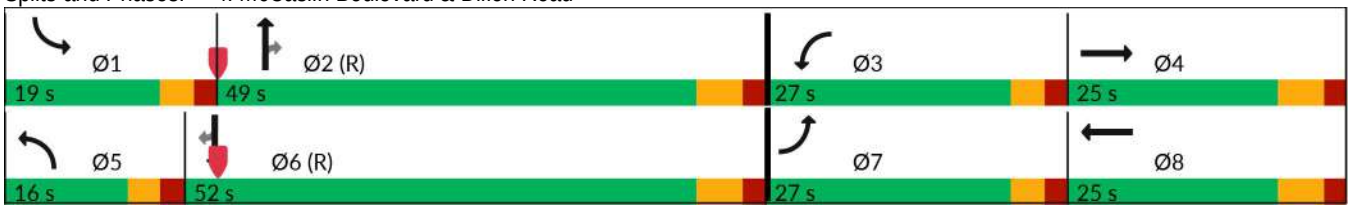
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	104	235	547	112	251	249	1104	510	307	1343	61
Future Volume (vph)	81	104	235	547	112	251	249	1104	510	307	1343	61
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.5	24.0		10.5	24.0		10.5	24.0	24.0	10.5	30.0	30.0
Total Split (s)	27.0	25.0		27.0	25.0		16.0	49.0	49.0	19.0	52.0	52.0
Total Split (%)	22.5%	20.8%		22.5%	20.8%		13.3%	40.8%	40.8%	15.8%	43.3%	43.3%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 4: McCaslin Boulevard & Dillon Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	104	235	547	112	251	249	1104	510	307	1343	61
Future Volume (veh/h)	81	104	235	547	112	251	249	1104	510	307	1343	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	111	0	582	119	0	265	1174	0	327	1429	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	145		631	411		317	1585		382	2374	
Arrive On Green	0.04	0.08	0.00	0.18	0.22	0.00	0.09	0.45	0.00	0.11	0.46	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	86	111	0	582	119	0	265	1174	0	327	1429	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	2.9	7.0	0.0	19.9	6.4	0.0	9.1	32.8	0.0	11.2	25.0	0.0
Cycle Q Clear(g_c), s	2.9	7.0	0.0	19.9	6.4	0.0	9.1	32.8	0.0	11.2	25.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	139	145		631	411		317	1585		382	2374	
V/C Ratio(X)	0.62	0.77		0.92	0.29		0.84	0.74		0.86	0.60	
Avail Cap(c_a), veh/h	634	296		634	411		317	1585		403	2374	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.7	54.3	0.0	48.2	39.0	0.0	53.6	27.5	0.0	52.4	23.9	0.0
Incr Delay (d2), s/veh	4.4	8.1	0.0	19.1	0.4	0.0	17.5	3.2	0.0	15.8	1.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	3.6	0.0	10.2	3.0	0.0	4.7	14.3	0.0	5.7	10.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.0	62.4	0.0	67.4	39.4	0.0	71.1	30.7	0.0	68.3	25.0	0.0
LnGrp LOS	E	E		E	D		E	C		E	C	
Approach Vol, veh/h		197			701			1439			1756	
Approach Delay, s/veh		61.8			62.6			38.1			33.0	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	59.5	26.9	15.3	16.0	61.8	9.8	32.4
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	14.0	43.0	22.0	19.0	11.0	46.0	22.0	19.0
Max Q Clear Time (g_c+I1), s	13.2	34.8	21.9	9.0	11.1	27.0	4.9	8.4
Green Ext Time (p_c), s	0.1	4.9	0.0	0.3	0.0	10.3	0.2	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	41.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

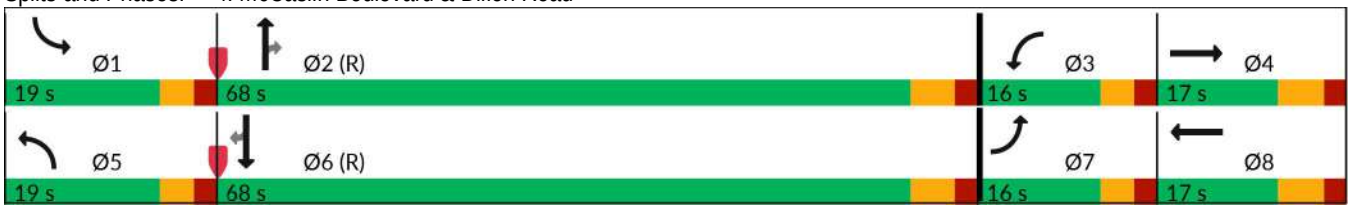
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	38	108	490	116	249	246	1119	451	145	835	49
Future Volume (vph)	35	38	108	490	116	249	246	1119	451	145	835	49
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	17.0		10.0	17.0		10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	16.0	17.0		16.0	17.0		19.0	68.0	68.0	19.0	68.0	68.0
Total Split (%)	13.3%	14.2%		13.3%	14.2%		15.8%	56.7%	56.7%	15.8%	56.7%	56.7%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 4: McCaslin Boulevard & Dillon Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	38	108	490	116	249	246	1119	451	145	835	49
Future Volume (veh/h)	35	38	108	490	116	249	246	1119	451	145	835	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	39	0	505	120	0	254	1154	0	149	861	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	77		317	195		315	2216		206	3025	
Arrive On Green	0.03	0.04	0.00	0.09	0.10	0.00	0.09	0.62	0.00	0.12	1.00	0.00
Sat Flow, veh/h	3428	1856	1572	3456	1870	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	36	39	0	505	120	0	254	1154	0	149	861	0
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1728	1870	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	1.2	2.5	0.0	11.0	7.4	0.0	8.7	21.7	0.0	5.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	2.5	0.0	11.0	7.4	0.0	8.7	21.7	0.0	5.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	100	77		317	195		315	2216		206	3025	
V/C Ratio(X)	0.36	0.51		1.59	0.62		0.81	0.52		0.72	0.28	
Avail Cap(c_a), veh/h	314	170		317	195		403	2216		403	3025	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.2	56.3	0.0	54.5	51.5	0.0	53.5	12.6	0.0	51.9	0.0	0.0
Incr Delay (d2), s/veh	2.2	5.0	0.0	281.9	5.7	0.0	9.1	0.9	0.0	4.7	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.3	0.0	17.2	3.8	0.0	4.2	8.5	0.0	2.2	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.3	61.3	0.0	336.4	57.2	0.0	62.6	13.5	0.0	56.6	0.2	0.0
LnGrp LOS	E	E		F	E		E	B		E	A	
Approach Vol, veh/h		75			625			1408			1010	
Approach Delay, s/veh		60.4			282.7			22.3			8.5	
Approach LOS		E			F			C			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	80.8	16.0	11.0	15.9	77.1	8.5	18.5
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	14.0	62.0	11.0	11.0	14.0	62.0	11.0	11.0
Max Q Clear Time (g_c+I1), s	7.0	23.7	13.0	4.5	10.7	2.0	3.2	9.4
Green Ext Time (p_c), s	0.2	11.1	0.0	0.0	0.3	7.6	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	71.0
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

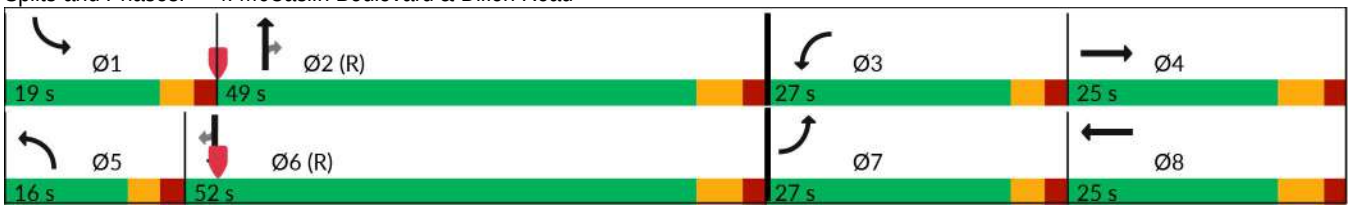
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	119	276	659	129	217	289	1176	608	307	1517	78
Future Volume (vph)	97	119	276	659	129	217	289	1176	608	307	1517	78
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.5	24.0		10.5	24.0		10.5	24.0	24.0	10.5	30.0	30.0
Total Split (s)	27.0	25.0		27.0	25.0		16.0	49.0	49.0	19.0	52.0	52.0
Total Split (%)	22.5%	20.8%		22.5%	20.8%		13.3%	40.8%	40.8%	15.8%	43.3%	43.3%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 4: McCaslin Boulevard & Dillon Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	119	276	659	129	217	289	1176	608	307	1517	78
Future Volume (veh/h)	97	119	276	659	129	217	289	1176	608	307	1517	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	127	0	701	137	0	307	1251	0	327	1614	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	161		634	417		317	1550		384	2326	
Arrive On Green	0.05	0.09	0.00	0.18	0.22	0.00	0.09	0.44	0.00	0.07	0.31	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	103	127	0	701	137	0	307	1251	0	327	1614	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	3.5	8.0	0.0	22.0	7.4	0.0	10.6	36.8	0.0	11.2	33.4	0.0
Cycle Q Clear(g_c), s	3.5	8.0	0.0	22.0	7.4	0.0	10.6	36.8	0.0	11.2	33.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	161		634	417		317	1550		384	2326	
V/C Ratio(X)	0.64	0.79		1.11	0.33		0.97	0.81		0.85	0.69	
Avail Cap(c_a), veh/h	634	296		634	417		317	1550		403	2326	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.2	53.8	0.0	49.0	39.1	0.0	54.3	29.4	0.0	54.6	34.3	0.0
Incr Delay (d2), s/veh	4.2	8.2	0.0	68.5	0.5	0.0	42.1	4.6	0.0	15.4	1.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.1	0.0	15.5	3.5	0.0	6.5	16.4	0.0	5.9	14.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.5	62.0	0.0	117.5	39.5	0.0	96.4	34.1	0.0	70.0	36.1	0.0
LnGrp LOS	E	E		F	D		F	C		E	D	
Approach Vol, veh/h		230			838			1558			1941	
Approach Delay, s/veh		61.3			104.8			46.4			41.8	
Approach LOS		E			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	58.3	27.0	16.3	16.0	60.7	10.6	32.8
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	14.0	43.0	22.0	19.0	11.0	46.0	22.0	19.0
Max Q Clear Time (g_c+I1), s	13.2	38.8	24.0	10.0	12.6	35.4	5.5	9.4
Green Ext Time (p_c), s	0.1	3.0	0.0	0.4	0.0	7.6	0.2	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	55.9
HCM 7th LOS	E

Notes

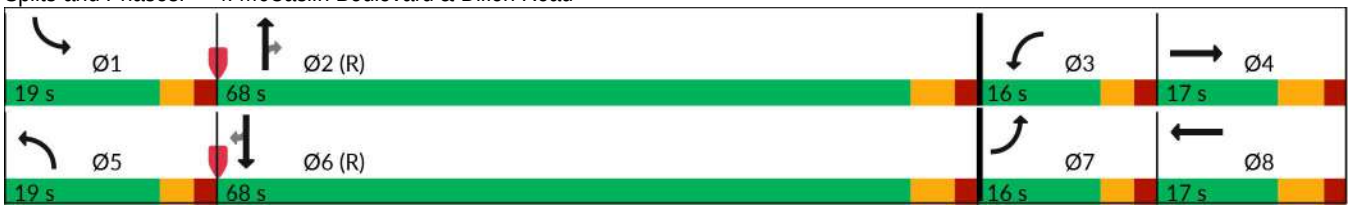
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	38	108	490	116	266	246	1157	451	197	954	49
Future Volume (vph)	35	38	108	490	116	266	246	1157	451	197	954	49
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	17.0		10.0	17.0		10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	16.0	17.0		16.0	17.0		19.0	68.0	68.0	19.0	68.0	68.0
Total Split (%)	13.3%	14.2%		13.3%	14.2%		15.8%	56.7%	56.7%	15.8%	56.7%	56.7%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 4: McCaslin Boulevard & Dillon Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	38	108	490	116	266	246	1157	451	197	954	49
Future Volume (veh/h)	35	38	108	490	116	266	246	1157	451	197	954	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	39	0	505	120	0	254	1193	0	203	984	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	77		317	195		315	2160		261	3025	
Arrive On Green	0.03	0.04	0.00	0.09	0.10	0.00	0.09	0.61	0.00	0.15	1.00	0.00
Sat Flow, veh/h	3428	1856	1572	3456	1870	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	36	39	0	505	120	0	254	1193	0	203	984	0
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1728	1870	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	1.2	2.5	0.0	11.0	7.4	0.0	8.7	23.8	0.0	6.8	0.0	0.0
Cycle Q Clear(g_c), s	1.2	2.5	0.0	11.0	7.4	0.0	8.7	23.8	0.0	6.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	100	77		317	195		315	2160		261	3025	
V/C Ratio(X)	0.36	0.51		1.59	0.62		0.81	0.55		0.78	0.33	
Avail Cap(c_a), veh/h	314	170		317	195		403	2160		403	3025	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.2	56.3	0.0	54.5	51.5	0.0	53.5	13.9	0.0	50.0	0.0	0.0
Incr Delay (d2), s/veh	2.2	5.0	0.0	281.9	5.7	0.0	9.1	1.0	0.0	5.1	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.3	0.0	17.2	3.8	0.0	4.2	9.5	0.0	2.9	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.3	61.3	0.0	336.4	57.2	0.0	62.6	14.9	0.0	55.1	0.3	0.0
LnGrp LOS	E	E		F	E		E	B		E	A	
Approach Vol, veh/h		75			625			1447			1187	
Approach Delay, s/veh		60.4			282.7			23.3			9.7	
Approach LOS		E			F			C			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	78.9	16.0	11.0	15.9	77.1	8.5	18.5
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	14.0	62.0	11.0	11.0	14.0	62.0	11.0	11.0
Max Q Clear Time (g_c+I1), s	8.8	25.8	13.0	4.5	10.7	2.0	3.2	9.4
Green Ext Time (p_c), s	0.3	11.5	0.0	0.0	0.3	9.1	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	67.9
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

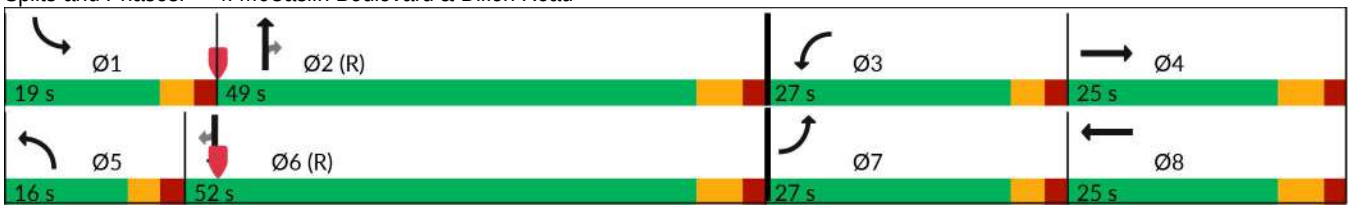
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	119	276	659	129	272	289	1301	608	342	1596	78
Future Volume (vph)	97	119	276	659	129	272	289	1301	608	342	1596	78
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.5	24.0		10.5	24.0		10.5	24.0	24.0	10.5	30.0	30.0
Total Split (s)	27.0	25.0		27.0	25.0		16.0	49.0	49.0	19.0	52.0	52.0
Total Split (%)	22.5%	20.8%		22.5%	20.8%		13.3%	40.8%	40.8%	15.8%	43.3%	43.3%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 4: McCaslin Boulevard & Dillon Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	119	276	659	129	272	289	1301	608	342	1596	78
Future Volume (veh/h)	97	119	276	659	129	272	289	1301	608	342	1596	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	127	0	701	137	0	307	1384	0	364	1698	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	161		634	417		317	1530		403	2326	
Arrive On Green	0.05	0.09	0.00	0.18	0.22	0.00	0.09	0.43	0.00	0.08	0.31	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	103	127	0	701	137	0	307	1384	0	364	1698	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	3.5	8.0	0.0	22.0	7.4	0.0	10.6	43.6	0.0	12.5	35.7	0.0
Cycle Q Clear(g_c), s	3.5	8.0	0.0	22.0	7.4	0.0	10.6	43.6	0.0	12.5	35.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	161		634	417		317	1530		403	2326	
V/C Ratio(X)	0.64	0.79		1.11	0.33		0.97	0.90		0.90	0.73	
Avail Cap(c_a), veh/h	634	296		634	417		317	1530		403	2326	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.2	53.8	0.0	49.0	39.1	0.0	54.3	31.9	0.0	54.6	35.1	0.0
Incr Delay (d2), s/veh	4.2	8.2	0.0	68.5	0.5	0.0	42.1	9.2	0.0	23.0	2.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.1	0.0	15.5	3.5	0.0	6.5	20.2	0.0	6.9	15.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.5	62.0	0.0	117.5	39.5	0.0	96.4	41.1	0.0	77.7	37.2	0.0
LnGrp LOS	E	E		F	D		F	D		E	D	
Approach Vol, veh/h		230			838			1691			2062	
Approach Delay, s/veh		61.3			104.8			51.1			44.3	
Approach LOS		E			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	57.7	27.0	16.3	16.0	60.7	10.6	32.8
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	14.0	43.0	22.0	19.0	11.0	46.0	22.0	19.0
Max Q Clear Time (g_c+I1), s	14.5	45.6	24.0	10.0	12.6	37.7	5.5	9.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	6.4	0.2	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	58.0
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	38	108	490	116	266	246	1157	451	197	954	49
Future Volume (vph)	35	38	108	490	116	266	246	1157	451	197	954	49
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	17.0		10.0	17.0		10.5	24.0	24.0	10.5	24.0	24.0
Total Split (s)	10.0	17.0		28.0	35.0		19.6	58.0	58.0	17.0	55.4	55.4
Total Split (%)	8.3%	14.2%		23.3%	29.2%		16.3%	48.3%	48.3%	14.2%	46.2%	46.2%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 4: McCaslin Boulevard & Dillon Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	38	108	490	116	266	246	1157	451	197	954	49
Future Volume (veh/h)	35	38	108	490	116	266	246	1157	451	197	954	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	39	0	505	120	0	254	1193	0	203	984	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	77		573	333		316	1899		258	2645	
Arrive On Green	0.03	0.04	0.00	0.17	0.18	0.00	0.09	0.53	0.00	0.15	1.00	0.00
Sat Flow, veh/h	3428	1856	1572	3456	1870	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	36	39	0	505	120	0	254	1193	0	203	984	0
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1728	1870	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	1.2	2.5	0.0	17.1	6.8	0.0	8.7	28.2	0.0	6.8	0.0	0.0
Cycle Q Clear(g_c), s	1.2	2.5	0.0	17.1	6.8	0.0	8.7	28.2	0.0	6.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	100	77		573	333		316	1899		258	2645	
V/C Ratio(X)	0.36	0.51		0.88	0.36		0.80	0.63		0.79	0.37	
Avail Cap(c_a), veh/h	143	170		662	452		420	1899		346	2645	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.57	0.57	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.2	56.3	0.0	48.9	43.3	0.0	53.5	19.6	0.0	50.1	0.0	0.0
Incr Delay (d2), s/veh	2.2	5.0	0.0	7.4	0.4	0.0	8.1	1.6	0.0	8.3	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.3	0.0	8.0	3.2	0.0	4.1	11.8	0.0	3.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.3	61.3	0.0	56.3	43.7	0.0	61.6	21.2	0.0	58.4	0.4	0.0
LnGrp LOS	E	E		E	D		E	C		E	A	
Approach Vol, veh/h		75			625			1447			1187	
Approach Delay, s/veh		60.4			53.8			28.3			10.3	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	70.1	24.9	11.0	16.0	68.2	8.5	27.4
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	12.0	52.0	23.0	11.0	14.6	49.4	5.0	29.0
Max Q Clear Time (g_c+I1), s	8.8	30.2	19.1	4.5	10.7	2.0	3.2	8.8
Green Ext Time (p_c), s	0.2	9.4	0.8	0.0	0.3	8.9	0.0	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	27.4
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

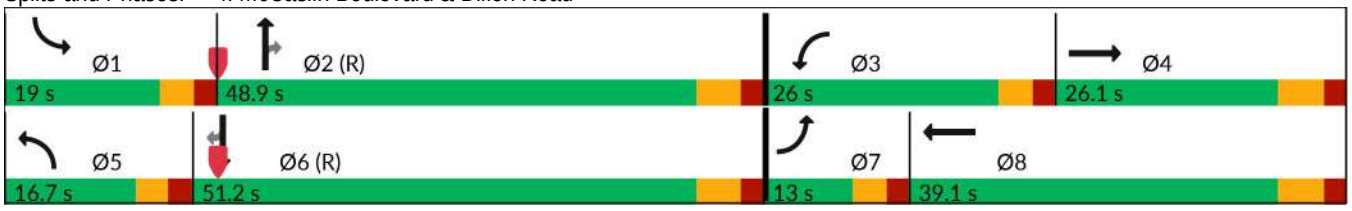
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	119	276	659	129	272	289	1301	608	342	1596	78
Future Volume (vph)	97	119	276	659	129	272	289	1301	608	342	1596	78
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.5	24.0		10.5	24.0		10.5	24.0	24.0	10.5	30.0	30.0
Total Split (s)	13.0	26.1		26.0	39.1		16.7	48.9	48.9	19.0	51.2	51.2
Total Split (%)	10.8%	21.8%		21.7%	32.6%		13.9%	40.8%	40.8%	15.8%	42.7%	42.7%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 4: McCaslin Boulevard & Dillon Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	119	276	659	129	272	289	1301	608	342	1596	78
Future Volume (veh/h)	97	119	276	659	129	272	289	1301	608	342	1596	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	127	0	701	137	0	307	1384	0	364	1698	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	162		605	405		337	1559		403	2337	
Arrive On Green	0.04	0.09	0.00	0.23	0.29	0.00	0.10	0.44	0.00	0.23	0.92	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	103	127	0	701	137	0	307	1384	0	364	1698	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	3.5	8.0	0.0	21.0	6.9	0.0	10.6	43.0	0.0	12.3	10.1	0.0
Cycle Q Clear(g_c), s	3.5	8.0	0.0	21.0	6.9	0.0	10.6	43.0	0.0	12.3	10.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	162		605	405		337	1559		403	2337	
V/C Ratio(X)	0.66	0.79		1.16	0.34		0.91	0.89		0.90	0.73	
Avail Cap(c_a), veh/h	230	313		605	516		337	1559		403	2337	
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.57	0.57	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.4	53.7	0.0	46.0	35.9	0.0	53.6	31.0	0.0	45.3	3.2	0.0
Incr Delay (d2), s/veh	4.8	8.1	0.0	82.4	0.3	0.0	27.8	7.9	0.0	23.0	2.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.1	0.0	15.5	3.1	0.0	5.9	19.6	0.0	5.9	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.2	61.9	0.0	128.4	36.2	0.0	81.4	38.9	0.0	68.4	5.2	0.0
LnGrp LOS	E	E		F	D		F	D		E	A	
Approach Vol, veh/h		230			838			1691			2062	
Approach Delay, s/veh		61.6			113.3			46.6			16.3	
Approach LOS		E			F			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	58.6	26.0	16.4	16.7	60.9	10.4	32.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	14.0	42.9	21.0	20.1	11.7	45.2	8.0	33.1
Max Q Clear Time (g_c+I1), s	14.3	45.0	23.0	10.0	12.6	12.1	5.5	8.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	17.3	0.1	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	46.0
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	31	1	19	79	24	4	43	5	0	1	6
Future Vol, veh/h	19	31	1	19	79	24	4	43	5	0	1	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	100	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	4	4	4	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	38	1	23	96	29	5	52	6	0	1	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	126	0	0	39	0	0	228	257	38	268	243	111
Stage 1	-	-	-	-	-	-	85	85	-	157	157	-
Stage 2	-	-	-	-	-	-	143	172	-	110	85	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1449	-	-	1571	-	-	727	647	1033	685	659	942
Stage 1	-	-	-	-	-	-	923	825	-	845	768	-
Stage 2	-	-	-	-	-	-	860	756	-	895	824	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1449	-	-	1571	-	-	698	628	1033	610	639	942
Mov Cap-2 Maneuver	-	-	-	-	-	-	756	672	-	707	689	-
Stage 1	-	-	-	-	-	-	908	811	-	832	756	-
Stage 2	-	-	-	-	-	-	839	745	-	819	811	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	2.8	1.14	10.57	9.06
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	756	697	1449	-	-	1571	-	-	-	895
HCM Lane V/C Ratio	0.006	0.084	0.016	-	-	0.015	-	-	-	0.01
HCM Ctrl Dly (s/v)	9.8	10.6	7.5	-	-	7.3	-	-	0	9.1
HCM Lane LOS	A	B	A	-	-	A	-	-	A	A
HCM 95th %tile Q(veh)	0	0.3	0	-	-	0	-	-	-	0

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	84	2	3	59	3	0	3	13	18	10	30
Future Vol, veh/h	1	84	2	3	59	3	0	3	13	18	10	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	100	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	2	2	2	3	3	3	13	13	13	2	2	2
Mvmt Flow	2	133	3	5	94	5	0	5	21	29	16	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	98	0	0	137	0	0	249	246	135	244	245	96
Stage 1	-	-	-	-	-	-	138	138	-	106	106	-
Stage 2	-	-	-	-	-	-	111	108	-	139	140	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.23	6.63	6.33	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.23	5.63	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.23	5.63	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.617	4.117	3.417	3.518	4.018	3.318
Pot Cap-1 Maneuver	1495	-	-	1441	-	-	682	638	885	709	657	960
Stage 1	-	-	-	-	-	-	839	762	-	900	808	-
Stage 2	-	-	-	-	-	-	868	785	-	864	781	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1495	-	-	1441	-	-	631	635	885	685	654	960
Mov Cap-2 Maneuver	-	-	-	-	-	-	718	688	-	759	706	-
Stage 1	-	-	-	-	-	-	838	761	-	897	805	-
Stage 2	-	-	-	-	-	-	806	783	-	838	780	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.09	0.35	9.42	9.57
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	840	1495	-	-	1441	-	-	759	881
HCM Lane V/C Ratio	-	0.03	0.001	-	-	0.003	-	-	0.038	0.072
HCM Ctrl Dly (s/v)	0	9.4	7.4	-	-	7.5	-	-	9.9	9.4
HCM Lane LOS	A	A	A	-	-	A	-	-	A	A
HCM 95th %tile Q(veh)	-	0.1	0	-	-	0	-	-	0.1	0.2

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	32	1	20	82	25	4	45	5	0	1	6
Future Vol, veh/h	20	32	1	20	82	25	4	45	5	0	1	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	100	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	4	4	4	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	39	1	24	100	30	5	55	6	0	1	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	130	0	0	40	0	0	238	268	40	279	253	115
Stage 1	-	-	-	-	-	-	88	88	-	164	164	-
Stage 2	-	-	-	-	-	-	149	179	-	115	89	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1443	-	-	1569	-	-	717	638	1032	673	650	937
Stage 1	-	-	-	-	-	-	919	822	-	838	762	-
Stage 2	-	-	-	-	-	-	853	751	-	890	821	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1443	-	-	1569	-	-	687	618	1032	596	629	937
Mov Cap-2 Maneuver	-	-	-	-	-	-	747	665	-	697	683	-
Stage 1	-	-	-	-	-	-	904	808	-	825	751	-
Stage 2	-	-	-	-	-	-	832	739	-	810	807	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	2.84	1.15	10.66	9.09
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	747	689	1443	-	-	1569	-	-	-	890
HCM Lane V/C Ratio	0.007	0.088	0.017	-	-	0.016	-	-	-	0.01
HCM Ctrl Dly (s/v)	9.8	10.7	7.5	-	-	7.3	-	-	0	9.1
HCM Lane LOS	A	B	A	-	-	A	-	-	A	A
HCM 95th %tile Q(veh)	0	0.3	0.1	-	-	0	-	-	-	0

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	87	2	3	61	3	0	3	14	19	10	31
Future Vol, veh/h	1	87	2	3	61	3	0	3	14	19	10	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	100	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	2	2	2	3	3	3	13	13	13	2	2	2
Mvmt Flow	2	138	3	5	97	5	0	5	22	30	16	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	102	0	0	141	0	0	257	254	140	252	253	99
Stage 1	-	-	-	-	-	-	143	143	-	109	109	-
Stage 2	-	-	-	-	-	-	114	111	-	144	144	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.23	6.63	6.33	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.23	5.63	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.23	5.63	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.617	4.117	3.417	3.518	4.018	3.318
Pot Cap-1 Maneuver	1491	-	-	1436	-	-	674	631	880	701	650	957
Stage 1	-	-	-	-	-	-	834	758	-	897	805	-
Stage 2	-	-	-	-	-	-	864	783	-	859	777	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1491	-	-	1436	-	-	622	628	880	676	647	957
Mov Cap-2 Maneuver	-	-	-	-	-	-	712	684	-	753	701	-
Stage 1	-	-	-	-	-	-	834	757	-	894	803	-
Stage 2	-	-	-	-	-	-	801	780	-	831	777	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.08	0.34	9.44	9.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	838	1491	-	-	1436	-	-	753	879
HCM Lane V/C Ratio	-	0.032	0.001	-	-	0.003	-	-	0.04	0.074
HCM Ctrl Dly (s/v)	0	9.4	7.4	-	-	7.5	-	-	10	9.4
HCM Lane LOS	A	A	A	-	-	A	-	-	A	A
HCM 95th %tile Q(veh)	-	0.1	0	-	-	0	-	-	0.1	0.2

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	41	1	20	86	40	4	49	5	46	14	44
Future Vol, veh/h	32	41	1	20	86	40	4	49	5	46	14	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	100	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	4	4	4	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	50	1	24	105	49	5	60	6	56	17	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	154	0	0	51	0	0	291	331	51	336	307	129
Stage 1	-	-	-	-	-	-	129	129	-	178	178	-
Stage 2	-	-	-	-	-	-	162	202	-	158	129	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1415	-	-	1555	-	-	661	588	1018	618	607	921
Stage 1	-	-	-	-	-	-	875	790	-	824	752	-
Stage 2	-	-	-	-	-	-	840	734	-	844	789	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1415	-	-	1555	-	-	581	563	1018	534	581	921
Mov Cap-2 Maneuver	-	-	-	-	-	-	665	628	-	650	653	-
Stage 1	-	-	-	-	-	-	851	768	-	811	740	-
Stage 2	-	-	-	-	-	-	761	722	-	753	767	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	3.29	1.01	11.1	10.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	665	651	1415	-	-	1555	-	-	650	838
HCM Lane V/C Ratio	0.007	0.101	0.028	-	-	0.016	-	-	0.086	0.084
HCM Ctrl Dly (s/v)	10.5	11.1	7.6	-	-	7.4	-	-	11.1	9.7
HCM Lane LOS	B	B	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0.3	0.1	-	-	0	-	-	0.3	0.3

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	93	2	3	69	52	0	17	14	49	18	56
Future Vol, veh/h	42	93	2	3	69	52	0	17	14	49	18	56
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	100	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	2	2	2	3	3	3	13	13	13	2	2	2
Mvmt Flow	67	148	3	5	110	83	0	27	22	78	29	89

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	192	0	0	151	0	0	416	484	149	455	444	151
Stage 1	-	-	-	-	-	-	283	283	-	160	160	-
Stage 2	-	-	-	-	-	-	133	202	-	294	284	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.23	6.63	6.33	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.23	5.63	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.23	5.63	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.617	4.117	3.417	3.518	4.018	3.318
Pot Cap-1 Maneuver	1381	-	-	1424	-	-	528	467	869	516	508	896
Stage 1	-	-	-	-	-	-	701	658	-	842	765	-
Stage 2	-	-	-	-	-	-	844	714	-	714	676	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1381	-	-	1424	-	-	430	443	869	454	482	896
Mov Cap-2 Maneuver	-	-	-	-	-	-	557	542	-	576	582	-
Stage 1	-	-	-	-	-	-	667	626	-	839	763	-
Stage 2	-	-	-	-	-	-	730	712	-	633	644	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	2.37	0.18	10.96	11.09
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	653	1381	-	-	1424	-	-	576	792
HCM Lane V/C Ratio	-	0.075	0.048	-	-	0.003	-	-	0.135	0.148
HCM Ctrl Dly (s/v)	0	11	7.7	-	-	7.5	-	-	12.2	10.3
HCM Lane LOS	A	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	-	0.2	0.2	-	-	0	-	-	0.5	0.5

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	39	1	24	100	30	5	55	6	0	1	8
Future Vol, veh/h	24	39	1	24	100	30	5	55	6	0	1	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	100	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	4	4	4	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	42	1	26	109	33	5	60	7	0	1	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	141	0	0	43	0	0	257	289	43	302	273	125
Stage 1	-	-	-	-	-	-	95	95	-	177	177	-
Stage 2	-	-	-	-	-	-	161	193	-	124	96	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1429	-	-	1565	-	-	697	621	1027	651	634	926
Stage 1	-	-	-	-	-	-	912	816	-	825	753	-
Stage 2	-	-	-	-	-	-	841	740	-	880	816	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1429	-	-	1565	-	-	665	600	1027	569	612	926
Mov Cap-2 Maneuver	-	-	-	-	-	-	732	652	-	678	671	-
Stage 1	-	-	-	-	-	-	895	801	-	811	740	-
Stage 2	-	-	-	-	-	-	818	728	-	794	801	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	2.84	1.14	10.83	9.1
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	732	676	1429	-	-	1565	-	-	-	888
HCM Lane V/C Ratio	0.007	0.098	0.018	-	-	0.017	-	-	-	0.011
HCM Ctrl Dly (s/v)	10	10.9	7.6	-	-	7.3	-	-	0	9.1
HCM Lane LOS	A	B	A	-	-	A	-	-	A	A
HCM 95th %tile Q(veh)	0	0.3	0.1	-	-	0.1	-	-	-	0

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	107	3	4	75	4	0	4	17	23	13	38
Future Vol, veh/h	1	107	3	4	75	4	0	4	17	23	13	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	100	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	3	3	3	13	13	13	2	2	2
Mvmt Flow	1	116	3	4	82	4	0	4	18	25	14	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	86	0	0	120	0	0	217	215	118	213	214	84
Stage 1	-	-	-	-	-	-	120	120	-	92	92	-
Stage 2	-	-	-	-	-	-	97	95	-	121	122	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.23	6.63	6.33	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.23	5.63	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.23	5.63	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.617	4.117	3.417	3.518	4.018	3.318
Pot Cap-1 Maneuver	1510	-	-	1462	-	-	716	664	905	744	683	976
Stage 1	-	-	-	-	-	-	858	776	-	915	818	-
Stage 2	-	-	-	-	-	-	883	796	-	884	795	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1510	-	-	1462	-	-	670	662	905	721	681	976
Mov Cap-2 Maneuver	-	-	-	-	-	-	744	705	-	783	722	-
Stage 1	-	-	-	-	-	-	858	775	-	912	816	-
Stage 2	-	-	-	-	-	-	828	793	-	860	794	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.07	0.36	9.31	9.43
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	859	1510	-	-	1462	-	-	783	896
HCM Lane V/C Ratio	-	0.027	0.001	-	-	0.003	-	-	0.032	0.062
HCM Ctrl Dly (s/v)	0	9.3	7.4	-	-	7.5	-	-	9.7	9.3
HCM Lane LOS	A	A	A	-	-	A	-	-	A	A
HCM 95th %tile Q(veh)	-	0.1	0	-	-	0	-	-	0.1	0.2

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	45	1	24	102	45	5	59	6	46	14	46
Future Vol, veh/h	36	45	1	24	102	45	5	59	6	46	14	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	100	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	4	4	4	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	49	1	26	111	49	5	64	7	50	15	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	160	0	0	50	0	0	298	340	49	347	316	135
Stage 1	-	-	-	-	-	-	128	128	-	188	188	-
Stage 2	-	-	-	-	-	-	171	212	-	159	128	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1407	-	-	1557	-	-	654	582	1019	608	600	913
Stage 1	-	-	-	-	-	-	876	790	-	814	745	-
Stage 2	-	-	-	-	-	-	831	727	-	843	790	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1407	-	-	1557	-	-	578	556	1019	520	574	913
Mov Cap-2 Maneuver	-	-	-	-	-	-	661	622	-	640	648	-
Stage 1	-	-	-	-	-	-	852	768	-	801	732	-
Stage 2	-	-	-	-	-	-	757	715	-	746	768	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	3.35	1.03	11.21	10.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	661	645	1407	-	-	1557	-	-	640	834
HCM Lane V/C Ratio	0.008	0.109	0.028	-	-	0.017	-	-	0.078	0.078
HCM Ctrl Dly (s/v)	10.5	11.3	7.6	-	-	7.4	-	-	11.1	9.7
HCM Lane LOS	B	B	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0.4	0.1	-	-	0.1	-	-	0.3	0.3

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	111	3	4	81	53	0	18	17	53	21	63
Future Vol, veh/h	42	111	3	4	81	53	0	18	17	53	21	63
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	100	-	-	100	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	3	3	3	13	13	13	2	2	2
Mvmt Flow	46	121	3	4	88	58	0	20	18	58	23	68

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	146	0	0	124	0	0	322	368	122	347	341	117
Stage 1	-	-	-	-	-	-	214	214	-	126	126	-
Stage 2	-	-	-	-	-	-	108	154	-	222	215	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.23	6.63	6.33	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.23	5.63	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.23	5.63	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.617	4.117	3.417	3.518	4.018	3.318
Pot Cap-1 Maneuver	1436	-	-	1457	-	-	610	544	900	607	581	935
Stage 1	-	-	-	-	-	-	764	706	-	878	792	-
Stage 2	-	-	-	-	-	-	871	749	-	781	725	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1436	-	-	1457	-	-	527	525	900	556	561	935
Mov Cap-2 Maneuver	-	-	-	-	-	-	634	604	-	657	638	-
Stage 1	-	-	-	-	-	-	740	683	-	876	790	-
Stage 2	-	-	-	-	-	-	782	747	-	719	702	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	2.04	0.22	10.29	10.28
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	719	1436	-	-	1457	-	-	657	838
HCM Lane V/C Ratio	-	0.053	0.032	-	-	0.003	-	-	0.088	0.109
HCM Ctrl Dly (s/v)	0	10.3	7.6	-	-	7.5	-	-	11	9.8
HCM Lane LOS	A	B	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	-	0.2	0.1	-	-	0	-	-	0.3	0.4

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	6	21	51	70	18
Future Vol, veh/h	2	6	21	51	70	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	3	8	27	65	90	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	221	101	113	0	-	0
Stage 1	101	-	-	-	-	-
Stage 2	119	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	768	954	1470	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	754	954	1470	-	-	-
Mov Cap-2 Maneuver	812	-	-	-	-	-
Stage 1	906	-	-	-	-	-
Stage 2	906	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.98	2.19	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1470	-	914	-	-
HCM Lane V/C Ratio	0.018	-	0.011	-	-
HCM Ctrl Dly (s/v)	7.5	-	9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	33	2	69	88	1
Future Vol, veh/h	13	33	2	69	88	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	56	3	117	149	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	274	150	151	0	-	0
Stage 1	150	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	716	896	1430	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	714	896	1430	-	-	-
Mov Cap-2 Maneuver	787	-	-	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	902	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.59	0.21	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1430	-	863	-	-
HCM Lane V/C Ratio	0.002	-	0.09	-	-
HCM Ctrl Dly (s/v)	7.5	-	9.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	6	22	53	73	19
Future Vol, veh/h	2	6	22	53	73	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	3	8	28	68	94	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	230	106	118	0	-	0
Stage 1	106	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	758	949	1464	-	-	-
Stage 1	919	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	743	949	1464	-	-	-
Mov Cap-2 Maneuver	805	-	-	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	901	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.01	2.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1464	-	908	-	-
HCM Lane V/C Ratio	0.019	-	0.011	-	-
HCM Ctrl Dly (s/v)	7.5	-	9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	34	2	72	92	1
Future Vol, veh/h	14	34	2	72	92	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	58	3	122	156	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	286	157	158	0	-	0
Stage 1	157	-	-	-	-	-
Stage 2	129	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	705	889	1422	-	-	-
Stage 1	872	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	703	889	1422	-	-	-
Mov Cap-2 Maneuver	780	-	-	-	-	-
Stage 1	870	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.66	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1422	-	854	-	-
HCM Lane V/C Ratio	0.002	-	0.095	-	-
HCM Ctrl Dly (s/v)	7.5	-	9.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	96	51	69	113	21
Future Vol, veh/h	7	96	51	69	113	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	9	123	65	88	145	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	378	158	172	0	-	0
Stage 1	158	-	-	-	-	-
Stage 2	219	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	624	887	1399	-	-	-
Stage 1	870	-	-	-	-	-
Stage 2	817	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	595	887	1399	-	-	-
Mov Cap-2 Maneuver	709	-	-	-	-	-
Stage 1	830	-	-	-	-	-
Stage 2	817	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.86	3.27	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1399	-	872	-	-
HCM Lane V/C Ratio	0.047	-	0.151	-	-
HCM Ctrl Dly (s/v)	7.7	-	9.9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	93	97	116	120	6
Future Vol, veh/h	17	93	97	116	120	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	158	164	197	203	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	734	208	214	0	-	0
Stage 1	208	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	387	832	1357	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	593	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	340	832	1357	-	-	-
Mov Cap-2 Maneuver	514	-	-	-	-	-
Stage 1	726	-	-	-	-	-
Stage 2	593	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.28	3.65	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1357	-	759	-	-
HCM Lane V/C Ratio	0.121	-	0.246	-	-
HCM Ctrl Dly (s/v)	8	-	11.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.4	-	1	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	8	27	65	89	23
Future Vol, veh/h	3	8	27	65	89	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	3	9	29	71	97	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	239	109	122	0	-	0
Stage 1	109	-	-	-	-	-
Stage 2	129	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	750	944	1459	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	735	944	1459	-	-	-
Mov Cap-2 Maneuver	800	-	-	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.05	2.21	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1459	-	900	-	-
HCM Lane V/C Ratio	0.02	-	0.013	-	-
HCM Ctrl Dly (s/v)	7.5	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	42	3	88	112	1
Future Vol, veh/h	17	42	3	88	112	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	46	3	96	122	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	224	122	123	0	-	0
Stage 1	122	-	-	-	-	-
Stage 2	102	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	764	929	1464	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	762	929	1464	-	-	-
Mov Cap-2 Maneuver	817	-	-	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	922	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.34	0.25	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1464	-	894	-	-
HCM Lane V/C Ratio	0.002	-	0.072	-	-
HCM Ctrl Dly (s/v)	7.5	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	98	56	78	127	25
Future Vol, veh/h	8	98	56	78	127	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	9	107	61	85	138	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	358	152	165	0	-	0
Stage 1	152	-	-	-	-	-
Stage 2	207	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	640	895	1407	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	828	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	613	895	1407	-	-	-
Mov Cap-2 Maneuver	721	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	828	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.71	3.21	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1407	-	879	-	-
HCM Lane V/C Ratio	0.043	-	0.131	-	-
HCM Ctrl Dly (s/v)	7.7	-	9.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	101	98	130	138	6
Future Vol, veh/h	20	101	98	130	138	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	110	107	141	150	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	508	153	157	0	-	0
Stage 1	153	-	-	-	-	-
Stage 2	354	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	525	893	1423	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	486	893	1423	-	-	-
Mov Cap-2 Maneuver	627	-	-	-	-	-
Stage 1	809	-	-	-	-	-
Stage 2	710	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.12	3.32	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1423	-	834	-	-
HCM Lane V/C Ratio	0.075	-	0.158	-	-
HCM Ctrl Dly (s/v)	7.7	-	10.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	49	3	37	103	53	7	30	37	5	3	0
Future Vol, veh/h	1	49	3	37	103	53	7	30	37	5	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	13	13	13
Mvmt Flow	1	57	3	43	120	62	8	35	43	6	3	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	181	0	0	60	0	0	269	328	59	313	299	151
Stage 1	-	-	-	-	-	-	61	61	-	237	237	-
Stage 2	-	-	-	-	-	-	208	267	-	77	63	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.23	6.63	6.33
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.23	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.23	5.63	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.617	4.117	3.417
Pot Cap-1 Maneuver	1376	-	-	1543	-	-	678	585	999	618	595	868
Stage 1	-	-	-	-	-	-	943	838	-	743	689	-
Stage 2	-	-	-	-	-	-	788	682	-	906	821	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1376	-	-	1543	-	-	655	569	999	540	578	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	655	569	-	540	578	-
Stage 1	-	-	-	-	-	-	942	837	-	722	670	-
Stage 2	-	-	-	-	-	-	762	663	-	830	821	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.14	1.42	10.53	11.56
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	736	1376	-	-	1543	-	-	540	578
HCM Lane V/C Ratio	0.117	0.001	-	-	0.028	-	-	0.011	0.006
HCM Ctrl Dly (s/v)	10.5	7.6	-	-	7.4	-	-	11.7	11.3
HCM Lane LOS	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0	0

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	166	5	26	19	6	3	3	29	58	15	4
Future Vol, veh/h	2	166	5	26	19	6	3	3	29	58	15	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	4	4	4
Mvmt Flow	3	221	7	35	25	8	4	4	39	77	20	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	33	0	0	228	0	0	335	333	225	327	332	29
Stage 1	-	-	-	-	-	-	230	230	-	99	99	-
Stage 2	-	-	-	-	-	-	105	103	-	229	233	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1578	-	-	1340	-	-	619	587	815	622	584	1040
Stage 1	-	-	-	-	-	-	773	714	-	903	809	-
Stage 2	-	-	-	-	-	-	901	810	-	770	708	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1578	-	-	1340	-	-	578	571	815	572	568	1040
Mov Cap-2 Maneuver	-	-	-	-	-	-	578	571	-	572	568	-
Stage 1	-	-	-	-	-	-	772	713	-	879	789	-
Stage 2	-	-	-	-	-	-	851	789	-	728	707	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.08	3.95	10.04	11.95
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	760	1578	-	-	1340	-	-	572	628
HCM Lane V/C Ratio	0.061	0.002	-	-	0.026	-	-	0.135	0.04
HCM Ctrl Dly (s/v)	10	7.3	-	-	7.8	-	-	12.3	11
HCM Lane LOS	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.5	0.1

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	57	9	51	111	55	11	31	48	5	3	0
Future Vol, veh/h	1	57	9	51	111	55	11	31	48	5	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	13	13	13
Mvmt Flow	1	66	10	59	129	64	13	36	56	6	3	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	193	0	0	77	0	0	323	385	72	366	359	161
Stage 1	-	-	-	-	-	-	74	74	-	280	280	-
Stage 2	-	-	-	-	-	-	249	312	-	87	79	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.23	6.63	6.33
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.23	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.23	5.63	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.617	4.117	3.417
Pot Cap-1 Maneuver	1362	-	-	1522	-	-	624	544	983	570	551	856
Stage 1	-	-	-	-	-	-	928	828	-	704	660	-
Stage 2	-	-	-	-	-	-	748	652	-	895	808	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1362	-	-	1522	-	-	595	522	983	482	529	856
Mov Cap-2 Maneuver	-	-	-	-	-	-	595	522	-	482	529	-
Stage 1	-	-	-	-	-	-	927	827	-	676	634	-
Stage 2	-	-	-	-	-	-	715	627	-	806	807	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.11	1.75	10.94	12.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	710	1362	-	-	1522	-	-	482	529
HCM Lane V/C Ratio	0.147	0.001	-	-	0.039	-	-	0.012	0.007
HCM Ctrl Dly (s/v)	10.9	7.6	-	-	7.5	-	-	12.6	11.9
HCM Lane LOS	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	0	0

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	182	14	46	29	6	12	3	49	60	16	4
Future Vol, veh/h	2	182	14	46	29	6	12	3	49	60	16	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	4	4	4
Mvmt Flow	3	243	19	61	39	8	16	4	65	80	21	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	47	0	0	261	0	0	429	427	252	415	432	43
Stage 1	-	-	-	-	-	-	257	257	-	165	165	-
Stage 2	-	-	-	-	-	-	172	169	-	250	267	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1561	-	-	1303	-	-	536	520	787	544	513	1022
Stage 1	-	-	-	-	-	-	747	695	-	832	758	-
Stage 2	-	-	-	-	-	-	830	758	-	750	685	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1561	-	-	1303	-	-	486	495	787	471	488	1022
Mov Cap-2 Maneuver	-	-	-	-	-	-	486	495	-	471	488	-
Stage 1	-	-	-	-	-	-	746	694	-	793	722	-
Stage 2	-	-	-	-	-	-	763	723	-	682	683	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.07	4.49	10.97	13.64
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	688	1561	-	-	1303	-	-	471	545
HCM Lane V/C Ratio	0.124	0.002	-	-	0.047	-	-	0.17	0.049
HCM Ctrl Dly (s/v)	11	7.3	-	-	7.9	-	-	14.2	11.9
HCM Lane LOS	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.6	0.2

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	215	9	51	165	55	11	31	48	5	3	0
Future Vol, veh/h	1	215	9	51	165	55	11	31	48	5	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	13	13	13
Mvmt Flow	1	250	10	59	192	64	13	36	56	6	3	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	256	0	0	260	0	0	570	632	255	613	605	224
Stage 1	-	-	-	-	-	-	258	258	-	342	342	-
Stage 2	-	-	-	-	-	-	312	374	-	270	263	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.23	6.63	6.33
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.23	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.23	5.63	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.617	4.117	3.417
Pot Cap-1 Maneuver	1292	-	-	1304	-	-	428	394	776	389	397	789
Stage 1	-	-	-	-	-	-	740	689	-	650	619	-
Stage 2	-	-	-	-	-	-	692	612	-	712	671	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1292	-	-	1304	-	-	405	375	776	313	379	789
Mov Cap-2 Maneuver	-	-	-	-	-	-	405	375	-	313	379	-
Stage 1	-	-	-	-	-	-	740	688	-	621	590	-
Stage 2	-	-	-	-	-	-	657	584	-	626	671	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.03	1.49	13.57	15.92
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	524	1292	-	-	1304	-	-	313	379
HCM Lane V/C Ratio	0.2	0.001	-	-	0.045	-	-	0.019	0.009
HCM Ctrl Dly (s/v)	13.6	7.8	-	-	7.9	-	-	16.7	14.6
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.7	0	-	-	0.1	-	-	0.1	0

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	291	14	46	195	6	12	3	49	60	16	4
Future Vol, veh/h	2	291	14	46	195	6	12	3	49	60	16	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	4	4	4
Mvmt Flow	3	388	19	61	260	8	16	4	65	80	21	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	268	0	0	407	0	0	796	793	397	782	799	264
Stage 1	-	-	-	-	-	-	403	403	-	387	387	-
Stage 2	-	-	-	-	-	-	393	391	-	395	412	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1296	-	-	1152	-	-	305	321	652	309	316	770
Stage 1	-	-	-	-	-	-	624	600	-	633	606	-
Stage 2	-	-	-	-	-	-	632	607	-	626	591	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1296	-	-	1152	-	-	267	303	652	260	299	770
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	303	-	260	299	-
Stage 1	-	-	-	-	-	-	623	599	-	599	574	-
Stage 2	-	-	-	-	-	-	572	575	-	558	590	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.05	1.55	13.84	22.8
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	492	1296	-	-	1152	-	-	260	341
HCM Lane V/C Ratio	0.173	0.002	-	-	0.053	-	-	0.308	0.078
HCM Ctrl Dly (s/v)	13.8	7.8	-	-	8.3	-	-	24.9	16.5
HCM Lane LOS	B	A	-	-	A	-	-	C	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0.2	-	-	1.3	0.3

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	68	10	59	135	67	13	38	56	6	4	0
Future Vol, veh/h	1	68	10	59	135	67	13	38	56	6	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	13	13	13
Mvmt Flow	1	74	11	64	147	73	14	41	61	7	4	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	220	0	0	85	0	0	359	429	79	408	398	183
Stage 1	-	-	-	-	-	-	82	82	-	311	311	-
Stage 2	-	-	-	-	-	-	277	348	-	97	87	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.23	6.63	6.33
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.23	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.23	5.63	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.617	4.117	3.417
Pot Cap-1 Maneuver	1332	-	-	1512	-	-	591	514	973	535	523	832
Stage 1	-	-	-	-	-	-	919	821	-	676	639	-
Stage 2	-	-	-	-	-	-	723	629	-	883	802	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1332	-	-	1512	-	-	561	491	973	441	500	832
Mov Cap-2 Maneuver	-	-	-	-	-	-	561	491	-	441	500	-
Stage 1	-	-	-	-	-	-	919	821	-	648	612	-
Stage 2	-	-	-	-	-	-	687	602	-	786	801	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.1	1.69	11.42	12.88
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	677	1332	-	-	1512	-	-	441	500
HCM Lane V/C Ratio	0.172	0.001	-	-	0.042	-	-	0.015	0.009
HCM Ctrl Dly (s/v)	11.4	7.7	-	-	7.5	-	-	13.3	12.3
HCM Lane LOS	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0	0

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	220	15	52	33	8	13	4	56	74	19	5
Future Vol, veh/h	3	220	15	52	33	8	13	4	56	74	19	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	4	4	4
Mvmt Flow	3	239	16	57	36	9	14	4	61	80	21	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	45	0	0	255	0	0	413	411	247	401	415	40
Stage 1	-	-	-	-	-	-	254	254	-	153	153	-
Stage 2	-	-	-	-	-	-	159	158	-	248	262	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1564	-	-	1310	-	-	549	530	791	556	525	1025
Stage 1	-	-	-	-	-	-	751	697	-	844	767	-
Stage 2	-	-	-	-	-	-	843	767	-	752	688	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1564	-	-	1310	-	-	501	506	791	486	501	1025
Mov Cap-2 Maneuver	-	-	-	-	-	-	501	506	-	486	501	-
Stage 1	-	-	-	-	-	-	749	696	-	808	734	-
Stage 2	-	-	-	-	-	-	780	734	-	688	686	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.09	4.4	10.82	13.35
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	698	1564	-	-	1310	-	-	486	561
HCM Lane V/C Ratio	0.114	0.002	-	-	0.043	-	-	0.165	0.047
HCM Ctrl Dly (s/v)	10.8	7.3	-	-	7.9	-	-	13.9	11.7
HCM Lane LOS	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.6	0.1

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	203	10	59	179	67	13	38	56	6	4	0
Future Vol, veh/h	1	203	10	59	179	67	13	38	56	6	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	13	13	13
Mvmt Flow	1	221	11	64	195	73	14	41	61	7	4	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	267	0	0	232	0	0	553	624	226	603	593	231
Stage 1	-	-	-	-	-	-	228	228	-	359	359	-
Stage 2	-	-	-	-	-	-	325	396	-	243	234	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.23	6.63	6.33
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.23	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.23	5.63	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.617	4.117	3.417
Pot Cap-1 Maneuver	1279	-	-	1336	-	-	439	398	806	395	404	782
Stage 1	-	-	-	-	-	-	768	710	-	637	608	-
Stage 2	-	-	-	-	-	-	681	599	-	736	691	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1279	-	-	1336	-	-	413	378	806	311	384	782
Mov Cap-2 Maneuver	-	-	-	-	-	-	413	378	-	311	384	-
Stage 1	-	-	-	-	-	-	767	709	-	606	579	-
Stage 2	-	-	-	-	-	-	644	570	-	640	691	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.04	1.51	13.66	15.87
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	531	1279	-	-	1336	-	-	311	384
HCM Lane V/C Ratio	0.219	0.001	-	-	0.048	-	-	0.021	0.011
HCM Ctrl Dly (s/v)	13.7	7.8	-	-	7.8	-	-	16.8	14.5
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0.2	-	-	0.1	0

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	310	15	52	173	8	13	4	56	74	19	5
Future Vol, veh/h	3	310	15	52	173	8	13	4	56	74	19	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	4	4	4
Mvmt Flow	3	337	16	57	188	9	14	4	61	80	21	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	197	0	0	353	0	0	663	661	345	651	665	192
Stage 1	-	-	-	-	-	-	352	352	-	305	305	-
Stage 2	-	-	-	-	-	-	311	310	-	346	360	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1376	-	-	1205	-	-	375	382	698	379	378	844
Stage 1	-	-	-	-	-	-	665	632	-	700	658	-
Stage 2	-	-	-	-	-	-	699	659	-	666	623	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1376	-	-	1205	-	-	335	364	698	325	359	844
Mov Cap-2 Maneuver	-	-	-	-	-	-	335	364	-	325	359	-
Stage 1	-	-	-	-	-	-	664	630	-	667	627	-
Stage 2	-	-	-	-	-	-	640	628	-	602	622	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.07	1.82	12.47	18.39
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	561	1376	-	-	1205	-	-	325	408
HCM Lane V/C Ratio	0.141	0.002	-	-	0.047	-	-	0.247	0.064
HCM Ctrl Dly (s/v)	12.5	7.6	-	-	8.1	-	-	19.7	14.4
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	1	0.2

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	75	18	5	140	21	1	0	3	64	0	1
Future Vol, veh/h	1	75	18	5	140	21	1	0	3	64	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	82	20	5	152	23	1	0	3	70	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	175	0	0	101	0	0	257	279	91	258	278	164
Stage 1	-	-	-	-	-	-	93	93	-	174	174	-
Stage 2	-	-	-	-	-	-	163	186	-	84	103	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1401	-	-	1491	-	-	697	629	966	695	630	881
Stage 1	-	-	-	-	-	-	913	818	-	827	755	-
Stage 2	-	-	-	-	-	-	839	746	-	924	810	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1401	-	-	1491	-	-	693	626	966	689	627	881
Mov Cap-2 Maneuver	-	-	-	-	-	-	765	684	-	759	687	-
Stage 1	-	-	-	-	-	-	913	817	-	824	752	-
Stage 2	-	-	-	-	-	-	835	743	-	921	809	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.08	0.22	8.99	10.22
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	906	1401	-	-	1491	-	-	761
HCM Lane V/C Ratio	0.005	0.001	-	-	0.004	-	-	0.093
HCM Ctrl Dly (s/v)	9	7.6	-	-	7.4	-	-	10.2
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	162	2	0	100	68	19	0	6	42	0	1
Future Vol, veh/h	1	162	2	0	100	68	19	0	6	42	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	60	60	60	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	5	5	5	2	2	2	2	2	2
Mvmt Flow	2	270	3	0	167	113	32	0	10	70	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	280	0	0	273	0	0	442	555	272	497	500	223
Stage 1	-	-	-	-	-	-	275	275	-	223	223	-
Stage 2	-	-	-	-	-	-	167	280	-	273	277	-
Critical Hdwy	4.12	-	-	4.15	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.245	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1283	-	-	1273	-	-	526	440	767	484	473	816
Stage 1	-	-	-	-	-	-	731	683	-	779	719	-
Stage 2	-	-	-	-	-	-	835	679	-	733	681	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1283	-	-	1273	-	-	524	439	767	477	472	816
Mov Cap-2 Maneuver	-	-	-	-	-	-	652	569	-	623	591	-
Stage 1	-	-	-	-	-	-	730	682	-	779	719	-
Stage 2	-	-	-	-	-	-	834	679	-	722	680	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.05	0	10.67	11.48
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	676	1283	-	-	1273	-	-	627
HCM Lane V/C Ratio	0.062	0.001	-	-	-	-	-	0.114
HCM Ctrl Dly (s/v)	10.7	7.8	-	-	0	-	-	11.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	76	22	6	165	21	1	0	4	64	0	1
Future Vol, veh/h	1	76	22	6	165	21	1	0	4	64	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	83	24	7	179	23	1	0	4	70	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	202	0	0	107	0	0	289	312	95	289	313	191
Stage 1	-	-	-	-	-	-	97	97	-	204	204	-
Stage 2	-	-	-	-	-	-	192	215	-	85	109	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1370	-	-	1484	-	-	663	603	962	664	603	851
Stage 1	-	-	-	-	-	-	910	815	-	798	733	-
Stage 2	-	-	-	-	-	-	809	725	-	923	805	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1370	-	-	1484	-	-	659	600	962	657	599	851
Mov Cap-2 Maneuver	-	-	-	-	-	-	739	664	-	733	667	-
Stage 1	-	-	-	-	-	-	909	814	-	795	730	-
Stage 2	-	-	-	-	-	-	805	721	-	918	805	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.08	0.23	8.99	10.42
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	907	1370	-	-	1484	-	-	735
HCM Lane V/C Ratio	0.006	0.001	-	-	0.004	-	-	0.096
HCM Ctrl Dly (s/v)	9	7.6	-	-	7.4	-	-	10.4
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	187	3	0	107	68	23	0	8	42	0	1
Future Vol, veh/h	1	187	3	0	107	68	23	0	8	42	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	5	5	5	2	2	2	2	2	2
Mvmt Flow	1	203	3	0	116	74	25	0	9	46	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	190	0	0	207	0	0	323	397	205	359	362	153
Stage 1	-	-	-	-	-	-	207	207	-	153	153	-
Stage 2	-	-	-	-	-	-	116	190	-	205	209	-
Critical Hdwy	4.12	-	-	4.15	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.245	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1384	-	-	1347	-	-	630	540	836	597	565	893
Stage 1	-	-	-	-	-	-	795	731	-	849	771	-
Stage 2	-	-	-	-	-	-	888	743	-	797	729	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1384	-	-	1347	-	-	628	540	836	590	565	893
Mov Cap-2 Maneuver	-	-	-	-	-	-	722	636	-	701	651	-
Stage 1	-	-	-	-	-	-	794	730	-	849	771	-
Stage 2	-	-	-	-	-	-	887	743	-	788	729	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.04	0	10.04	10.47
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	748	1384	-	-	1347	-	-	705
HCM Lane V/C Ratio	0.045	0.001	-	-	-	-	-	0.066
HCM Ctrl Dly (s/v)	10	7.6	-	-	0	-	-	10.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	5	9	1	1	46	119	12	0	197	12
Future Vol, veh/h	0	0	5	9	1	1	46	119	12	0	197	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	20	20	20	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	6	10	1	1	53	137	14	0	226	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	476	490	233	476	490	144	240	0	0	151	0	0
Stage 1	233	233	-	249	249	-	-	-	-	-	-	-
Stage 2	243	256	-	226	240	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.7	6.4	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.3	5.7	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.3	5.7	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.68	4.18	3.48	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	470	454	763	499	479	904	1326	-	-	1431	-	-
Stage 1	731	679	-	755	700	-	-	-	-	-	-	-
Stage 2	722	664	-	776	707	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	450	436	763	476	460	904	1326	-	-	1431	-	-
Mov Cap-2 Maneuver	591	553	-	607	565	-	-	-	-	-	-	-
Stage 1	731	679	-	725	672	-	-	-	-	-	-	-
Stage 2	691	637	-	770	707	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.75	10.92	2.03	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1326	-	-	763	621	1431	-	-
HCM Lane V/C Ratio	0.04	-	-	0.008	0.02	-	-	-
HCM Ctrl Dly (s/v)	7.8	-	-	9.8	10.9	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	0	11	10	0	1	7	169	5	1	212	1
Future Vol, veh/h	42	0	11	10	0	1	7	169	5	1	212	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	63	63	63	63	63	63	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	3	3	3	2	2	2
Mvmt Flow	67	0	17	16	0	2	11	268	8	2	337	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	631	639	337	634	636	272	338	0	0	276	0	0
Stage 1	340	340	-	294	294	-	-	-	-	-	-	-
Stage 2	290	298	-	340	341	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	394	394	705	392	396	766	1216	-	-	1287	-	-
Stage 1	674	639	-	714	669	-	-	-	-	-	-	-
Stage 2	717	667	-	675	638	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	389	390	705	378	392	766	1216	-	-	1287	-	-
Mov Cap-2 Maneuver	559	533	-	545	531	-	-	-	-	-	-	-
Stage 1	674	638	-	707	663	-	-	-	-	-	-	-
Stage 2	709	661	-	657	638	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	12.2	11.64	0.31	0.04
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1216	-	-	584	560	1287	-	-
HCM Lane V/C Ratio	0.009	-	-	0.144	0.031	0.001	-	-
HCM Ctrl Dly (s/v)	8	-	-	12.2	11.6	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	6	10	1	1	56	132	14	0	209	15
Future Vol, veh/h	0	0	6	10	1	1	56	132	14	0	209	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	20	20	20	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	7	11	1	1	61	143	15	0	227	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	501	516	235	500	516	151	243	0	0	159	0	0
Stage 1	235	235	-	273	273	-	-	-	-	-	-	-
Stage 2	266	280	-	227	243	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.7	6.4	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.3	5.7	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.3	5.7	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.68	4.18	3.48	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	453	438	761	481	463	895	1323	-	-	1421	-	-
Stage 1	729	678	-	733	684	-	-	-	-	-	-	-
Stage 2	702	647	-	776	704	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	430	418	761	455	441	895	1323	-	-	1421	-	-
Mov Cap-2 Maneuver	575	539	-	589	550	-	-	-	-	-	-	-
Stage 1	729	678	-	699	653	-	-	-	-	-	-	-
Stage 2	667	617	-	769	704	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.77	11.1	2.18	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1323	-	-	761	603	1421	-	-
HCM Lane V/C Ratio	0.046	-	-	0.009	0.022	-	-	-
HCM Ctrl Dly (s/v)	7.9	-	-	9.8	11.1	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	51	0	14	11	0	1	9	174	5	1	237	1
Future Vol, veh/h	51	0	14	11	0	1	9	174	5	1	237	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	3	3	3	2	2	2
Mvmt Flow	55	0	15	12	0	1	10	189	5	1	258	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	469	474	258	471	472	192	259	0	0	195	0	0
Stage 1	260	260	-	211	211	-	-	-	-	-	-	-
Stage 2	209	214	-	260	261	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	505	489	780	503	490	850	1300	-	-	1379	-	-
Stage 1	745	693	-	791	727	-	-	-	-	-	-	-
Stage 2	793	725	-	745	692	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	500	485	780	489	486	850	1300	-	-	1379	-	-
Mov Cap-2 Maneuver	641	599	-	627	596	-	-	-	-	-	-	-
Stage 1	744	692	-	785	722	-	-	-	-	-	-	-
Stage 2	786	720	-	730	692	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.04	10.73	0.37	0.03
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1300	-	-	666	641	1379	-	-
HCM Lane V/C Ratio	0.008	-	-	0.106	0.02	0.001	-	-
HCM Ctrl Dly (s/v)	7.8	-	-	11	10.7	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	187	29	16	153	23	26
Future Vol, veh/h	187	29	16	153	23	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	75	-	0	0
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	215	33	18	176	26	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	248	0	444	232
Stage 1	-	-	-	-	232	-
Stage 2	-	-	-	-	213	-
Critical Hdwy	-	-	4.12	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.218	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1317	-	566	800
Stage 1	-	-	-	-	800	-
Stage 2	-	-	-	-	816	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1317	-	558	800
Mov Cap-2 Maneuver	-	-	-	-	684	-
Stage 1	-	-	-	-	800	-
Stage 2	-	-	-	-	804	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.74	10.05
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	684	800	-	-	1317	-
HCM Lane V/C Ratio	0.039	0.037	-	-	0.014	-
HCM Ctrl Dly (s/v)	10.5	9.7	-	-	7.8	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	266	30	31	162	19	25
Future Vol, veh/h	266	30	31	162	19	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	75	-	0	0
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	2	2	8	8	5	5
Mvmt Flow	403	45	47	245	29	38

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	448	0	765	426
Stage 1	-	-	-	-	426	-
Stage 2	-	-	-	-	339	-
Critical Hdwy	-	-	4.18	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.272	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1081	-	367	622
Stage 1	-	-	-	-	653	-
Stage 2	-	-	-	-	715	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1081	-	351	622
Mov Cap-2 Maneuver	-	-	-	-	533	-
Stage 1	-	-	-	-	653	-
Stage 2	-	-	-	-	684	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	1.36	11.58
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	533	622	-	-	1081	-
HCM Lane V/C Ratio	0.054	0.061	-	-	0.043	-
HCM Ctrl Dly (s/v)	12.1	11.2	-	-	8.5	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	198	33	8	177	24	4
Future Vol, veh/h	198	33	8	177	24	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	75	-	0	0
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	215	36	9	192	26	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	251	0	443	233
Stage 1	-	-	-	-	233	-
Stage 2	-	-	-	-	210	-
Critical Hdwy	-	-	4.12	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.218	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1314	-	567	799
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	818	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1314	-	563	799
Mov Cap-2 Maneuver	-	-	-	-	688	-
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	813	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.34	10.31
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	688	799	-	-	1314	-
HCM Lane V/C Ratio	0.038	0.005	-	-	0.007	-
HCM Ctrl Dly (s/v)	10.4	9.5	-	-	7.8	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	305	34	6	167	20	8
Future Vol, veh/h	305	34	6	167	20	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	75	-	0	0
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	8	8	5	5
Mvmt Flow	332	37	7	182	22	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	368	0	545	350
Stage 1	-	-	-	-	350	-
Stage 2	-	-	-	-	195	-
Critical Hdwy	-	-	4.18	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.272	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1158	-	495	687
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	831	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1158	-	492	687
Mov Cap-2 Maneuver	-	-	-	-	630	-
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	827	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.28	10.75
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	630	687	-	-	1158	-
HCM Lane V/C Ratio	0.035	0.013	-	-	0.006	-
HCM Ctrl Dly (s/v)	10.9	10.3	-	-	8.1	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	91	0	0	44	139	1030	52	63	950	58
Future Vol, veh/h	0	0	91	0	0	44	139	1030	52	63	950	58
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	100	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	13	13	13	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	100	0	0	48	153	1132	57	69	1044	64

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	554	-	-	595	1108	0	0	1189	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.36	-	-	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	4.03	-	-	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	*743	0	0	*763	614	-	-	553	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			0			0	0	-	-	0	-	-
Mov Cap-1 Maneuver	-	-	*743	-	-	*763	614	-	-	553	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.6	10.03	1.46	0.73
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	614	-	-	743	763	553	-	-
HCM Lane V/C Ratio	0.249	-	-	0.135	0.063	0.125	-	-
HCM Ctrl Dly (s/v)	12.8	-	-	10.6	10	12.4	-	-
HCM Lane LOS	B	-	-	B	B	B	-	-
HCM 95th %tile Q(veh)	1	-	-	0.5	0.2	0.4	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	230	0	0	79	164	1156	69	88	1527	113
Future Vol, veh/h	0	0	230	0	0	79	164	1156	69	88	1527	113
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	100	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	250	0	0	86	178	1257	75	96	1660	123

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	891	-	-	666	1783	0	0	1332	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.16	-	-	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.93	-	-	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	*671	0	0	*733	361	-	-	523	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			0			0	0	-	-	0	-	-
Mov Cap-1 Maneuver	-	-	*671	-	-	*733	361	-	-	523	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	13.51	10.56	2.87	0.68
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	361	-	-	671	733	523	-	-
HCM Lane V/C Ratio	0.494	-	-	0.372	0.117	0.183	-	-
HCM Ctrl Dly (s/v)	24.3	-	-	13.5	10.6	13.4	-	-
HCM Lane LOS	C	-	-	B	B	B	-	-
HCM 95th %tile Q(veh)	2.6	-	-	1.7	0.4	0.7	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	96	0	0	52	153	1231	65	77	1103	61
Future Vol, veh/h	0	0	96	0	0	52	153	1231	65	77	1103	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	100	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	13	13	13	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	104	0	0	57	166	1338	71	84	1199	66

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	633	-	-	704	1265	0	0	1409	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.36	-	-	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	4.03	-	-	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	*728	0	0	*718	534	-	-	503	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			0			0	0	-	-	0	-	-
Mov Cap-1 Maneuver	-	-	*728	-	-	*718	534	-	-	503	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.77	10.44	1.56	0.84
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	534	-	-	728	718	503	-	-
HCM Lane V/C Ratio	0.311	-	-	0.143	0.079	0.166	-	-
HCM Ctrl Dly (s/v)	14.8	-	-	10.8	10.4	13.6	-	-
HCM Lane LOS	B	-	-	B	B	B	-	-
HCM 95th %tile Q(veh)	1.3	-	-	0.5	0.3	0.6	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	244	0	0	95	168	1359	86	107	1828	118
Future Vol, veh/h	0	0	244	0	0	95	168	1359	86	107	1828	118
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	100	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	265	0	0	103	183	1477	93	116	1987	128

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1058	-	-	785	2115	0	0	1571	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.16	-	-	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.93	-	-	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	*626	0	0	*703	264	-	-	429	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			0			0	0	-	-	0	-	-
Mov Cap-1 Maneuver	-	-	*626	-	-	*703	264	-	-	429	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	14.91	11	4.62	0.86
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	264	-	-	626	703	429	-	-
HCM Lane V/C Ratio	0.691	-	-	0.424	0.147	0.271	-	-
HCM Ctrl Dly (s/v)	44.4	-	-	14.9	11	16.5	-	-
HCM Lane LOS	E	-	-	B	B	C	-	-
HCM 95th %tile Q(veh)	4.6	-	-	2.1	0.5	1.1	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	484	8	11	629	45	20	1	18	23	0	93
Future Vol, veh/h	80	484	8	11	629	45	20	1	18	23	0	93
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	3	3	3	2	2	2
Mvmt Flow	87	526	9	12	684	49	22	1	20	25	0	101

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	733	0	0	535	0	0	1070	1461	267	1170	1441	366
Stage 1	-	-	-	-	-	-	704	704	-	732	732	-
Stage 2	-	-	-	-	-	-	366	757	-	438	709	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.56	6.56	6.96	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.53	4.03	3.33	3.52	4.02	3.32
Pot Cap-1 Maneuver	868	-	-	1206	-	-	238	149	*952	198	155	631
Stage 1	-	-	-	-	-	-	529	530	-	379	425	-
Stage 2	-	-	-	-	-	-	623	412	-	799	530	-
Platoon blocked, %		-	-	0	-	-	0	0	0	0	0	
Mov Cap-1 Maneuver	868	-	-	1206	-	-	178	133	*952	172	138	631
Mov Cap-2 Maneuver	-	-	-	-	-	-	288	232	-	290	264	-
Stage 1	-	-	-	-	-	-	476	477	-	375	421	-
Stage 2	-	-	-	-	-	-	518	408	-	703	476	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.34	0.13	14.14	14.32
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	288	818	868	-	-	1206	-	-	512
HCM Lane V/C Ratio	0.076	0.025	0.1	-	-	0.01	-	-	0.246
HCM Ctrl Dly (s/v)	18.5	9.5	9.6	-	-	8	-	-	14.3
HCM Lane LOS	C	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.1	0.3	-	-	0	-	-	1

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	118	763	37	32	750	44	43	4	34	28	9	136
Future Vol, veh/h	118	763	37	32	750	44	43	4	34	28	9	136
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	123	795	39	33	781	46	45	4	35	29	9	142

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	827	0	0	833	0	0	1522	1954	417	1516	1950	414
Stage 1	-	-	-	-	-	-	1060	1060	-	871	871	-
Stage 2	-	-	-	-	-	-	462	894	-	645	1079	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	800	-	-	1016	-	-	123	74	*866	124	74	588
Stage 1	-	-	-	-	-	-	378	402	-	312	367	-
Stage 2	-	-	-	-	-	-	549	358	-	763	392	-
Platoon blocked, %		-	-	0	-	-	0	0	0	0	0	
Mov Cap-1 Maneuver	800	-	-	1016	-	-	73	60	*866	95	61	588
Mov Cap-2 Maneuver	-	-	-	-	-	-	166	149	-	219	175	-
Stage 1	-	-	-	-	-	-	320	340	-	302	355	-
Stage 2	-	-	-	-	-	-	392	346	-	612	332	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.33	0.34	23.77	19.77
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	166	575	800	-	-	1016	-	-	421
HCM Lane V/C Ratio	0.269	0.069	0.154	-	-	0.033	-	-	0.428
HCM Ctrl Dly (s/v)	34.4	11.7	10.3	-	-	8.7	-	-	19.8
HCM Lane LOS	D	B	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1	0.2	0.5	-	-	0.1	-	-	2.1

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	567	10	14	751	52	24	1	22	20	0	85
Future Vol, veh/h	96	567	10	14	751	52	24	1	22	20	0	85
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	3	3	3	2	2	2
Mvmt Flow	104	616	11	15	816	57	26	1	24	22	0	92

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	873	0	0	627	0	0	1269	1734	314	1392	1711	436
Stage 1	-	-	-	-	-	-	830	830	-	875	875	-
Stage 2	-	-	-	-	-	-	439	903	-	517	836	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.56	6.56	6.96	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.53	4.03	3.33	3.52	4.02	3.32
Pot Cap-1 Maneuver	769	-	-	1130	-	-	170	99	*934	135	103	568
Stage 1	-	-	-	-	-	-	455	471	-	310	365	-
Stage 2	-	-	-	-	-	-	564	352	-	746	470	-
Platoon blocked, %		-	-	0	-	-	0	0	0	0	0	
Mov Cap-1 Maneuver	769	-	-	1130	-	-	122	84	*934	111	88	568
Mov Cap-2 Maneuver	-	-	-	-	-	-	227	174	-	230	211	-
Stage 1	-	-	-	-	-	-	393	407	-	306	360	-
Stage 2	-	-	-	-	-	-	466	347	-	627	406	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.49	0.14	16.45	15.91
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	227	785	769	-	-	1130	-	-	443
HCM Lane V/C Ratio	0.115	0.032	0.136	-	-	0.013	-	-	0.257
HCM Ctrl Dly (s/v)	22.9	9.7	10.4	-	-	8.2	-	-	15.9
HCM Lane LOS	C	A	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.4	0.1	0.5	-	-	0	-	-	1

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	903	46	39	880	47	52	5	42	30	11	151
Future Vol, veh/h	139	903	46	39	880	47	52	5	42	30	11	151
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	75	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	145	941	48	41	917	49	54	5	44	31	11	157

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	966	0	0	989	0	0	1799	2301	494	1785	2301	483
Stage 1	-	-	-	-	-	-	1254	1254	-	1022	1022	-
Stage 2	-	-	-	-	-	-	545	1047	-	763	1278	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	709	-	-	905	-	-	73	40	*830	75	40	530
Stage 1	-	-	-	-	-	-	295	330	-	253	311	-
Stage 2	-	-	-	-	-	-	490	303	-	706	319	-
Platoon blocked, %		-	-	0	-	-	0	0	0	0	0	
Mov Cap-1 Maneuver	709	-	-	905	-	-	~ 36	30	*830	52	30	530
Mov Cap-2 Maneuver	-	-	-	-	-	-	106	98	-	167	127	-
Stage 1	-	-	-	-	-	-	235	262	-	241	297	-
Stage 2	-	-	-	-	-	-	316	290	-	522	254	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.45	0.37	43.07	28.39
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	106	462	709	-	-	905	-	-	348
HCM Lane V/C Ratio	0.509	0.106	0.204	-	-	0.045	-	-	0.574
HCM Ctrl Dly (s/v)	69.6	13.7	11.4	-	-	9.2	-	-	28.4
HCM Lane LOS	F	B	B	-	-	A	-	-	D
HCM 95th %tile Q(veh)	2.3	0.4	0.8	-	-	0.1	-	-	3.4

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Appendix G: Queue Analysis Worksheets



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	49	76	49	336	105	128	24	577	306	50	524	63
v/c Ratio	0.38	0.29	0.21	0.77	0.44	0.41	0.04	0.28	0.29	0.09	0.24	0.06
Control Delay (s/veh)	60.6	54.8	2.0	63.4	55.0	12.4	12.4	22.0	10.2	8.4	12.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.6	54.8	2.0	63.4	55.0	12.4	12.4	22.0	10.2	8.4	12.1	0.1
Queue Length 50th (ft)	37	30	0	130	76	0	11	191	79	13	109	0
Queue Length 95th (ft)	77	55	0	#210	138	59	m23	240	135	29	143	0
Internal Link Dist (ft)		381			388			1371			1724	
Turn Bay Length (ft)	150		150	175		250	125		350	125		150
Base Capacity (vph)	177	353	272	441	239	314	560	2066	1046	534	2192	1029
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.22	0.18	0.76	0.44	0.41	0.04	0.28	0.29	0.09	0.24	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	49	152	40	352	84	65	51	616	515	137	1028	54
v/c Ratio	0.32	0.49	0.16	0.71	0.31	0.19	0.18	0.34	0.48	0.29	0.53	0.06
Control Delay (s/veh)	56.1	57.3	1.3	57.1	48.4	1.3	10.1	16.3	6.4	12.1	20.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.1	57.3	1.3	57.1	48.4	1.3	10.1	16.3	6.4	12.1	20.2	0.1
Queue Length 50th (ft)	37	61	0	136	59	0	14	131	54	42	283	0
Queue Length 95th (ft)	76	94	0	186	109	0	m32	154	83	77	364	0
Internal Link Dist (ft)		381			388			1371			1724	
Turn Bay Length (ft)	150		150	175		250	125		350	125		150
Base Capacity (vph)	236	471	321	526	285	350	291	1833	1068	467	1927	919
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.32	0.12	0.67	0.29	0.19	0.18	0.34	0.48	0.29	0.53	0.06

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	53	77	51	405	123	155	28	689	365	61	626	73
v/c Ratio	0.40	0.29	0.22	0.83	0.47	0.43	0.06	0.34	0.35	0.13	0.29	0.07
Control Delay (s/veh)	61.2	54.5	2.1	66.1	54.7	11.6	11.8	22.0	9.3	8.7	13.1	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	61.2	54.5	2.1	66.1	54.7	11.6	11.8	22.0	9.3	8.7	13.1	0.3
Queue Length 50th (ft)	41	30	0	161	90	0	12	240	96	17	135	0
Queue Length 95th (ft)	82	55	0	#275	159	63	m24	260	128	33	174	3
Internal Link Dist (ft)		381			388			1371			1724	
Turn Bay Length (ft)	150		150	175		250	125		350	125		150
Base Capacity (vph)	177	353	272	487	264	357	484	2016	1053	456	2135	1005
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.22	0.19	0.83	0.47	0.43	0.06	0.34	0.35	0.13	0.29	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	56	176	43	417	88	80	53	726	623	167	1228	58
v/c Ratio	0.34	0.53	0.16	0.77	0.30	0.22	0.25	0.41	0.56	0.43	0.66	0.06
Control Delay (s/veh)	55.7	57.4	1.3	58.5	47.3	3.2	12.6	16.9	7.1	15.7	23.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.7	57.4	1.3	58.5	47.3	3.2	12.6	16.9	7.1	15.7	23.8	0.1
Queue Length 50th (ft)	42	70	0	160	61	0	17	156	78	57	384	0
Queue Length 95th (ft)	83	106	0	#227	115	12	m33	188	102	93	467	0
Internal Link Dist (ft)		381			388			1371			1724	
Turn Bay Length (ft)	150		150	175		250	125		350	125		150
Base Capacity (vph)	236	471	321	552	299	361	210	1781	1103	389	1868	895
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.37	0.13	0.76	0.29	0.22	0.25	0.41	0.56	0.43	0.66	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	31	40	43	87	151	802	22	32	828
v/c Ratio	0.36	0.29	0.47	0.48	0.28	0.20	0.02	0.06	0.22
Control Delay (s/veh)	61.3	21.7	70.8	23.6	2.6	3.0	0.0	1.0	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	61.3	21.7	70.8	23.6	2.6	3.0	0.0	1.0	2.3
Queue Length 50th (ft)	24	5	33	7	11	52	0	1	14
Queue Length 95th (ft)	m58	42	73	59	17	58	m0	m3	17
Internal Link Dist (ft)		689		812		1567			1371
Turn Bay Length (ft)	225		100		225		100	100	
Base Capacity (vph)	97	153	102	193	537	3983	1255	550	3772
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.26	0.42	0.45	0.28	0.20	0.02	0.06	0.22

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	102	110	32	43	118	1082	60	64	1375
v/c Ratio	0.68	0.63	0.20	0.51	0.37	0.30	0.05	0.16	0.40
Control Delay (s/veh)	71.3	34.0	48.5	46.6	8.9	13.0	1.5	2.8	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.3	34.0	48.5	46.6	8.9	13.0	1.5	2.8	4.4
Queue Length 50th (ft)	74	18	22	9	36	198	1	7	56
Queue Length 95th (ft)	#155	#118	54	#56	m46	m190	m6	m12	63
Internal Link Dist (ft)		689		812		1567			1371
Turn Bay Length (ft)	225		100		225		100	100	
Base Capacity (vph)	150	176	165	85	417	3581	1149	522	3448
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.63	0.19	0.51	0.28	0.30	0.05	0.12	0.40

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	38	45	53	107	182	949	26	39	983
v/c Ratio	0.50	0.31	0.58	0.54	0.39	0.24	0.02	0.08	0.26
Control Delay (s/veh)	71.9	21.5	78.2	23.7	4.3	3.8	0.2	1.1	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.9	21.5	78.2	23.7	4.3	3.8	0.2	1.1	2.3
Queue Length 50th (ft)	29	6	41	8	13	59	0	2	16
Queue Length 95th (ft)	m#69	44	#92	66	35	93	m1	m3	19
Internal Link Dist (ft)		689		812		1567			1371
Turn Bay Length (ft)	225		100		225		100	100	
Base Capacity (vph)	83	157	101	209	462	3974	1253	482	3769
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.29	0.52	0.51	0.39	0.24	0.02	0.08	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	123	129	39	52	138	1264	73	77	1613
v/c Ratio	0.82	0.67	0.25	0.57	0.52	0.35	0.06	0.22	0.47
Control Delay (s/veh)	87.5	34.9	49.5	49.5	18.5	10.5	1.3	3.5	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	87.5	34.9	49.5	49.5	18.5	10.5	1.3	3.5	5.1
Queue Length 50th (ft)	90	21	27	12	43	157	0	8	64
Queue Length 95th (ft)	#172	#133	62	#67	m76	m176	m3	m15	93
Internal Link Dist (ft)		689		812		1567			1371
Turn Bay Length (ft)	225		100		225		100	100	
Base Capacity (vph)	150	192	165	91	362	3567	1145	462	3417
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.67	0.24	0.57	0.38	0.35	0.06	0.17	0.47

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	123	67	234	218	67	92	174	887	127	45	713	85
v/c Ratio	0.63	0.17	0.15	0.61	0.34	0.06	0.71	0.46	0.14	0.38	0.45	0.10
Control Delay (s/veh)	64.5	47.7	0.2	58.4	54.1	0.1	65.1	18.8	5.0	54.0	34.3	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.5	47.7	0.2	58.4	54.1	0.1	65.1	18.8	5.0	54.0	34.3	4.6
Queue Length 50th (ft)	95	25	0	85	50	0	143	164	0	36	224	4
Queue Length 95th (ft)	156	47	0	125	95	0	209	270	38	78	334	17
Internal Link Dist (ft)		773			630			442			1567	
Turn Bay Length (ft)	50		75	300		150	175			300		
Base Capacity (vph)	260	520	1553	429	232	1583	309	1916	915	134	1600	810
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.13	0.15	0.51	0.29	0.06	0.56	0.46	0.14	0.34	0.45	0.10

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	245	101	336	255	60	99	196	935	213	99	1277	137
v/c Ratio	0.90	0.19	0.21	0.67	0.29	0.06	0.77	0.58	0.26	0.63	0.90	0.19
Control Delay (s/veh)	84.3	44.9	0.3	59.9	52.1	0.1	68.4	30.7	10.1	55.0	44.4	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	84.3	44.9	0.3	59.9	52.1	0.1	68.4	30.7	10.1	55.0	44.4	7.9
Queue Length 50th (ft)	191	36	0	100	44	0	163	233	27	78	393	20
Queue Length 95th (ft)	#339	64	0	144	87	0	m206	309	m61	m131	#684	56
Internal Link Dist (ft)		773			630			442			1567	
Turn Bay Length (ft)	50		75	300		150	175			300		
Base Capacity (vph)	280	560	1583	429	232	1583	295	1605	834	177	1412	735
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.18	0.21	0.59	0.26	0.06	0.66	0.58	0.26	0.56	0.90	0.19

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	255	111	373	308	63	120	184	1142	259	120	1540	138
v/c Ratio	0.66	0.26	0.24	0.56	0.43	0.08	0.76	0.68	0.29	0.66	0.98	0.18
Control Delay (s/veh)	44.5	48.3	0.3	39.5	61.1	0.1	66.9	24.6	5.9	54.0	51.0	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.5	48.3	0.3	39.5	61.1	0.1	66.9	24.6	5.9	54.0	51.0	9.6
Queue Length 50th (ft)	165	42	0	96	48	0	148	259	27	88	~713	29
Queue Length 95th (ft)	239	68	0	130	93	0	m171	m268	m36	m#167	#820	m64
Internal Link Dist (ft)		773			630			442			1567	
Turn Bay Length (ft)	50		75	300		150	175			300		
Base Capacity (vph)	389	589	1583	569	217	1583	242	1681	881	194	1566	771
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.19	0.24	0.54	0.29	0.08	0.76	0.68	0.29	0.62	0.98	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	132	72	233	260	75	112	191	1062	153	54	841	89
v/c Ratio	0.65	0.18	0.15	0.66	0.35	0.07	0.72	0.57	0.17	0.45	0.56	0.11
Control Delay (s/veh)	65.3	47.5	0.2	59.4	53.4	0.1	62.0	23.9	7.8	55.4	45.5	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	65.3	47.5	0.2	59.4	53.4	0.1	62.0	23.9	7.8	55.4	45.5	6.4
Queue Length 50th (ft)	102	27	0	102	55	0	149	255	7	44	315	4
Queue Length 95th (ft)	166	50	0	146	104	0	m217	358	m51	m87	418	26
Internal Link Dist (ft)		773			630			442			1567	
Turn Bay Length (ft)	50		75	300		150	175			300		
Base Capacity (vph)	260	520	1553	434	235	1583	354	1866	907	134	1511	775
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.14	0.15	0.60	0.32	0.07	0.54	0.57	0.17	0.40	0.56	0.11

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	255	111	373	308	63	120	184	1142	259	120	1540	138
v/c Ratio	0.89	0.19	0.24	0.79	0.30	0.08	0.90	0.73	0.31	0.72	1.04	0.19
Control Delay (s/veh)	81.6	44.2	0.3	67.3	52.7	0.1	81.5	27.1	6.4	63.5	67.3	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	81.6	44.2	0.3	67.3	52.7	0.1	81.5	27.1	6.4	63.5	67.3	9.7
Queue Length 50th (ft)	198	40	0	123	46	0	151	265	29	97	~713	29
Queue Length 95th (ft)	#346	68	0	#184	92	0	m169	m263	m36	m#181	#820	m64
Internal Link Dist (ft)		773			630			442			1567	
Turn Bay Length (ft)	50		75	300		150	175			300		
Base Capacity (vph)	295	589	1583	400	217	1583	206	1557	834	177	1479	735
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.19	0.24	0.77	0.29	0.08	0.89	0.73	0.31	0.68	1.04	0.19

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	29	35	89	428	102	244	215	996	385	188	846	41
v/c Ratio	0.16	0.28	0.06	1.36	0.55	0.15	0.61	0.47	0.35	0.56	0.28	0.04
Control Delay (s/veh)	55.6	58.0	0.1	222.6	62.3	0.2	59.0	15.8	2.4	65.7	14.3	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.6	58.0	0.1	222.6	62.3	0.2	59.0	15.8	2.4	65.7	14.3	0.5
Queue Length 50th (ft)	11	27	0	~228	78	0	84	240	0	79	117	0
Queue Length 95th (ft)	27	60	0	#334	135	0	124	330	48	115	157	m3
Internal Link Dist (ft)		533			489			905			404	
Turn Bay Length (ft)	300		125	350		250	450			175		75
Base Capacity (vph)	311	169	1568	315	192	1583	401	2125	1104	400	3023	988
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.21	0.06	1.36	0.53	0.15	0.54	0.47	0.35	0.47	0.28	0.04

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	86	111	250	582	119	267	265	1174	543	327	1429	65
v/c Ratio	0.36	0.58	0.16	0.93	0.27	0.17	0.67	0.83	0.60	0.72	0.68	0.09
Control Delay (s/veh)	57.0	62.4	0.2	71.3	40.2	0.2	60.1	39.8	8.6	59.9	33.8	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.0	62.4	0.2	71.3	40.2	0.2	60.1	39.8	8.6	59.9	33.8	3.1
Queue Length 50th (ft)	34	85	0	234	79	0	103	440	46	127	286	1
Queue Length 95th (ft)	60	140	0	#341	131	0	#154	#604	165	175	350	m10
Internal Link Dist (ft)		533			489			905			404	
Turn Bay Length (ft)	300		125	350		250	450			175		75
Base Capacity (vph)	629	294	1583	629	436	1583	393	1409	902	462	2117	727
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.38	0.16	0.93	0.27	0.17	0.67	0.83	0.60	0.71	0.68	0.09

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	36	39	111	505	120	274	254	1193	465	203	984	51
v/c Ratio	0.26	0.32	0.07	0.83	0.33	0.17	0.66	0.65	0.45	0.61	0.39	0.06
Control Delay (s/veh)	60.3	59.5	0.1	52.2	21.0	0.2	59.3	25.6	4.4	60.5	13.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.3	59.5	0.1	52.2	21.0	0.2	59.3	25.6	4.4	60.5	13.8	0.3
Queue Length 50th (ft)	14	30	0	99	19	0	99	394	14	85	115	0
Queue Length 95th (ft)	32	66	0	179	38	0	143	505	84	124	171	m1
Internal Link Dist (ft)		533			489			905			404	
Turn Bay Length (ft)	300		125	350		250	450			175		75
Base Capacity (vph)	141	169	1568	657	450	1583	425	1823	1024	357	2542	873
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.23	0.07	0.77	0.27	0.17	0.60	0.65	0.45	0.57	0.39	0.06

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	103	127	294	701	137	289	307	1384	647	364	1698	83
v/c Ratio	0.47	0.61	0.19	1.17	0.33	0.18	0.71	1.01	0.73	0.74	0.83	0.11
Control Delay (s/veh)	61.4	62.6	0.3	145.8	26.2	0.2	59.9	64.4	14.6	56.1	38.4	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	61.4	62.6	0.3	145.8	26.2	0.2	59.9	64.4	14.6	56.1	38.4	2.0
Queue Length 50th (ft)	40	97	0	~319	38	0	118	~630	126	136	367	0
Queue Length 95th (ft)	71	156	0	#446	m75	0	#191	#787	293	m157	m374	m2
Internal Link Dist (ft)		533			489			905			404	
Turn Bay Length (ft)	300		125	350		250	450			175		75
Base Capacity (vph)	228	312	1583	600	513	1583	435	1369	891	489	2048	735
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.41	0.19	1.17	0.27	0.18	0.71	1.01	0.73	0.74	0.83	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Appendix H: Crash Data

| CUID | Person Cnt | Ped Number | Sector | Day | Month | Crash Date | Crash Time | Agency Id | City | County | Latitude | Longitude | Schools | Location | Location2 | Road Description | First Hit | Second Hit | Mhit | Crash Type | Approach | Wild Animal | Num Num | Intrsc | Injur | Injur | Total | Secondary | Construct | School | Bus | Road Contr | Road Cond | Lighting | Weather | Collision | Pedestrian | Pedal | Motorcycle | Train | Alcohol | Drug | Speed | Hit and Run | Hit and Run | Hit and Run

Attachment 3: Applicable Comprehensive Plan and Housing Plan Polices for the Centennial Valley Affordable Housing Development
June 2, 2026

FUTURE LAND USE FRAMEWORK

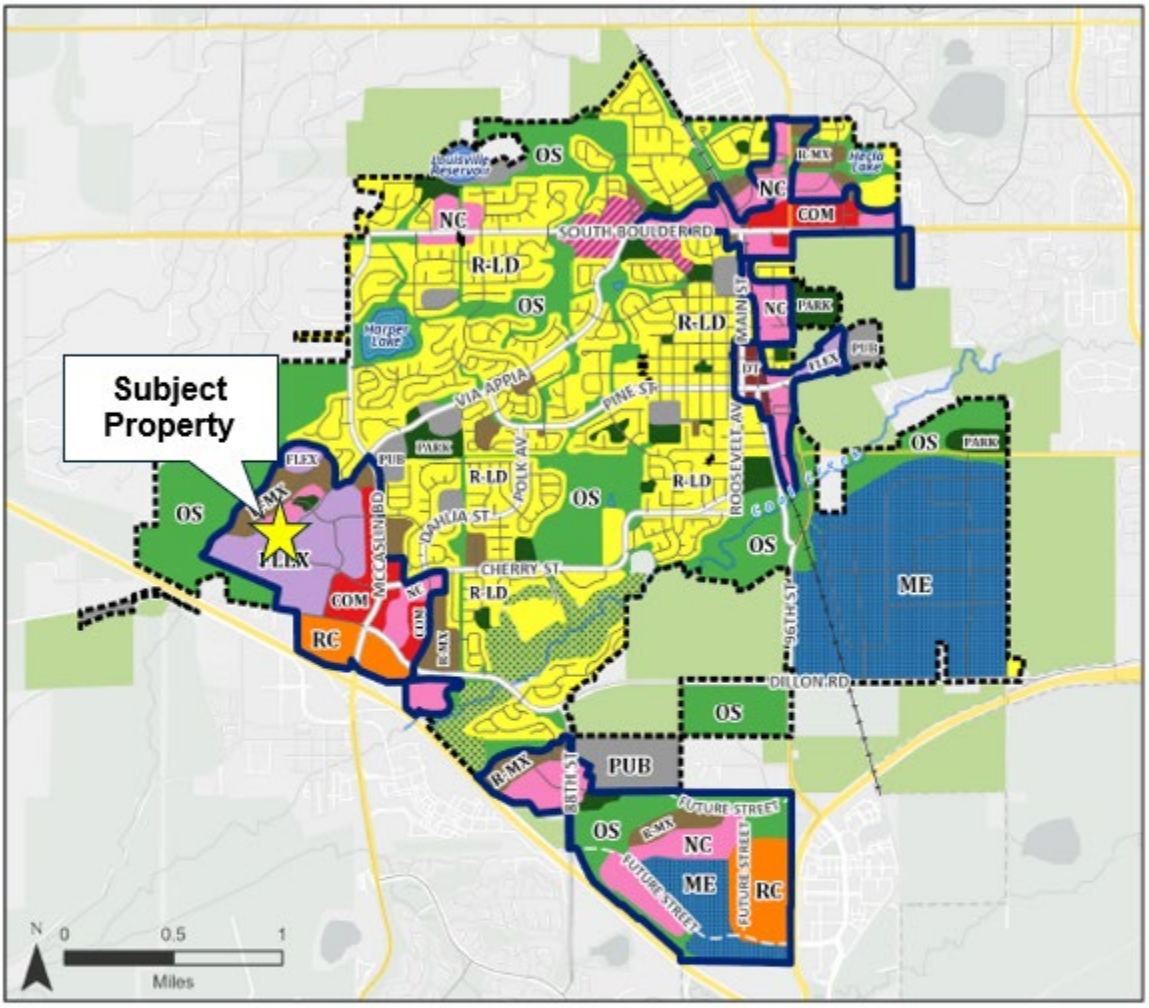


Figure 11: Future Land Use Framework
Source: City of Louisville

LEGEND

Placetypes
- Residential Low Density (R-LD)
- Residential Mix (R-MX)
- Neighborhood Center (NC)
- Downtown (DT)
- Regional Center (RC)
- Commercial Corridor (COM)
- Integrated Development/FLEX (FLEX)
- Public Facilities (PUB)
- Parks and Recreation (PARK)

Overlay Areas
- Golf Course
- Naturally Occurring Affordable Housing (NOAH) Overlay
- City Limits
- Opportunity Area
- Open Space outside of Louisville

Integrated Development (FLEX)

Community Character

Description: The Integrated Development/ FLEX placetype supports a mix of residential, employment, and commercial uses in a coordinated, adaptable environment. These areas allow different uses to coexist and evolve over time, creating opportunities for housing choice, job growth, and neighborhood-serving retail. The intent is to foster a vibrant, walkable setting where uses complement each other and support daily needs.

Location: Primarily located in the Centennial Valley area, with additional sites elsewhere in the city where flexible land use is appropriate. These locations typically have access to major arterial roads and are near existing commercial areas.

Transportation Connectivity

- Areas with existing transportation connections and road systems that can accommodate additional traffic, such as Centennial Parkway; the Centennial Valley area is also close to high-frequency transit.
- Support breaking up large blocks by providing additional transportation connections - particularly bicycle and pedestrian connections - that link open space areas and other activity areas.
- Support trail connections to nearby open space areas.
- Enhance corridors with landscaping, seating, pedestrian-scale lighting, and public art to improve comfort and visual character.





Existing Centennial Valley Office (Left), Boulder Junction Mixed Use (Right); Source: Google Street View

Land Use and Scale

Primary Land Uses:

- Retail, Restaurant, Entertainment, and Office
- Light Industrial
- Multifamily Residential

Supporting Land Uses:

- Parks and Recreation
- Open Space, Trails, and Conservation
- Community Places (places of worship, schools, public spaces, community centers, etc.)

Density and Scale:

- Residential Density: 18-30 DU/acre
- Building Heights: 3 stories

Development Considerations

- Buffer development where commercial and residential uses meet to address noise, lighting, and privacy, using treatments like landscaping and fencing appropriate to the context.
- Provide inviting, well-designed public spaces—especially in larger developments—that are visible from the street and include amenities such as seating, informal play or activity areas, and landscaping.
- Orient buildings toward the street and promote ground-floor activation through design or land uses that create an engaging, neighborhood-scale frontage and contribute to a cohesive public realm.
- Incorporate parks and open spaces to enhance workplace wellness and provide opportunities for outdoor activity.
- Ensure building heights transition appropriately when adjacent to established single-family neighborhoods, typically limiting to two stories at the edge.

List of Applicable Comprehensive and Housing Plan Applicable Policies

Comprehensive Plan Applicable Policies:

- **Goal LU 1. Increase Residential Development Opportunities.** Strategies:
    - LU 1.1 Prioritize the use of vacant and underutilized land for new housing, particularly in areas with access to transit, services, and existing infrastructure.
    - LU 1.5. Support housing types and locations that advance social equity by expanding access to affordable, accessible, and diverse homes for households with a range of needs and incomes.
    - LU 1.6. Leverage new residential development to increase economic vitality and vibrancy in areas with underutilized or long-term vacant commercial land.

- **Goal LU 2. Expand and Maintain Access to Affordable Housing.** Strategies:
    - LU 2.4. Identify and pursue funding and incentive opportunities, including grants, fee reductions, or density bonuses to encourage affordable housing development and preservation.
    - LU 2.6. Continue to support the Boulder County Regional Housing Partnership goal of having 12% of all homes be permanently affordable by 2035 and continue to pursue local policies and partnerships that help Louisville contribute to this target.
    - LU 2.7. Apply and strengthen requirements or incentives for providing onsite affordable units in new residential or mixed-use developments.

- **Goal LU 3. Diversify Louisville's Housing Stock.** Strategies:
    - Strategy LU 3.3. Require or encourage a mix of housing types, sizes, and price points within larger residential or mixed-use projects to foster inclusive, mixed-income communities.

- **Goal LU 9 Create a vibrant, mixed-use neighborhood in Centennial Valley where daily needs are close by and new housing fosters a strong sense of community while maintaining the core existing commercial areas. Strategies:**
    - Strategy LU 9.4. Support a range of housing types and price points to serve diverse households and support nearby commercial uses.

- **Goal EV 3. Enhance Commercial Areas to Boost Economic Activity.** Strategies:
    - Strategy EV 3.2. Encourage new housing near commercial districts to strengthen customer bases, support local businesses, and increase activity throughout the day and evening.

    - Strategy EV 3.5. Support the redevelopment or adaptive reuse of underutilized or outmoded commercial properties to create modern spaces that meet current market needs and contribute to vibrant, mixed-use areas.

- **Goal LU 6 Promote Exceptional Building and Site Design.** Strategies:
    - Strategy LU 6.4. Promote building heights, massing, and architectural details that complement surrounding areas.

Louisville Housing Plan Applicable Policies:

- Goal 1: Increase Residential Development Opportunities
- Goal 2: Expand and Maintain Access to Affordable Housing
- Goal 3: Diversify Louisville's Housing Stock
- Action Item 1.1: Establish Criteria and Identify Areas for Zoning Changes to Support Additional Residential Development
- Action Item 2.6: Establish and Strengthen Partnerships to Support Preserved and New Income-Restricted Affordable Housing

City Council Public Hearing

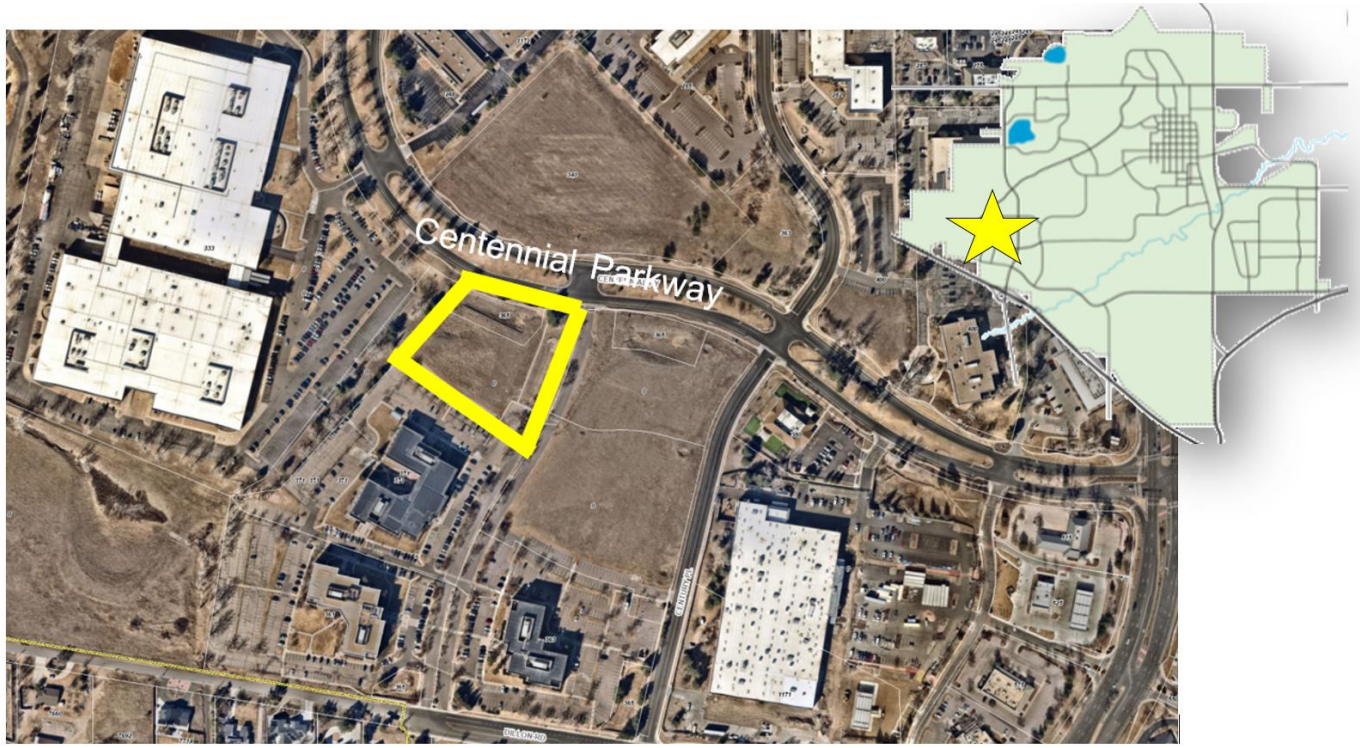
August 4, 2026

Centennial Valley General Development Plan Amendment to Allow Multifamily Affordable Housing and Establish Maximum Building Heights and Residential Density for 2.8 Acre Site

Summary of Request

Centennial Valley General Development Plan (GDP) amendment on 2.8 acre site to:

- Allow permanently affordable multifamily housing
- Up to 37 dwelling units per acre
- Up to 45 feet tall buildings (4 stories)



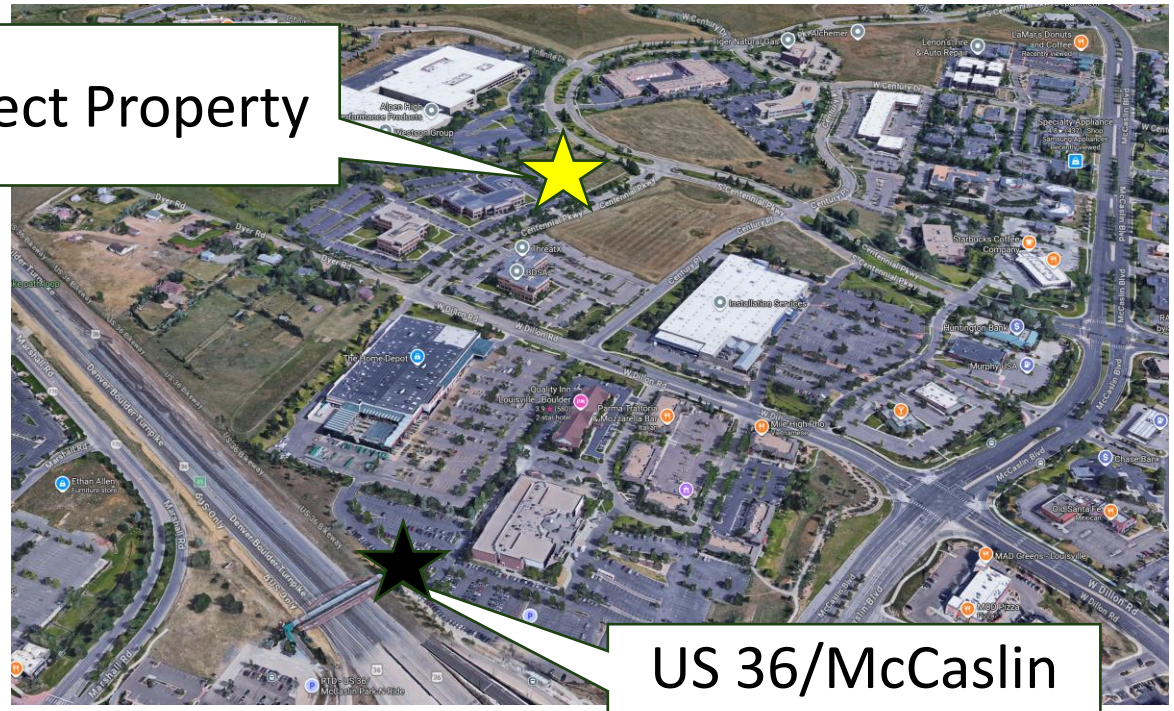
City of Louisville

Summary of Request

- GDP amendment only addresses allowed land use, building height, and residential density
- Separate, future public processes will address specific proposals (e.g., PUDs)
- GDP amendment states that **only permanently affordable (deed restricted) residential** is allowed on subject property
- City is applicant to support affordable housing goals

Background

- Site is governed by Centennial Valley General Development Plan (GDP) that establishes zoning
- Only commercial uses allowed on subject property
- Surrounded by vacant land and commercial uses
- Well served by transportation infrastructure

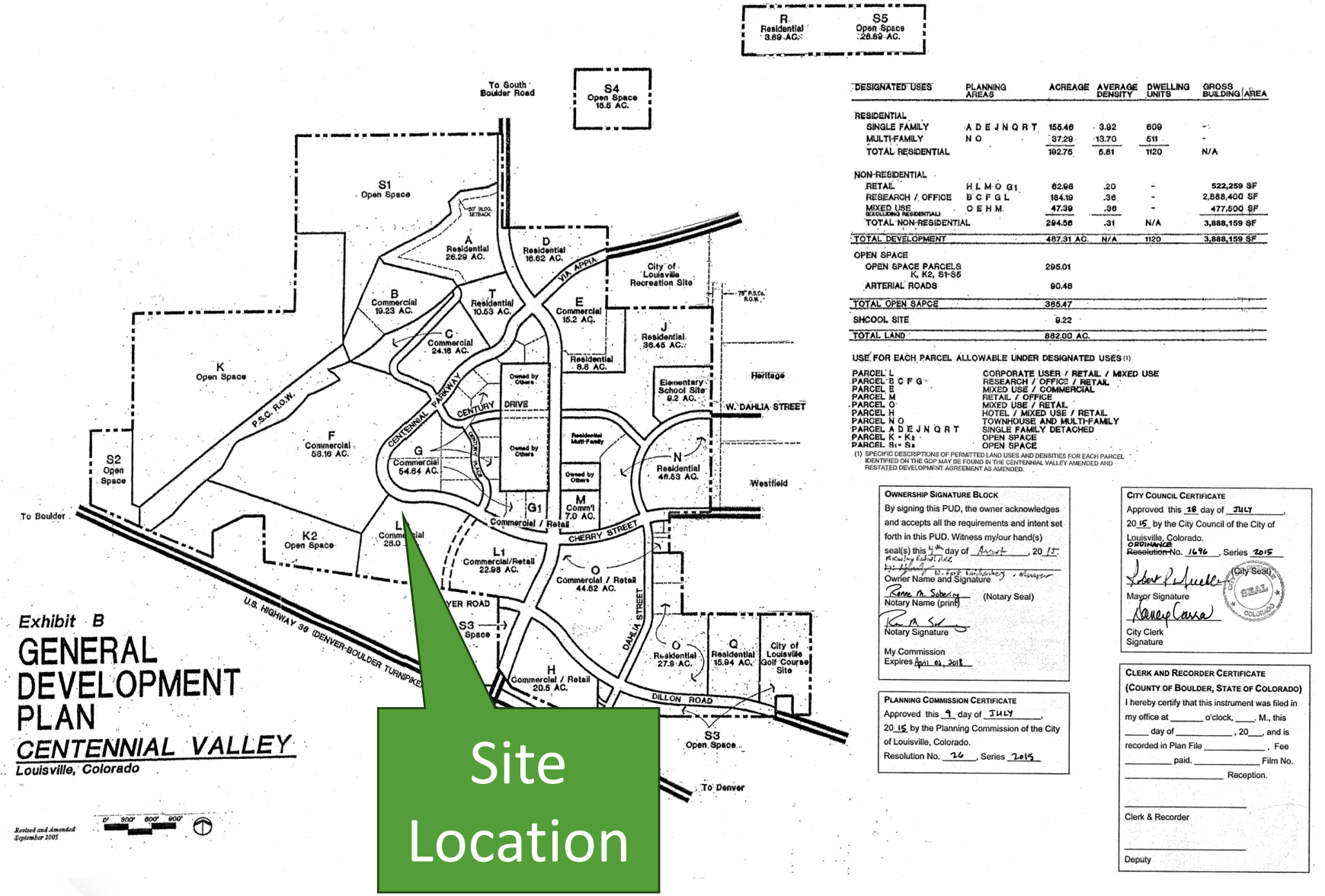




Subject property looking south from Centennial Pkwy

City of Louisville

Centennial Valley GDP



DESIGNATED USES	PLANNING AREAS	ACREAGE	AVERAGE DENSITY	DWELLING UNITS	GROSS BUILDING AREA
RESIDENTIAL					
SINGLE FAMILY	A D E J N Q R T	155.46	3.92	609	-
MULTI-FAMILY	N O	37.29	13.70	511	-
TOTAL RESIDENTIAL		192.75	5.81	1120	N/A
NON-RESIDENTIAL					
RETAIL	H L M O G1	62.98	.20	-	522,259 SF
RESEARCH / OFFICE	B C F G L	184.19	.36	-	2,888,400 SF
MIXED USE (EXCLUDING RESIDENTIAL)	O E H M	47.39	.36	-	477,500 SF
TOTAL NON-RESIDENTIAL		294.56	.31	N/A	3,888,159 SF
TOTAL DEVELOPMENT		487.31 AC.	N/A	1120	3,888,159 SF
OPEN SPACE					
OPEN SPACE PARCELS K, K2, S1-S5		295.01			
ARTERIAL ROADS		90.46			
TOTAL OPEN SAPCE		385.47			
SHCOOL SITE		9.22			
TOTAL LAND		882.00 AC.			

USE FOR EACH PARCEL ALLOWABLE UNDER DESIGNATED USES (1)

PARCEL L	CORPORATE USER / RETAIL / MIXED USE
PARCEL B C F G	RESEARCH / OFFICE / RETAIL
PARCEL E	MIXED USE / COMMERCIAL
PARCEL M	RETAIL / OFFICE
PARCEL O	MIXED USE / RETAIL
PARCEL H	HOTEL / MIXED USE / RETAIL
PARCEL N O	TOWNHOUSE AND MULTI-FAMILY
PARCEL A D E J N Q R T	SINGLE FAMILY DETACHED
PARCEL K - K2	OPEN SPACE
PARCEL S1- S5	OPEN SPACE

(1) SPECIFIC DESCRIPTIONS OF PERMITTED LAND USES AND DENSITIES FOR EACH PARCEL IDENTIFIED ON THE GDP MAY BE FOUND IN THE CENTENNIAL VALLEY AMENDED AND RESTATED DEVELOPMENT AGREEMENT AS AMENDED.

OWNERSHIP SIGNATURE BLOCK

By signing this PUD, the owner acknowledges and accepts all the requirements and intent set forth in this PUD. Witness my/our hand(s) seal(s) this 4th day of August, 20 15

Owner Name and Signature

Rene M. Sobering (Notary Seal)
Notary Name (print)

Notary Signature

My Commission Expires April 03, 2018

PLANNING COMMISSION CERTIFICATE

Approved this 9 day of JULY, 20 15 by the Planning Commission of the City of Louisville, Colorado.

Resolution No. 26, Series 2015

CITY COUNCIL CERTIFICATE

Approved this 28 day of JULY, 20 15 by the City Council of the City of Louisville, Colorado.

~~Ordinance~~ Resolution No. 1696, Series 2015

(City Seal)

Mayor Signature

City Clerk Signature

CLERK AND RECORDER CERTIFICATE (COUNTY OF BOULDER, STATE OF COLORADO)

I hereby certify that this instrument was filed in my office at _____ o'clock, ____ M., this ____ day of _____, 20___, and is recorded in Plan File _____, Fee _____ paid. _____ Film No. _____ Reception.

Clerk & Recorder

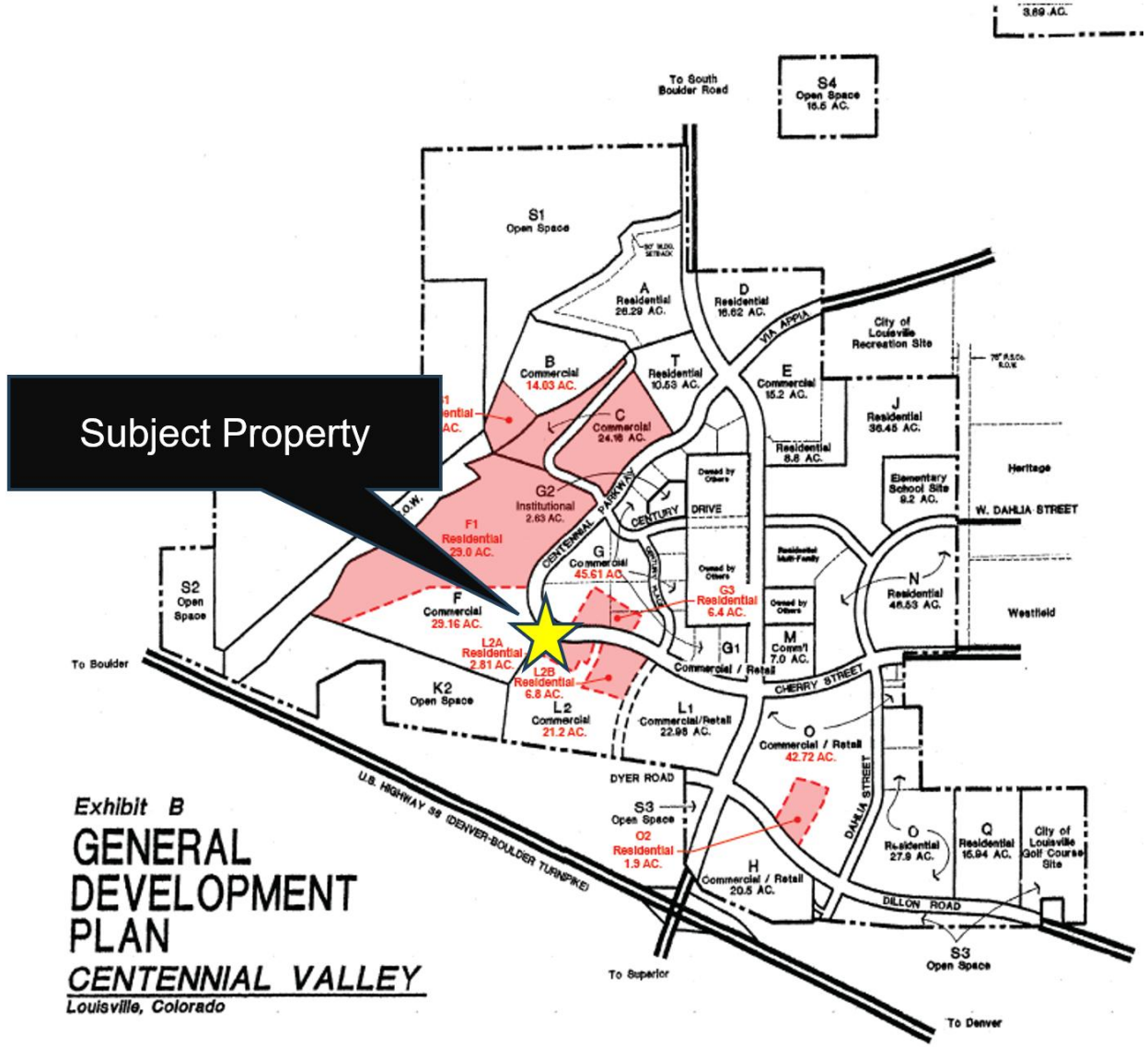
Deputy

Site Location

City of Louisville

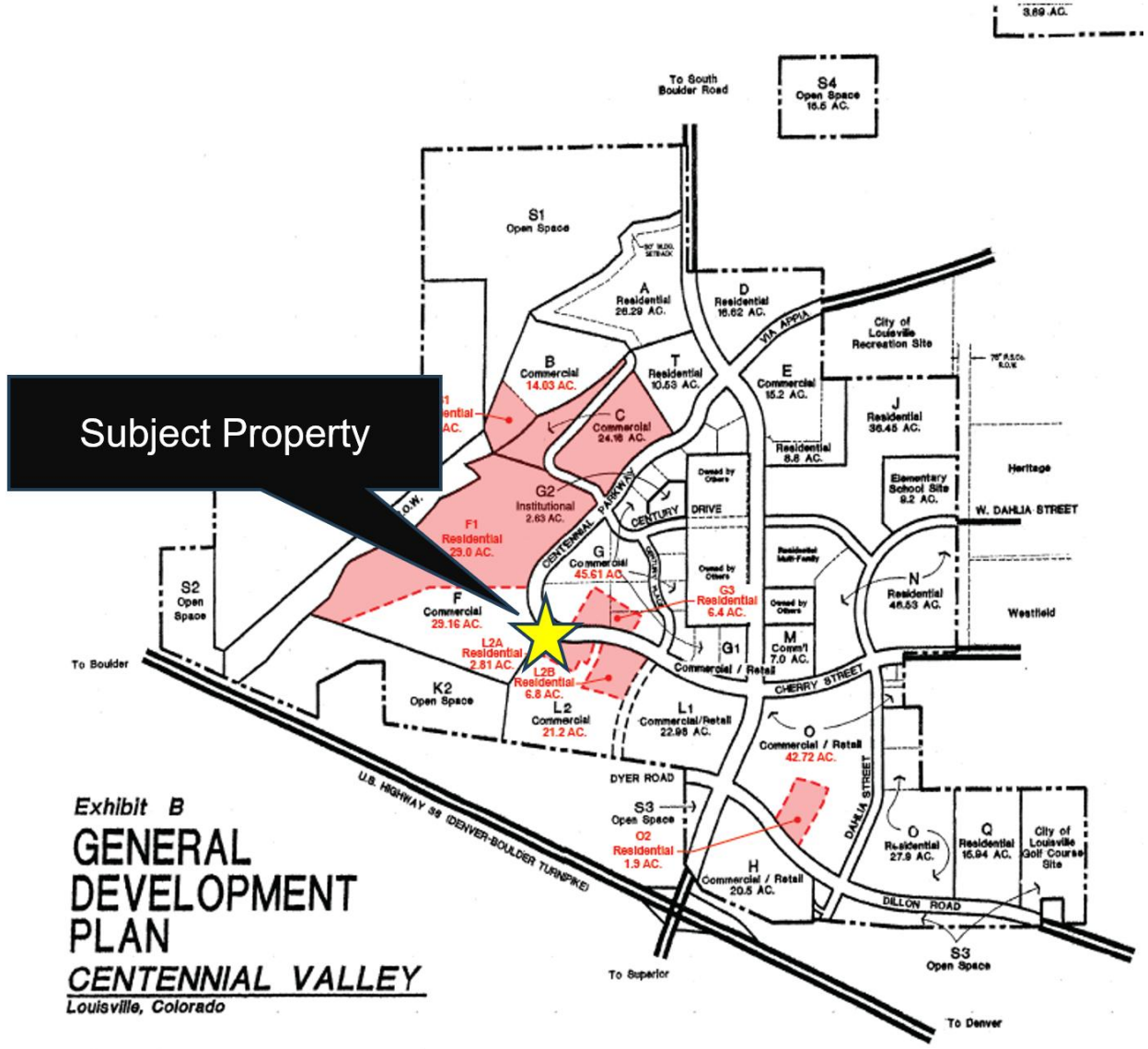
Background

- Anticipating separate, future GDP amendment to allow residential on other sites in Centennial Valley
- Densities and heights consistent with Comprehensive Plan being contemplated on those sites



Background

- Affordable housing units on subject property may be credited towards required affordable housing on surrounding properties
- Anticipated future GDP amendment will include agreements addressing this
- GDP amendments are separate due to a LIHTC application deadline for subject property



Prior City Council and Planning Commission Meetings

- City Council provided nonbinding feedback on the subject concept plan on June 2 - support for the project to move forward, no major issues identified
- Planning Commission recommended approval with no conditions on June 11
- City Council voted to advance to public hearing on July 21

Specific (Future) Proposal

This GDP amendment would support a project with:

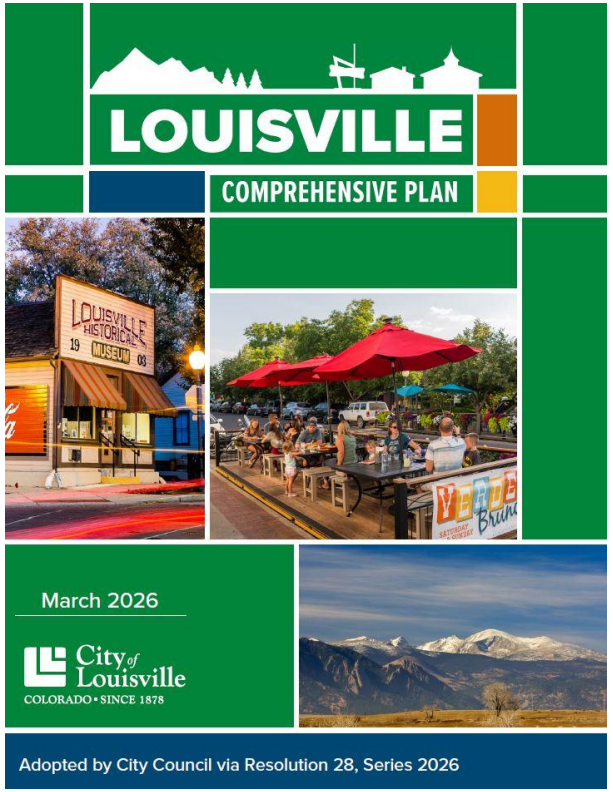
- 100 permanently affordable units
- Mix of 1-3 bedroom rental units
- AMI: for households between 30-80% Area Median Income (AMI); with average of 60% AMI
- 1 parking space per unit





GDP Amendment Proposal

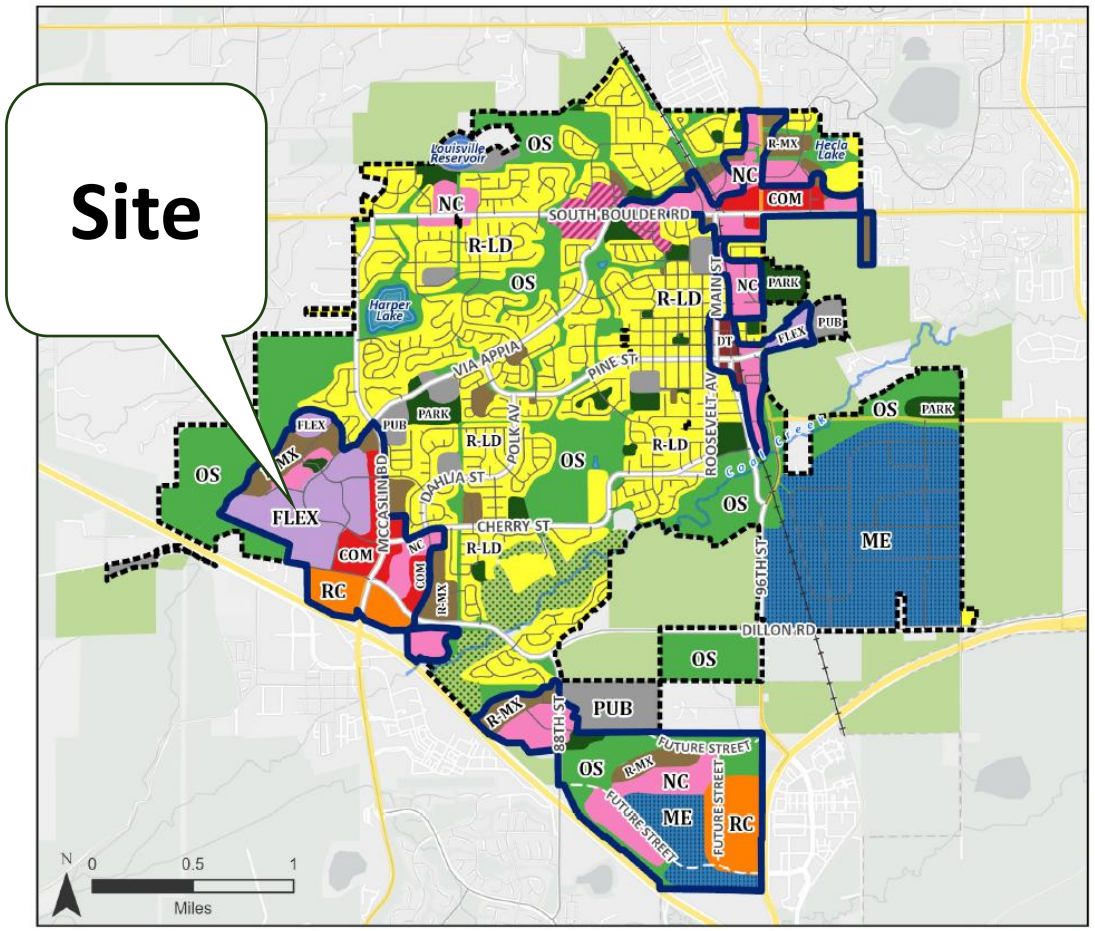
- City as applicant because the request:
  - Closely aligns with numerous City adopted policy goals
  - Addresses the City's Proposition 123 Commitment
  - Supports a City land banking grant in partnership with Koelbel and Company, LIHTC tax credit application (August)
- Reminder that site planning, etc. evaluation happens at future public hearings





Analysis – Comprehensive Plan, Housing Plan

- Proposal is in Centennial Valley Housing Opportunity Area
- Policies supporting:
  - Affordable housing, housing diversity
  - Redevelopment of underutilized commercial land
  - Locating density near transit
  - Residential to support nearby commercial



City of Louisville

Analysis – Building Heights

- A four story building exceeds the Comprehensive Plan building height guidance for this area (3 stories)
- The Comprehensive Plan also states there should be flexibility based on community benefits provided (affordable housing)


LOUISVILLE
COMPREHENSIVE PLAN

March 2026

City of Louisville
COLORADO • SINCE 1878

Adopted by City Council via Resolution 28, Seri

Integrated Development (FLEX)

Community Character

Description: The Integrated Development/ FLEX placetype supports a mix of residential, employment, and commercial uses in a coordinated, adaptable environment. These areas allow different uses to coexist and evolve over time, creating opportunities for housing choice, job growth, and neighborhood-serving retail. The intent is to foster a vibrant, walkable setting where uses complement each other and support daily needs.

Location: Primarily located in the Centennial Valley area, with additional sites elsewhere in the city where flexible land use is appropriate. These locations typically have access to major arterial roads and are near existing commercial areas.

Land Use and Scale

Primary Land Uses:

- Retail, Restaurant, Entertainment, and Office
- Light Industrial
- Multifamily Residential

Supporting Land Uses:

- Parks and Recreation
- Open Space, Trails, and Conservation
- Community Places (places of worship, schools, public spaces, community centers, etc.)

Density and Scale:

- Residential Density: 18-30 DU/acre
- Building Heights: 3 stories

Transportation Connectivity

- Areas with existing transportation connections and road systems that can accommodate additional traffic, such as Centennial Parkway; the Centennial Valley area is also close to high-frequency transit.
- Support breaking up large blocks by providing additional transportation connections - particularly bicycle and pedestrian connections - that link open space areas and other activity areas.
- Support trail connections to nearby open space areas.
- Enhance corridors with landscaping, seating, pedestrian-scale lighting, and public art to improve comfort and visual character.

Development Considerations

- Buffer development where commercial and residential uses meet to address noise, lighting, and privacy, using treatments like landscaping and fencing appropriate to the context.
- Provide inviting, well-designed public spaces—especially in larger developments—that are visible from the street and include amenities such as seating, informal play or activity areas, and landscaping.
- Orient buildings toward the street and promote ground-floor activation through design or land uses that create an engaging, neighborhood-scale frontage and contribute to a cohesive public realm.
- Incorporate parks and open spaces to enhance workplace wellness and provide opportunities for outdoor activity.
- Ensure building heights transition appropriately when adjacent to established single-family neighborhoods, typically limiting to two stories at the edge.

Existing Centennial Valley Office (Left), Boulder Junction Mixed Use (Right): Source: Google Street View

46 | PLAN ELEMENTS

LOUISVILLE COMPREHENSIVE PLAN

City of Louisville

Analysis: Building Heights





BEFORE



AFTER

©2026 BRYANT FLINK ARCHITECTURE + DESIGN

BF AD

KOELBEL

Louisville Affordable Housing
Louisville, Colorado

May 7th, 2026

MULTIFAMILY TEST FIT
3 levels Type V / 1 Garden level

View From Centennial Pkwy

4 OF 6

City of Louisville

Analysis: Building Heights





BEFORE



AFTER

©2026 BRYANT FLINK ARCHITECTURE + DESIGN

BFAD KOELBEL

Louisville Affordable Housing
Louisville, Colorado

May 7th, 2026

MULTIFAMILY TEST FIT
3 levels Type V / 1 Garden level

View from Centennial Parkway and Century Place

5 OF 6

City of Louisville

Analysis: Building Heights



City of Louisville

Analysis

- City's Proposition 123 Commitment is 77 units by end of 2026
- Broader Traffic Impact Study underway including subject property
  - Undergoing final review
  - Preliminary findings that residential generates fewer AM and PM peak hour trips than office

Recommendation

Approval of Ordinance No. 1935, Series 2026, approving a Centennial Valley General Development Plan amendment for Lot A of the Centennial Valley Business Park Filing No. 8 Final Plat to allow multifamily, permanently affordable residential development with a maximum building height of 45 feet and a maximum residential density of 37 dwelling units per acre.

City of Louisville
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City Council Communication
Agenda Item 8.C.

Subject: Resolution No. 72, Series 2026 - A Resolution Approving the Centennial 8 Replat B to Facilitate a Minor Subdivision to Combine 1006 Honeysuckle Lane and 1008 Honeysuckle Lane

This will be the only reading of this item and final action may be taken. There will be one round of public comment.

Date: August 4, 2026

Prepared By: Jessica Daniels, Senior Planner

Presented By: Jessica Daniels, Senior Planner

Summary:
The applicant, Joel and Caitlin Hawksley, request approval of a minor subdivision to combine 1008 Honeysuckle Lane (Lot 36) and 1006 Honeysuckle Lane (Lot 35) into new lot 35A. The proposed re-plat qualifies for the Minor Subdivision procedure in Louisville Municipal Code (LMC), which waives the requirement for a preliminary plat review process (Sec. 16.12.110). No waivers are requested and Staff finds that the development proposal meets applicable Sections 16 and 17 of the Louisville Municipal Code.

Background / Prior Discussions:
The subject properties consist of Lot 36, Centennial 8 Replat A (1008 Honeysuckle Lane) and Lot 35, Centennial 8 Replat A (1006 Honeysuckle Lane). These properties were destroyed by the Marshall Fire in 2021. The applicant, Joel and Caitlin Hawksley, purchased the property at 1008 Honeysuckle Lane in June 2020 and rebuilt their home in March 2024. The adjacent lot located at 1006 Honeysuckle lane has remained vacant and is currently for sale by the property owner, Lynda Faires. The applicant intends to purchase 1006 Honeysuckle Lane and consolidate the property with 1008 Honeysuckle Lane.

Planning Commission Review
At their meeting on June 11, 2026, the Planning Commission passed Resolution No. 9, Series 2026, recommending approval of the Centennial 8 Replat B to facilitate the minor subdivision at 1006 Honeysuckle Lane and 1008 Honeysuckle Lane. LINK: June 11, 2026 Planning Commission meeting.

Development Proposal:
The applicants propose a minor subdivision to consolidate 1008 Honeysuckle Lane (Lot 36) and 1006 Honeysuckle Lane (Lot 35) into one proposed lot of 13,077 square feet and approximately 150 feet in width. The purpose of the proposal is for the applicant to

have one larger lot to increase space for a residential garden, play area for their children, and to support future plans for a new accessible Accessory Dwelling Unit (ADU).

Figure 1: Proposed Lot Consolidation Plat

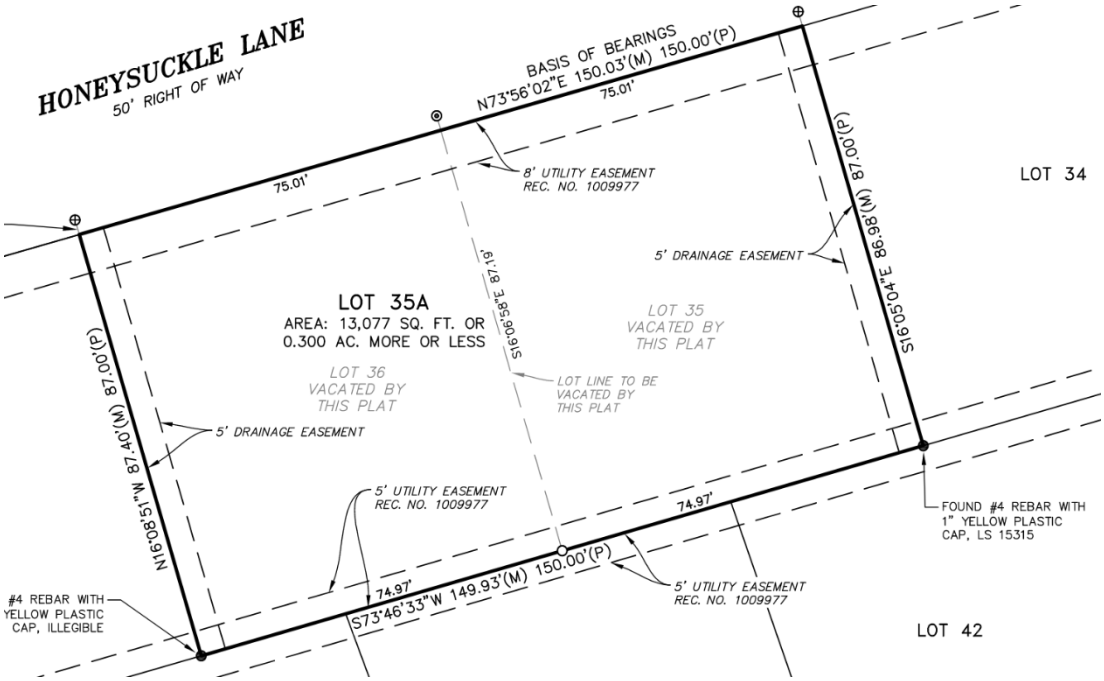
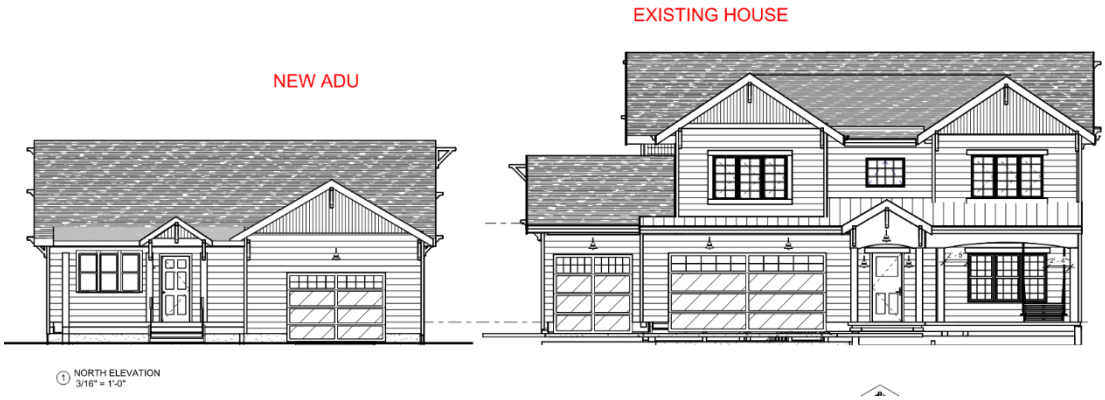


Figure 2: Conceptual Plan for New ADU (for reference, not part of this request)



Analysis:

Staff find that the proposal meets the final plat criteria, applicable zoning requirements, and subdivision design standards in LMC Sec. 16.12.090 and LMC Chapter 16.16, and applicable city codes and standards for access, drainage and utilities. The following

summarizes the findings:

Yard and Bulk Standards
LMC Sec. 17.12.040 outlines allowed lot coverages for the RE Zone District, with smaller lots having a larger percent allowance compared to larger lots.

Figure 3: LMC Sec. 17.12.040 RE Lot Coverage Standards

11. The maximum lot coverage for the R-E zone district shall be as follows:
    a. For a lot having a lot area of less than 5,000 square feet: 35 percent;
    b. For a lot having a lot area of 5,000 to 9,000 square feet: 30 percent, or 1,750 sf whichever is greater;
    c. For a lot having a lot area of 9,001 to 12,000 square feet: 25 percent, or 2,700 sf whichever is greater;
    d. For a lot having a lot area of 12,001 square feet or greater: 20 percent, or 3,000 sf whichever is greater.

The existing properties at 1006 Honeysuckle Lane and 1008 Honeysuckle Lane have lot sizes of approximately 6,453 square feet and 6,432 square feet, respectively, with each lot having a width of 75 feet. Under the current zoning standards, each lot is permitted a maximum lot coverage of 30 percent, resulting in allowable lot coverage of approximately 1,935 square feet for 1006 Honeysuckle Lane and 1,929 square feet for 1008 Honeysuckle Lane. When combined, the individual lot coverage entitlements total 3,865 square feet for the two properties (i.e. not consolidated).

The proposed lot consolidation would create a single lot containing approximately 13,077 square feet with a width of 150 feet. This would result in a lot coverage allowance of 20% or 3,000 sq. ft, whichever is larger. Thus, the allowed lot coverage would be 3,000 sq. ft., which would be the largest allowed lot coverage in the neighborhood. Other lots in the subdivision range in size from 6,426 sq. ft. to 9,822 sq. ft., which results in lot coverage allowances that range between 1,928 sq. ft. and 2,700 sq. ft. Although the newly consolidated lot would have the largest allowed lot coverage in the subdivision by 300 sq. ft., it would not be significantly larger than the next largest lot coverage within the neighborhood. In addition, the total lot coverage would be less for the combined lots vs. the sum of the two individual lots.

In addition, the ADU code allows a lot coverage credit of 500 sq. ft., which results in up to 3,500 sq. ft of lot coverage for the combined lot if it were to include an ADU. The applicant plans to construct a detached ADU with an approximately 1,300 sq. ft. lot coverage. The resulting total lot coverage of the primary residence and the ADU would equal approximately 3,300 sq. ft., but would be split between two structures.

The resulting consolidated lot would maintain the required minimum setbacks for the existing home, and minimum lot area and lot width standards would be met.

Minor Subdivision Procedure
As per *Sec 16.12.110. (A.) - Minor subdivision procedure* of the LMC, the City Council

may approve the Final Plat following recommendation by the Planning Commission, and the requirement for filing a preliminary plat is waived. The request is eligible for consideration as a minor subdivision as it meets the following criteria outline in *Sec. 16.12.110.(C) - Minor subdivision procedure* of the Louisville Municipal Code (LMC):

1. *The subdivision contains **solely residential use** and results in **not more than four dwelling units**;*
2. ***The subdivision is a replat** of an approved final subdivision plat which **does not result in a material change** in the type of public improvements, easements, arrangement of streets, open space, or utilities;*
3. *The **subdivision results in no more than two lots; each lot is adjacent to and has access to an accepted and maintained public street;** the improvements required by chapter 16.20 are already in existence and available to serve each lot; **each lot will meet the requirements of the city's zoning regulations without the necessity for a modification**; no modification or variance has been granted within the three previous years to any lot; and, no part of the subdivision has been approved as part of a minor subdivision within three years prior to the date of the submission of the minor subdivision plat;*
4. *The subdivision is of a lot, **previously created by an approved final subdivision plat**, which is split or subdivided into no more than two lots and the lots created by the split comply with the applicable dimensional requirements of the city's zoning regulations.*

Final Plat Criteria

Section 16.12.075 (A) of the LMC establishes the following rationale for consideration of final plats by Planning Commission and City Council:

1. *Whether the plat conforms to all of the requirements of this title;*
2. *Whether approval of the plat will be consistent with the city's comprehensive plan, applicable zoning requirements, and other applicable federal, state and city laws;*
3. *Whether the proposed subdivision will promote the purposes set forth in section 16.04.020 of this Code and comply with the standards set forth in chapter 16.16 of this Code and this title.*

Staff finds that the application complies with the final plat criteria. The consolidated lot will meet minimum lot size and width standards and the resulting structures will meet all established zoning standards for the subdivision. The proposal also meets the purposes set forth for subdivisions in Sec. 16.04.020, including protecting the character and the social and economic stability of the neighborhood and city.

Public Land Dedication/Fee-in-Lieu

Per Sec. 16.16.060. (4.) of the LMC, satisfactory dedication arrangements were made and approved by the City Council at the time of the previous subdivision of the same property as per the Centennial 8 Subdivision Agreement signed on December 15th,

1987, which included public land dedication. No fee-in-lieu or land dedication is required for the minor subdivision request at 1006 Honeysuckle Land and1008 Honeysuckle Lane.

Public Improvements
Installation of a water service and water meter at 1006 Honeysuckle is required when the applicant begins using the tap. This work requires a Right-Of-Way (ROW) permit and replacement of all the service line downstream of the existing curb stop per Marshall Fire permit requirements. A Subdivision Agreement is not required for public improvements.

Council Work Plan:
N/A

Fiscal Impact:
For the applicant, combining the lots is more economical from an insurance perspective, as the ADU would be covered under their existing homeowner insurance policy.

From a property tax perspective, if the lots remained separate and a second primary residence were constructed, the overall assessed value would likely be higher than a single lot with one primary residence and an ADU. Property values are determined by the Boulder County Assessor, so the exact property tax impact cannot be determined by the City at this time.

Alternatives:
A resolution approving the application is included with this memo. The City Council may adopt it as drafted, direct staff to draft a resolution disapproving the application for consideration, or refer the application back to the Planning Commission.

Recommendation:
Staff recommend approval of Resolution No. 72, Series 2026, approving the Centennial 8 Replat A for a minor subdivision to consolidate lots at 1006 Honeysuckle Lane & 1008 Honeysuckle Lane.

Attachments:
1. Resolution No. 72, Series 2026
2. Final Plat 1006 1008 Honeysuckle Lane
3. Planning Commission Resolution
4. Application Materials
5. Staff Presentation

RESOLUTION NO. 72
SERIES 2026

A RESOLUTION APPROVING THE CENTENNIAL 8 REPLAT B TO FACILITATE A MINOR SUBDIVISION TO COMBINE 1006 HONEYSUCKLE LANE AND 1008 HONEYSUCKLE LANE

WHEREAS, there has been submitted to the Louisville City Council an application for approval of a replat (minor subdivision) to combine 1008 Honeysuckle Lane (Lot 36, Centennial 8 Replat A) and 1006 Honeysuckle Lane (Lot 35, Centennial 8 Replat A) into a new lot 35A; and

WHEREAS, City staff has reviewed the information submitted and found the application complies with the Louisville zoning regulations and other applicable sections of the Louisville Municipal Code; and

WHEREAS, the Planning Commission considered the application at a duly noticed public hearing on June 11, 2026, at which evidence and testimony were entered into the record, including the Louisville Planning Commission Staff Report, and the Planning Commission voted unanimously in favor of recommending approval; and

WHEREAS, the City Council considered the application at a duly noticed public hearing on August 4, 2026, at which evidence and testimony were entered into the record, including the findings in the Louisville City Council staff report dated August 4, 2026; and

WHEREAS, the City Council finds the application should be approved, as set forth herein.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The Centennial 8 Replat B, a minor subdivision plat that combines 1008 Honeysuckle Lane (Lot 36, Centennial 8 Replat A) and 1006 Honeysuckle Lane (Lot 35, Centennial 8 Replat A) into a new lot 35A, is hereby approved.

PASSED AND ADOPTED this 4th day of August, 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

CENTENNIAL 8 REPLAT B

A REPLAT OF LOTS 35 & 36, CENTENNIAL 8 REPLAT A LOCATED IN THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M. CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

SHEET 1 OF 1

TOTAL AREA = 13,077 SQ. FT. OR 0.300 ACRE, MORE OR LESS

CERTIFICATE OF DEDICATION AND OWNERSHIP:

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED BEING THE OWNER OF A TRACT OF LAND DESCRIBED IN DEEDS RECORDED IN THE RECORDS OF BOULDER COUNTY AT RECEPTION NO. 3796814 ON JUNE 19, 2020 AND RECEPTION NO. 3447950 ON MAY 18, 2015, LOCATED IN THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M. CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

LOTS 35 & 36, CENTENNIAL 8 REPLAT A, COUNTY OF BOULDER, STATE OF COLORADO.

CONTAINING 13,077 SQUARE FEET OR 0.300 ACRE, MORE OR LESS.

HAS LAID OUT, PLATTED, AND SUBDIVIDED THE SAME INTO LOTS, UNDER THE NAME AND STYLE OF CENTENNIAL 8 REPLAT B:

OWNERSHIP SIGNATURE BLOCK

HAVE LAID OUT, PLATTED AND SUBDIVIDED THE SAME INTO LOTS UNDER THE NAME OF CENTENNIAL 8 REPLAT B:

WITNESS MY/OUR HAND(S) AND SEAL(S) THIS _____ DAY OF _____ A.D. 20___.

_____
JOEL HAWKSLEY SIGNATURE

_____
NOTARY NAME (PRINT)

_____(NOTARY SEAL)
NOTARY SIGNATURE

_____
CAITLIN HAWKSLEY SIGNATURE

_____
NOTARY NAME (PRINT)

_____(NOTARY SEAL)
NOTARY SIGNATURE

OWNERSHIP SIGNATURE BLOCK

HAVE LAID OUT, PLATTED AND SUBDIVIDED THE SAME INTO LOTS UNDER THE NAME OF CENTENNIAL 8 REPLAT B:

WITNESS MY/OUR HAND(S) AND SEAL(S) THIS _____ DAY OF _____ A.D. 20___.

_____
LYNDA M FAIRES SIGNATURE

_____
NOTARY NAME (PRINT)

_____(NOTARY SEAL)
NOTARY SIGNATURE

NOTES:

1) THIS PLAT WAS PREPARED FOR THE EXCLUSIVE USE OF PERSONS NAMED IN THE STATEMENT HEREON. SAID STATEMENT DOES NOT EXTEND TO ANY UNNAMED PERSON WITHOUT AN EXPRESS STATEMENT BY THE SURVEYOR NAMING SAID PERSON.

2) THIS LAND SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY EHRHART LAND SURVEYING, LLC TO DETERMINE OWNERSHIP OF THIS TRACT OR VERIFY EASEMENTS OF RECORD. REFERENCE IS MADE TO WFG NATIONAL TITLE INSURANCE COMPANY COMMITMENT NO. 25-239222, WITH A COMMITMENT DATE OF DECEMBER 23, 2025 AND WFG NATIONAL TITLE INSURANCE COMPANY COMMITMENT NO. 26-100249, WITH A COMMITMENT DATE OF DECEMBER 29, 2025 FROM WHICH THIS SURVEY IS BASED. THIS PROPERTY IS SUBJECT TO ALL COVENANTS AND RESTRICTIONS RELATING TO THE USE AND CHARACTER OF THE LAND AND ALL MATTERS APPEARING OF PUBLIC RECORD AND AS MAY BE DISCLOSED BY A MORE RECENT TITLE COMMITMENT OR REPORT.

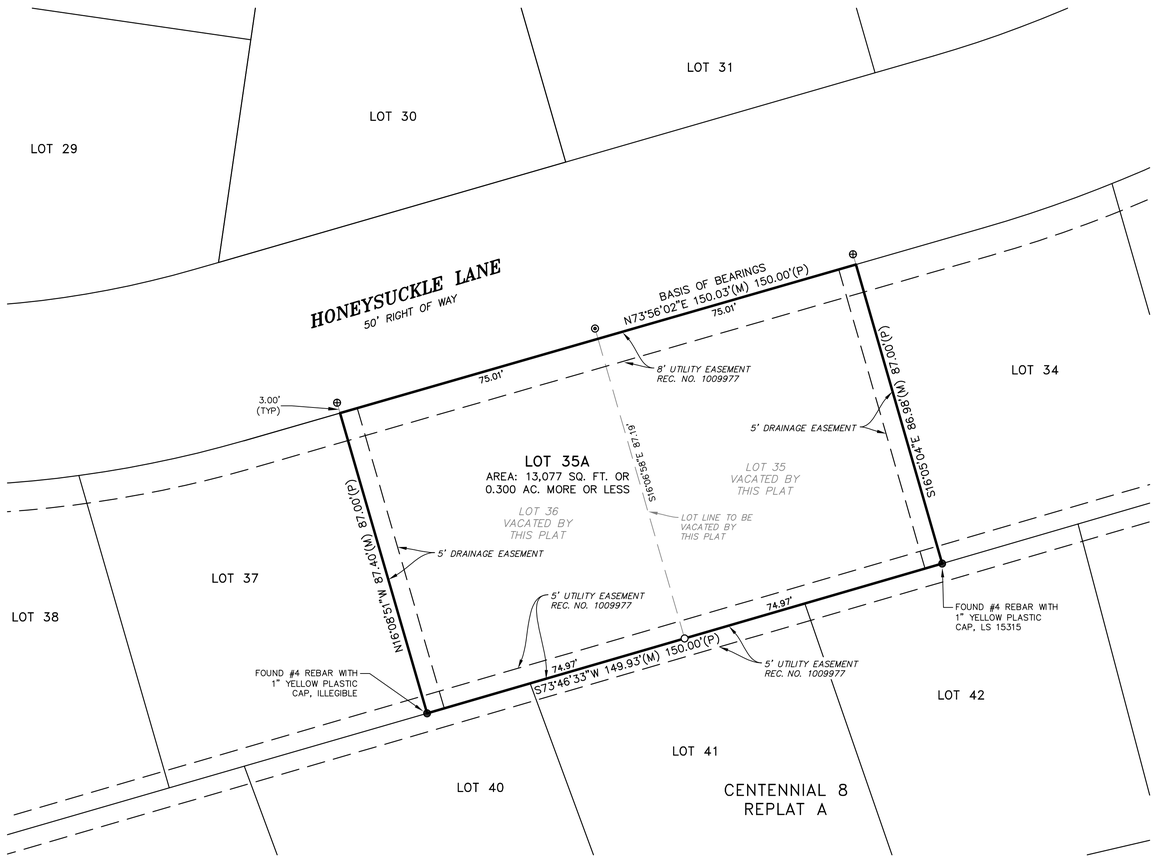
3) LINEAL UNITS USED ARE U.S. SURVEY FEET.

4) BASIS OF BEARINGS: THE NORTHWESTERLY LINE OF THE SUBJECT PROPERTY, BEARING N73°56'02"E (MEASURED), A DISTANCE OF 150.03 FEET, MONUMENTED AS SHOWN HEREON.

5) ALL RIGHT-OF-WAY AND LOT AND BLOCK INFORMATION WAS TAKEN FROM THE PLAT OF CENTENNIAL 8, REPLAT A RECORDED OCTOBER 24, 1989 AT RECEPTION NO. 1009977.

6) NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE SURVEYOR'S STATEMENT SHOWN HEREON.

7) PER THE STATE OF COLORADO BOARD OF LICENSURE FOR ARCHITECTS, PROFESSIONAL ENGINEERS, AND PROFESSIONAL LAND SURVEYORS RULE 1.6.B.2, THE WORD "CERTIFY" AS USED HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED. THE SURVEY REPRESENTED HEREON HAS BEEN PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH APPLICABLE STANDARDS OF PRACTICE AND IS BASED UPON MY KNOWLEDGE, INFORMATION AND BELIEF.





VICINITY MAP
NOT TO SCALE

LEGEND

- ⊙ FOUND BRASS DISK & NAIL, EHRHART PLS 29414 – 3.00' OFFSET
- ○ FOUND #5 REBAR WITH 1.25" YELLOW PLASTIC CAP, EHRHART PLS 29414
- ● FOUND PROPERTY CORNER AS DESCRIBED
- ⊕ FOUND CHISELED CROSS IN CONCRETE – 3.00' OFFSET – UNLESS NOTED OTHERWISE
- (M) MEASURED DISTANCE
- (P) PLATTED DISTANCE RECEPTION NO. 1009977

NORTH

SCALE: 1" = 20'

0 10 20 40

CITY COUNCIL CERTIFICATE:

APPROVED THIS _____ DAY OF _____, 2025, BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO.
RESOLUTION NO. ___, SERIES _____

_____
MAYOR SIGNATURE

_____
CITY CLERK SIGNATURE

PLANNING COMMISSION CERTIFICATE:

RECOMMENDED APPROVAL THIS _____ DAY OF _____, 2025, BY THE PLANNING COMMISSION OF THE CITY OF LOUISVILLE, COLORADO.
RESOLUTION NO. ___, SERIES _____

SURVEYOR'S STATEMENT:

I, JOHN P. EHRHART, A DULY REGISTERED LAND SURVEYOR, LICENSED IN THE STATE OF COLORADO, HEREBY STATE FOR AND ON BEHALF OF EHRHART LAND SURVEYING, LLC, THAT A SURVEY OF THE ABOVE DESCRIBED PREMISES WAS CONDUCTED BY ME OR UNDER MY DIRECT SUPERVISION, RESPONSIBILITY AND CHECKING ON OR AROUND DECEMBER 1, 2025; THAT SAID SURVEY AND THE ATTACHED PRINT HEREON WERE MADE IN SUBSTANTIAL ACCORDANCE WITH C.R.S. 38-51-106 "LAND SURVEY PLAT".

COLORADO REGISTERED JOHN P. EHRHART 29414 PROFESSIONAL LAND SURVEYOR

_____
JOHN P. EHRHART
COLORADO P.L.S. #29414
EHRHART LAND SURVEYING, LLC
PO BOX 930, ERIE, CO 80516
PHONE: 303-828-3340

EHRHART
LAND SURVEYING
P.O. Box 930 • Erie, Colorado 80516
(303) 828-3340
www.coloradols.com

SHEET:	1 OF 1
DATE:	3/11/26
DRAWN BY:	JMH
PROJECT:	S255498

RESOLUTION NO. 9
SERIES 2026

A RESOLUTION RECOMMENDING APPROVAL OF THE CENTENNIAL 8 REPLAT B TO FACILITATE THE MINOR SUBDIVISION AT 1006 HONEYSUCKLE LAND AND 1008 HONEYSUCKLE LAND.

WHEREAS, A final plat approval is requested for a replat (minor subdivision) to combine 1008 Honeysuckle Lane (Lot 36) and 1006 Honeysuckle Lane (Lot 35) into new lot 35A; and

WHEREAS, City staff has reviewed the information submitted and found that the application complies with the Louisville zoning regulations and other applicable sections of the Louisville Municipal Code; and

WHEREAS, the Planning Commission has considered the application at a duly noticed public hearing on June 11, 2026, where evidence and testimony were entered into the record, including the findings in the Louisville Planning Commission staff report dated June 11, 2026; and

NOW THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Louisville, Colorado does hereby recommend approval of the Centennial 8 Replat B..

PASSED AND ADOPTED this 11tj day of June, 2026.

By: _____
Steve Brauneis, Chair
Planning Commission

Attest: _____
Cullen Choi, Secretary
Planning Commission

City of Louisville
COLORADO • SINCE 1878

Community Development Department

749 Main Street • Louisville CO 80027 • 303.335.4592 • www.louisvilleco.gov

Development Review Application Form

Please complete this form and include it with the submittal documents for your development review application. Applications will not be processed until all required information is provided to the satisfaction of the City of Louisville Planning Department.

Property Information

Common Address(es): 1006 & 1008 Honeysuckle Lane, Louisville, CO 80027
Legal Description:
Lot 35 & 36 Block 1 Subdivision Centennial 8
Lot Area: 35: 6453 ft^2 36: 6432 ft^2 Sq. Ft. or _____Acres

LAND USE PROCESS (check all that apply)

- ❑ Annexation
- ❑ Concept Plan
- ❑ Easement Vacation
- ❑ Oil and Gas
- ❑ General Development Plan (GDP)
  - ❑ Amendment
  - ❑ New GDP
- ❑ Planned Unit Development (PUD)
  - ❑ Amendment
  - ❑ Preliminary
  - ❑ New PUD
- ❑ Rezoning
- ❑ Special Review Use (SRU)
  - ❑ Amendment
  - ❑ New SRU
- ❑ Subdivision
  - ❑ Final or Replat
  - ❑ Preliminary Plat
- ❑ Temporary Use Permit
- ❑ Variance
- ❑ Vested Property Right
- ❑ Wireless Facility
- ❑ Other: _____

PROJECT DESCRIPTION:

Property Owner Information

Name: Lynda Faires (35) Joel & Caitlin Hawksley (36) Entity (if applicable) _____
Address: Lynda: 218 S Cleveland Ave, Louisville, CO 80027 Joel: 1008 Honeysuckle Lane, Louisville
Phone: [redacted] Email: [redacted]

Application Representative Information

Name: Joel & Caitlin Hawksley Entity (if applicable) _____
Address: 1008 Honeysuckle Lane, Louisville, CO
Phone: [redacted] Email: [redacted]

Certification/Signature

I certify that the information I have submitted is true and correct to the best of my knowledge and in filing the application and submittal documents, I am acting as and/or with the knowledge and consent of those persons who are owners of the subject property or are parties to this application.

Joel Hawksley — Joel Hawksley — January 5, 2026
Signature* Print Name Date

***If acting as a representative/agent of the owner, include written authorization from the owner that certifies the agent's right to submit this application**

Lynda Faires
218 S Cleveland Avenue
Louisville, CO 80027

November 19, 2025

To whom it may concern,

I authorize Caitlin & Joel Hawksley to pursue approval of a replat combining 1006 and 1008 Honeysuckle Ln.

Lynda Faires

Lynda Faires
Owner of 1006 Honeysuckle Lane, Louisville, CO

January 7, 2026

To: City of Louisville Planning Commission and City Council

From: Joel and Caitlin Hawksley

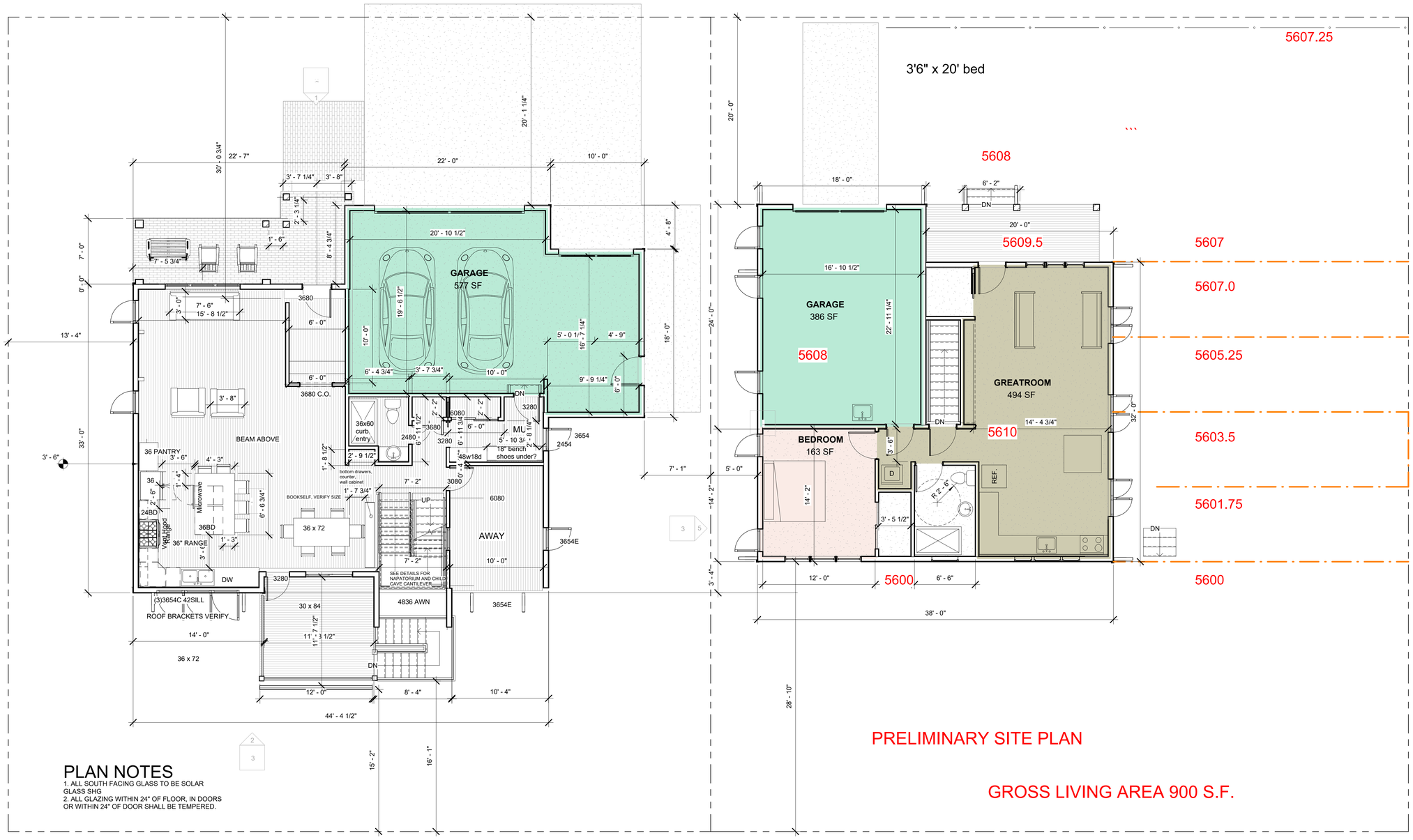
RE: Land Use Application to consolidate 1006 and 1008 Honeysuckle Lane (Lots 35 and 36), Centennial 8 subdivision

We purchased the property at 1008 Honeysuckle Lane in June 2020 and it became our home. On December 30th, 2021, the Marshall Fire completely destroyed our house. We moved back into our rebuilt home in March 2024.

We would like to purchase lot 35 (1006 Honeysuckle Lane) and consolidate it with our lot (36) for the purpose of creating a larger lot for a residential garden, play space for our two boys, and building a potential new Accessory Dwelling Unit (ADU), using the existing sewer and water taps for lot 35. Our intention is for the ADU to be accessible.

We are respectfully asking for a subdivision modification dissolving the lot line between the two lots. Doing so will allow us to develop the combined property to serve the needs of our family for generations to come.

Thank you for your time and consideration.



PLAN NOTES

1. ALL SOUTH FACING GLASS TO BE SOLAR GLASS SHG
2. ALL GLAZING WITHIN 24" OF FLOOR, IN DOORS OR WITHIN 24" OF DOOR SHALL BE TEMPERED.

PRELIMINARY SITE PLAN

GROSS LIVING AREA 900 S.F.

1 SITE PLAN
3/16" = 1'-0"

PROJECT DATE
1-5-2026

REVISIONS

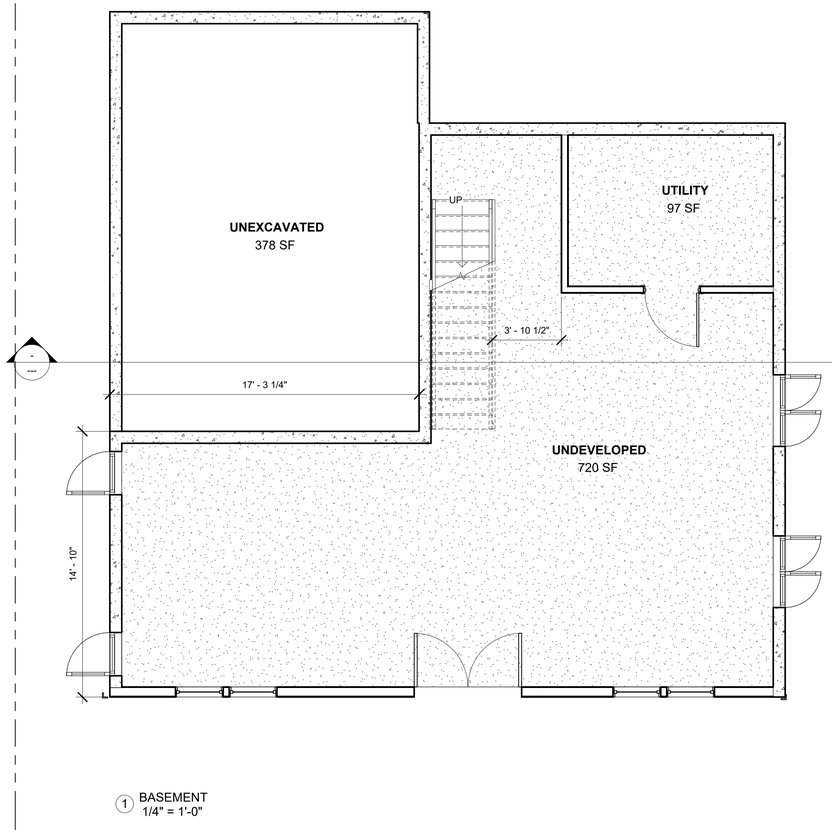
Cait and Joel Hawksley
1006 Honeysuckle Lane
Louisville, Ohio

RICK HAWKSLEY ARCHITECT
120 Portage Street
Kent, Ohio 44240
330.715.2354
rick@hawksley.org

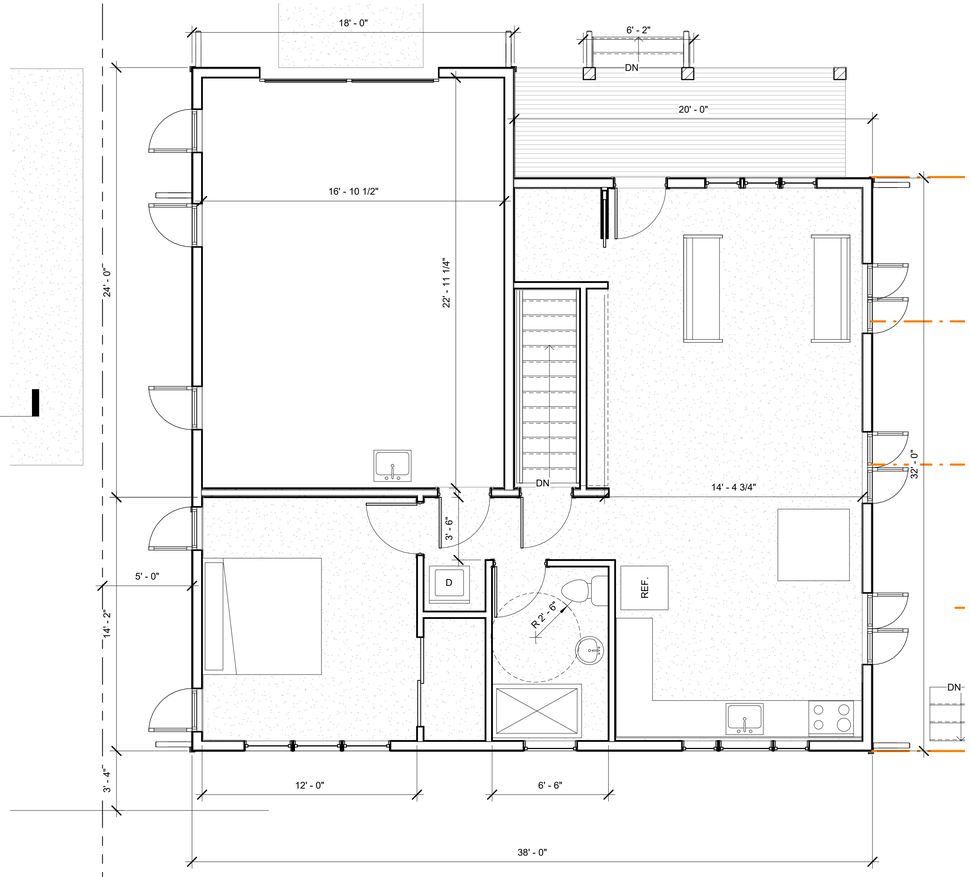
CONTENTS

1

Scale 3/16" = 1'-0"



1 BASEMENT
1/4" = 1'-0"



2 FIRST FLOOR PLAN
1/4" = 1'-0"

PROJECT DATE
1-5-2026

REVISIONS

Cait and Joel Hawksley
1006 Honeysuckle Lane
Louisville, Ohio

RICK HAWKSLEY ARCHITECT
120 Portage Street
Kent, Ohio 44240
330.715.2354
rick@hawksley.org

CONTENTS

2

Scale 1/4" = 1'-0"

NEW ADU

EXISTING HOUSE



1 NORTH ELEVATION
3/16" = 1'-0"

2 SOUTH ELEVATION
3/16" = 1'-0"



4 EAST ELEVATION
3/16" = 1'-0"

PROJECT DATE
1-5-2026

REVISIONS

Cait and Joel Hawksley
1006 Honeysuckle Lane
Louisville, Ohio

RICK HAWKSLEY ARCHITECT
120 Portage Street
Kent, Ohio 44240
330.715.2354
rick@hawksley.org

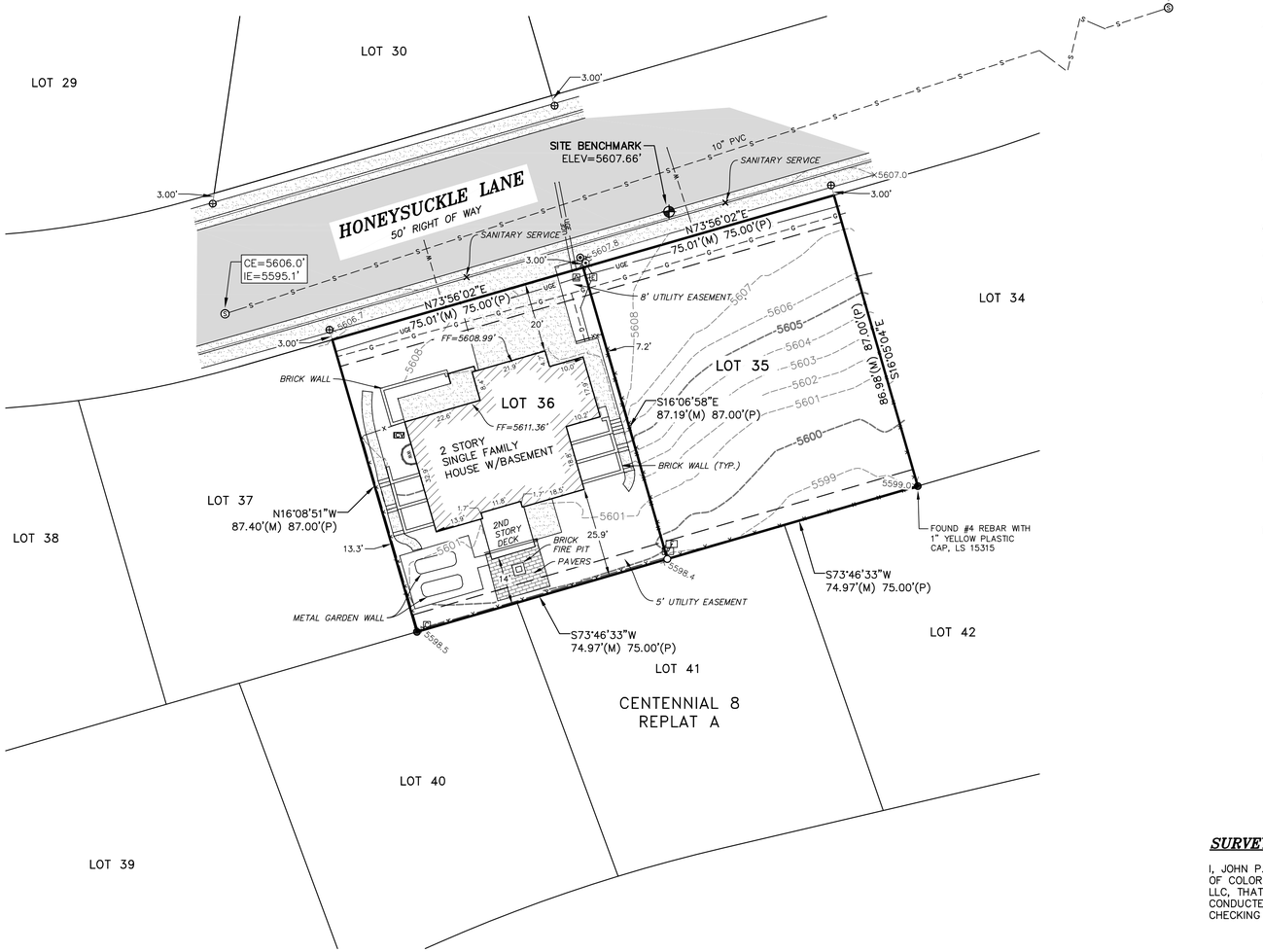
CONTENTS

3

Scale 3/16" = 1'-0"

LEGEND

- SITE BENCHMARK
- SET BRASS DISK & NAIL, EHRHART PLS 29414 – 3.00' OFFSET
- SET #5 REBAR WITH 1.25" YELLOW PLASTIC CAP, EHRHART PLS 29414
- FOUND PROPERTY CORNER AS DESCRIBED
- FOUND CHISELED CROSS IN CONCRETE – 3.00' OFFSET – UNLESS NOTED OTHERWISE
- (P) PLATTED DISTANCE
- (M) MEASURED DISTANCE
- CE COVER ELEVATION
- IE INVERT ELEVATION
- X 5107.3 SPOT ELEVATION
- Ⓢ SEWER MANHOLE
- –S– SEWER LINE
- –UGE– UNDERGROUND ELECTRIC LINE
- [E] ELECTRIC PEDESTAL
- ELECTRIC TRANSFORMER BOX
- LIGHT POLE
- –G– GAS LINE
- –W– WATER LINE
- –X– FENCE
- CONCRETE
- ASPHALT
- BUILDING



NORTH

SCALE: 1" = 20'

0 10 20 40

LEGAL DESCRIPTION:

LOT 35 & 36, CENTENNIAL 8 REPLAT A, COUNTY OF BOULDER, STATE OF COLORADO.

CONTAINING 13,077 SQUARE FEET OR 0.300 ACRE, MORE OR LESS.

NOTES:

1) THE PURPOSE OF THIS SURVEY IS TO SHOW CERTAIN TOPOGRAPHIC FEATURES, AS REQUESTED BY CLIENT.
2) THIS TOPOGRAPHIC SURVEY IS NOT A "LAND SURVEY PLAT" OR AN "IMPROVEMENT SURVEY PLAT". APPROXIMATE PROPERTY LINES SHOWN HEREON ARE FROM RECORD PROPERTY DESCRIPTIONS PROVIDED BY CLIENT. BOUNDARY DETERMINATIONS ARE NOT A PART OF THE SURVEYOR'S STATEMENT SHOWN HEREON.
3) EASEMENTS AND PUBLIC DOCUMENTS SHOWN OR NOTED HEREON WERE EXAMINED AS TO LOCATION AND PURPOSE AND WERE NOT EXAMINED AS TO RESERVATIONS, RESTRICTIONS, CONDITIONS, OBLIGATIONS, TERMS, OR AS TO THE RIGHT TO GRANT THE SAME.
4) BENCHMARK: NGS "W 413" – PID: LL1549 – ELEV = 5459.62' (NAVD88–GEOID 18)

   SITE BENCHMARK: CHISELED CROSS IN CONCRETE PAN OF HONEYSUCKLE LANE. ELEV=5607.66' (NAVD88–GEOID18)
5) THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE COMMITMENT AND DOES NOT CONSTITUTE A TITLE SEARCH BY EHRHART LAND SURVEYING, LLC TO DETERMINE OWNERSHIP OF THIS TRACT, VERIFY THE DESCRIPTION SHOWN, VERIFY THE COMPATIBILITY OF THIS DESCRIPTION WITH THAT OF ADJACENT TRACTS, OR VERIFY EASEMENTS OF RECORD.
6) LINEAL UNITS USED ARE U.S. SURVEY FEET
7) ALL RIGHT–OF–WAY AND LOT AND BLOCK INFORMATION WAS TAKEN FROM THE PLAT OF CENTENNIAL 8, REPLAT A RECORDED OCTOBER 24, 1989 AT RECEPTION NO. 1009977.
8) UTILITY LOCATIONS AND PIPE SIZES SHOWN ARE FROM VISIBLE SURFACE EVIDENCE, MAPS PROVIDED AND LOCATES BY OTHERS. THIS OFFICE CANNOT ACCEPT RESPONSIBILITY FOR THE ACCURACY OF THE UNDERGROUND IMPROVEMENTS SHOWN HEREON. UNDERGROUND UTILITY CONNECTIONS FOR WHICH THERE ARE NO PUBLIC RECORDS READILY AVAILABLE ARE NOT SHOWN. FOR SPECIFIC LOCATIONS DURING CONSTRUCTION CALL THE UTILITY NOTIFICATION CENTER OF COLORADO AT 1–800–922–1987.
9) TOPOGRAPHIC AREA IS LOCATED IN FLOOD ZONE "X" (AREA OF MINIMAL FLOOD HAZARD) PER FLOOD INSURANCE RATE MAP FOR BOULDER COUNTY, COLORADO AND INCORPORATED AREAS, MAP NUMBER 08013C0581J (MAP NOT PRINTED), DATED DECEMBER 18, 2012.
10) NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE SURVEYOR'S STATEMENT SHOWN HEREON.
11) PER THE STATE OF COLORADO BOARD OF LICENSURE FOR ARCHITECTS, PROFESSIONAL ENGINEERS, AND PROFESSIONAL LAND SURVEYORS RULE 1.6.B.2, THE WORD "CERTIFY" AS USED HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED. THE SURVEY REPRESENTED HEREON HAS BEEN PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH APPLICABLE STANDARDS OF PRACTICE AND IS BASED UPON MY KNOWLEDGE, INFORMATION AND BELIEF.

SURVEYOR'S STATEMENT:

I, JOHN P. EHRHART, A DULY REGISTERED LAND SURVEYOR, LICENSED IN THE STATE OF COLORADO, HEREBY STATE FOR AND ON BEHALF OF EHRHART LAND SURVEYING, LLC, THAT A TOPOGRAPHIC SURVEY OF THE ABOVE DESCRIBED PREMISES WAS CONDUCTED BY ME OR UNDER MY DIRECT SUPERVISION, RESPONSIBILITY AND CHECKING ON OR AROUND DECEMBER 1, 2025.

JOHN P. EHRHART
COLORADO P.L.S. #29414
EHRHART LAND SURVEYING, LLC
PO BOX 930, ERIE, CO 80516
PHONE: 303–828–3340

COLORADO REGISTERED JOHN P. EHRHART 12/19/25 29414 PROFESSIONAL LAND SURVEYOR

PROJECT NO.
S255498

EHRHART
LAND SURVEYING
P.O. Box 930
Erie, Colorado 80516
(303) 828-3340
www.coloradols.com

TOPOGRAPHIC SURVEY

1008 & 1006 HONEYSUCKLE LANE
LOT 35 & 36, CENTENNIAL 8 REPLAT A
SW 1/4 SECTION 7, T1S, R69W OF THE 6TH P.M.
CITY OF LOUISVILLE, BOULDER COUNTY, COLORADO

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DATE: 12/19/25
FIELD WORK BY: IRE
DRAWN BY: JMH
CHECKED BY: JPE

SHEET NO.
1 OF 1

1006-1008 Honeysuckle Lane Minor Subdivision

City Council, August 4, 2026

Presented by: Jess Daniels, Senior Planner

Community Development

Background

- Subject Properties:
  - Lot 36 Centennial 8 Replat B (1008 Honeysuckle Lane)
  - Lot 35, Centennial 8 Replat B (1006 Honeysuckle Lane)
- Affected by Marshall Fire
  - 1008 Honeysuckle rebuilt by current owner and applicant
  - 1006 Honeysuckle is vacant (for sale)
- Residential Estate (R-E) zoning
- Centennial 8 Replat B
  - Land dedication requirements satisfied by Centennial 8 Subdivision agreement, 1987



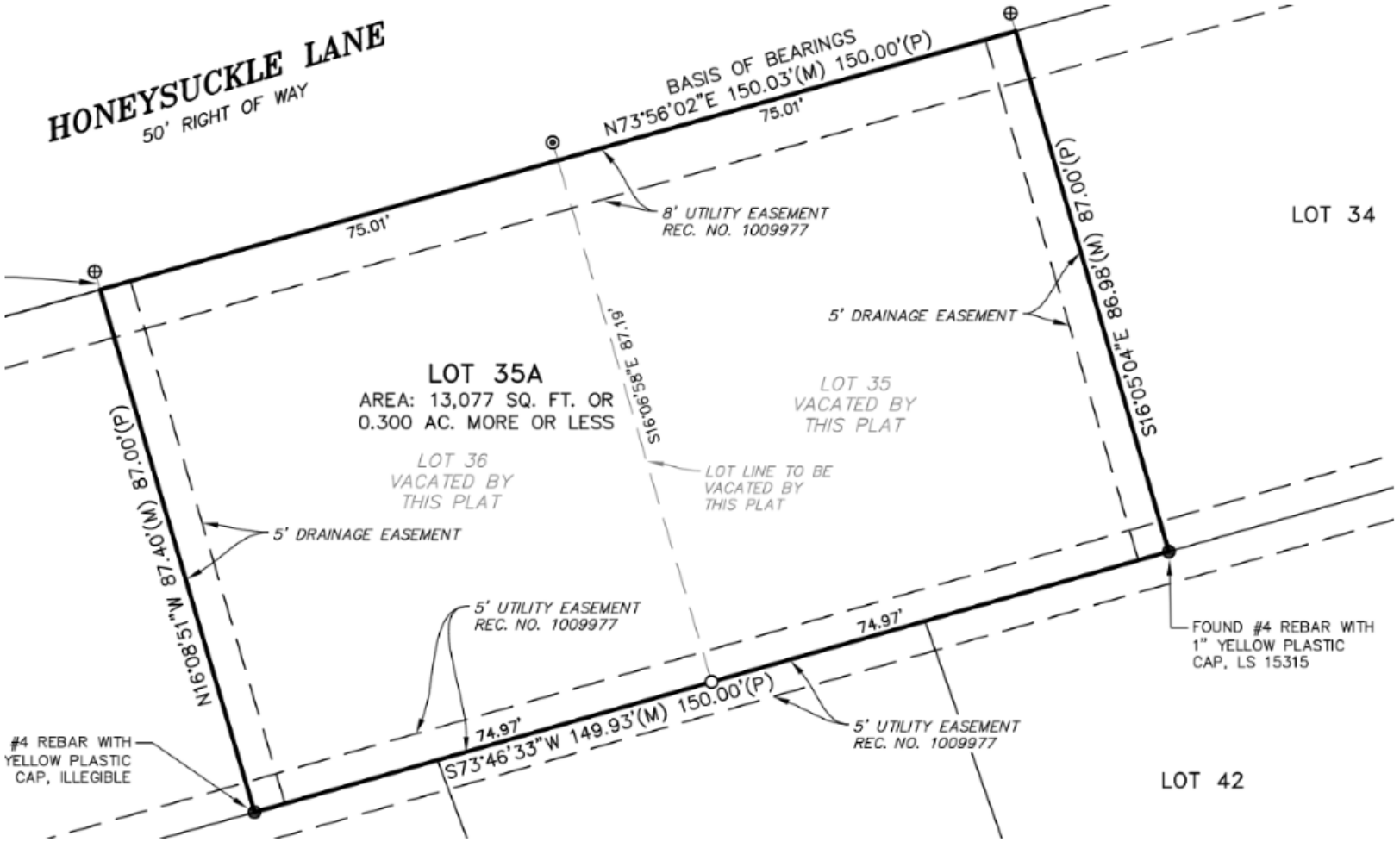
Current image of subject properties

City of Louisville

Proposal

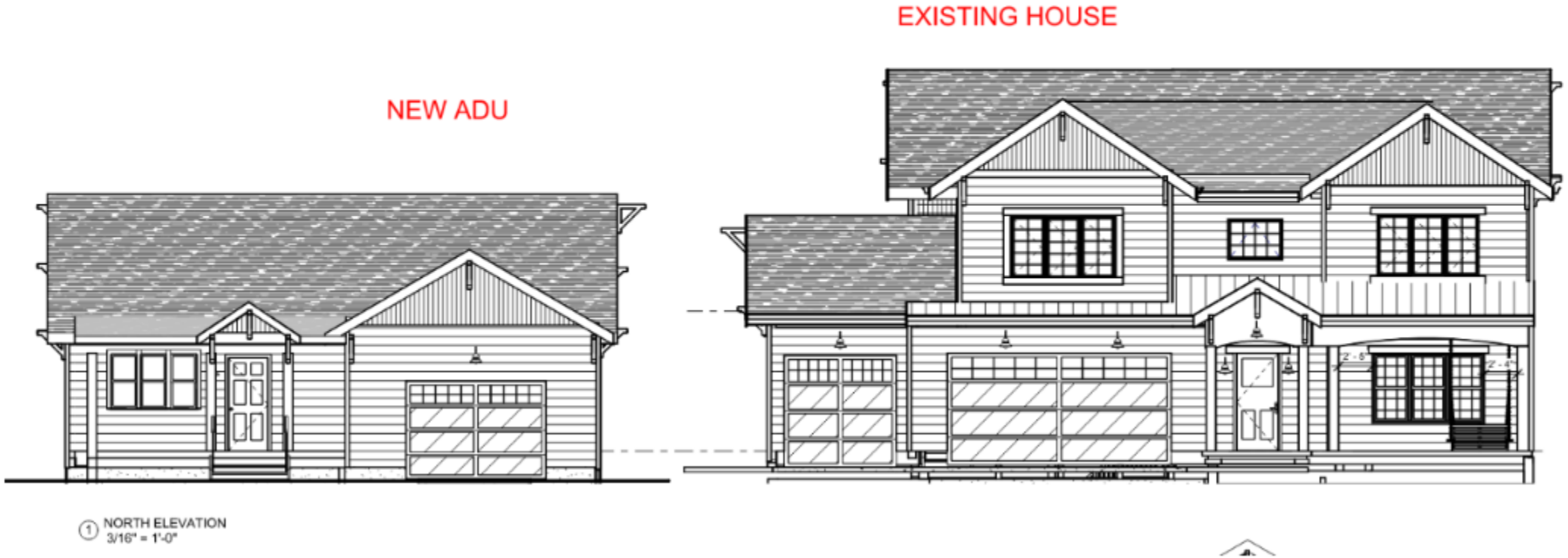
- Minor Subdivision procedure (LMC *Sec 16.12.110.)* to consolidate Lot 36 and Lot 35 into new lot 35A
- Proposed Lot 35A:
  - 13,077 square feet
  - 150 feet in width
- Purpose is for applicant to have one larger lot to increase space for a residential garden, play area for their children, and to support future plans for a new accessible Accessory Dwelling Unit (ADU).

Figure 1: Proposed Lot Consolidation Plat



City of Louisville

Figure 2: Conceptual Plan for New ADU



Analysis

- Meets the final plat criteria, applicable zoning requirements, and subdivision design standards”
  - Current lot coverage entitlement is 30% for each Lot (35 & 36)
  - New Lot 35A reduced lot coverage to 20% of lot size or 3000 sq ft, whichever is greater (for R-E lots over 12,001 square feet)
  - Compatible with neighboring development patterns
    - Lots nearby range in size from 6,426 sq. ft. to 9,822 sq. ft., with lot coverage allowances that range between 1,928 sq. ft. and 2,700 sq.
    - Additional 300 sq feet not significantly larger than next largest lot coverage in neighborhood
    - Total lot coverage is less for the combined lots than sum of two individual lots
  - Public improvements include new waterline/water meter to 1006 Honeysuckle Lane (per Subdivision Agreement)

Staff Recommendation

Staff recommend approval of Resolution X, 2026, approving the Centennial 8 Replat A to facilitate the minor subdivision at 1006 Honeysuckle Lane & 1008 Honeysuckle Lane.

City of Louisville

City of Louisville
COLORADO • SINCE 1878

City Council Communication
Agenda Item 8.D.

Subject: Resolution No. 73, Series 2026 — A Resolution Designating the Residence Located at 1101 Main Street a Historic Landmark to be Named the Caranci House and Awarding a Landmark Grant Incentive

This will be the only reading of this item and final action may be taken. There will be one round of public comment.

Date: August 4, 2026

Prepared By: Jessica Daniels, Senior Planner

Presented By: Jessica Daniels, Senior Planner

Summary:

The applicant requests designation of the residence at 1101 Main Street as a local historic landmark, to be known as the Caranci House, pursuant to Chapter 15.36 of the Louisville Municipal Code. The property was constructed circa 1928 and is eligible for landmark designation based on its age, architectural, social, and geographic significance. The Historic Preservation Commission conducted a public hearing on June 15, 2026 and recommended approval of the designation and the associated landmark incentive bonus of $7,700.00. Staff concurs with the Commission's recommendation and recommends approval.

VICINITY MAP:



Background / Prior Discussions:

HISTORICAL BACKGROUND:

Information from Gigi Yang, Louisville Historical Museum

The property is associated with Italian culture in Louisville and the achievements of the individual Louisville residents of Italian heritage who have owned it. The Italian-born Jacoe brothers, Eliseo and Frank, owned the parcel individually or jointly for 45 years. They were musicians who were trained in Italy and who played in bands in the Louisville area and in Denver, often alongside other Italian-born musicians. Additionally, Eliseo and Annie Jacoe, who constructed the house at 1101 Main and who lived there until the 1950s, operated the Jacoe grocery store, which was a neighborhood store that also sold Italian foods to Louisville's residents of Italian heritage.

Later, from 1959 until the present, the Eugene and Virginia Caranci family owned and lived in the house. Eugene Caranci was one of the founders of Louisville's Society of Italian Americans. Virginia Caranci was the primary person responsible for the preservation of the Jacoe Store and Tomeo House buildings and the establishment of the Louisville Historical Museum in 1986. Virginia served on the Historical Commission for 30 years, from when the Commission was first created in 1979 until 2009, serving as Chair for many of those years. Eugene and Virginia Caranci were both instrumental in the shaping of Louisville, including working towards the establishment of Monarch High School, Avista Hospital, Coal Creek Golf Course, and other Louisville institutions, in addition to working on many Louisville community events through their involvement with the Chamber, Society of Italian Americans, the Historical Museum, and other organizations.

Please see the attached Social History Report (Attachment No. 2) for more information.



Photo from 1948 Boulder County Assessors Card



Photo of 1101 Main Street, *Stories in Place*



Current Photo of 1101 Main Street


Current Photo of 1101 Main Street


Current Photo of 1101 Main Street

ARCHITECTURAL INTEGRITY:
"Stories in Places: Putting Louisville's Residential Development in Context" (2018) identified 1101 Main Street as a Bungalow Form (1900-1930) architectural type and used this property as an example of the Bungalow Form in Louisville generally, which are abundant in Louisville. Bungalows are one or one-and-one-half-story mass-plan houses that tend to (but not always) have large front porches. They reflect many of the ideals of the Arts and Crafts movement (1880–1920). Bungalows in Louisville also commonly feature stucco as the exterior material, such as seen at 1101 Main Street.

The property is also identified as a stucco clipped gable with porch and high integrity.



Photo of 1101 Main as an example of the Bungalow form prevalent in the City, and identifying key Bungalow Form characteristics from *Stories in Place,* Figure 122, pg. 111.

HISTORIC PRESERVATION COMMISSION RECOMMENDATION
At their meeting on June 15, 2026, the Historic Preservation Commission passed Resolution 7, Series 2026 (Attachment No. 3), recommending that the City Council approve the landmark designation at 1101 Main Street with an incentive grant in the amount of $7,700.00 and that the structure be named the Caranci House. LINK: June 15, 2026, Historic Preservation Commission Meeting

Development Proposal:
The applicant requests designation of the existing residence at 1101 Main Street as a local historic landmark pursuant to Chapter 15.36 of the Louisville Municipal Code. No physical alterations, additions, or redevelopment are proposed as part of this application. The request includes naming the property the Caranci House and approval of the associated landmark incentive grant.

Analysis:
HISTORICAL SIGNIFICANCE ANALYSIS AND CRITERIA FOR LISTING AS LOCAL LANDMARK:
In order to receive a City Landmark designation, landmarks must be at least 50 years old and meet one or more of the criteria for architectural, social or geographic/environmental significance as set forth in Louisville Municipal Code (LMC) Section 15.36.050(A).

Sec. 15.36.050. - Criteria for Designation

Staff analysis of the criteria is as follows:

Criteria	Meets Criteria?	Evaluation
1. *Landmarks must be at least 50 years old and meet one or more of the criteria for architectural, social or geographic/environmental significance as described in this chapter.*	**Yes**	1101 Main Street was constructed ca.1928 making it approximately 98 years old, exceeding the minimum age requirement for designation as a local landmark.
1. a. Architectural. 1. ***Exemplifies specific elements of an architectural style or period.*** 2. *Example of the work of an architect or builder who is recognized for expertise nationally, statewide, regionally, or locally.* 3. *Demonstrates superior craftsmanship or high artistic value.* 4. *Represents an innovation in construction, materials or design.* 5. *Style particularly associated with the Louisville area.* 6. *Represents a built environment of a group of people in an era of history that is culturally significant to Louisville.* 7. *Pattern or grouping of elements representing at least one of the above criteria.* 8. *Significant historic remodel.*	**Yes**	The residence is a high-integrity example of the Bungalow form, one of Louisville's predominant historic residential building types. As documented in Stories in Place, the property retains the character-defining features of the Bungalow style and is identified as a representative example of this architectural form.
1. b. Social. 1. *Site of historic event that had an effect upon society.* 2. ***Exemplifies cultural, political, economic or social***	**Yes**	The property is associated with the Jacoe and Caranci families, whose contributions to Louisville's Italian-American community, historic preservation efforts, and civic organizations are

heritage of the community. 3. ***Association with a notable person or the work of a notable person.***		documented in the Social History Report. These associations demonstrate the property's connection to Louisville's social and cultural heritage.
1. c. Geographic/environmental. 1. ***Enhances sense of identity of the community.*** 2. *An established and familiar natural setting or visual feature that is culturally significant to the history of Louisville.*	**Yes**	The property contributes to the historic residential character of Main Street and reinforces the visual identity of Louisville's historic neighborhoods. Its continued preservation maintains an established historic streetscape that is culturally significant to the community.
3. *All properties will be evaluated for physical integrity and shall meet one or more of the following criteria:* a. ***Shows character, interest or value as part of the development, heritage or cultural characteristics of the community, region, state, or nation.*** b. ***Retains original design features, materials and/or character.*** c. ***Remains in its original location, has the same historic context after having been moved, or was moved more than 50 years ago.*** d. *Has been accurately reconstructed or restored based on historic documentation.*	**Yes**	• Noted for its high integrity in *Stories in Place* • Exemplifies the Bungalow form which is abundant in Louisville • Appears to have maintained its historic footprint

Staff finds that 1101 Main Street exceeds the minimum age requirement for local landmark designation, retains a high degree of historic integrity, and meets the criteria for architectural, social, and geographic/environmental significance set forth in Section 15.36.050(A) of the Louisville Municipal Code. Based on the information contained in the landmark application, supporting historical documentation, and the Historic Preservation Commission's recommendation, staff finds the property eligible for

designation as a local historic landmark.

Council Work Plan:
N/A.

Fiscal Impact:
The landmark incentive of $7,700.00 would be paid to the property owner at the time of landmarking from the Historic Preservation Fund. There are adequate funds in the Historic Preservation Fund (approximatley $2.6M) to support the landmark designation.

Alternatives:
That the City Council deny the landmark designation request.

Recommendation:
That the City Council approve Resolution 73, Series 2026, approving the landmark designation with an incentive grant in the amount of $7,700, and that the structure be named the Caranci House.

Attachments:
1. Resolution No. 73, Series 2026
2. 1101 Main Social History
3. HPC Landmark Resolution
4. Staff presentation

RESOLUTION NO. 73
SERIES 2026

A RESOLUTION DESIGNATING THE RESIDENCE LOCATED AT 1101 MAIN STREET A HISTORIC LANDMARK TO BE NAMED THE CARANCI HOUSE AND AWARDING A LANDMARK GRANT INCENTIVE

WHEREAS, there has been submitted to the City Council an application requesting a landmark eligibility determination for a historical residential structure located at 1101 Main Street on property legally described as Lots 1 and 2, Block 2, Barclay Place, City of Louisville, County of Boulder, State of Colorado; and

WHEREAS, City staff and the Louisville Historic Preservation Commission have reviewed the application and found it to be in compliance with Chapter 15.36 of the Louisville Municipal Code;

WHEREAS, the Louisville Historic Preservation Commission held a properly noticed public hearing on the proposed landmark application and has forwarded to the City Council its recommendation of approval; and

WHEREAS, the City Council has duly considered the proposed landmark application and the Commission's recommendation and report, and has held a properly noticed public hearing on the application; and

WHEREAS, the City Council finds the residence at 1101 Main Street meets the criteria set forth in Section 15.36.050.A.1.a of the Louisville Municipal Code for social significance because it exemplifies the cultural, political, economic, or social heritage of the community considering its association with various Louisville families and Louisville's cultural heritage and for architectural significance because it has architectural integrity that is representative of the built environment in 1900s Louisville; and

WHEREAS, the City Council finds this social and architectural significance justifies the approval of the historic landmark application, and the award of the landmark grant incentive as provided herein.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The proposed historic landmark application for the residence located at 1101 Main Street is hereby approved and is hereby designated a historic landmark to be known as the Caranci House

Section 2. As a historic landmark, the Caranci House is eligible for incentives offered by the City for historic landmarks, including a $7,700 landmark incentive grant that

is hereby approved by the City Council.

Section 3. The City Clerk shall provide written notification of such designation to the property owners and cause a copy of this resolution to be recorded with the Boulder County Clerk and Recorder.

PASSED AND ADOPTED this 4th day of August, 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

Bridget Bacon
Louisville Historical Museum
Department of Cultural Services
City of Louisville, Colorado
June 2023

1101 Main St. History

Legal Description: Lots 1 & 2, Block 2, Barclay Place Addition

Year of Construction: 1928

Summary: The property is associated with Italian culture in Louisville and the achievements of the individual Louisville residents of Italian heritage who have owned it. The Italian-born Jacoe brothers, Eliseo and Frank, owned the parcel individually or jointly for 45 years. They were musicians who were trained in Italy and who played in bands in the Louisville area and in Denver, often alongside other Italian-born musicians. Additionally, Eliseo and Annie Jacoe, who had the house at 1101 Main constructed and who lived there until the 1950s, operated the Jacoe grocery store that was a neighborhood store that also sold Italian foods to Louisville's residents of Italian heritage. Later, from 1959 until the present, the Eugene and Virginia Caranci family has owned and lived in the house. Eugene Caranci was one of the founders of Louisville's Society of Italian Americans. Virginia Caranci was the primary person responsible for the preservation of the Jacoe Store and Tomeo House buildings and the establishment of the Louisville Historical Museum in 1986. Both are remembered for sharing stories and information about the Italian customs and culture that they grew up with in Louisville.

Prior to the current house that was constructed in 1928, the Fischer family had a carpentry shop on the property that the Jacoe family lived in.

Development of Barclay Place

The Colorado Mortgage and Investment Co., Limited, a corporation organized under the laws of Great Britain and doing business in Colorado, in 1897 platted the Barclay Place subdivision in which this property is located and began to sell lots. (A second plat filing for clarification was recorded in 1901.)

Herman H. Fischer Ownership, 1902-1909

In 1902, Hermann Heinrich (Herman H.) Fischer purchased Lots 1 & 2 of Block 2 (now 1101 Main) from the developers of Barclay Place. In the next year, 1903, he also purchased Lots 3 & 4 (now 1109 Main) from Lute McCorkle. Fischer (1845-1921) was born in Germany and married Marie Brasse in 1869. They then immigrated to the U.S. later the same year. They moved across the U.S. for the next few decades and came to Louisville in 1896 with some of their adult children.

Herman H. Fischer and his sons worked as builders and carpenters in Louisville. According to a written history from the Fischer family on file with the Louisville Historical Museum, they built the 1903 addition to the Louisville Public School; the State Mercantile Building at 801 Main; the Baptist Church at 701 Grant; the original Town Hall in the 700 block of Main; the Rex Theatre at 817 Main; the former Lackner Saloon (now Casa Alegre) at 1006 Pine; and the DiFrancia saloon at 740 Front (now the 740 Front restaurant). According to a different source, the Fischers also built the DiFrancia house at 1045 La Farge. After Herman H. Fischer's death in 1921, his sons and grandsons continued to build homes and businesses in Louisville, including such buildings as the Chamber of Commerce building at 901 Main and the restaurant at 809 Main (now Zucca).

At 1101 Main, on the back of the property, Herman H. Fischer and his sons constructed the original Fischer Carpentry Shop. It appears to have been used as a workshop for their carpentry business. No interior photos of it have been found. This building has been documented as being in this location in the written Fischer family history and in the following photo that originated with the Fischer family. The carpentry shop was located next to the alley and faced Short Street (the same location as the current garage at 1101 Main). Fischer presumably purchased the parcel for the purpose of using it for his business, as it was located a short distance from many of the buildings that he and his sons had under construction at the time.



In 1909, Fischer sold all of the lots, 1, 2, 3, and 4, to brothers Eliseo Jacoe and Marcello “Frank” Jacoe. (Despite photographic evidence showing the existence of the Fischer Carpentry Shop in this location, the building is not shown on the 1909 Drumm’s Wall Map of Louisville, for unknown reasons.)

Jacoe Family Ownership, 1909-1954

Brothers Eliseo Jacoe (1881-1958) and Marcello “Frank” Jacoe (1884-1972) purchased Lots 1, 2, 3, and 4 in 1909. By all accounts, they soon began to use the existing Fischer Carpentry Shop as a residence, although their listing in the 1910 census records is not clear with respect to the exact location of their home in that year.

Eliseo and Frank were born in Grimaldi, province of Cosenza, region of Calabria, Italy and came to the U.S., Frank in about 1900 and Eliseo in 1901. Another brother, Robert, and a sister, Josephine, also settled in Louisville.

In February 1913, Eliseo married Anna “Annie” Jordinelli (1891-1954). She was born in Marshall, Colorado to parents who had been born in Italy. She grew up right behind 1101 Main, at 1100 La Farge. (Her home, the Jordinelli House, was later moved to the Louisville Historical Museum campus.) They may have met due to living next to one another. The following photo is their wedding photo with Frank Jacoe (Eliseo’s brother) and Katie Jordinelli (Annie’s sister and Frank’s future wife), standing behind them on the left, and Robert (Eliseo’s other brother) with his future wife, Mary Dionigi, standing behind them on the right.



The following photo from the Jacoe family shows Frank Jacoe by a car outside of the former Fischer Carpentry Shop that became the Jacoe residence, and the next photo labeled "Jacoe's Place" shows a fuller picture of the rear of the same building (looking from Main St.).





The next residential directory after the Jacoe brothers purchased the Fischer property, which is the one for 1916, gives the address of 215 Short for Eliseo and Annie Jacoe and Frank Jacoe. Eliseo and Annie's son, Pasqual (who had been born in November 1913), would have been part of the household as well. The other Jacoe brother, Robert, was also listed in the 1916 directory with the same address. For Eliseo and Frank and their families, this remained their address for a long time, and this also appears to have been the makeup of the household for several years (except for Robert, who moved nearby). Records show that the address of 215 Short was also the address of the property until well after the new house (the current structure) was built.[1]

[1] 1109 Main was constructed next to 1101 Main on the same parcel that the Fischers had owned. The County's date for the construction of 1109 Main is 1908. The accuracy of this date has not been researched. If the Fischers did construct a dwelling at 1109 Main in 1908, it is not out of the question that the Jacoes may have resided there at some point. However, the fact that their address was on Short Street, along with the photographic evidence of

The following three photos show different views of the east side of the Jacoe home (formerly the Fischer Carpentry Shop). Frank Jacoe took these photos and many others of the building; many of them show that it was a focal point for family life for the Jacoes and their extended family in Louisville. Pasqual Jacoe and his dog are in the first and third photos, while Eliseo Jacoe appears to be the man on the left in the middle photo.







many photos of the family in the Jacoe Photo Album that were taken next to the former Fischer Carpentry shop, suggests that 1109 Main may not have actually been constructed in 1908.

Eliseo and Frank Jacoe had several occupations since their arrival in the U.S., with several of them being things that they did jointly. In the years just before Prohibition began in Colorado in 1916, they operated a saloon on Front Street. Then, for a short time after Prohibition started, they had the "Jacoe Bros. Pool Hall" on Main Street.

In 1923, Eliseo and Annie Jacoe opened a grocery store one block to the south of their home, at 1001 Main. (Today, it is the main building of the Louisville Historical Museum.) It was one of Louisville's small neighborhood grocery stores where people regularly shopped or to which they called in delivery orders, but it also sold Italian foods. Like other store owners in Louisville, the Jacoes extended credit to their customers. This was especially important in a town like Louisville, where coal mining was seasonal and men were out of work during the summers. The following County Assessor photo shows the Jacoe Store in 1948:



Clearly, it was a convenience for Eliseo and Annie Jacoe to be able to own their home just one block up from the location of their grocery store (which they rented). Many Louisville boys and a few girls worked for the store over the years. Delivery boys for the store got to drive Eliseo Jacoe's delivery truck. Members of the Rossi family who had grown up in the Tomeo House near the Jacoe Store in the 1920s and 1930s remembered Eliseo Jacoe as having been generous to the family, as their father had died and they had no regular source of income. Eliseo would give them day-old bread that hadn't sold in the store and allowed them the use of the yard behind the store in order to have more space for growing vegetables. In 2004, John Rossi told the Museum staff that he himself worked at the Jacoe Store in the 1930s and was paid with a cut of meat for a roast each week.

Eliseo and Frank were also both talented musicians who were members of various bands. Eliseo Jacoe played in bands in the Denver-Louisville-Boulder area. According to the news item about his retirement, he had performed for period of a few years at the Tabor Grand Opera House and for the Denver municipal band. He was known as "the Professor" (and the family of his niece, Virginia Caranci, still refer to him as "Uncle Professor"). Parents paid him to teach such instruments as the trumpet, trombone, saxophone, and accordion to their children. Richard La

Salle, who later went on to have a career as the leader of an orchestra during WWII and in Hollywood as the composer of scores for movies and TV shows, took musical instrument lessons from Eliseo Jacoe in the late 1920s and early 1930s.

The Louisville Historical Commission selected Eliseo Jacoe to receive the 2000 Pioneer Award, and the write-up is at Louisville Pioneer Award | City of Louisville, CO (louisvilleco.gov) on the Museum website.

Frank Jacoe appears to have focused his later career almost entirely on music, unlike Eliseo, who combined operating a store with being a musician. Frank was a music teacher and also performed in the Denver municipal band, often at City Park; Denver newspapers as early as 1911 listed him on the program at popular concerts at which he was a soloist, often playing the cornet. Frank was also an amateur photographer who is believed to have taken this photo of the Louisville Band in 1911 that appears to show include Eliseo.



In 1921, Frank Jacoe conveyed his co-ownership of Lots 1, 2, 3, and 4 to Eliseo Jacoe and took a trip to Italy to visit their parents. A 1926 Denver directory lists him as living in Denver and working as a musician. In 1927, Frank married Katie Jordinelli, who was the sister of Annie Jordinelli Jacoe (two brothers married two sisters).

In 1928, following Frank's marriage in 1927, Eliseo divided the property and conveyed more than half of it to Frank Jacoe. Eliseo ended up with Lot 1 and the south half (12.5 feet) of Lot 2. Frank ended up with the north half (12.5 feet) of Lot 2 plus, Lots 3 and 4. (This was 1109 Main, which would be the residence of Frank and Katie Jacoe for many years.)

Construction and History of Current House; Date of Construction

Following Frank Jacoe's marriage in 1927 to Katie Jordinelli, the Jacoe brothers appear to have jointly decided to live next to one another on Lots 1, 2, 3, and 4. As noted just above, in 1928, Eliseo took the south side (where the Fischer Carpentry Shop was located) and Frank took the north side of the property.

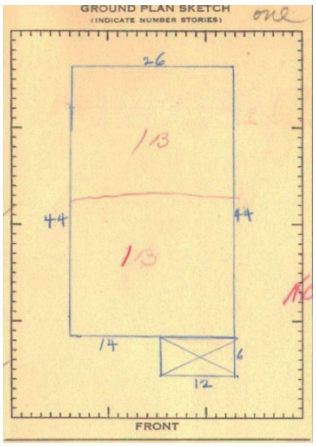
Eliseo then set about having the house at 1101 Main constructed. The 1948 Boulder County Assessor card for this property and the Boulder County website both give the construction date of 1928 for the house at 1101 Main. Boulder County has sometimes been found to be in error with respect to the date of construction of Louisville buildings, so other evidence is looked to. In this case, the date of 1928 is believed to be correct and is supported by the division of the property in 1928. The Jacoes' niece, Virginia Caranci, stated in an oral history interview recorded on May 5, 2011 for the Louisville Historical Museum that a number of people who owed bills at the Jacoe Store worked off their debts to Eliseo Jacoe by doing work on the house when it was constructed. Virginia Caranci's mention of the house having been constructed in 1929 in the same interview is notable for the year being so close to the County's year of 1928, and in fact it is very possible that the final finishes were not completed until 1929. Information regarding when the Fischer Carpentry Shop was torn down could not be found.

The following undated photo from the Jacoe family shows the house at 1101 Main, possibly in the 1940s.



The following images show the photo and ground layout of 1101 Main from the 1948 Boulder County Assessor card:





In addition to Eliseo and Annie Jacoe having his brother (Frank Jacoe) and her sister (Katie Jordinelli Jacoe) living right next door at 1109 Main, Annie and Katie's parents (and later their sister and her family) lived behind 1101 Main at 1100 La Farge. Also, the third Jacoe brother, Robert, lived at 1045 La Farge, which was catty-corner from the Jordinellis. This arrangement was similar to the other family complexes of homes that families created in Louisville.

The saucer magnolia tree that planted on the south side of the house at 1101 Main has garnered regular attention in the *Louisville Times* and even statewide. The earliest *Times* article found, from April 16, 1942, stated that Louisvlle claimed the only blooming magnolia tree in Colorado, that it first bloomed in 1941, and that people even came from Denver to see it in bloom. The article also stated it had come from a nursery in Michigan and that "Mr. and Mrs. E. Jacoe" had planted it by their house in about 1936. According to a search in the Colorado Historic Newspapers Collection, the *Times* also highlighted the tree and its blooms in 1946, 1972, 1974, 1977, 1978, 1981, and 2003. The 2003 item stated that it was "the largest of its species in Colorado and thus earned the title of state champion tree," having been nominated by the City of Louisville.

Annie Jordinelli Jacoe passed away in 1954. Eliseo Jacoe sold the house the same year and went to live at his son's home in Louisville. In 1958, Eliseo Jacoe announced his retirement for health reasons after 35 years of operating the store, and passed away not long after. (Eliseo and Annie Jacoe's son, Pasqual, became a chemist and authority on uranium mine research who, at the time of his death in 1972, was the Director of the Occupational and Radiological Division of the Colorado State Department of Health, according to his obituary in the *Louisville Times*.)

Lester and Doris Else Ownership, 1954-1959

In 1954, Eliseo Jacoe sold 1101 Main to Lester Else (1899-1978) and Doris Else (1906-1992). At the same time, Frank Jacoe conveyed his ownership of two-and-a-half feet of his property at 1109 Main to the Elses. (This meant that the legal description of 1101 Main was now all of Lot 1

and the south 15 feet of Lot 2.) Lester and Doris Else moved to Louisville that year to take over the Bungalow Drug Store from the family of Ralph Grunkemeyer, who had recently died. (Bunglalow Drug was at the time located in the 700 block of Main Street where the City Hall parking lot is located now.) The *Louisvlle Times* reported that the Elses' son, Dwayne (1925-2009), was a pharmacist who was going to manage it.

Louisville directories for the period of ownership by Lester and Doris Else do show them and their son Dwayne as living at 1101 Main. In 1959, they sold both 1101 Main and their store.

Virginia and Eugene Caranci Family Ownership, 1959-present

In 1959, Virginia DeRose Caranci (1931-2023) and Eugene Caranci (1929-2018) bought 1101 Main from Lester and Doris Else. Virginia Caranci had prior connections to the home, as her aunts were Annie Jordinelli Jacoe and Katie Jordinelli Jacoe, and her uncles by marriage were the Jacoe brothers, Eliseo and Frank. Virginia grew up in the home of her Jordinelli grandparents at 1100 La Farge, which was the house behind 1101 Main. When Virginia's father died in 1940, Virginia and her mother and brother moved to the Jordinelli home in Louisville. (She stated in her 2011 oral history interview that her brother, Dick, lived with the Jacoes at 1101 Main for at least part of the time.) Virginia's mother, Minnie DeRose (1904-1997), lived at 1100 La Farge, behind her daughter's home at 1101 Main, from about 1940 until her death, carrying on the tradition of members of this family living close to one another. Eugene and Virginia raised their three daughters, Reggie, Jeanne, and Shelley, at 1101 Main.

In 1974, Virginia Caranci was the heir to the estate of her aunt Katherine Jordinelli Jacoe (1890-1973), owner and resident of 1109 Main next door (Frank Jacoe had died the previous year). Virginia Caranci executed a quit claim deed to herself and Eugene Caranci. In 1979, the two sold 1109 Main, but they retained the north 10 feet of Lot 2 instead of having it be part of the 1109 Main parcel. Therefore, the legal description of 1101 Main today is Lots 1 & 2 of Block 2, and the legal description of 1109 Main is Lots 3 & 4 of Block 2.

Both Eugene and Virginia were extensively involved in the Louisville community. Among other accomplishments, Eugene Caranci was an educator for Denver Public Schools, Executive Director of the Louisville Chamber of Commerce, and one of the four founders of Louisville's Society of Italian Americans. Virginia was the person most responsible for the establishment of the Louisville Historical Museum in 1986. She served on the Historical Commission for 30 years, from when the Commission was first created in 1979 until 2009, serving as Chair for many of those years. Eugene and Virginia Caranci were both instrumental in the shaping of Louisville, including working towards the establishment of Monarch High School, Avista Hospital, Coal Creek Golf Course, and other Louisville institutions, in addition to working on many Louisville

community events through their involvement with the Chamber, Society of Italian Americans, the Historical Museum, and other organizations.

In 1992, the Louisville Historical Commission selected Eugene Caranci to receive the Louisville Pioneer Award, and in 2006, the Commission selected Virginia Caranci to receive the same award. This Louisville Pioneer Award | City of Louisville, CO (louisvilleco.gov) page at the Historical Museum website tells of what they each did for the Louisville community. The two are also remembered for having made themselves available to talk about Louisville history and Italian culture in Louisville. For example, in her 2011 oral history interview, Virginia described the traditional Christmas Eve dinner at the Caranci home at 1101 with seven different Italian seafood dishes, and Eugene was interviewed for articles such as this 2012 article about the Society of Italian Americans and its annual festival, La Festa.

Recent Architectural Analysis

According to the 2018 report "Stories in Places: Putting Louisville's Residential Development in Context" (Microsoft Word - Final Louisville Residential Context 111918 (louisvilleco.gov)) written by PaleoWest Archaeology for the City of Louisville, with respect to the Bungalow Form (1900–1930): "Bungalows are one or one-and-one-half-story mass-plan houses that tend to (but not always) have large front porches. They reflect many of the ideals of the Arts and Crafts movement (1880–1920). The Bungalow form is abundant in Louisville. Although some have a clear Craftsman style (see below), many do not; a very recognizable alternate type in Louisville is the Bungalow with clipped gables and little or no ornamentation. Bungalows in Louisville also commonly feature stucco as the exterior material, such as seen at 1101 Main Street (Figure 122). . . . Defining characteristics seen on Bungalows in Louisville include the following (Colorado Historical Society 2008):

- Gently pitched front or side gable roof
- Large front porch with thick columns
- Clipped gable
- Overhanging eaves
- Stucco or wood on exterior
- One or one-and-one-half story" (page 111).

The Residential Context Report also described 1101 Main Street as being a "stucco clipped gable with porch and high integrity" (p. 158).

The preceding research is based on a review of relevant and available online County property records, census records, oral history interviews, Louisville directories, and Louisville Historical Museum maps, files, and obituary records.

RESOLUTION NO. 7
SERIES 2026

A RESOLUTION MAKING FINDINGS AND RECOMMENDATIONS REGARDING THE LANDMARK DESIGNATION FOR A HISTORICAL RESIDENTIAL PROPERTY LOCATED AT 1101 MAIN STREET.

WHEREAS, there has been submitted to the Louisville Historic Preservation Commission (HPC) an application requesting a landmark eligibility determination for a historical property located at 1101 Main Street, legally described as LOT 1 & 2 BLK 2 BARCLAY PLACE, City of Louisville, State of Colorado; and

WHEREAS, the HPC have reviewed the application and found it to be in compliance with Chapter 15.36 of the Louisville Municipal Code, including Section 15.36.050.A, establishing criteria for landmark designation; and

WHEREAS, the HPC has held a properly noticed public hearing on the proposed landmark application; and

WHEREAS, 1101 Main Street (the Caranci House) has social significance because it exemplifies the cultural, political, economic, or social heritage of the community considering its association with various Louisville families and Louisville's cultural heritage; and

WHEREAS, the property has architectural significance because it has architectural integrity that is representative of the built environment in 1900s Louisville; and

WHEREAS, the HPC finds that these and other characteristics specific to the Caranci House have social and architectural significance as described in Section 15.36.050.A of the Louisville Municipal Code; and

NOW, THEREFORE, BE IT RESOLVED BY THE HISTORIC PRESERVATION COMMISSION OF THE CITY OF LOUISVILLE, COLORADO:

1. The application to landmark the property at 1101 Main Street be approved for the following reasons:
    a. Architectural integrity has been largely maintained over time.
    b. Association with Louisville's heritage.
2. The Historic Preservation Commission recommends the City Council approve the landmark incentive grant in the amount of $7,700.00
3. With the amendment that the structure be named the Caranci House.

PASSED AND ADOPTED this 15th day of June, 2026.

Sloane K. Whidden

Sloane Whidden, Chairperson

1101 Main Street – Landmark Designation Request

City Council, August 4, 2026

Presented by: Jess Daniels, Senior Planner, Community Development

City of Louisville



Site Location

1101 Main Street

Conditions Over Time



1948 Boulder County Assessor Card photo



Present-day images of the subject property.

City of Louisville

Landmark Criteria

Meets one or more criteria for landmarking:

Age

- Ca.1928 - 98 years old.

Social Significance

- Housing for community members that contributed to Louisville through social and cultural activities

Physical Integrity

- Best example of the Bungalow Form which is abundant in Louisville
- Noted for its high integrity in Stories in Place
- Maintained historic footprint

City of Louisville

Staff Recommendation

- That the City Council approve Resolution X, Series 2026, approving the landmark designation, an incentive grant in the amount of $7,700.00, and that the structure be named the Caranci House.

City of Louisville
COLORADO • SINCE 1878

City Council Communication
Agenda Item 8.E.

Subject: Resolution No. 74, Series 2026 — A Resolution Approving a Focused Preservation and Restoration Grant and an Extraordinary Circumstances Grant for the James House Located at 700 Pine Street

This will be the only reading of this item and final action may be taken. There will be one round of public comment.

Date: August 4, 2026

Prepared By: Jessica Daniels, Senior Planner

Presented By: Jessica Daniels, Senior Planner

Summary:

VICINITY MAP:



The property was landmarked in 2013 and received a landmark bonus of $1,000 but did not apply for any additional grant funding at that time. As per the current Historic Preservation Funding resolution, owners are eligible to request grant funds up to three years after the date of landmarking, and are subject to the funding resolution in effect at the time of landmarking. The current application requests the following:

- A Focused Preservation and Restoration Grant of up to $15,000, and an Extraordinary Circumstances grant of $22,300.00 for a total grant of $37,300.00

The applicant had previously requested a grant totaling $128,300, but has aligned their

request to match the current funding resolution criteria and the HPC and staff recommendations. The applicant has submitted a letter included with the application explaining their reasoning for the original grant request amount and considerations that Council and the HPC could take into account when developing updated criteria for future grant funding resolutions.

STAFF RECOMMENDATION:
Based on the maximum permitted grants under the City's adopted funding resolutions, staff recommends the following:

- Approval of a Focused Preservation and Restoration Grant of up to $15,000
- Approval of Extraordinary Circumstances grants of up to $22,300 for structural and shoring work.
    - Total Recommend Grant: $37,300

The City's funding resolutions have been developed to implement the landmarking incentive program, which sets limits on the timeframe and amounts of historic preservation landmarking grants to ensure the funds are used for the required purpose of *incentivizing* local landmark designation consistent with the purpose of the historic preservation tax.

The property was landmarked in 2013, and the grant application is subject to both the grant funding guidelines and limits under Resolution No. 2, Series 2012 for Focused Preservation and Restoration Grants and the funding guidelines and limits under Resolution No. 102, Series 2025 for Extraordinary Circumstances grants.

Under the applicable funding resolution, the subject property is still eligible for a "Focused" grant up to $15,000, which is limited to sustaining the existing form, integrity, and materials of a historic property (not broader rehabilitation work). Eligibility for this grant does not have an expiration date. Staff finds that there are eligible expenses in the grant request that qualify for the "Focused" grant category to support a maximum grant of $15,000.

Requests for "extraordinary circumstances" grants are subject to Resolution No. 102, Series 2025, are limited to $22,300, and must meet one of the following criteria:

i. Preserve, restore, and rehabilitate the integrity of historic architectural features and materials of the exterior of the buildings, including but not limited to historic windows, doors, siding, and other historic features that, without the additional grant funds, would be replaced by new materials; or

ii. Pay for vital structural work and building code compliance -related work that exceed Tier 1 grant amounts, if identified in an approved HSA.

Staff finds that the grant request qualifies for work that would complete vital structural work on the landmarked home and recommends a grant be awarded up to the

maximum allowed amount of $22,300. The applicant has requested a grant of $113,000 for preservation, restoration, and structural work on the home. However, this amount is not allowed by the adopted funding resolutions and criteria.

HISTORIC PRESERVATION COMMISSION RECOMMENDATION:

- Approval of a Focused Preservation and Restoration Grant of up to $15,000.00
- Approval of Extraordinary Circumstances grants of up to $22,300.00 for structural and shoring work.

At their June 15th meeting, the Historic Preservation Commission found that the project is eligible for a Focused Preservation and Restoration Grant up to the maximum of $15,000 and the second criterion is met for an Extraordinary Circumstances grant for structural foundation work and confirmed that such grants are limited to $22,300 as outlined in the applicable funding resolution. Ext: Link: June 15, 2026, Historic Preservation Commission Meeting.

Background / Prior Discussions:
HISTORICAL BACKGROUND:
Information from Bridget Bacon, Louisville Historical Museum

This property is part of the Jefferson Place Subdivision, which was platted in 1880. Records indicate the house was built around 1903.

Carveth Family, Owners 1891-1925
Arthur and Ann Carveth acquired the property at 700 Pine in 1891, though the house was not built until about 1903. Arthur was a carpenter. His and Ann's sons, James Arthur and Frank, ran the Carveth Brothers & Dalby general store in the State Mercantile building from 1910 to 1945.

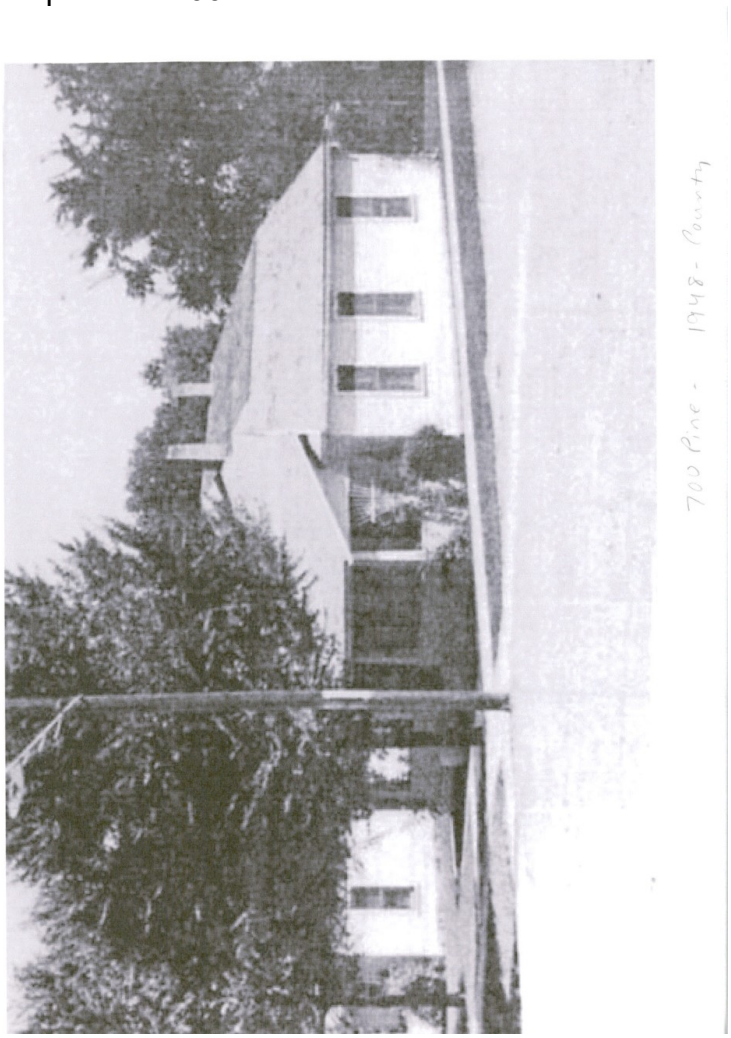
James Family, Owners 1938-2008
Gladys and George James bought the house in 1938, and George worked as a miner in the winter, including at the Centennial Mine, and for the Public Service Company in the summers. After the mines closed in the 1950s, George worked for the National Bureau of Standards in Boulder. He was also an amateur actor.

Volgelsberg Family, 2008 – Present Debbie Volgelsberg acquired ownership of the home when Gladys James passed away in 2008. In 2009, Aaron & Janis Volgelsberg moved into the home and assumed ownership in 2024. The home was landmarked in 2013.

Please refer to the attached social history (Attachment No. 3) for more information.



Recent photo of 700 Pine Street



1948 Boulder County Assessor Card Photo

ARCHITECTURAL INTEGRITY:
The property was landmarked in 2013. The City's Paleowest Architectural surveys *Stories in Places: Putting Louisville's Residential Development in Context* identifies 700 Pine Street as a National Folk House architectural type constructed in 1945. This date of construction is likely an error based on documentation of construction in the social history report. National folk house forms were associated

with railroads and worker housing in general. They were popular from the 1870s to 1930s and are the dominant residential type in Louisville from that time.

HISTORIC STRUCTURE ASSESSMENT:
A Historic Structure Assessment was previously done for the property in 2024 and paid for by the Historic Preservation Fund in the amount of $4,000 (Attachment No. 4). As per the HSA, the existing house at 700 Pine Street has a high degree of historic integrity when compared to historic photos.

LANDMARK DESIGNATION:
The home was landmarked in 2013 by the previous owner Debbie Volgelsberg. An alteration certificate was requested and approved in 2018 for a re-roof. Building permit records include the re-roof in 2018, a new furnace and water tank heater in 2013, electrical 124 amp service change in 2009, re-roof in 2009, re-siding of the garage in 1988, and soffit and window alterations in 1984. Several additions have been added to the property, likely in the early 1990s (east addition) and 1920's (south addition and enclosed porch).

Development Proposal:
PROJECT SCOPE OF WORK:
The scope of work the applicant is planning for the property is described in detail in Attachment No. 5, No. 6., and No.7 The following is a summary of the work:

- Siding restoration and repair
- Remove aluminum soffits and repair or replace wood soffits underneath
- Chimney repair
- Replace windows and doors
- Repair the entry porch and replace finishes to match historical
- New asphalt shingle roof
- New insulation
- Reinforce house framing
- Remove existing foundation and replace with new
- Remove metal siding on garage and re-stucco exterior
- Rear building addition for new bedroom
- Update and replace mechanical and electrical systems

The HPC reviewed the scope of the exterior work at their June 15th meeting to ensure that such work is meeting the City's historic preservation standards, and voted to approve the requested Alternation Certificate.

Analysis:
GRANT REQUEST AND ELIGIBILITY:
The current HPF funding Resolution No. 102, Series 2025 (Attachment No. 8) limits

grants to the grant eligibility criteria of the resolution in place at the time of landmark designation. Therefore, grants available to this property are governed by Resolution No. 2, Series 2012. In addition, an applicant may apply for an Extraordinary Circumstances Grant subject to the current funding Resolution No. 102, Series 2025 (Attachment No. 9), which includes eligibility criteria and a cap on the maximum grant amount available.

> *Section 12. Time limits and procedures.*
>
> > *e. Owners of properties landmarked prior to enactment of this resolution shall have access to the grant funds available through the resolutions in effect at the time of landmarking approval. Such owners may also apply for additional grants through the extraordinary circumstances process described above.*

The following includes analysis for both the grants available under Resolution No. 2, Series 2012 and the Extraordinary Circumstances.

1. Grants Available Under Resolution No. 2, Series 2012
The following sections summarize available grants under the applicable funding resolution at the time of landmark designation.

> *Section 3. Flexible grants for preserving, restoring, rehabilitating, or protecting landmarked property:*
>
> *a.* ***For a period of 18 months from when a property is declared a landmark*** *pursuant to Chapter 15.36 of the Louisville Municipal Code the owner of* ***the property shall be eligible for a grant from the Historic Preservation Fund in the amount of up to $5,000 for residential structures*** *and up to $65,000 for commercial structures. These grants are available for the following purposes….:*

This application is not eligible for this grant due to the 18-month expiration on eligibility.

> Section 5. Focused preservation and/or restoration grants with matching funding requirements:
>
> a. ***In addition to being eligible for the grants listed elsewhere*** *in this Resolution, a property declared a landmark pursuant to Chapter 15. 36 of the Louisville Municipal Code is eligible for a grant from the Historic Preservation Fund in the amount of up to $100,000 for commercial structures and* ***up to $15,000 for residential structures*** *activities described in this Section, or a series of grants totaling $100,000 for commercial structures and up to $15,000 for residential structures.*
>
> *c. Grants specified in this section* ***may only be used for preservation and/or restoration projects: These projects include measures directed towards sustaining the existing form, integrity, and materials of a historic***

property. None of the funding awarded pursuant to this section may be used for any actions considered routine maintenance. Routine maintenance includes painting, refinishing and exterior cleaning.

Staff finds that this application is eligible for this matching grant up to a maximum of $15,000. Staff finds that the following items in the proposed scope of work are eligible for this grant along with the estimated total cost of the improvements:

- Windows and Exterior Doors - $24,000
- Exterior Siding and Trim - $24,640
- *Total Eligible Work = $48,640*

2. Extraordinary Circumstances Grant Eligibility Under Resolution No. 102, Series 2025
The recent funding resolution provided criteria to qualify for Extraordinary Circumstances grants and caps the amount for residential projects at $22,300. The qualifying criteria are as follows (Section 8, e.):

> *e. For purposes of Table 1 and Table 2, " extraordinary circumstances" shall mean additional grant funds are appropriate to:*
>
> *i. Preserve, restore, and rehabilitate the integrity of historic architectural features and materials of the exterior of the buildings, including but not limited to historic windows, doors, siding, and other historic features that, without the additional grant funds, would be replaced by new materials; or*
>
> ***ii. Pay for vital structural work and building code compliance -related work that exceed Tier 1 grant amounts, if identified in an approved HSA.***

Staff finds that this application is eligible for this matching grant up to a maximum of $22,300. Staff finds that the following items in the proposed project scope related to structural foundation work are eligible for this grant along with the total estimated cost for the work:

- Temporary Shoring of House While a New Foundation is Installed - $12,000
- Foundation - $44,505
- *Total Eligible Work = $56,505*

The applicant is requesting $22,300 in grants under the Extraordinary Circumstances grant category (Attachment No. 5), which is the maximum funds permitted by Resolution 102, Series 2025 for extraordinary circumstances. The purpose of the eligibility expirations and grant caps within the funding resolutions is to align the program with the requirements of the ballot initiative and city ordinance, which limits the use of the tax funds to providing incentives for preservation. The funds are not intended to be used to fund open-ended preservation work on landmarked properties, as this goes beyond the use of the fund as an incentive.

In addition, the City currently has 70 landmarked properties, and allowing open-ended grant eligibility without reasonable limits on timing and eligible grant amounts for landmarked properties could lead to a depletion of the fund over time, impacting the ability of the fund to provide adequate incentives for new landmark and grant applications.

Council Work Plan:
N/A

Fiscal Impact:
The current fund balance is approximately $2.6M and staff find that there are adequate funds to support the recommended total grant of $37,300.00.

Alternatives:
- Approve a Focused Preservation and Restoration Grant of up to $15,000 and an Extraordinary Circumstances Grant of up to $23,000.00
- Not approve the grant requests if found to not be eligible.

Recommendation:
Approval of Resolution No. 74, Series 2026, approving a Focused Preservation and Restoration Grant of up to $15,000 and an extraordinary circumstances grant of up to $22,300.00 for a total grant of $37,300.00

Attachments:
1. Resolution No. 74, Series 2026
2. HPC Resolution 700 Pine Street
3. 700 Pine history
4. Historic Structure Assessment (HSA)
5. Statement of Work
6. Alteration Certificate Drawings
7. Amended Grant Table
8. RES 2012-02 (Landmarking Incentives)
9. Resolution 2025-102
10. Narrative for Extraordinary Circumstances Funding Request
11. Additional Grant Narrative
12. Additional Grant Narrative #2
13. Staff Presentation

RESOLUTION NO. 74
SERIES 2026

A RESOLUTION APPROVING A FOCUSED PRESERVATION AND RESTORATION GRANT AND AN EXTRAORDINARY CIRCUMSTANCES GRANT FOR THE JAMES HOUSE LOCATED AT 700 PINE STREET

WHEREAS, the James House, located at 700 Pine Street on property legally described as Lots 21 and 22, Block 7, Jefferson Place Subdivision, City of Louisville, County of Boulder, State of Colorado, was declared a local landmark by the City Council in 2013 and received a landmarking incentive bonus in the amount of $1,000.00, but no further grant applications were filed with the City at that time; and

WHEREAS, there has been submitted to the City Council an application requesting a Focused Preservation and Restoration Grant and an Extraordinary Circumstances Grant the James House; and

WHEREAS, as a property landmarked in 2013, grant applications for the James House are subject to both the grant funding guidelines and limits under Resolution No. 2, Series 2012 for Focused Preservation and Restoration Grants and the funding guidelines and limits under Resolution No. 102, Series 2025 for Extraordinary Circumstances grants, both of which act to limit the availability of grant funding available for the property; and

WHEREAS, City staff and the Louisville Historic Preservation Commission have reviewed the application and found it to be in compliance with Chapter 15.36 of the Louisville Municipal Code; and

WHEREAS, the Louisville Historic Preservation Commission held a properly noticed public hearing on the proposed grant application and has forwarded to the City Council its recommendation of approval for a Focused Preservation and Restoration Grant in the amount of $15,000 and an Extraordinary Circumstances Grant in the amount of $23,200; and

WHEREAS, the City Council has duly considered the grant application and the Commission's recommendation and report, and has held a properly noticed public hearing on the application; and

WHEREAS, the City Council finds the repairs to the existing structure to be funded by the Focused Preservation and Restoration Grant will assist in the preservation of the James House and there are extraordinary circumstances warranting the requested Extraordinary Circumstances Grant, and the requested grants for the same should be approved.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves the following grants for the James House in a total amount of **$38,200**, in accordance with Resolution No. 2, Series 2012, and Resolution No. 102, Series 2025, for the work set forth in **Exhibit A** attached hereto and incorporated herein by this reference:

A. Focused Preservation and Restoration Grant application for the James House in the amount of **$15,000.00**, for windows and exterior doors and exterior siding and trim; and

B. Extraordinary Circumstances Grant in the amount of **$23,200** for structural and shoring work.

PASSED AND ADOPTED this 4th day of August, 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

EXHIBIT A

Table 1. Preservation Grant requests		
Requests		**Analysis**
Per Resolution No. 2, Series 2012		
Description	Amount	Focused Preservation and/or Restoration
Windows and Exterior Doors	$24,000	Eligible
Exterior Siding and Trim	$24,640	Eligible
Total Eligible Work: $48,640		
Per Resolution No. 102, Series 2025		
Description	Amount	Extraordinary Circumstances
Temporary Shoring of House While a New Foundation is Installed	$12,000	Eligible
Foundation	$44,505	Eligible
Total Eligible Work: $56,505		
Total Focused Preservation and Restoration Grant	**$15,000.00**	
Total Extraordinary Circumstances Grant	**$22,300.00**	
Total of Grants Awarded	**$37,300.00**	

RESOLUTION NO. 8
SERIES 2026

A RESOLUTION MAKING FINDINGS AND RECOMMENDATIONS REGARDING A FOCUSED PRESERVATION AND RESTORATION GRANT FOR THE JAMES HOUSE LOCATED AT 700 PINE STREET

WHEREAS, there has been submitted to the Louisville Historic Preservation Commission (HPC) an application requesting a preservation and restoration grant for the Unger House, a historic residential structure located at 700 Pine Street on property legally described as Lots 21-22 Blk 7 Jefferson Place, City of Louisville, State of Colorado; and

WHEREAS, the City Staff and the HPC have reviewed the application and found it to be in compliance with Section 3.20.605.D and Section 15.36.120 of the Louisville Municipal Code; and

WHEREAS, the HPC has held a properly noticed public hearing on the preservation and restoration grant; and

NOW, THEREFORE, BE IT RESOLVED BY THE HISTORIC PRESERVATION COMMISSION OF THE CITY OF LOUISVILLE, COLORADO:

1. The Historic Preservation Commission recommends the City Council approve the focused preservation and restoration grant application for the James House, in the amount of **$15,000** as per the funding resolution in effect at the time of landmarking and **$22,300** in extraordinary circumstances for structural and shoring work for a total of **$37,300** for work described in the attached Exhibit A.

PASSED AND ADOPTED this 15th day of June 2026.



Sloane K. Whidden
Sloane Whidden Chairperson

EXHIBIT A

Table 1. Preservation Grant requests		
Requests		**Analysis**
Description	Amount	Focused Preservation and/or Restoration
Manual J/S/D, Blower-door test & Letters	$1,251.00	Ineligible
Blueprint Copies	$250.20	Ineligible
Surveying	$2,168.40	Ineligible
Engineering, Inspections, Letters	$1,251.00	Ineligible
Soils Report & Inspections	$834.00	Ineligible
Site Work	$2,919.00	Ineligible – Not Focused Preservation or Restoration
Temporary Facilities & Controls	$3,753.00	Ineligible
Excavation, Grade, Prep, Backfill & Trucking	$44,000	Ineligible – Not Focused Preservation or Restoration
Temporary Shoring of Existing Main House Structure	$12,000	Extraordinary Circumstances
Concrete Footings, Foundations & Concrete Window Wells	$44,505.60	Extraordinary Circumstances
Perimeter Drain System & Foundation Waterproofing	$5,200.00	Extraordinary Circumstances
Undergrade prep for Basement concrete slab - Materials & Labor	$5,200.00	Extraordinary Circumstances
Basement Concrete Slab	$14,300.00	Extraordinary Circumstances
Concrete Pump Truck - If needed	$1,400.00	Ineligible – Not Focused Preservation or Restoration
Undergrade prep for all concrete patio slabs - Materials & Labor	$4,800.00	Ineligible – Not Focused Preservation or Restoration

Rear & South Concrete Patios - Materials & Labor	$2,800.00	Ineligible – Not Focused Preservation or Restoration
Radon Mitigation System	$1,440.00	Ineligible – Not Focused Preservation or Restoration
Framing - Materials, Including Trusses	$25,600.00	Ineligible – Not Focused Preservation or Restoration
Framing - Labor	$26,400.00	Ineligible – Not Focused Preservation or Restoration
Plumbing	$18,400.00	Ineligible – not limited or code sensitive
Mechanical/HVAC	$25,600.00	Ineligible – not limited or code sensitive
Electrical	$26,400.00	Ineligible – not limited or code sensitive
Insulation - Materials & Labor - Cellulose & Foam	$17,344.00	Ineligible
Drywall - Materials & Labor	$17,600.00	Ineligible
Windows & Exterior Doors - Materials & Installation Labor	$24,000.00	Eligible – Focused Restoration/Rehabilitation
Painting - Interior & Exterior - Materials & Labor	$12,800.00	Ineligible
Exterior Siding & Trim - Soffit & Eaves - Materials - Hardie	$12,640.00	Eligible – Focused Restoration/Rehabilitation
Exterior Siding & Trim - Soffit & Eaves - Labor	$12,000.00	Eligible – Focused Restoration/Rehabilitation
Roofing - Materials & Labor	$6,400.00	Ineligible
Gutters & Downspouts - Materials & Labor	$3,600.00	Ineligible
Backout - Materials & Labor	$6,960.00	Ineligible
Cleaning & Finals	$4,400.00	Ineligible
RCI - Project Administration	$4,000.00	Ineligible
RCI - Construction Management & Supervision	$28,000.00	Ineligible
Total Project Cost	$359,816.20	Note: Quote provided for addition, but total cost only includes work for home.
Eligible Focused Preservation and Restoration Expenses	$52,240	

Total Recommended Focused Preservation and Restoration Grant	$15,000.00	
Total Recommended Extraordinary Circumstances Grant	$22, 300.00	
Total Recommend Grant	$37,300	

700 Pine

Legal Description: Lots 21 and 22, Block 7, Jefferson Place

When Constructed:

Boulder County Assessor records say that it was built in 1903. However, it seems likely that at least part of the house was constructed before that. The 1900 federal census indicates that Arthur Carveth, who was the owner of this property in 1900, "owns" his home, and this was the only property that he owned.

The 1909 Drumm's Wall Map of Louisville at the Historical Museum shows a structure standing on Lot 22 (the corner lot) only. There may have been a later addition to the house to the east, on Lot 21.

Development of Jefferson Place

The subdivision in which 700 Jefferson is located was Jefferson Place. Charles Welch was its developer and he platted Jefferson Place in 1880. Charles Welch was the prominent Colorado businessman who played a large role in the founding of Louisville and the opening of its first coal mine, the Welch Mine.

Carveth Ownership

Boulder County records show that a deed from Charles Welch for Lot 22 was recorded in 1891, and a deed from Charles Welch for Lot 21 was recorded in 1899. (1898)

Arthur and Ann Carveth were both born in England. Arthur was a carpenter. Arthur lived 1836 to 1913 and Ann lived 1838 to 1920.

Arthur and Ann Carveth's sons, James Arthur and Frank, formed a business with their cousin called Carveth Brothers & Dalby that was located in the State Mercantile Building on Main Street from approximately 1910 to 1945.

The Louisville directory for 1904 shows Arthur and Ann Carveth living at the corner of Jefferson and Pine, the correct location for 700 Pine. Their son, James A., was living with them at that time.

The directory for 1916 shows that Ann, a widow, was living on Pine.

The 1920 census shows that Ann Carveth was living on Pine, likely in this home, with her brother, James Dalby.

Humphrey Ownership, 1925 - 1938

In 1925, James Arthur Carveth (son of Arthur and Ann) and Mary Carveth sold Lots 21 and 22 to Joseph and Della Humphrey. It is believed that Della was the second wife of Joseph. Joe Humphrey (1865 – 1930) had previously operated the Commercial Hotel a block to the east on Pine Street.

James Ownership

Gladys and George James, who married in 1933, acquired this property in 1938 from Della Humphrey.

The property is still in the James family, meaning that it has been in the same family for 72 years.

DAJDESIGN
ARCHITECTURE+INTERIORS

HISTORIC STRUCTURAL ASSESSMENT

700 PINE STREET, LOUISVILLE, COLORADO

May 31, 2024



Evaluated by:

Andy Johnson, AIA
DAJ Design
922A Main Street, Louisville, CO 80027
303-527-1100; andy@dajdesign.com

This Project was paid for by the Louisville Preservation Fund grant.

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1.0 INTRODUCTION

1.1 RESEARCH BACKGROUND / PROJECT PARTICIPANTS

DAJ Design conducted an Historic Structural Assessment for the structure located at 700 Pine Street, Louisville, Colorado to determine its feasibility as a candidate for historic landmark designation as defined under the Historic Preservation program of the City of Louisville. The structure is a residential property. The City of Louisville Historic Preservation Commission found probable cause that the building may be eligible for landmarking under criteria in section 15.36.050 of the Louisville Municipal Code. Therefore, the Commission approved the Historic Structural Assessment to be paid for by the Louisville Preservation Fund grant.



The primary purpose of this HSA is to evaluate the property's current condition and to identify preservation priorities for the best use of rehabilitation funds. DAJ Design inspected 700 Pine visually to identify areas of necessary maintenance and repair. It is possible that complications exist that were not visible and therefore it is recommended that the property owner includes contingency funding in any repair budget.

DAJ Design inspected 700 Pine Street on May 9th, 2024, with GFE Structural. The weather for the visit was cool and overcast. Adequate access to the basement and attic were available, though not all areas were entirely visible. Additionally, there is a detached garage on the site. It is not considered historic, so assessment was minimal.

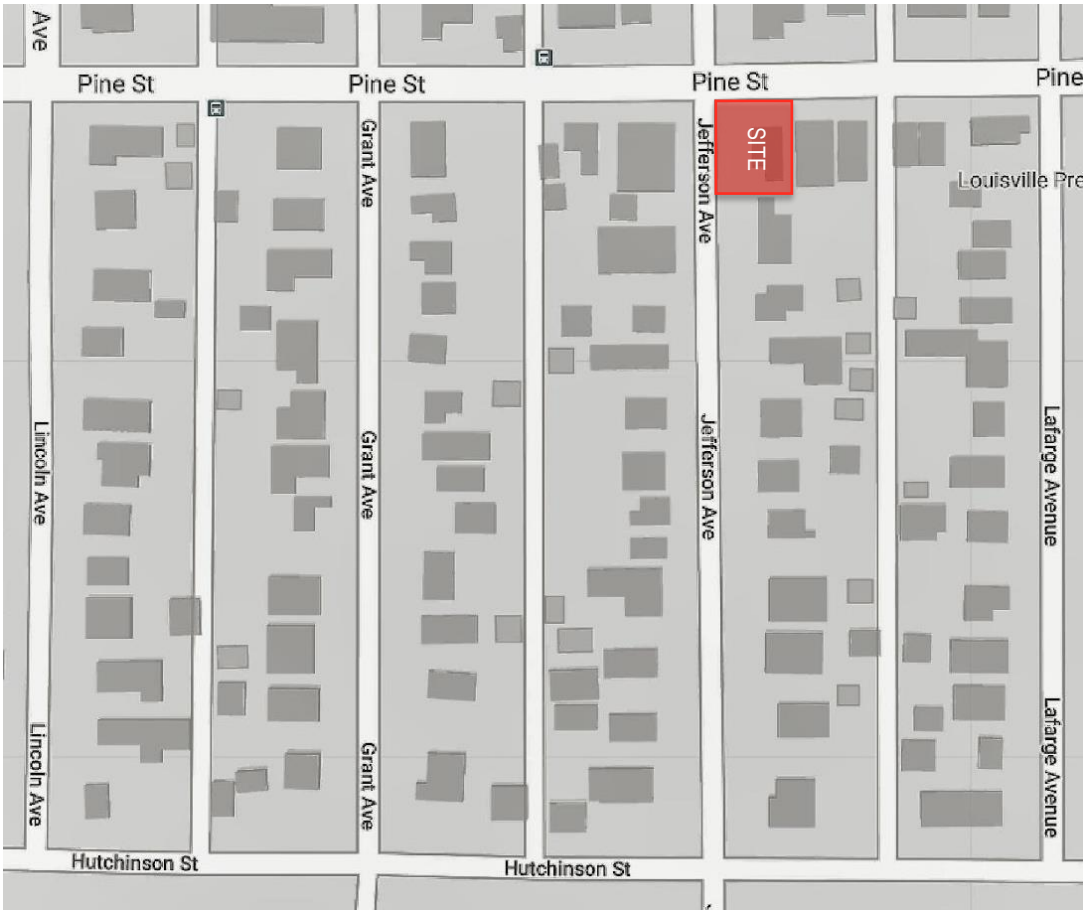
LIST OF CONSULTANTS AND SOURCES:

STRUCTURAL ENGINEER
Vignan Beesam, M.S.
Reviewed By: Jesse Sholinsky, P.E.
GFE STRUCTURAL
PO BOX 20708
BOULDER, CO 80308
303.554.9591

SOURCES
"Louisville Historic Preservation Commission Staff Report," March 18, 2024.

1.2 BUILDING LOCATION

VICINITY MAP



LEGAL DESCRIPTION

Lots 21 and 22, Block 7, Jefferson Place

2.0 HISTORY AND USE

The following report was written by Bridget Bacon of the Louisville Historical Museum.

700 Pine St. History

Legal Description: Lots 21 and 22, Block 7, Jefferson Place

When Constructed:

Boulder County Assessor records say that it was built in 1903. However, it seems likely that at least part of the house was constructed before that. The 1900 federal census indicates that Arthur Carveth, who was the owner of this property in 1900, "owns" his home, and this was the only property he owned.

The 1909 Drumm's Wall Map of Louisville at the Historical Museum shows a structure standing on lot 22 (the corner lot) only. There may have been a later addition to the house to the east, on lot 21.

Development of Jefferson Place

The subdivision in which 700 Pine is located is Jefferson Place. Charles Welch was its developer and he platted Jefferson Place in 1880. Charles Welch was the prominent Colorado businessman who played a large role in the founding of Louisville and the opening of its first coal mine, the Welch Mine.

Carveth Ownership

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Arthur and Ann Carveth were both born in England. Arthur was a carpenter. Arthur lived 1836 to 1913 and Ann lived 1838 to 1920.

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The Louisville directory for 1904 shows Arthur and Ann Carveth living at the corner of Jefferson and Pine, the correct location for 700 Pine. Their son, James A., was living with them at that time. The directory for 1916 shows that Ann, a widow, was living on Pine. The 1920 Census shows that Ann Carveth was living on Pine, likely in this home, with her brother James Dalby.

Humphrey Ownership, 1925 – 1938

In 1925, James Arthur Carveth (son of Arthur and Ann) and Mary Carveth sold lots 21 and 22 to Joseph and Della Humphrey. It is believed that Della was the second wife of Joseph. Joe Humphrey (1865 – 1930) had previously operated the Commercial Hotel a block to the east on Pine Street.

James Ownership

George and Gladys James, who married in 1933, acquired this property in 1938 from Della Humphrey. The property is still in the James family, meaning that it has been in the same family for 72 years.

2.1 ARCHITECTURAL SIGNIFICANCE & CONSTRUCTION HISTORY

The residential property at 700 Pine was built sometime around 1900. It is a typical wood frame vernacular house of the Louisville area. In 2024 the structure is clad in steel siding, although evidence remains of the original painted wood siding existing beneath. The foundation is essentially original, compared to 1948, and the house has had minimal renovation since. The building is composed of a series of very early additions. As these were built around the turn of the century, there is minimal documentation of the home's evolution.

The following is a conjectural timeline.

It is believed that the first phase of construction was the west living room and bedroom. This phase approximately mirrors the footprint on the site from the 1909 Drumm's Wall Map, although this is not conclusive. It appears that the current east sitting room was constructed next, since the roof ridge is above that of the west side. It is unlikely that the roofline of an addition would be set at a lower height, hence the west side is believed to predate the south side. It is conjectured that when the phase two roof was built, the original front facing gable was partially removed, resulting in the irregular roof line seen today. The bay window on the east may be original to this second phase, but it could also be a very early addition. The south kitchen wing was added after the bay window. Physical evidence suggests this was built in one phase. Sometime after, the parallel gable roofs of phases one and three were combined by extending the roof upwards, hence the peak on the main façade, as supported by roof framing observations. The front porch must have been built, at the earliest after phase two, but it may postdate phase three.

The primary façade faces north to Pine Street and the original form of the house is apparent when viewed from the northeast. The overall mass and footprint of the house remain unchanged since 1948, and the only significant change since then has been the installation of steel siding.

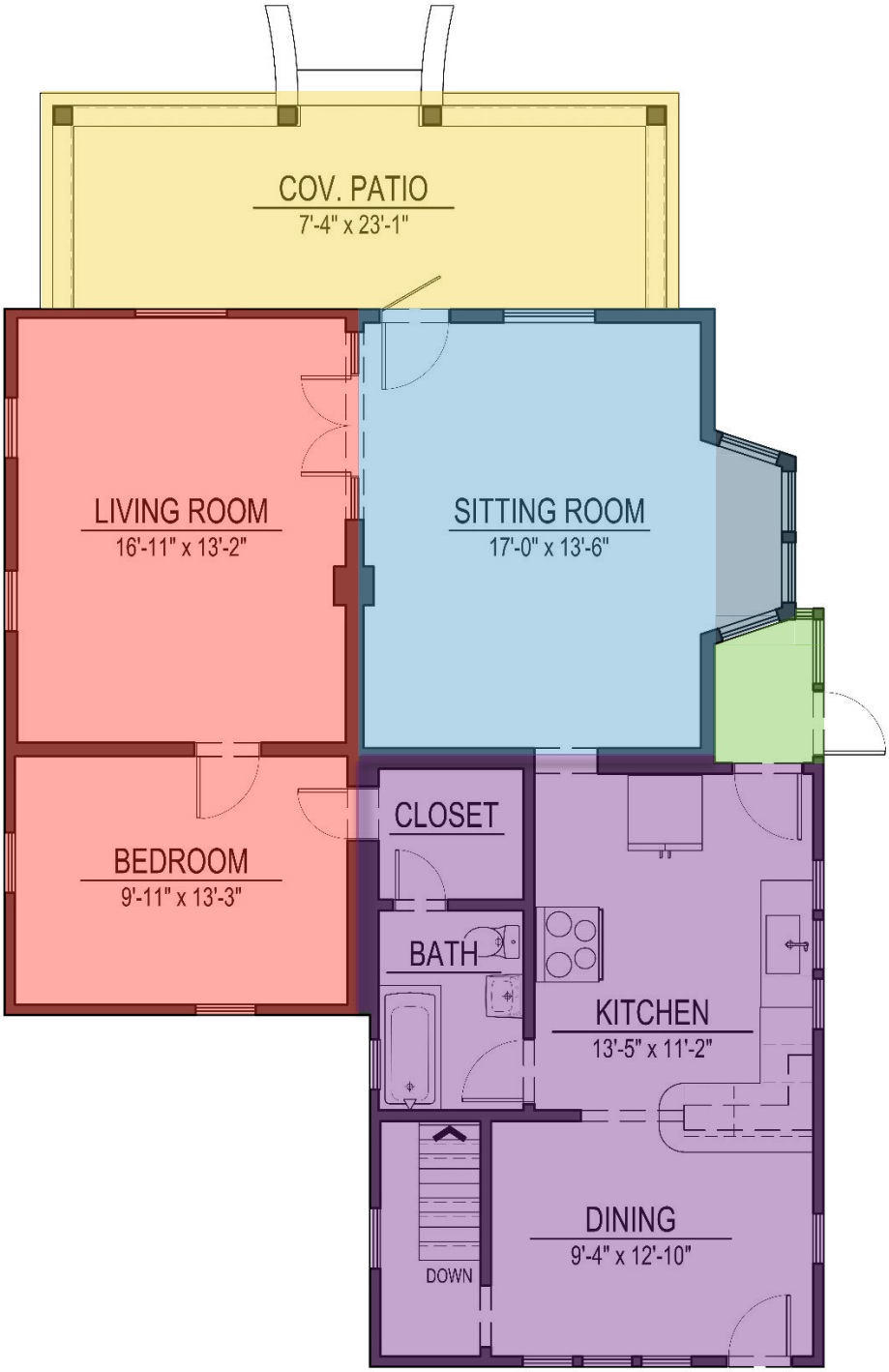
The wood frame construction style of the original house is typical of early 20th century construction techniques found in the Louisville area. Many of the original materials remain and are consistent with other building materials and details used on other houses built around the same time in the Louisville area.

700 Pine has the potential to be restored to a high degree of architectural integrity when compared to historic photos. Overall, the home is well maintained, with items that require prioritization, as outlined in the analysis of this report. The original house is essentially intact with very few modifications since the original construction in the 1900's. Based on site measurements and observations, it is believed that the original wood siding, a shiplap with a Dutch cove profile, is present throughout under the existing aluminum siding . Further investigative deconstruction has the potential to reveal a larger extent of original materials.

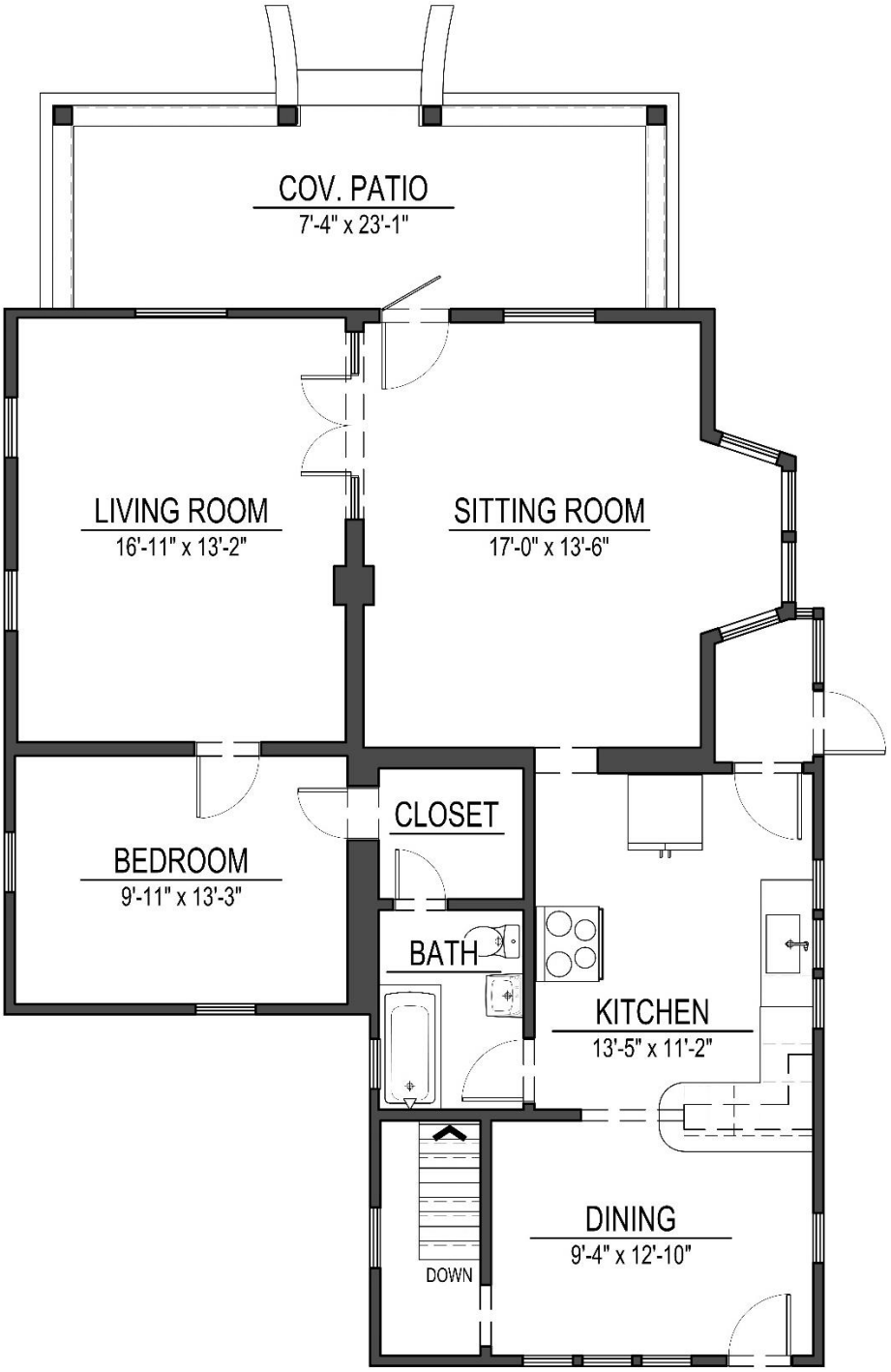
700 Pine is listed on the Local Register.

Primary Changes Occurring Over Time:

- Original house (RED): ca. 1900
- Probable east addition (BLUE): Unknown, early 1900s.
- Bay window (GRAY): Unknown, early 1900s.
- South addition (PURPLE): Unknown, ca.1920s.
- Enclosed porch: Unknown, ca.1920s, enclosed post 1948.
- New asphalt roof: 2018
- New floor joists: Unknown
- New siding: 1974
- New windows: Unknown
- New gutters & downspouts: Unknown


COV. PATIO
7'-4" x 23'-1"
LIVING ROOM
16'-11" x 13'-2"
SITTING ROOM
17'-0" x 13'-6"
BEDROOM
9'-11" x 13'-3"
CLOSET
BATH
KITCHEN
13'-5" x 11'-2"
DINING
9'-4" x 12'-10"
DOWN

2.2 FLOOR PLANS



Main Level Floor Plan

2.3 PROPOSED USE

There is no proposed change of use at this time.

3.0 STRUCTURE CONDITION ASSESSMENT

3.1 SITE

ASSOCIATED LANDSCAPE FEATURES

Description:

700 Pine is set on a corner lot in downtown Louisville that is approximately 50 feet wide by 100 feet deep, running lengthwise in the north-south direction and totaling approximately 5,000 sf. The property is bordered on the north by Pine Street, on the west by Jefferson Avenue, on the south by an alley, and on the east by a residential property. The property is enclosed along the alley by a wood and metal fence, partially along the east property line by a plastic fence, and there are smaller metal fences enclosing a rear yard between the house and a garage.

Approximately 35% of the lot is covered by the footprints of the main house and the garage. The main house sits about 25 feet from Pine Street and 18 feet from Jefferson Avenue. The garage sits near the southwest corner of the property and abuts the alley. There is a small concrete driveway between Jefferson Avenue and the garage.

Most of the site is grass, with a large shrub at the southwest corner of the house, shrubs on the east and west sides of the covered front porch, a garden in the southeast corner of the site, and small shrubs around the north and east of the garage. There are mature trees in the alley but none that are located on the site.

Finally, in the southeast corner of the lot there are three small structures built of concrete, brick, and CMU blocks with metal caps. These appear to be historic trash incinerators that are no longer used.



Southwest corner of the house with large shrub.



Possible historic trash incinerators.

Condition Evaluation:

Overall, the landscape features are in good condition. The trash incinerators may be historic, though further analysis by an historian is necessary.

Recommendations:

The Louisville Historical Museum should further evaluate the three concrete, brick, and CMU structures located in the southeast corner of the property to determine their potential historic value to the site and to Louisville as a whole.

GRADING

Description:

Overall, the site is relatively flat with a slight downward slope to the east. The grade has a pronounced negative slope towards the house on the west side as it slopes down from the Jefferson Avenue sidewalk towards the house. This negative drainage was likely created when the streets around old town Louisville were paved, thus raising their historic elevations relative to the houses in the area. This is particularly noticeable in this area along the east side of Jefferson Avenue. Finished grade sits below the finish materials of the house in most areas, though minimally along the west side and in some areas on the west side the grade sits at or above the height of the foundation.



Typical relationship between grade and finish material



Negative drainage along the west property line

Condition Evaluation:

The overall site grading is in poor condition. It is important that the grading around the house should be a minimum of 6 inches below the top of the foundation and slope away from the foundation for at least the first 5 feet. Due to the nature of the lot, it is difficult to meet these requirements without some amount of regrading or lifting the building and pouring a new foundation.

The effects of poor grading are difficult to determine in one site visit. However, the owner notes that there is water infiltration into the basement during and after significant rain and snow events. Furthermore, the affected areas are not visible without the removal of finish materials. It is apparent however that the grading around the house, particularly on the west side, directs surface water towards the house foundation.

Recommendations:

1. Continue to monitor the drainage around the perimeter of the house. The perimeter should be observed after snow and significant rain events to assess for all areas of pooling water.
2. The top of the foundation relative to the top of grade should be determined around the entire perimeter of the house. If the top of the foundation is determined to be at or below the existing grade, new grading should occur to bring the grade down below the top of the foundation, as prescribed by a licensed structural engineer.
3. Finished grade around the house perimeter should be re-graded to create positive drainage away from the house. The top of finished grade should be a minimum of 6 inches below the top of the foundation and slope away from the foundation for at least the first 5 feet. Coordinate slope with a licensed geotechnical engineer.
4. The house foundation should be replaced to bring the top of foundation at least six inches above finished grade. Coordinate with a licensed structural engineer and a licensed geotechnical engineer.
5. The wood floor framing members including the sill plate, rim board, floor joists, and floor sheathing should be inspected for rot caused by poor drainage. If rot is found in any of these members, the affected flooring should be replaced as prescribed by a licensed structural engineer.

PARKING

Description:

Parking on the site is provided by a one-car garage located in the southwest corner of the site, abutting the south alley and facing Jefferson Avenue. There are no records for when the garage was built, but it is mentioned on the 1948 Boulder County assessor's card and the construction type is typical of that timeframe for the Louisville area. The building is constructed of 8x8x16 CMU block walls supported by a concrete foundation of unknown depth, and it is not clear if there is a footing. The garage roof is constructed with 2x6 roof rafters at approximately 17 inches on-center and sloping down towards the east. The rafters bear on 1x sill plates along the east and west CMU walls and are spliced on a mid-span 6x6 beam that bears on the north and south walls. The garage roof sheathing is constructed with 1x12 skip sheathing. There is a poured concrete slab floor and a poured concrete driveway to Jefferson Avenue.

The exterior finish is a steel siding that was applied in 1988, according to building records. This is after the steel siding was added to the house in 1974. The overhead door facing Jefferson is a painted wood door. There is a painted wood person door and three single-pane, divided lite windows on the north side.



Garage interior, showing CMU walls & roof construction.



Southwest corner of the garage.

Condition Evaluation:

The garage is in fair condition. Minimal assessment of this structure was made due to the lack of information of the date of construction. The garage meets the criteria for an historic structure as it appears to have been constructed prior to 1948. However, the current condition of the garage does not contribute to the overall historic context of the 700 Pine site. There are several significant cracks in the CMU wall, finish materials of the parapet appear to be deteriorating or have detached, and it was difficult to fully assess the roof. Furthermore, it is difficult to determine if the garage is supported by a proper foundation.

Recommendations:

1. The garage should continue to perform adequately for its intended use. Consult a licensed structural engineer if any modifications are to be made. Grouting of the CMU walls, strengthening of existing roof framing and verification of the type of foundation and footing below the perimeter CMU walls are some of the likely repairs needed if new loads are to be added to the detached garage.
2. Repair, refinish, or replace the garage doors and windows.
3. Remove the steel siding. Upon removal, further analysis of the CMU walls and roof structure should be made by a licensed structural engineer.

3.2 STRUCTURAL SYSTEM

FOUNDATION SYSTEMS

Description:

The house foundation was observed from beneath the main floor within a dug-out basement area. Access to the basement is through an interior wood framed stair that does not meet current codes, located west of the dining room. It is unclear if this access location is original to this portion of the house or if it was added after the original construction. Most of the original crawlspace appears to have been dug out after the original construction and the original house would have had a shallower crawlspace, likely 12-18 inches in depth. Portions of the house still sit on top of a shallow crawlspace with CMU retaining walls between the basement and crawlspace depth areas to retain the crawlspace soil. The current basement was likely dug out after the original construction to accommodate the installation of a furnace, as seen by the central chimney that runs through to the basement floor. It is unclear if the crawlspace foundation walls bear on a footing below.



Transition from crawlspace to basement depth concrete foundation with a CMU retaining wall.

The basement depth areas are located beneath the kitchen, and the central portions of the living and sitting rooms, around the chimney location. Crawlspace areas still exist along the perimeter of the house, beneath the dining, the bedroom, the east portions of the kitchen and sitting room, and beneath the covered front patio. There is also an old coal room directly west of the living room. This room was not accessible during the site visit, but the concrete cap is visible from the exterior.

The foundation at the front of the house, possibly at the covered patio, is stacked brick at crawlspace depth. This then transitions to what appears to be a concrete foundation at a crawlspace depth, though this might be a layer of concrete on top of an original brick or stone rubble foundation. Moving southward beneath the living room, the foundation then transitions to a board-formed concrete foundation poured to basement depth along the west wall adjacent to the coal room. This is the only basement depth concrete wall. The remainder of the concrete walls only go to crawlspace depth. The transition from the crawlspace perimeter to the basement interior is created with a single-course, 4-inch thick, CMU retaining wall that retains the cut soils at the crawlspace areas. This CMU wall is stepped in from the exterior walls between 3 ½ to 4 feet from the inside face of the original foundation. The CMU walls sit on a concrete slab floor and stop short of the bottom of the floor joists, providing access to the crawlspace areas. It is unclear if the CMU retaining wall is grouted solid or if any of the foundation walls or CMU retaining walls have footings. Creating partial basement areas by digging out original crawlspace foundations was a common practice in the Louisville area to accommodate the installation of coal furnaces in basements. This often included the addition of a coal storage room, as seen along the west side of this house.

From the exterior of the house, it appears that a concrete sister wall was poured next to the original foundation around the entire perimeter of the house. This practice can be seen on several other houses in the Louisville area and was done to help with water infiltration through original foundations without replacing the original foundation. The depth of the concrete sister wall could not be determined, but it appears to be 6-8 inches thick and abuts the bottom of the steel siding.

The foundation wall insulation type could not be determined, if any exists. It is likely that there is minimal to no insulation on the exterior of the foundation walls. There is no insulation on the inside face of the foundation walls in the basement or crawlspace areas and no insulation at the crawlspace floor.

Condition Evaluation:

The entire foundation is in poor condition and does not meet the minimum IRC code requirements for today's standards. The top of the foundation on the west side of the house sits at or below grade in most areas. Additionally, the top of the foundation around the remainder of the house does not sit high enough above grade to keep water from entering the basement and away from the wood framing members. According to the homeowner, water enters the basement during and after rain and snow events. It is likely that the concrete sister wall helps to mitigate this issue, but it is not a long-term solution and only delays damage to the foundation rather than prevent it. Furthermore, the crawlspace foundations do not appear to be of adequate depth or supported by a proper footing. It is unclear if the board-formed, basement depth foundation is supported by a footing, but this foundation sits below the exterior grade.

The CMU retaining walls are difficult to assess as it is uncertain if they are grouted solid or bear on proper footings. The retaining walls appear to be retaining the crawlspace soil adequately, but they are also carrying significant beam loads from the floor framing without proper attachments, and again, with an unknown footing.



Original foundation may be concrete with large aggregate, or a concrete coat on top of a stone or brick foundation.



Concrete sister wall poured around the exterior face of the original foundation.

Recommendations:

1. The foundation walls (including the perimeter crawlspace/porch walls and interior basement CMU walls) should be replaced with a new concrete foundation at either a basement or crawlspace depth below frost, or a combination of basement and crawlspace depths. New foundation walls should be designed by a licensed structural engineer and supported with proper footings.
2. A new foundation should be set high enough to allow for proper drainage away from the foundation as prescribed by a geotechnical engineer. To pour a new concrete foundation, the house will need to be temporarily lifted or moved to a temporary location by a licensed house mover. The location of the house on the site should not vary from the current, historic location.
3. Alternatively, the existing crawlspace foundation walls and basement retaining walls could be reinforced or partially replaced, but this would be at a greater cost and with a less desirable outcome than entirely replacing the foundation. The following outline a few options to evaluate and reinforce the existing foundation:
    a. Bracing should be added to laterally support the CMU walls to help in retaining the crawlspace soil. In addition, steps should be taken to prevent water infiltration through the CMU wall.
    b. Grouting of the CMU walls should be completed especially at the locations where main floor beams are bearing on the CMU walls.
    c. The footings were not visible during the observation and should be verified and evaluated prior to any remodel or new construction. Coordinate all findings with a licensed structural engineer.
    d. Continually monitor the main floor walls for signs of foundation distress such as cracking or improper door operation. Wall cracks were not observed within the wall finish on the main level. If signs of cracking are detected, these areas should be evaluated by a licensed engineer and repaired as needed.
4. New footings are likely needed to support the point and distributed loads from the roof and floor framing as specified in the recommendations below. New foundation support below any new beam and posts supporting the floor and roof framing should be coordinated with a licensed structural engineer.
5. Foundation wall and crawlspace insulation should be added to achieve an R-value as close as possible to current code standards.

FLOOR & CEILING SYSTEMS

Description:

The floor framing of the north half of the house, beneath the front living areas, is constructed of 2x6 floor joists at 24 inches on-center, running east to west. These floor joists are rough-sawn, indicating that they are of older construction. The floor joists bear on the east and west foundation walls with a 2x wood sill plate. The floor joists in the basement portion of this area are supported by a couple of beam lines. One beam is a 3-ply 2x6 dropped beam construction that terminates and bears on the CMU retaining walls and the other beam is a 2-ply 2x6 flush beam construction that extends between the CMU retaining wall and crawlspace wall. The 3-ply dropped beam appeared to be installed later as it was not rough-sawn like the other beams and joists. The floor joists in the crawlspace areas of the north half of the house are supported by stacked wood, CMU blocks, bricks, and other various wood members that bear directly on the crawlspace soil. The floor joists in the northeast portion of the house are spliced on a central beam line supported by various stacked material bearing on the crawlspace dirt.

The floor framing of the south half of the house, beneath the kitchen and dining room, is constructed of 2x8 floor joists at 24 inches on-center, running east to west. These floor joists are also rough-sawn, indicating that they are of older construction. The joists bear directly on the east and west original foundation walls without a sill plate. The floor joists in this area are supported mid-span by a slightly off-center beamline. The joists are not spliced along this beamline and span approximately 18 feet. The central beam is a 4-ply 2x6 dropped construction that appears to run from the south side of the house and terminates somewhere in the crawlspace at the north end of the house. The beam is supported by the CMU retaining walls and an 8x8 column that appears to bear directly on the concrete slab floor. The beam appears to have been added later when the basement was dug out as it is not rough-sawn like the other beams and joists and the floor joists were likely originally supported with stacked wood, bricks, or blocks as seen in the other crawlspace areas and was common in similar houses in the Louisville area. The stairs to access the basement are in this part of the house and the floor joists are cut around the stair opening. All joists at the entire main floor framing area are spliced at one location above a bearing member.

Sheathing throughout the house is constructed of 1x3 tongue-and-groove hardwood. This sheathing would have been the original finish flooring though it has since been covered by a layer linoleum and carpet and possibly other finish layers beneath the carpet.



Floor joists supported by various stacked material bearing on the crawlspace soil.

There is no insulation at the main floor rim joist nor in the floor cavity of the crawlspace. It could not be determined if the crawlspace is a conditioned space.

Condition Evaluation:

The 2x6 and the 2x8 floor joists are in fair condition. The 2x6 floor joists are typical for houses built around the same time in the Louisville area, while the 2x8 joist sizing is less common, though other examples can be found. The joist sizing and spacing do not meet minimum IRC code requirements for today's standards. However, the main level floor felt sturdy, and no significant areas of bulging or sagging were observed.

The beams supporting the floor joists are in poor condition. The spacing and sizing of the beams are not adequate for the current loads that they are supporting. The beams are not properly attached to their supports nor extend the full length of the floor system. The beam sizing, spacing, and spans do not meet minimum IRC code requirements for today's standards.

The beam supports are in poor condition as well. It is unclear how the CMU retaining walls that are also carrying the beam loads are constructed, whether they have proper footings or are grouted solid. Furthermore, it does not appear that any of the columns are supported by proper footings. The materials, sizing, and construction methods of the beam supports do not meet minimum IRC code requirements for today's standards. Similarly, the stacked materials that support the floor joists in the crawlspace areas consisting of masonry block, brick, and various wood sizes are in poor condition and are likely in place to help stabilize a sagging or soft floor system. These joist supports are not properly attached and bear on the crawlspace soil without proper footings.

The floor sheathing appears to be in fair condition. The sheathing appears to be performing adequately, but the extent of the sheathing and the number of layers on top of the sheathing could not be determined. The floor sheathing does meet minimum IRC code requirements for today's standards and appears to be performing adequately.



Beam supporting the floor joists and bearing on the CMU retaining wall.

Recommendations:

1. The beams and beam supports should be replaced or reinforced as prescribed by a licensed structural engineer. The best method is to construct new beams and beam supports that support the existing floor joists and remove the existing beams and beam supports as prescribed by a licensed structural engineer. These new supports should bear on footings, or any other type of foundation as prescribed by a licensed structural engineer and located at a depth and soil bearing capacity as specified by a licensed geotechnical engineer.
2. The floor framing should be observed by a licensed engineer and repaired as needed. The existing floor joists may be over spanned per current IRC code. New floor joists should be sistered to the existing floor joist or new beam lines should be added to the main floor system to support the existing floor joists as mentioned above. Special attention should be given to the connections between the foundation walls, floor joists, beams, and beam supports. The floors are not suitable for additional load resulting from a remodel or addition.
3. It is likely that the non-visible portions of the floor structure are constructed in a similar manner to those areas that are exposed. However, the entire floor structure should be verified and evaluated by a licensed structural engineer prior to any remodel or addition.
4. If the main floor deflection is inadequate, consult a licensed structural engineer for additional support design options.
5. New beams may need to be added to support the point and distributed loads from the roof framing as specified in the recommendations of the 'Roof Framing Systems' section of this report.
6. Rim joist insulation should be added to achieve an R-value as close as possible to current code standards. Verify that the crawlspace is a conditioned area otherwise insulation should be added to achieve an R-value as close as possible to current code standards.



Original floor joist and floor sheathing.

ROOF FRAMING SYSTEMS

Description:

Access to view the roof framing is through an exterior attic hatch in the south wall of the south facing gable. However, not all areas of the roof framing were visible from this location. The northwest portions of the house roof were not visible nor was the roof framing over the covered front patio. Also, the upper portions of the roof appear to have been over-framed on top of the south facing gable without access to this space. The below analysis is for the visible portions of the roof only. However, it is likely that the non-visible portions of the roof are constructed in a similar manner to those that are visible, as common materials and techniques are found on many houses built around the same time in the Louisville area.

The roof framing over the west side of the house was likely an original north-south gable that was later connected to an east facing gable in the northeast part of the house. The east facing gable is still visible though partially covered on the south side. Where these two roofs meet, the roof forms a hip at the northwest corner. The south part of the house forms a south facing gable roof at a steeper pitch than the previously described roof elements. This roof is connected to the lower roofs with a taller north-south gable with a steeper pitch on the east side than on the west side, where it connects to the original gable ridge. The covered patio roof is a shed roof sloping north that is partially framed on top of the east-west running gable. The bay window roof sits lower than the other roof elements and is a hipped roof. There is a small portion of low-pitched roof south of the bay window that partially covers the east side entrance room.

Where observed, the roof rafters are 2x4 at 24 inches on-center and the ceiling joists are 2x4 at 24 inches on-center. The roof sheathing is an original layer of 1x skip sheathing with a second layer of OSB sheathing on top. There is no ridge beam or collar ties. There are several 1x vertical and diagonal braces supporting the rafters, but these only occur in a few places and do not appear to bear on walls below. Part of the original south aspect of the east facing gable is visible in the attic space. The roof framing over the east entrance room is partially visible and is 2x4 construction, but it is unclear how this roof is supported. The north portions of the house, including the bay window and front patio roofs were not accessible for analysis.

Where observed, the insulation in the attic is a combination of blown-in cellulose and fiberglass batt insulation with a depth of approximately one foot, maybe more in some areas. This insulation appears to cover the entire house roof above conditioned space. It is unclear when the roof insulation was added, though it is not original.



Original roof rafters and sheathing with new sheathing on top. Vertical 1x supports do not bear below.

Condition Evaluation:

The roof is in fair condition and is constructed of typical materials and methods for houses built around the same time in the Louisville area. There is some evidence of water damage on the rafters and original sheathing where the roof was able to be observed.

Several roof areas were minimally assessed due to limited access to observe the structural members. These roofs appear to be constructed using similar materials and techniques as those areas observed and appear to be performing adequately.

The roof over the east entrance room is in poor condition as it does not appear to be properly supported. Limited access to this area was available, but those framing members that were visible do not appear to have proper supports, if any at all.

The attic insulation is in fair condition but difficult to assess due to unknown depths in most areas and the combination of blown-in and fiberglass batts are difficult to determine. The insulation R-value does not meet current code standards.



Visible portion of roof framing viewed from the south. The south aspect of an original gable is partially visible.

Recommendations:

The roof and ceiling structure is not to current code standards. Since Louisville did not likely have a building code at the time of construction, we are unable to determine if it was built to a code or engineered. The original roof is built to a similar standard of other buildings typical of this type and age.

All new repairs should be specified by a licensed structural engineer. Repair details should be provided and submitted to the City of Louisville for review and be observed by the engineer and city inspectors during construction.



1. An attic access hatch should be installed in the ceiling per code.
2. Hurricane clips (or toe-nails) may need to be added where roof framing members bear on exterior walls to meet the minimum IRC code requirements of today.
3. Collar ties are needed to be in compliance with current IRC code for prescriptive roof framing.
4. Diagonal braces and purlins are needed to strengthen the existing rafters to be in compliance with the current IRC code for prescriptive roof framing.
5. Gusset plates or ridge straps are needed at the ridge to be in compliance with the current IRC code for prescriptive roof framing.
6. Additional beams are needed in the attic area to support the above-mentioned diagonal braces and purlins. This is mainly needed approximately at the mid-span of the roofs. These beams will require support in the wall system and likely would require new foundation support in the crawlspace and basement. This must be coordinated with a licensed structural engineer.
7. Attic insulation should be added to achieve an R-value as close as possible to current code standards. The maximum insulation possible should be added at the perimeter of the roof as the roof depth in this location does not allow for the minimum required by code. Any energy upgrades, such as increased insulation in the attic, could result in prolonged snow retention on the roof and could ultimately affect roof performance without first completing structural reinforcement.
8. It is not recommended to add additional roofing materials such as an additional layer of shingles, or solar panels without the additional structural support mentioned above.
9. The above-mentioned recommendations are for the visible portions of the roof (mainly the south portion of the roof). The northern and western portions of the roof (including the roof over the entry porch) were not entirely visible during the observation. Further analysis would be required once these roof structures are exposed. However, we assume that the roof framing in these areas may be built in a similar way and would need similar repairs as mentioned above.

3.3 ENVELOPE – EXTERIOR WALLS

EXTERIOR WALL CONSTRUCTION

Description:

The main level wall framing was not exposed for review. The wall framing is likely a 2x4 stud wall with studs on regular spacing (site measurements support this assumed wall thickness). The original wood siding appears to be attached directly to the wall framing, as seen in the attic. The wall insulation type could not be determined, if any exists. It is likely that there is minimal to no insulation in the original house walls.



South facing gable end wall as seen in the attic.

Condition Evaluation:

Since the wall structure was not exposed for observation, we are unable to evaluate the condition or determine if there is any structural damage. The wall heights are approximately 8 feet tall which is an acceptable height for 2x4 wood stud construction. Wall finish cracks were observed on some of the interior wall and ceiling surfaces. The cause of this cracking could be from foundation movement or from improper application of textured surfaces of the original plaster over gypsum board. Furthermore, the insulation type and R-value within the walls could not be determined, if any is present. It is likely that there is minimal to no wall insulation.

Recommendations:

1. Without the opportunity to observe the exterior wall structure, we do not have any recommendations currently. If the opportunity presents itself, the exterior walls should be assessed by a licensed structural engineer. The owner is to note that the walls will need to be evaluated if any remodels or additional load is to be added. It is likely that additional studs may need to be added for the increased loads above in combination with the wind load on the building. Also, if any remodel or addition plan is in place, new braced wall lines may be added by adding OSB or gypsum board on the interior side of exterior walls to resist wind loading.
2. Wall cavity insulation should be added to achieve an R-value as close as possible to current code standards. Any energy upgrades, such as increased insulation in the attic, could result in prolonged snow retention on the roof and could ultimately affect roof performance without first completing structural reinforcement.

EXTERIOR FINISHES

Description:

The entirety of the house is clad in painted steel siding that was added in 1974, according to building records. The steel siding wraps the house, and the siding runs from the top of the foundation all the way up through the gable ends. Based on historic images and areas within the east side enclosed porch, the original siding appears to be a shiplap siding with a Dutch-cove profile. It is possible that different areas of the house might have different siding, as they were probably built at different times. Based on evidence in the attic, it is likely that the original wood siding still remains beneath the steel siding and is attached directly to the wall studs.



Steel siding & brick chimney.

Condition Evaluation:

The steel siding is in fair condition as there are a few bent or chipped panels. The condition of the wood shiplap siding is difficult to assess as very little of the siding was exposed for analysis. The areas of exposed shiplap siding appear to be in fair condition.

Recommendations:

1. Remove the steel siding and any layers beneath to expose the original wood siding.
2. Repair, refinish, or replace the original wood siding.



Painted shiplap siding with a Dutch cove profile is visible in the east side entrance room.

EXTERIOR MASONRY

Description:

A brick chimney is present that runs from the basement through the roof of the house. The chimney is likely original to the sitting room, which is believed to have been an early addition. The chimney was likely added when the basement was dug out and a coal furnace would have been added. Additionally, the 1948 Boulder County Assessor's card images shows a brick chimney that is centered on the east gable. No physical evidence remains of the chimney seen in the 1948 photograph.

Condition Evaluation:

The chimney is in fair condition where visible. The chimney is enclosed on the main floor and in the attic so the condition of this part of the chimney can not be assessed.

Recommendations:

The chimney's masonry should be tuck-pointed to stabilize its condition.

EXTERIOR APPENDAGES

Description:

A covered porch is attached to the front of the house that is roughly 7 ½ feet deep and 23 feet wide. Access to the porch roof, knee-wall, and floor structure was not possible, but the roof and walls are most likely wood framed with 2x4 construction. The porch floor felt to be wood framed over a crawlspace with a concrete or brick foundation, similar to the other parts of the house. The porch ceiling has a vinyl panel soffit, and the floor is covered with exterior carpet. The porch roof is supported by four tapered wood columns that sit on a knee-wall with an opening centered on the north side of the porch. The knee-walls have steel siding that flares out at the base. There are likely wood shingles beneath the steel siding at the porch walls. The front porch is visible on the 1948 Boulder County Assessor's card floor plan sketch. However, based on the roof construction, the covered front porch is likely not original, though it is an early addition. Tapered columns and shingled, flared knee-walls are typical of front porches constructed in the 1910's to 1920's in the Louisville area.



Front porch knee-wall and column.

Condition Evaluation:

Overall, the front porch is in fair condition. The structure was not visible for analysis, but it appears to be preforming adequately and is likely constructed in a similar manner to the remainder of the house. The carpet flooring, steel siding, and vinyl soffit found at the front porch are not original, but it is likely that original materials remain beneath these finishes. If not, there are several examples of similarly constructed porches built around the same time in the Louisville area.

Recommendations:

1. The porch foundation should be replaced along with the entire house foundation as described above.
2. The porch finishes including the carpet, steel siding, and vinyl soffit should be removed, potentially exposing original finishes beneath. Repair, refinish, or replace the original finishes. These are likely a wood deck floor, wood shingle siding on the knee-walls, and a beadboard soffit.
3. The front porch floor, wall, and roof structure should be assessed by a licensed structural engineer when finishes are removed. It is likely that further support of these elements will be necessary once analyzed.



Covered front porch as viewed from the northwest.

3.4 ENVELOPE – ROOFING & WATERPROOFING

ROOFING SYSTEMS

Description:

The house roof is covered with an asphalt composite shingle roof that was added in 2018, according to building records. This roof was likely replaced due to hail damage, as was common in the Louisville area at this time. Building records indicate that an asphalt composite shingle roof was added in 2009 that appears to have replaced a cedar shingle roof that had been added in 1984. The 1948 Boulder County Assessor's card shows that in 1948 the roof material was wood shingles, and this is visible in the associated photograph. There is a small portion of roof south of the bay window that is a low-pitched roof that appears to be finished with a membrane, though this was difficult to determine. There are also corrugated metal awnings over the south and east doors.

There is a gable end vent in the east facing gable constructed of slats in the steel siding panel. The attic hatch in the south facing gable also provides some venting of the roof. Aluminum drip edges along the rakes and eaves were also likely added in 2018 as was required by code.



Asphalt shingle roof, metal awning over east door, low pitched roof south of the bay window, and a gable end vent.

Condition Evaluation:

The asphalt composition shingle roof is in good condition. Roof venting does not appear to be adequate for the amount of attic space. The metal awnings at the east and south doors are in fair condition but are not historic. The low-pitched roof south of the bay window is in poor condition and appears to be an area that might trap water or prolong snow retention.

Recommendations:

1. Roof venting should be increased with the addition of low and high venting as required by code.
2. Consider removing or replacing the steel awnings above the south and east doors as these are not historic.
3. Replace the low-pitched roof south of the bay window. This roof should be properly supported as prescribed by a licensed structural engineer, and sloped to direct water away from the exterior walls and the foundation of the house.

SHEET METAL FLASHING

Description:

There appears to be sheet metal flashing where the chimney meets the roof, though access and analysis were limited. It is possible that there is flashing beneath the steel siding where roof aspects meet exterior walls, but this is indeterminable due to the siding. There is also flashing at the upper edges of the front porch roof where it meets the lower roof to direct water down the roof slope.

Condition Evaluation:

The condition of metal flashing is indeterminable at this time. The flashing was minimally visible at best and may exist in several areas that are not exposed.

Recommendations

1. Remove or replace the metal flashing when the steel siding is removed. Install new flashing as prescribed by code.
2. Replace the metal flashing around the chimney when the chimney is tuck-pointed.

PERIMETER FOUNDATION DRAINAGE

Description:

A perimeter foundation drain was not observed during the inspection. Due to the construction period and construction methods used, it is unlikely that a perimeter foundation drain exists.

Recommendations

A perimeter foundation drain should be installed with the installation of a new foundation that adheres to all current City of Louisville building codes.

DRAINAGE SYSTEM, GUTTERS & DOWNSPOUTS

Description:

Painted white, k-style gutters are found throughout the house and covered front porch, although not all roof aspects contain gutters. Gutters are not present on the bay window or the low-pitched roof south of the bay window. Gutters are also not present on the north aspect of the east facing gable. Where gutters are present, they are located at the end of eaves in appropriate locations and of appropriate lengths for adequate water collection. 2x3 downspouts are located throughout and appear to be of an adequate amount for proper drainage where located. According to building records, the gutters and downspouts were added in 1982.



Typical gutter & downspout.

Condition Evaluation:

The gutters are in fair condition. Gutters can be difficult to assess outside of significant rain or snow events, but they appear to be properly attached and no visible signs of leaking were present. The downspouts are in fair condition as they appear to be of an adequate amount and in proper locations but are missing in a few locations. Some of the downspouts drain onto concrete splash blocks that direct water away from the foundation. However, several downspouts appear to discharge water in a location that is not properly drained from the house foundation.

Recommendations:

1. Ensure that all gutters, downspouts, and downspout extensions are maintained to discharge water away from the building foundation and are kept clear of debris.
2. The gutters and downspouts are not historic. Consider replacing the gutters with ½ round gutters and the downspouts with round downspouts. Though not historic, these styles will more appropriately match the historic nature of the house.

SKYLIGHTS / CUPOLAS

Description:

There are no skylights or cupolas.

3.5 WINDOWS & DOORS

DOORS

Description:

The front door is a stained wood door with a 1/3-lite divided into three single panes of glass. The door is craftsman-style with a dentil shelf beneath the window and a large single panel below the dentil. The front door is probably not original to the original phase of construction, but it may have been replaced in the 1930's, as many details suggest a renovation during this time. There is also the possibility that the opening location is not original, as it is likely the window openings have changed since this part was added ca. 1900. That said, the current opening is historic as it appears in the 1948 Boulder County Assessor's card image. Additionally, the front door has an aluminum, full-lite storm door.

The back door on the south side is a stained wood, 1/3-lite door with three panels beneath a single-pane glass window. It is unclear when the door was replaced, but it likely predates 1948 as well. The door appears to be original to this location, although the opening may be a later alteration. An aluminum door frame for a storm or screen door is present in this location but the door has been removed. There is another door midway along the east side of the house. This area was once a porch, but it has been enclosed as part of the house at an unknown date. The current door to this side entrance room is an aluminum storm door. The original entrance to the house on this side has a painted wood door of similar design to the rear door. However, the panels are more detailed with an extra panel above the glass, and this door appears to be of older construction than either of the other two doors.



Front door.



Rear door.



Side door.

Condition Evaluation:

The two wood doors are in fair condition. All doors work properly and appear to create acceptable seals. However, the unfinished wood on the doors is in need of refinishing. The aluminum storm doors are in fair condition that are all operable, though some of the unmaintained hardware makes operability difficult.

Recommendations:

1. Scrape, sand, and stain or paint all wood doors.
2. Remove the aluminum storm door from the front door. The door is in a well-covered area that does not need a storm door for weather protection. If a screen door is desired, a minimally framed screen door could be added.
3. Replace the storm door on the east side with a lockable full-lite screen door.

WINDOWS

Description:

As the home at 700 Pine is the product of many historic expansions, there is scarce information about what the true "original" windows may have looked like. That said, all the current openings on the front portion of the house appear to be historic locations. These openings probably reached their present form around 1920, if not earlier.

The windows on the front façade are aluminum, single-hung, cottage-style windows. The current windows are replacements for original wood windows, but the original windows would have been cottage-style. These window openings may have been altered early on in the home's life as the trim is slightly different to the other openings, but the windows have most likely existed in this form for around 100 years. The cottage window form has many examples throughout Louisville.



Cottage window

The window openings on the west side of the house are unchanged since 1948. These openings are typical of the early 1900's in Louisville. The windows for each location are single-hung aluminum windows. The replacement aluminum windows approximate the original wood window style.



Typical aluminum single-hung window.

The windows on the kitchen addition are more recent than the other windows but they are still within the period of significance. Most of the windows in the kitchen area (south part of the house) are wood, single-hung, 3-over-1 and 4-over-1 units. It is unclear when these were added, but they are not typical of the early 1900s. Nonetheless, the windows are historic. It is possible that these windows were added when the kitchen was renovated. One window in this part of the building matches the single-hung windows found elsewhere in the house. This opening may be original, and the newer openings might have been made to match this window.

The bay window on the east façade has the same aluminum replacement single-hung windows.

Condition Evaluation:

All of the windows are in fair condition. Operation was not tested but appears to be minimal. The aluminum and wood windows are beyond the expected lifespan of such windows and do not perform well thermally in Louisville's climate.



Typical wood 3-over-1 window.

Recommendations:

1. Remove the aluminum storm windows from all windows. Consider replacing with new wood storm windows of minimal visual impact. These windows should be removable, with an option for bug screens installed in their place during the warmer months.
2. All of the windows should be replaced with new window units that match the appearance of those in the historic photo from 1948.

3.6 EXTERIOR DETAILS

SOFFIT & FASCIA

Description:

According to building records, all of the soffits at the roof overhangs and at the front porch were replaced or covered in 1984. The soffits and fascia at the roof overhangs are painted aluminum coil stock that appears to have been applied directly on top of the existing soffits and fascia. It is possible that wood soffits and fascia are beneath the current aluminum but they might have been removed, or there might not have been any soffits as is sometimes the case on similar homes in Louisville. The original fascia and soffits, if any, would have been painted wood 1x material and numerous examples can be found on other houses in Louisville. The eaves are square-cut and project approximately one foot beyond the exterior wall surface, both typical for similar houses in Louisville.



Aluminum soffit and fascia with steel corner trim. The covered porch has a corrugated vinyl soffit.

Condition Evaluation:

The aluminum soffits and fascia are in fair condition. The aluminum holds up well and appears to have been painted relatively recently. If wood soffits or fascia are beneath the aluminum, their condition is indeterminable at this time.

Recommendations:

Remove the aluminum coil stock soffits and fascia. Determine if wood soffits and fascia are beneath the aluminum and repair refinish or replace as necessary. If there are no soffits or fascia beneath the aluminum, add painted wood 1x soffits and fascia as seen throughout similar houses in the Louisville area.

TRIM

Description:

All the corner trim is standard painted steel siding trim, 2 ½" wide. Standard painted steel j-trim wraps some of the windows and doors but not all. This trim would have been added along with the steel siding in 1974. The original corner trim would have been painted wood that was either removed or covered by the steel siding.

Some windows retain wood five-piece window trim, consisting of a sill, trim and drip cap. This is presumed to be original as it appears in the 1948 image. The trim has also been wrapped in painted aluminum coil stock that was added in 1984, according to building records.

Condition Evaluation:

The existing steel and aluminum trim is in good condition.

Recommendations:

Remove the steel and aluminum trim with the steel siding exposing the original window, door, and corner trim sizes below. Repair, refinish, or replace the original wood trim.

3.7 MECHANICAL SYSTEMS

HEATING & AIR-CONDITIONING

Description:

Heating is provided to the entire house through a gas-fired forced-air furnace located in the basement. The furnace is a 40,000 btu, sealed combustion unit that is direct-vented through the roof. According to building records, the furnace is a replacement that was added in 2013. The furnace sits on the concrete slab floor with adequate space for servicing. Rigid ductwork runs throughout the basement to floor vents servicing the main floor. A 2-ton air conditioning unit is part of the forced-air system that was also added in 2013.



Gas furnace located in the basement.

Condition Evaluation:

The furnace, air conditioning, and air delivery system appear to be in good condition but were not tested. Building records indicate that the furnace was installed in 2013 and it seems to have had regular maintenance. Therefore, the furnace and air conditioning should continue to perform as they have if regular maintenance is continued.

Recommendations:

1. Continue to perform routine maintenance on the furnace and air conditioning to prolong their lifespans.
2. If heating or cooling does not perform to the homeowner's satisfaction, consult with a licensed mechanical designer for upgrade options.

WATER SERVICE, PLUMBING, & SEWER UTILITIES

Description:

A standard 40-gallon, gas-fired water heater with a sidearm is located in the basement and is direct-vented through the roof. According to building records, the water heater was replaced in 2013. The water delivery system is copper. The waste lines are a combination of abs plastic, copper, and cast-iron. The sewer line exits the house at the south wall, at a relatively low depth which is common for similar houses in Louisville. Additionally, there is no fire sprinkler system in the house.



Gas water heater located in the basement.

Condition Evaluation:

The water heater, supply and waste lines, and sewer appear to be in good condition, but were not tested. Building records indicate that the water heater was installed in 2013, therefore, the water heater should continue to perform if properly maintained.

Recommendations:

No recommendations at this time.

3.8 ELECTRICAL SYSTEMS

ELECTRICAL SERVICE & PANELS

Description:

2009 – 125 amp service change
Electrical service to the house is brought in overhead from an electrical pole near the southwest corner of the lot in the alley. The electrical panel and meter are located on the west exterior of the house. According to building records, the electrical panel was replaced in 2009 with a 125-amp panel. There are panels located in the west wall of the kitchen and in the basement. It is unclear if these panels are sub-panels or if they have been abandoned.


Overhead electrical service, panel, and meter.

Condition Evaluation:

The electrical service was not tested during the site visit but appears to be in working condition. The panel appears to be sized appropriately for the existing house requirements but will likely need to be upgraded for any future improvements.

Recommendations:

1. The electrical service panel should be replaced by a licensed electrical engineer with a new 200-amp panel compliant with current codes.
2. Replace the electrical sub-panels in the kitchen and basement if still in use.
3. The overhead electrical service should be replaced by a licensed electrical engineer with a new underground electrical line compliant with current codes.

ELECTRICAL DISTRIBUTION SYSTEM

Description

Electrical distribution throughout the house is Romex wiring that is visible in the crawlspace. It appears that this wiring serves the entire house, though not all areas are visible for analysis. There are also cloth-sheathed wires in the basement that are still used, though it is unclear to what extent. It is likely that knob and tube wiring was originally used as was common with similar houses in the Louisville area, through no remains were observed in the basement.




Romex & cloth-sheathed wiring.

Condition Evaluation:

The electrical distribution was not tested during the site visit but appears to be in good condition.

Recommendations:

Determine the extent of the cloth-sheathed wiring throughout the house and remove and replace with new wiring to current codes.

LIGHTING

Description:

Exterior wall sconce light fixtures are located next to the front door and above the south facing rear door. The light fixtures were not tested but appear to be on interior switched circuits.



Wall sconce next to the front door.

Condition Evaluation:

The light fixtures were not tested but appear to be in working condition. Neither of the exterior light fixtures are historic but they might be replacement fixtures in historic locations.

Recommendations:

1. Removal of the steel siding may reveal original light fixture locations apparent on the original wood shiplap siding. If the siding is removed and historic light fixture locations are determined, replace the exterior light fixtures with a full cutoff, high-efficiency unit.
2. Consider installing new exterior lighting that complies with Dark Sky regulations.

4.0 ANALYSIS AND COMPLIANCE

4.1 HAZARDOUS MATERIALS

Due to the age of the building, the finish coatings may contain lead-based paint and asbestos may be present in the plaster topcoat. A professional evaluation should be conducted to determine the presence of any hazardous materials.

4.2 MATERIALS ANALYSIS

Does not apply.

4.3 ZONING CODE COMPLIANCE

Notes:

- It is recommended that the owner have a survey of the property conducted to verify the *Lot Size*. All *Lot Coverage* and *Floor Area Ratio* percentages are based on the actual property size and are subject to change from what is specified in this report.
- Building area square footages are taken from:
  - Boulder County Property Records (R)
  - As-built measurements as measured from the interior face of wall, by DAJ Design (M)
- Some areas are taken from the Boulder County Property Records. These records are found to be inaccurate at times. All areas are subject to change based on actual measurements.
- Only the main floor of the house was measured by DAJ Design as this is the main historic structure located on the specified property.

Legal Description:	Lots 21 and 22, Block 7, Jefferson Place City of Louisville, County of Boulder, State of Colorado
Year Built (Main House):	Ca. 1900
Lot Dimensions:	Approx. 50' x 100'
Lot Size:	5,000sf (ISP)
Zoning:	RL (one residential unit per 7,000sf) Property is subject to the Old Town Overlay Zoning District Regs

Areas of levels in square feet (sf):

First (above ground) finished area:	1083 sf (M)
Basement (below ground) area:	255 sf (R)
Front porch area:	170 sf (M)
Detached garage area:	368 sf (R)

Allowable Building Height (from existing grade):

Primary Structure:	27'
Accessory Structure:	20'

Lot Coverage:			
Existing:	1,713 sf	34.2%	House & Garage
Landmark:	2,375 sf	47.5%	662 sf remain
Floor Area Ratio:			
Existing:	1,451 sf	29%	First floor
Landmark:	2,750 sf	55%	1,299 sf remain
Setbacks:			
Front:	20’		(could be different depending on the front of neighboring house locations)
Front Porch:	14’		(6’ encroachment into front yard & street side yard setback)
Rear:	25’		
Side (interior lot line):	5’		
Side (street lot line):	10’		
Accessory Rear:	3’		
Accessory Side:	3’		

5.0 PRESERVATION PLAN

5.1 PRIORITIZED WORK

CRITICAL DEFICIENCY

- The Louisville Historical Museum should further evaluate the three concrete, brick, and cmu structures located in the southeast corner of the property to determine their potential historic value to the site and to Louisville as a whole.
- Continue to monitor the drainage around the perimeter of the house. The perimeter should be observed after snow and significant rain events to assess for all areas of pooling water.
- The top of the foundation relative to the top of grade should be determined around the entire perimeter of the house. If the top of the foundation is determined to be at or below the existing grade, new grading should occur to bring the grade down below the top of the foundation, as prescribed by a licensed structural engineer.
- Finished grade around the house perimeter should be re-graded to create positive drainage away from the house. The top of finished grade should be a minimum of 6 inches below the top of the foundation and slope away from the foundation for at least the first 5 feet. Coordinate slope with a licensed geotechnical engineer.
- The house foundation should be replaced to bring the top of foundation at least six inches above finished grade. Coordinate with a licensed structural engineer and a licensed geotechnical engineer.
- The wood floor framing members including the sill plate, rim board, floor joists, and floor sheathing should be inspected for rot caused by poor drainage. If rot is found in any of these members, the affected flooring should be replaced as prescribed by a licensed structural engineer.
- Remove the steel siding. Upon removal, further analysis of the CMU walls and roof structure should be made by a licensed structural engineer.
- The foundation walls (including the perimeter crawlspace/porch walls and interior basement CMU walls) should be replaced with a new concrete foundation at either a basement or crawlspace depth below frost, or a combination of basement and crawlspace depths. New foundation walls should be designed by a licensed structural engineer and supported with proper footings.
- A new foundation should be set high enough to allow for proper drainage away from the foundation as prescribed by a geotechnical engineer. To pour a new concrete foundation, the house will need to be temporarily lifted or moved to a temporary location by a licensed house mover. The location of the house on the site should not vary from the current, historic location.
- Alternatively, the existing crawlspace foundation walls and basement retaining walls could be reinforced or partially replaced, but this would be at a greater cost and with a less desirable outcome than entirely replacing the foundation. The following outline a few options to evaluate and reinforce the existing foundation:
    - Bracing should be added to laterally support the CMU walls to help in retaining the crawlspace soil. In addition, steps should be taken to prevent water infiltration through the CMU wall.
    - Grouting of the CMU walls should be completed especially at the locations where main floor beams are bearing on the CMU walls.
    - The footings were not visible during the observation and should be verified and evaluated prior to any remodel or new construction. Coordinate all findings with a licensed structural engineer.
    - Continually monitor the main floor walls for signs of foundation distress such as cracking or improper door operation. Wall cracks were not observed within the wall finish on the main level. If signs of cracking are detected, these areas should be evaluated by a licensed engineer and repaired as needed.

- New footings are likely needed to support the point and distributed loads from the roof and floor framing as specified in the recommendations below. New foundation support below any new beam and posts supporting the floor and roof framing should be coordinated with a licensed structural engineer.
- Foundation wall and crawlspace insulation should be added to achieve an R-value as close as possible to current code standards.
- The beams and beam supports should be replaced or reinforced as prescribed by a licensed structural engineer. The best method is to construct new beams and beam supports that support the existing floor joists and remove the existing beams and beam supports as prescribed by a licensed structural engineer. These new supports should bear on footings, or any other type of foundation as prescribed by a licensed structural engineer and located at a depth and soil bearing capacity as specified by a licensed geotechnical engineer.
- The floor framing should be observed by a licensed engineer and repaired as needed. The existing floor joists may be over spanned per current IRC code. New floor joists should be sistered to the existing floor joist or new beam lines should be added to the main floor system to support the existing floor joists as mentioned above. Special attention should be given to the connections between the foundation walls, floor joists, beams, and beam supports. The floors are not suitable for additional load resulting from a remodel or addition.
- It is likely that the non-visible portions of the floor structure are constructed in a similar manner to those areas that are exposed. However, the entire floor structure should be verified and evaluated by a licensed structural engineer prior to any remodel or addition.
- New beams may need to be added to support the point and distributed loads from the roof framing as specified in the recommendations of the 'Roof Framing Systems' section of this report.
- Rim joist insulation should be added to achieve an R-value as close as possible to current code standards. Verify that the crawlspace is a conditioned area otherwise insulation should be added to achieve an R-value as close as possible to current code standards.
- An attic access hatch should be installed in the ceiling per code.
- Hurricane clips (or toe-nails) may need to be added where roof framing members bear on exterior walls to meet the minimum IRC code requirements of today.
- Collar ties are needed to be in compliance with current IRC code for prescriptive roof framing.
- Diagonal braces and purlins are needed to strengthen the existing rafters to be in compliance with the current IRC code for prescriptive roof framing.
- Gusset plates or ridge straps are needed at the ridge to be in compliance with the current IRC code for prescriptive roof framing.
- Additional beams are needed in the attic area to support the above-mentioned diagonal braces and purlins. This is mainly needed approximately at the mid-span of the roofs. These beams will require support in the wall system and likely would require new foundation support in the crawlspace and basement. This must be coordinated with a licensed structural engineer.
- Attic insulation should be added to achieve an R-value as close as possible to current code standards. The maximum insulation possible should be added at the perimeter of the roof as the roof depth in this location does not allow for the minimum required by code. Any energy upgrades, such as increased insulation in the attic, could result in prolonged snow retention on the roof and could ultimately affect roof performance without first completing structural reinforcement.
- The above-mentioned recommendations are for the visible portions of the roof (mainly the south portion of the roof). The northern and western portions of the roof (including the roof over the entry porch) were not entirely visible during the observation. Further analysis would be required once these roof structures are exposed. However, we assume that the roof framing in these areas may be built in a similar way and would need similar repairs as mentioned above.

- Without the opportunity to observe the exterior wall structure, we do not have any recommendations currently. If the opportunity presents itself, the exterior walls should be assessed by a licensed structural engineer. The owner is to note that the walls will need to be evaluated if any remodels or additional load is to be added. It is likely that additional studs may need to be added for the increased loads above in combination with the wind load on the building. Also, if any remodel or addition plan is in place, new braced wall lines may be added by adding OSB or gypsum board on the interior side of exterior walls to resist wind loading.
- Wall cavity insulation should be added to achieve an R-value as close as possible to current code standards. Any energy upgrades, such as increased insulation in the attic, could result in prolonged snow retention on the roof and could ultimately affect roof performance without first completing structural reinforcement.
- Remove the steel siding and any layers beneath to expose the original wood siding.
- Repair, refinish, or replace the original wood siding.
- The chimney's masonry should be tuck-pointed to stabilize its condition.
- The porch foundation should be replaced along with the entire house foundation as described above.
- The porch finishes including the carpet, steel siding, and vinyl soffit should be removed, potentially exposing original finishes beneath. Repair, refinish, or replace the original finishes. These are likely a wood deck floor, wood shingle siding on the knee-walls, and a beadboard soffit.
- The front porch floor, wall, and roof structure should be assessed by a licensed structural engineer when finishes are removed. It is likely that further support of these elements will be necessary once analyzed.
- Roof venting should be increased with the addition of low and high venting as required by code.
- Replace the low-pitched roof south of the bay window. This roof should be properly supported as prescribed by a licensed structural engineer and sloped to direct water away from the exterior walls and the foundation of the house.
- Remove or replace the metal flashing when the steel siding is removed. Install new flashing as prescribed by code.
- Replace the metal flashing around the chimney when the chimney is tuck-pointed.
- Scrape, sand, and stain or paint all wood doors.
- Remove the aluminum storm door from the front door. The door is in a well-covered area that does not need a storm door for weather protection. If a screen door is desired, a minimally framed screen door could be added.
- Remove the aluminum storm windows from all windows. Consider replacing with new wood storm windows of minimal visual impact. These windows should be removable, with an option for bug screens installed in their place during the warmer months.
- All of the windows should be replaced with new window units that match the appearance of those in the historic photo from 1948.
- Remove the aluminum coil stock soffits and fascia. Determine if wood soffits and fascia are beneath the aluminum and repair refinish or replace as necessary. If there are no soffits or fascia beneath the aluminum, add painted wood 1x soffits and fascia as seen throughout similar houses in the Louisville area.
- Remove the steel and aluminum trim with the steel siding exposing the original window, door, and corner trim sizes below. Repair, refinish, or replace the original wood trim.
- Determine the extent of the cloth-sheathed wiring throughout the house and remove and replace with new wiring to current codes.

SERIOUS DEFICIENCY

- Repair, refinish, or replace the garage doors and windows.
- Consider removing or replacing the steel awnings above the south and east doors as these are not historic.
- Ensure that all gutters, downspouts, and downspout extensions are maintained to discharge water away from the building foundation and are kept clear of debris.
- The gutters and downspouts are not historic. Consider replacing the gutters with ½ round gutters and the downspouts with round downspouts. Though not historic, these styles will more appropriately match the historic nature of the house.
- The electrical service panel should be replaced by a licensed electrical engineer with a new 200-amp panel compliant with current codes.
- Replace the electrical sub-panels in the kitchen and basement if still in use.
- The overhead electrical service should be replaced by a licensed electrical engineer with a new underground electrical line compliant with current codes.
- Removal of the steel siding may reveal original light fixture locations apparent on the original wood shiplap siding. If the siding is removed and historic light fixture locations are determined, replace the exterior light fixtures with a full cutoff, high-efficiency unit.
- Consider installing new exterior lighting that complies with Dark Sky regulations.

MINOR DEFICIENCY

- The garage should continue to perform adequately for its intended use. Consult a licensed structural engineer if any modifications are to be made. Grouting of the CMU walls, strengthening of existing roof framing and verification of the type of foundation and footing below the perimeter CMU walls are some of the likely repairs needed if new loads are to be added to the detached garage.
- If the main floor deflection is inadequate, consult a licensed structural engineer for additional support design options.
- It is not recommended to add additional roofing materials such as an additional layer of shingles, or solar panels without the additional structural support mentioned above.
- Replace the storm door on the east side with a lockable full-lite screen door.
- Continue to perform routine maintenance on the furnace and air conditioning to prolong their lifespans.
- If heating or cooling does not perform to the homeowner's satisfaction, consult with a licensed mechanical designer for upgrade options.

5.2 PHASING PLAN

A phasing plan is not available at this time.

5.3 ESTIMATE OF PROBABLE COST OF CONSTRUCTION

A probable cost of construction is not available at this time.

6.0 PHOTOGRAPHS AND ILLUSTRATIONS



1948 Boulder County Assessor's Card Image



2024 Northwest Corner



2024 Southwest Corner



2024 Rear Façade, Looking North.



2024 Northeast Corner

Preservation Scope of Work

Date: April 3, 2026

Project: Vogelsberg Residence (Historic James House)
700 Pine Street
Louisville, CO 80027

Preservation Scope of Work Outline
Work limited to preservation, rehabilitation and restoration of the historic structure. Scope does not include any work associated with planned additions

Principal Structure

3.1 Site Work:
- Improve drainage around structure
- Work may involve a raised foundation detail at top of foundation wall

3.2 Structural Systems
- Foundation
  - Shore, structure and remove existing foundations- replace with new
  - Provide new foundation wall with foundation drain at entire perimeter.
- First Floor Framing
  - Sister or reinforce existing framing per engineer
- Roof Framing
  - Sister, reinforce, or brace existing framing per engineer

3.3 Envelope- Exterior Walls
- Remove existing metal siding to expose historic wood siding- patch and repair siding (replace with like materail where beyond repair) Any new siding to match the structure's original ship-lap siding. Include painting.
- Insulate all exterior walls- blown in
- Existing chimney to remain- tuck-point masonry to stabilize

3.4 Envelope Roofing & Attic
- New asphalt shingle roofing. Provide new ridge vent for high venting
- Provide low roof venting – at soffits or a mid-roof vent
- Remove metal awnings roofs over side and rear doors
- Insulate attic to R60

3.5 Windows and Doors
- Replace all existing windows with wood windows in historic window openings
- Maintain existing entry, side and rear door. Prep doors for new stain. Provide new storm doors

3.6 Exterior Details

- Remove aluminum soffits and fascia. Patch and repair wood soffit and fascia underneath or replace with painted 1x

3.7 Mechanical Systems

- Remove and replace furnace. Provide new ductwork
- Replace plumbing as necessary
- Provide new water heater.

3.8 Electrical Systems

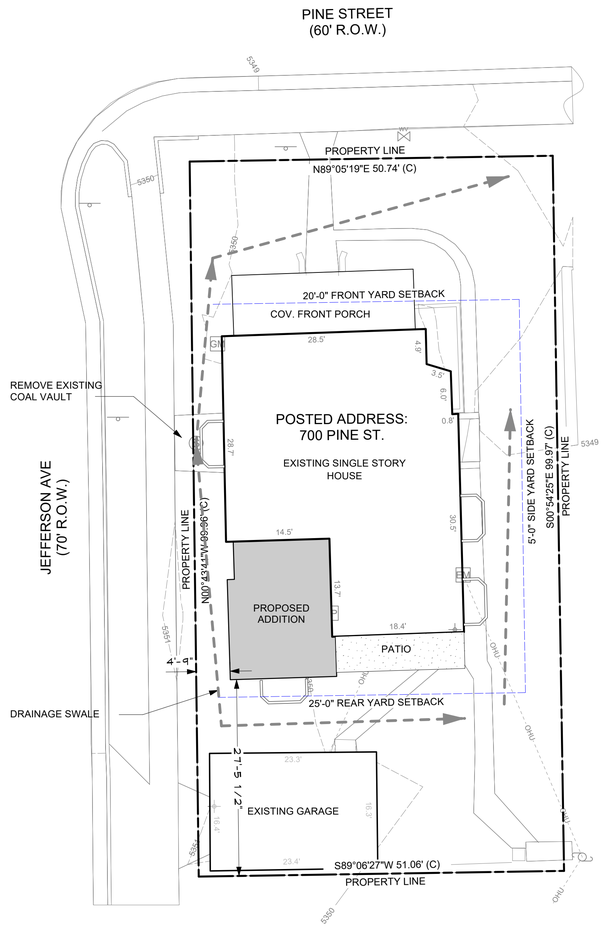
- Provide new (at minimum) 200-amp panel
- Remove and replace distribution wiring throughout.

Appearances & Accessory Structure

- Entry Porch- remove finishes (carpet, vinyl siding, and metal soffit)- repair, refinish or replace finishes to match historic original.
- Garage- Remove existing metal siding to expose masonry. Repair CMU as per engineer. Re-stucco exterior.



VICINITY MAP



SITE PLAN
1" = 10'-0"

PROJECT INFORMATION

LEGAL DESCRIPTION:
LOTS 21-22 BLK 7 JEFFERSON PLACE

JURISDICTION:
LOUISVILLE

ZONING
Zone District: Old Town Overlay-RL

PROJECT DESCRIPTION:
Alteration and addition to existing single family residence.

BUILDING CODES:
2024 International Residential Code (IRC)
2024 International Energy Conservation Code (IECC)
2023 National Electrical Code (NEC)

PROJECT DATA

LOT SIZE (SF)	Per ISP	5,088
LOT COVERAGE ALLOWED (47.5% Landmark)		2,417
FLOOR AREA RATIO ALLOWED (55% Landmark)		2,798

FLOOR AREA (Net)	
Basement	NA
Main Floor (Existing)	1,060
Garage (Existing)	359
Addition (Proposed)	271
Total Floor Area Ratio	1,690

LOT COVERAGE (Gross)	
House (Existing)	1,124
Front Porch (Existing)	182
Garage (Existing)	382
Addition (Proposed)	278
Total Lot Coverage	1,966

* Floor Area as defined by LMC *17.08.165* (floors within the exterior walls excluding stair openings)

PROJECT DIRECTORY

OWNER
Aaron and Janice Vogelsberg
700 Pine Street
Louisville, CO 80027

ARCHITECT
Stewart Architecture
1132 Jefferson Ave.
Louisville, CO 80027
Contact: Peter Stewart 303-665-6668

BUILDER
Raimo Construction
127 Shale Ridge Rd.
Berthoud, CO 80513

STRUCTURAL ENGINEER
40th Parallel Structural Engineering
318 Main St.
Longmont, CO 80501
Contact: Dan Belleau 970-227-6368

DRAWING INDEX

ARCHITECTURAL DRAWINGS

1. PROPOSED SITE PLAN
2. CRAWL SPACE (EXISTING & PROPOSED)
3. MAIN FLOOR (EXISTING & PROPOSED)
4. ELEVATIONS (EXISTING & PROPOSED)
5. ELEVATIONS (EXISTING & PROPOSED)
6. ELEVATIONS (EXISTING & PROPOSED)
7. 3D VIEWS (PROPOSED)

stewart ARCHITECTURE
1132 JEFFERSON AVE.
LOUISVILLE, CO 80027
303. 665. 6668

Restoration and Addition to the Vogelsberg Residence
The Historic James House, 700 Pine Street, Louisville CO. 80027

LOTS 21-22 BLK 7 JEFFERSON PLACE

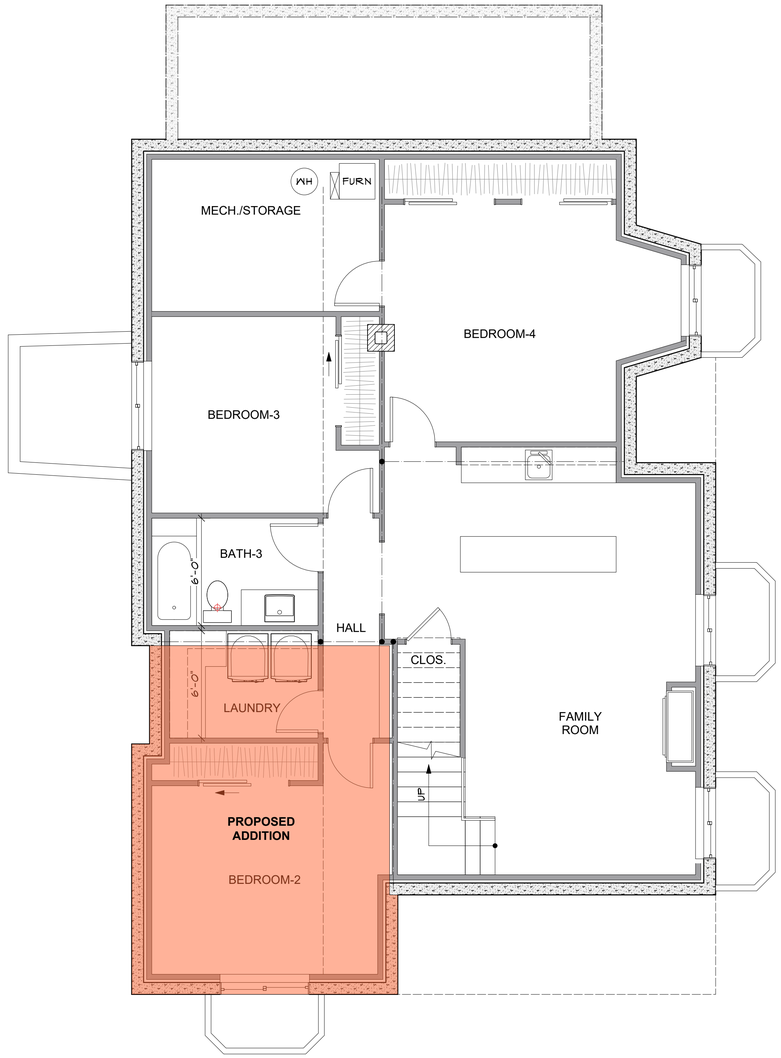
Issue:

Date	Comments	Init.
4/3/26	Alt Cert	PS

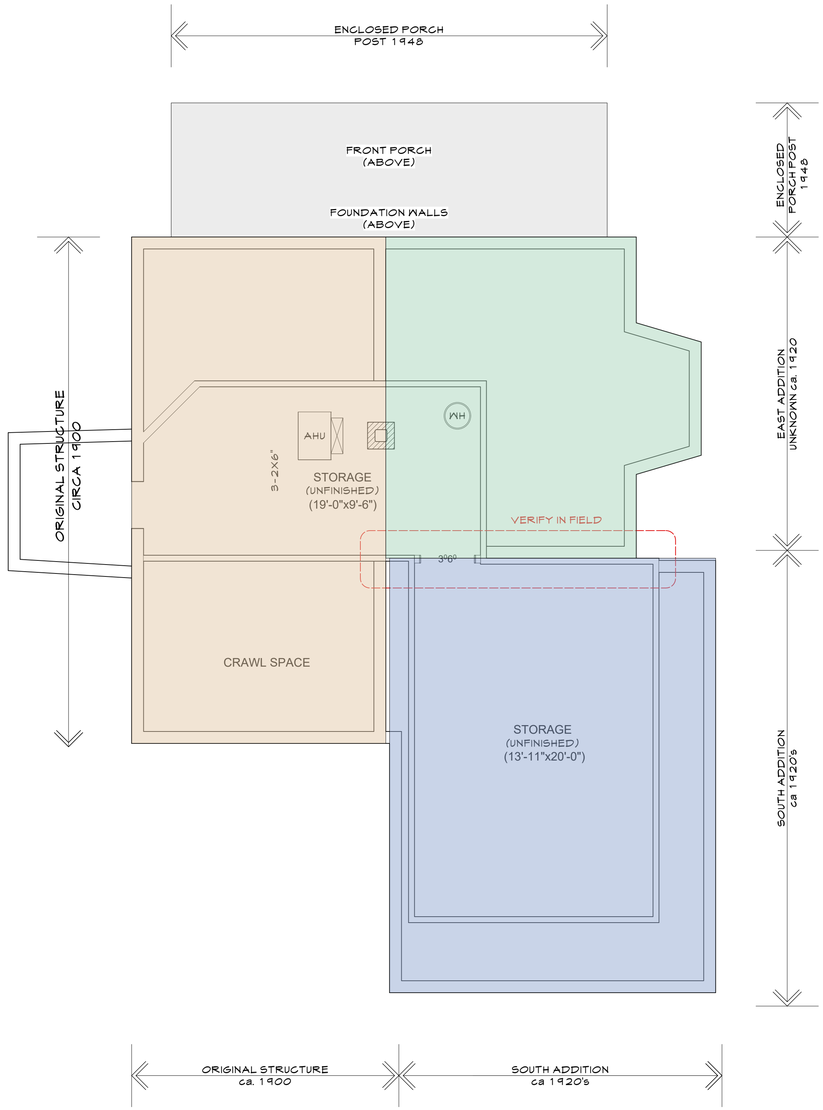
LANDMARK ALTERATION CERTIFICATE APPLICATION

Sheet Title
Site Plan

Sheet No.
1 of 6



PROPOSED BASMENT PLAN
1/4"=1'-0"



EXISTING BASEMENT PLAN
1/4"=1'-0"

LEGEND

- ORIGINAL STRUCTURE (CIRCA 1900)
- PROBABLE EAST ADDITION (EARLY 1900's)
- SOUTH ADDITION (1920's)
- ENCLOSED PORCH (1920's, ENCLOSED POST 1948's)

stewart ARCHITECTURE
1132 JEFFERSON AVE.
LOUISVILLE, CO 80027
303. 665. 6668

Restoration and Addition to the Vogelsberg Residence
The Historic James House, 700 Pine Street, Louisville CO. 80027

LOTS 21-22 BLK 7 JEFFERSON PLACE

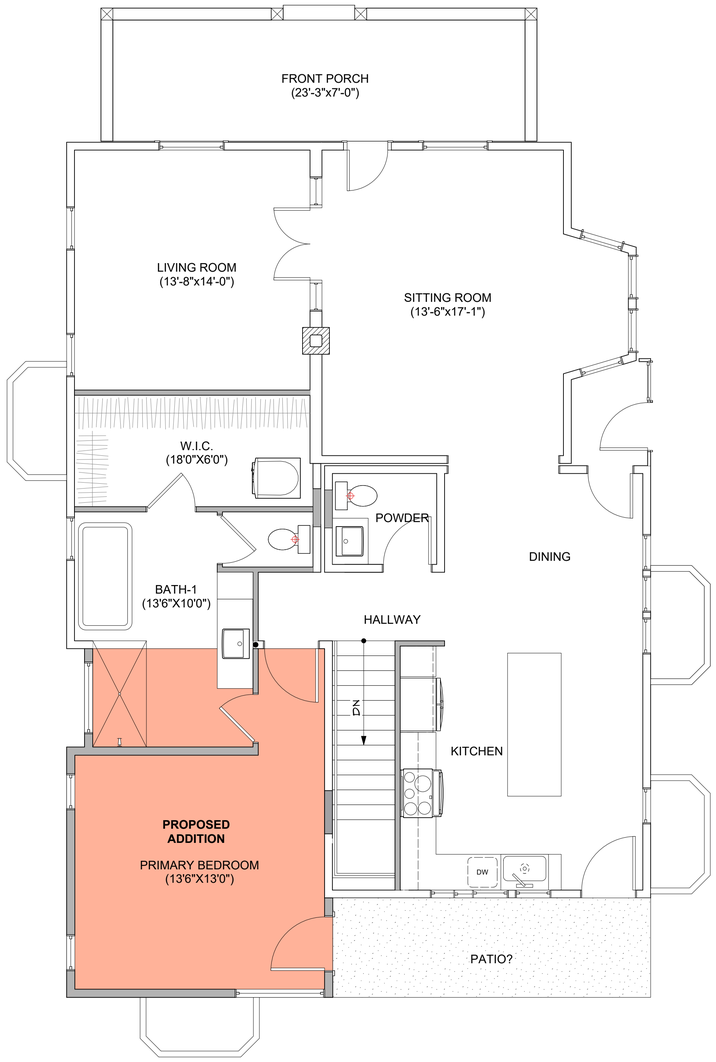
Issue:

Date	Comments	Init.
4/3/26	Alt Cert	PS

LANDMARK ALTERATION CERTIFICATE APPLICATION

Sheet Title
Crawl Space
Existing & Proposed

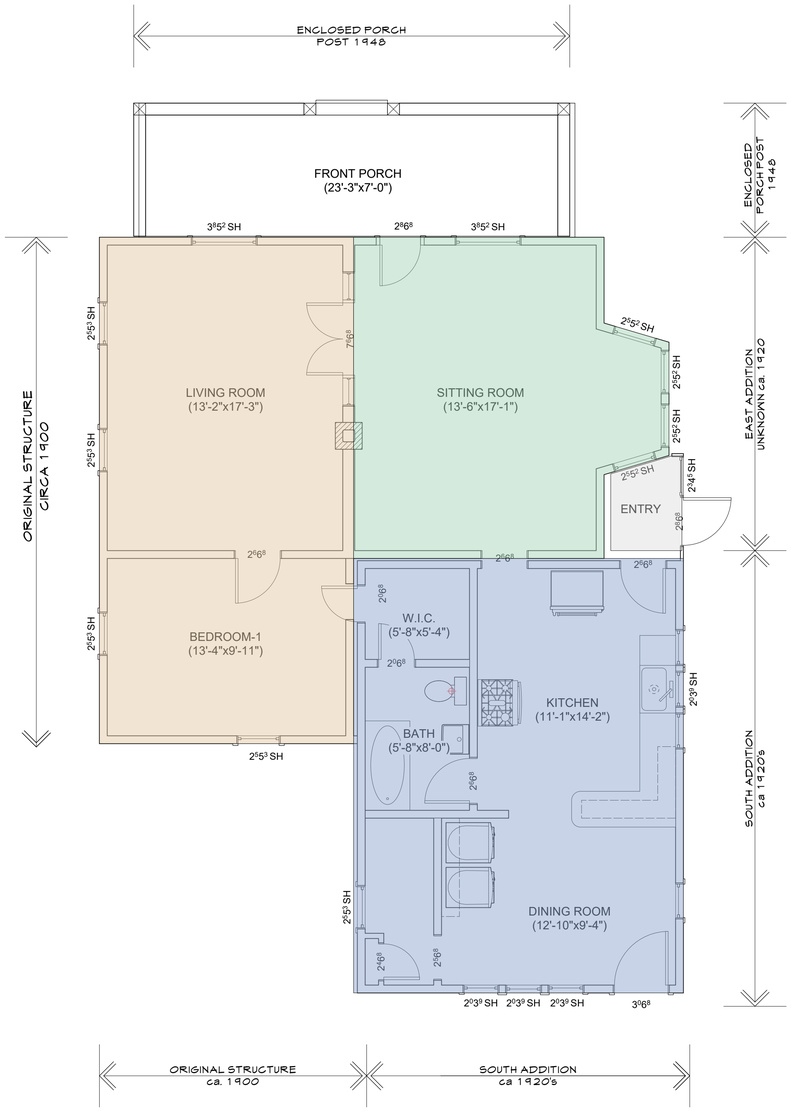
Sheet No.
2 of 6



PROPOSED MAIN FLOOR PLAN

1/4"= 1'-0"

N



EXISTING MAIN FLOOR PLAN

1/4"= 1'-0"

N

LEGEND

- ORIGINAL STRUCTURE (CIRCA 1900)
- PROBABLE EAST ADDITION (EARLY 1900's)
- SOUTH ADDITION (1920's)
- ENCLOSED PORCH (1920's, ENCLOSED POST 1948's)

stewart ARCHITECTURE
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LOUISVILLE, CO 80027
303. 665. 6668

Restoration and Addition to the Vogelsberg Residence
The Historic James House, 700 Pine Street, Louisville CO. 80027

LOTS 21-22 BLK 7 JEFFERSON PLACE

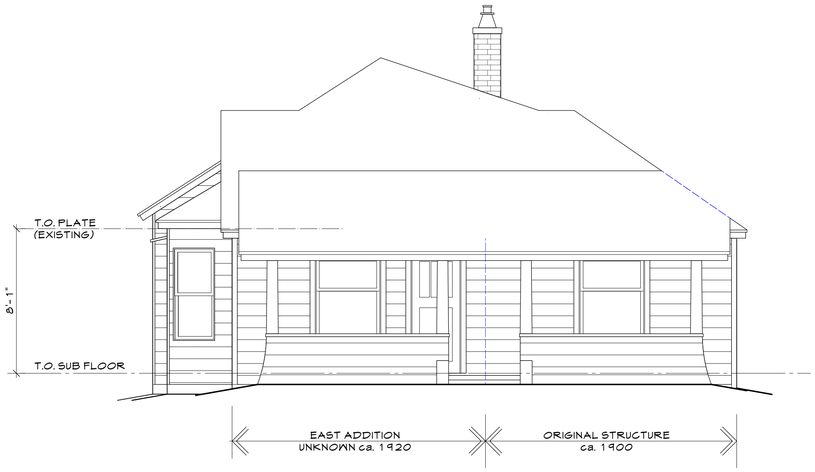
Issue:

Date	Comments	Init.
4/3/26	Alt Cert	PS

LANDMARK ALTERATION CERTIFICATE APPLICATION

Sheet Title
Main Floor
Existing & Proposed

Sheet No.
3 of 6



EXISTING NORTH ELEVATION

1/4"=1'-0"



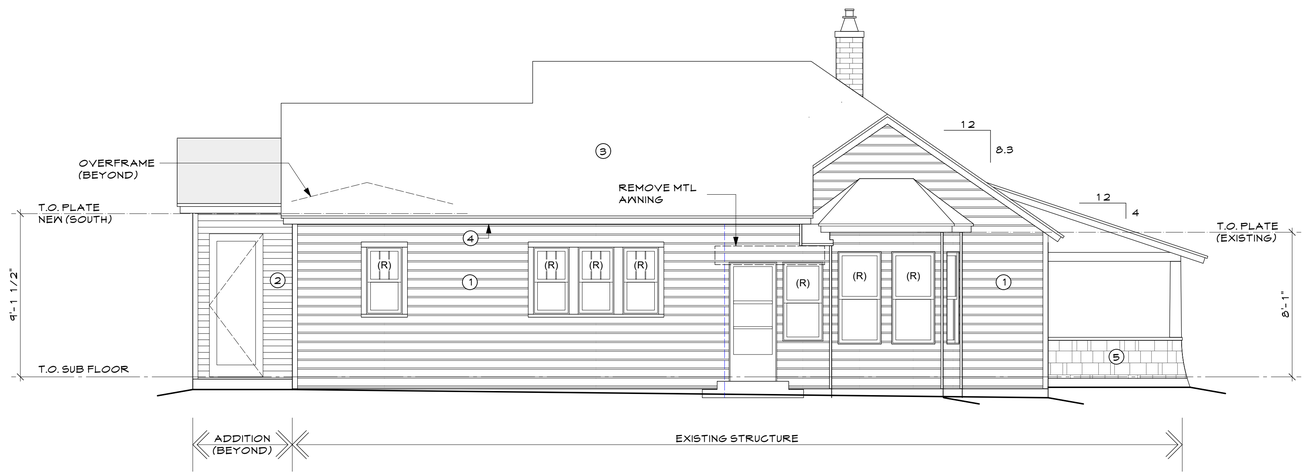
EXISTING EAST ELEVATION

1/4"=1'-0"



PROPOSED NORTH ELEVATION

1/4"=1'-0"



PROPOSED EAST ELEVATION

1/4"=1'-0"

ELEVATION KEY NOTES ⑨

1. EXISTING SIDING: CAREFULY REMOVE EXISTING STEEL SIDING, REPAIR ORIGINAL WOOD SIDING - OR REPLACE WIITH LIKE MATERIAL IF BEYOND REPAIR
2. NEW SIDING AT ADDITION: COMPOSITE LAP SIDING WITH 4 1/2" EXPOSURE
3. ASPHALT COMPOSITION SHINGLES
4. WOODWORK: (SOFFITS, FASCIA, & TRIM) CAREFULY REMOVE EXISTING STEEL MATERIALS, REPAIR ORIGINAL WOOD WORK - OR REPLACE WIITH LIKE MATERIAL IF BEYOND REPAIR
5. REMOVE METAL SIDING, PROVIDE NEW WOOD SHINGLES TO MATCH HISTORIC.

(R) REMOVE EXISTNG WINDONS AND REPLACE WITH NEW WOOD WINDONS - OPERATIONS, DIVIDED LITES AND DIMENSIONS TO MATCH HISTORIC.

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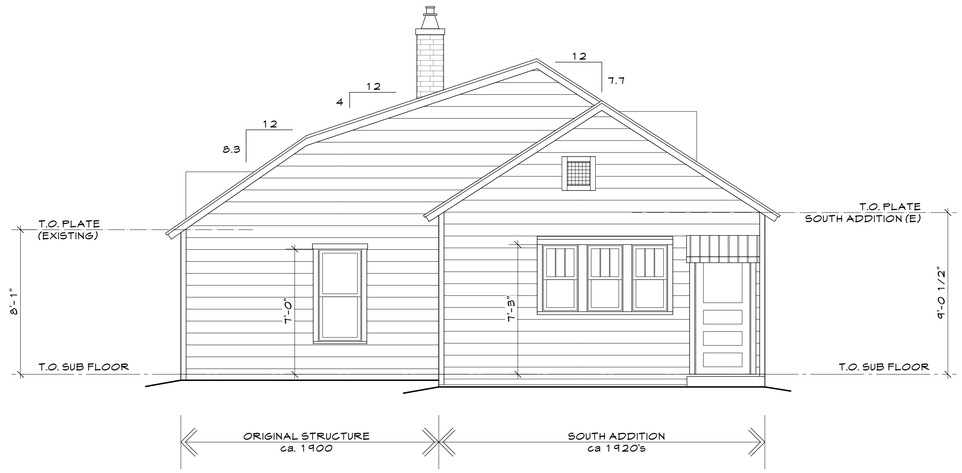
LOTS 21-22 BLK 7 JEFFERSON PLACE

Issue:

Date	Comments	Init.
4/3/26	Alt Cert	PS

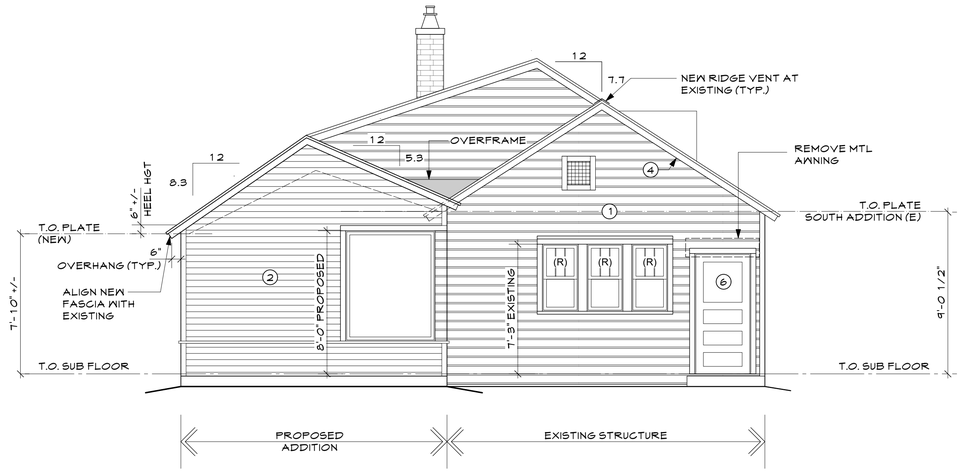
LANDMARK ALTERATION
CERTIFICATE APPLICATION

Sheet Title
Elevations
Existing & Proposed
Sheet No.
4 of 6



EXISTING SOUTH ELEVATION

1/4"=1'-0"



PROPOSED SOUTH ELEVATION

1/4"=1'-0"

ELEVATION KEY NOTES ⓟ

1. EXISTING SIDING: CAREFULY REMOVE EXISTING STEEL SIDING, REPAIR ORIGINAL WOOD SIDING - OR REPLACE WIITH LIKE MATERIAL IF BEYOND REPAIR
2. NEW SIDING AT ADDITION: COMPOSITE LAP SIDING WITH 4 1/2" EXPOSURE
3. ASPHALT COMPOSITION SHINGLES
4. WOODWORK: (SOFFITS, FASCIA, & TRIM) CAREFULY REMOVE EXISTING STEEL MATERIALS, REPAIR ORIGINAL WOOD WORK - OR REPLACE WIITH LIKE MATERIAL IF BEYOND REPAIR
5. REMOVE METAL SIDING, PROVIDE NEW WOOD SHINGLES TO MATCH HISTORIC.

(R) REMOVE EXISTNG WNDOWS AND REPLACE WITH NEW WOOD WINDOWS - OPERATIONS, DIVIDED LITES AND DIMENSIONS TO MATCH HISTORIC.

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303. 665. 6668

Restoration and Addition to the Vogelsberg Residence
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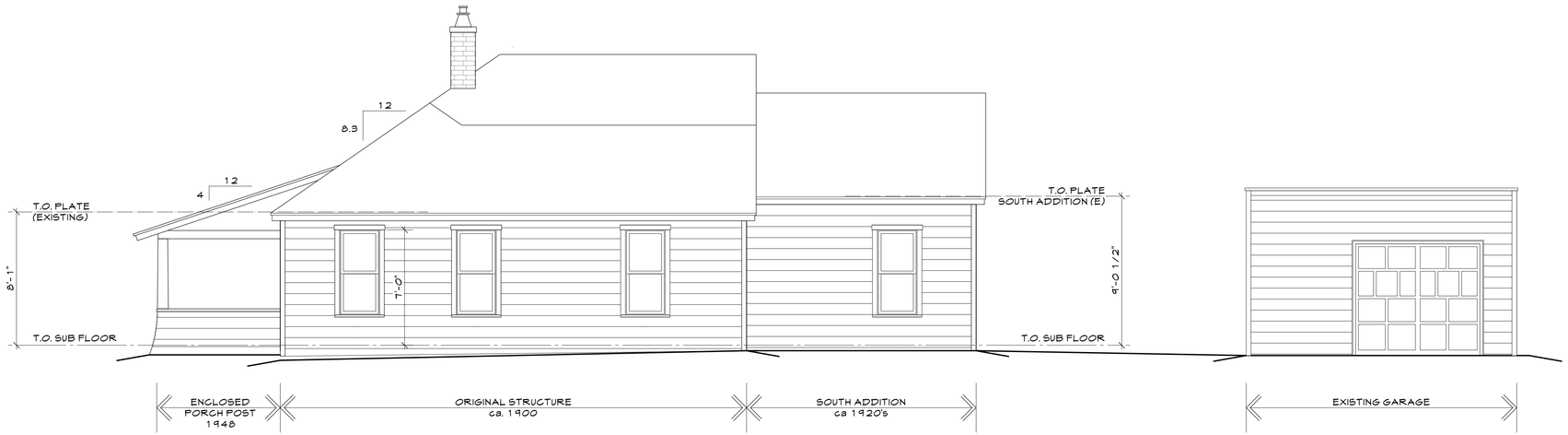
LOTS 21-22 BLK 7 JEFFERSON PLACE

Issue:

Date	Comments	Init.
4/3/26	Alt Cert	PS

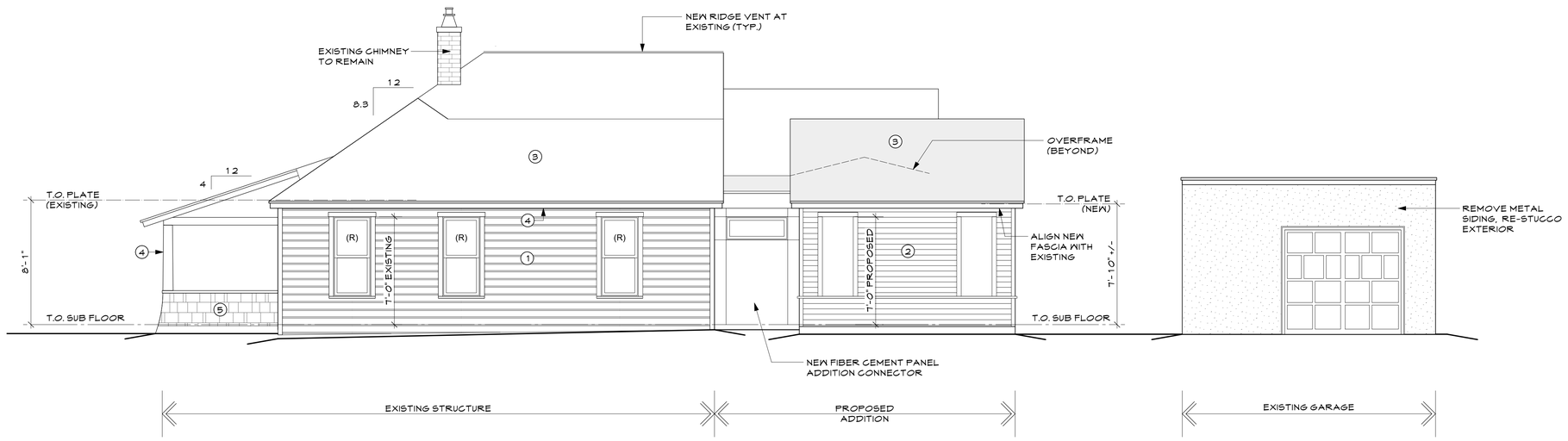
LANDMARK ALTERATION
CERTIFICATE APPLICATION

Sheet Title
Elevations
Existing & Proposed
Sheet No.
5 of 6



EXISTING WEST ELEVATION

1/4"=1'-0"



PROPOSED WEST ELEVATION

1/4"=1'-0"

ELEVATION KEY NOTES (R)

1. EXISTING SIDING: CAREFULY REMOVE EXISTING STEEL SIDING, REPAIR ORIGINAL WOOD SIDING - OR REPLACE WIITH LIKE MATERIAL IF BEYOND REPAIR
2. NEW SIDING AT ADDITION: COMPOSITE LAP SIDING WITH 4 1/2" EXPOSURE
3. ASPHALT COMPOSITION SHINGLES
4. WOODWORK: (SOFFITS, FASCIA, & TRIM) CAREFULY REMOVE EXISTING STEEL MATERIALS, REPAIR ORIGINAL WOOD WORK - OR REPLACE WIITH LIKE MATERIAL IF BEYOND REPAIR
5. REMOVE METAL SIDING, PROVIDE NEW WOOD SHINGLES TO MATCH HISTORIC.

(R) REMOVE EXISTNG WNDONS AND REPLACE WITH NEW WOOD WINDONS - OPERATIONS, DIVIDED LITES AND DIMENSIONS TO MATCH HISTORIC.

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ARCHITECTURE
1132 JEFFERSON AVE.
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LOTS 21-22 BLK 7 JEFFERSON PLACE

Issue:

Date	Comments	Init.
4/3/26	Alt Cert	PS

LANDMARK ALTERATION
CERTIFICATE APPLICATION

Sheet Title
Elevations
Existing & Proposed
Sheet No.
6 of 6



VIEW OF WEST SIDE
NTS



VIEW OF NORTH-WEST CORNER
NTS



VIEW OF SOUTH-EAST CORNER
NTS

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Restoration and Addition to the Vogelsberg Residence
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LOTS 21-22 BLK 7 JEFFERSON PLACE

Issue:

Date	Comments	Init.
4/3/26	Alt Cert	PS

LANDMARK ALTERATION CERTIFICATE APPLICATION

Sheet Title
3D Views

Sheet No.

Grant Table

700 Pine Street Revised: 7/28/2026

	Eligible Costs	Grant Request	Grantee Costs
Focused Grant			
For preservation and restoration projects. These projects include measures directed towards sustaining the existing form, integrity, and materials of a historic property.			
Maximum $ 15,000 (per Resolution #2, 2012)			
Maximum $ 63,000 (per Resolution #102, 2025)			
Site Work (Drainage)	$ 6,000		
Windows & Exterior Doors	$ 24,000		
Exterior Siding & Trim - Soffit & Eaves	$ 24,640		
Roofing & Gutters	$ 10,000		
Painting (restoration exterior only)	$ 6,400		
Building services (Elec, Mech, Plumbing) - $35,000		Not eligible for prior landmarks	
General Conditions (contractor admin & management)	$ 25,000		
Additional Structural Funds (Building integrity)			
Included in Focused Grant above (per Resolution #2, 2012)			
Maximum $ 20,000 (per Resolution #102, 2025)		Not eligible for prior landmarks	
Framing and reinforcing existing floor & roof	$ 46,000		
Subtotal Focused Grant	$ 142,040	$ 15,000	$ 127,040
New Construction			
Maximum $ 23,000 (per Resolution #102, 2025)			
Bedroom Addition ($ 220,000)	NA	Not eligible for prior landmarks	NA
Extraordinary Circumstances - Foundation replacement			
Unlimited (per Resolution #2, 2012)			
Maximum $ 22,300 (per Resolution #102, 2025)			
Excavation, Grade, Prep, Backfill & Trucking	$ 38,000		
Concrete Footings, Foundations & Concrete Window Wells	$ 44,505		
Perimeter Drain System & Foundation Waterproofing	$ 5,200		
Undergrade prep for Basement concrete slab	$ 5,200		
Concrete Pump Truck	$ 1,440		
Subtotal (Foundation replacement)	$ 94,345	$ 22,300	$ 72,045
Grand Total	**$ 236,385**	**$ 37,300**	**$ 199,085**

RESOLUTION NO. 2
SERIES 2012

A RESOLUTION ESTABLISHING ADDITIONAL INCENTIVES FROM THE HISTORIC PRESRVATION FUND TO ENCOURAGE HISTORIC LANDMARK DESIGNATIONS AND NEW BUILDINGS OF CHARACTER FOR RESIDENTIAL AND COMMERCIAL PROPERTIES IN THE CITY OF LOUISVILLE AND TO FACILITATE THE ASSESSMENT OF PROTECTED STRUCTURES

WHEREAS, historic properties and buildings of character in the City of Louisville (the "City") are major contributors to the City's economic prosperity and quality of life; and,

WHEREAS, the Louisville City Council, pursuant to the City Charter, established a Historic Preservation Commission to assist it in the preservation and landmarking of these properties; and,

WHEREAS, when properties are locally landmarked they are preserved for future posterity and enjoyment and continue contribution to the unique character of the City; and

WHEREAS, at the November 4, 2008 election, the voters approved a ballot issue to levy one-eighth of one percent (1/8%) sales tax for purposes of historic preservation purposes within Historic Old Town Louisville; and,

WHEREAS, City council by Ordinance No. 1544, Series 2008, imposed the tax approved by the voters and established the Historic Preservation Fund; and

WHEREAS, the City Council by Resolution No. 20, Series 2009, created provisions related to the administration and uses of the Historic Preservation Fund; and

WHEREAS, Resolution No. 20, Series 2009, authorized the creation of a grant program to assist property owners in the rehabilitation and restoration of historic properties and new buildings of character;

WHEREAS, Resolution No. 20, Series 2010, authorized the creation of incentives to assist property owners in the rehabilitation and restoration of historic properties;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

In order to further facilitate and enhance the implementation of Resolution 20, Series 2009, and Resolution No. 20, Series 2010 the following provisions shall be enacted:

Section 1. Incentive program to encourage owners of historic structures and buildings of character to seek designations as landmarks or structures of merit:

a. An incentive of $10,000 shall be awarded to commercial property owners whose properties are declared landmarks pursuant to Chapter 15.36 of the Louisville Municipal Code, with the intended protections for landmarks pursuant to that chapter.

b. An incentive of $10,000 shall be awarded to commercial property owners whose properties are designated a Structure of Merit and who grant a conservation easement approved by the Louisville City Council. A property subject to a conservation easement is also subject to requirements for alteration certificates.

c. While property owners are encouraged to enhance and preserve the historic character of their property, incentives made under this section have no conditions other than landmark status or designation as a structure of merit.

Section 2. Grant program to conduct structural assessments of protected structures:

a. Any structure that is declared a landmark pursuant to Chapter 15.36 of the Louisville Municipal Code, or which is declared a Structure of Merit by the Historic Preservation Commission, shall undergo a building assessment to develop a preservation plan to establish priorities for the maintenance of the property.

b. For a period of 18 months from when a property is declared a landmark pursuant to Chapter 15.36 of the Louisville Municipal Code, or declared a Structure of Merit by the Historic Preservation Commission, the owner of the property shall be eligible for a grant from the Historic Preservation Fund in the amount of up to $900 for residential properties or up to $6,000 for commercial properties. Such grants shall be used solely to offset a portion or all of the cost of conducting a building assessment as described in this Section.

c. The assessment shall be conducted by a qualified consultant under contract with the City, or by a qualified consultant of the owner's choosing.

d. An exception to the requirement for a building assessment may be granted by the Historic Preservation Commission for good cause.

Section 3. Flexible grants for preserving, restoring, rehabilitating, or protecting landmarked property:

a. For a period of 18 months from when a property is declared a landmark pursuant to Chapter 15.36 of the Louisville Municipal Code the owner of the property shall be eligible for a grant from the Historic Preservation Fund in the amount of up to $5,000 for residential structures and up to $65,000 for commercial structures. These grants are available for the following purposes:

    i. Preservation and restoration: These projects include measures directed towards sustaining the existing form, integrity, and materials of a historic property, including preliminary measures to protect and stabilize the property. Up to 10% of a grant may be used for one-time actions considered routine maintenance. Routine maintenance includes painting, refinishing and exterior cleaning.

    ii. Rehabilitation: These projects include measures directed toward adapting a property to make efficient contemporary use of it while sensitively preserving the features of the property, which are significant to its historical, architectural, and cultural values. Sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make the property functional is appropriate within a rehabilitation project. This category also includes the restoration of a property to a specific, significant point in its history.

    iii. Pre-development: These projects include assessments of past and present historical features of a property for the purpose of properly and adequately documenting these characteristics. This includes assessing the physical condition of any existing historic features. Grants for this purpose will be available to individuals desiring to do restoration and renovation projects.

b. Grant funding may only be expended for the activities listed in this section for landmarked portions of a property.

Section 4. Incentive grants to encourage conservation easements on properties which contribute to the character, historical or architectural merit in Downtown Louisville and which are not eligible to be landmarked:

a. For a period of 18 months from when a property is designated by the City Council as a structure of merit, the owner of the property shall be eligible for a grant from the Historic Preservation Fund in the amount of up to $50,000. These grants are available for:

   i. Preserving, rehabilitating, restoring or protecting the property.

   ii. Offsetting costs of preserving the structural merit of a building that is being expanded pursuant to Section 17.16.280 and 17.28.050 of the Louisville Municipal Code.

b. Grant funding may only be expended for the activities listed in this section for those portions of a property designated to be a structure of merit.

Section 5. Focused preservation and/or restoration grants with matching funding requirements:

a. In addition to being eligible for the grants listed elsewhere in this Resolution, a property declared a landmark pursuant to Chapter 15.36 of the Louisville Municipal Code is eligible for a grant from the Historic Preservation Fund in the amount of up to $100,000 for commercial structures and up to $15,000 for residential structures activities described in this Section, or a series of grants totaling $100,000 for commercial structures and up to $15,000 for residential structures.

b. In addition to being eligible for the grants listed elsewhere in this Resolution, a property designated by the City Council as a structure of merit is eligible for a grant from the Historic Preservation Fund in the amount of up to $75,000 for commercial structures activities described in this Section.

c. Grants specified in this section may only be used for preservation and/or restoration projects: These projects include measures directed towards sustaining the existing form, integrity, and materials of a historic property. None of the funding awarded pursuant to this section may be used for any actions considered routine maintenance. Routine maintenance includes painting, refinishing and exterior cleaning.

d. All grants authorized under this Section shall be conditioned on the applicant matching at least one hundred percent (100 %) of the

amount of the grant with expenditures or an equivalent value of approved in-kind services that are integral to the project that is deemed eligible for a grant from the Historic Preservation Fund.

Section 6. New construction grants:

Owners of property on which new commercial structures or additions to existing commercial structures are proposed are eligible for grants of up to $75,000 total from the Historic Preservation Fund in order to limit mass, scale, and number of stories; to preserve setbacks, to preserve pedestrian walkways between buildings; and to utilize materials typical of historic buildings, above mandatory requirements.

Section 7. Maximum grant amounts and procedures:

a. The maximum combined amount of incentive and grant funding from the Historic Preservation Fund that any property may receive is limited to the following:

   i. $21,900 per property for a landmark residential structure

   ii. $181,000 per property for a landmark commercial structure

   iii. $141,000 per property for a designated commercial structure of merit

   iv. $75,000 for any new commercial construction project that limits the mass, scale, and number of stories; preserves setbacks, preserves pedestrian walkways between buildings; and utilizes materials typical of historic buildings, above mandatory requirements.

b. These limitations may be exceeded upon recommendation of the Historic Preservation Commission and approval by City Council upon a showing of extraordinary circumstances. Any grant exceeding the above limitations shall be conditioned on the applicant matching at least one hundred percent (100%) of the amount of the grant with expenditures or an equivalent value of approved in-kind services that are integral to the project that is deemed eligible for a grant from the Historic Preservation Fund.

c. The Historic Preservation Commission will review all grant applications and make recommendations to the City Council for approval or disapproval. The City Council may approve, deny or return a proposal to the HPC for further information.

d. Grants may be given in installments upon the satisfactory completion of portions of the project, or given in total upon the satisfactory completion of the project. Conditions for the satisfactory completion of the project shall be given when the grant is awarded. Grants may be revoked if the conditions are not met. Grants given prior to the beginning of a project may be given only in suitable situations, as recommended by the HPC and approved by City Council.

e. In addition to the procedures outlined herein, the administration of grants shall be in compliance with all applicable procedures in Resolution No. 20, Series 2009.

PASSED AND ADOPTED this 3RD day of January 2012.

CITY OF LOUISVILLE SEAL COLORADO

ATTEST:

Robert P. Muckle, Mayor

Nancy Varra, City Clerk

RESOLUTION NO. 102
SERIES 2025

A RESOLUTION MODIFYING AND INCREASING INCENTIVES UTILIZING THE HISTORIC PRESERVATION FUND

WHEREAS, historic properties and buildings of character in the City of Louisville (the "City") are major contributors to the character and quality of life of our City; and

WHEREAS, the City Council, pursuant to the City Charter, established a Historic Preservation Commission to assist it in the preservation and landmarking of these properties; and

WHEREAS, when properties are locally landmarked, they are preserved for future posterity and enjoyment and continue to contribute to the unique character of the City; and

WHEREAS, at the November 4, 2008 election, the voters approved Ballot Issue 2A to levy a one-eighth of one percent (1/8%) sales tax for purposes of historic preservation purposes within Historic Old Town Louisville through December 31, 2018; and

WHEREAS, at the November 2, 2010 election, the voters approved Ballot Issue 2D to levy a permanent use tax of 3.50%, which superseded the City's then-current use tax, of which one-eighth of one percent (1/8%) of the use tax was dedicated to historic preservation purposes consistent with Ballot Issue 2A; and

WHEREAS, at the November 7, 2017 election, the voters approved Ballot Issue 2F, which extended the expiration date of the temporary sales tax of one-eighth of one percent for historic preservation from December 31, 2018 to December 31, 2028; and

WHEREAS, by Ordinance No. 1544, Series 2008, and Ordinance No. 1743, Series 2017, the City Council imposed the tax approved by the voters, established the Historic Preservation Fund ("HPF"), and codified the financial incentives set forth within Ballot Issues 2A (2008), 2D (2010), and 2F (2017); and

WHEREAS, Resolution No. 20, Series 2009, Resolution No. 20, Series 2010, Resolution No. 2, Series 2012, and Resolution No. 2, Series 2014, the City Council adopted provisions related to the administration and uses of the HPF and established grant programs and incentives to assist property owners in the rehabilitation and restoration of historic properties and new buildings of character; and

WHEREAS, by Resolution No. 4, Series 2014, and Resolution No. 21, Series 2016, the City Council established a revolving loan program within the HPF to encourage landmark designations and rehabilitation of historic properties in the City of Louisville; and

WHEREAS, by Resolution No. 17, Series 2019, the City Council combined all previously adopted incentives into a single resolution and increased certain incentives; and

WHEREAS, by Resolution No. 25, Series 2025, the amounts available for Historic Structure Assessment (HSA) grants were increased from $4,000 to $7,500 for residential properties and from $9,000 to $10,000 for commercial properties; and

WHEREAS, a core value of the City's Comprehensive Plan is promotion and preservation of the City's history and cultural heritage, particularly the City's mining and agricultural past; and

WHEREAS, increasing incentives for historic preservations will promote and strengthen another core value of the City's Comprehensive Plan, which is to promote unique commercial areas and distinctive neighborhoods, recognizing the diversity of commercial areas and neighborhoods by establishing customized policy and tools to ensure that each maintains its individual character, economic vitality, and livable structures; and

WHEREAS, the City Council desires to increase the maximum amounts of certain Historic Preservation incentives to best serve the City's core values, as set forth herein.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. Historic Preservation Fund.

There exists a Historic Preservation Fund ("HPF") in the City of Louisville, as established by Ordinance 1544, 2008 and amended by Ordinance 1743, 2017.

a. The HPF shall be funded by:

i. Proceeds from the 1/8% sales tax established by 2008 Louisville Ballot Issue 2A and Ordinance 1544, Series 2008 and extended by Louisville Ballot Issue 2F and Ordinance 1743, Series 2017;

ii. Proceeds from the allocation of 1/8% use tax for historic preservation, as established by Louisville Ballot Issue 2D and Ordinance 1575, Series 2010;

iii. Private and public donations, bequests, grants and funding from other sources made to the City for historic preservation purposes;

iv. Interfund loans from the City of Louisville; if approved by ordinance; and

v. Earnings on such amounts as may be deposited in the HPF.

b. The City of Louisville Historic Preservation Commission (the "Commission") shall make recommendations regarding expenditures from the HPF, but final action shall be taken by City Council by resolution, provided that after January 1, 2019, any expenditure of funds outside historic Old Town Louisville is approved by the affirmative vote of not less than five members of the entire City Council. The HPF should be managed to achieve maximum preservation of historic structures and the character of historic Louisville.

c. The Commission shall annually submit to the City Council an annual workplan and may supplement, modify, or update this document throughout the year as necessary.

d. As further detailed in the Sections below, the uses of the HPF shall be consistent with the following funds or purposes:

i. Administrative Funds;

ii. Contingency/Emergency Reserve Funds;

iii. Sales and Use Tax Proceeds to Support the Operations and Maintenance of the Louisville Museum Campus;

iv. Acquisitions Funds; and

v. Incentives for Historic Preservation, to Preserve Character, and for New Construction, including grants and loans.

Section 2. Administrative Funds.

Administrative Funds shall be used for purposes consistent with the establishment of the HPF, and shall include, but not be limited to:

a. Historical building surveys, other site surveys or reconnaissance-level or intensive-level historic and architectural surveys;

b. Staff to support the Commission and City activities in administering programs funded by the tax, including, but not limited to, interns, preservation planners, staff to conduct research for demolition review functions by the Commission and to assist vendors in conducting historic preservation surveys, and other support staff;

c. Plaques or other designations to honor structures that are landmarked or add to the character of historic Louisville;

d. Public outreach and education efforts; and

e. Funding of public-private partnerships for preservation of buildings of historic significance.

Section 3. Contingency/Emergency Reserve Funds.

On an annual basis twenty-five percent (25%) of the previous year's 1/8% sales tax revenue shall be set as the Contingency/Emergency Reserve. These funds shall be accessed only for incentives or acquisitions that become necessary due to exigent circumstances, upon the recommendation of the Commission and approval of City Council. "Exigent circumstances" for purposes of this section shall mean that the Commission has determined, with concurrence of City Council, that without urgent action, significant damage will be done to the historic fabric or character of Louisville.

Section 4. Operation and Maintenance for the Louisville Museum Campus.

Each year no more than twenty percent (20%) of the net annual City fiscal year proceeds of the one-eighth percent sales and use tax for historic preservation shall be transferred from the HPF to the City's General Fund to be used for the operation and maintenance of the Louisville Museum Campus.

Section 5. Acquisitions Funds.

Use of Acquisition funds of the HPF shall include, but not be limited to:

a. The purchase of historic properties or properties which contribute to the historic character of Louisville. These properties, if eligible, shall be landmarked pursuant to Chapter 15.36 of the Louisville Municipal Code and if not eligible, shall have a conservation easement placed upon them to preserve the outside appearance of the structure or other historical attributes of the structure or site. Prior to the purchase of any property, the City Council shall consider the financial risk, but the City Council may base its approval on considerations other than financial. The City may perform any restoration or rehabilitation work necessary on properties the City acquires, subject to availability of funds therefore, and may then sell the properties unless retained for a municipal purpose. A conservation easement for historic preservation purposes may be placed on the property prior to or in connection with any sale. Any loss and any costs resulting from the acquisition, rehabilitation and sale of the property shall be charged to the HPF, while any profits shall be deposited to the HPF; and

b. The purchase of conservation easements to protect the appearance of structures that contribute to the character of historic Louisville. Easements funded by the City may be held solely by the City or jointly with another governmental entity or a third-party non-profit preservation organization.

Section 6. Grant program to conduct Historic Structure Assessments (HSAs) of eligible structures.

Prior to any structure being declared a landmark pursuant to Chapter 15.36 of the Louisville Municipal Code or the establishment of a conservation easement, or approval of grants for preserving, restoring, rehabilitating, or protecting a landmark property, the property will undergo a historic structure assessment (HSA) to develop a preservation plan to establish priorities for the maintenance of the property.

a. At a regular meeting, the Commission shall review the building history, application, and other relevant information to determine whether there is probable cause to believe the building may be eligible for landmarking under the criteria in § 15.36.050 of the Louisville Municipal Code. If probable cause is not found by the Commission, an HSA grant will not be issued. If probable cause is found by the Commission, the owner of the property shall be eligible for a Historic Structure Assessment (HSA) grant in an amount up to $7,500 for residential properties and $10,000 for commercial properties. Such grants shall be used solely to offset a portion or all of the cost of conducting the HSA. A finding of probable cause is solely for purposes of action on the HSA grant request and does not guarantee any outcome at subsequent hearings by the Commission or City Council.

b. The maximum grant amounts may be increased up to $10,000 for residential properties and $15,000 for commercial properties upon a demonstration by the applicant that the additional grant amount is needed due to extraordinary circumstances relating to building size, condition, architectural details, or other unique conditions compared to similar Louisville properties.

c. All grants are approved subject to the City's HSA process. The HSA shall be conducted by qualified consultants that are approved by the City prior to commencing the assessment. The primary consultant must be an architect licensed in the State of Colorado, and unless waived by the Historic Preservation Commission for good cause, a structural engineer licensed in the State of Colorado must contribute to all pertinent parts of the assessment. Qualified consultants in other specialty areas, such as mechanical and electrical systems, should be utilized as needed for a thorough and complete assessment. The primary consultant must have significant experience in the field of historic preservation and must be familiar with and able to apply The Secretary of the Interior's Standards for the Treatment of Historic Properties.

d. The City shall establish minimum standards and scopes of work for assessments and make such available to the consultants prior to commencing the assessment. The City shall be provided with a copy of any completed assessment for which grant funds are awarded and verify that the assessment meets the established standards and follows the scope of work prior to providing reimbursement of the grant funds awarded.

e. An exception to the requirement for an HSA prior to landmarking or the establishment of a conservation easement may be granted by the Commission for good cause.

Section 7. Qualifying Work for Grant and Loan Programs.

Grants and loans may be approved for any of the following categories of work; however, grant funds may not be used for interior improvements other than for protection, stabilization, or code-required work.

a. **Preservation** is the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property as they now exist. Approved work focuses upon the repair of exterior historic materials and features rather than extensive replacement and new construction.

b. **Rehabilitation** is the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values. Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate.

c. **Restoration** is the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time. Approved work focuses on exterior work and includes the removal of features from other periods in its history and reconstruction of missing features from the restoration period.

d. **Maintenance** is the act or process of maintaining or preserving the form, features, and characters of a property as existing at the time of the work to maintain its historic character and condition. Approved work is limited to exterior work.

Section 8. Grants for preserving, restoring, rehabilitating, or protecting landmarked property.

a. For a period of 36 months from when a property is declared a landmark pursuant to Chapter 15.36 of the Louisville Municipal Code or from the establishment of a conservation easement, the owner of the property may be eligible for a grant from the HPF in the amount set forth in Table 1 for residential structures and Table 2 for commercial structures.

b. The landmarking bonus is an unmatched incentive grant. Owners of a landmarked property will be eligible for this grant following the signing of the landmark and grant agreements. Except for applicants whose household income is at or below 120% Area Median Income ("AMI"), as calculated by the United States Department of Housing and Urban Development ("HUD") ("Income Qualified Applicants") who have applied for grant funds to perform maintenance, the remaining grants shall be conditioned based on the applicant matching at least one hundred percent (100%) of the amount of

the grant with expenditures or an equivalent value of approved in-kind services for approved work based on the completed HSA and deemed eligible for a grant from the HPF. Income Qualified Applicants will not be required to provide matching funds or approved in-kind services for maintenance work. Eligible work will fall under the preservation, rehabilitation, or restoration, and maintenance for Income Qualified Applicants, categories as described above.

d. Applicants must complete the work covered by any grants and submit their reimbursement requests within 60 months of the landmark declaration or the establishment of a conservation easement. Upon a showing of good cause, the above timeline may be extended with approval of a subcommittee consisting of a designated staff person and two randomly selected members of the Commission. If the request for timeline extension is not approved unanimously, the request shall be forwarded to the full Commission for consideration at a public meeting.

Table 1: Residential Grant Amounts

Type	**Amount**
Residential Landmark Incentive	$7,700
Tier 1	
Residential (Matching)	$63,000
Additional Structural Funds (Matching)	$20,000
New Construction (Matching)	$23,000
(Tier 1 Subtotal)	*$106,000*
Tier 2	
Extraordinary Circumstances (Maximum Amount; Matching)	$22,300
(Tier 1 + Tier 2 Subtotal)	*$128,300*
Tier 3	
Exceptional Circumstances (Matching)	No limit if criteria met
Total Grant Funds Available Per Residential Property*	**$136,000+**

* Total includes landmark incentive
+ Plus unlimited exceptional circumstances matching grant under Tier 3
+Total excludes HSA grant.

Table 2: Commercial Grant Amounts	
Type	**Amount**
Commercial Landmark Incentive	$77,000
Tier 1	
Commercial (Matching)	$232,000
New Commercial Construction (Matching)	$111,000
(Tier 1 Subtotal)	*$343,000*
Tier 2	
Extraordinary Circumstances (Maximum Amount; Matching)	$80,000
(Tier 1 + Tier 2 Subtotal)	*$423,000*
Tier 3	
Exceptional Circumstances (Matching)	No limit if criteria met
Total Grant Funds Available Per Commercial Property*	**$500,000⁺**
OR	
Conservation Easement	**$77,000**

* Total includes landmark incentive

⁺ Plus unlimited exceptional circumstances matching grant under Tier 3

\+ Total excludes HSA grant.

e. For purposes of Table 1 and Table 2, "extraordinary circumstances" shall mean additional grant funds are appropriate to:

i. Preserve, restore, and rehabilitate the integrity of historic architectural features and materials of the exterior of the buildings, including but not limited to historic windows, doors, siding, and other historic features that, without the additional grant funds, would be replaced by new materials; or

ii. Pay for vital structural work and building code compliance-related work that exceed Tier 1 grant amounts, if identified in an approved HSA.

f. For purposes of Table 1 and Table 2, "exceptional circumstances" must meet all of the following criteria:

i. Demonstrate exceptional architectural style or social history contributing to the historic fabric of Louisville; and

ii. Demonstrate exceptional uniqueness in the City; and

iii. Demonstrate that, without the additional grant funds, the project is not financially viable; and

iv. Demonstrate a gap in funding for the project to be financially feasible.

iv. HPF funds are available, after taking into consideration other priorities and obligations (including encumbered funds).

Section 9. Residential new construction grants.

Owners of landmarked property or property with an established conservation easement on which additions to existing residential structures are proposed are eligible for matching grants as set forth in Section 8, Table 1 for new residential construction that, beyond mandatory requirements, substantially limits mass, scale, and number of stories, preserves setbacks in a manner that protects the historic integrity of the property and its environment by differentiating new work from the old. Qualifying new construction must maintain the existing height of the historic structure over the first 1/3 of the overall structure and have a floor area ratio (FAR) 10% below what is allowed by zoning.

Section 10. Residential Structural Grant.

Residential properties that require extensive stabilization work that exceeds Tier 1 funding amounts as set forth in Section 8, Table 1 may apply for additional funds for structural work. The condition warranting additional funds must be detailed/justified in an approved Historic Structure Assessment (HSA). Eligibility is for the historic home only and not foundation or stabilization work for new construction.

Section 11. Commercial new construction grants.

Owners of landmarked property or property with an established conservation easement on which new commercial structures or additions to existing commercial structures are proposed are eligible for grants as set forth in Section 8, Table 2 for new commercial construction that, beyond mandatory requirements, substantially limits mass, scale, and number of stories, preserves setbacks in a manner that, a protects the historic integrity of the property and its environment by differentiating new work from the old. Qualifying new construction must limit building height to two stories and have a floor area ratio (FAR) 20% below what is allowed by zoning.

Section 12. Time limits and procedures.

a. To be considered for incentives funding, the owner must complete an application and submit it to the Community Development Department, together with sufficient building plans, if appropriate. Applications may be submitted at any time. Applications shall initially be reviewed by City staff, followed by a recommendation to the Commission. The Commission shall make a recommendation to City Council for final action. Any recommendation by the Commission may be to grant some, all, or none of the requested incentives. If the Commission recommendation is to grant the requested incentives in whole or part, it shall also forward recommendations regarding the terms of an agreement which must be met for receipt of the incentives. All recommendations are subject to approval, rejection and/or modification by City Council, and City Council may return recommendations for further information or review. All incentives are subject to budgetary requirements and considerations, including review of amounts currently and foreseeably available in the HPF and appropriation in the discretion of City Council. Applications for incentive and grant funds must be received by the Community Development Department within 36 months of the date a property is declared a landmark pursuant to Chapter 15.36 of the Louisville Municipal Code or the establishment of a conservation easement. Following the second anniversary of landmarking or establishment of a conservation easement, if no application has been filed for incentive and grant funds for the property, City staff shall provide a courtesy notice to the owner reminding them of the upcoming deadline for filing such applications.

b. Reimbursement requests for completed work approved for grant funding must be received within 60 months of a property being declared a landmark pursuant to Chapter 15.36 of the Louisville Municipal Code or the establishment of a conservation easement.

c. Upon a showing of good cause, the above timeline for work not started or completed may be extended with approval of a subcommittee of the Historic Preservation Commission consisting of a designated staff person and two randomly selected members of the Commission. If the request for timeline extension is not approved unanimously, the request will be forwarded to the full Commission for consideration at a public meeting.

d. Any time extensions due to extraordinary circumstances that exceed the 36-month cap for grant applications or the 60-month cap for reimbursement requests may require an update to the existing HSA described in Section 7 if the necessary work has changed in that time period or if the applicants are proposing work not identified in the HSA. If deemed necessary, this update will be completed at the expense of the applicant.

e. Owners of properties landmarked prior to enactment of this resolution shall have access to the grant funds available through the resolutions in effect at the time of landmarking approval. Such owners may also apply for additional grants through the extraordinary circumstances process described above.

f. The Commission will review all complete grant applications and make recommendations to the City Council for approval or disapproval. The City Council may approve, deny, or return a proposal to the Commission for further information.

g. Grants may be given in installments upon the satisfactory completion of portions of the project, or given in total upon the satisfactory completion of the project. Conditions for the satisfactory completion of the project shall be given when the grant is awarded. Grants may be revoked if the conditions are not met. Grants given prior to the beginning of a project may be given only in suitable situations, as recommended by the Commission and approved by City Council, including approval by not less than five members of City Council for grants outside Old Town Louisville.

h. An applicant may request that the value of stabilization, restoration or preservation work completed on the structure prior to landmarking be considered as a credit against the matching requirement of this Section. Credit for such previously completed work is at the discretion of the City Council. Credit may only be considered under the following circumstances:

i. Only work completed within five years prior to the effective date of landmarking may be considered for potential credit against the matching requirement.

ii. The work previously performed was for stabilization, restoration, or preservation of the historic structure. No landscaping or site work may be considered for potential credit against the matching requirement. No interior work, except for structural work, sensitive upgrading of mechanical, electrical, and plumbing systems, and other code-required work to make the property functional, may be considered for potential credit against the matching requirement.

iii. Consideration for credit against the matching requirement may only be given to costs of previously completed work which is documented by paid receipts or invoices. The applicant shall provide the City with complete copies of all such receipts or invoices together with proof of payment, and shall also provide any available supporting documentation upon City request. The request for consideration of previously completed work shall also be accompanied by applicant's written certification that the work for which credit is requested was completed and the costs thereof were incurred and paid, and that the information in such request is true and accurate to the best of applicant's knowledge and belief. The value of in- kind services completed by the applicant shall not be considered.

iv. The amount of credit given for any previously completed work shall be determined by the City Council with input from the Commission,

considering such factors as the nature, extent and useful life of the work, the time it was completed, the appreciated or depreciated value of the work, and such other factors as determined relevant.

Section 13. Incentive grants to encourage conservation easements on properties which contribute to the character, historical or architectural merit in Downtown Louisville and which are not eligible to be landmarked.

a. For a period of 18 months from when a property is designated by the City Council as a structure of merit, the owner of the property shall be eligible for a grant from the HPF as set forth in Section 8, Table 2. These grants are available for:

i. Preserving, rehabilitating, restoring or protecting the property.

ii. Offsetting costs of preserving the structural merit of a building that is being expanded pursuant to Sections 17.16.280 and 17.28.050 of the Louisville Municipal Code.

iii.

b. Grant funding may only be expended for the activities listed in this section for those portions of a property designated to be a structure of merit.

Section 14. Loans from the Revolving Loan Program.

a. The historic preservation revolving loan program shall be used to provide low-interest loans for the purposes of preservation, restoration, rehabilitation and protection of properties that are landmarked pursuant to Chapter 15.36 of the Louisville Municipal Code or subject to a conservation easement to preserve the character of historic Louisville. All loans shall be funded solely from those funds held within the HPF for such purposes, and all loans shall be expressly contingent upon the availability of funds. Additionally, low-interest loans may be provided to Income Qualified Applicants for the purpose of maintaining a landmarked home.

b. The City Manager is authorized to issue requests for proposals and enter into contracts for entities to administer the loans from this program.

c. The City Manager is authorized to adopt written rules for the administration of the loan program, the provisions of which shall be consistent with Ballot Issues 2A, 2D and 2F and City ordinances and resolutions implementing the Ballot Issues.

d. Complete loan request applications shall be submitted to the Community Development Department and shall be reviewed by the Commission at a public meeting. The Commission shall provide its recommendation on the application before final action is taken by City Council. Final action on loans awarded to property outside historic Old Town Louisville shall be approved by at least five Council Members.

e. Loan requests applications may be submitted and considered in conjunction with grants from the HPF, respecting the grant limitations established herein. The Commission may recommend a mixture of loans and grants from the HPF even if the applicant requested only one type of assistance, and also may recommend one type of assistance where a mixture is requested. City Council may also decide to approve any one or a mixture of loans and grants regardless of the number or types of assistance requested in the request application. A mixture of loans and grants awarded to property outside historic Old Town Louisville shall be approved by not less than five Council Members.

f. Loans shall be at least $2,500. There is no specific loan limit, but the Commission and City Council shall consider the following in setting a loan amount:

g. HPF funds are available, after taking into consideration other priorities and obligations (including encumbered funds).

h. The necessity of the work to be performed for the preservation or rehabilitation of the structure, or maintenance of the structure for those income-qualified applicants, and how the proposed work fits into the approved HSA recommendations;

i. The availability of other funding sources.

j. Interest rates shall be equal to 2% below the Wall Street Journal Prime Rate as reported on the date of city acceptance of a complete application, not to go below 1%. Any fees for loan processing shall also be established at the time of the award. The loan repayment schedule shall also be established at the time of the award; provided, however, that all loans shall include a due-on-sale clause providing that any outstanding balance on the loan shall be paid in full upon sale or transfer of the property.

k. In connection with the processing of loan requests, the City may require such information as is reasonably necessary to determine the state of title to and encumbrances upon the subject property, the creditworthiness of the proposed borrower(s), and other matters relevant to loan award and repayment criteria. The City or loan program administrator may require applicants provide written consents to obtain such information.

l. Receipt of any loans, grants or other incentives shall require that the structure be landmarked pursuant to Chapter 15.36 of the Louisville Municipal Code, or if not eligible for landmarking, that the owner grant the City a conservation easement to preserve the outside appearance of the structure or other historic attributes of the structure or site.

m. Loan funds may not be used for interior improvements other than for protection, stabilization, or code-required work.

Section 15. Repeal and Reenactment; Effective Date. Resolution No. 17, Series 2019 and Resolution No. 24, Series 2025 are hereby repealed.

PASSED AND ADOPTED this 16th day of December 2025.

Christopher M. Leh, Mayor

ATTEST:

Gemny Kline, City Clerk

CITY OF LOUISVILLE SEAL COLORADO

Narrative for Extraordinary Circumstances Funding Request

700 Pine Street – Louisville, Colorado

The property located at 700 Pine Street is a locally landmarked historic resource that reflects the architectural, cultural, and social history that defines the City of Louisville. Constructed circa 1903 and prominently situated at the corner of Pine Street and Jefferson Avenue; two highly visible and heavily traveled corridors just west of downtown - the home serves as a gateway feature to Louisville's historic core and a visible representation of the community's early development.

This property has remained in the James family since 1938, when it was purchased by our grandparents, George and Gladys James. Our family's connection to Louisville extends even further, including homesteading roots in the immediate area and our grandmother's childhood residence just two blocks away. Our grandfather, a coal miner, was actively involved in the Louisville community through participation in the Louisville Miners baseball team and the Louisville Rod and Gun Club. The home therefore represents not only a preserved architectural form, but a multi-generational link to the people and industries that shaped Louisville's identity.

Following our grandmother's passing in 2008, ownership transitioned to our mother, Debbie Vogelsberg. In 2009, we moved into the home, and in February 2024, we formally assumed ownership with the explicit intent of restoring and preserving the property for future generations. This long-term stewardship reflects a sustained commitment to maintaining both the structure and the historic character of the surrounding neighborhood.

In 2013, we worked with the City to designate the home as a local landmark under the Historic Preservation program. This decision was made in direct response to the increasing loss of historic homes in Louisville and a desire to preserve the architectural character that contributes to the City's identity and sense of place. At the time of landmarking, funding opportunities were governed by City of Louisville Resolution No. 2 Series 2012, which limited residential preservation grants to approximately $15,000, with a maximum total funding cap of $21,900 per property.

While these incentives encouraged landmarking, they were not designed to address the level of structural rehabilitation now required for a property of this age that has remained largely unaltered for over a century.

A Historic Structural Assessment (HSA) completed by DAJ Design in May 2024 confirms that the home retains a high degree of historic integrity, with minimal changes since at least the mid-20th century. However, this same integrity has resulted in significant deferred structural and system deficiencies. The report identifies critical issues that must be addressed to preserve the structure, including:

- Complete replacement of the failing and non-code-compliant foundation

- Structural reinforcement or replacement of floor systems and supports
- Hazardous material mitigation, including asbestos and mold
- Electrical system upgrades to meet current safety standards
- Site grading and drainage corrections to prevent ongoing water intrusion

These are not elective improvements, but necessary interventions required to stabilize and preserve the historic structure.

The financial impact of these required preservation efforts is substantial. A detailed construction budget prepared in February 2026 identifies **$424,843.20 in preservation-related costs alone**, exclusive of new construction or non-preservation improvements. This amount exceeds the historic funding cap established under the 2012 resolution by more than twenty times.

This disparity highlights the core issue: the funding framework in place at the time of landmarking did not—and could not—anticipate the true cost of preserving a structure of this age and condition under modern building codes, environmental regulations, and construction costs.

Section 7(b) of the 2012 resolution explicitly allows for these limitations to be exceeded "upon a showing of extraordinary circumstances," subject to recommendation by the Historic Preservation Commission and approval by City Council. The conditions present at 700 Pine Street clearly meet this threshold:

- The home requires complete structural rehabilitation, including foundation replacement requiring the lifting of the structure
- The project includes mandatory health and safety remediation (asbestos and mold)
- The property has exceptional historic integrity, with minimal alteration since the early 20th century
- The structure occupies a highly visible and community-defining location
- The cost of preservation is disproportionate to previously available funding levels

Furthermore, the City's more recent actions to increase available preservation funding (as reflected in updated policy direction in 2025) demonstrate recognition that meaningful preservation requires funding levels aligned with real-world costs. This project is precisely the type of preservation effort those updates were intended to support.

Importantly, the preservation of 700 Pine Street provides a clear public benefit. Due to its prominent location and longstanding presence, the home contributes directly to the visual and historical fabric of Louisville. Its restoration will preserve a rare example of early 20th-century vernacular construction, reinforce the historic character of the downtown area, and maintain continuity within a neighborhood that has experienced increasing redevelopment pressure.

Our family has maintained continuous ownership of this property for over 85 years and has demonstrated a long-standing commitment to its preservation. We are prepared to make a significant personal financial investment in this project. However, the scale of required work creates a financial burden that cannot reasonably be addressed without support aligned with the City's preservation goals.

For these reasons, we respectfully request that the Historic Preservation Commission recommend, and City Council approve, funding beyond the standard grant limitations under the extraordinary circumstances provisions per City Council Resolution No. 112, Series 2025. Doing so will ensure the preservation of a historically significant property that embodies both the architectural and human history of Louisville and aligns directly with the purpose and intent of the Historic Preservation Fund.

stewart
ARCHITECTURE

July 17, 2026

Jess Daniels, AICP
Senior Planner, Community Development
City of Louisville
749 Main Street
Louisville CO 80027

RE: 700 Pine Street, Vogelsberg Residence (Historic James House)
Preservation and Restoration Grant Application

Ms. Daniels,

Attached is an amended Grant Table to accompany the grant request for City Council's consideration. The table is revised to provide clarity to the grant request budget. The previous grant table included ineligible project costs, such as interior improvements, to demonstrate the property owner's commitment and investment. These items have been removed per your request so only eligible expenses are included. The table has also been reformatted to correspond with the current guidelines outlined in Resolution NO. 102 Series 2025.

As you are aware the owners of this landmarked property believe the original intent of the voter approved Historic Preservation Fund tax and purpose of the Historic Preservation Fund is to provide "grant programs and incentives to assist property owners in the rehabilitation and restoration of historic properties and new buildings of character". Since passage of the tax the incentive program goals have shifted away from historic preservation to a very narrow focus of property "landmarking". Without the stated grant assistance to fill the gap of preservation costs the vital preservation work of this landmarked property may not come to fruition.

The owners acknowledge the 2025 Resolution recommends a time limit for grant application requests. However, the owners believe they are eligible for an extension, showing good cause due to family circumstances as outlined in the owners narrative of extraordinary circumstances. They therefore ask City Council to grant a finding of extraordinary circumstances.

Consistent with the intent of the voters and the tax, the owners ask City Council to approve the requested grant in order to preserve this landmarked property, and a modest grant for new construction (a bedroom addition) that contributes to the character of the City.

Thank you for your consideration,

Peter Stewart, Stewart Architecture
Project Representative



1132 Jefferson Avenue ▪ Louisville, Colorado 80027 ▪ tel 303.665.6668

stewart
ARCHITECTURE

July 28, 2026

Jess Daniels, AICP
Senior Planner, Community Development
City of Louisville
749 Main Street
Louisville CO 80027

RE: 700 Pine Street, Vogelsberg Residence (Historic James House)
Preservation and Restoration Grant Application

Ms. Daniels,

At your request, attached is an amended Grant Table to accompany the grant request for City Council's consideration. The table is revised to align with the grant funding approved by the Historic Preservation Commission (HPC). As you recall, our request for preservation grants totaled $128,300 using today's historic preservation incentive standards. The HPC however only approved a total of $37,300 based on incentive standards from 2012 in combination with a finding of "extraordinary circumstances" and imposing limits established in today's incentive standards.

Inequity of the Grant Program
This grant application highlights the inequities between funding of potential, new landmarks and other prior designated landmarked properties. We believe the objective and original intent of the voter approved Historic Preservation Fund tax and the Historic Preservation Fund is to provide "grant programs and incentives to assist property owners in the rehabilitation and restoration of historic properties and new buildings of character". However, since passage of the tax the incentive program goals have shifted away from historic preservation goals toward a narrow focus of incentivizing "landmarking". We believe these inequities are inconsistent with the intent of the tax and the fund.

In the report provided to the HPC staff states:

> The "purpose of the fund to *incentivize* local landmark designation" and further asserts that is "the intended use of Historic Preservation Funds outlined in Louisville Municipal Code (LMC) Sec. 3.20.605."

We do not believe that is an accurate representation of the purpose of the fund and the cited code section. The purpose of the tax as outlined in the code is for funds to be used to preserve the historic resources of the city – not merely to acquire landmark designations.

Because of the limited preservation funds available for this property, as recommended by the HPC, and the resulting funding gap, some of the work needed

to stabilize and repair the structure may not be achievable at this time. Regardless, we do request City Council's approval of the maximum amount possible to assist this property owner in the rehabilitation and restoration of this historic property. We believe this funding request is consistent with the voter approved tax and the goals of the community.

Thank you for your consideration,

Peter Stewart, Stewart Architecture
Project Representative



700 Pine Street – Historic Preservation Fund Grant Request

City Council, August 4, 2026

Presented by: Jess Daniels, Senior Planner, Community Development

City of Louisville



Site Location

Summary

REQUEST

- Focused Preservation and Restoration Grant of up to $15,000
- Extraordinary Circumstances grant of $22,300
- Total grant request: $37,300

STAFF AND HPC RECOMMENDATION

- Approval of a Preservation and Restoration Grant of up to $15,000
- Approval of Extraordinary Circumstances grants of up to $22,300 for structural and shoring work.
- Total recommended grant: $37,300

Background

- Landmarked in 2013 and received a landmark bonus of $1,000
- Did not apply for any additional grant funding at that time
- Subject to Resolution in effect at the time of landmarking (No. 2, Series 2012):
  - “Focused” grant category – limited to sustaining the existing form, integrity, and materials of a historic property (not broader rehabilitation work), do not have an expiration date, and are limited to $15,000
- Also subject to Resolution No. 102, Series 2025 regarding funding guidelines and limits:
  - Max $22,300 for extraordinary circumstances
    - For vital structural or code work or additional funds to preserve original materials

Conditions Over Time



Present-day images of the subject property.



1948 Boulder County Assessor Card Photo

City of Louisville

Project Scope of Work

- Exterior siding, roofing and attic
- Replacement of Windows and Doors
- Remove/replace aluminum soffits and fascia
- Remove entry porch finishes and rematch to historic original
- Garage siding removal/re-stucco
- New 1 bedroom addition
- Interior upgrades (foundations, mechanical, plumbing, electrical etc.)

“Focused” Preservation and Restoration Grant

- Resolution 2, Series 2012, Section 5. c: *(grants)…may only be used for preservation and/or restoration projects: These projects include measures directed towards sustaining the existing form, integrity, and materials of a historic property. None of the funding awarded pursuant to this section may be used for any actions considered routine maintenance. Routine maintenance includes painting, refinishing and exterior cleaning.*

- Eligible Items:
  - Windows and Exterior Doors - $24,000
  - Exterior Siding and Trim - $24,640
  - Total Eligible Work = $48,640

- **Total Recommended Focused Preservation and Restoration Grant: $15,000.00**

City of Louisville

Extraordinary Circumstances Request

- Resolution No. 102, Series 2025 caps residential projects at $22,300.00 for vital structural or code required work or additional funds to preserve original materials (Section 8, e and Section 8, Table 1).

- Request: $22,300 for structural and shoring scope of work

- Eligible Items:
  - Temporary Shoring of House While a New Foundation is Installed - $12,000
  - Foundation - $44,505
  - Total Eligible Work = $56,505

- **Total Recommended Focused Preservation and Restoration Grant: $22,300.00**

City of Louisville

Staff Analysis

- Intent of Historic Preservation Fund is to provide incentives for local landmarking
- Eligibility expirations and grant caps meet requirements of the ballot initiative and City ordinance to provide incentives for landmarking
- HPF fund is not intended to be used to fund open-ended preservation work (70 landmarks in City)
- Request is consistent with Resolution in effect at the time (Series No. 2, 2012), and process regarding extraordinary circumstances of Resolution 102, Series 2025.

Historic Preservation Commission Recommendation

- That City Council approve a Focused Preservation and Restoration Grant of up to $15,000 and an extraordinary circumstances grant of up to $22,300.00 for structural and shoring work a total grant of $37,300.00 (Resolution No. 8, Series 2026).

Staff Recommendation

- Approval of Resolution No. XX, Series 2026, approving a Focused Preservation and Restoration Grant of up to $15,000 and an extraordinary circumstances grant of up to $22,300.00 for structural and shoring work for a total grant of $37,300.00.