



# PLANNING COMMISSION MEETING AGENDA March 18, 2026

Library Community Room  
55 Academy Street, Lebanon, Oregon 97355

**Chair:**

Don Robertson

**Vice Chair:**

Lory Gerig-Knurowski

**Commissioners:**

Kristina Breashears

Karisten Baxter

Don Fountain

Shyla Malloy

Mike Miller

Regina Thompson

**Regular Meeting:**

6:00 PM

1. **Call to Order / Flag Salute**
2. **Roll Call**
3. **Minutes:** May 21, 2025, August 20, 2025. November 19, 2025  
and February 18, 2026
4. **Citizen Comments** – restricted to items not on the agenda
5. **Commission Review**
  - a. **Public Hearing** – Planning File S-22-03  
The applicant is requesting a three-year extension to the approved 28-lot subdivision.  
630, 636 & 660 B Street / 12S02W15BA01000, 1100 & 1200
  - b. **Public Hearing** – Planning File S-26-02, VAR-26-01  
The applicant proposes to subdivide an existing 6.39-acre parcel into 52 small residential lots along with a Class III Variance to the 25-foot maximum building height requirement to allow for 33-foot.  
S 5<sup>th</sup> Street / 12S02W22D 01001
6. **Commission Business and Comments**
  - SDC Committee
  - April Meeting 18<sup>th</sup> agenda items & election of Chair/Vice
7. **Adjournment**

Planning Commission meetings are recorded and available on the City's YouTube page at <https://www.youtube.com/user/CityofLebanonOR>. The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired or for other accommodations for persons with disabilities should be made at least 48 hours before the meeting to the Development Services Department at 541.258.4906.





# LEBANON PLANNING COMMISSION MEETING MINUTES

May 21, 2025 at 6:00 PM

Santiam Travel Station – 750 3rd Street, Lebanon, Oregon

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## MISSION STATEMENT

*The City of Lebanon is dedicated to providing exceptional services and opportunities that enhance the quality of life for present and future members of the community.*

## CALL TO ORDER / FLAG SALUTE

### ROLL CALL

#### PRESENT

Chair Don Robertson  
Vice-Chair Lory Gerig-Knurowski  
Karisten Baxter  
Kristina Breshears  
Don Fountain  
Alternate Regina Thompson

#### ABSENT

Alternate Shyla Malloy  
Alternate W. Marcellus Angellford  
Alternate Michael Miller

#### STAFF

Community Development Director Kelly Hart  
City Engineer Ron Whitlatch  
Development Services Supervisor Shana Olson  
City Attorney Tre Kennedy

## MINUTES – April 16, 2025 Planning Commission Meeting

The minutes were approved as submitted.

## COMMISSION REVIEW

### 1. Public Hearing – Planning File A-25-02

A proposed annexation for the property located at 31666 SW 5<sup>th</sup> Street with the preliminary zoning designation of Residential Mixed Density (RM) (12S02W22D 00902)

Chair Robertson opened the public hearing. City Attorney Kennedy reviewed the public hearing process. Commissioner Breshears said that she knows the family that is renting the house, but the relationship would not influence her decision. No additional ex-parte contacts, conflicts of interest, or biases were disclosed by the Commissioners.

Community Development Director Hart presented the staff report. She stated that staff finds the proposal complies with the decision criteria for an Annexation and the establishment of the applicable zone. Staff recommends that the Planning Commission recommend the City Council

approve the Annexation of the subject area and establishment of the respective Residential Mixed Density (Z-RM) zone on the newly annexed property.

Chair Robertson asked clarifying questions of the applicant's narrative.

Applicant testimony – none

Testimony in favor of or in opposition to the applications – Joseph and Jennifer Cable, neighbors, expressed that they are not opposed to the annexation but requested assurance that they would be notified if any development was proposed and that they would not be required to annex.

The public hearing was closed.

Motion to approve by Commissioner Fountain, seconded by Commissioner Baxter. Voting Yea: Chair Robertson, Vice-Chair Gerig-Knurowski, Commissioners Baxter, Breshears, Fountain and Thompson. The motion passed 6-0.

## 2. **Public Hearing – Planning File DCA-25-01**

A proposed Development Code Amendment to implement portions of the adopted Housing Production Strategy.

Consultants Brandon Crawford and Darci Rudzinski from MIG, Inc. presented the staff report.

Laura LaRoque, resident, submitted written testimony included in the packet. Crawford said that they recommended not adopting the changes, as the Project Advisory Committee had already approved the document. Hart said that staff appreciates the effort put into the testimony, noting that comments were mostly about style, and the City has discretion to adopt the code the way it feels most appropriate. The Project Advisory Committee reviewed the language and had opportunity to comment and make modifications.

Testimony – There were no members of the public present for comment.

Hart clarified for Commissioner Thompson that Section A of 16.19.120, concerning affordable housing on non-residential or public land, applies to specific groups eligible under Senate Bill 8, now part of Lebanon's development code. If eligible, they must follow Section B standards. If not, they cannot develop on non-residential or public land and must develop according to the appropriate zoning.

Commissioner Thompson asked how the rule about "dwellings being 14 feet apart where flammable fuel is stored between units" is enforced. Hart explained that this is carried over from the old code, and the fuel likely refers to propane. In such cases, storage must be placed farther from the property. These additional standards apply when homes are close together.

Hart explained to Commissioner Thompson that the term "family" was removed due to a state law change. "Household" refers to individuals living together and functioning as a unit.

Hart clarified for Commissioner Thompson that, under Cottage Clusters Section 9b, parking spaces must be located at least 10 feet from the property line.

Commissioner Thompson said that she prefers the word "must" for clarity. Hart explained that "shall" is a legal requirement and is sometimes appropriate, while both terms carry similar weight and can be interchangeable. City Attorney Kennedy added that "shall" is more legal, whereas "must" carries a moral connotation.

Commissioner Fountain expressed that he would not be comfortable approving changes without first having them reviewed by the Project Advisory Committee.

Responding to Chair Robertson's observation that Policy P-42 and P-43 are identical, Hart said that she would look this over.

Motion to approve by Commissioner Breshears, seconded by Commissioner Baxter. Voting Yea: Chair Robertson, Vice-Chair Gerig-Knurowski, Commissioners Baxter, Breshears, Fountain and Thompson. The motion passed 6-0.

Chair Robertson thanked the consultants and those who served on the committee.

**CITIZEN COMMENTS** – None

**COMMISSION BUSINESS AND COMMENTS**

There will be no Planning Commission meeting in June.

Future Planning Commission meetings will be held at the Lebanon Public Library.

In response to Chair Robertson's question about the development next to Walgreens, Hart said that it will be a tractor supply store. She also provided a general development update.

**ADJOURNMENT** – The meeting adjourned at 7:15 PM.





# LEBANON PLANNING COMMISSION MEETING MINUTES

August 20, 2025 at 6:00 PM

Santiam Travel Station – 750 3rd Street, Lebanon, Oregon

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## MISSION STATEMENT

*The City of Lebanon is dedicated to providing exceptional services and opportunities that enhance the quality of life for present and future members of the community.*

## CALL TO ORDER / FLAG SALUTE

### ROLL CALL

#### PRESENT

Chair Don Robertson  
Vice-Chair Lory Gerig-Knurowski  
Karisten Baxter  
Don Fountain  
Shyla Malloy  
Alternate Michael Miller  
Alternate Regina Thompson

#### ABSENT

Kristina Breshears  
Alternate W. Marcellus Angellford

#### STAFF

Community Development Director Kelly Hart  
City Manager/City Engineer Ron Whitlatch  
City Attorney Tre Kennedy

## MINUTES – February 19, 2025 Planning Commission Meeting

The minutes were approved as submitted.

## COMMISSION REVIEW

### 1. Public Hearing – Planning File CPMA-25-01, ZMA-25-01, CU-25-01 & PLA-25-02

Request to change the Comprehensive Plan Map designation from Mixed Use (C-MU) to Commercial (C-CM) and the Zoning Map designation from Mixed Use (Z-MU) to Highway Commercial (Z-HCM). The applicant is also requesting a Property Line Adjustment to consolidate the two lots and a Conditional Use Permit to construct and operate a car wash facility. (12S02W23B 00114 & 00115)

City Attorney Kennedy reviewed the public hearing process. Chair Robertson opened the public hearing. There was no ex parte, conflict of interest, or bias disclosed by the Commissioners.

Community Development Director Hart presented the staff report. She stated that staff finds the proposal complies with the decision criteria and recommends approval of the application subject to the adoption of the Conditions of Development listed in the staff report.

Applicant testimony –

Testimony in favor of or in opposition to the applications – None

The public hearing was closed.

Motion to approve by Commissioner Fountain, seconded by Commissioner Miller. **Voting Yea: Chair Robertson, Vice-Chair Gerig-Knurowski, Commissioners Baxter, Breshears, Fountain, Malloy, Miller and Thompson. The motion passed 8-0.**

**CITIZEN COMMENTS** – None

**COMMISSION BUSINESS AND COMMENTS**

Hart said that there will be a Planning Commission meeting in September.

She also announced her resignation from the City.

**ADJOURNMENT** – The meeting adjourned at **6:28** PM.



# PLANNING COMMISSION MEETING MINUTES

November 19, 2025 at 6:00 PM

Library Community Meeting Room  
55 Academy Street, Lebanon, Oregon

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## CALL TO ORDER / FLAG SALUTE

### ROLL CALL

#### PRESENT

Chair Don Robertson  
Vice-Chair Lory Gerig-Knurowski  
Kristina Breshears  
Don Fountain  
Alternate Michael Miller

#### ABSENT

Karisten Baxter  
Alternate Shyla Malloy  
Alternate Regina Thompson

#### STAFF

City Manager Ron Whitlatch  
Development Services Director Shana Olson  
City Attorney Tre Kennedy  
Council of Governments Contract Planner Dan Fleishman

### MINUTES – October 15, 2025 Planning Commission Meeting

The minutes were approved as submitted.

### COMMISSION REVIEW

#### 1. Public Hearing – Planning File CU-25-02

A Conditional Use request to establish a gas (filling) station at 3300 Burdell Boulevard (12S2W23B 00104)

Chair Robertson opened the public hearing. City Attorney Kennedy reviewed the public hearing process. There were no ex-parte contacts, conflicts of interest, or biases disclosed by the Commissioners.

Council of Governments Contract Planner Fleishman presented the staff report. He stated that staff finds the proposal complies with Conditional Use decision criteria and recommends application approval subject to two conditions (relating to submitting plans to the Fire Marshal to demonstrate compliance and that an engineering site plan be submitted for staff approval) as detailed in the staff report.

Chair Robertson asked about traffic access management treatments. Development Services Director Olson explained that the Transportation System Plan identifies the need for additional traffic mitigation at the intersection between Carl's Jr. and Walmart. Staff is monitoring development activity to determine when to initiate the project, which could involve installing a

signal but will more likely be a roundabout. She confirmed that the proposed development does not trigger any improvements at that location.

Olson also confirmed that the traffic impact analysis accounted for the building at full occupancy as well as the tractor supply being in operation.

Applicant testimony – Laura LaRoque, Pathfinder and Land Use Consulting, and Omar Khan, Khan Development, LLC, the owner and developer of the site, introduced themselves. LaRoque discussed the application and noted that Fire District staff attended the pre-application meeting and did not identify any requirements at that time.

Testimony in favor of or in opposition to the applications – none.

The public hearing was closed.

Motion to approve by Commissioner Fountain, seconded by Commissioner Miller. Voting Yea: Chair Robertson, Vice-Chair Gerig-Knurowski, Commissioners Breshears, Fountain and Miller. The motion passed unanimously.

**CITIZEN COMMENTS** – none

**COMMISSION BUSINESS AND COMMENTS**

City Manager Whitlatch reported on recent City departmental changes and noted that Fleishman is expected to continue assisting staff for the next four or five months.

Olson said that there are currently no applications scheduled for the December meeting.

**ADJOURNMENT** – The meeting adjourned at 6:20 PM.



# LEBANON PLANNING COMMISSION MEETING MINUTES

February 18, 2026 at 6:00 PM

Library Community Meeting Room  
55 Academy Street, Lebanon, Oregon

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## CALL TO ORDER / FLAG SALUTE

### ROLL CALL

#### PRESENT

Vice-Chair Lory Gerig-Knurowski  
Karisten Baxter  
Kristina Breshears  
Don Fountain  
Alternate Shyla Malloy  
Alternate Regina Thompson

#### ABSENT

Chair Don Robertson  
Alternate Michael Miller

#### STAFF

City Manager Ron Whitlatch  
Development Services Director Shana Olson  
City Attorney Tre Kennedy

**MINUTES** – none

**CITIZEN COMMENTS** – none

## COMMISSION REVIEW

City Attorney Kennedy reviewed the public hearing process.

### 1. Public Hearing – Planning File A-26-01

The proposed annexation of an approximately 0.75-acre property at the southeast corner of Airport Rd and Stoltz Hill Rd (2015 Stoltz Hill Road, 12S02W15CA, tax lot 900) and establishment of the applicable Residential Mixed Density zone

Vice-Chair Gerig-Knurowski opened the public hearing. There were no ex-parte contacts, conflicts of interest, or biases disclosed by the Commissioners.

Development Services Director Olson delivered the staff report. Staff determined that the proposal meets the annexation decision criteria and recommends that the Planning Commission make a recommendation to the City Council to approve the proposed annexation and establish the applicable Residential Mixed Density zoning designation.

Applicant testimony – Brian Vandetta, Udell Engineering, the applicant's representative, indicated he was available to respond to questions; none were raised.

Testimony in favor of the application – none

Testimony in opposition to the application – Luke Parker asked about the applicant’s plans for the property and whether potential floodplain or drainage impacts had been assessed, expressing concern about possible effects on drainage to his property. He also stated that he did not receive notice of the hearing from either the City or the County.

Kennedy explained that the only item under consideration is the annexation.

The public hearing was closed.

Motion to approve by Commissioner Baxter, seconded by Commissioner Malloy. Voting Yea: Vice-Chair Gerig-Knurowski, Commissioners Baxter, Breshears, Fountain, Malloy and Thompson. The motion passed unanimously.

## **2. Public Hearing – Planning File AR-26-01, S-26-01**

A request for approval of a 5-small-lot single-unit detached subdivision and a concurrent Administrative Review for townhome development on two of the proposed lots. (401 W. Mary Street, 12S02W10AB, tax lot 800)

Kennedy recused himself from this hearing. City Manager Whitlatch went over the public hearing process. Vice-Chair Gerig-Knurowski opened the public hearing. Commissioner Fountain recused himself.

Olson presented the staff report. Staff has determined that the proposal complies with subdivision and administrative review decision criteria and recommends approval of the subdivision application with the conditions of development, as contained in the staff report. Staff also concludes that the administrative review application meets the Residential Land Use Zones criteria. The department approves the administrative review application subject to the conditions and requirements contained in the staff report.

Applicant testimony – Brian Vandetta, Udell Engineering, the applicant’s representative,

Testimony in favor of the application – none

Testimony in opposition to the application – McKenzi Evans expressed concerns about safety and the increased number of cars, noting that there have been multiple occasions when cars have blocked their driveway.

Applicant rebuttal – In response to the parking concern, Vandetta explained that each detached single-family lot – not multi-family – will provide two off-street parking spaces, resulting in a total of 10 spaces for the five proposed units.

Responding to Vice-Chair Gerig-Knurowski’s question about the attached townhomes, Vandetta stated they will look nearly identical to the detached single-family homes and will include a minimum of two off-street parking spaces. He also confirmed that the street is wide enough to accommodate parking on both sides.

The public hearing was closed. There was a question from the audience about flag lot orientation and driveway access. The public hearing was re-opened.

Applicant rebuttal – Vandetta explained that Lots 4 and 5 will share a driveway, Lots 1 and 2 will share a driveway, and Lot 3 will have its own individual driveway.

In response to an audience question regarding construction in the area, Vandetta clarified that this is a separate development. Olson added that the property to the west already has a building permit and is not included in the development proposal under consideration tonight.

The public hearing was closed.

In response to Commissioner Malloy’s question about emergency vehicle access to Lot 5, Olson explained that the Fire Department confirmed the lot meets their spacing requirements and did not impose any conditions of approval. They would not drive down the driveway as it will be 150

feet from the road. Whitlatch said that Lot 5 should function similarly to Lot 4, where there will likely be sufficient space to turn around, although it is difficult to determine from the current design.

Motion to approve by Commissioner Malloy, seconded by Commissioner Thompson. Voting Yea: Vice-Chair Gerig-Knurowski, Commissioners Baxter, Breshears, Fountain, Malloy and Thompson. The motion passed unanimously.

#### **COMMISSION BUSINESS AND COMMENTS**

The next Planning Commission meeting will be held on March 18, 2026.

**ADJOURNMENT** – The meeting adjourned at 6:32 PM.



# AGENDA ITEM

5.a.







925 S. Main Street  
Lebanon, Oregon 97355

TEL: 541.258.4906  
development@lebanonoregon.gov  
www.lebanonoregon.gov

# MEMORANDUM

*Development Services*

To: Lebanon Planning Commission  
From: Shana Olson, Development Services Director  
Subject: Planning File No. S-22-03 Extension

Date: March 11, 2026

## I. BACKGROUND

The applicant requests a three-year extension of the previously approved Preliminary Subdivision. (File S-22-03). The subdivision was originally approved for three years ending on April 1, 2026.

The applicant states that the property has changed ownership, and the new owner is restarting project planning and coordination. The requested extension would allow additional time to complete engineering, permitting coordination, and final plat preparation. No modifications to the approved subdivision are proposed as part of this request.



## II. CURRENT REPORT

The Planning Commission previously approved a preliminary subdivision to divide an approximately 4.90-acre site into 28 residential lots. The property is located on the south side of B Street, midway between 7th and 9th Streets. The site is currently developed with three single-family residences, all proposed for demolition. Surrounding properties to the north, south, east, and west are developed with single-family residences within the Lebanon Urban Growth Boundary and are in zone R-MD.

The approved preliminary plat includes 28 residential lots averaging approximately 3,248 square feet each. The lots are eligible for development as single-family zero-lot-line townhomes and will have direct driveway access to a proposed new public street. The development includes a roadway connection to B Street, which is classified in the 2018 Transportation System Plan (TSP) as a local residential street.

Sanitary sewer and water mains will be extended from 7th and 9th Streets through the proposed new public street. Internal lots will connect to the extended mains via laterals, while lots fronting B Street will connect to existing mains.

## III. STAFF ANALYSIS

### **A. Lebanon Development Code Section 16.20.070 (J) states the following:**

#### *Expiration of Planning Approval and Re-Application*

*Unless the decision authority otherwise stipulates, Planning Approval for all types of land use applications, except for subdivisions, are valid for two years. Subdivision approvals are valid for three years. Expiration of land use approval occurs when applicants do NOT "exercise" their land use approval (see Section 16.20.080 immediately below) within the approved time period<sup>1</sup>. Preliminary Plats for subdivisions must be recorded within the approved time period. The City shall NOT grant a renewal or extension if planning approval has expired. Applicants must resubmit if their approval has expired.*

### **B. Written Request Requirement**

The applicant submitted a written request for a time extension on February 17, 2026, as required by this section. The preliminary subdivision approval does not expire until April 1, 2026; therefore, the request was submitted prior to the expiration of the approval.

### **C. Eligibility for Extension**

The preliminary subdivision approval for File S-22-03 is valid for three years and is scheduled to expire on April 1, 2026. The applicant submitted a written request for a time extension prior to the expiration of the approval period. No modifications to the approved subdivision are proposed, and staff is not aware of any changes to applicable Development Code standards or surrounding land use conditions that would affect the original approval.

### **D. Transportation Impact Analysis Review**

A Traffic Impact Analysis (TIA) was prepared for the Misty Meadows Townhomes development in September 2022 by Kittelson & Associates in support of the original subdivision application. The study evaluated anticipated traffic operations associated with the proposed 28-unit development and

reviewed operations at nearby intersections, including W B Street/S 7th Street and the proposed site access connection on W B Street.

The TIA concluded that the study intersections would operate within the City of Lebanon mobility standards during weekday AM and PM peak hour conditions and that no capacity-related mitigation would be required. The study recommended installation of stop control at the proposed site access roadway connection consistent with City standards and the Manual on Uniform Traffic Control Devices (MUTCD).

In March 2026, Kittelson & Associates prepared an update memorandum reviewing the findings of the 2022 TIA and current development conditions in the vicinity of the project. The memorandum concluded that the findings and recommendations contained in the original September 21, 2022, Traffic Impact Analysis remain valid and that no additional updates to the study are necessary to support the requested extension of the preliminary subdivision approval.

Based on the consultant's review, staff finds that the transportation analysis prepared for the original subdivision approval remains applicable to the proposed extension request.

#### IV. CONCLUSION AND RECOMMENDATION

The requested extension applies only to the timing of the previously approved preliminary subdivision and does not reopen or modify the original land use approval. If approved, the extension would allow the applicant additional time to complete engineering plan review, permitting coordination, and final plat preparation consistent with the subdivision layout and conditions previously approved by the Planning Commission.

Based on the information submitted by the applicant and the analysis provided in this report, staff finds that the proposal meets the applicable requirements of the Lebanon Development Code. Staff recommends approval of the requested three-year extension of the preliminary subdivision approval for File S-22-03 pursuant to LDC 16.20.070(J).

#### V. PLANNING COMMISSION ACTION

Staff has provided the Planning Commission with several options, each accompanied by an appropriate motion.

**1. Approve the application, adopting the draft order as presented.**

I move that the Planning Commission approve the Subdivision Extension (S-22-03) and adopt the Draft Order as presented by staff.

**2. Deny the application, directing staff to modify the draft order.**

I move that the Planning Commission deny the Subdivision Extension (S-22-03) and specify the reasons why the applicant has not met the criteria.





B. EXISTING CONDITIONS

The site is currently developed with three single-family residences, which are proposed for demolition as part of the future subdivision development.

The surrounding neighborhood consists of established residential development.

C. PROPOSAL

The previously approved preliminary plat creates 28 residential lots averaging approximately 3,248 square feet.

The lots are intended for development with single-family zero-lot-line townhomes. They will obtain driveway access from a new public street connecting to B Street, which is classified in the 2018 Transportation System Plan as a local residential street.

Sanitary sewer and water mains will be extended from 7th Street to 9th Street through the proposed public street, and internal lots will connect to the extended mains.

The applicant states that the property has recently changed ownership and that the new owner is restarting planning and coordination for the project. The extension would allow time to complete engineering and final plat preparation.

D. AGENCY COMMENTS

The following agencies were notified of the proposal: Build Lebanon Trails, Consumers Power, NW Natural, Pacific Power, Peak Internet, Republic Services, Oregon Pilots Association, Oregon Department of Aviation, Santiam-Albany Canal, Grand Prairie Water District, Linn County Assessor, Planning, Road and Surveyor Departments, Oregon Department of Transportation, Lebanon Fire District, Lebanon Building and Engineering, Lebanon Community School District, Lebanon Planning Commission and the Lebanon Chamber of Commerce.

No agency comments were received that would affect the requested extension.

E. PUBLIC COMMENTS

The City issued a public notification in compliance with the Lebanon Development Code and State regulations on February 26, 2026. The deadline for submission of written comments prior to the hearing was 5:00 pm on Tuesday, March 17, 2026. The City received no public comments on this application prior to the hearing.

F. ANALYSIS – EXTENSION REQUEST

The applicable approval criteria are contained in Lebanon Development Code Section 16.20.070(J) regarding expiration of planning approval and eligibility for extension of subdivision approvals.

FINDING:

Subdivision approvals are valid for three years unless otherwise specified. Preliminary plats must be recorded within the approved time period or the approval expires.

The preliminary subdivision approval for Planning File S-22-03 is scheduled to expire on April 1, 2026. The applicant submitted a written request for an extension on February 17, 2026, prior to the expiration of the approval period.

No modifications to the approved subdivision are proposed, and staff is not aware of changes to Development Code standards or surrounding land use conditions that would affect the original approval.

Based on the findings above, the Planning Commission concludes that the extension request satisfies the applicable provisions of the Lebanon Development Code.

#### **IV. CONCLUSION**

Based on the findings above, the Planning Commission concludes that the request for a three-year extension of the preliminary subdivision approval for Planning File S-22-03 complies with the applicable provisions of the Lebanon Development Code.

#### **V. ORDER**

The Planning Commission approves Planning File S-22-03, granting a three-year extension of the previously approved preliminary subdivision.

This extension applies only to the timing of the previously approved subdivision and does not modify the original approval, findings, or conditions.

The extension allows the applicant until April 1, 2029, to complete the subdivision process and record the final plat.

All conditions and requirements of the original preliminary subdivision approval shall remain in effect unless otherwise modified by the City.

This Order of Approval appears only as a matter of record.

APPROVED BY A \_\_\_\_\_ VOTE OF THE LEBANON PLANNING COMMISSION ON MARCH 18, 2026.

DATED at Lebanon, Oregon, this 18th day of March 2026.

SIGNED:

- 
- Don Robertson, Planning Commission Chair
  - Lory Gerig-Knurowski, Planning Commission Vice Chair

ATTEST:

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Shana Olson; Development Services Director



555 13th Street NE, Suite 2  
Salem, Oregon 97301-4178  
ph: (503) 986-3198  
emailto: [jonathan.rico@odot.oregon.gov](mailto:jonathan.rico@odot.oregon.gov)  
[Crash Analysis and Reporting Unit web page](#)

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**From:** Matt Hughart <[MHUGHART@kittelson.com](mailto:MHUGHART@kittelson.com)>  
**Sent:** Friday, May 27, 2022 2:35 PM  
**To:** ODOT TDS Crash Request Group <[ODOTTDSCrashRequestGroup@odot.oregon.gov](mailto:ODOTTDSCrashRequestGroup@odot.oregon.gov)>  
**Cc:** Alec Kauffman <[akauffman@kittelson.com](mailto:akauffman@kittelson.com)>  
**Subject:** Lebanon, OR Crash Data Request

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Hi,

I would like to request the most recent five years of intersection crash data at the following location in Lebanon, OR:

- S 7th Street/W B Street

Thank you.

Matt

Matt Hughart, AICP  
Principal Planner

[Kittelson & Associates, Inc.](#)  
Transportation Engineering / Planning  
851 SW 6th Avenue, Suite 600  
Portland, OR 97204  
503.228.5230  
503.535.7425 (direct)  
503.936.1463 (mobile)





# NOTICE OF PUBLIC HEARING

## LEBANON PLANNING COMMISSION

**NOTICE IS HEREBY GIVEN** that a public hearing will be held before the Lebanon Planning Commission on **March 18, 2026, at 6:00 p.m.** in the Library Community Room located at 55 Academy Street, to afford the public an opportunity to be heard and give testimony concerning the following matter:

|                               |  |
|-------------------------------|--|
| <b>Planning Case No.:</b>     | S-22-03                                  |
| <b>Applicant:</b>             | West Coast Home Solutions                |
| <b>Location:</b>              | B Street                                 |
| <b>Map &amp; Tax Lot No.:</b> | 12S02W15BA01000, 01100 & 01200           |
| <b>Request:</b>               | Request for Extension - Subdivision      |
| <b>Decision Criteria:</b>     | Lebanon Development Code Chapters: 16.20 |

**Request:** The applicant is requesting a three-year extension to the approved 28-lot subdivision.

**Providing Comments:** The city will be accepting public comments on this item in several ways to afford the public an opportunity to give testimony on the subject matter. Written and verbal testimony will be accepted upon issuance of this notice, **until 5:00 p.m. on Tuesday, March 17, 2026.** Written testimony may be emailed to [development@lebanonoregon.gov](mailto:development@lebanonoregon.gov) or mailed to the City of Lebanon at 925 S. Main Street, Lebanon, OR 97355, or delivered and dropped in the white mailbox in front of City Hall. Persons who desire to access the Zoom meeting to give oral testimony regarding a Public Hearing can contact the [development@lebanonoregon.gov](mailto:development@lebanonoregon.gov) by noon prior to the meeting so that staff can provide instructions.



The public is invited to either participate in person at the Library Community Room or watch the meeting virtually on **March 18, 2026**, at <https://www.youtube.com/user/CityofLebanonOR/videos>.

The agenda and application materials will be available for review on the City's website at <https://www.lebanonoregon.gov/meetings> seven days prior to the hearing.

*CITIZENS ARE INVITED TO PARTICIPATE* in the public hearing and give written or oral testimony as described above that address applicable decision criteria during that part of the hearing process designated for testimony in favor of, or opposition to, the proposal. If additional documents or evidence are provided in support of the application subsequent to notice being sent, a party may, prior to the closing of the hearing, request that the record remain open for at least seven days so such material may be reviewed.

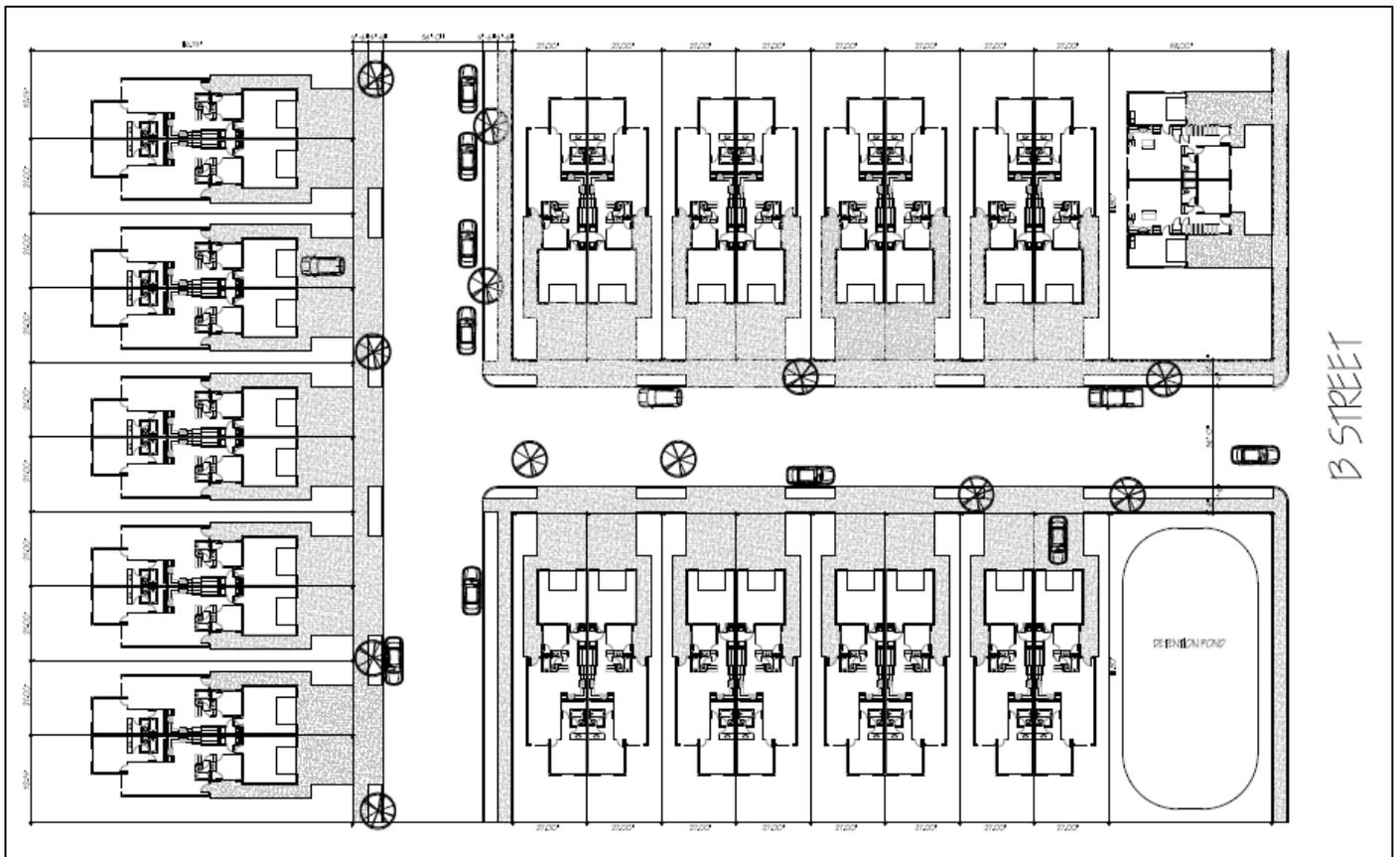
**Appeals:** Failure to raise an issue in the hearings, in person or by letter, or failure to provide sufficient specificity to afford the decision makers an opportunity to respond to the issue precludes appeal to the Land Use Board of Appeals based on that issue. Decisions of the Planning Commission may be appealed to the Lebanon City Council within 15 days following the date the Commission's final written decision is mailed. Only the applicant, a party providing testimony, and/or a person who requests a

copy of the decision has rights to appeal a land use decision. The appeal must be submitted on the appeals form as prescribed by City Council with appropriate fee paid and must set forth the criteria issues that were raised which the applicant or party deems itself aggrieved. Please contact our office should you have any questions about our appeals process.

**Obtain Information:** A copy of the application, all documents and evidence relied upon by the applicant, and applicable criteria are available for inspection at no cost and will be provided at the cost of 25 cents per single-sided page. If you have questions or would like additional information, please contact City of Lebanon Community Development Department, 925 Main Street; phone 541-258-4906; email [development@lebanonoregon.gov](mailto:development@lebanonoregon.gov)

**The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired or for other accommodations for persons with disabilities should be made at least 48 hours before the meeting to 541-258-4906.**

## PROPOSED PLAN



### Memorandum

**To:** Tammy Dickey, Senior Development Services Technician, [tdickey@lebanonoregon.gov](mailto:tdickey@lebanonoregon.gov);  
Shana Olson, Development Services Director, [solson@lebanonoregon.gov](mailto:solson@lebanonoregon.gov)

**From:** Erik de Guzman, LEI Engineering & Surveying of Oregon;  
Eugene Labunsky, West Coast Home Solutions

**Date:** February 17, 2026

**Job Number:** 60-42 Lebanon Subdivision

**Subject:** Lebanon Planning Commission Decision Planning File No. S-22-03

#### Request for Extension of S-22-03

Development Services Staff,

I am writing on behalf of the current applicant/owner, Eugene Labunsky of West Coast Home Solutions (WCHS), to request an extension of the Subdivision approval (Planning File No. S-22-03) for the project at 630-660 W B Street.

S-22-03 was approved with a three-year approval period ending in March 2026. Since the property has been sold to WCHS, the new owner is effectively restarting project planning and coordination. To allow adequate time to complete engineering, permitting coordination, and final plat materials for recordation, WCHS requests a three-year extension of the S-22-03 subdivision approval.

WCHS intends to proceed consistent with the approved subdivision decision and will comply with the conditions of approval for S-22-03. No modifications are being proposed to the subdivision as approved.

For clarity, this request is only for an extension of the Subdivision approval (S-22-03). The Administrative Review approval (AR-22-06, townhome construction) has expired and is not part of this request.

Please confirm in writing whether the City can grant this extension and, if so, the updated expiration/recording deadline. If the City needs a specific form, fee, or additional information to process the request, please let me know and we will provide it promptly.

Sincerely,



Erik de Guzman  
LEI Engineering & Surveying of Oregon



# MEMORANDUM

March 6, 2026

Project# 24995.11

To: Shana Olson, Development Services Director

City of Lebanon

925 S Main Street

Lebanon, OR 97355

From: Matt Hughart, AICP, Chris Brehmer, PE, and Robert Olney

RE: Misty Meadows Townhomes

## Review of 2022 Traffic Impact Analysis

In September 2022, Kittelson & Associates completed a traffic impact analysis (TIA) for the proposed Misty Meadows Townhomes development (see *Misty Meadows Townhomes – Transportation Assessment*, dated September 21, 2022). At the time of the study, the proposed development consisted of 28 townhomes to be located west of the S 7<sup>th</sup> Street corridor between W B Street and W D Street in Central Lebanon (see Figure 1).

**Figure 1. Site Vicinity Map**



The study evaluated the expected operational impacts of the Misty Meadows Townhomes on two study intersections under year 2023 conditions: W B Street/S 7<sup>th</sup> Street and the planned site access connection at W B Street. The TIA's primary findings and recommendations are reproduced below:

- The study intersection and site access road intersection are forecast to meet the City of Lebanon mobility standards during the weekday AM and PM peak hours under existing, 2023 background, and 2023 total traffic conditions. No capacity-based mitigation needs were identified at either intersection.
- At the proposed site access roadway connection W B Street, it is recommended that the future northbound approach to W B Street be stop-controlled in accordance with City standards and the *Manual on Uniform Traffic Control Devices (MUTCD)*.
- A preliminary intersection sight distance measurement at the proposed access roadway connection to W B Street shall be included in the formal development application along with the proposed building footprint(s) and other above ground structures including fences, monument signs, and landscaping.
- To confirm adequate sight lines at the proposed W B Street site access intersection, it is recommended that a final sight distance evaluation be performed post construction and prior to site occupancy.

## 2026 Update

In the time since the 2022 TIA study was completed, the proposed Misty Meadows Townhomes development has not been constructed. In order to provide continued development flexibility, it is understood that the applicant is requesting an extension of the land use application approval, which is set to expire April 1, 2026. To support this extension request, Kittelson reviewed the 2022 TIA and recent development trends in the overall site vicinity. Based on this review, we conclude that the findings and recommendations from the original September 21, 2022 *Misty Meadows Townhomes – Transportation Assessment* report remain valid. We see no need for further updates to the 2022 TIA to support the requested extension.

# Technical Memorandum

Project# 24995.11

September 21, 2022

To: Shana Olson, Project Manager  
City of Lebanon  
925 Main Street  
Lebanon, OR 97355

From: Matt Hughart, Alec Kauffman, and Chris Brehmer, PE

CC: Ron Whitlatch, Lebanon Engineering Services Director

RE: Misty Meadows Townhomes – Transportation Assessment



EXPIRES: 12/31/23

## SUMMARY

Pathfinder Properties, LLC is proposing to develop a 28-lot townhome development on multiple parcels located west of the S 7<sup>th</sup> Street corridor between W B Street and W D Street in central Lebanon. This memorandum documents a transportation assessment of the proposed subdivision. In summary, the study intersections are projected to continue to satisfy the applicable City mobility standards. Accordingly, no on or off-site capacity-based mitigation measures are required to accommodate the proposed development. However, the following recommendations are identified for implementation in conjunction with site development, subject to City approval:

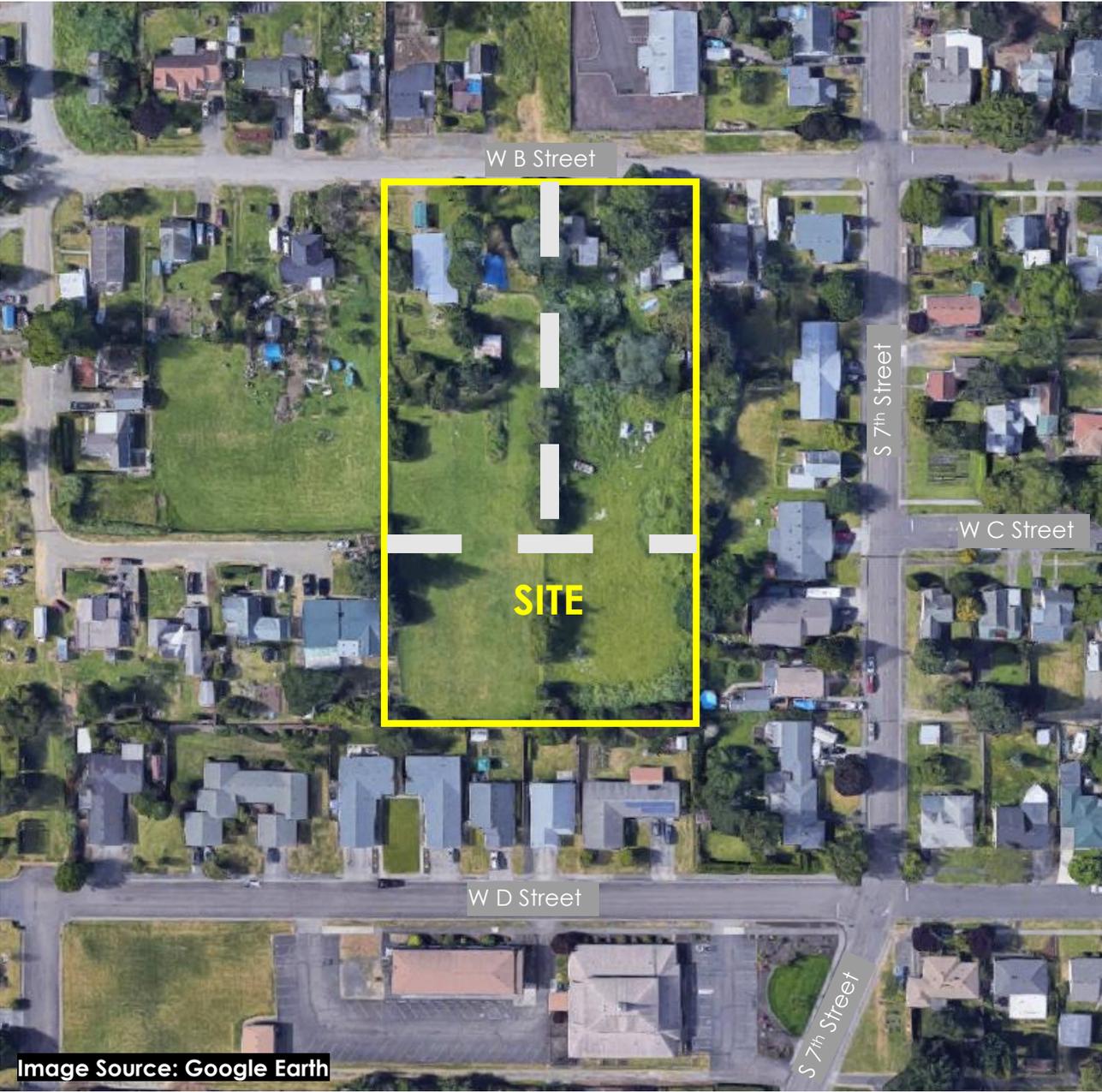
- A STOP (R1-1) sign shall be installed on the northbound site access road approach to W B Street in accordance with City standards and the *Manual on Uniform Traffic Control Devices* (MUTCD).
- A preliminary intersection sight distance measurement at the proposed access roadway connection to W B Street shall be included in the formal development application along with the proposed building footprint(s) and other above ground structures including fences, monument signs, and landscaping.
- A final sight distance evaluation shall be performed post construction and prior to site occupancy to certify that adequate intersection sight distance is provided at the proposed site access roadway connection to W B Street.

## INTRODUCTION

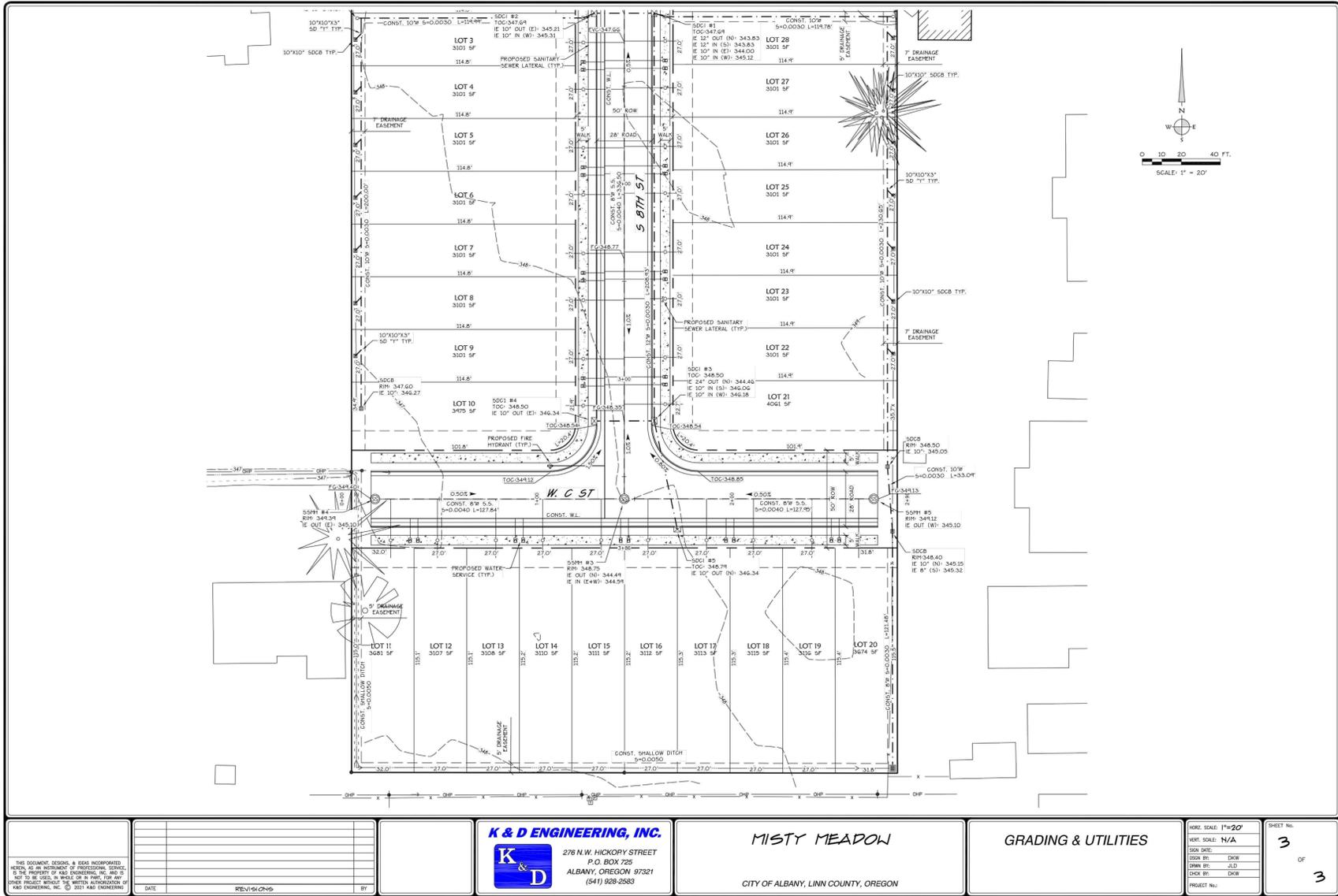
The proposed residential development will consist of up to 28 townhomes. Access will be provided via a private access roadway with a single driveway connection to W B Street. The site location and vicinity are shown in Figure 1, and a site plan is shown in Figure 2.

This report identifies the transportation-related impacts associated with the proposed development and was prepared in accordance with the City of Lebanon Transportation Impact Study requirements. Per agreement with City staff, operational analyses were performed at the W B Street/S 7<sup>th</sup> Street study intersection and the future site roadway connection to W B Street.

Figure 1 – Site Vicinity Map



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Proposed Site Plan  
Lebanon, OR

Figure  
2

This report evaluates the following transportation issues:

- Existing 2022 land use and transportation system conditions within the site vicinity during the weekday AM and PM peak periods;
- Forecast year 2023 background traffic conditions during the weekday AM and PM peak periods, considering background growth and transportation improvements planned in the study area;
- Trip generation and distribution estimates for the proposed development;
- Forecast year 2023 total traffic conditions during the weekday AM and PM peak periods with build-out of the site; and
- Study recommendations.

## ANALYSIS METHODOLOGY

All operational analyses described in this report were performed in accordance with the procedures stated in the *Highway Capacity Manual (HCM)*. The 7<sup>th</sup> Edition of the HCM was used to assess study intersection operations during the peak 15 minutes of the peak hour. The peak hour factor (PHF) was derived from the existing raw manual turning movement counts and applied uniformly over each scenario. The operations analysis presented in this report was completed using Synchro 11 analysis software.

## APPLICABLE MOBILITY STANDARDS

Intersection operating targets adopted by City of Lebanon are summarized below.

### CITY OF LEBANON OPERATING STANDARDS

The City of Lebanon adopted the following mobility targets for all city-owned/maintained intersections.

**Two-way Stop and Yield Controlled Intersections:** *All intersection approaches during the highest one-hour period on an average weekday (typically, but not always the evening peak period between 4 PM and 6 PM during the spring or fall) shall operate with a volume-to-capacity (v/c) ratio not greater than 0.90.*

## EXISTING CONDITIONS

The existing conditions analysis identifies the site conditions and current physical and operational characteristics of roadways within the study area.

### Site Conditions and Adjacent Land Uses

The site of the proposed subdivision is undeveloped and bounded by existing single-family neighborhoods to the west, south, and east, and W B Street to the north.

### Transportation Facilities

Table 1 summarizes the characteristics of roadways within the site vicinity.

**Table 1: Existing Transportation Facilities**

| Roadway                  | Functional Classification <sup>1</sup> | Number of Lanes | Posted Speed (mph) | Sidewalks | Bicycle Lanes | On-Street Parking |
|--------------------------|--|-----------------|--------------------|-----------|---------------|-------------------|
| S 7 <sup>th</sup> Street | Collector Street                       | 2               | 25                 | Yes       | None          | Yes               |
| W B Street               | Local Street                           | 1-2             | Not Posted         | None      | None          | Yes               |

<sup>1</sup> Per the *City of Lebanon Transportation System Plan* (2019).

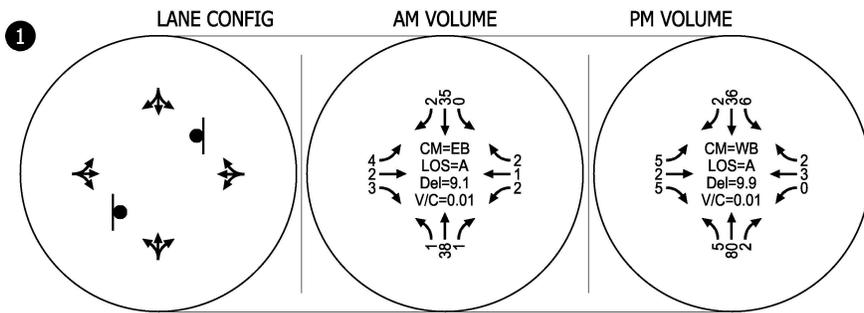
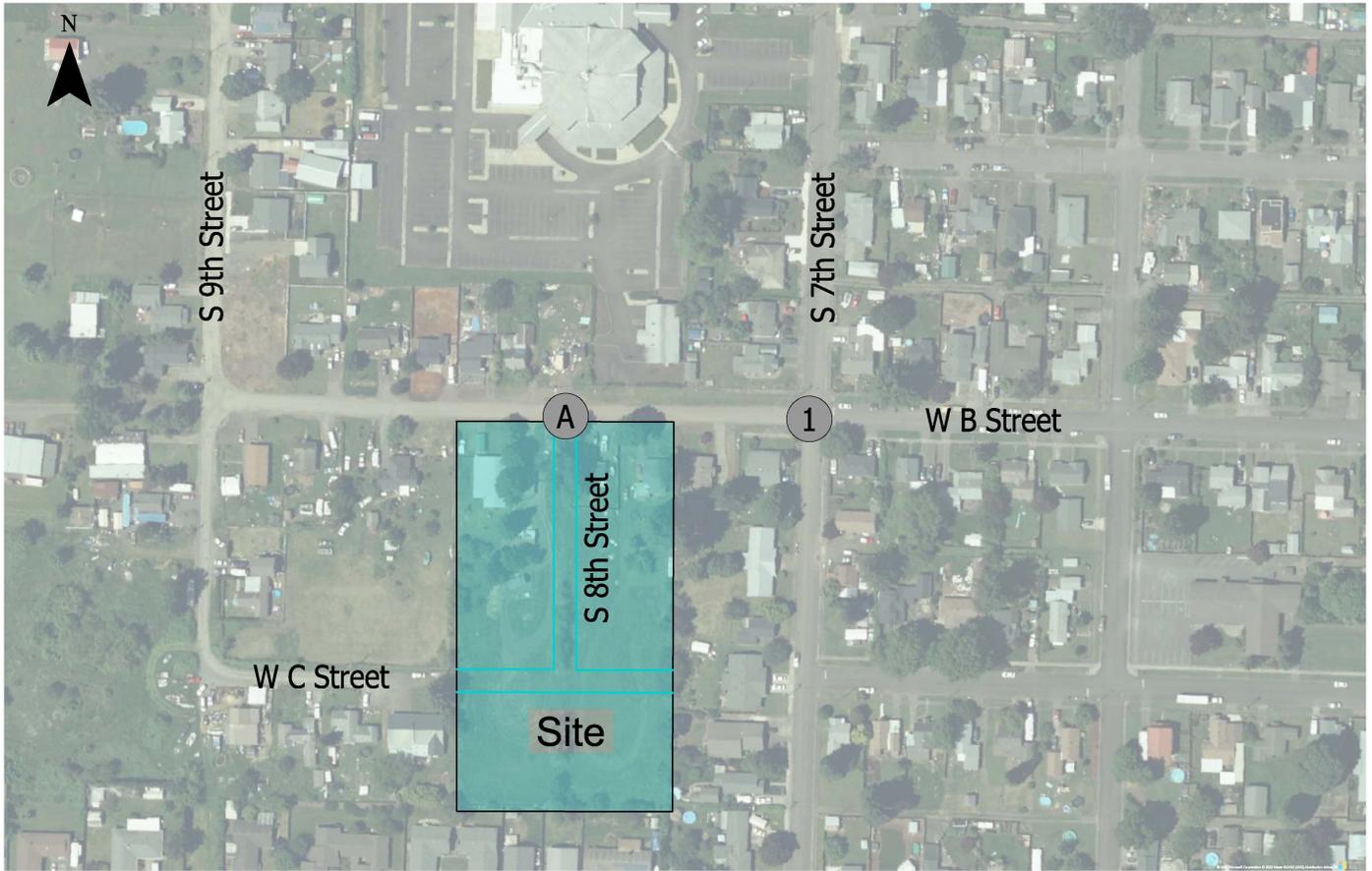
### Intersection Crash History

Intersection crash history was reviewed in an effort to identify potential safety issues in the site vicinity. The Oregon Department of Transportation (ODOT) researched crash records for the S 7<sup>th</sup> Street/W B Street intersection for the five-year period from January 1, 2016 through December 31, 2020. Per their records, there have been no reported crashes at the intersection within this five-year reporting period. *Appendix A contains correspondence with ODOT and the data provided for the intersection.*

### Existing Traffic Conditions

Quality Counts collected turning movement counts at the study intersection in early June 2022 while local schools were in session. The counts were conducted on a typical mid-weekday during the morning peak period (7:00 – 9:00 AM) and evening peak period (4:00 – 6:00 PM). *Appendix B contains the traffic count data.*

Figure 3 illustrates existing lane configurations and traffic control devices, the existing intersection traffic volumes and the intersection operational performance during the weekday AM and PM peak hours, respectively. As shown, the study intersection currently operates in compliance with applicable City operational thresholds. *Appendix C contains the existing operations analysis worksheets.*



CM = INTERSECTION MOVEMENT  
 LOS = INTERSECTION MOVEMENT LEVEL OF SERVICE  
 Del = INTERSECTION MOVEMENT CONTROL DELAY  
 V/C = INTERSECTION VOLUME-TO-CAPACITY RATIO

- STOP SIGN  
**Existing Lane Configurations & Traffic Control Devices**  
**Existing Traffic Volumes, Weekday AM & PM Peak Hour**  
**Lebanon, OR**

Figure 3

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# TRANSPORTATION ASSESSMENT

The transportation impact analysis identifies how the study intersection will operate in the year 2023 upon buildout of the proposed development. This section of the report includes analysis of 2023 background traffic volumes and operations, an estimate of site-generated trips, and analysis of 2023 total traffic volumes and operations with the proposed development.

## 2023 BACKGROUND OPERATIONAL ANALYSIS

A two percent annual growth rate (consistent with the growth rates forecast in the Lebanon TSP) was applied to the existing study intersection traffic volumes to reflect near-term growth on the local transportation network. No in-process developments were identified by City staff that would directly impact the study intersection.

Figure 5 illustrates the resulting 2023 background traffic volumes and operational analysis for the weekday AM and PM peak hour. As shown, the study intersection is expected to continue to satisfy City standards under background conditions. *Appendix D includes the 2023 background conditions operations analysis worksheets.*

## Proposed Development Plan

The proposed develop plan includes 28 duplex homes. Access to the proposed development will be provided by via a new local roadway connection off W B Street. Construction of the proposed development is expected to begin in 2022 with full build-out and occupancy in 2023.

## TRIP GENERATION

A trip generation estimate was prepared for the proposed development based on information provided in the standard reference, *Trip Generation Manual, 11<sup>th</sup> Edition*, published by the Institute of Transportation Engineers (ITE). ITE land use code 215 (Single-Family Attached Housing) was used as a basis for the estimate. Table 2 summarizes the estimates for the daily, weekday AM and weekday PM peak hours.

**Table 2: Trip Generation Estimate**

| Land Use                       | ITE Code | Size (Units) | Daily Trips | Weekday AM Peak Hour |    |     | Weekday PM Peak Hour |    |     |
|--------------------------------|----------|--------------|-------------|----------------------|----|-----|----------------------|----|-----|
|                                |          |              |             | Total                | In | Out | Total                | In | Out |
| Single-Family Attached Housing | 215      | 28           | 202         | 13                   | 4  | 9   | 16                   | 9  | 7   |

## SITE TRIP DISTRIBUTION/TRIP ASSIGNMENT

The site-generated trips shown in Table 2 were distributed onto the study area roadways based on a review of typical traffic patterns and the location of major employment/retail/school destinations in the site vicinity. The trip distribution pattern is illustrated in Figure 4 along with the peak hour site trip assignment.

## 2023 TOTAL OPERATIONAL ANALYSIS

The total traffic conditions analysis forecasts the operation of the study intersection and future site roadway connection to W B Street with the inclusion of traffic generated by the proposed development. Total traffic conditions were determined by adding the estimated site-generated trips to the year 2023 background volumes for the AM and PM peak hour.

Figure 5 illustrates the 2023 total traffic volumes and summarizes the corresponding operational analysis for the weekday AM and PM peak hours. The study intersection operations are projected to continue to satisfy the applicable City standards. Accordingly, no on or off-site capacity-based mitigation measures are required to accommodate the proposed development. *Appendix D includes the total conditions operations analysis worksheets.*

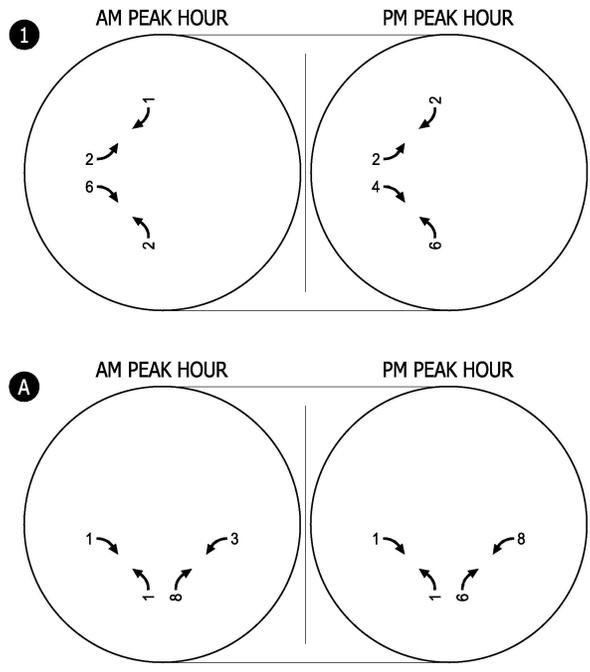
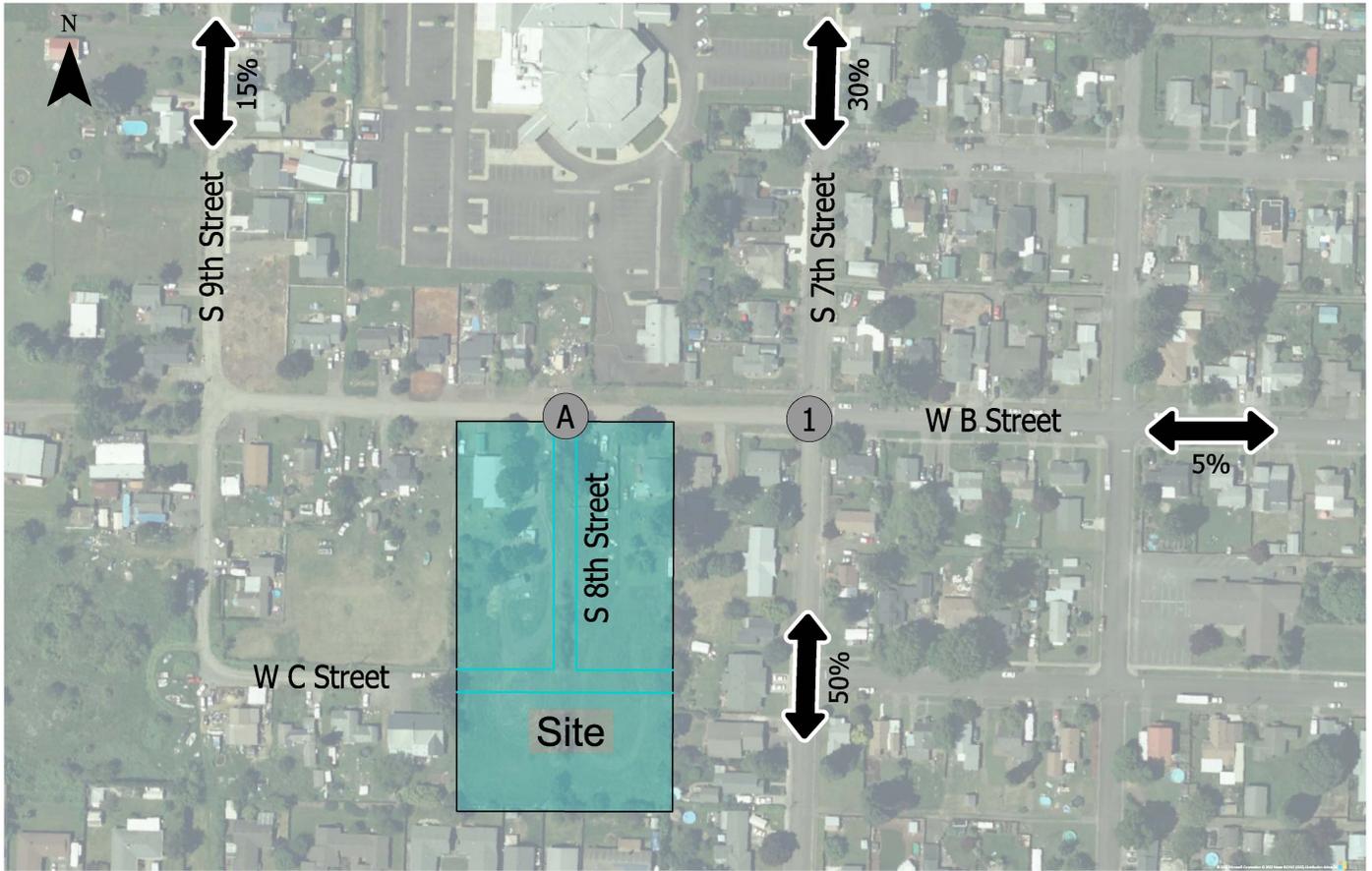
## SITE TRIP IMPACTS TO THE LOCAL TRANSPORTATION NETWORK

Based on field observations and the peak hour capacity of the two-way stop-controlled W B Street/S 7<sup>th</sup> Street intersection, future traffic volumes are anticipated to remain at levels that would not necessitate intersection traffic control modifications beyond existing conditions.

At the proposed site access roadway connection W B Street, it is recommended that the future northbound approach to W B Street be stop controlled in accordance with City standards and the *Manual on Uniform Traffic Control Devices (MUTCD)*.

## PRELIMINARY SIGHT DISTANCE REVIEW

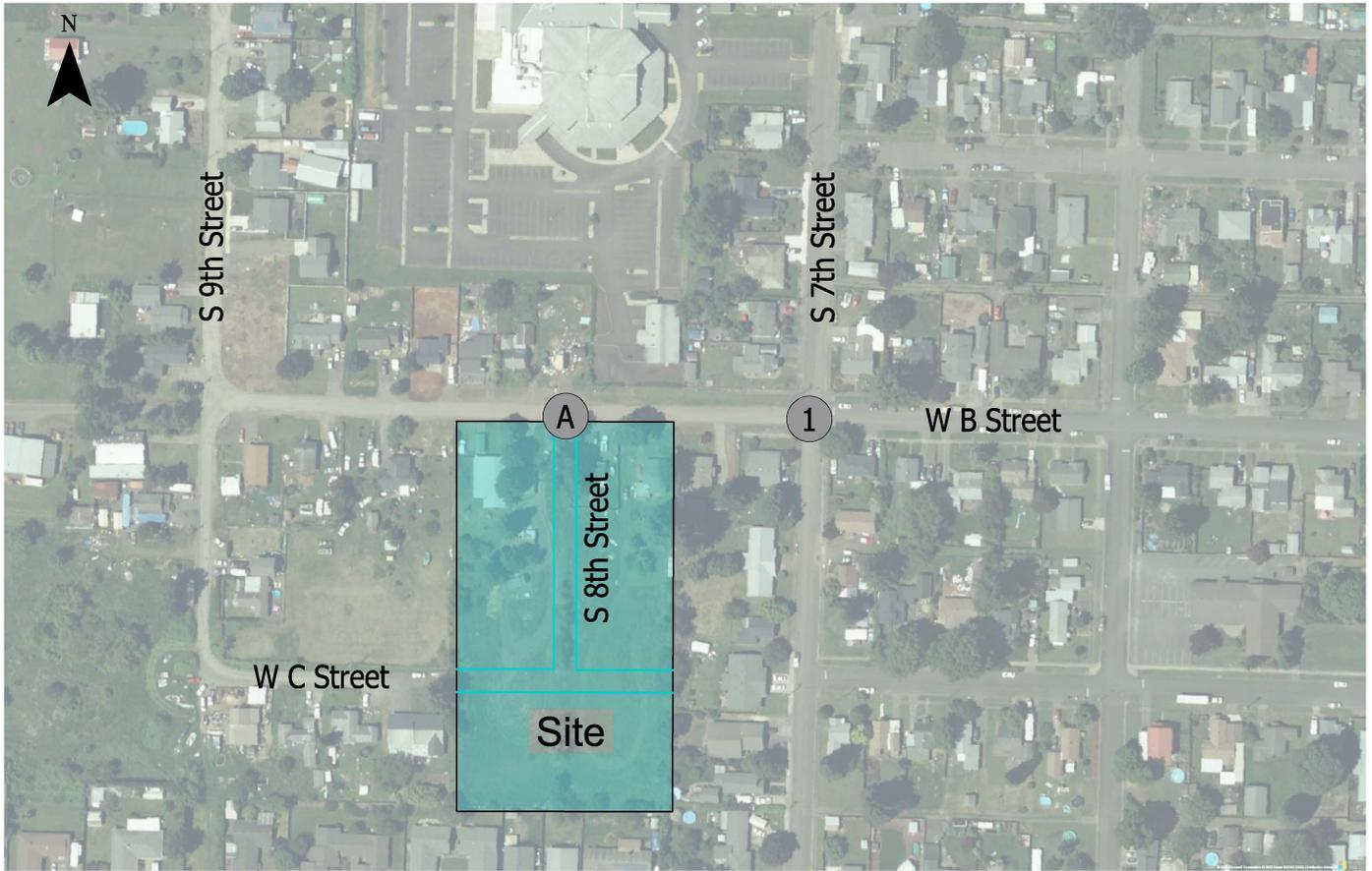
Intersection sight distance was preliminarily assessed at the proposed site access roadway connection to W B Street. At the proposed site access road intersection, W B Street is flat and has no horizontal curvature. As such, adequate intersection sight distance is possible. To ensure adequate sight distance at buildout of the project, it is recommended that the developer place and maintain all vegetation and other above ground signage in a manner that provides adequate sight distance per City standards. A final sight distance evaluation is recommended at this intersection post construction to confirm adequate sight lines and setback distances are achieved in accordance with City standards.



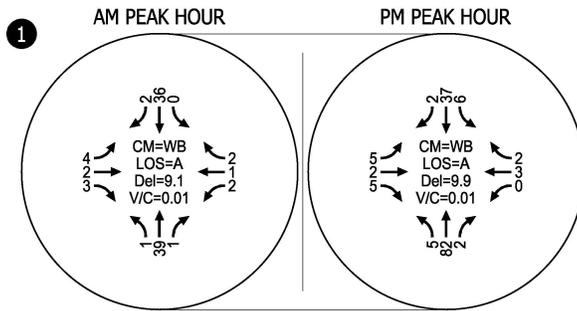
Trip Distribution Pattern and Site-Generated Trip Assignment  
 Weekday AM & PM Peak Hour  
 Lebanon, OR

Figure  
 4

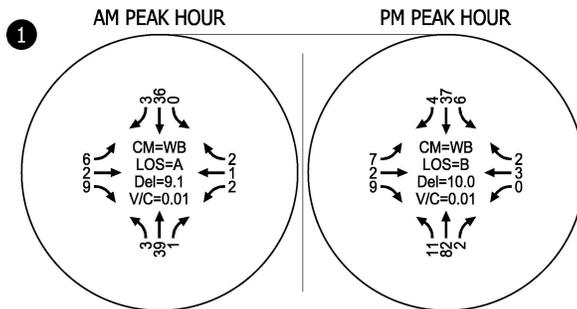
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**YEAR 2023  
BACKGROUND**



**YEAR 2023  
TOTAL**



CM = INTERSECTION MOVEMENT  
 LOS = INTERSECTION MOVEMENT LEVEL OF SERVICE  
 Del = INTERSECTION MOVEMENT CONTROL DELAY  
 V/C = INTERSECTION VOLUME-TO-CAPACITY RATIO

**Year 2023 Background & Total Traffic Volumes  
 Weekday AM & PM Peak Hour  
 Lebanon, OR**

**Figure  
 5**

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## FINDINGS AND RECOMMENDATIONS

The primary findings and recommendations of this study are summarized below.

- The study intersection and site access road intersection are forecast to meet the City of Lebanon mobility standards during the weekday AM and PM peak hours under existing, 2023 background, and 2023 total traffic conditions. No capacity-based mitigation needs were identified at either intersection.
- At the proposed site access roadway connection W B Street, it is recommended that the future northbound approach to W B Street be stop controlled in accordance with City standards and the *Manual on Uniform Traffic Control Devices (MUTCD)*.
- A preliminary intersection sight distance measurement at the proposed access roadway connection to W B Street shall be included in the formal development application along with the proposed building footprint(s) and other above ground structures including fences, monument signs, and landscaping.
- To confirm adequate sight lines at the proposed W B Street site access intersection, it is recommended that a final sight distance evaluation be performed post construction and prior to site occupancy.

We trust this memorandum adequately addresses the traffic and circulation impacts associated with the proposed residential development. Please let us know if you have any questions regarding our analyses or need additional information.

## APPENDIX

- A. Crash Data Correspondence
- B. Traffic Count Data
- C. Existing Conditions Worksheets
- D. 2023 Background and Total Traffic Conditions Worksheets

# Appendix A

## Crash Data Correspondence



**From:** RICO Jonathan <Jonathan.RICO@odot.oregon.gov>  
**Sent:** Friday, June 3, 2022 11:27 AM  
**To:** Matt Hughart  
**Cc:** Alec Kauffman; ODOT TDS Crash Request Group  
**Subject:** RE: Lebanon, OR Crash Data Request -- 20220114  
**Attachments:** [jr.Hughart\\_ISECT\\_S7thSt\\_&\\_BSt\\_CDS150.pdf](#)

Good Morning, Matt,

Please find attached crash history report for crashes at the intersection of S 7<sup>th</sup> St & W B St in Lebanon, OR. The report covers the most recent five years of crash data available, 2016-2020.

NOTE: No crashes were reported for the time period requested, the attached report is essentially blank.

A link to the CAR Unit's webpage is included below my contact information, there you can find a link to our crash data system code manual and crash data disclaimers. Take a second to review the disclaimers as these apply to all crash data requests.

Please let me know if you have questions or need anything further.

Have a great day!

### **Jonathan Rico**

Crash Reporting Technician  
Crash Analysis and Reporting Unit  
ODOT Policy, Data & Analysis Division (formerly TDD)  
555 13th Street NE, Suite 2  
Salem, Oregon 97301-4178  
ph: (503) 986-3198  
emailto: [jonathan.rico@odot.oregon.gov](mailto:jonathan.rico@odot.oregon.gov)  
[Crash Analysis and Reporting Unit web page](#)

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**From:** RICO Jonathan  
**Sent:** Tuesday, May 31, 2022 6:26 AM  
**To:** Matt Hughart <[MHUGHART@kittelerson.com](mailto:MHUGHART@kittelerson.com)>  
**Cc:** Alec Kauffman <[akauffman@kittelerson.com](mailto:akauffman@kittelerson.com)>; ODOT TDS Crash Request Group <[ODOTTDSCrashRequestGroup@odot.oregon.gov](mailto:ODOTTDSCrashRequestGroup@odot.oregon.gov)>  
**Subject:** RE: Lebanon, OR Crash Data Request -- 20220114

Good Morning, Matt,

Crash data request received, please allow two weeks to complete this data request.

Best,

### **Jonathan Rico**

Crash Reporting Technician  
Crash Analysis and Reporting Unit  
ODOT Policy, Data & Analysis Division (formerly TDD)

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION  
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT  
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at S 7th St & B St in Lebanon, OR.  
January 1, 2016 through December 31, 2020

| COLLISION TYPE | FATAL<br>CRASHES | NON-<br>FATAL<br>CRASHES | PROPERTY<br>DAMAGE<br>ONLY | TOTAL<br>CRASHES | PEOPLE<br>KILLED | PEOPLE<br>INJURED | TRUCKS | DRY<br>SURF | WET<br>SURF | DAY | DARK | INTER-<br>SECTION | INTER-<br>SECTION<br>RELATED | OFF-<br>ROAD |
|----------------|------------------|--------------------------|----------------------------|------------------|------------------|-------------------|--------|-------------|-------------|-----|------|-------------------|------------------------------|--------------|
| YEAR:          |                  |                          |                            |                  |                  |                   |        |             |             |     |      |                   |                              |              |
| TOTAL          |                  |                          |                            |                  |                  |                   |        |             |             |     |      |                   |                              |              |
| FINAL TOTAL    |                  |                          |                            |                  |                  |                   |        |             |             |     |      |                   |                              |              |

**Disclaimers:** Effective 2016, collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants. Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.

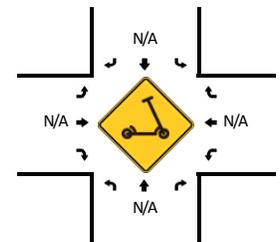
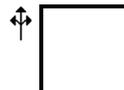
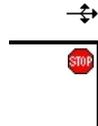
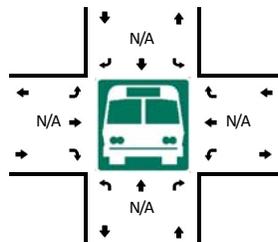
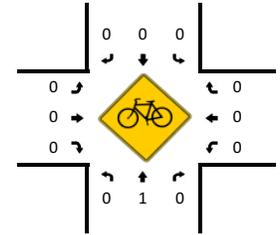
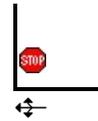
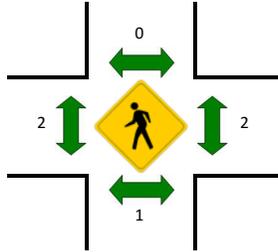
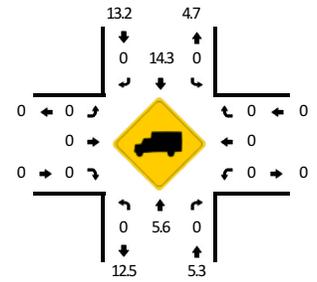
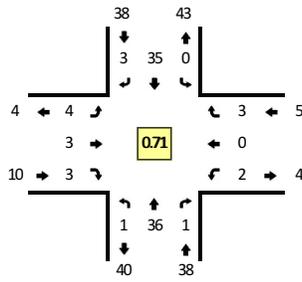
A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see [https://www.oregon.gov/ODOT/Data/documents/Crash\\_Data\\_Disclaimers.pdf](https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf).

Appendix B  
Traffic Count Data

**LOCATION:** S 7th St -- W B St  
**CITY/STATE:** Lebanon, OR

**QC JOB #:** 15847801  
**DATE:** Thu, Jun 2 2022

Peak-Hour: 7:10 AM -- 8:10 AM  
 Peak 15-Min: 7:35 AM -- 7:50 AM



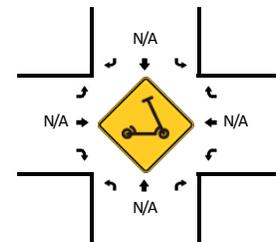
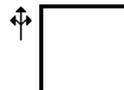
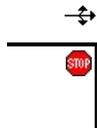
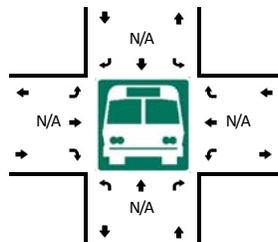
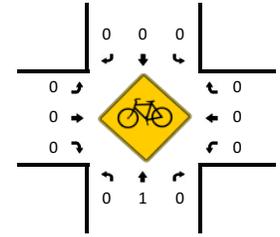
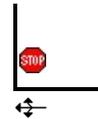
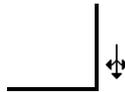
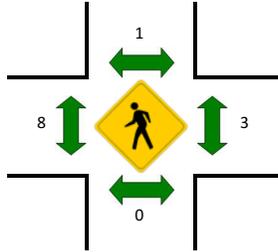
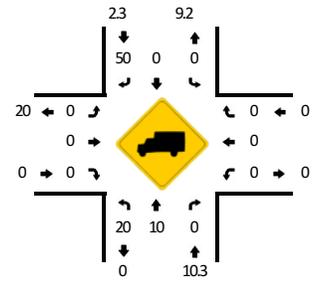
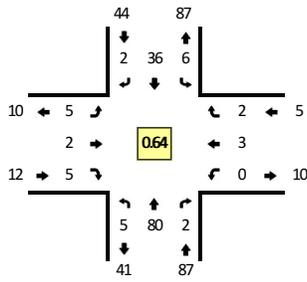
| 5-Min Count Period Beginning At | S 7th St (Northbound) |      |       |   | S 7th St (Southbound) |      |       |   | W B St (Eastbound) |      |       |   | W B St (Westbound) |      |       |   | Total | Hourly Totals |
|---------------------------------|-----------------------|------|-------|---|-----------------------|------|-------|---|--------------------|------|-------|---|--------------------|------|-------|---|-------|---------------|
|                                 | Left                  | Thru | Right | U | Left                  | Thru | Right | U | Left               | Thru | Right | U | Left               | Thru | Right | U |       |               |
| 7:00 AM                         | 0                     | 0    | 0     | 0 | 0                     | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 1     |               |
| 7:05 AM                         | 0                     | 2    | 0     | 0 | 0                     | 2    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 4     |               |
| 7:10 AM                         | 0                     | 3    | 0     | 0 | 0                     | 4    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 1    | 0     | 0 | 8     |               |
| 7:15 AM                         | 0                     | 2    | 0     | 0 | 0                     | 1    | 1     | 0 | 0                  | 0    | 1     | 0 | 0                  | 0    | 0     | 0 | 5     |               |
| 7:20 AM                         | 0                     | 7    | 0     | 0 | 0                     | 0    | 0     | 0 | 0                  | 1    | 0     | 0 | 0                  | 0    | 0     | 1 | 9     |               |
| 7:25 AM                         | 0                     | 4    | 1     | 0 | 0                     | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 1    | 0     | 1 | 8     |               |
| 7:30 AM                         | 0                     | 2    | 0     | 0 | 0                     | 3    | 0     | 0 | 0                  | 0    | 1     | 0 | 0                  | 1    | 0     | 0 | 7     |               |
| 7:35 AM                         | 0                     | 6    | 0     | 0 | 0                     | 6    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 12    |               |
| 7:40 AM                         | 0                     | 1    | 0     | 0 | 0                     | 4    | 1     | 0 | 0                  | 2    | 0     | 1 | 0                  | 0    | 0     | 0 | 9     |               |
| 7:45 AM                         | 1                     | 3    | 0     | 0 | 0                     | 7    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 11    |               |
| 7:50 AM                         | 0                     | 3    | 0     | 0 | 0                     | 0    | 1     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 4     |               |
| 7:55 AM                         | 0                     | 0    | 0     | 0 | 0                     | 2    | 0     | 0 | 0                  | 1    | 1     | 1 | 0                  | 0    | 0     | 0 | 5     | 83            |
| 8:00 AM                         | 0                     | 2    | 0     | 0 | 0                     | 4    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 6     | 88            |
| 8:05 AM                         | 0                     | 3    | 0     | 0 | 0                     | 3    | 0     | 0 | 0                  | 0    | 0     | 1 | 0                  | 0    | 0     | 0 | 7     | 91            |
| 8:10 AM                         | 0                     | 3    | 0     | 0 | 0                     | 4    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 7     | 90            |
| 8:15 AM                         | 0                     | 4    | 0     | 0 | 0                     | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 1     | 0 | 6     | 91            |
| 8:20 AM                         | 0                     | 3    | 0     | 0 | 0                     | 4    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 1     | 0 | 8     | 90            |
| 8:25 AM                         | 1                     | 5    | 0     | 0 | 0                     | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 6     | 88            |
| 8:30 AM                         | 0                     | 3    | 0     | 0 | 0                     | 1    | 1     | 0 | 0                  | 1    | 1     | 0 | 0                  | 0    | 0     | 0 | 7     | 88            |
| 8:35 AM                         | 1                     | 4    | 0     | 0 | 0                     | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 6     | 82            |
| 8:40 AM                         | 0                     | 2    | 0     | 0 | 0                     | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 2     | 75            |
| 8:45 AM                         | 0                     | 3    | 0     | 0 | 0                     | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 4     | 68            |
| 8:50 AM                         | 0                     | 2    | 0     | 0 | 0                     | 1    | 0     | 0 | 0                  | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 4     | 68            |
| 8:55 AM                         | 1                     | 1    | 0     | 0 | 0                     | 2    | 0     | 0 | 0                  | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 5     | 68            |
| Peak 15-Min Flowrates           | Northbound            |      |       |   | Southbound            |      |       |   | Eastbound          |      |       |   | Westbound          |      |       |   | Total |               |
| All Vehicles                    | 4                     | 40   | 0     | 0 | 0                     | 68   | 4     | 0 | 8                  | 0    | 4     | 0 | 0                  | 0    | 0     | 0 | 128   |               |
| Heavy Trucks                    | 0                     | 4    | 0     | 0 | 0                     | 12   | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 16    |               |
| Buses                           |                       |      |       |   |                       |      |       |   |                    |      |       |   |                    |      |       |   |       |               |
| Pedestrians                     |                       | 0    |       |   |                       | 0    |       |   |                    | 0    |       |   |                    | 0    |       |   | 0     |               |
| Bicycles                        | 0                     | 0    | 0     |   | 0                     | 0    | 0     |   | 0                  | 0    | 0     |   | 0                  | 0    | 0     |   | 0     |               |
| Scoters                         |                       |      |       |   |                       |      |       |   |                    |      |       |   |                    |      |       |   |       |               |

Comments:

**LOCATION:** S 7th St -- W B St  
**CITY/STATE:** Lebanon, OR

**QC JOB #:** 15847802  
**DATE:** Thu, Jun 2 2022

Peak-Hour: 3:25 PM -- 4:25 PM  
 Peak 15-Min: 3:25 PM -- 3:40 PM



| 5-Min Count Period Beginning At | S 7th St (Northbound) |      |       |   | S 7th St (Southbound) |      |       |   | W B St (Eastbound) |      |       |   | W B St (Westbound) |      |       |   | Total | Hourly Totals |
|---------------------------------|-----------------------|------|-------|---|-----------------------|------|-------|---|--------------------|------|-------|---|--------------------|------|-------|---|-------|---------------|
|                                 | Left                  | Thru | Right | U | Left                  | Thru | Right | U | Left               | Thru | Right | U | Left               | Thru | Right | U |       |               |
| 3:00 PM                         | 0                     | 3    | 0     | 0 | 0                     | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 4     |               |
| 3:05 PM                         | 0                     | 4    | 0     | 0 | 0                     | 6    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 10    |               |
| 3:10 PM                         | 0                     | 0    | 0     | 0 | 0                     | 4    | 0     | 0 | 0                  | 0    | 0     | 1 | 0                  | 0    | 0     | 0 | 5     |               |
| 3:15 PM                         | 1                     | 0    | 1     | 0 | 0                     | 3    | 0     | 0 | 0                  | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 6     |               |
| 3:20 PM                         | 1                     | 6    | 0     | 0 | 0                     | 2    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 9     |               |
| 3:25 PM                         | 0                     | 9    | 0     | 0 | 0                     | 3    | 0     | 0 | 0                  | 1    | 0     | 1 | 0                  | 0    | 0     | 0 | 14    |               |
| 3:30 PM                         | 0                     | 18   | 0     | 0 | 0                     | 3    | 0     | 0 | 0                  | 0    | 0     | 1 | 0                  | 0    | 0     | 0 | 22    |               |
| 3:35 PM                         | 0                     | 9    | 0     | 0 | 0                     | 9    | 0     | 0 | 0                  | 1    | 0     | 0 | 0                  | 0    | 1     | 2 | 22    |               |
| 3:40 PM                         | 0                     | 4    | 0     | 0 | 1                     | 4    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 1     | 0 | 10    |               |
| 3:45 PM                         | 0                     | 8    | 0     | 0 | 1                     | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 10    |               |
| 3:50 PM                         | 2                     | 7    | 1     | 0 | 1                     | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 12    |               |
| 3:55 PM                         | 0                     | 6    | 0     | 0 | 0                     | 2    | 0     | 0 | 0                  | 0    | 1     | 1 | 0                  | 0    | 0     | 0 | 10    |               |
| 4:00 PM                         | 1                     | 1    | 0     | 0 | 1                     | 2    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 5     | 134           |
| 4:05 PM                         | 0                     | 4    | 1     | 0 | 1                     | 3    | 1     | 0 | 0                  | 2    | 0     | 1 | 0                  | 0    | 1     | 0 | 14    | 135           |
| 4:10 PM                         | 0                     | 5    | 0     | 0 | 0                     | 3    | 0     | 0 | 0                  | 0    | 1     | 1 | 0                  | 0    | 0     | 0 | 10    | 139           |
| 4:15 PM                         | 0                     | 3    | 0     | 0 | 1                     | 2    | 1     | 0 | 0                  | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 8     | 144           |
| 4:20 PM                         | 2                     | 6    | 0     | 0 | 0                     | 3    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 11    | 146           |
| 4:25 PM                         | 0                     | 4    | 0     | 0 | 0                     | 2    | 2     | 0 | 0                  | 0    | 0     | 1 | 0                  | 0    | 0     | 0 | 9     | 148           |
| 4:30 PM                         | 0                     | 8    | 0     | 0 | 0                     | 3    | 1     | 0 | 0                  | 0    | 0     | 1 | 0                  | 0    | 0     | 0 | 13    | 143           |
| 4:35 PM                         | 0                     | 2    | 0     | 0 | 0                     | 5    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 7     | 134           |
| 4:40 PM                         | 1                     | 3    | 0     | 0 | 1                     | 2    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 7     | 119           |
| 4:45 PM                         | 0                     | 5    | 0     | 0 | 0                     | 2    | 0     | 0 | 0                  | 0    | 0     | 1 | 0                  | 0    | 0     | 0 | 9     | 116           |
| 4:50 PM                         | 0                     | 2    | 0     | 0 | 0                     | 3    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 5     | 115           |
| 4:55 PM                         | 1                     | 2    | 0     | 0 | 0                     | 2    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 5     | 108           |
| 5:00 PM                         | 1                     | 3    | 1     | 0 | 0                     | 3    | 0     | 0 | 0                  | 0    | 1     | 0 | 0                  | 0    | 0     | 0 | 9     | 103           |
| 5:05 PM                         | 0                     | 4    | 1     | 0 | 0                     | 4    | 0     | 0 | 0                  | 0    | 0     | 1 | 0                  | 0    | 0     | 0 | 10    | 107           |
| 5:10 PM                         | 1                     | 4    | 0     | 0 | 0                     | 1    | 1     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 7     | 103           |
| 5:15 PM                         | 0                     | 2    | 0     | 0 | 0                     | 3    | 0     | 0 | 0                  | 1    | 0     | 1 | 0                  | 0    | 0     | 0 | 7     | 100           |
| 5:20 PM                         | 2                     | 5    | 0     | 0 | 0                     | 2    | 0     | 0 | 0                  | 0    | 0     | 1 | 0                  | 0    | 0     | 0 | 11    | 99            |
| 5:25 PM                         | 0                     | 1    | 0     | 0 | 1                     | 1    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 3     | 99            |
| 5:30 PM                         | 1                     | 2    | 0     | 0 | 1                     | 6    | 1     | 0 | 0                  | 0    | 0     | 0 | 0                  | 1    | 0     | 0 | 12    | 93            |
| 5:35 PM                         | 0                     | 2    | 0     | 0 | 0                     | 2    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 4     | 92            |
| 5:40 PM                         | 1                     | 2    | 0     | 0 | 0                     | 4    | 0     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 7     | 89            |
| 5:45 PM                         | 0                     | 4    | 0     | 0 | 0                     | 1    | 1     | 0 | 0                  | 0    | 0     | 0 | 0                  | 1    | 0     | 0 | 7     | 89            |
| 5:50 PM                         | 0                     | 4    | 0     | 0 | 0                     | 5    | 2     | 0 | 0                  | 0    | 1     | 0 | 0                  | 0    | 0     | 0 | 12    | 87            |
| 5:55 PM                         | 0                     | 3    | 0     | 0 | 0                     | 1    | 1     | 0 | 0                  | 0    | 0     | 0 | 0                  | 0    | 0     | 0 | 5     | 94            |

| Peak 15-Min Flowrates | Northbound |      |       |   | Southbound |      |       |   | Eastbound |      |       |   | Westbound |      |       |   | Total |
|-----------------------|------------|------|-------|---|------------|------|-------|---|-----------|------|-------|---|-----------|------|-------|---|-------|
|                       | Left       | Thru | Right | U | Left       | Thru | Right | U | Left      | Thru | Right | U | Left      | Thru | Right | U |       |
| All Vehicles          | 0          | 144  | 0     | 0 | 0          | 60   | 0     | 0 | 8         | 0    | 8     | 0 | 0         | 4    | 8     | 0 | 232   |
| Heavy Trucks          | 0          | 12   | 0     | 0 | 0          | 0    | 0     | 0 | 0         | 0    | 0     | 0 | 0         | 0    | 0     | 0 | 12    |
| Buses                 |            |      |       |   |            |      |       |   |           |      |       |   |           |      |       |   |       |
| Pedestrians           |            | 0    |       |   |            | 4    |       |   |           | 4    |       |   |           | 12   |       |   | 20    |
| Bicycles              | 0          | 4    | 0     |   | 0          | 0    | 0     |   | 0         | 0    | 0     |   | 0         | 0    | 0     |   | 4     |
| Scoters               |            |      |       |   |            |      |       |   |           |      |       |   |           |      |       |   |       |

*Comments:*

Report generated on 6/10/2022 4:25 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Appendix C  
Existing Conditions Worksheets

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.5  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 4    | 2    | 3    | 2    | 1    | 2    | 1    | 38   | 1    | 0    | 35   | 2    |
| Future Vol, veh/h        | 4    | 2    | 3    | 2    | 1    | 2    | 1    | 38   | 1    | 0    | 35   | 2    |
| Conflicting Peds, #/hr   | 0    | 0    | 1    | 1    | 0    | 0    | 2    | 0    | 2    | 2    | 0    | 2    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 0    | 0    | 23   | 0    |
| Mvmt Flow                | 6    | 3    | 4    | 3    | 1    | 3    | 1    | 54   | 1    | 0    | 49   | 3    |

| Major/Minor          | Minor2 |     | Minor1 |     | Major1 |      |      | Major2 |   |      |   |   |
|----------------------|--------|-----|--------|-----|--------|------|------|--------|---|------|---|---|
| Conflicting Flow All | 112    | 112 | 54     | 114 | 113    | 57   | 54   | 0      | 0 | 57   | 0 | 0 |
| Stage 1              | 53     | 53  | -      | 59  | 59     | -    | -    | -      | - | -    | - | - |
| Stage 2              | 59     | 59  | -      | 55  | 54     | -    | -    | -      | - | -    | - | - |
| Critical Hdwy        | 7.1    | 6.5 | 6.2    | 7.1 | 6.5    | 6.2  | 4.1  | -      | - | 4.1  | - | - |
| Critical Hdwy Stg 1  | 6.1    | 5.5 | -      | 6.1 | 5.5    | -    | -    | -      | - | -    | - | - |
| Critical Hdwy Stg 2  | 6.1    | 5.5 | -      | 6.1 | 5.5    | -    | -    | -      | - | -    | - | - |
| Follow-up Hdwy       | 3.5    | 4   | 3.3    | 3.5 | 4      | 3.3  | 2.2  | -      | - | 2.2  | - | - |
| Pot Cap-1 Maneuver   | 870    | 782 | 1019   | 868 | 781    | 1015 | 1564 | -      | - | 1560 | - | - |
| Stage 1              | 965    | 855 | -      | 958 | 850    | -    | -    | -      | - | -    | - | - |
| Stage 2              | 958    | 850 | -      | 962 | 854    | -    | -    | -      | - | -    | - | - |
| Platoon blocked, %   |        |     |        |     |        |      |      | -      | - | -    | - | - |
| Mov Cap-1 Maneuver   | 864    | 778 | 1016   | 859 | 777    | 1013 | 1561 | -      | - | 1557 | - | - |
| Mov Cap-2 Maneuver   | 864    | 778 | -      | 859 | 777    | -    | -    | -      | - | -    | - | - |
| Stage 1              | 962    | 853 | -      | 955 | 847    | -    | -    | -      | - | -    | - | - |
| Stage 2              | 953    | 847 | -      | 954 | 852    | -    | -    | -      | - | -    | - | - |

| Approach             | EB  |  | WB  |  | NB  |  | SB |  |
|----------------------|-----|--|-----|--|-----|--|----|--|
| HCM Control Delay, s | 9.1 |  | 9.1 |  | 0.2 |  | 0  |  |
| HCM LOS              | A   |  | A   |  |     |  |    |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 | SBL  | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|------|-----|-----|
| Capacity (veh/h)      | 1561  | -   | -   | 886   | 895   | 1557 | -   | -   |
| HCM Lane V/C Ratio    | 0.001 | -   | -   | 0.014 | 0.008 | -    | -   | -   |
| HCM Control Delay (s) | 7.3   | 0   | -   | 9.1   | 9.1   | 0    | -   | -   |
| HCM Lane LOS          | A     | A   | -   | A     | A     | A    | -   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 0     | 0     | 0    | -   | -   |

| 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       | 5    | 2    | 5    | 0    | 3    | 2    | 5    | 80   | 2    | 6    | 36   | 2    |
| Future Vol, veh/h        | 5    | 2    | 5    | 0    | 3    | 2    | 5    | 80   | 2    | 6    | 36   | 2    |
| Conflicting Peds, #/hr   | 1    | 0    | 0    | 0    | 0    | 1    | 8    | 0    | 3    | 3    | 0    | 8    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 20   | 10   | 0    | 0    | 0    | 50   |
| Mvmt Flow                | 8    | 3    | 8    | 0    | 5    | 3    | 8    | 125  | 3    | 9    | 56   | 3    |

| Major/Minor          | Minor2 |     | Minor1 |     | Major1 |     |      | Major2 |   |      |   |   |
|----------------------|--------|-----|--------|-----|--------|-----|------|--------|---|------|---|---|
| Conflicting Flow All | 232    | 231 | 66     | 227 | 231    | 131 | 67   | 0      | 0 | 131  | 0 | 0 |
| Stage 1              | 84     | 84  | -      | 146 | 146    | -   | -    | -      | - | -    | - | - |
| Stage 2              | 148    | 147 | -      | 81  | 85     | -   | -    | -      | - | -    | - | - |
| Critical Hdwy        | 7.1    | 6.5 | 6.2    | 7.1 | 6.5    | 6.2 | 4.3  | -      | - | 4.1  | - | - |
| Critical Hdwy Stg 1  | 6.1    | 5.5 | -      | 6.1 | 5.5    | -   | -    | -      | - | -    | - | - |
| Critical Hdwy Stg 2  | 6.1    | 5.5 | -      | 6.1 | 5.5    | -   | -    | -      | - | -    | - | - |
| Follow-up Hdwy       | 3.5    | 4   | 3.3    | 3.5 | 4      | 3.3 | 2.38 | -      | - | 2.2  | - | - |
| Pot Cap-1 Maneuver   | 727    | 672 | 1003   | 733 | 672    | 924 | 1427 | -      | - | 1467 | - | - |
| Stage 1              | 929    | 829 | -      | 861 | 780    | -   | -    | -      | - | -    | - | - |
| Stage 2              | 859    | 779 | -      | 932 | 828    | -   | -    | -      | - | -    | - | - |
| Platoon blocked, %   |        |     |        |     |        |     |      | -      | - | -    | - | - |
| Mov Cap-1 Maneuver   | 708    | 657 | 995    | 716 | 657    | 920 | 1416 | -      | - | 1463 | - | - |
| Mov Cap-2 Maneuver   | 708    | 657 | -      | 716 | 657    | -   | -    | -      | - | -    | - | - |
| Stage 1              | 916    | 817 | -      | 853 | 773    | -   | -    | -      | - | -    | - | - |
| Stage 2              | 845    | 772 | -      | 916 | 816    | -   | -    | -      | - | -    | - | - |

| Approach             | EB  | WB  | NB  | SB |
|----------------------|-----|-----|-----|----|
| HCM Control Delay, s | 9.7 | 9.9 | 0.4 | 1  |
| HCM LOS              | A   | A   |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 1416  | -   | -   | 793   | 742   | 1463  | -   | -   |
| HCM Lane V/C Ratio    | 0.006 | -   | -   | 0.024 | 0.011 | 0.006 | -   | -   |
| HCM Control Delay (s) | 7.6   | 0   | -   | 9.7   | 9.9   | 7.5   | 0   | -   |
| HCM Lane LOS          | A     | A   | -   | A     | A     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 0.1   | 0     | 0     | -   | -   |

Appendix D  
Year 2023 Background and Total Traffic  
Conditions Worksheets

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.5  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 4    | 2    | 3    | 2    | 1    | 2    | 1    | 39   | 1    | 0    | 36   | 2    |
| Future Vol, veh/h        | 4    | 2    | 3    | 2    | 1    | 2    | 1    | 39   | 1    | 0    | 36   | 2    |
| Conflicting Peds, #/hr   | 0    | 0    | 1    | 1    | 0    | 0    | 2    | 0    | 2    | 2    | 0    | 2    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 0    | 0    | 23   | 0    |
| Mvmt Flow                | 6    | 3    | 4    | 3    | 1    | 3    | 1    | 55   | 1    | 0    | 51   | 3    |

| Major/Minor          | Minor2 |     | Minor1 |     | Major1 |      |      | Major2 |   |      |   |   |
|----------------------|--------|-----|--------|-----|--------|------|------|--------|---|------|---|---|
| Conflicting Flow All | 115    | 115 | 56     | 117 | 116    | 58   | 56   | 0      | 0 | 58   | 0 | 0 |
| Stage 1              | 55     | 55  | -      | 60  | 60     | -    | -    | -      | - | -    | - | - |
| Stage 2              | 60     | 60  | -      | 57  | 56     | -    | -    | -      | - | -    | - | - |
| Critical Hdwy        | 7.1    | 6.5 | 6.2    | 7.1 | 6.5    | 6.2  | 4.1  | -      | - | 4.1  | - | - |
| Critical Hdwy Stg 1  | 6.1    | 5.5 | -      | 6.1 | 5.5    | -    | -    | -      | - | -    | - | - |
| Critical Hdwy Stg 2  | 6.1    | 5.5 | -      | 6.1 | 5.5    | -    | -    | -      | - | -    | - | - |
| Follow-up Hdwy       | 3.5    | 4   | 3.3    | 3.5 | 4      | 3.3  | 2.2  | -      | - | 2.2  | - | - |
| Pot Cap-1 Maneuver   | 867    | 779 | 1016   | 864 | 778    | 1014 | 1562 | -      | - | 1559 | - | - |
| Stage 1              | 962    | 853 | -      | 957 | 849    | -    | -    | -      | - | -    | - | - |
| Stage 2              | 957    | 849 | -      | 960 | 852    | -    | -    | -      | - | -    | - | - |
| Platoon blocked, %   |        |     |        |     |        |      |      | -      | - | -    | - | - |
| Mov Cap-1 Maneuver   | 861    | 775 | 1013   | 854 | 774    | 1012 | 1559 | -      | - | 1556 | - | - |
| Mov Cap-2 Maneuver   | 861    | 775 | -      | 854 | 774    | -    | -    | -      | - | -    | - | - |
| Stage 1              | 959    | 851 | -      | 954 | 846    | -    | -    | -      | - | -    | - | - |
| Stage 2              | 952    | 846 | -      | 952 | 850    | -    | -    | -      | - | -    | - | - |

| Approach             | EB  | WB  | NB  | SB |
|----------------------|-----|-----|-----|----|
| HCM Control Delay, s | 9.1 | 9.1 | 0.2 | 0  |
| HCM LOS              | A   | A   |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 | SBL  | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|------|-----|-----|
| Capacity (veh/h)      | 1559  | -   | -   | 883   | 891   | 1556 | -   | -   |
| HCM Lane V/C Ratio    | 0.001 | -   | -   | 0.014 | 0.008 | -    | -   | -   |
| HCM Control Delay (s) | 7.3   | 0   | -   | 9.1   | 9.1   | 0    | -   | -   |
| HCM Lane LOS          | A     | A   | -   | A     | A     | A    | -   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 0     | 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       | 5    | 2    | 5    | 0    | 3    | 2    | 5    | 82   | 2    | 6    | 37   | 2    |
| Future Vol, veh/h        | 5    | 2    | 5    | 0    | 3    | 2    | 5    | 82   | 2    | 6    | 37   | 2    |
| Conflicting Peds, #/hr   | 1    | 0    | 0    | 0    | 0    | 1    | 8    | 0    | 3    | 3    | 0    | 8    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 20   | 10   | 0    | 0    | 0    | 50   |
| Mvmt Flow                | 8    | 3    | 8    | 0    | 5    | 3    | 8    | 128  | 3    | 9    | 58   | 3    |

| Major/Minor          | Minor2 |     | Minor1 |     | Major1 |     |      | Major2 |   |      |   |   |
|----------------------|--------|-----|--------|-----|--------|-----|------|--------|---|------|---|---|
| Conflicting Flow All | 237    | 236 | 68     | 232 | 236    | 134 | 69   | 0      | 0 | 134  | 0 | 0 |
| Stage 1              | 86     | 86  | -      | 149 | 149    | -   | -    | -      | - | -    | - | - |
| Stage 2              | 151    | 150 | -      | 83  | 87     | -   | -    | -      | - | -    | - | - |
| Critical Hdwy        | 7.1    | 6.5 | 6.2    | 7.1 | 6.5    | 6.2 | 4.3  | -      | - | 4.1  | - | - |
| Critical Hdwy Stg 1  | 6.1    | 5.5 | -      | 6.1 | 5.5    | -   | -    | -      | - | -    | - | - |
| Critical Hdwy Stg 2  | 6.1    | 5.5 | -      | 6.1 | 5.5    | -   | -    | -      | - | -    | - | - |
| Follow-up Hdwy       | 3.5    | 4   | 3.3    | 3.5 | 4      | 3.3 | 2.38 | -      | - | 2.2  | - | - |
| Pot Cap-1 Maneuver   | 722    | 668 | 1001   | 727 | 668    | 920 | 1425 | -      | - | 1463 | - | - |
| Stage 1              | 927    | 827 | -      | 858 | 778    | -   | -    | -      | - | -    | - | - |
| Stage 2              | 856    | 777 | -      | 930 | 827    | -   | -    | -      | - | -    | - | - |
| Platoon blocked, %   |        |     |        |     |        |     |      | -      | - | -    | - | - |
| Mov Cap-1 Maneuver   | 703    | 653 | 993    | 710 | 653    | 916 | 1414 | -      | - | 1459 | - | - |
| Mov Cap-2 Maneuver   | 703    | 653 | -      | 710 | 653    | -   | -    | -      | - | -    | - | - |
| Stage 1              | 914    | 815 | -      | 850 | 771    | -   | -    | -      | - | -    | - | - |
| Stage 2              | 842    | 770 | -      | 914 | 815    | -   | -    | -      | - | -    | - | - |

| Approach             | EB  | WB  | NB  | SB |
|----------------------|-----|-----|-----|----|
| HCM Control Delay, s | 9.7 | 9.9 | 0.4 | 1  |
| HCM LOS              | A   | A   |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 1414  | -   | -   | 789   | 738   | 1459  | -   | -   |
| HCM Lane V/C Ratio    | 0.006 | -   | -   | 0.024 | 0.011 | 0.006 | -   | -   |
| HCM Control Delay (s) | 7.6   | 0   | -   | 9.7   | 9.9   | 7.5   | 0   | -   |
| HCM Lane LOS          | A     | A   | -   | A     | A     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 0.1   | 0     | 0     | -   | -   |

| 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       | 6    | 2    | 9    | 2    | 1    | 2    | 3    | 39   | 1    | 0    | 36   | 3    |
| Future Vol, veh/h        | 6    | 2    | 9    | 2    | 1    | 2    | 3    | 39   | 1    | 0    | 36   | 3    |
| Conflicting Peds, #/hr   | 0    | 0    | 1    | 1    | 0    | 0    | 2    | 0    | 2    | 2    | 0    | 2    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   | 71   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 0    | 0    | 23   | 0    |
| Mvmt Flow                | 8    | 3    | 13   | 3    | 1    | 3    | 4    | 55   | 1    | 0    | 51   | 4    |

| Major/Minor          | Minor2 |     | Minor1 |     | Major1 |      |      | Major2 |   |      |   |   |
|----------------------|--------|-----|--------|-----|--------|------|------|--------|---|------|---|---|
| Conflicting Flow All | 121    | 121 | 56     | 128 | 123    | 58   | 57   | 0      | 0 | 58   | 0 | 0 |
| Stage 1              | 55     | 55  | -      | 66  | 66     | -    | -    | -      | - | -    | - | - |
| Stage 2              | 66     | 66  | -      | 62  | 57     | -    | -    | -      | - | -    | - | - |
| Critical Hdwy        | 7.1    | 6.5 | 6.2    | 7.1 | 6.5    | 6.2  | 4.1  | -      | - | 4.1  | - | - |
| Critical Hdwy Stg 1  | 6.1    | 5.5 | -      | 6.1 | 5.5    | -    | -    | -      | - | -    | - | - |
| Critical Hdwy Stg 2  | 6.1    | 5.5 | -      | 6.1 | 5.5    | -    | -    | -      | - | -    | - | - |
| Follow-up Hdwy       | 3.5    | 4   | 3.3    | 3.5 | 4      | 3.3  | 2.2  | -      | - | 2.2  | - | - |
| Pot Cap-1 Maneuver   | 859    | 773 | 1016   | 850 | 771    | 1014 | 1560 | -      | - | 1559 | - | - |
| Stage 1              | 962    | 853 | -      | 950 | 844    | -    | -    | -      | - | -    | - | - |
| Stage 2              | 950    | 844 | -      | 954 | 851    | -    | -    | -      | - | -    | - | - |
| Platoon blocked, %   |        |     |        |     |        |      |      | -      | - | -    | - | - |
| Mov Cap-1 Maneuver   | 852    | 768 | 1013   | 833 | 766    | 1012 | 1557 | -      | - | 1556 | - | - |
| Mov Cap-2 Maneuver   | 852    | 768 | -      | 833 | 766    | -    | -    | -      | - | -    | - | - |
| Stage 1              | 957    | 851 | -      | 945 | 840    | -    | -    | -      | - | -    | - | - |
| Stage 2              | 943    | 840 | -      | 938 | 849    | -    | -    | -      | - | -    | - | - |

| Approach             | EB | WB  | NB  | SB |
|----------------------|----|-----|-----|----|
| HCM Control Delay, s | 9  | 9.1 | 0.5 | 0  |
| HCM LOS              | A  | A   |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 | SBL  | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|------|-----|-----|
| Capacity (veh/h)      | 1557  | -   | -   | 917   | 880   | 1556 | -   | -   |
| HCM Lane V/C Ratio    | 0.003 | -   | -   | 0.026 | 0.008 | -    | -   | -   |
| HCM Control Delay (s) | 7.3   | 0   | -   | 9     | 9.1   | 0    | -   | -   |
| HCM Lane LOS          | A     | A   | -   | A     | A     | A    | -   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 0.1   | 0     | 0    | -   | -   |

| 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       | 7    | 2    | 9    | 0    | 3    | 2    | 11   | 82   | 2    | 6    | 37   | 4    |
| Future Vol, veh/h        | 7    | 2    | 9    | 0    | 3    | 2    | 11   | 82   | 2    | 6    | 37   | 4    |
| Conflicting Peds, #/hr   | 1    | 0    | 0    | 0    | 0    | 1    | 8    | 0    | 3    | 3    | 0    | 8    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   | 64   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 20   | 10   | 0    | 0    | 0    | 50   |
| Mvmt Flow                | 11   | 3    | 14   | 0    | 5    | 3    | 17   | 128  | 3    | 9    | 58   | 6    |

| Major/Minor          | Minor2 |     | Minor1 |     | Major1 |     |      | Major2 |   |      |   |   |
|----------------------|--------|-----|--------|-----|--------|-----|------|--------|---|------|---|---|
| Conflicting Flow All | 256    | 255 | 69     | 255 | 257    | 134 | 72   | 0      | 0 | 134  | 0 | 0 |
| Stage 1              | 87     | 87  | -      | 167 | 167    | -   | -    | -      | - | -    | - | - |
| Stage 2              | 169    | 168 | -      | 88  | 90     | -   | -    | -      | - | -    | - | - |
| Critical Hdwy        | 7.1    | 6.5 | 6.2    | 7.1 | 6.5    | 6.2 | 4.3  | -      | - | 4.1  | - | - |
| Critical Hdwy Stg 1  | 6.1    | 5.5 | -      | 6.1 | 5.5    | -   | -    | -      | - | -    | - | - |
| Critical Hdwy Stg 2  | 6.1    | 5.5 | -      | 6.1 | 5.5    | -   | -    | -      | - | -    | - | - |
| Follow-up Hdwy       | 3.5    | 4   | 3.3    | 3.5 | 4      | 3.3 | 2.38 | -      | - | 2.2  | - | - |
| Pot Cap-1 Maneuver   | 701    | 652 | 1000   | 702 | 651    | 920 | 1421 | -      | - | 1463 | - | - |
| Stage 1              | 926    | 827 | -      | 840 | 764    | -   | -    | -      | - | -    | - | - |
| Stage 2              | 838    | 763 | -      | 925 | 824    | -   | -    | -      | - | -    | - | - |
| Platoon blocked, %   |        |     |        |     |        |     |      | -      | - | -    | - | - |
| Mov Cap-1 Maneuver   | 679    | 632 | 992    | 677 | 631    | 916 | 1410 | -      | - | 1459 | - | - |
| Mov Cap-2 Maneuver   | 679    | 632 | -      | 677 | 631    | -   | -    | -      | - | -    | - | - |
| Stage 1              | 907    | 815 | -      | 827 | 752    | -   | -    | -      | - | -    | - | - |
| Stage 2              | 818    | 751 | -      | 903 | 812    | -   | -    | -      | - | -    | - | - |

| Approach             | EB  | WB | NB  | SB |
|----------------------|-----|----|-----|----|
| HCM Control Delay, s | 9.7 | 10 | 0.9 | 1  |
| HCM LOS              | A   | B  |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 1410  | -   | -   | 798   | 721   | 1459  | -   | -   |
| HCM Lane V/C Ratio    | 0.012 | -   | -   | 0.035 | 0.011 | 0.006 | -   | -   |
| HCM Control Delay (s) | 7.6   | 0   | -   | 9.7   | 10    | 7.5   | 0   | -   |
| HCM Lane LOS          | A     | A   | -   | A     | B     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 0.1   | 0     | 0     | -   | -   |





**NOTICE OF LEBANON PLANNING COMMISSION DECISION  
PLANNING FILE No. S-22-03, AR-22-06**

- A. APPLICANT: Jon Joling
- B. PROPERTY LOCATION: The subject property is located on south side of W B Street, west of S 7<sup>th</sup> Street. The property address is 630-660 W B Street, and Linn County Tax Assessor Map number is 12S 02W 15BA, tax lots 1000, 1100, and 1200.
- C. PARCEL SIZE: The property is 2.89 acres.
- D. EXISTING DEVELOPMENT: The site is currently improved with three single-family home and accessory structures that are to be demolished as part of the subdivision.
- E. ZONING: The property is Residential Mixed Density (Z-RM).
- F. REQUEST: Approval of a 28-lot, 1-tract subdivision, and administrative review for the proposed development of a townhome project for the property located on the south side of B Street, west of S 7<sup>th</sup> Street.
- G. DECISION CRITERIA: The decision criteria are found in the Lebanon Development Code: Chapter 16.22 – Land Divisions (Subdivisions and Partitions) and Chapter 16.20 – Review and Decision Making Procedures.
- H. PLANNING COMMISSION HEARING DATE: March 15, 2023.

**II. DECISION AND CONDITIONS OF APPROVAL**

The Planning Commission **APPROVED** the above-mentioned request subject to the following Conditions of Approval:

- 1. The Planning Department conditions include, but may not be limited to:
  - a. A final partition plat, complying with provisions in ORS Chapter 92, shall be completed by a registered professional land surveyor and submitted to the City for approval.

- b. The final plat shall substantially conform to the proposal, comply with applicable requirements in the Lebanon Development Code and recorded within three years of the final date of approval.
  - c. Full sight-obscuring fencing shall be installed along the eastern and western project boundary lines along the length of the public right-of-way. Fencing shall be a minimum 6-feet in height to a maximum 8-feet in height.
  - d. Any proposed fencing shall be installed in compliance with Chapter 16.15 and of Section 16.12.030.F the Development Code. Lots 1, 9 and 20 as identified on the preliminary plat shall comply with the sight distance triangle as designated by the Engineering Department.
  - e. A maintenance agreement or homeowners association shall be established to maintain ownership and property taxes associated with the one tract and to maintain the storm detention systems. The agreements or association shall be filed and recorded prior to issuance of certificates of occupancy.
2. All requirements of the Lebanon Fire District shall be met, including but not limited to:
- a. Plans shall be submitted for review and approval by the Lebanon Fire Marshal that demonstrates full compliance with the Oregon Fire Code and local amendments. Lebanon Fire Marshal approval shall be obtained prior to issuance of building permits.
3. The Engineering Department conditions include, but may not be limited to:
- a. All public improvements shall:
    - i. conform to the latest "City of Lebanon Standards for Public Improvements."
    - ii. require completion of a Drawing Review Application and a Public Improvements Permit prior to beginning construction.
    - iii. be designed by a professional engineer registered in the State of Oregon.
    - iv. Prior to final plat approval, a bond or other approved form of assurance is required for all incomplete public improvements.
  - b. All elevations shown on plans submitted to the City must be on the NAVD 88 vertical datum to provide compatibility with the City computer aided mapping system.
  - c. All private, onsite utilities must be reviewed and approved by the City Building Official.

#### Transportation

- a. Provide a Geotech report including minimum street section for wet and dry weather construction conditions.
- b. Construct City standard full depth half street improvements along B Street.
- c. Developer has requested reduced planter strip widths on the proposed streets (S

8th Street & W C Street) to accommodate street side parking.

- d. Provide City standard street trees in compliance with the City of Lebanon street tree policy.
- e. Driveway access for lot 3 shall be located along B Street.
- f. Fence locations for lots 3, & 28 will require intersection sight distance & clear vision design submitted for review and approval.
- g. Sidewalks, paths and driveway approaches must comply with ADA requirements.
- h. Sidewalks adjacent to the detention pond shall be constructed with public improvements.
- i. Provide City standard streetlights.
- j. Postmaster must approve cluster mailbox locations.
- k. Provide verification of Republic Services approval of location and turn around access to garbage and recycling containers.

#### Water

- a. Identify any on-site wells on the engineered drawings. Wells must be capped and abandoned according to state and county regulations prior to connection to the public water system.
- b. The number and location of fire hydrants shall be approved by the Lebanon Fire Marshal. All new hydrants must be operational and accepted by the City prior to storage of combustible materials on site.
- c. Water system improvements shall be extended through the development site and to the edges of the property lines so that future extensions can continue.

#### Storm Drainage

- d. The drainage system and grading plan shall be designed so as not to adversely impact drainage to or from adjacent properties. Storm drainage facilities must be designed and constructed to ensure historical rates of site discharge are not exceeded. Storm drain capacity shall be determined by the Rational Method for a 10-year event with a 15-minute minimum durations time using the curve (fig 5.3) in the master plan. A detailed design including engineering calculations shall be submitted as part of site plan review.
- e. With the engineering drawings, provide a grading plan for the sites that indicates existing and proposed elevations. Drainage improvements (ditches and or piping) may be required at the site boundaries to prevent adverse impacts. The engineering drawings must provide a detailed design (including calculations) of the drainage improvements and mitigation of any impacts to adjacent properties.
- f. Maintenance responsibility for private storm water detention systems shall be clearly established through subdivision Conditions, Covenants and Restrictions on the subdivision plat or through property deed restrictions. The city doesn't not accept maintenance responsibility for private storm water systems or detention facilities.
- g. Storm drain improvements shall be extended through the development site to the

edges of the property line so that future extensions can continue.

- h. Provide verification of Oregon DEQ NPDES permit issuance and all condition of permit issuance prior to construction
- i. Any wetlands identified as being impacted by public improvements shall be mitigated prior to the final acceptance of public improvements.
- j. Provide a construction erosion prevention plan.
- k. Provide detail of detention pond fencing. Fence shall not be higher than 30", A unobscured fence can be up to 36" in height.

#### Sewer System

- a. Identify any on-site septic systems on the engineering drawings. Septic systems must be abandoned according to the city and county regulations.
- b. The sewer shall be extended through the development site to the edges of the property lines so that future extensions can continue.

#### Landscaping

- dd. Any landscaping proposed in the public right of way shall have a maximum mature height of no more than 24 inches above the street grade and at least 3 feet from any fire hydrant. All landscaping proposed in the yard setback areas adjacent to public streets shall have a maximum mature height of no more than 36 inches above the street grade.

### III. OTHER PERMITS AND RESTRICTIONS

The Applicant is herein advised that the use of the property involved in this application may require additional permits from the City or other local, State or Federal agencies.

The City of Lebanon land use and review and approval process does not take the place of, or relieve, the Applicant of responsibility for acquiring such other permits, or satisfy any restrictions or conditions thereon. The land use approval herein does not remove, alter or impair in any way any covenants or restrictions imposed on this property by deed or other instrument.

### IV. APPEALS

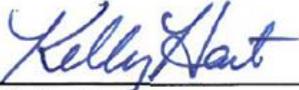
This Planning Commission decision will be official on the 15<sup>th</sup> day from the mailing of this notice, unless appealed within that time. Appeals must be received at the Lebanon Community Development Department (925 South Main Street, Lebanon, Oregon 97355) by **5:00 PM, Friday, March 31, 2023**. Appeal is to the City Council and the appeal fee is \$500.

Should you wish to appeal this action, or have any questions or comments regarding this project, please contact Community Development Department, at (541) 258-4906, for further information.

V. RECORD

The City's case file and record can be viewed in the Community Development Department at Lebanon City Hall, located at 925 S. Main Street, Lebanon, OR 97355 during regular business hours.

Respectfully,



\_\_\_\_\_  
Kelly Hart  
Community Development Director

March 16, 2023

Date



## NARRATIVE for MISTY MEADOW TOWNHOMES

This project proposes to subdivide the 2.89 acre property located at 660 W B street into 28 Townhome lots and one detention basin lot. Street and utility infrastructure will be constructed to serve the project.

General Decision Criteria: The City may approve, approve with conditions or deny a preliminary plat based on the following *decision criteria*:

1. *The proposed preliminary plat complies with the applicable Development Code Sections and adopted Master Plans.*

**The property is zoned RM. This project proposes townhouses for the lots. Table 16.05-7 Lists the Minimum Lot size as 2,500 sf and the minimum Width as 20 ft.**

**The proposed minimum lot size is 3,101 and the proposed minimum lot width is 27 ft. The proposed minimum corner lot width is 32 ft. The code minimum requirements are met.**

2. *The proposed plat name is not already recorded for another subdivision, and satisfies the provisions of ORS Chapter 92 and the County Surveyor.*

**The proposed name of this subdivision is Misty Meadow.**

3. *The proposed streets, roads, sidewalks, bicycle lanes, pathways, utilities, and surface water management facilities are laid out so as to conform or transition to the plats of subdivisions and of partitions already approved for adjoining property as to width, general direction and in all other respects. All proposed public improvements and dedications are identified on the preliminary plat. City of Lebanon Development Code Adopted by City Council on 12/10/08 Chapter 16.22: Land Divisions, Property Line Adjustments, and Vacations Page 10.*

**The proposed street width is 28 feet providing two 10ft travel lanes and one 8 ft parking lane as listed in Table 16.13.030-2 for local streets.**

**Five ft wide sidewalks are proposed on both sides of the proposed new local street.**

**On-street parking will be designated for the North side of C St and the east side of 8<sup>th</sup> St.**

**Townhouse units will have side by side one-car garages to allow for a parking space between driveways.**

**Storm drainage will be collected in pipes and routed through a detention basin prior to discharge to the public storm drain in 7<sup>th</sup> Street. A detention study is included with this submittal.**

*All proposed private common areas and improvements (e.g., homeowner association property) are identified on the preliminary plat.*

**The detention basin will be owned and operated by a homeowners' association. There are no other common areas or improvements proposed.**

4. *Evidence that all City, County, State and Federal regulatory agency identified or mapped special management areas have been accurately and effectively identified on the appropriate maps and plans submitted to the City for review.*

**No special management areas were identified.**

5. *Evidence that improvements or conditions required by the City, road authority, Linn County, special districts, utilities, and/or other service providers, as applicable to the project, have been or can be met.*

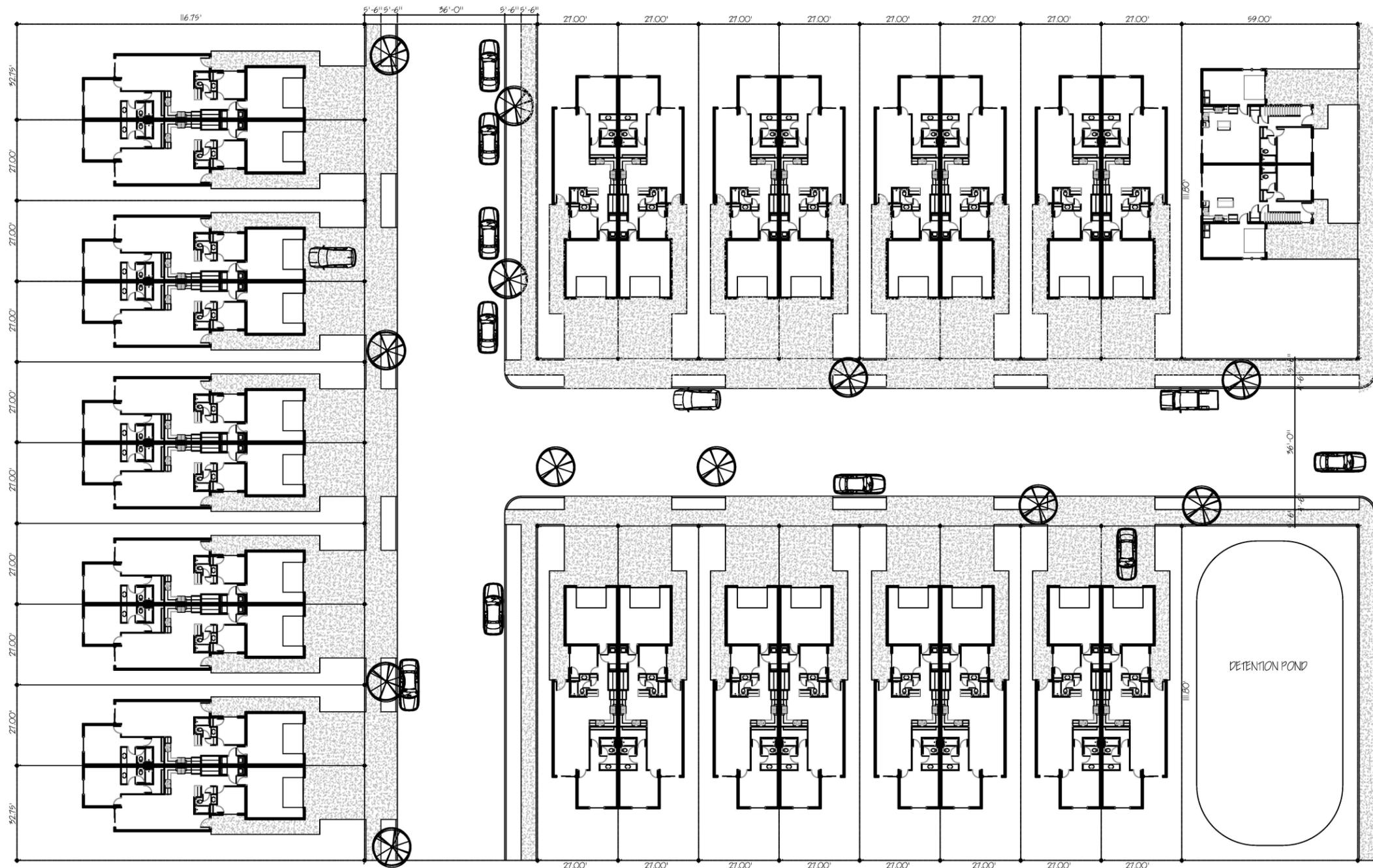
**B street will be widened on one side with Curb Gutters and sidewalks.**

6. *If any part of the site is located within a Special Area Plan or District, Overlay Zone, or previously approved Planned Development, it shall conform to the applicable regulations and/or conditions.*

**No Special Area Plan or District has been identified.**



B STREET



- (SPECIES & DIA AS NOTED) TREE TO BE REMOVED
- ⊗ TREE (DIA AS NOTED)
- ⊕ FIRE HYDRANT
- ⊞ SEWER STUBOUT
- ⊠ CATV PEDESTAL
- ⊡ TELEPHONE PEDESTAL
- ⊞ ELECTRIC PEDESTAL
- ⊞ GAS STUBOUT
- ⊞ WATER STUBOUT
- ⊞ WATER VALVE
- ⊙ PROPERTY CORNER
- MONUMENT FOUND AS NOTED
- 100 — COUNTOUR (ASSUMED ELEV)
- — — EASEMENT / SETBACK LINE
- ==== CONCRETE CURB
- - - - UTILITY LINE (AS NOTED)
- ==== PROPERTY BOUNDARY
- — — GROUND SLOPE

© COPYRIGHT 2022

DATE: 12-21-2022

SCALE: 1" = 40'

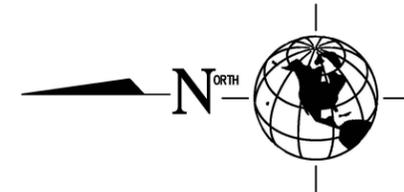
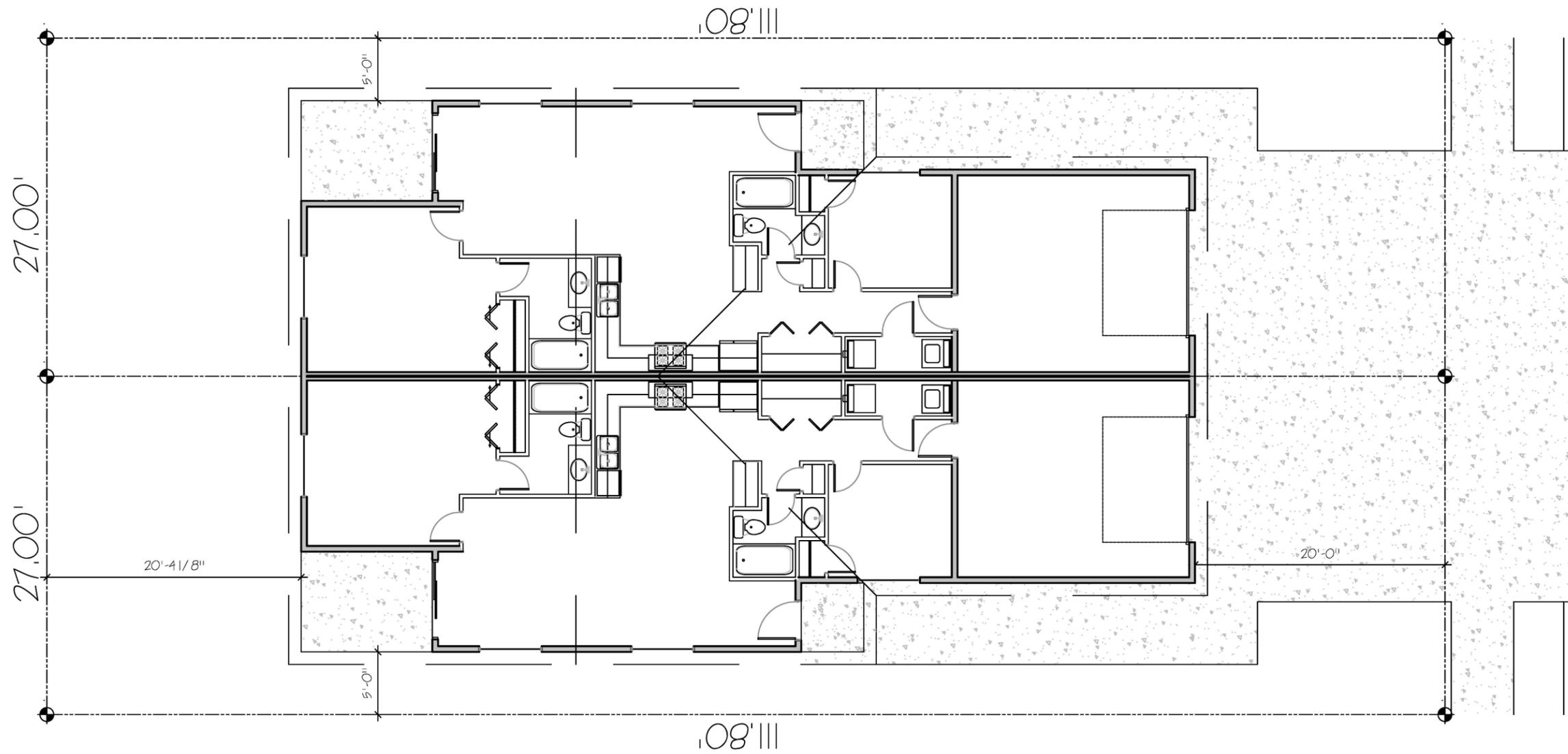
FILE # 19075

PROJECT: 1907

PAGE 5

SITE PLAN





- |  |                                |  |  |
|--|--------------------------------|--|--|
|  | GAS STUBOUT                    |  | (SPECIES & DIA AS NOTED)<br>TREE TO BE REMOVED |
|  | WATER STUBOUT                  |  | TREE (DIA AS NOTED)                            |
|  | WATER VALVE                    |  | FIRE HYDRANT                                   |
|  | PROPERTY CORNER                |  | SEWER STUBOUT                                  |
|  | MONUMENT FOUND AS NOTED        |  | CATV PEDESTAL                                  |
|  | COUNTOUR (ASSUMED ELEV)<br>100 |  | TELEPHONE PEDESTAL                             |
|  | EASEMENT / SETBACK LINE        |  | ELECTRIC PEDESTAL                              |
|  | CONCRETE CURB                  |  |  |
|  | UTILITY LINE (AS NOTED)        |  |  |
|  | PROPERTY BOUNDARY              |  |  |
|  | GROUND SLOPE                   |  |  |

SITE PLAN

© COPYRIGHT 2021

DATE: 3-12-2021

SCALE: 1"= 10'

FILE # 2018 st

PROJECT: 2018

PAGE 5



# AGENDA ITEM

5.b.







925 S. Main Street  
Lebanon, Oregon 97355

TEL: 541.258.4906  
development@lebanonoregon.gov  
www.lebanonoregon.gov

# MEMORANDUM

*Development Services*

To: Lebanon Planning Commission  
From: Shana Olson, Development Services Director  
Subject: Planning File No. S-26-02, VAR-26-01

Date: March 11, 2026

## I. BACKGROUND

Under consideration is a request for approval of a 52-lot, two-tract residential subdivision, a Class III Variance, and a Right-of-Way Variance for the property located north of Joy Street and east of South Fifth Street, assigned an address of 31707 South Fifth Street. The property is identified as Linn County Tax Assessor Map 12S-02W-22D, Tax Lot 1001, and contains approximately 6.39 acres. The site is currently undeveloped.

The property is located within a developed neighborhood. Properties to the north and west are within the Lebanon Urban Growth Boundary and portions of unincorporated Linn County and are developed with residential uses designated Residential Mixed Density (C-RM). One property to the north is within city limits, zoned Residential Mixed Density (Z-RM), and has recent planning approval for apartment development. Properties to the south are within the city limits and zoned Residential Mixed Density, and are developed with single-family residential dwellings. To the east is a developed site occupied by Kids and Company of Linn County Board (Kidco Head Start).

The property has previously been considered for subdivision development. In 2024, the Planning Commission approved a 35-lot subdivision designed with larger lots intended to accommodate duplex development. The current application proposes a new subdivision of the property consistent with the Residential Mixed Density zoning designation.



## II. CURRENT REPORT

The current application includes a preliminary plan to subdivide the existing 6.39-acre site into 52 residential lots and two tracts for stormwater drainage facilities. The application also includes a Class III Variance request to increase the maximum building height for small-lot single-unit detached dwellings from 25 feet to 33 feet, along with a Transportation System Plan (TSP) variance request to allow the proposed internal public streets to be constructed with a 50-foot right-of-way rather than the 58-foot width identified in the TSP.

The subdivision is designed to create 48 small-lot single-unit detached residential lots and four standard residential lots intended for single-family or duplex development, consistent with the Residential Mixed Density zoning district.

The subdivision layout includes the creation of a new public street extending east from South Fifth Street, terminating in a cul-de-sac near the eastern portion of the property. In addition, the proposed street will extend north from Joy Street to connect with the new public street within the subdivision.

A private street is proposed to serve a portion of the development containing up to sixteen dwelling units. Private streets serving a limited number of units are addressed in LDC 16.13.030(N) and the provisions of the Lebanon Transportation System Plan.

The residential lots have been designed to meet the minimum development standards for residential development within the RM zoning district. While the subdivision is anticipated to develop primarily with single-unit detached dwellings, duplex development may also be permitted on qualifying lots consistent with state housing regulations and the Lebanon Development Code.

A city-maintained drainage ditch is located along the southern portion of the property. A 20-foot easement has been established over the drainage ditch for maintenance purposes.

Approval of the preliminary subdivision establishes the general layout of the site's lots, streets, utilities, and infrastructure. Approval of the subdivision does not authorize construction of specific homes. Individual dwelling units will be reviewed for compliance with applicable development standards, including setbacks, building height, lot coverage, and parking requirements, at the time of building permit review. Final design details for utilities, stormwater facilities, and other public improvements will be reviewed through the City's engineering plan review process prior to final plat approval and construction.

## III. STAFF ANALYSIS

The following analysis evaluates the proposed subdivision and variance requests for consistency with the applicable provisions of the Lebanon Development Code.

The subject property is located within the Residential Mixed Density (Z-RM) zoning district. The RM zone allows a variety of residential housing types, including single-unit detached dwellings, duplexes, townhouses, and other residential forms.

Per LDC 16.05.090, the minimum lot area and width requirements for small-lot single-unit detached dwellings are 2,500 square feet and 30 feet, respectively. Small-lot dwellings are limited to a maximum lot size of 3,500 square feet.

The proposed subdivision creates 52 residential lots ranging in size from approximately 2,864 square feet to more than 16,000 square feet. These lot dimensions meet or exceed the minimum development standards for residential development within the RM zoning district.

### **Access and Circulation**

The internal street network includes a new public street extending east from South Fifth Street and terminating in a cul-de-sac. A second public street connection is proposed from Joy Street, extending north to connect with the new public street within the subdivision.

The Development Code establishes maximum block lengths for new subdivisions to promote pedestrian connectivity. To meet the block length standards in LDC 16.12.030(K), the proposal includes extending a public street north from Joy Street to connect with the new public street within the subdivision. This connection provides pedestrian and vehicular connectivity between the proposed subdivision and the existing neighborhood to the south.

The Right-of-Way Variance requests approval of a 50-foot right-of-way for the proposed internal public street, rather than the 58-foot width identified in the Transportation System Plan (TSP). Due to site constraints associated with the drainage corridor and available lot area, Engineering reviewed the proposed street design and determined that removal of landscape strips would allow on-street parking on both sides of the street while maintaining adequate roadway width. Based on this review, Engineering authorized the deviation from the standard public street section.

South Fifth Street is identified as a Collector Street in the TSP. The existing right-of-way is approximately 60 feet. Based on the existing development pattern on the west side of the street, the Engineering Department determined that additional right-of-way dedication would not be required as part of this subdivision. The TSP authorizes the Engineering Department to approve deviations of this type when site conditions warrant.

Joy Street is a partially improved local roadway with a drainage ditch along its northern portion. Due to maintenance requirements associated with the drainage ditch, the Public Works Department determined that a standard sidewalk and landscape strip improvement along the north side of Joy Street is not feasible. Street improvements along this frontage will consist of roadway improvements consistent with City engineering standards.

The City's Trails Master Plan identifies the conceptual alignment of Trail 11 generally along the drainage corridor in the vicinity of the subject property. During the agency review process, Build Lebanon Trails submitted comments noting that the conceptual trail alignment appears to follow the drainage ditch along the southern portion of the site. The City's Engineering and Public Works Departments reviewed the drainage corridor and subdivision layout and

determined that the available area along the ditch does not provide sufficient width to accommodate both the required drainage infrastructure and a multi-use trail facility.

In addition, the Trails Master Plan identifies conceptual alignments, and specific trail locations are typically determined through future planning efforts, capital improvement projects, or development proposals where the trail can reasonably be accommodated. Engineering and Public Works staff identified an alternative alignment south of the subdivision that would better accommodate the long-term development of Trail 11. Based on this review, staff determined that the proposed subdivision cannot reasonably accommodate the trail within the drainage corridor, and therefore, no trail dedication or construction is required as part of this subdivision application.

### **Transportation Impacts**

Transportation impacts associated with the proposed subdivision were evaluated through the preparation of a Traffic Impact Analysis (TIA). According to LDC 16.20.110(B), the City or other road authority may require a traffic impact study as part of a development application when there is an increase in site traffic volume generation of 300 Average Daily Trips (ADT).

A TIA prepared by Kittelson & Associates (February 2026) evaluated transportation impacts associated with the proposed subdivision, assuming full buildout in 2028. Based on trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, the proposed development is estimated to generate approximately 473 daily vehicle trips, including approximately 40 trips during the AM peak hour and 53 trips during the PM peak hour.

The TIA evaluated operations at nearby intersections, including Vaughan Lane/S 5th Street, Joy Street/the proposed public street, S Main Road/Joy Street, and the proposed site access on South Fifth Street. Future traffic conditions incorporate background growth consistent with the TSP, as well as traffic associated with nearby planned developments.

The analysis indicates that the studied intersections are expected to operate within City mobility standards under future conditions. The TIA recommends installing STOP signs at the proposed access points to South Fifth Street and Joy Street, consistent with City standards and the Manual on Uniform Traffic Control Devices (MUTCD).

### **Utilities and Public Services**

Public water and sanitary sewer infrastructure are available along South Fifth Street and Joy Street, including a 16-inch water main and a 24-inch sewer main in South Fifth Street, and an 8-inch water main and a 10-inch sewer main in Joy Street. Utility extensions are proposed throughout the subdivision to serve each lot.

Stormwater from the development will be managed through a combination of public drainage infrastructure and an on-site stormwater detention facility located within Tract A.

## **Environmental Considerations**

A wetland delineation prepared for the property identified wetlands within portions of the site. The applicant has submitted a Joint Permit Application to the U.S. Army Corps of Engineers, the Oregon Department of State Lands, and the Oregon Department of Environmental Quality for review prior to disturbance or mitigation of wetlands.

The property is not located within a mapped FEMA floodplain.

## **Class III Variance**

The applicant requests a Class III Variance to increase the maximum building height for small-lot single-unit detached dwellings from 25 feet to 33 feet.

Under LDC 16.05.090, small-lot single-unit detached dwellings are limited to a maximum building height of 25 feet. Standard single-unit detached dwellings within the Residential Mixed Density (RM) zoning district may be constructed up to 40 feet in height.

The requested height increase would allow the construction of two-story residential dwellings with typical roof pitches while remaining below the maximum building height permitted for other residential structures within the RM zoning district.

The applicant states that the additional building height is necessary to accommodate functional two-story homes on the smaller residential lots proposed within the subdivision. The variance would allow standard residential roof pitches and second-story living space while maintaining compatibility with other residential development permitted in the RM zone.

The proposed subdivision includes 48 small-lot single-unit detached parcels. Because these lots are smaller than typical single-family residential parcels, additional building height allows homes to develop vertically rather than expanding the building footprint. Allowing increases in building height can help maintain functional interior layouts while reducing lot coverage and preserving usable yard area.

The requested height of 33 feet remains below the 40-foot maximum height permitted for standard single-unit detached dwellings within the RM zoning district. As a result, the proposed height is consistent with the general scale of residential development typically anticipated within the zone. It is not expected to have a significant visual or compatibility impact on surrounding residential properties.

Based on the information provided by the applicant and the analysis contained in this report, staff finds that the requested variance may allow reasonable residential development of the property while remaining generally consistent with the intent of the RM zoning district and the overall building height framework established in the Lebanon Development Code.

The Planning Commission must determine whether the request satisfies the approval criteria for a Class III Variance outlined in Lebanon Development Code Chapter 16.29, based on the

evidence in the record and the testimony received at the public hearing. Detailed findings addressing the applicable variance criteria are provided in the Draft Order.

### **Public Testimony**

Public testimony related to the proposal is summarized below.

The City issued a public notification in compliance with the Lebanon Development Code and State regulations on January 28, 2026. The public comment period remained open until 5:00 pm on Tuesday, February 17, 2026. The City received five written public comments prior to the public hearing.

The comments generally expressed concerns regarding potential traffic impacts associated with additional homes in the area, the proposed increase in residential density, and the requested variance to allow building heights of up to 33 feet. Commenters also requested clarification on the number and type of proposed housing units, whether three-story structures would be built, and whether additional parking, sidewalks, or pedestrian paths would be included in the development.

Concerns were expressed that taller homes and increased development intensity could affect neighborhood character, privacy, natural light, and property values. One commenter asked whether fencing or additional buffering would be provided between existing homes and the new subdivision. All written comments were entered into the record.

### **IV. RECOMMENDATION**

Based on the information submitted by the applicant and the analysis provided in this report, staff finds that the proposal can meet the applicable requirements of the Lebanon Development Code, subject to the recommended conditions of approval.

Staff therefore recommends the Planning Commission approve the proposed subdivision and Class III Variance, subject to the conditions contained in the Draft Order.

The Planning Commission must determine whether the applications satisfy the applicable approval criteria based on the findings and evidence in the record.

## V. PLANNING COMMISSION ACTION

Staff has provided the Planning Commission with several options, each accompanied by an appropriate motion.

**1. Approve the application, adopting the draft order as presented.**

I move that the Planning Commission approve applications S-26-02 and VAR-26-01 and adopt the Draft Order as presented by staff.

**2. Approve the application, adopting modifications to the draft order.**

I move that the Planning Commission approve applications S-26-02 and VAR-26-01 and adopt the Draft Order with the following modifications.

**3. Approve the subdivision and deny the variance.**

I move that the Planning Commission approve the Subdivision application S-26-02 and deny the Class III Variance application VAR-26-01, and direct staff to prepare a Final Order consistent with the Commission's decision.

**4. Continue the hearing until April 17, 2026.**

I move that the Planning Commission continue the public hearing on applications S-26-02 and VAR-26-01 to April 17, 2026.

**5. Deny the application, directing staff to modify the draft order.**

I move that the Planning Commission deny the applications S-26-02 and VAR-26-01 and direct staff to prepare a Final Order reflecting the Commission's findings.

**6. Close the hearing but keep the record open for submission of written testimony.**

I move that the Planning Commission close the public hearing on the applications S-26-02 and VAR-26-01 and leave the written record open for submission of additional testimony, until April 8, 2026

**7. Close the hearing and record, and continue deliberation to the next meeting.**

I move that the Planning Commission close the public hearing and continue deliberations on applications S-26-02 and VAR-26-01 to the April 17, 2026 meeting.



**BEFORE THE LEBANON PLANNING COMMISSION**

In the matter of the )  
Application of )  
Family Tree Real Estate, LLC )

Subdivision  
File S-26-02  
VAR-26-01

**ORDER OF APPROVAL**

**I. NATURE OF APPLICATION**

The application requests approval of a 52-lot residential subdivision and two tracts, along with a Class III Variance to increase the maximum building height for small-lot single-unit detached dwellings from 25 feet to 33 feet, on approximately 6.39 acres of property located at 31707 South Fifth Street (Linn County Tax Assessor Map 12S-02W-22D, Tax Lot 1001), zoned Residential Mixed Density (Z-RM).

**II. PUBLIC HEARING**

A public hearing was held before the Lebanon Planning Commission on March 18, 2026. The Planning Commission reviewed Planning Files S-26-02 and VAR-26-01, including the staff report, application materials, and testimony submitted into the record.

**III. FINDINGS OF FACT**

**A. GENERAL FINDINGS**

1. The owner and applicant of the property is Family Tree Real Estate, LLC, represented by Udell Engineering and Land Surveying, LLC.
2. The subject property is located at 31707 South Fifth Street and is identified as Linn County Tax Assessor Map 12S 02W 22D, Tax Lot 1001.
3. The property is approximately 6.39 acres.
4. The property is zoned Residential Mixed Density (Z-RM).
5. The surrounding area is primarily developed with residential uses, including single-unit detached dwellings and other residential development permitted within the RM zoning district. A Head Start facility is located to the east of the site.

**B. EXISTING CONDITIONS**

The subject property is currently undeveloped. A city-maintained drainage ditch runs along the southern portion of the property, with a 27-foot maintenance easement.

Wetlands have been identified on portions of the site through a wetland delineation prepared for the property.

**C. PROPOSAL**

The applicant proposes a 52-lot residential subdivision and two tracts for stormwater and drainage facilities.

The subdivision includes:

- Development of 52 residential lots
- Creation of two tracts for stormwater and drainage facilities
- Construction of a new public street extending east from South Fifth Street and connecting to Joy Street
- Construction of a private street serving a portion of the subdivision

Future development is anticipated to consist primarily of single-unit detached dwellings, with single-family or duplex development permitted on qualifying lots consistent with state housing regulations and the Lebanon Development Code.

The application also includes a Class III Variance to allow a maximum building height of 33 feet for small-lot single-unit detached dwellings rather than the 25-foot maximum height permitted by the Lebanon Development Code.

#### D. AGENCY COMMENTS

The following agencies were notified of the proposal: Build Lebanon Trails, Consumers Power, NW Natural, Pacific Power, Peak Internet, Republic Services, Oregon Pilots Association, Oregon Department of Aviation, Santiam-Albany Canal, Grand Prairie Water District, Linn County Assessor, Planning, Road and Surveyor Departments, Oregon Department of Transportation, Lebanon Fire District, Lebanon Building and Engineering, Lebanon Community School District, Lebanon Planning Commission and the Lebanon Chamber of Commerce.

Agency comments were received from Build Lebanon Trails, Development Engineering, and the Lebanon Fire District.

Build Lebanon Trails noted that Trail 11, identified in the City's Trails Master Plan, generally follows the drainage corridor near the site. The City's Engineering and Public Works Departments reviewed the location and determined that the drainage corridor within the subdivision does not provide sufficient space to accommodate both the required drainage infrastructure and a multi-use trail facility. Staff also identified a more feasible alignment for the trail south of the subdivision area. As a result, no trail dedication or construction is required as part of this subdivision approval.

Comments from Development Engineering and the Lebanon Fire District are addressed through the conditions of approval.

#### E. PUBLIC COMMENTS

The City issued a public notification in compliance with the Lebanon Development Code and State regulations on February 26, 2026. The deadline for submission of written comments prior to the hearing was 5:00 pm on Tuesday, March 17, 2026. The City received five written public comments prior to the hearing. These comments were entered into the record and considered by the Planning Commission during the public hearing.

#### F. ANALYSIS - SUBDIVISION

Subdivision applications are required to satisfy approval criteria contained within the Lebanon Development Code (LDC) Chapter 16.22.

#### G. APPROVAL CRITERIA - SUBDIVISION

1. *The proposed preliminary plat complies with the applicable Development Code Sections and adopted Master Plans. At a minimum, the provisions of this Chapter and the applicable Chapters and Sections of Article Two (Land Use and Land Use/Development Zones) and Article Three (Community Development and Use Standards) of this Code shall apply. Where*

*a variance is necessary to receive preliminary plat approval, the application shall also comply with the relevant Sections of Chapter 16.29.*

FINDING: The subject property is zoned Residential Mixed Density (Z-RM). Within this zone, small-lot single-unit detached dwellings require a minimum lot size of 2,500 square feet and a minimum width of 30 feet, with a maximum lot size of 3,500 square feet.

The proposed subdivision creates 48 small-lot single-unit detached parcels ranging from approximately 2,864 to 3,485 square feet, which comply with the dimensional standards for this housing type. Four additional lots ranging from approximately 5,059 to over 16,000 square feet are also proposed and are large enough to accommodate standard single-family or duplex development permitted within the RM zone.

Single-unit detached dwellings are an outright permitted use in the RM zone, and development standards such as setbacks, building coverage, and parking will be reviewed at the time of building permit review. Therefore, this criterion is met.

- 2. The proposed plat name is not already recorded for another subdivision and satisfies the provisions of ORS Chapter 92 and the County Surveyor.*

FINDING: Subdivision plat names must comply with ORS 92.090, which requires approval by the County Surveyor and prohibits names that are the same as or similar to existing subdivisions within the county. The proposed plat name "Cedar River Estates" has been reviewed and approved by the Linn County Surveyor. Therefore, this criterion is met.

- 3. The proposed streets, roads, sidewalks, bicycle lanes, pathways, utilities, and surface water management facilities are laid out so as to conform to or transition to the plats of subdivisions and partitions already approved for adjoining property, as to width, general direction, and in all other respects. All proposed public improvements and dedications are identified on the preliminary plat.*

FINDING: The subdivision proposes a new public street extending east from South Fifth Street, terminating in a cul-de-sac and connecting to Joy Street through a secondary public street extension.

South Fifth Street is classified as a collector street in the Lebanon Transportation System Plan, which identifies a standard right-of-way width of 75 feet. The existing right-of-way width along the subject property is approximately 60 feet, and the Engineering Department determined that additional dedication is not required due to existing development patterns along the corridor.

Joy Street is a partially improved local street with a drainage ditch along the northern edge. Due to the drainage infrastructure, Public Works determined that full sidewalk and landscape strip improvements are not feasible along this frontage. Street improvements will therefore consist of roadway improvements consistent with City engineering standards.

Public water and sewer utilities are available in both South Fifth Street and Joy Street, including a 16-inch water main and 24-inch sewer main in South Fifth Street and an 8-inch water main and 10-inch sewer main in Joy Street. These utilities will be extended through the subdivision to serve each lot.

Stormwater will be managed through public infrastructure and a detention facility located in Tract A, ensuring post-development runoff does not exceed pre-development conditions.

Based on the availability of utilities and the design of the proposed infrastructure improvements, this criterion is met.

- 4. All proposed private common areas and improvements (e.g., homeowners' association property) are identified on the preliminary plat.*

FINDING: The preliminary plat identifies two tracts designated for stormwater and drainage facilities. These tracts will provide space for stormwater management infrastructure and will be maintained in accordance with City standards and conditions of approval. Therefore, this criterion is met.

- 5. Evidence that all City, County, State, and Federal regulatory agencies identified or mapped special management areas have been accurately and effectively identified on the appropriate maps and plans submitted to the City for review.*

FINDING: The property is not located within the FEMA Special Flood Hazard Area.

A wetlands delineation identified portions of the site as wetlands. The applicant has submitted a Joint Permit Application to the U.S. Army Corps of Engineers, the Oregon Department of State Lands, and the Oregon Department of Environmental Quality for the required approvals prior to disturbance of the wetlands. With these regulatory reviews and approvals, this criterion is met.

- 6. Evidence that improvements or conditions required by the City, road authority, Linn County, special districts, utilities, and/or other service providers, as applicable to the project, have been or can be met.*

FINDING: The proposed subdivision has been reviewed by affected agencies and City departments, including Development Engineering and the Lebanon Fire District. Public water and sanitary sewer infrastructure are available in South Fifth Street and Joy Street, and utilities will be extended throughout the subdivision to serve each lot. Stormwater facilities will be designed and constructed to ensure post-development runoff does not exceed pre-development conditions, with final design reviewed during the City's engineering plan review process. With the required agency review and conditions of approval, the proposal demonstrates that required improvements and service requirements can be met. Therefore, this criterion is met.

- 7. If any part of the site is located within a Special Area Plan or District, Overlay Zone, or previously approved Planned Development, it shall conform to the applicable regulations and/or conditions.*

FINDING: The subject property is located outside all other overlay zones or special districts. Therefore, the criterion has been met.

- 8. All lots shall comply with the lot area, setback, and dimensional requirements of the applicable land use zone (Chapters 16.05 – 16.10) and the standards of Chapter 16.12 (Subsection 16.12.030.K, Street Connectivity and Formation of Blocks).*

FINDING: The proposed subdivision creates 52 residential lots ranging from approximately 2,864 square feet to over 16,000 square feet. The majority of lots are designed for small-lot single-unit detached dwellings, which require a minimum lot size of 2,500 square feet and a minimum lot width of 30 feet in the RM zone. The proposed lots meet or exceed these minimum dimensional standards.

To comply with block length and connectivity requirements in LDC 16.12.030(K), the subdivision includes a new public street extending north from Joy Street to connect with the internal subdivision street network. This connection provides vehicular and pedestrian connectivity between the proposed subdivision and the existing neighborhood to the south. Therefore, this criterion is met.

9. *Setbacks shall be as required by the applicable land use zone (Chapter 16.05–16.10).*

FINDING: The subdivision establishes buildable residential lots that meet the minimum dimensional standards of the RM zoning district. Although no structures are proposed as part of this subdivision application, the size and configuration of the lots provide adequate building envelopes to accommodate required setbacks for future development. Compliance with setback, building coverage, and height standards will be verified at the time of building permit review. Therefore, this criterion is met.

10. *Each lot shall conform to the standards of Chapter 16.12 (Access and Circulation).*

FINDING: Each lot within the subdivision will obtain access from either a public street or a private street, consistent with the access and circulation standards of Chapter 16.12. The subdivision includes a new public street connection from South Fifth Street and an additional connection to Joy Street, providing vehicular and pedestrian access to the site. A private street is proposed to serve a limited number of lots within the subdivision, consistent with the provisions of LDC 16.13.030(N) for private streets serving a limited number of dwelling units. With these access arrangements and the conditions of approval, this criterion is met.

11. *Landscape or other screening may be required to maintain privacy for abutting uses. See Chapters 16.05 – 16.10 (Land Use Zones), and Chapter 16.15 (Landscaping, Street Trees, etc.).*

FINDING: The subdivision application establishes residential lots but does not include specific building development plans. Landscaping requirements applicable to residential development will be reviewed at the time of building permit application in accordance with Chapter 16.15 (Landscaping and Street Trees) of the Lebanon Development Code. With future development subject to applicable landscaping and screening standards, this criterion is met.

12. *In conformance with the Oregon Fire Code, a 20-foot-wide fire apparatus access drive shall be provided to serve all portions of a building that are located more than 150 feet from a public or private road or approved access drive. See Chapter 16.12 (Access and Circulation).*

FINDING: The subdivision layout provides access to each lot from either a public or private street, ensuring that future structures will be located within the required distance of an approved fire apparatus access drive. The Lebanon Fire District reviewed the proposal and provided conditions of approval to ensure compliance with the Oregon Fire Code, including requirements for fire access, hydrant placement, and fire protection standards. With compliance with these conditions, this criterion is met.

13. *Where a common drive is to be provided to serve more than one lot, a reciprocating access easement and maintenance agreement shall be recorded with the approved subdivision or partition plat.*

FINDING: The subdivision includes a private street serving a portion of the development. Where shared access facilities are required, a reciprocal access easement and maintenance agreement will be recorded to ensure continued access and maintenance responsibilities for affected properties. With the recording of these agreements as part of the final plat process, this criterion is met.

14. *All applicable engineering design standards for streets, utilities, surface water management, and easements shall be met.*

FINDING: The proposed subdivision includes the construction of public improvements and utility extensions necessary to serve the development. Public improvements will be designed in accordance with the City of Lebanon Standards for Public Improvements and reviewed through the City's engineering plan review process prior to construction. Stormwater facilities, utility connections, and required easements will be incorporated into the final engineering plans and subdivision plat. With compliance with these engineering standards and conditions of approval, this criterion is met.

I. ANALYSIS – CLASS III VARIANCE

The Planning Commission reviewed the application materials, staff report, testimony provided during the public hearing, and evidence in the record to evaluate the request for a Class III Variance under Lebanon Municipal Code (LMC) Chapter 16.29. Based on the findings below, and evidence in the record, the Planning Commission finds that the requested variance satisfies the applicable approval criteria.

J. APPROVAL CRITERIA – CLASS III VARIANCE

1. *The proposed variance will not be materially detrimental to the purposes of this Code, to any other applicable policies and standards, or to other properties in the same land use, zone, or vicinity.*

FINDING: The applicant requests a variance to increase the maximum building height for small lot houses from 25 feet to 33 feet. Small lot houses are permitted within the applicable zoning district; however, the Lebanon Development Code establishes a maximum building height of 25 feet for this housing type. Other residential housing types permitted in the zoning district, including single-family detached dwellings and townhomes, may be permitted up to 40 feet in height.

The applicant states that the requested height increase would allow construction of two-story homes within the proposed subdivision. Development in the surrounding area includes a variety of residential housing types permitted under the zoning district.

Based on the application materials and evidence in the record, the Planning Commission finds that the requested increase in building height will not be materially detrimental to the purposes of the Development Code or to other properties within the same zone or vicinity.

- 2. A hardship to development exists that is peculiar to the lot size or shape, topography, or other similar circumstances related to the property over which the applicant has no control, and that are not applicable to other properties in the vicinity (e.g., the same Land Use Zone).*

FINDING: Variance approval requires that a hardship to development exist that is related to the physical characteristics of the property, such as lot size, shape, or topography, and that the hardship is not generally applicable to other properties in the same zone.

The subject property is proposed to be developed as a small lot residential subdivision, which is a permitted housing type within the zoning district but is subject to a maximum building height of 25 feet under the Lebanon Development Code. The applicant states that the requested variance would allow construction of typical two-story homes consistent with the proposed development pattern for the subdivision.

Based on the evidence in the record, the Planning Commission finds that the development characteristics of the property and application of the 25-foot height standard create a hardship that supports consideration of the requested variance.

- 3. The use proposed will be the same as permitted under this Code and City standards will be maintained to the greatest extent that is reasonably possible while permitting reasonable economic use of the land.*

FINDING: The proposed development consists of residential uses that are permitted within the applicable zoning district. Small lot houses are allowed within the zone subject to compliance with the standards of the Lebanon Development Code, including the maximum building height of 25 feet.

The requested variance would allow an increase in the maximum building height for small lot houses from 25 feet to 33 feet. All other applicable development standards of the Development Code will continue to apply to the proposed development.

The Planning Commission finds that the proposed use is consistent with uses permitted within the zoning district and that City standards will be maintained to the greatest extent reasonably possible while allowing reasonable economic use of the property.

- 4. Existing physical and natural systems, such as but not limited to traffic, drainage, natural resources, and parks will not be adversely affected any more than would occur if the development occurred as specified by the subject standard.*

FINDING: The requested variance relates specifically to building height and does not modify other development standards related to traffic, drainage, natural resources, or parks. The proposed subdivision will be subject to applicable development standards and infrastructure requirements of the Lebanon Development Code.

Based on the evidence in the record, the Planning Commission finds that the requested increase in building height will not adversely affect existing physical or

natural systems beyond the impacts that would occur if the development complied with the 25-foot height standard.

5. *The hardship is not self-imposed.*

FINDING: Variance approval requires that the hardship not be self-imposed by the applicant. The proposed development includes small lot houses, which are permitted within the zoning district but are subject to a maximum building height of 25 feet under the Development Code.

Based on the evidence in the record, the Planning Commission finds that the hardship associated with the development of the property is not self-imposed.

6. *The Variance requested is the minimum Variance that would alleviate the hardship.*

FINDING: The applicant has requested a variance to increase the maximum building height for small lot houses from 25 feet to 33 feet. The applicant states that the requested height would allow construction of two-story residential structures within the proposed subdivision.

Based on the evidence in the record, the Planning Commission finds that the requested increase from 25 feet to 33 feet represents the minimum variance necessary to alleviate the hardship while allowing development consistent with the zoning district.

#### **IV. CONCLUSION**

Based on the findings above, the Planning Commission concludes that the proposed Subdivision (S-26-02) and Class III Variance (VAR-26-01) comply with the applicable approval criteria of the Lebanon Development Code, including Chapter 16.20 (Subdivisions) and Chapter 16.29 (Variances). Accordingly, the Planning Commission finds the applications meet the required decision criteria, subject to the conditions of approval contained in this Order.

#### **V. ORDER**

The Planning Commission hereby approves Planning File S-26-02 / VAR-26-01, subject to the conditions of the approval contained herein.

The Planning Department conditions include, but are not be limited to the following:

- a. A final partition plat, complying with provisions in ORS Chapter 92, shall be completed by a registered professional land surveyor and submitted to the City for approval.
- b. The final plat shall substantially conform to the proposal, comply with applicable requirements in the Lebanon Development Code, and be recorded within three years of the final approval date.
- c. The final plat shall include all identified easements, including all public utility, private utility, sewer, and private drainage, access, and no-build-restriction easements.

All requirements of the Lebanon Fire District shall be met, including but not be limited to:

- a. Plans demonstrating full compliance with the Oregon Fire Code and local amendments shall be submitted to the Lebanon Fire Marshal for review and approval prior to Building Permit Issuance.

The following are the Engineering Division's comments on the plan proposed:

**General**

- a. This proposal includes installation of new public improvements. All public improvements shall:
  - (1) conform to the latest "City of Lebanon Standards for Public Improvements."
  - (2) require completion of a Drawing Review Application and a Public Improvements Permit prior to beginning construction.
  - (3) be designed by a professional engineer registered in the State of Oregon.
- b. All elevations shown on plans submitted to the City must be on the NAVD 88 vertical datum to provide compatibility with the City computer aided mapping system.
- c. All private, onsite utilities must be reviewed and approved by the City Building Official.

**Transportation**

- a. Provide a Geotech report, including a minimum street section for wet and dry weather construction conditions.
- b. Construct City standard full-depth half street improvements along Fifth Street, the length of the lot frontage, including a handrail for Burkart Creek pedestrian crossing.
- c. The 1991 TSP identified S Fifth St as a 60-foot collector. The current TSP identifies S Fifth as a 70-foot collector. The existing 60-foot right-of-way and street alignment is consistent with the newly constructed subdivision to the south, Heather Estates Phase 2. Considering the constrained roadway and the existing home locations, which make it extremely difficult to meet the standards, the Engineering Department approves a variance to the standard.
- d. Construct a modified full-depth half street along Joy Street with a 28-foot asphalt width and extend the gravel shoulder for maintenance access to the storm easement. No curb and gutter will be required.
- e. Due to the existing storm drainage and easement along the south property line on Joy Street, a variance not requiring a landscape strip for the new public street will be warranted. This exception provides adequate buildable area and allows for parking on both sides of the street.
- f. Provide City standard street trees in compliance with the City of Lebanon street tree policy along Fifth Street and the public street connection to Joy Street.
- g. No driveway access will be allowed to Fifth Street.
- h. Fence locations for Lots 3, 4, 14, and Tract A will require intersection sight distance and a clear vision design to be submitted for review and approval by the City Engineer.
- i. Sidewalks, paths, and driveway approaches must comply with ADA requirements.
- j. Sidewalks adjacent to the detention pond shall be constructed with public improvements.
- k. Provide city standard streetlights and show the layout of public improvement plans.
- l. Postmaster must approve cluster mailbox locations.
- m. Provide verification of Republic Services approval of location and turnaround access to garbage and recycling containers.
- n. Provide verification from emergency services and the Linn County surveyor for proposed street names.

**Water**

- a. Identify any on-site wells on the engineered drawings. Wells must be capped and abandoned according to state and county regulations before connection to the public water system.
- b. The Lebanon Fire Marshal shall approve the number and location of fire hydrants. All new hydrants must be operational and accepted by the City prior to storing combustible materials on site.
- c. Water system improvements shall be extended through the development site. Water main

shall be constructed as a loop system from Fifth to Joy Streets.

### **Sewer System**

- a. Identify any on-site septic systems on the engineering drawings. Septic systems must be abandoned according to the city and county regulations.
- b. The sewer shall be extended through the development site.

### **STORM DRAINAGE**

- a. The drainage system and grading plan shall be designed so as not to adversely impact drainage to or from adjacent properties. Storm drainage facilities must be designed and constructed to ensure historical rates of site discharge are not exceeded. Storm drain capacity shall be determined by the Rational Method for a 10-year event with a 15-minute minimum duration time using the curve (fig 5.3) in the master plan. A detailed design, including engineering calculations, shall be submitted as part of the site plan review.
- b. With the engineering drawings, provide a grading plan for the sites that indicate existing and proposed elevations. Drainage improvements (ditches and or piping) may be required at the site boundaries to prevent adverse impacts. The engineering drawings must provide a detailed design (including calculations) of the drainage improvements and mitigation of any impacts to adjacent properties.
- c. Storm drain improvements shall be extended through the development site to the edges of the property line so that future extensions can continue.
- d. Provide verification of Oregon DEQ NPDES permit issuance and all conditions of permit issuance prior to construction.
- e. Any wetlands identified as impacted by public improvements shall be mitigated prior to final acceptance of the public improvements.
- f. Provide a construction erosion prevention plan.
- g. Provide details of detention pond fencing. Fence shall not be higher than 30". An unobscured fence can be up to 36" in height and constructed with public improvements.
- h. Maintenance responsibility for private storm water detention systems shall be clearly established through subdivision conditions, covenants, and restrictions on the subdivision plat or through property deed restrictions. The City does not accept maintenance responsibility for private stormwater systems or detention facilities.
- i. A rear yard fence for Lots 1-20 shall be located on the north line of the drainage ditch easement. The fence shall be constructed of consistent materials. Fence construction may occur concurrently with public improvement construction or at the time of building permit issuance; however, the fence must be completed prior to dwelling occupancy. Fences exceeding seven (7) feet in height shall require a building permit.

### **LANDSCAPING**

- a. Any landscaping proposed in the public right of way shall have a maximum mature height of no more than 24 inches above the street grade and at least 3 feet from any fire hydrant. All fences and shrubs proposed in the yard setback areas adjacent to public streets shall have a maximum mature height of no more than 36 inches above the street grade.

This Order of Approval appears only as a matter of record.

APPROVED BY A \_\_\_\_\_ VOTE OF THE LEBANON PLANNING COMMISSION ON MARCH 18, 2026.

DATED at Lebanon, Oregon, this 18th day of March 2026.

SIGNED:

- 
- Don Robertson, Planning Commission Chair
  - Lory Gerig-Knurowski, Planning Commission Vice Chair

ATTEST:

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Shana Olson, Development Services Director



**From:** [gmewwem](#)  
**To:** [Shana Olson](#)  
**Cc:** [D. C.](#)  
**Subject:** RE: FW: Plan case number: S-26-02, var-26-01 Meeting March 18, 2026  
**Date:** Monday, March 9, 2026 6:36:23 PM

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Caution! This message was sent from outside your organization.

Hi Shana,

Thank you for the additional Udell information.

Could you please send to the planning committee to review if there are additional ways to help provide privacy screening from the proposed new 33 foot homes in contrast to the current subdivisions that are 20-25 feet tall.

I am not an expert but some ideas might be:

- 1) Have a tall (8') permanent fence added on the perimeter of the new subdivision.
- 2) Have evergreen trees planted in each back yard lot to provide a tall privacy hedge (American pillar, Italian cypress, leyland, evergreen arborvitae, etc.)
- 3) Do not allow additional fill dirt to be added where a new foundation is going to be poured to help keep the overall height of the structures as low as possible.
- 4) Get a proposed elevation picture of the front and back of the new homes to see how they are going to look? This might allow for additional review to help with privacy screening ideas?
- 5) Could a different style of roof be used to help reduce the height? I understand that the building code for our lots is up to 40' but none of the homes in the current subdivisions were built that high.

Google AI response:

For a 30-foot wide, 25-foot maximum height single-family home, you can build a variety of roof types, with the most common and practical options being gable, hip, shed, or Dutch gable roofs. The 25-foot height restriction is generally sufficient to accommodate standard roof pitches (such as 4/12 to 8/12) for a one or two-story home.

Here are the specific types of roofs suited for this, based on building practices:

**Gable Roof (Most Common/Affordable):** A classic triangular roof with two sloped sides. This is easy to install, sheds water and snow well, and provides ample attic space. A 4/12 or 6/12 pitch works well within height limits.

**Hip Roof (Stable/Wind Resistant):** A roof with slopes on all four sides that meet at the top. It is more structurally stable than a gable roof and better for high-wind areas.

**Shed/Lean-to Roof (Modern/Low Cost):** A single, sloped surface that is efficient for drainage.

- 6) Other ideas planning team may have?

Thank you for all your help. If I missed anything please let me know.

Sincerely,  
Donna Clark  
386 W Joy Street  
858-668-9919

----- Original message -----

From: Shana Olson <solson@lebanonoregon.gov>

Date: 3/5/26 6:41 PM (GMT-08:00)

To: gmewwem@aol.com

Subject: FW: Plan case number: S-26-02, var-26-01 Meeting March 18, 2026

Hello Donna,

It was nice speaking with you this evening. I've included the documentation that was submitted with the application. The files were too large to attach to the email, so I created a OneDrive link for you to access them.  [Applicant Info](#)

Please let me know if you have any follow-up questions or if there is anything else I can help with.

Thank you,

Shana Olson

Development Services Director

City of Lebanon | 925 S Main Street | Lebanon, OR 97355

541.258.4265

www.lebanonoregon.gov

Messages to and from this email may be subject to Oregon Public Records Disclosure and Retention Laws.



## Tammy Dickey

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**From:** gmewwem (null) <gmewwem@aol.com>  
**Sent:** Thursday, March 5, 2026 1:56 PM  
**To:** Development Services  
**Subject:** Plan case number: S-26-02, var-26-01 Meeting March 18, 2026

Caution! This message was sent from outside your organization.

Hi,

I am an owner on 386 W Joy street and just received a new notice of changes to the building project Family Tree Real Estate.

The information is very small so I have a few questions if you could help me out.

- 1) Was ADA access considered for all these new homes?
- 2) Will sidewalks or parking be added on 5th street and Joy street?
- 3) Will a walking path be added in this new subdivision?
- 4) Was a traffic study completed for the increase of homes 35 to 52?
- 5) If the roof variance is increase from 25 max to 33 would this mean the homes would be 3 stories? Is the area zoned for 52 units- 3 stories?
- 6) Will fencing be installed along Joy street to help block the new homes?
- 7) With the new plan has the 5th street right of way issue been resolved 60' vs 75'?
- 8) Have any additional parking spaces been included for guests/workers etc in the new plan?
- 9) Does city planning considering all the building plans that are approved or in the approval process across a wide area to help maintain a good balance of walking path continuation, sidewalks, water drain age, home height, parks and traffic impact across all the subdivisions?

I am concerned about all the new building projects in the area. Joy and 5th streets are already very busy and people drive very fast on these narrow roads and kids play on the streets all the time.

The home heights in the surrounding areas is 20-25 feet so approving high density tall homes of 33 feet would make them intrusive by impacting livability due to significant loss of:

- 1) privacy as the new homes would have elevated views into current homes bedrooms and living spaces
- 2) reduced natural light (solar power reduction causing energy cost increase) due to shadow cast from the higher buildings
- 3) loss of property value due to reduced curb appeal due to obstructed views, loss of light and privacy, a cramped and crowded aesthetic reducing open space feeling.

Thank you in advance for your updates.

Sincerely,  
Donna Clark  
858-668-9919



## Tammy Dickey

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**From:** Stephanie Dickerson <stephanie.dickerson.8001@mail.linnbenton.edu>  
**Sent:** Wednesday, March 4, 2026 7:50 PM  
**To:** Development Services  
**Subject:** 5th street plans

Caution! This message was sent from outside your organization.

There is not enough information about the plans that were sent out for Family Tree Real Estate on 5th street. Planning case N0. S-26-02 & VAR-26-01.

Where do they want to build the 3 story buildings? How many? I have looked at the plans and it does not show where they would be. It was my understanding this was a neighborhood with single family homes, except in the back would be duplexes. I would like more details to understand what is being built. I am on Joy st and this would be my front yard.

Thank you for your time and help,  
Stephanie Dickerson



## Tammy Dickey

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**From:** braden whaley <bradenwhaley@gmail.com>  
**Sent:** Saturday, February 28, 2026 10:30 AM  
**To:** Development Services  
**Subject:** Comment on S-26-02, VAR-26-01

Caution! This message was sent from outside your organization.

Being that my property that borders this property will substantially loose value if a 33 foot tall apartment complex is built behind it. The city has the ability to not approve this varance. If they do approve it and we do loose substantial value of our property we leave our options open to recover the value lost from the city via a tort case agenst the city.

Don't provide the variance. It will not just me that will be substantially harmed by this and I belive many other will also bring a case agenst the city for lost value.

## Braden Whaley

"What stands in the way becomes the way."



## Tammy Dickey

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**From:** Rodney Sell <rodneywsell@gmail.com>  
**Sent:** Thursday, February 26, 2026 3:58 PM  
**To:** Tammy Dickey  
**Subject:** Re: Notice of Public Hearings - March 18th Planning Commission Meeting

Caution! This message was sent from outside your organization.

Planning Case No.: S-26-02.

Hello Tammy.

Please include these comments in the record for the Planning Commission to review.

While reviewing this Notice of Public Hearing the presence of a planned public trail on this property came to light. The City of Lebanon's Trails Master Plan has the trail identified as: Trail #11. Trail 11 is a proposed trail spur that branches off of the South Boundary Trail and proceeds straight east until meeting West Joy Street where it will continue east as existing sidewalk until reaching the existing paved portion of Trail 11, which travels diagonally through the Heather Estates Subdivision from West Joy Street to the intersection of Jadon Drive and South Main Road. (Page #74 in the Trails Master Plan)

There are several locations in the existing trail system where the street side sidewalk/pathway have been widened to 10 feet to accommodate safe trail use for the variety of trail users. I.E. Strollers, bicycles, walkers, runners, dog walkers etc. Two wide trail examples are the recently constructed sidewalk/pathway on the north side of Airport Road between Stoltz Hill Road and the 7th Street Pedestrian Trail. Another example is the streetside walkway running the length of Russell Drive ending at Cheadle Lake north parking area.

BLT is hopeful that as part of any future development on this site this proposed section of the Trail 11 can be developed.

Feel free to contact me anytime with comments and/or questions.

Happy Trails,

Rod Sell, Build Lebanon Trail ,Board President

On Thu, Feb 26, 2026 at 1:33 PM Tammy Dickey <[tdickey@lebanonoregon.gov](mailto:tdickey@lebanonoregon.gov)> wrote:

Please find two notices attached for the March 18<sup>th</sup> Meeting.

**Tammy Dickey**

Sr. Development Services Technician

City of Lebanon | 925 S Main Street | Lebanon, OR 97355

541.258.4257

[www.lebanonoregon.gov](http://www.lebanonoregon.gov)





Outlook

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## S-26-02 &VAR-26-01

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**From** Danna and Blane Edwards <dannablane@hotmail.com>

**Date** Mon 3/9/2026 8:21 AM

**To** Development Services <development@lebanonoregon.gov>

Caution! This message was sent from outside your organization.

We are out of state at the time of the hearing but want our opposition in the record. We own 2 houses on W Joy St. and are adamantly opposed to the variance for height. I know that these will look like the tall 4- or 5-bedroom units that ruin neighborhoods and create parking nightmares just as they have in Corvallis. They should take the existing neighborhood into consideration when building. You wouldn't want this across the street from your home and we don't either.

John (Blane) and Danna Edwards 541-401-1000



# TECHNICAL MEMORANDUM

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February 26, 2026

Project# 24995.25

To: Shana Olson, Development Services Director

City of Lebanon

925 S Main Street

Lebanon, OR 97355

From: Matt Hughart, AICP, and Robert Olney

CC: Ron Whitlach, P.E., City Manager/City Engineer

RE: Cedar River Estates Traffic Impact Analysis



RENEWS: 12/31/27

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## Summary

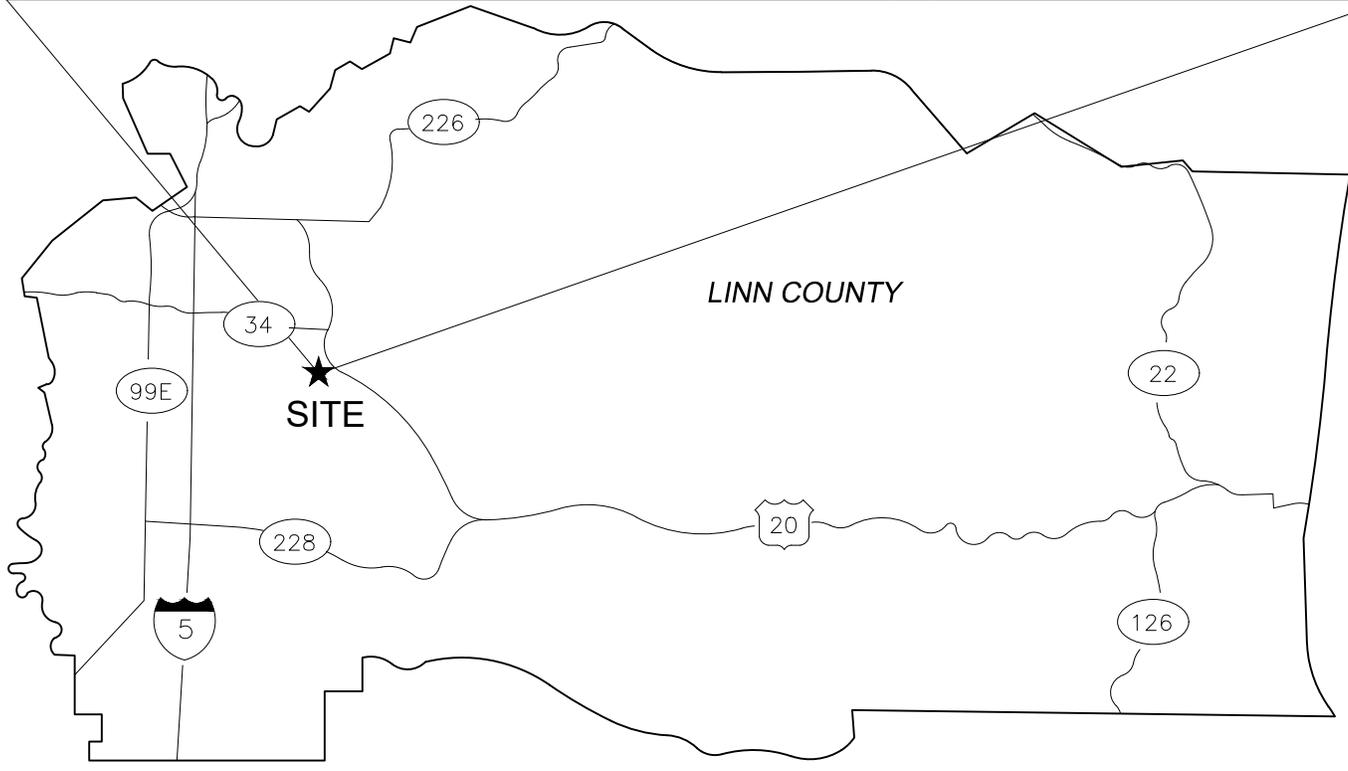
Family Tree Real Estate, LLC, is proposing to construct a 52-unit subdivision ("Cedar River Estates") in Lebanon, Oregon. The approximately 6.4-acre site is currently undeveloped and is located north of Joy Street and east of S 5<sup>th</sup> Street. The following recommendations are identified for implementation in conjunction with site development:

- A STOP (R1-1) sign shall be installed on the westbound site access road approach to S 5<sup>th</sup> Street in accordance with City of Lebanon (City) standards and the *Manual on Uniform Traffic Control Devices (MUTCD)*.
- A STOP (R1-1) sign shall be installed on the southbound site access road approach to Joy Street in accordance with City standards and the *MUTCD*.
- A preliminary intersection sight distance measurement at the proposed access roadway connection to S 5<sup>th</sup> Street shall be included in the formal development application along with the proposed building footprint(s) and other above ground structures including fences, monument signs, and landscaping.

This report documents a traffic impact analysis (TIA) for the subdivision which, for the purposes of this analysis, will be assumed to be built out and fully occupied in 2028. Additional details are provided herein.

## Introduction

The site of the proposed subdivision is currently vacant and is zoned Residential Mixed Density per the City of Lebanon Zoning Map. The site is located near the south end of the city. It is bounded directly to the north by larger residential lots and to the east by a daycare business. Across Joy Street to the south of the site is a larger subdivision of detached single-family homes. The site location and vicinity are shown in Figure 1 and a detailed site plan is provided in Figure 2.

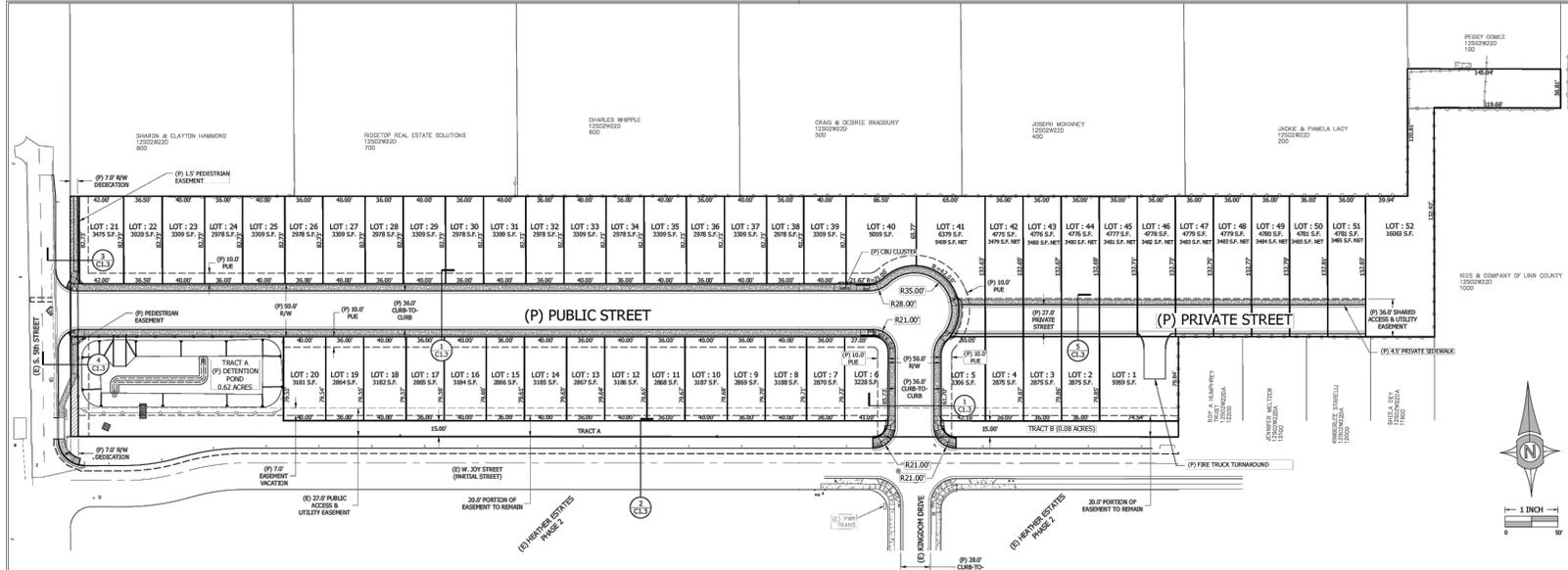


Site Vicinity Map  
Lebanon, Oregon

Figure  
1

C:\Users\roiney\appdata\local\temp\AcPublish\_20140124995\_025\_CedarRiver\_Figures.dwg Feb 24, 2026 - 10:04am - roiney Layout Tab: Site Vicinity Map

C:\Users\rodney\AppData\local\temp\AcPublish\_20140124995\_025\_CedarRiver\_Figures.dwg Feb 24, 2026 - 10:04am - rodney Layout Tab: Proposed Site Plan

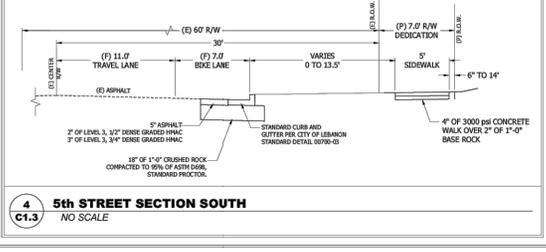
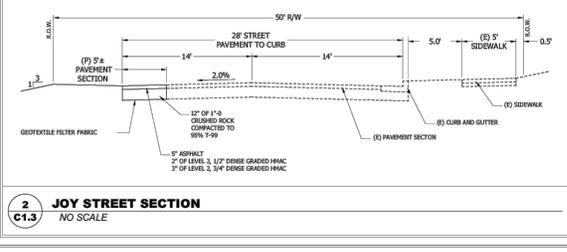
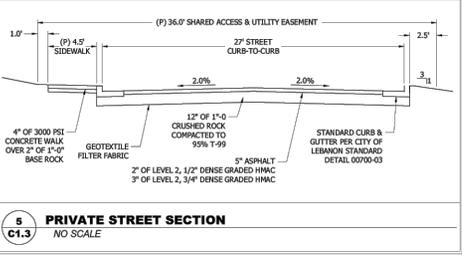
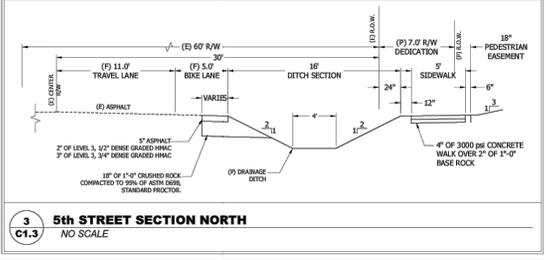
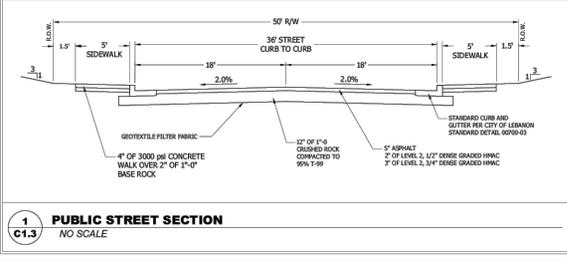


**CLIENT:**  
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 (541) 469-8774  
 rumbly@familytree.com

**UDELL ENGINEERING  
 AND SURVEYING, LLC**  
 63 EAST ASH ST.  
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 (541) 945-5125 PH.  
 (541) 945-1366 FAX

**TENTATIVE LOT LAYOUT  
 CEDAR RIVER ESTATES  
 SUBDIVISION  
 LEBANON, OREGON**

DATE: FEBRUARY 11, 2026  
 PROJECT: 22-230 CEDAR RIVER LOT 1E  
 DRAWN BY: ROONEY  
 CHECKED BY: MALLA  
 SCALE: AS SHOWN



**PROJECT AREA SUMMARY**

|                  |            |
|------------------|------------|
| GROSS LAND AREA: | 6.38 ACRES |
| TRACT A:         | 0.62 ACRES |
| TRACT B:         | 0.58 ACRES |
| PUBLIC STREET:   | 1.51 ACRES |
| NET LAND AREA:   | 4.56 ACRES |

THIS MAP WAS PREPARED FOR PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION

| PLAN REVISIONS | DATE |
|----------------|------|
|                |      |
|                |      |
|                |      |

Sheet **C1.3**  
 SCALE: SEE BASESCALE

NOTE: SIDEWALKS ARE TO BE CONSTRUCTED WITH INDIVIDUAL BUILDING PERMITS. SIDEWALKS ARE SHOWN ON PLAN VIEW FOR REFERENCE ONLY.

RECEIVED FROM CITY OF LEBANON : FEBRUARY 13, 2026

Proposed Site Plan  
 Lebanon, Oregon  
 Figure  
 2



## Scope of the Report

This report identifies the transportation-related impacts associated with the Cedar River Estates subdivision and was prepared in accordance with City of Lebanon (City) TIA requirements. Per agreement with City staff, operational analyses were performed at the following study intersections:

1. Vaughan Lane / S 5<sup>th</sup> Street
2. Joy Street / Kingdom Drive (and Proposed Public Street Site Access)
3. S Main Road / Joy Street
4. S 5<sup>th</sup> Street / Proposed Public Street Site Access

This report evaluates the following transportation issues:

- Existing 2026 land use and transportation system conditions within the site vicinity during the weekday AM and PM peak periods;
- Forecast year 2028 background traffic conditions during the weekday AM and PM peak periods, considering background growth, in-process development, and transportation improvements planned in the study area;
- Trip generation and distribution estimates for the Cedar River Estates subdivision;
- Forecast year 2028 total traffic conditions during the weekday AM and PM peak period with build-out of the subdivision; and,
- Study recommendations.

## Analysis Methodology

All operational analyses described in this report were performed in accordance with the procedures stated in the *Highway Capacity Manual (HCM)*. The 7<sup>th</sup> Edition of the *HCM* was used to assess study intersection operations during the peak 15 minutes of the peak hour. The peak hour factor (PHF) was derived from the existing raw manual turning movement counts and applied uniformly over each scenario. The operations analysis presented in this report was completed using PTV Vistro 2026 analysis software.

## Applicable Mobility Standards

All study intersections are two-way stop-controlled (TWSC) and are owned and operated by the City. Intersection operating targets adopted by the City for TWSC are summarized as follows: All intersection approaches during the highest one-hour period on an average weekday (typically, but not always the evening peak period between 4:00 PM and 6:00 PM during the spring or fall) shall operate with a volume-to-capacity (v/c) ratio not greater than 0.90.

# Existing Conditions

This section summarizes the existing characteristics of the transportation system and adjacent land uses in the vicinity of the proposed subdivision, including an inventory of the existing multimodal transportation facilities and options, a summary of recent crash history, and an evaluation of existing intersection operations for motor vehicles at the study intersections.

## Site Conditions and Adjacent Land Uses

The project site (tax lot 210837) is an approximately 6.4-acre property located near the southern edge of Lebanon. The site is currently vacant and undeveloped.

The site is mostly surrounded by residential properties of various sizes. The site is bounded to the north and west by detached single-family homes on larger lots, mostly not yet incorporated into the City of Lebanon. To the south is a subdivision of single-family homes. An off-site commercial daycare is adjacent to the eastern edge of the project site.

## Transportation Facilities

Table 1 summarizes the characteristics of the roadways within the site vicinity. Figure 3 illustrates the existing lane configurations and traffic control devices at the study intersections.

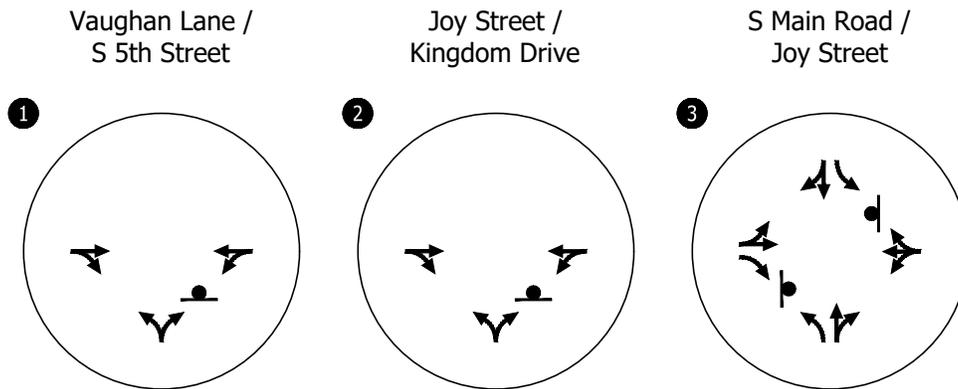
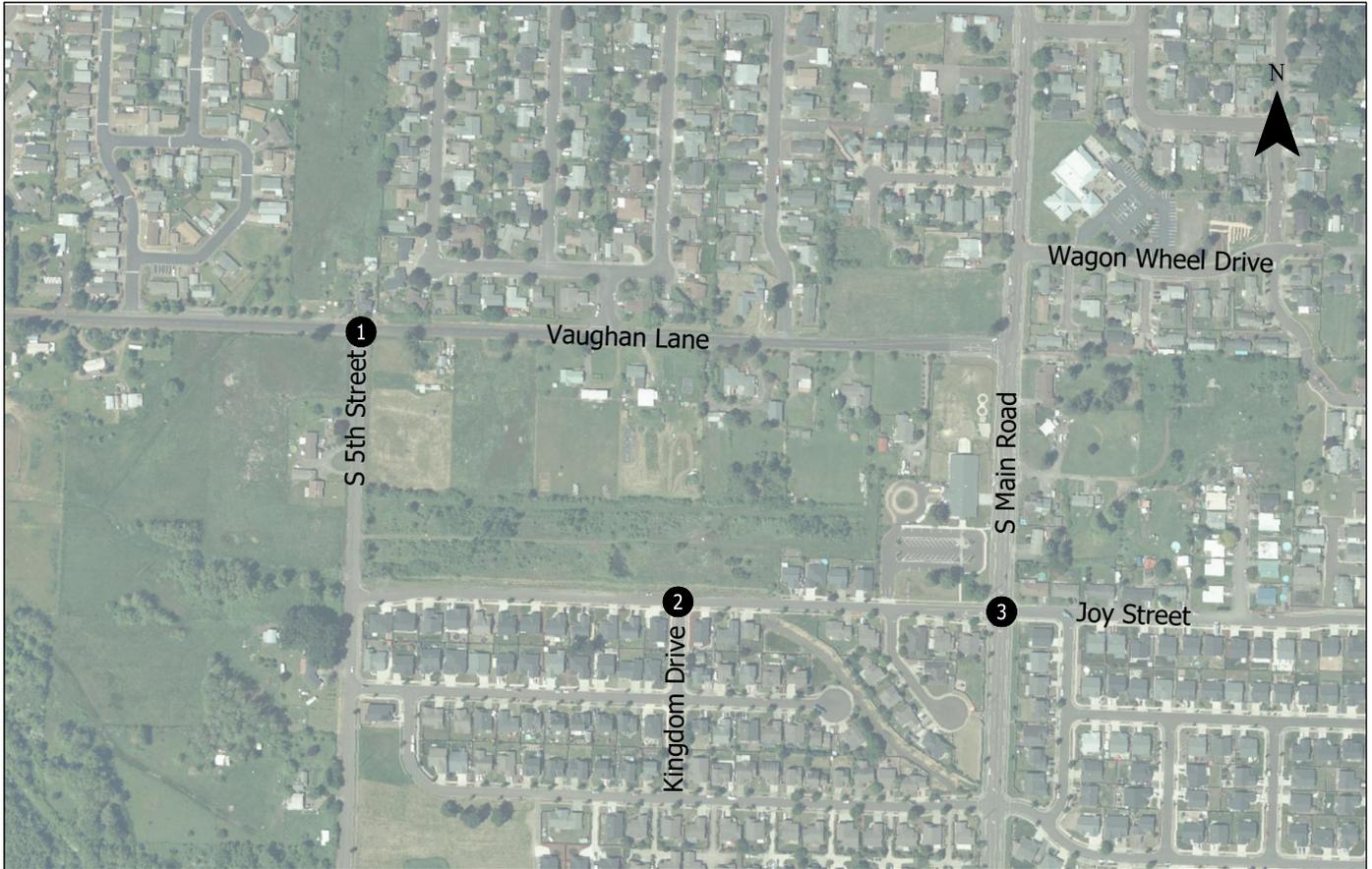
**Table 1. Existing Transportation Facilities**

| Roadway                  | Functional Classification <sup>1</sup> | Number of Lanes | Posted Speed (mph) | Sidewalks Provided?  | Striped Bicycle Lanes Provided? | On-Street Parking Provided? |
|--------------------------|--|-----------------|--------------------|----------------------|---------------------------------|-----------------------------|
| Vaughan Lane             | Minor Arterial                         | 2               | 40                 | No                   | No                              | No                          |
| S 5 <sup>th</sup> Street | Collector                              | 2               | 25                 | Partial <sup>2</sup> | No                              | No                          |
| S Main Road              | Minor Arterial                         | 3               | 35                 | Yes                  | Yes                             | No                          |
| Joy Street               | Local                                  | 2               | 25                 | Partial <sup>2</sup> | No                              | No                          |
| Kingdom Drive            | Local                                  | 2               | 25                 | Yes                  | No                              | West side                   |

<sup>1</sup> Per the *City of Lebanon Transportation System Plan* (2019).

<sup>2</sup> Detached sidewalk is provided along the east side of the roadway between Joy Street and the south City limits.

<sup>3</sup> Detached sidewalk is provided along the south side of the roadway between S 5<sup>th</sup> Street and S Main Road as well as along the north side of the roadway between the east site property line and S Main Road.



- # - Study Intersections
- - STOP Sign

Existing Lane Configurations  
& Traffic Control Devices  
Lebanon, Oregon

Figure  
3

## Multi-Use Facilities

S Main Road is the only study area roadway with continuous, dedicated pedestrian and bicycle facilities on both sides of the street. Vaughan Lane and S 5<sup>th</sup> Street have no sidewalks or bike lanes (including paved, striped shoulders) within the study area, despite being Minor Arterial and Collector facilities, respectively. The north side of Joy Street along the site frontage is currently unimproved, as the proposed site is still undeveloped; there is also an existing easement along the north side of Joy Street for a storm drainage canal. To the east of the site, sidewalk along the north side of Joy Street connects to S Main Road.

## Transit Facilities

There are currently no fixed transit stops within the study area, which lies outside the 1/2-mile buffer for LINX service.

## Intersection Crash History

The Oregon Department of Transportation (ODOT) Crash Data System was queried to obtain crash records at the study intersections for the five-year period from January 1, 2019 to December 31, 2023 (the most-recent five years of available data). Table 2 summarizes the ODOT crash data that is limited to a single reported property damage only crash. No fatal or serious injury crashes were reported. *Appendix A provides the ODOT crash report which provides more details on the reported crashes.*

**Table 2. Reported Crash History (January 1, 2019 - December 31, 2023)**

| Study Intersection                      | Crash Type       |       | Crash Severity       |       | Total Crashes |
|---|------------------|-------|----------------------|-------|---------------|
|   | Turning Movement | Other | Property Damage Only | Other |               |
| Vaughan Lane / S 5 <sup>th</sup> Street | 1                | -     | 1                    | -     | 1             |
| Joy Street / Kingdom Drive              | -                | -     | -                    | -     | 0             |
| S Main Road / Joy Street                | -                | -     | -                    | -     | 0             |

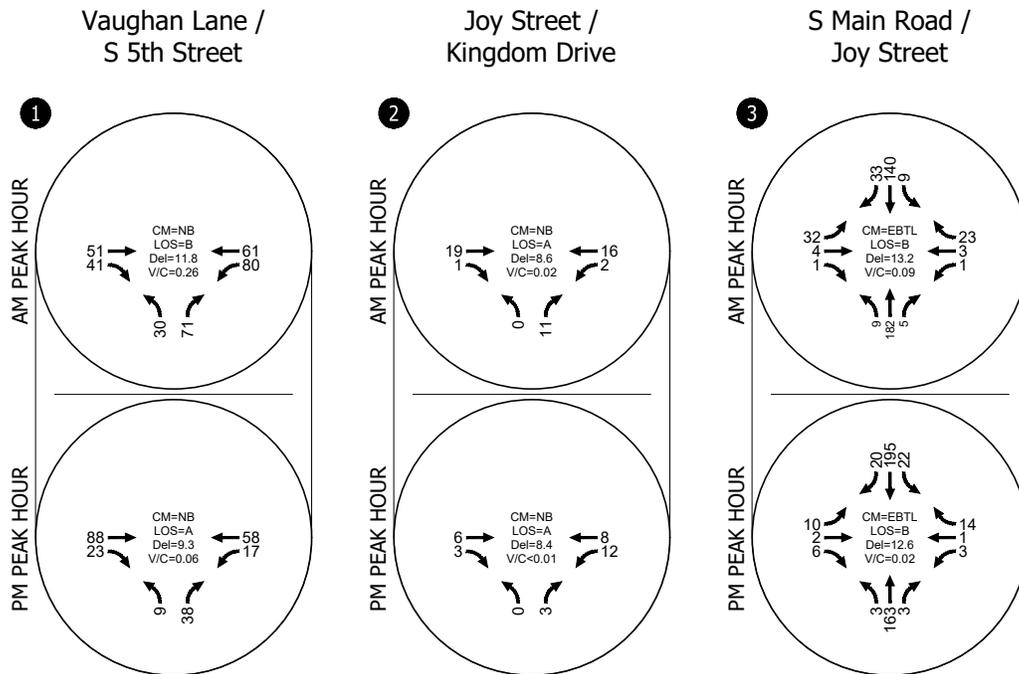
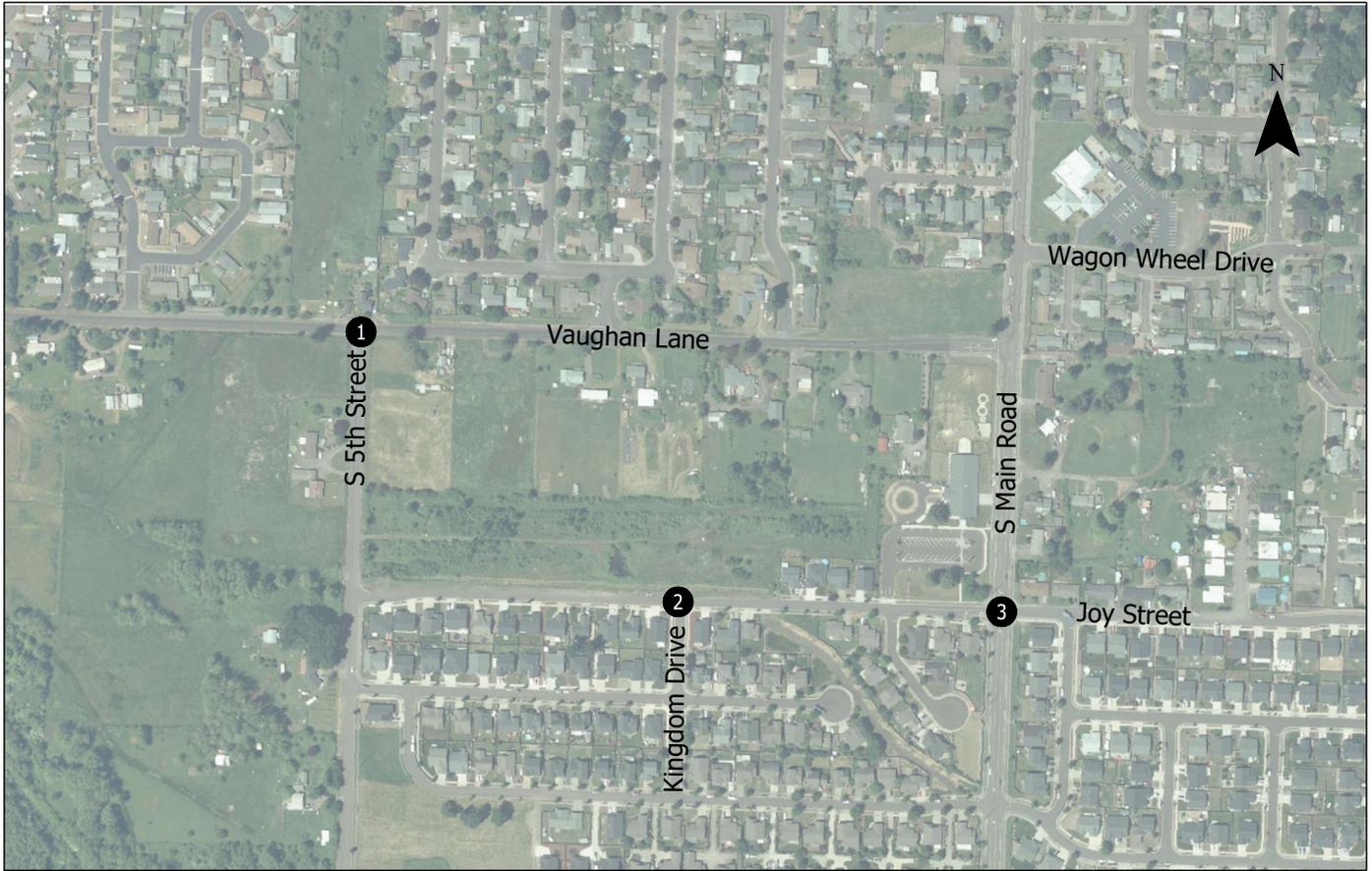
With a single reported crash over the five-year review period, no crash patterns were identified that require mitigation in conjunction with the proposed site development and none of the study intersections have crash rates that exceed statewide crash rate performance thresholds identified in the ODOT *Analysis Procedures Manual (APM)*.

## Existing Traffic Conditions

Vehicle turning movement, pedestrian and bicycle counts were conducted at the study intersections on a mid-week day in January 2026. On this date, local schools were in session and on normal start/stop times and the weather was fair. *Appendix B contains the count data summary sheets.*

### Existing Conditions

Figure 4 summarizes the corresponding traffic operations during the weekday morning (7:30-8:30 AM) and evening (4:05-5:05 PM) peak hours. As shown in Figure 4 and detailed in *Appendix C* (which includes the existing conditions operations analysis reports), the study intersection operations currently operate acceptably according to City standards during both the AM and PM peak hours.



CM = CRITICAL INTERSECTION APPROACH/MOVEMENT  
 LOS = CRITICAL INTERSECTION MOVEMENT LEVEL OF SERVICE  
 Del = CRITICAL INTERSECTION MOVEMENT CONTROL DELAY  
 V/C = CRITICAL INTERSECTION MOVEMENT VOLUME-TO-CAPACITY RATIO

Existing Traffic Conditions  
 AM & PM Peak Hours  
 Lebanon, Oregon

Figure  
 4

# Transportation Assessment

The traffic impact analysis identifies how the study intersections are projected to operate in the year 2028 upon buildout and occupancy of the Cedar River Estates subdivision. This section of the report includes analysis of 2028 background traffic volumes and operations, an estimate of site-generated trips, and analysis of 2028 total traffic volumes and operations with the Cedar River Estates subdivision.

## Year 2028 Background Operational Analysis

Background traffic operations capture the expected performance of the study intersections in the future prior to development of the proposed subdivision. This type of analysis typically includes traffic attributed to planned/approved developments within the study area and general growth in the region but does not include traffic from the proposed development.

### Growth and Planned Developments

A 2% annual growth rate (consistent with growth rates forecast in the Lebanon TSP) was applied to the existing study intersection traffic volumes to reflect near-term growth on the local transportation network.

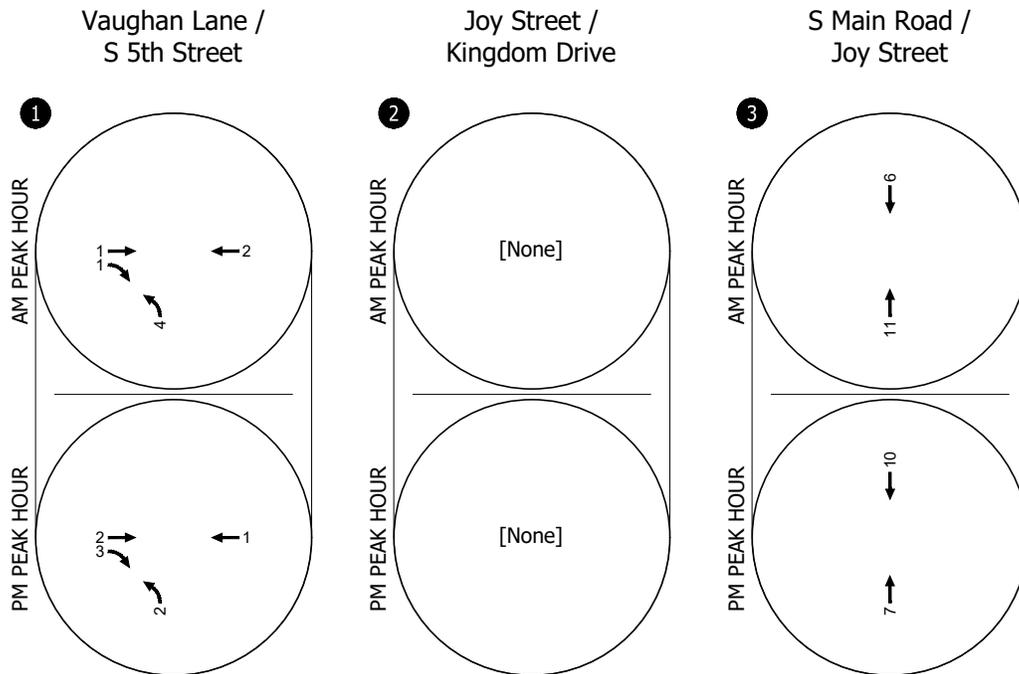
The City identified two in-process developments for this analysis. A 28-unit attached single-family subdivision has been approved at 377 Vaughan Lane, which is directly adjacent to the north of the proposed Cedar River Estates site. A single access onto Vaughan Lane is expected for this 28-unit development. A 36-unit apartment complex is anticipated to be constructed one block south of Cedar River Estates on Jadon Drive. While not formally approved, City staff indicated that the apartments would likely be constructed on the same timeline as Cedar River Estates. At the City’s recommendation, estimated trips have been developed and included as in-process trips. Estimated trips from these two in-process developments are summarized in Table 3 and assigned to study intersections as shown in Figure 5. The trips in Table 3 were developed using average trip rates for single family attached housing and fitted equation trip rates for the multifamily housing as documented in the *Trip Generation Manual, 12<sup>th</sup> Edition*, published by the Institute of Transportation Engineers (ITE).

**Table 3. Estimated In-Process Development Trips**

| Land Use                       | ITE Code | Units        | Daily Trips | Weekday AM Peak Hour |           |           | Weekday PM Peak Hour |           |           |
|--------------------------------|----------|--------------|-------------|----------------------|-----------|-----------|----------------------|-----------|-----------|
|                                |          |              |             | In                   | Out       | Total     | In                   | Out       | Total     |
| Single-Family Attached Housing | 215      | 28           | 186         | 3                    | 10        | 13        | 8                    | 6         | 14        |
| Multifamily Housing (Low-Rise) | 220      | 36           | 324         | 6                    | 20        | 26        | 15                   | 10        | 25        |
|                                |          | <b>Total</b> | <b>510</b>  | <b>9</b>             | <b>30</b> | <b>39</b> | <b>23</b>            | <b>16</b> | <b>39</b> |

The total in-process trips from Table 3 were added to the background growth volumes to reflect 2028 background volumes. These volumes and associated operations are summarized in Figure 6. As shown, all study intersections are expected to operate acceptably per City standards.

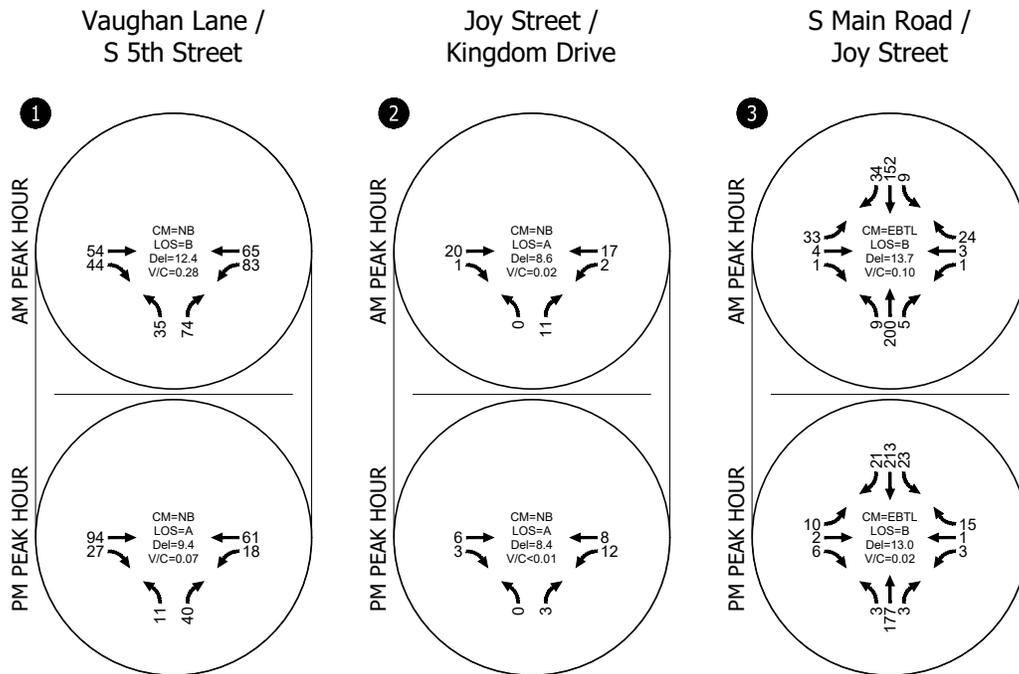
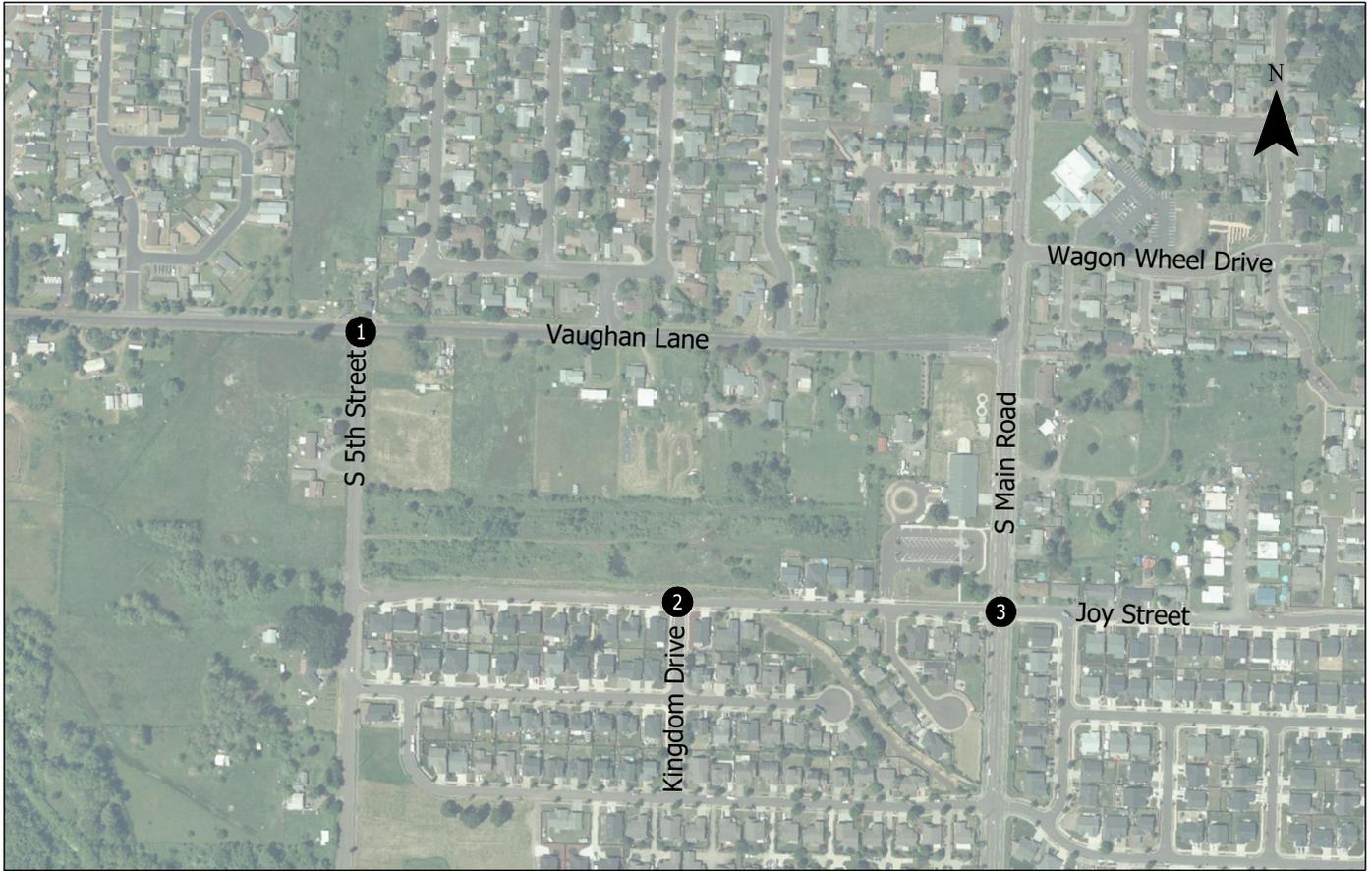
*Appendix D includes the 2028 background traffic volumes and operations analysis worksheets.*



**A** - Whaley Vaughan Development    **B** - Jadon Drive Apartments

Year 2028 Estimated Trips From In-Process Developments  
AM & PM Peak Hours  
Lebanon, Oregon

Figure  
5



Year 2028 Background Traffic Conditions  
AM & PM Peak Hours  
Lebanon, Oregon

Figure  
6

CM = CRITICAL INTERSECTION APPROACH/MOVEMENT  
LOS = CRITICAL INTERSECTION MOVEMENT LEVEL OF SERVICE  
Del = CRITICAL INTERSECTION MOVEMENT CONTROL DELAY  
V/C = CRITICAL INTERSECTION MOVEMENT VOLUME-TO-CAPACITY RATIO

## Proposed Development Plan

For the purposes of this analysis, the proposed Cedar River Estates subdivision is expected to be built out and occupied by 2028. The development plan (illustrated in Figure 2) consists of 52 lots, each with a detached single-family home. Sidewalk will be constructed along the subdivision frontage on S 5<sup>th</sup> Street.

A new east-west public street is proposed through the site from S 5<sup>th</sup> Street west to a new public north-south street aligned with Kingdom Drive at Joy Street. An east-west private street connection is proposed to serve home access east of Kingdom Drive. On the south side of the subdivision, a new fourth leg would be constructed on the north approach of the existing Joy Street / Kingdom Drive intersection. On the west end of the subdivision, a new three-leg intersection with S 5<sup>th</sup> Street would be constructed approximately 125 feet to the north of the existing Joy Street / S 5<sup>th</sup> Street intersection.

All residential home driveway accesses will be via the new on-site public and private roadways. No home access is proposed direct to S 5<sup>th</sup> Street or Joy Street.

The assumed new lane configurations and traffic control devices – based on the site plan in Figure 2 – are illustrated in Figure 7.

## Trip Generation Estimate

Table 4 provides the estimated trip generation for a 52-unit subdivision according to average rates in the ITE *The Trip Generation Manual, 12<sup>th</sup> Edition* dataset. Estimates are provided for the typical weekday AM and PM peak hours, as well as daily.

**Table 4. Estimated Site Trip Generation**

| Land Use                           | ITE Code | Units | Daily Trips | Weekday AM Peak Hour |     |       | Weekday PM Peak Hour |     |       |
|------------------------------------|----------|-------|-------------|----------------------|-----|-------|----------------------|-----|-------|
|                                    |          |       |             | In                   | Out | Total | In                   | Out | Total |
| Single-Family Detached Residential | 210      | 52    | 473*        | 11                   | 29  | 40    | 33                   | 20  | 53    |

\* Daily trips were calculated using an average rate to more realistically reflect the size of the development.

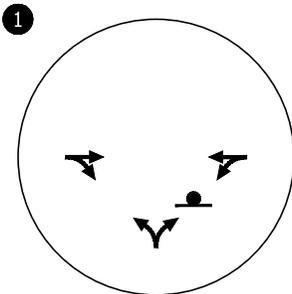
## Site Trip Distribution and Trip Assignment

As previously noted, the Cedar River Estates subdivision is proposed to have two public street connections to the existing roadway network – one on the west end of the site on S 5<sup>th</sup> Street, and one on the south side of the site on Joy Street. Based on knowledge of destinations in the local vicinity and the surrounding region, trips were distributed directionally and assigned to respective study intersections. Notable local and regional destinations include I-5 (via OR 34 and Stoltz Hill Road), central Lebanon (via S Main Road), Walmart (via Joy Street), and eastbound US 20 (via Crowfoot Road).

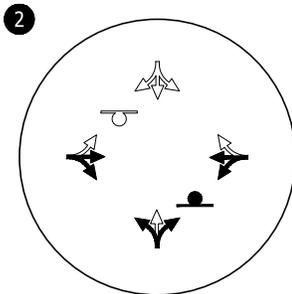
The resulting assumed trip distribution and assignment for the Cedar River Estates subdivision is illustrated in Figure 8.



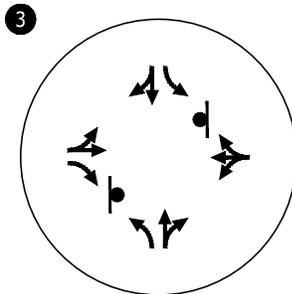
Vaughan Lane / S 5th Street



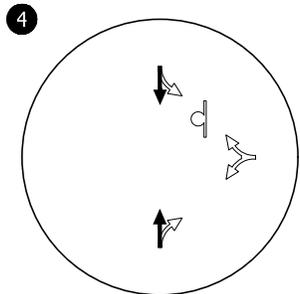
Joy Street / Kingdom Drive-Site Access



S Main Road / Joy Street



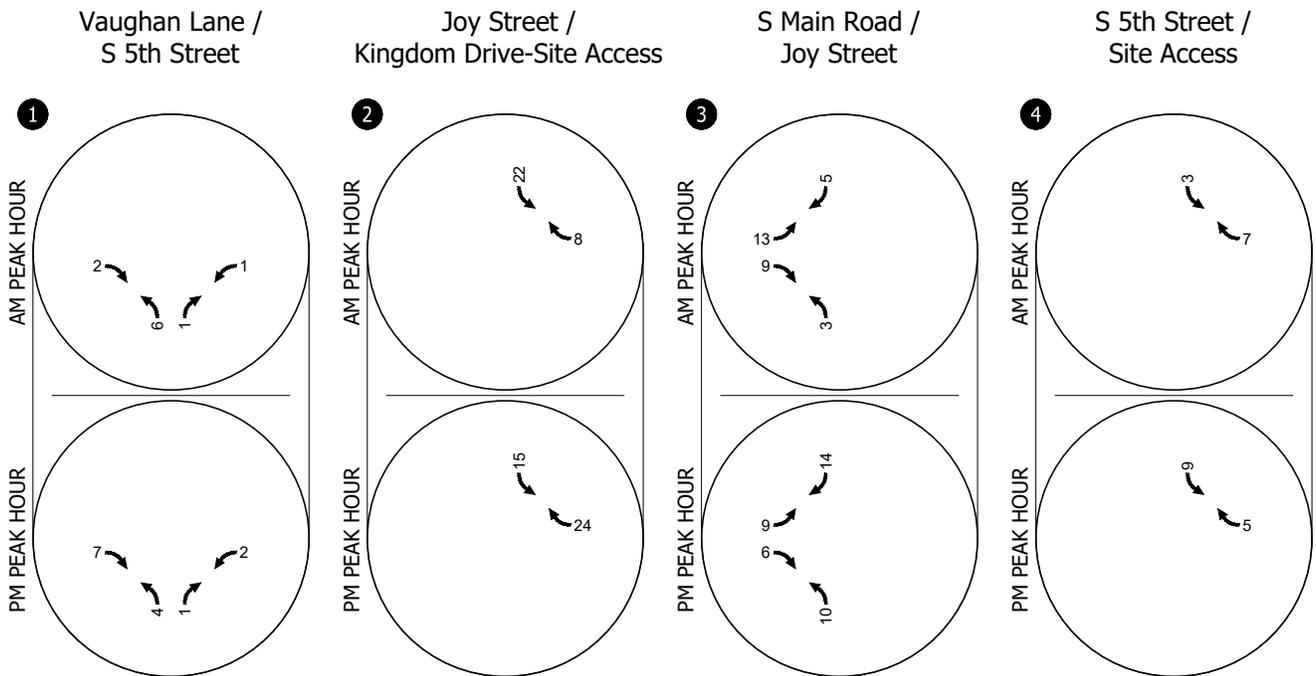
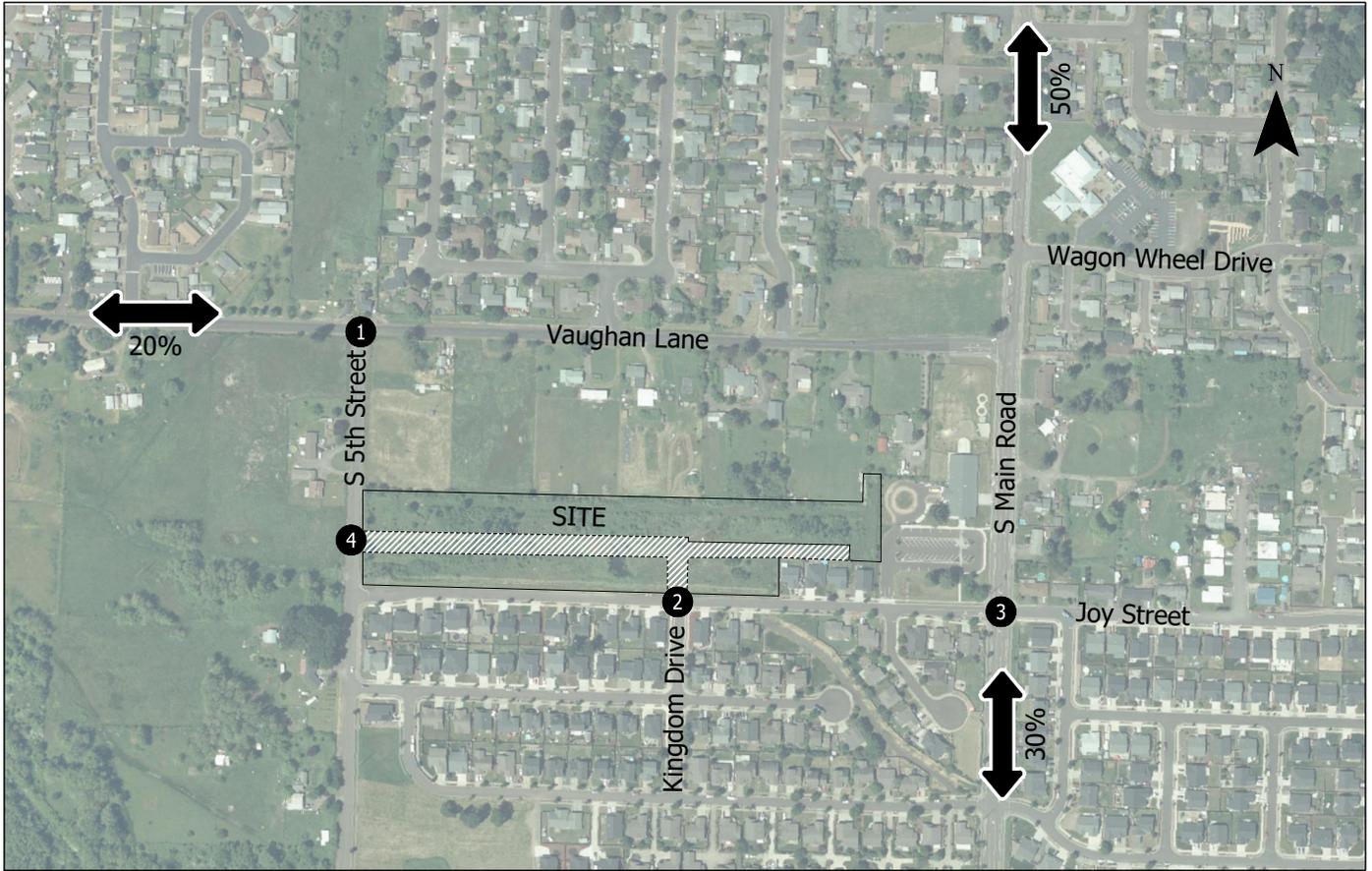
S 5th Street / Site Access



Note: Hollow arrows and STOP signs denote assumed new lane configurations and traffic controls.

Assumed Future Lane Configurations & Traffic Control Devices Lebanon, Oregon

Figure 7



Estimated Site-Generated Trip Distribution & Assignment  
 AM & PM Peak Hours  
 Lebanon, Oregon

Figure 8

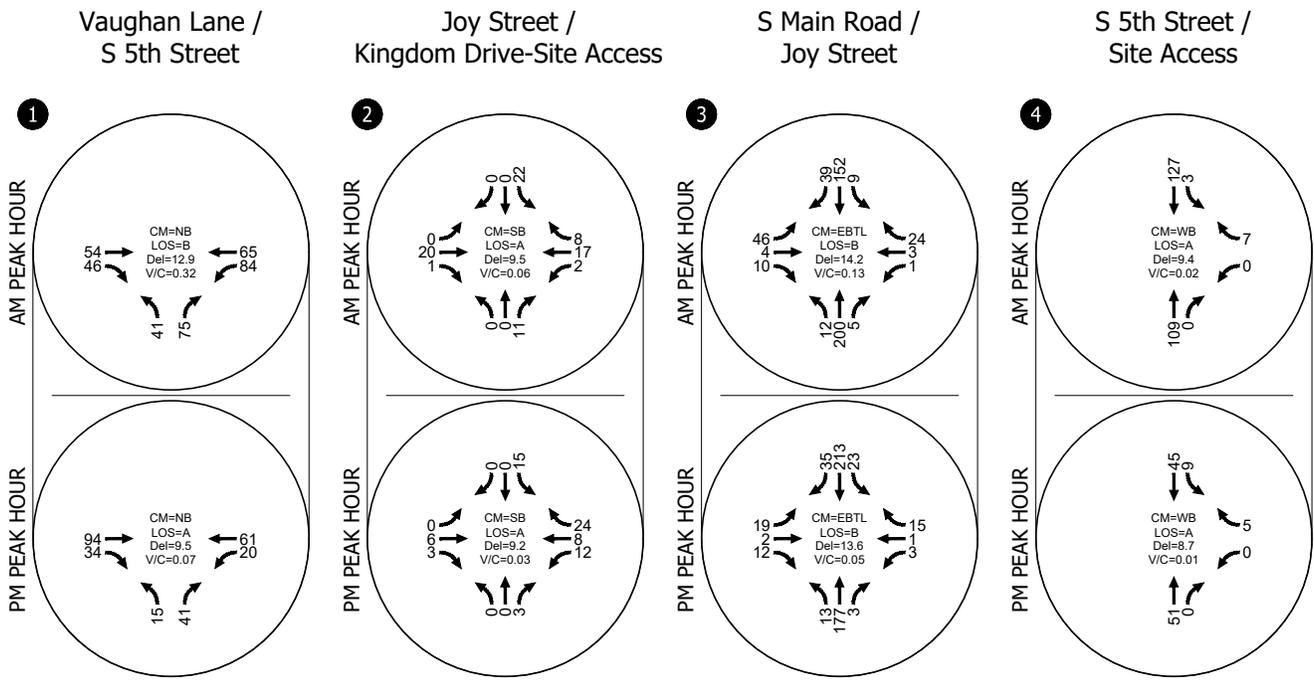
Estimated Trip Distribution  
 XX%

# Year 2028 Total Traffic Conditions

The total traffic conditions analysis forecasts the operation of the study intersections with the inclusion of traffic generated by the proposed Cedar River Estates subdivision. Total traffic conditions were determined by adding the estimated site-generated trips in Figure 8 to the year 2028 background volumes for the weekday AM and PM peak hours in Figure 6.

Figure 9 summarizes the corresponding operational analysis for the weekday AM and PM peak hours. As shown, all study intersections are expected to continue to satisfy City standards under full buildout conditions. Queues were estimated for the 95<sup>th</sup>-percentile at all study intersections; none were found to exceed one or two vehicles during either the AM or PM peak hours. Therefore, all queues are expected to be manageable with existing (and proposed) striping and lane configurations.

*Appendix E includes the 2028 total traffic volumes and operations analysis worksheets.*



Year 2028 Projected Total Traffic Conditions  
AM & PM Peak Hours  
Lebanon, Oregon

Figure 9

CM = CRITICAL INTERSECTION APPROACH/MOVEMENT  
 LOS = CRITICAL INTERSECTION MOVEMENT LEVEL OF SERVICE  
 Del = CRITICAL INTERSECTION MOVEMENT CONTROL DELAY  
 VIC = CRITICAL INTERSECTION MOVEMENT VOLUME-TO-CAPACITY RATIO

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# Findings and Recommendations

The primary findings of this study are summarized below.

- The study intersections are forecast to meet the City of Lebanon operating standards during the weekday AM and PM peak hours under existing and future traffic conditions.
- No capacity-based mitigation needs were identified at the study intersections.
- No safety-based mitigations were identified at the study intersections based on the crash analysis.

Additionally, the following recommendations are provided to the City:

- A STOP (R1-1) sign shall be installed on the westbound site access road approach to S 5<sup>th</sup> Street in accordance with City standards and the *Manual on Uniform Traffic Control Devices (MUTCD)*.
- A STOP (R1-1) sign shall be installed on the southbound site access road approach to Joy Street in accordance with City standards and the *MUTCD*.
- A preliminary intersection sight distance measurement at the proposed access roadway connection to S 5<sup>th</sup> Street shall be included in the formal development application along with the proposed building footprint(s) and other above ground structures including fences, monument signs, and landscaping.

We trust this memorandum adequately addresses the traffic and circulation impacts associated with the proposed Cedar River Estates subdivision. Please let us know if you have any questions regarding our analyses or need additional information.

## Appendix

- A. Crash Data
- B. Traffic Count Data
- C. 2026 Existing Traffic Conditions Worksheets
- D. 2028 Background Traffic Conditions Worksheets
- E. 2028 Total Traffic Conditions Worksheets



Appendix A  
Crash Data

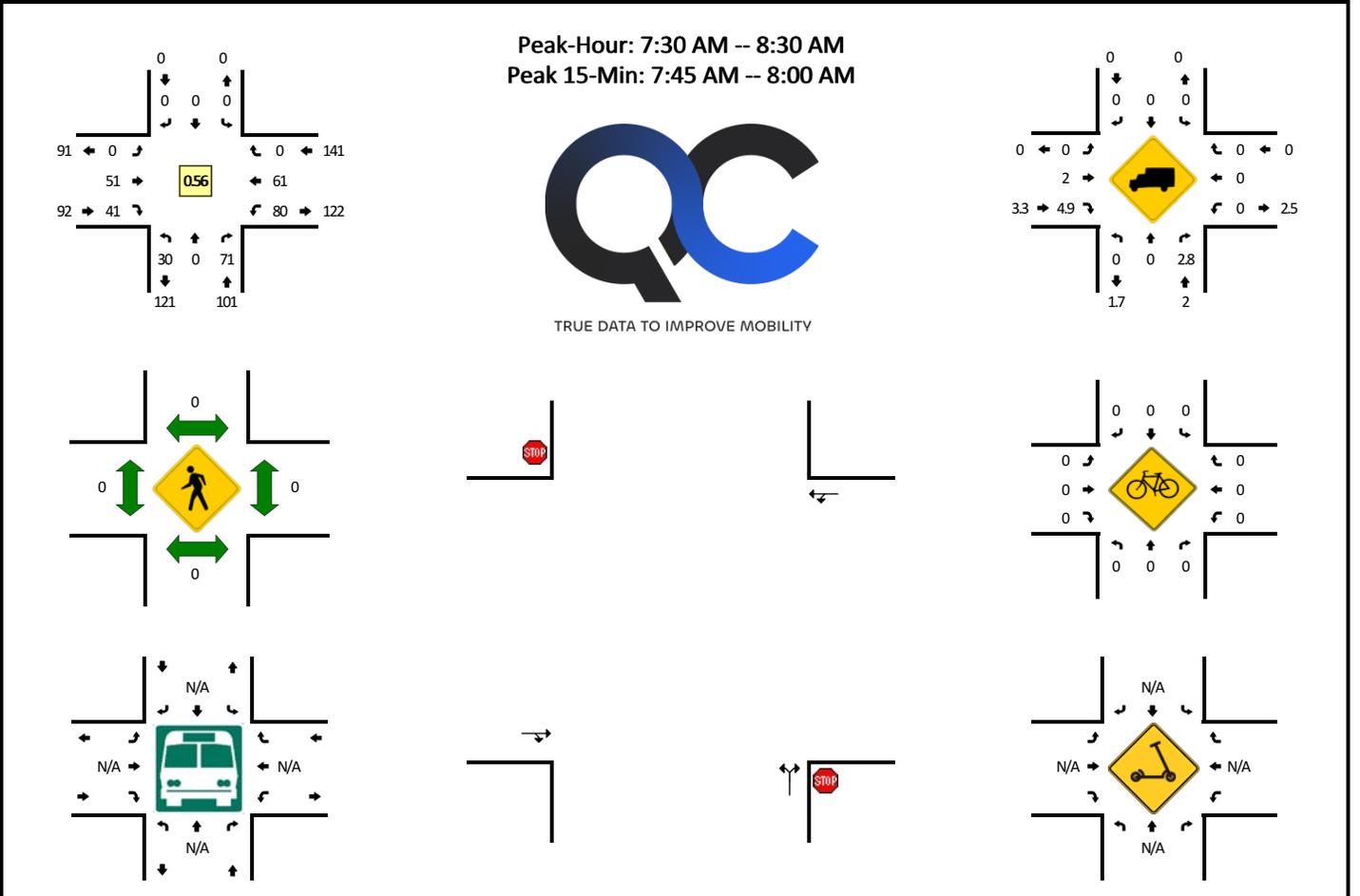




Appendix B  
Traffic Count Data

**LOCATION:** SW 5th St -- Vaughn Ln  
**CITY/STATE:** Lebanon, OR

**QC JOB #:** 17399401  
**DATE:** Tue, Jan 13 2026

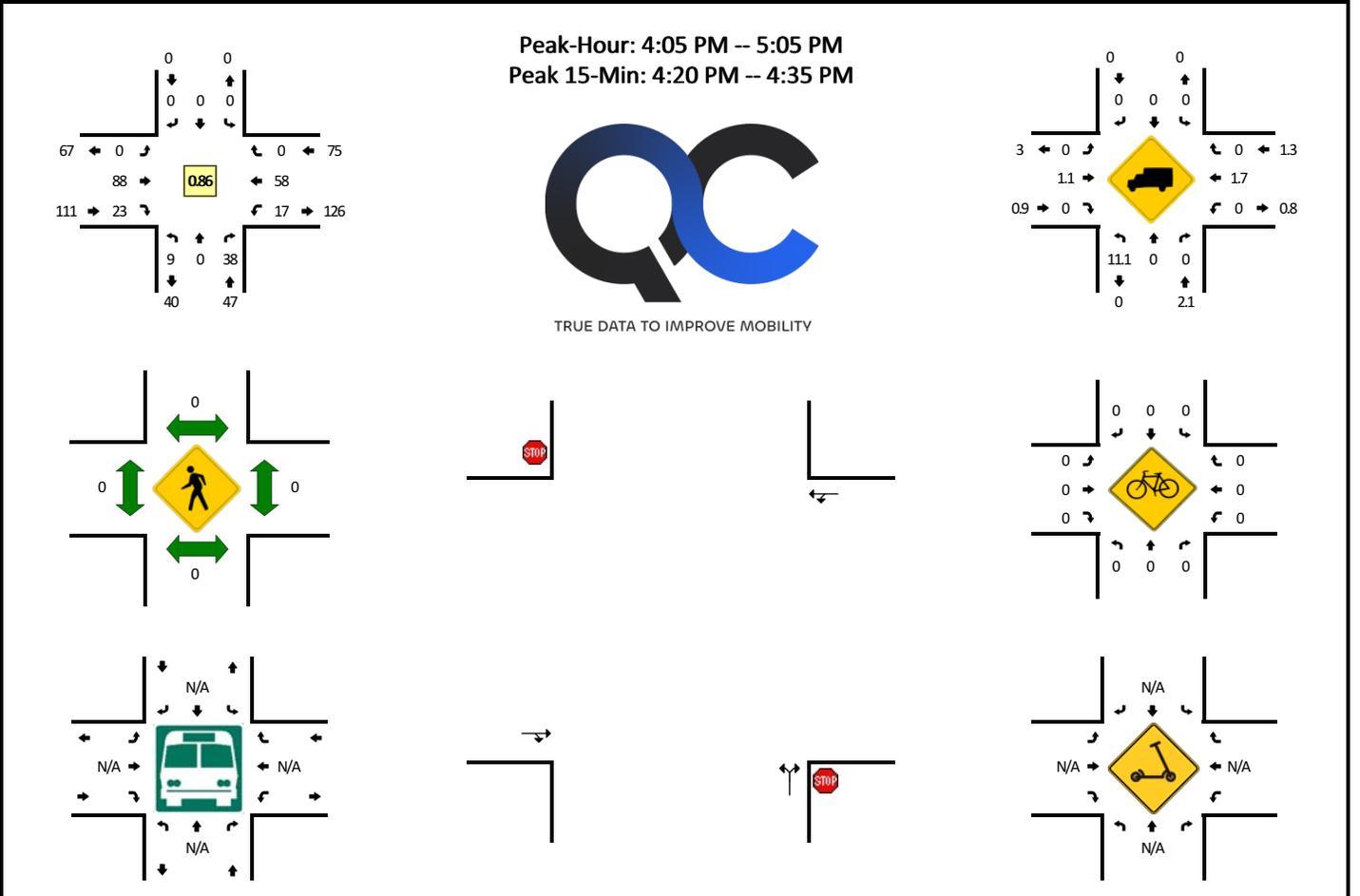


| 5-Min Count Period Beginning At | SW 5th St (Northbound) |      |       |   | SW 5th St (Southbound) |      |       |   | Vaughn Ln (Eastbound) |      |       |   | Vaughn Ln (Westbound) |      |       |   | Total | Hourly Totals |
|---------------------------------|------------------------|------|-------|---|------------------------|------|-------|---|-----------------------|------|-------|---|-----------------------|------|-------|---|-------|---------------|
|                                 | Left                   | Thru | Right | U | Left                   | Thru | Right | U | Left                  | Thru | Right | U | Left                  | Thru | Right | U |       |               |
| 7:00 AM                         | 1                      | 0    | 2     | 0 | 0                      | 0    | 0     | 0 | 0                     | 2    | 2     | 0 | 3                     | 6    | 0     | 0 | 16    |               |
| 7:05 AM                         | 2                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                     | 3    | 1     | 0 | 1                     | 3    | 0     | 0 | 10    |               |
| 7:10 AM                         | 5                      | 0    | 1     | 0 | 0                      | 0    | 0     | 0 | 0                     | 3    | 0     | 0 | 2                     | 2    | 0     | 0 | 13    |               |
| 7:15 AM                         | 3                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                     | 0    | 2     | 0 | 5                     | 3    | 0     | 0 | 13    |               |
| 7:20 AM                         | 0                      | 0    | 1     | 0 | 0                      | 0    | 0     | 0 | 0                     | 4    | 3     | 0 | 2                     | 4    | 0     | 0 | 14    |               |
| 7:25 AM                         | 3                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                     | 0    | 2     | 0 | 4                     | 4    | 0     | 0 | 13    |               |
| 7:30 AM                         | 2                      | 0    | 1     | 0 | 0                      | 0    | 0     | 0 | 0                     | 3    | 1     | 0 | 3                     | 2    | 0     | 0 | 12    |               |
| 7:35 AM                         | 0                      | 0    | 3     | 0 | 0                      | 0    | 0     | 0 | 0                     | 8    | 3     | 0 | 4                     | 4    | 0     | 0 | 22    |               |
| 7:40 AM                         | 3                      | 0    | 1     | 0 | 0                      | 0    | 0     | 0 | 0                     | 5    | 3     | 0 | 9                     | 5    | 0     | 0 | 26    |               |
| 7:45 AM                         | 0                      | 0    | 5     | 0 | 0                      | 0    | 0     | 0 | 0                     | 3    | 17    | 0 | 26                    | 6    | 0     | 0 | 57    |               |
| 7:50 AM                         | 3                      | 0    | 7     | 0 | 0                      | 0    | 0     | 0 | 0                     | 5    | 9     | 0 | 20                    | 6    | 0     | 0 | 50    |               |
| 7:55 AM                         | 7                      | 0    | 15    | 0 | 0                      | 0    | 0     | 0 | 0                     | 2    | 3     | 0 | 10                    | 6    | 0     | 0 | 43    | 289           |
| 8:00 AM                         | 4                      | 0    | 22    | 0 | 0                      | 0    | 0     | 0 | 0                     | 6    | 2     | 0 | 2                     | 5    | 0     | 0 | 41    | 314           |
| 8:05 AM                         | 3                      | 0    | 8     | 0 | 0                      | 0    | 0     | 0 | 0                     | 5    | 1     | 0 | 1                     | 4    | 0     | 0 | 22    | 326           |
| 8:10 AM                         | 3                      | 0    | 6     | 0 | 0                      | 0    | 0     | 0 | 0                     | 4    | 0     | 0 | 3                     | 6    | 0     | 0 | 22    | 335           |
| 8:15 AM                         | 3                      | 0    | 1     | 0 | 0                      | 0    | 0     | 0 | 0                     | 3    | 0     | 0 | 1                     | 4    | 0     | 0 | 12    | 334           |
| 8:20 AM                         | 0                      | 0    | 2     | 0 | 0                      | 0    | 0     | 0 | 0                     | 2    | 2     | 0 | 1                     | 9    | 0     | 0 | 16    | 336           |
| 8:25 AM                         | 2                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                     | 5    | 0     | 0 | 0                     | 4    | 0     | 0 | 11    | 334           |
| 8:30 AM                         | 2                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                     | 2    | 3     | 0 | 0                     | 1    | 0     | 0 | 8     | 330           |
| 8:35 AM                         | 0                      | 0    | 3     | 0 | 0                      | 0    | 0     | 0 | 0                     | 1    | 1     | 0 | 1                     | 2    | 0     | 0 | 8     | 316           |
| 8:40 AM                         | 1                      | 0    | 4     | 0 | 0                      | 0    | 0     | 0 | 0                     | 2    | 1     | 0 | 1                     | 5    | 0     | 0 | 14    | 304           |
| 8:45 AM                         | 1                      | 0    | 1     | 0 | 0                      | 0    | 0     | 0 | 0                     | 5    | 0     | 0 | 1                     | 5    | 0     | 0 | 13    | 260           |
| 8:50 AM                         | 2                      | 0    | 2     | 0 | 0                      | 0    | 0     | 0 | 0                     | 4    | 0     | 0 | 1                     | 2    | 0     | 0 | 11    | 221           |
| 8:55 AM                         | 2                      | 0    | 2     | 0 | 0                      | 0    | 0     | 0 | 0                     | 0    | 0     | 0 | 0                     | 3    | 0     | 0 | 7     | 185           |
| Peak 15-Min Flowrates           | Northbound             |      |       |   | Southbound             |      |       |   | Eastbound             |      |       |   | Westbound             |      |       |   | Total |               |
|                                 | Left                   | Thru | Right | U | Left                   | Thru | Right | U | Left                  | Thru | Right | U | Left                  | Thru | Right | U |       |               |
| All Vehicles                    | 40                     | 0    | 108   | 0 | 0                      | 0    | 0     | 0 | 0                     | 40   | 116   | 0 | 224                   | 72   | 0     | 0 | 600   |               |
| Heavy Trucks                    | 0                      | 0    | 4     |   | 0                      | 0    | 0     |   | 0                     | 0    | 0     |   | 0                     | 0    | 0     |   | 4     |               |
| Buses                           |                        |      |       |   |                        |      |       |   |                       |      |       |   |                       |      |       |   |       |               |
| Pedestrians                     |                        | 0    |       |   |                        | 0    |       |   |                       | 0    |       |   |                       | 0    |       |   | 0     |               |
| Bicycles                        | 0                      | 0    | 0     |   | 0                      | 0    | 0     |   | 0                     | 0    | 0     |   | 0                     | 0    | 0     |   | 0     |               |
| Scoters                         |                        |      |       |   |                        |      |       |   |                       |      |       |   |                       |      |       |   |       |               |

Comments:

**LOCATION:** SW 5th St -- Vaughn Ln  
**CITY/STATE:** Lebanon, OR

**QC JOB #:** 17399402  
**DATE:** Tue, Jan 13 2026

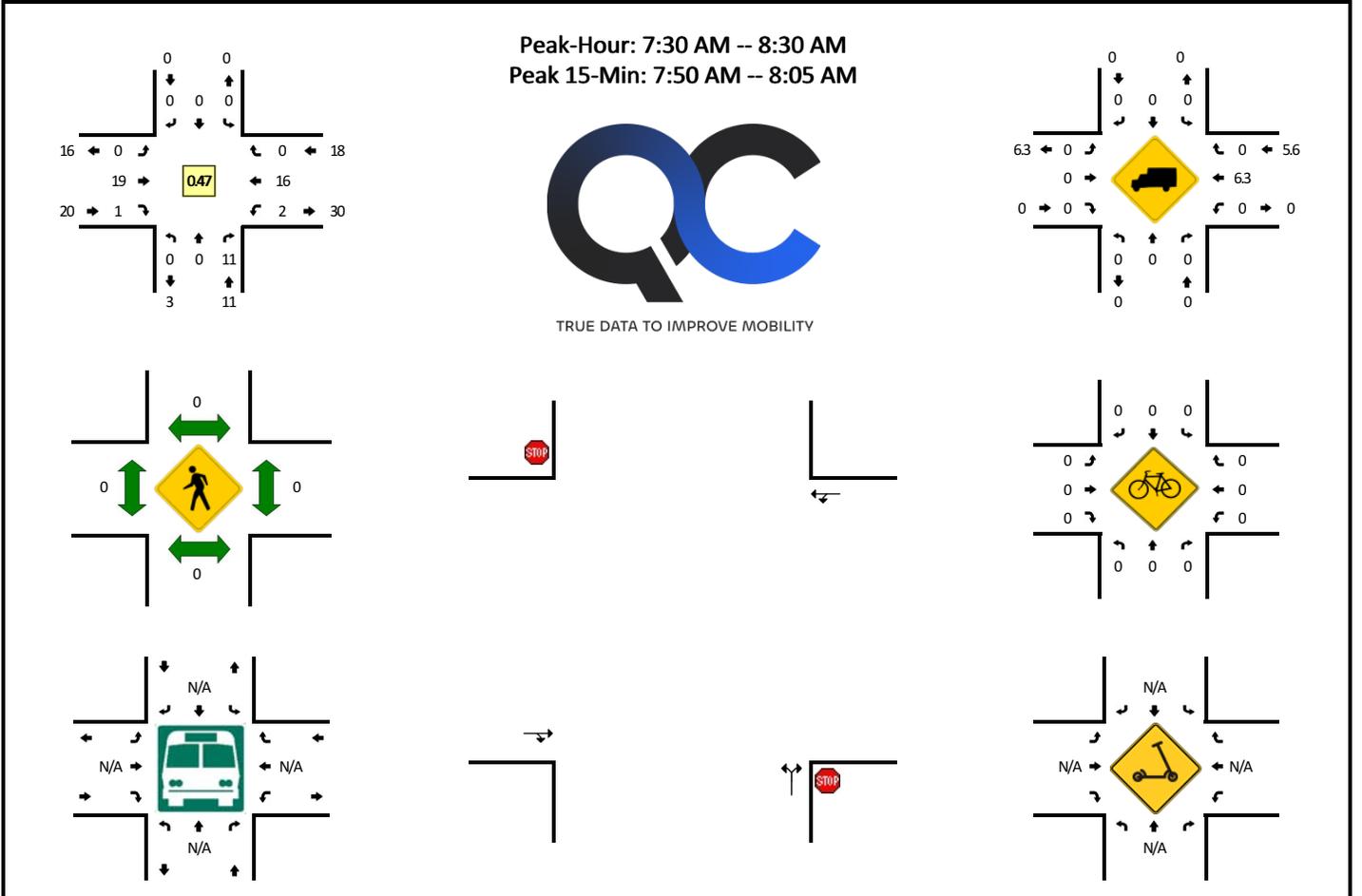


| 5-Min Count Period Beginning At | SW 5th St (Northbound) |      |       |   | SW 5th St (Southbound) |      |       |   | Vaughn Ln (Eastbound) |      |       |   | Vaughn Ln (Westbound) |      |       |   | Total | Hourly Totals |
|---------------------------------|------------------------|------|-------|---|------------------------|------|-------|---|-----------------------|------|-------|---|-----------------------|------|-------|---|-------|---------------|
|                                 | Left                   | Thru | Right | U | Left                   | Thru | Right | U | Left                  | Thru | Right | U | Left                  | Thru | Right | U |       |               |
| 4:00 PM                         | 0                      | 0    | 3     | 0 | 0                      | 0    | 0     | 0 | 0                     | 4    | 2     | 0 | 3                     | 6    | 0     | 0 | 18    |               |
| 4:05 PM                         | 1                      | 0    | 3     | 0 | 0                      | 0    | 0     | 0 | 0                     | 10   | 1     | 0 | 1                     | 8    | 0     | 0 | 24    |               |
| 4:10 PM                         | 1                      | 0    | 2     | 0 | 0                      | 0    | 0     | 0 | 0                     | 5    | 2     | 0 | 1                     | 7    | 0     | 0 | 18    |               |
| 4:15 PM                         | 0                      | 0    | 1     | 0 | 0                      | 0    | 0     | 0 | 0                     | 6    | 2     | 0 | 3                     | 3    | 0     | 0 | 15    |               |
| 4:20 PM                         | 2                      | 0    | 13    | 0 | 0                      | 0    | 0     | 0 | 0                     | 5    | 3     | 0 | 0                     | 3    | 0     | 0 | 26    |               |
| 4:25 PM                         | 1                      | 0    | 2     | 0 | 0                      | 0    | 0     | 0 | 0                     | 7    | 2     | 0 | 3                     | 6    | 0     | 0 | 21    |               |
| 4:30 PM                         | 0                      | 0    | 4     | 0 | 0                      | 0    | 0     | 0 | 0                     | 6    | 2     | 0 | 0                     | 9    | 0     | 0 | 21    |               |
| 4:35 PM                         | 1                      | 0    | 4     | 0 | 0                      | 0    | 0     | 0 | 0                     | 9    | 0     | 0 | 3                     | 2    | 0     | 0 | 19    |               |
| 4:40 PM                         | 1                      | 0    | 3     | 0 | 0                      | 0    | 0     | 0 | 0                     | 12   | 3     | 0 | 0                     | 2    | 0     | 0 | 21    |               |
| 4:45 PM                         | 0                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                     | 4    | 0     | 0 | 0                     | 2    | 0     | 0 | 6     |               |
| 4:50 PM                         | 1                      | 0    | 2     | 0 | 0                      | 0    | 0     | 0 | 0                     | 9    | 1     | 0 | 1                     | 5    | 0     | 0 | 19    |               |
| 4:55 PM                         | 1                      | 0    | 3     | 0 | 0                      | 0    | 0     | 0 | 0                     | 7    | 1     | 0 | 4                     | 7    | 0     | 0 | 23    | 231           |
| 5:00 PM                         | 0                      | 0    | 1     | 0 | 0                      | 0    | 0     | 0 | 0                     | 8    | 6     | 0 | 1                     | 4    | 0     | 0 | 20    | 233           |
| 5:05 PM                         | 1                      | 0    | 2     | 0 | 0                      | 0    | 0     | 0 | 0                     | 5    | 3     | 0 | 1                     | 5    | 0     | 0 | 17    | 226           |
| 5:10 PM                         | 2                      | 0    | 3     | 0 | 0                      | 0    | 0     | 0 | 0                     | 7    | 4     | 0 | 1                     | 2    | 0     | 0 | 19    | 227           |
| 5:15 PM                         | 1                      | 0    | 5     | 0 | 0                      | 0    | 0     | 0 | 0                     | 4    | 1     | 0 | 3                     | 1    | 0     | 0 | 15    | 227           |
| 5:20 PM                         | 0                      | 0    | 2     | 0 | 0                      | 0    | 0     | 0 | 0                     | 6    | 1     | 0 | 1                     | 7    | 0     | 0 | 17    | 218           |
| 5:25 PM                         | 2                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                     | 5    | 4     | 0 | 1                     | 3    | 0     | 0 | 15    | 212           |
| 5:30 PM                         | 2                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                     | 4    | 2     | 0 | 1                     | 4    | 0     | 0 | 13    | 204           |
| 5:35 PM                         | 0                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                     | 8    | 3     | 0 | 2                     | 4    | 0     | 0 | 17    | 202           |
| 5:40 PM                         | 2                      | 0    | 1     | 0 | 0                      | 0    | 0     | 0 | 0                     | 8    | 2     | 0 | 1                     | 2    | 0     | 0 | 16    | 197           |
| 5:45 PM                         | 1                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                     | 4    | 0     | 0 | 3                     | 2    | 0     | 0 | 10    | 201           |
| 5:50 PM                         | 1                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                     | 6    | 4     | 0 | 2                     | 5    | 0     | 0 | 18    | 200           |
| 5:55 PM                         | 2                      | 0    | 1     | 0 | 0                      | 0    | 0     | 0 | 0                     | 7    | 1     | 0 | 2                     | 6    | 0     | 0 | 19    | 196           |
| Peak 15-Min Flowrates           | Northbound             |      |       |   | Southbound             |      |       |   | Eastbound             |      |       |   | Westbound             |      |       |   | Total |               |
|                                 | Left                   | Thru | Right | U | Left                   | Thru | Right | U | Left                  | Thru | Right | U | Left                  | Thru | Right | U |       |               |
| All Vehicles                    | 12                     | 0    | 76    | 0 | 0                      | 0    | 0     | 0 | 0                     | 72   | 28    | 0 | 12                    | 72   | 0     | 0 | 272   |               |
| Heavy Trucks                    | 0                      | 0    | 0     |   | 0                      | 0    | 0     |   | 0                     | 0    | 0     |   | 0                     | 0    | 0     |   | 0     |               |
| Buses                           |                        |      |       |   |                        |      |       |   |                       |      |       |   |                       |      |       |   |       |               |
| Pedestrians                     |                        | 0    |       |   |                        | 0    |       |   |                       | 0    |       |   |                       | 0    |       |   | 0     |               |
| Bicycles                        | 0                      | 0    | 0     |   | 0                      | 0    | 0     |   | 0                     | 0    | 0     |   | 0                     | 0    | 0     |   | 0     |               |
| Scoters                         |                        |      |       |   |                        |      |       |   |                       |      |       |   |                       |      |       |   |       |               |

Comments:

**LOCATION:** Kingdom Dr -- W Joy  
**CITY/STATE:** Lebanon, OR

**QC JOB #:** 17399403  
**DATE:** Tue, Jan 13 2026



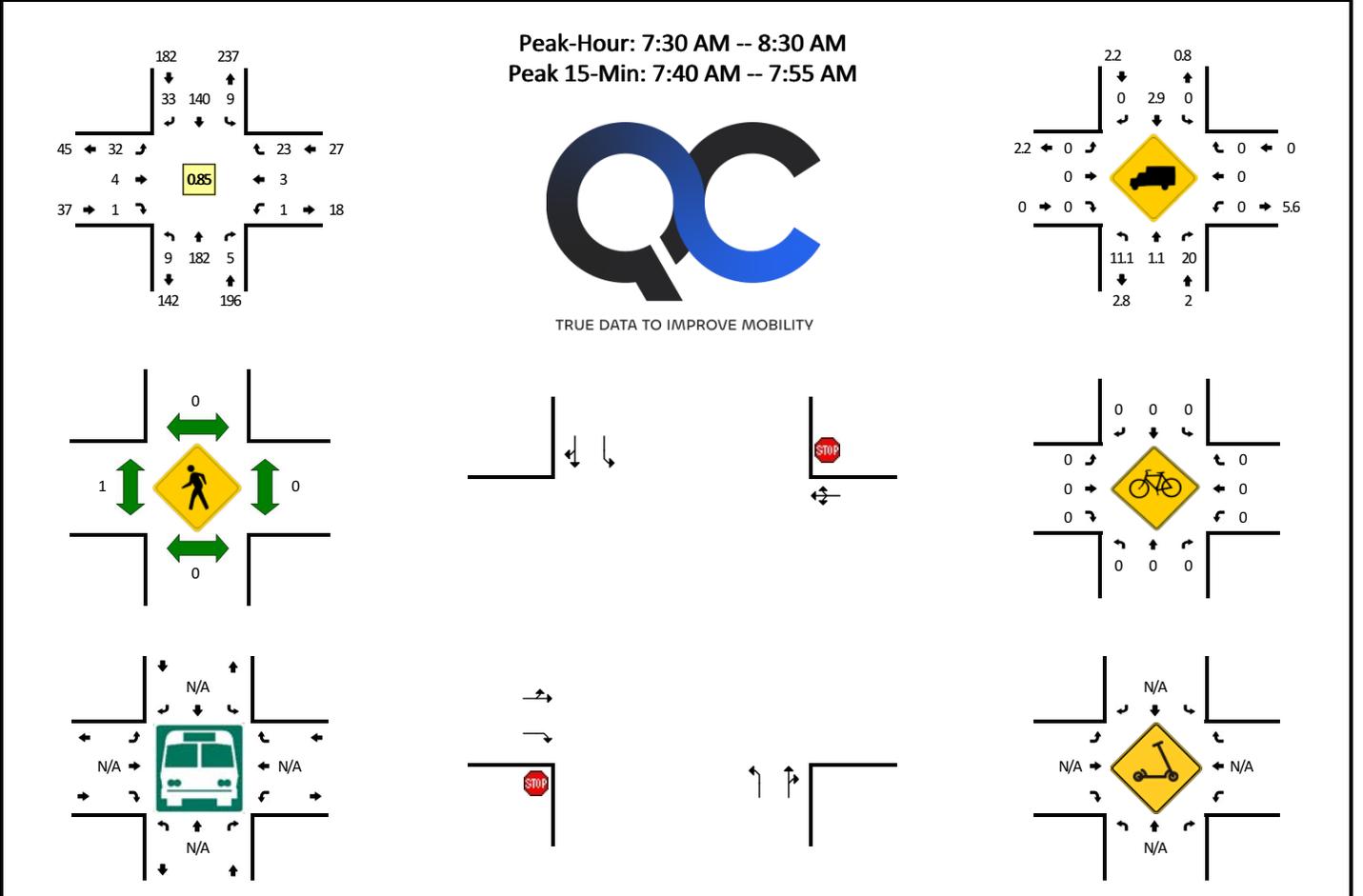
| 5-Min Count Period Beginning At | Kingdom Dr (Northbound) |      |       |   | Kingdom Dr (Southbound) |      |       |   | W Joy (Eastbound) |      |       |   | W Joy (Westbound) |      |       |   | Total | Hourly Totals |    |
|---------------------------------|-------------------------|------|-------|---|-------------------------|------|-------|---|-------------------|------|-------|---|-------------------|------|-------|---|-------|---------------|----|
|                                 | Left                    | Thru | Right | U | Left                    | Thru | Right | U | Left              | Thru | Right | U | Left              | Thru | Right | U |       |               |    |
| 7:00 AM                         | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 2    | 1     | 0 | 0                 | 1    | 1     | 0 | 0     | 4             |    |
| 7:05 AM                         | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 1    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 2             |    |
| 7:10 AM                         | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 1    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 1             |    |
| 7:15 AM                         | 0                       | 0    | 3     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 3             |    |
| 7:20 AM                         | 0                       | 0    | 1     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 1             |    |
| 7:25 AM                         | 0                       | 0    | 1     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 1    | 0     | 0 | 0     | 2             |    |
| 7:30 AM                         | 0                       | 0    | 1     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 1    | 0     | 0 | 0     | 2             |    |
| 7:35 AM                         | 0                       | 0    | 1     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 1             |    |
| 7:40 AM                         | 0                       | 0    | 3     | 0 | 0                       | 0    | 0     | 0 | 0                 | 1    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 4             |    |
| 7:45 AM                         | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 1                 | 3    | 0     | 0 | 0     | 4             |    |
| 7:50 AM                         | 0                       | 0    | 1     | 0 | 0                       | 0    | 0     | 0 | 0                 | 1    | 0     | 0 | 0                 | 5    | 0     | 0 | 0     | 7             |    |
| 7:55 AM                         | 0                       | 0    | 1     | 0 | 0                       | 0    | 0     | 0 | 0                 | 5    | 1     | 0 | 0                 | 3    | 0     | 0 | 0     | 10            | 41 |
| 8:00 AM                         | 0                       | 0    | 3     | 0 | 0                       | 0    | 0     | 0 | 0                 | 6    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 9             | 46 |
| 8:05 AM                         | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 3    | 0     | 0 | 0                 | 1    | 0     | 0 | 0     | 4             | 48 |
| 8:10 AM                         | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 2    | 0     | 0 | 0                 | 3    | 0     | 0 | 0     | 5             | 52 |
| 8:15 AM                         | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 1    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 1             | 50 |
| 8:20 AM                         | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 0             | 49 |
| 8:25 AM                         | 0                       | 0    | 1     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 1                 | 0    | 0     | 0 | 0     | 2             | 49 |
| 8:30 AM                         | 0                       | 0    | 3     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 3             | 50 |
| 8:35 AM                         | 0                       | 0    | 2     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 2             | 51 |
| 8:40 AM                         | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 1    | 0     | 0 | 0     | 1             | 48 |
| 8:45 AM                         | 0                       | 0    | 2     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 1    | 0     | 0 | 0     | 3             | 47 |
| 8:50 AM                         | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 1    | 0     | 0 | 0                 | 1    | 0     | 0 | 0     | 2             | 42 |
| 8:55 AM                         | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 1                 | 1    | 0     | 0 | 0     | 2             | 34 |
| Peak 15-Min Flowrates           | Northbound              |      |       |   | Southbound              |      |       |   | Eastbound         |      |       |   | Westbound         |      |       |   | Total |               |    |
|                                 | Left                    | Thru | Right | U | Left                    | Thru | Right | U | Left              | Thru | Right | U | Left              | Thru | Right | U |       |               |    |
| All Vehicles                    | 0                       | 0    | 20    | 0 | 0                       | 0    | 0     | 0 | 0                 | 48   | 4     | 0 | 0                 | 32   | 0     | 0 | 0     | 104           |    |
| Heavy Trucks                    | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 0             |    |
| Buses                           | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 0             |    |
| Pedestrians                     | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 0             |    |
| Bicycles                        | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 0             |    |
| Scoters                         | 0                       | 0    | 0     | 0 | 0                       | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0                 | 0    | 0     | 0 | 0     | 0             |    |

Comments:



**LOCATION:** S Main Rd -- E Joy St  
**CITY/STATE:** Lebanon, OR

**QC JOB #:** 17399405  
**DATE:** Tue, Jan 13 2026

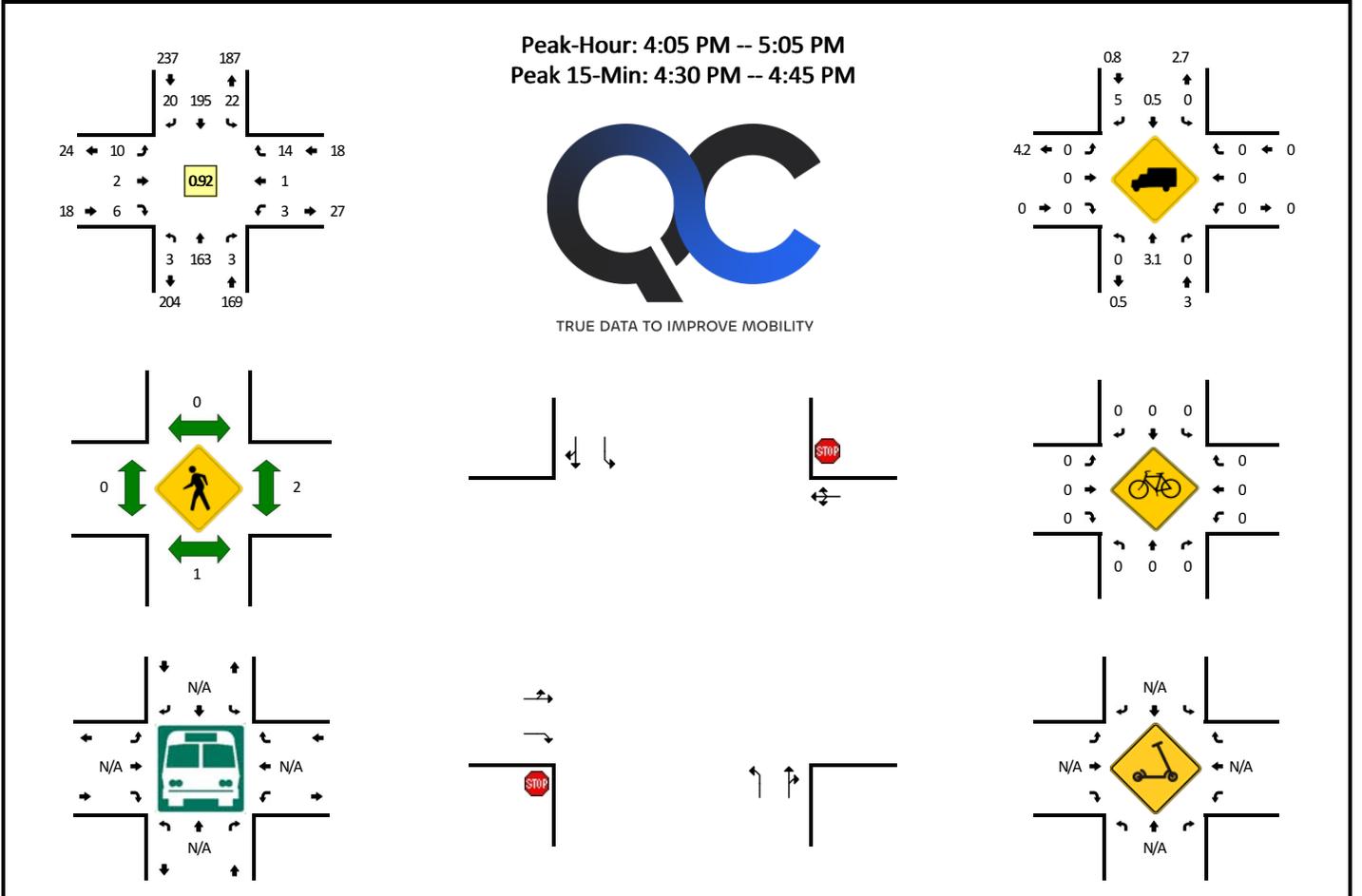


| 5-Min Count Period Beginning At | S Main Rd (Northbound) |      |       |   | S Main Rd (Southbound) |      |       |   | E Joy St (Eastbound) |      |       |   | E Joy St (Westbound) |      |       |   | Total | Hourly Totals |
|---------------------------------|------------------------|------|-------|---|------------------------|------|-------|---|----------------------|------|-------|---|----------------------|------|-------|---|-------|---------------|
|                                 | Left                   | Thru | Right | U | Left                   | Thru | Right | U | Left                 | Thru | Right | U | Left                 | Thru | Right | U |       |               |
| 7:00 AM                         | 0                      | 11   | 0     | 0 | 0                      | 3    | 2     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 1     | 0 | 17    |               |
| 7:05 AM                         | 0                      | 7    | 0     | 0 | 2                      | 3    | 1     | 0 | 3                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 16    |               |
| 7:10 AM                         | 0                      | 7    | 0     | 0 | 0                      | 6    | 0     | 0 | 2                    | 0    | 0     | 0 | 0                    | 0    | 2     | 0 | 17    |               |
| 7:15 AM                         | 0                      | 14   | 0     | 0 | 1                      | 5    | 0     | 0 | 3                    | 0    | 0     | 0 | 0                    | 0    | 5     | 0 | 28    |               |
| 7:20 AM                         | 0                      | 19   | 0     | 0 | 0                      | 3    | 0     | 0 | 2                    | 0    | 0     | 0 | 0                    | 0    | 3     | 0 | 27    |               |
| 7:25 AM                         | 1                      | 11   | 0     | 0 | 0                      | 5    | 0     | 0 | 2                    | 0    | 0     | 0 | 0                    | 0    | 3     | 0 | 22    |               |
| 7:30 AM                         | 0                      | 11   | 0     | 0 | 1                      | 5    | 1     | 0 | 2                    | 0    | 0     | 0 | 0                    | 0    | 3     | 0 | 23    |               |
| 7:35 AM                         | 0                      | 19   | 0     | 0 | 1                      | 13   | 2     | 0 | 1                    | 0    | 0     | 0 | 0                    | 0    | 2     | 0 | 38    |               |
| 7:40 AM                         | 0                      | 11   | 1     | 0 | 0                      | 21   | 4     | 0 | 2                    | 0    | 0     | 0 | 0                    | 0    | 3     | 0 | 42    |               |
| 7:45 AM                         | 0                      | 17   | 0     | 0 | 5                      | 12   | 6     | 0 | 0                    | 0    | 0     | 0 | 0                    | 2    | 3     | 0 | 45    |               |
| 7:50 AM                         | 3                      | 17   | 0     | 0 | 0                      | 15   | 4     | 0 | 2                    | 0    | 0     | 0 | 0                    | 0    | 2     | 0 | 43    |               |
| 7:55 AM                         | 1                      | 15   | 0     | 0 | 2                      | 10   | 2     | 0 | 5                    | 0    | 0     | 0 | 0                    | 1    | 0     | 0 | 36    | 354           |
| 8:00 AM                         | 0                      | 13   | 1     | 0 | 0                      | 14   | 0     | 0 | 6                    | 2    | 1     | 0 | 0                    | 0    | 3     | 0 | 40    | 377           |
| 8:05 AM                         | 1                      | 12   | 2     | 0 | 0                      | 16   | 3     | 0 | 4                    | 0    | 0     | 0 | 0                    | 0    | 1     | 0 | 39    | 400           |
| 8:10 AM                         | 2                      | 12   | 0     | 0 | 0                      | 12   | 4     | 0 | 2                    | 1    | 0     | 0 | 0                    | 0    | 1     | 0 | 34    | 417           |
| 8:15 AM                         | 1                      | 20   | 0     | 0 | 0                      | 9    | 3     | 0 | 1                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 34    | 423           |
| 8:20 AM                         | 0                      | 18   | 1     | 0 | 0                      | 9    | 0     | 0 | 3                    | 0    | 0     | 0 | 0                    | 0    | 3     | 0 | 34    | 430           |
| 8:25 AM                         | 1                      | 17   | 0     | 0 | 0                      | 4    | 4     | 0 | 4                    | 1    | 0     | 0 | 1                    | 0    | 2     | 0 | 34    | 442           |
| 8:30 AM                         | 0                      | 3    | 0     | 0 | 0                      | 3    | 2     | 0 | 3                    | 0    | 0     | 0 | 0                    | 0    | 1     | 0 | 12    | 431           |
| 8:35 AM                         | 0                      | 7    | 0     | 0 | 0                      | 5    | 0     | 0 | 4                    | 0    | 0     | 0 | 0                    | 0    | 1     | 0 | 17    | 410           |
| 8:40 AM                         | 1                      | 15   | 0     | 0 | 1                      | 4    | 2     | 0 | 3                    | 0    | 0     | 0 | 0                    | 0    | 1     | 0 | 27    | 395           |
| 8:45 AM                         | 0                      | 13   | 0     | 0 | 2                      | 4    | 3     | 0 | 2                    | 0    | 0     | 0 | 2                    | 0    | 2     | 0 | 28    | 378           |
| 8:50 AM                         | 0                      | 8    | 0     | 0 | 0                      | 7    | 3     | 0 | 6                    | 0    | 0     | 0 | 0                    | 1    | 2     | 0 | 27    | 362           |
| 8:55 AM                         | 0                      | 14   | 0     | 0 | 1                      | 6    | 7     | 0 | 1                    | 0    | 1     | 0 | 0                    | 0    | 4     | 0 | 34    | 360           |
| Peak 15-Min Flowrates           | Northbound             |      |       |   | Southbound             |      |       |   | Eastbound            |      |       |   | Westbound            |      |       |   | Total |               |
|                                 | Left                   | Thru | Right | U | Left                   | Thru | Right | U | Left                 | Thru | Right | U | Left                 | Thru | Right | U |       |               |
| All Vehicles                    | 12                     | 180  | 4     | 0 | 20                     | 192  | 56    | 0 | 16                   | 0    | 0     | 0 | 0                    | 8    | 32    | 0 | 520   |               |
| Heavy Trucks                    | 0                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0     |               |
| Buses                           | 0                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0     |               |
| Pedestrians                     | 0                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0     |               |
| Bicycles                        | 0                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0     |               |
| Scoters                         | 0                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0     |               |

Comments:

**LOCATION:** S Main Rd -- E Joy St  
**CITY/STATE:** Lebanon, OR

**QC JOB #:** 17399406  
**DATE:** Tue, Jan 13 2026



| 5-Min Count Period Beginning At | S Main Rd (Northbound) |      |       |   | S Main Rd (Southbound) |      |       |   | E Joy St (Eastbound) |      |       |   | E Joy St (Westbound) |      |       |   | Total | Hourly Totals |
|---------------------------------|------------------------|------|-------|---|------------------------|------|-------|---|----------------------|------|-------|---|----------------------|------|-------|---|-------|---------------|
|                                 | Left                   | Thru | Right | U | Left                   | Thru | Right | U | Left                 | Thru | Right | U | Left                 | Thru | Right | U |       |               |
| 4:00 PM                         | 0                      | 11   | 0     | 0 | 2                      | 11   | 1     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 25    |               |
| 4:05 PM                         | 0                      | 12   | 0     | 0 | 2                      | 15   | 4     | 0 | 3                    | 0    | 2     | 0 | 0                    | 0    | 0     | 0 | 38    |               |
| 4:10 PM                         | 0                      | 21   | 1     | 0 | 2                      | 14   | 1     | 0 | 1                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 40    |               |
| 4:15 PM                         | 1                      | 12   | 1     | 0 | 1                      | 14   | 2     | 0 | 0                    | 0    | 0     | 0 | 0                    | 1    | 5     | 0 | 37    |               |
| 4:20 PM                         | 0                      | 17   | 0     | 0 | 0                      | 14   | 3     | 0 | 1                    | 0    | 0     | 0 | 1                    | 0    | 1     | 0 | 37    |               |
| 4:25 PM                         | 0                      | 17   | 0     | 0 | 1                      | 16   | 1     | 0 | 0                    | 1    | 0     | 0 | 0                    | 0    | 0     | 0 | 36    |               |
| 4:30 PM                         | 0                      | 16   | 0     | 0 | 4                      | 13   | 3     | 0 | 0                    | 0    | 1     | 0 | 0                    | 0    | 3     | 0 | 40    |               |
| 4:35 PM                         | 1                      | 10   | 0     | 0 | 4                      | 17   | 4     | 0 | 0                    | 0    | 2     | 0 | 0                    | 0    | 1     | 0 | 39    |               |
| 4:40 PM                         | 0                      | 11   | 1     | 0 | 2                      | 25   | 0     | 0 | 0                    | 0    | 0     | 0 | 1                    | 0    | 1     | 0 | 41    |               |
| 4:45 PM                         | 1                      | 11   | 0     | 0 | 0                      | 15   | 1     | 0 | 0                    | 0    | 0     | 0 | 1                    | 0    | 1     | 0 | 30    |               |
| 4:50 PM                         | 0                      | 10   | 0     | 0 | 1                      | 22   | 0     | 0 | 3                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 36    |               |
| 4:55 PM                         | 0                      | 13   | 0     | 0 | 3                      | 9    | 1     | 0 | 1                    | 0    | 1     | 0 | 0                    | 0    | 1     | 0 | 29    | 428           |
| 5:00 PM                         | 0                      | 13   | 0     | 0 | 2                      | 21   | 0     | 0 | 1                    | 1    | 0     | 0 | 0                    | 0    | 1     | 0 | 39    | 442           |
| 5:05 PM                         | 0                      | 8    | 0     | 0 | 3                      | 18   | 1     | 0 | 2                    | 0    | 0     | 0 | 0                    | 0    | 2     | 0 | 34    | 438           |
| 5:10 PM                         | 1                      | 12   | 1     | 0 | 3                      | 22   | 1     | 0 | 3                    | 0    | 0     | 0 | 0                    | 0    | 1     | 0 | 44    | 442           |
| 5:15 PM                         | 0                      | 11   | 0     | 0 | 2                      | 16   | 0     | 0 | 1                    | 0    | 1     | 0 | 1                    | 0    | 2     | 0 | 34    | 439           |
| 5:20 PM                         | 1                      | 17   | 0     | 0 | 4                      | 15   | 2     | 0 | 1                    | 0    | 1     | 0 | 2                    | 0    | 2     | 0 | 45    | 447           |
| 5:25 PM                         | 0                      | 14   | 0     | 0 | 1                      | 25   | 2     | 0 | 1                    | 0    | 0     | 0 | 0                    | 0    | 1     | 0 | 44    | 455           |
| 5:30 PM                         | 1                      | 16   | 1     | 0 | 1                      | 11   | 1     | 0 | 5                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 36    | 451           |
| 5:35 PM                         | 1                      | 12   | 0     | 0 | 2                      | 16   | 1     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 32    | 444           |
| 5:40 PM                         | 0                      | 5    | 0     | 0 | 2                      | 10   | 3     | 0 | 2                    | 0    | 0     | 0 | 0                    | 0    | 1     | 0 | 23    | 426           |
| 5:45 PM                         | 1                      | 16   | 2     | 0 | 3                      | 18   | 2     | 0 | 3                    | 0    | 0     | 0 | 0                    | 0    | 1     | 0 | 46    | 442           |
| 5:50 PM                         | 0                      | 11   | 0     | 0 | 3                      | 19   | 1     | 0 | 1                    | 0    | 0     | 0 | 0                    | 0    | 1     | 0 | 36    | 442           |
| 5:55 PM                         | 0                      | 11   | 0     | 0 | 0                      | 18   | 3     | 0 | 1                    | 0    | 0     | 0 | 2                    | 0    | 0     | 0 | 35    | 448           |
| Peak 15-Min Flowrates           | Northbound             |      |       |   | Southbound             |      |       |   | Eastbound            |      |       |   | Westbound            |      |       |   | Total |               |
|                                 | Left                   | Thru | Right | U | Left                   | Thru | Right | U | Left                 | Thru | Right | U | Left                 | Thru | Right | U |       |               |
| All Vehicles                    | 4                      | 148  | 4     | 0 | 40                     | 220  | 28    | 0 | 0                    | 0    | 12    | 0 | 4                    | 0    | 20    | 0 | 480   |               |
| Heavy Trucks                    | 0                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0     |               |
| Buses                           | 0                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0     |               |
| Pedestrians                     | 0                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0     |               |
| Bicycles                        | 0                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0     |               |
| Scoters                         | 0                      | 0    | 0     | 0 | 0                      | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0                    | 0    | 0     | 0 | 0     |               |

Comments:

## Appendix C

### 2026 Existing Traffic Conditions Worksheets

**Intersection Level Of Service Report**  
**Intersection 1: Vaughan Lane / S 5th Street**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 14.5  |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | B     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.117 |

**Intersection Setup**

| Name                         | S 5th Street |        | Vaughan Lane |        | Vaughan Lane |        |
|------------------------------|--------------|--------|--------------|--------|--------------|--------|
| Approach                     | Northbound   |        | Eastbound    |        | Westbound    |        |
| Lane Configuration           |              |        |              |        |              |        |
| Turning Movement             | Left         | Right  | Thru         | Right  | Left         | Thru   |
| Lane Width [ft]              | 12.00        | 12.00  | 12.00        | 12.00  | 12.00        | 12.00  |
| No. of Lanes in Entry Pocket | 0            | 0      | 0            | 0      | 0            | 0      |
| Entry Pocket Length [ft]     | 100.00       | 100.00 | 100.00       | 100.00 | 100.00       | 100.00 |
| No. of Lanes in Exit Pocket  | 0            | 0      | 0            | 0      | 0            | 0      |
| Exit Pocket Length [ft]      | 0.00         | 0.00   | 0.00         | 0.00   | 0.00         | 0.00   |
| Speed [mph]                  | 25.00        |        | 40.00        |        | 40.00        |        |
| Grade [%]                    | 0.00         |        | 0.00         |        | 0.00         |        |
| Crosswalk                    | No           |        | No           |        | No           |        |

**Volumes**

| Name                                    | S 5th Street |        | Vaughan Lane |        | Vaughan Lane |        |
|---|--------------|--------|--------------|--------|--------------|--------|
| Base Volume Input [veh/h]               | 30           | 71     | 51           | 41     | 80           | 61     |
| Base Volume Adjustment Factor           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00         | 3.00   | 2.00         | 5.00   | 0.00         | 0.00   |
| Growth Factor                           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| In-Process Volume [veh/h]               | 0            | 0      | 0            | 0      | 0            | 0      |
| Site-Generated Trips [veh/h]            | 0            | 0      | 0            | 0      | 0            | 0      |
| Diverted Trips [veh/h]                  | 0            | 0      | 0            | 0      | 0            | 0      |
| Pass-by Trips [veh/h]                   | 0            | 0      | 0            | 0      | 0            | 0      |
| Existing Site Adjustment Volume [veh/h] | 0            | 0      | 0            | 0      | 0            | 0      |
| Other Volume [veh/h]                    | 0            | 0      | 0            | 0      | 0            | 0      |
| Total Hourly Volume [veh/h]             | 30           | 71     | 51           | 41     | 80           | 61     |
| Peak Hour Factor                        | 0.5600       | 0.5600 | 0.5600       | 0.5600 | 0.5600       | 0.5600 |
| Other Adjustment Factor                 | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 13           | 32     | 23           | 18     | 36           | 27     |
| Total Analysis Volume [veh/h]           | 54           | 127    | 91           | 73     | 143          | 109    |
| Pedestrian Volume [ped/h]               | 0            |        | 0            |        | 0            |        |

**Intersection Settings**

|                                    |      |      |      |
|------------------------------------|------|------|------|
| Priority Scheme                    | Stop | Free | Free |
| Flared Lane                        | No   |      |      |
| Storage Area [veh]                 | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           | No   |      |      |
| Number of Storage Spaces in Median | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |       |       |      |      |      |      |
|---------------------------------------|-------|-------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.12  | 0.14  | 0.00 | 0.00 | 0.10 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 14.50 | 10.64 | 0.00 | 0.00 | 7.70 | 0.00 |
| Movement LOS                          | B     | B     | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 1.01  | 1.01  | 0.00 | 0.00 | 0.26 | 0.26 |
| 95th-Percentile Queue Length [ft/ln]  | 25.25 | 25.25 | 0.00 | 0.00 | 6.46 | 6.46 |
| d_A, Approach Delay [s/veh]           | 11.79 |       | 0.00 |      | 4.37 |      |
| Approach LOS                          | B     |       | A    |      | A    |      |
| d_I, Intersection Delay [s/veh]       | 5.42  |       |      |      |      |      |
| Intersection LOS                      | B     |       |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Joy Street / Kingdom Drive**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 8.6   |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | A     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.022 |

**Intersection Setup**

| Name                         | Kingdom Drive |        | Joy Street |        | Joy Street |        |
|------------------------------|---------------|--------|------------|--------|------------|--------|
| Approach                     | Northbound    |        | Eastbound  |        | Westbound  |        |
| Lane Configuration           |               |        |            |        |            |        |
| Turning Movement             | Left          | Right  | Thru       | Right  | Left       | Thru   |
| Lane Width [ft]              | 12.00         | 12.00  | 12.00      | 12.00  | 12.00      | 12.00  |
| No. of Lanes in Entry Pocket | 0             | 0      | 0          | 0      | 0          | 0      |
| Entry Pocket Length [ft]     | 100.00        | 100.00 | 100.00     | 100.00 | 100.00     | 100.00 |
| No. of Lanes in Exit Pocket  | 0             | 0      | 0          | 0      | 0          | 0      |
| Exit Pocket Length [ft]      | 0.00          | 0.00   | 0.00       | 0.00   | 0.00       | 0.00   |
| Speed [mph]                  | 25.00         |        | 25.00      |        | 25.00      |        |
| Grade [%]                    | 0.00          |        | 0.00       |        | 0.00       |        |
| Crosswalk                    | Yes           |        | Yes        |        | Yes        |        |

**Volumes**

| Name                                    | Kingdom Drive |        | Joy Street |        | Joy Street |        |
|---|---------------|--------|------------|--------|------------|--------|
| Base Volume Input [veh/h]               | 0             | 11     | 19         | 1      | 2          | 16     |
| Base Volume Adjustment Factor           | 1.0000        | 1.0000 | 1.0000     | 1.0000 | 1.0000     | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00          | 0.00   | 0.00       | 0.00   | 0.00       | 6.00   |
| Growth Factor                           | 1.0000        | 1.0000 | 1.0000     | 1.0000 | 1.0000     | 1.0000 |
| In-Process Volume [veh/h]               | 0             | 0      | 0          | 0      | 0          | 0      |
| Site-Generated Trips [veh/h]            | 0             | 0      | 0          | 0      | 0          | 0      |
| Diverted Trips [veh/h]                  | 0             | 0      | 0          | 0      | 0          | 0      |
| Pass-by Trips [veh/h]                   | 0             | 0      | 0          | 0      | 0          | 0      |
| Existing Site Adjustment Volume [veh/h] | 0             | 0      | 0          | 0      | 0          | 0      |
| Other Volume [veh/h]                    | 0             | 0      | 0          | 0      | 0          | 0      |
| Total Hourly Volume [veh/h]             | 0             | 11     | 19         | 1      | 2          | 16     |
| Peak Hour Factor                        | 0.4700        | 0.4700 | 0.4700     | 0.4700 | 0.4700     | 0.4700 |
| Other Adjustment Factor                 | 1.0000        | 1.0000 | 1.0000     | 1.0000 | 1.0000     | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 0             | 6      | 10         | 1      | 1          | 9      |
| Total Analysis Volume [veh/h]           | 0             | 23     | 40         | 2      | 4          | 34     |
| Pedestrian Volume [ped/h]               | 0             |        | 0          |        | 0          |        |

**Intersection Settings**

|                                    |      |      |      |
|------------------------------------|------|------|------|
| Priority Scheme                    | Stop | Free | Free |
| Flared Lane                        | No   |      |      |
| Storage Area [veh]                 | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           | No   |      |      |
| Number of Storage Spaces in Median | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 8.99 | 8.55 | 0.00 | 0.00 | 7.28 | 0.00 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.07 | 0.07 | 0.00 | 0.00 | 0.01 | 0.01 |
| 95th-Percentile Queue Length [ft/ln]  | 1.70 | 1.70 | 0.00 | 0.00 | 0.17 | 0.17 |
| d_A, Approach Delay [s/veh]           | 8.55 |      | 0.00 |      | 0.77 |      |
| Approach LOS                          | A    |      | A    |      | A    |      |
| d_I, Intersection Delay [s/veh]       | 2.19 |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |

**Intersection Level Of Service Report  
Intersection 3: S Main Road / Joy Street**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 13.2  |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | B     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.079 |

**Intersection Setup**

| Name                         | S Main Road |        |        | S Main Road |        |        | Joy Street |        |       | Joy Street |        |        |
|------------------------------|-------------|--------|--------|-------------|--------|--------|------------|--------|-------|------------|--------|--------|
| Approach                     | Northbound  |        |        | Southbound  |        |        | Eastbound  |        |       | Westbound  |        |        |
| Lane Configuration           | ↵↵          |        |        | ↵↵          |        |        | ↵↵         |        |       | ↵          |        |        |
| Turning Movement             | Left        | Thru   | Right  | Left        | Thru   | Right  | Left       | Thru   | Right | Left       | Thru   | Right  |
| Lane Width [ft]              | 12.00       | 12.00  | 12.00  | 12.00       | 12.00  | 12.00  | 12.00      | 12.00  | 12.00 | 12.00      | 12.00  | 12.00  |
| No. of Lanes in Entry Pocket | 1           | 0      | 0      | 1           | 0      | 0      | 0          | 0      | 1     | 0          | 0      | 0      |
| Entry Pocket Length [ft]     | 100.00      | 100.00 | 100.00 | 100.00      | 100.00 | 100.00 | 100.00     | 100.00 | 60.00 | 100.00     | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket  | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0     | 0          | 0      | 0      |
| Exit Pocket Length [ft]      | 0.00        | 0.00   | 0.00   | 0.00        | 0.00   | 0.00   | 0.00       | 0.00   | 0.00  | 0.00       | 0.00   | 0.00   |
| Speed [mph]                  | 35.00       |        |        | 35.00       |        |        | 25.00      |        |       | 25.00      |        |        |
| Grade [%]                    | 0.00        |        |        | 0.00        |        |        | 0.00       |        |       | 0.00       |        |        |
| Crosswalk                    | Yes         |        |        | Yes         |        |        | Yes        |        |       | Yes        |        |        |

**Volumes**

| Name                                    | S Main Road |        |        | S Main Road |        |        | Joy Street |        |        | Joy Street |        |        |
|---|-------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| Base Volume Input [veh/h]               | 9           | 182    | 5      | 9           | 140    | 33     | 32         | 4      | 1      | 1          | 3      | 23     |
| Base Volume Adjustment Factor           | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 11.00       | 1.00   | 20.00  | 0.00        | 3.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   |
| Growth Factor                           | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| In-Process Volume [veh/h]               | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Site-Generated Trips [veh/h]            | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Diverted Trips [veh/h]                  | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Pass-by Trips [veh/h]                   | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Existing Site Adjustment Volume [veh/h] | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Other Volume [veh/h]                    | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Total Hourly Volume [veh/h]             | 9           | 182    | 5      | 9           | 140    | 33     | 32         | 4      | 1      | 1          | 3      | 23     |
| Peak Hour Factor                        | 0.8500      | 0.8500 | 0.8500 | 0.8500      | 0.8500 | 0.8500 | 0.8500     | 0.8500 | 0.8500 | 0.8500     | 0.8500 | 0.8500 |
| Other Adjustment Factor                 | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 3           | 54     | 1      | 3           | 41     | 10     | 9          | 1      | 0      | 0          | 1      | 7      |
| Total Analysis Volume [veh/h]           | 11          | 214    | 6      | 11          | 165    | 39     | 38         | 5      | 1      | 1          | 4      | 27     |
| Pedestrian Volume [ped/h]               | 0           |        |        | 0           |        |        | 1          |        |        | 0          |        |        |

**Intersection Settings**

|                                    |      |      |      |      |
|------------------------------------|------|------|------|------|
| Priority Scheme                    | Free | Free | Stop | Stop |
| Flared Lane                        |      |      |      | No   |
| Storage Area [veh]                 | 0    | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           |      |      | No   | No   |
| Number of Storage Spaces in Median | 0    | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.08  | 0.01  | 0.00 | 0.00  | 0.01  | 0.03 |
| d_M, Delay for Movement [s/veh]       | 7.76 | 0.00 | 0.00 | 7.67 | 0.00 | 0.00 | 13.16 | 12.93 | 9.19 | 12.28 | 12.58 | 9.56 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.03 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.29  | 0.29  | 0.00 | 0.13  | 0.13  | 0.13 |
| 95th-Percentile Queue Length [ft/ln]  | 0.63 | 0.00 | 0.00 | 0.61 | 0.00 | 0.00 | 7.25  | 7.25  | 0.09 | 3.35  | 3.35  | 3.35 |
| d_A, Approach Delay [s/veh]           | 0.37 |      |      | 0.39 |      |      | 13.04 |       |      | 10.03 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | B     |       |      |
| d_I, Intersection Delay [s/veh]       | 2.04 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

**Intersection Level Of Service Report**  
**Intersection 1: Vaughan Lane / S 5th Street**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 10.2  |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | B     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.014 |

**Intersection Setup**

| Name                         | S 5th Street  |        | Vaughan Lane  |        | Vaughan Lane  |        |
|------------------------------|---|--------|---|--------|---|--------|
| Approach                     | Northbound  |        | Eastbound   |        | Westbound   |        |
| Lane Configuration           |  |        |  |        |  |        |
| Turning Movement             | Left  | Right  | Thru  | Right  | Left  | Thru   |
| Lane Width [ft]              | 12.00   | 12.00  | 12.00   | 12.00  | 12.00   | 12.00  |
| No. of Lanes in Entry Pocket | 0   | 0      | 0   | 0      | 0   | 0      |
| Entry Pocket Length [ft]     | 100.00  | 100.00 | 100.00  | 100.00 | 100.00  | 100.00 |
| No. of Lanes in Exit Pocket  | 0   | 0      | 0   | 0      | 0   | 0      |
| Exit Pocket Length [ft]      | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  | 0.00   |
| Speed [mph]                  | 25.00   |        | 40.00   |        | 40.00   |        |
| Grade [%]                    | 0.00  |        | 0.00  |        | 0.00  |        |
| Crosswalk                    | No  |        | No  |        | No  |        |

**Volumes**

| Name                                    | S 5th Street |        | Vaughan Lane |        | Vaughan Lane |        |
|---|--------------|--------|--------------|--------|--------------|--------|
| Base Volume Input [veh/h]               | 9            | 38     | 88           | 23     | 17           | 58     |
| Base Volume Adjustment Factor           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| Heavy Vehicles Percentage [%]           | 11.00        | 0.00   | 1.00         | 0.00   | 0.00         | 2.00   |
| Growth Factor                           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| In-Process Volume [veh/h]               | 0            | 0      | 0            | 0      | 0            | 0      |
| Site-Generated Trips [veh/h]            | 0            | 0      | 0            | 0      | 0            | 0      |
| Diverted Trips [veh/h]                  | 0            | 0      | 0            | 0      | 0            | 0      |
| Pass-by Trips [veh/h]                   | 0            | 0      | 0            | 0      | 0            | 0      |
| Existing Site Adjustment Volume [veh/h] | 0            | 0      | 0            | 0      | 0            | 0      |
| Other Volume [veh/h]                    | 0            | 0      | 0            | 0      | 0            | 0      |
| Total Hourly Volume [veh/h]             | 9            | 38     | 88           | 23     | 17           | 58     |
| Peak Hour Factor                        | 0.8600       | 0.8600 | 0.8600       | 0.8600 | 0.8600       | 0.8600 |
| Other Adjustment Factor                 | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 3            | 11     | 26           | 7      | 5            | 17     |
| Total Analysis Volume [veh/h]           | 10           | 44     | 102          | 27     | 20           | 67     |
| Pedestrian Volume [ped/h]               | 0            |        | 0            |        | 0            |        |

**Intersection Settings**

|                                    |      |      |      |
|------------------------------------|------|------|------|
| Priority Scheme                    | Stop | Free | Free |
| Flared Lane                        | No   |      |      |
| Storage Area [veh]                 | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           | No   |      |      |
| Number of Storage Spaces in Median | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |       |      |      |      |      |      |
|---------------------------------------|-------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.01  | 0.05 | 0.00 | 0.00 | 0.01 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 10.15 | 9.08 | 0.00 | 0.00 | 7.47 | 0.00 |
| Movement LOS                          | B     | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.19  | 0.19 | 0.00 | 0.00 | 0.03 | 0.03 |
| 95th-Percentile Queue Length [ft/ln]  | 4.80  | 4.80 | 0.00 | 0.00 | 0.84 | 0.84 |
| d_A, Approach Delay [s/veh]           | 9.28  |      | 0.00 |      | 1.72 |      |
| Approach LOS                          | A     |      | A    |      | A    |      |
| d_I, Intersection Delay [s/veh]       | 2.41  |      |      |      |      |      |
| Intersection LOS                      | B     |      |      |      |      |      |

**Intersection Level Of Service Report  
Intersection 2: Joy Street / Kingdom Drive**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 8.4   |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | A     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.005 |

**Intersection Setup**

| Name                         | Kingdom Drive |        | Joy Street |        | Joy Street |        |
|------------------------------|---------------|--------|------------|--------|------------|--------|
| Approach                     | Northbound    |        | Eastbound  |        | Westbound  |        |
| Lane Configuration           |               |        |            |        |            |        |
| Turning Movement             | Left          | Right  | Thru       | Right  | Left       | Thru   |
| Lane Width [ft]              | 12.00         | 12.00  | 12.00      | 12.00  | 12.00      | 12.00  |
| No. of Lanes in Entry Pocket | 0             | 0      | 0          | 0      | 0          | 0      |
| Entry Pocket Length [ft]     | 100.00        | 100.00 | 100.00     | 100.00 | 100.00     | 100.00 |
| No. of Lanes in Exit Pocket  | 0             | 0      | 0          | 0      | 0          | 0      |
| Exit Pocket Length [ft]      | 0.00          | 0.00   | 0.00       | 0.00   | 0.00       | 0.00   |
| Speed [mph]                  | 25.00         |        | 25.00      |        | 25.00      |        |
| Grade [%]                    | 0.00          |        | 0.00       |        | 0.00       |        |
| Crosswalk                    | Yes           |        | Yes        |        | Yes        |        |

**Volumes**

| Name                                    | Kingdom Drive |        | Joy Street |        | Joy Street |        |
|---|---------------|--------|------------|--------|------------|--------|
| Base Volume Input [veh/h]               | 0             | 3      | 6          | 3      | 12         | 8      |
| Base Volume Adjustment Factor           | 1.0000        | 1.0000 | 1.0000     | 1.0000 | 1.0000     | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00          | 0.00   | 0.00       | 0.00   | 0.00       | 0.00   |
| Growth Factor                           | 1.0000        | 1.0000 | 1.0000     | 1.0000 | 1.0000     | 1.0000 |
| In-Process Volume [veh/h]               | 0             | 0      | 0          | 0      | 0          | 0      |
| Site-Generated Trips [veh/h]            | 0             | 0      | 0          | 0      | 0          | 0      |
| Diverted Trips [veh/h]                  | 0             | 0      | 0          | 0      | 0          | 0      |
| Pass-by Trips [veh/h]                   | 0             | 0      | 0          | 0      | 0          | 0      |
| Existing Site Adjustment Volume [veh/h] | 0             | 0      | 0          | 0      | 0          | 0      |
| Other Volume [veh/h]                    | 0             | 0      | 0          | 0      | 0          | 1      |
| Total Hourly Volume [veh/h]             | 0             | 3      | 6          | 3      | 12         | 9      |
| Peak Hour Factor                        | 0.6200        | 0.6200 | 0.6200     | 0.6200 | 0.6200     | 0.6200 |
| Other Adjustment Factor                 | 1.0000        | 1.0000 | 1.0000     | 1.0000 | 1.0000     | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 0             | 1      | 2          | 1      | 5          | 4      |
| Total Analysis Volume [veh/h]           | 0             | 5      | 10         | 5      | 19         | 15     |
| Pedestrian Volume [ped/h]               | 2             |        | 0          |        | 0          |        |

**Intersection Settings**

|                                    |      |      |      |
|------------------------------------|------|------|------|
| Priority Scheme                    | Stop | Free | Free |
| Flared Lane                        | No   |      |      |
| Storage Area [veh]                 | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           | No   |      |      |
| Number of Storage Spaces in Median | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 8.89 | 8.38 | 0.00 | 0.00 | 7.26 | 0.00 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.01 | 0.01 | 0.00 | 0.00 | 0.03 | 0.03 |
| 95th-Percentile Queue Length [ft/ln]  | 0.35 | 0.35 | 0.00 | 0.00 | 0.80 | 0.80 |
| d_A, Approach Delay [s/veh]           | 8.38 |      | 0.00 |      | 4.06 |      |
| Approach LOS                          | A    |      | A    |      | A    |      |
| d_I, Intersection Delay [s/veh]       | 3.33 |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |

**Intersection Level Of Service Report  
Intersection 3: S Main Road / Joy Street**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 12.6  |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | B     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.002 |

**Intersection Setup**

| Name                         | S Main Road |        |        | S Main Road |        |        | Joy Street |        |       | Joy Street |        |        |
|------------------------------|-------------|--------|--------|-------------|--------|--------|------------|--------|-------|------------|--------|--------|
| Approach                     | Northbound  |        |        | Southbound  |        |        | Eastbound  |        |       | Westbound  |        |        |
| Lane Configuration           | ↵           |        |        | ↵           |        |        | ↵          |        |       | +          |        |        |
| Turning Movement             | Left        | Thru   | Right  | Left        | Thru   | Right  | Left       | Thru   | Right | Left       | Thru   | Right  |
| Lane Width [ft]              | 12.00       | 12.00  | 12.00  | 12.00       | 12.00  | 12.00  | 12.00      | 12.00  | 12.00 | 12.00      | 12.00  | 12.00  |
| No. of Lanes in Entry Pocket | 1           | 0      | 0      | 1           | 0      | 0      | 0          | 0      | 1     | 0          | 0      | 0      |
| Entry Pocket Length [ft]     | 100.00      | 100.00 | 100.00 | 100.00      | 100.00 | 100.00 | 100.00     | 100.00 | 60.00 | 100.00     | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket  | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0     | 0          | 0      | 0      |
| Exit Pocket Length [ft]      | 0.00        | 0.00   | 0.00   | 0.00        | 0.00   | 0.00   | 0.00       | 0.00   | 0.00  | 0.00       | 0.00   | 0.00   |
| Speed [mph]                  | 35.00       |        |        | 35.00       |        |        | 25.00      |        |       | 25.00      |        |        |
| Grade [%]                    | 0.00        |        |        | 0.00        |        |        | 0.00       |        |       | 0.00       |        |        |
| Crosswalk                    | Yes         |        |        | Yes         |        |        | Yes        |        |       | Yes        |        |        |

**Volumes**

| Name                                    | S Main Road |        |        | S Main Road |        |        | Joy Street |        |        | Joy Street |        |        |
|---|-------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| Base Volume Input [veh/h]               | 3           | 163    | 3      | 22          | 195    | 20     | 10         | 2      | 6      | 3          | 1      | 14     |
| Base Volume Adjustment Factor           | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 2.00        | 2.00   | 2.00   | 2.00        | 2.00   | 2.00   | 2.00       | 2.00   | 2.00   | 2.00       | 2.00   | 2.00   |
| Growth Factor                           | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| In-Process Volume [veh/h]               | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Site-Generated Trips [veh/h]            | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Diverted Trips [veh/h]                  | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Pass-by Trips [veh/h]                   | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Existing Site Adjustment Volume [veh/h] | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Other Volume [veh/h]                    | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Total Hourly Volume [veh/h]             | 3           | 163    | 3      | 22          | 195    | 20     | 10         | 2      | 6      | 3          | 1      | 14     |
| Peak Hour Factor                        | 0.9200      | 0.9200 | 0.9200 | 0.9200      | 0.9200 | 0.9200 | 0.9200     | 0.9200 | 0.9200 | 0.9200     | 0.9200 | 0.9200 |
| Other Adjustment Factor                 | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 1           | 44     | 1      | 6           | 53     | 5      | 3          | 1      | 2      | 1          | 0      | 4      |
| Total Analysis Volume [veh/h]           | 3           | 177    | 3      | 24          | 212    | 22     | 11         | 2      | 7      | 3          | 1      | 15     |
| Pedestrian Volume [ped/h]               | 1           |        |        | 0           |        |        | 0          |        |        | 2          |        |        |

**Intersection Settings**

|                                    |      |      |      |      |
|------------------------------------|------|------|------|------|
| Priority Scheme                    | Free | Free | Stop | Stop |
| Flared Lane                        |      |      |      | No   |
| Storage Area [veh]                 | 0    | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           |      |      | No   | No   |
| Number of Storage Spaces in Median | 0    | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.02  | 0.00  | 0.01 | 0.01  | 0.00  | 0.02 |
| d_M, Delay for Movement [s/veh]       | 7.71 | 0.00 | 0.00 | 7.63 | 0.00 | 0.00 | 12.56 | 12.58 | 9.46 | 12.45 | 12.60 | 9.31 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.01 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.08  | 0.08  | 0.03 | 0.08  | 0.08  | 0.08 |
| 95th-Percentile Queue Length [ft/ln]  | 0.17 | 0.00 | 0.00 | 1.32 | 0.00 | 0.00 | 2.05  | 2.05  | 0.65 | 1.97  | 1.97  | 1.97 |
| d_A, Approach Delay [s/veh]           | 0.13 |      |      | 0.71 |      |      | 11.48 |       |      | 9.98  |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | A     |       |      |
| d_I, Intersection Delay [s/veh]       | 1.30 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

Appendix D  
2028 Background Traffic Conditions  
Worksheets

**Intersection Level Of Service Report**  
**Intersection 1: Vaughan Lane / S 5th Street**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 15.2  |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | C     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.139 |

**Intersection Setup**

| Name                         | S 5th Street |        | Vaughan Lane |        | Vaughan Lane |        |
|------------------------------|--------------|--------|--------------|--------|--------------|--------|
| Approach                     | Northbound   |        | Eastbound    |        | Westbound    |        |
| Lane Configuration           |              |        |              |        |              |        |
| Turning Movement             | Left         | Right  | Thru         | Right  | Left         | Thru   |
| Lane Width [ft]              | 12.00        | 12.00  | 12.00        | 12.00  | 12.00        | 12.00  |
| No. of Lanes in Entry Pocket | 0            | 0      | 0            | 0      | 0            | 0      |
| Entry Pocket Length [ft]     | 100.00       | 100.00 | 100.00       | 100.00 | 100.00       | 100.00 |
| No. of Lanes in Exit Pocket  | 0            | 0      | 0            | 0      | 0            | 0      |
| Exit Pocket Length [ft]      | 0.00         | 0.00   | 0.00         | 0.00   | 0.00         | 0.00   |
| Speed [mph]                  | 25.00        |        | 40.00        |        | 40.00        |        |
| Grade [%]                    | 0.00         |        | 0.00         |        | 0.00         |        |
| Crosswalk                    | No           |        | No           |        | No           |        |

**Volumes**

| Name                                    | S 5th Street |        | Vaughan Lane |        | Vaughan Lane |        |
|---|--------------|--------|--------------|--------|--------------|--------|
| Base Volume Input [veh/h]               | 35           | 74     | 54           | 44     | 83           | 65     |
| Base Volume Adjustment Factor           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00         | 3.00   | 2.00         | 5.00   | 0.00         | 0.00   |
| Growth Factor                           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| In-Process Volume [veh/h]               | 0            | 0      | 0            | 0      | 0            | 0      |
| Site-Generated Trips [veh/h]            | 0            | 0      | 0            | 0      | 0            | 0      |
| Diverted Trips [veh/h]                  | 0            | 0      | 0            | 0      | 0            | 0      |
| Pass-by Trips [veh/h]                   | 0            | 0      | 0            | 0      | 0            | 0      |
| Existing Site Adjustment Volume [veh/h] | 0            | 0      | 0            | 0      | 0            | 0      |
| Other Volume [veh/h]                    | 0            | 0      | 0            | 0      | 0            | 0      |
| Total Hourly Volume [veh/h]             | 35           | 74     | 54           | 44     | 83           | 65     |
| Peak Hour Factor                        | 0.5600       | 0.5600 | 0.5600       | 0.5600 | 0.5600       | 0.5600 |
| Other Adjustment Factor                 | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 16           | 33     | 24           | 20     | 37           | 29     |
| Total Analysis Volume [veh/h]           | 62           | 132    | 96           | 79     | 148          | 116    |
| Pedestrian Volume [ped/h]               | 0            |        | 0            |        | 0            |        |

**Intersection Settings**

|                                    |      |      |      |
|------------------------------------|------|------|------|
| Priority Scheme                    | Stop | Free | Free |
| Flared Lane                        | No   |      |      |
| Storage Area [veh]                 | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           | No   |      |      |
| Number of Storage Spaces in Median | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |       |       |      |      |      |      |
|---------------------------------------|-------|-------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.14  | 0.14  | 0.00 | 0.00 | 0.10 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 15.17 | 11.03 | 0.00 | 0.00 | 7.73 | 0.00 |
| Movement LOS                          | C     | B     | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 1.17  | 1.17  | 0.00 | 0.00 | 0.27 | 0.27 |
| 95th-Percentile Queue Length [ft/ln]  | 29.23 | 29.23 | 0.00 | 0.00 | 6.71 | 6.71 |
| d_A, Approach Delay [s/veh]           | 12.36 |       | 0.00 |      | 4.33 |      |
| Approach LOS                          | B     |       | A    |      | A    |      |
| d_I, Intersection Delay [s/veh]       | 5.59  |       |      |      |      |      |
| Intersection LOS                      | C     |       |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Joy Street / Kingdom Drive**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 8.6   |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | A     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.022 |

**Intersection Setup**

| Name                         | Kingdom Drive |        | Joy Street |        | Joy Street |        |
|------------------------------|---------------|--------|------------|--------|------------|--------|
| Approach                     | Northbound    |        | Eastbound  |        | Westbound  |        |
| Lane Configuration           |               |        |            |        |            |        |
| Turning Movement             | Left          | Right  | Thru       | Right  | Left       | Thru   |
| Lane Width [ft]              | 12.00         | 12.00  | 12.00      | 12.00  | 12.00      | 12.00  |
| No. of Lanes in Entry Pocket | 0             | 0      | 0          | 0      | 0          | 0      |
| Entry Pocket Length [ft]     | 100.00        | 100.00 | 100.00     | 100.00 | 100.00     | 100.00 |
| No. of Lanes in Exit Pocket  | 0             | 0      | 0          | 0      | 0          | 0      |
| Exit Pocket Length [ft]      | 0.00          | 0.00   | 0.00       | 0.00   | 0.00       | 0.00   |
| Speed [mph]                  | 25.00         |        | 25.00      |        | 25.00      |        |
| Grade [%]                    | 0.00          |        | 0.00       |        | 0.00       |        |
| Crosswalk                    | Yes           |        | Yes        |        | Yes        |        |

**Volumes**

| Name                                    | Kingdom Drive |        | Joy Street |        | Joy Street |        |
|---|---------------|--------|------------|--------|------------|--------|
| Base Volume Input [veh/h]               | 0             | 11     | 20         | 1      | 2          | 17     |
| Base Volume Adjustment Factor           | 1.0000        | 1.0000 | 1.0000     | 1.0000 | 1.0000     | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00          | 0.00   | 0.00       | 0.00   | 0.00       | 6.00   |
| Growth Factor                           | 1.0000        | 1.0000 | 1.0000     | 1.0000 | 1.0000     | 1.0000 |
| In-Process Volume [veh/h]               | 0             | 0      | 0          | 0      | 0          | 0      |
| Site-Generated Trips [veh/h]            | 0             | 0      | 0          | 0      | 0          | 0      |
| Diverted Trips [veh/h]                  | 0             | 0      | 0          | 0      | 0          | 0      |
| Pass-by Trips [veh/h]                   | 0             | 0      | 0          | 0      | 0          | 0      |
| Existing Site Adjustment Volume [veh/h] | 0             | 0      | 0          | 0      | 0          | 0      |
| Other Volume [veh/h]                    | 0             | 0      | 0          | 0      | 0          | 0      |
| Total Hourly Volume [veh/h]             | 0             | 11     | 20         | 1      | 2          | 17     |
| Peak Hour Factor                        | 0.4700        | 0.4700 | 0.4700     | 0.4700 | 0.4700     | 0.4700 |
| Other Adjustment Factor                 | 1.0000        | 1.0000 | 1.0000     | 1.0000 | 1.0000     | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 0             | 6      | 11         | 1      | 1          | 9      |
| Total Analysis Volume [veh/h]           | 0             | 23     | 43         | 2      | 4          | 36     |
| Pedestrian Volume [ped/h]               | 0             |        | 0          |        | 0          |        |

**Intersection Settings**

|                                    |      |      |      |
|------------------------------------|------|------|------|
| Priority Scheme                    | Stop | Free | Free |
| Flared Lane                        | No   |      |      |
| Storage Area [veh]                 | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           | No   |      |      |
| Number of Storage Spaces in Median | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 9.01 | 8.57 | 0.00 | 0.00 | 7.29 | 0.00 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.07 | 0.07 | 0.00 | 0.00 | 0.01 | 0.01 |
| 95th-Percentile Queue Length [ft/ln]  | 1.71 | 1.71 | 0.00 | 0.00 | 0.17 | 0.17 |
| d_A, Approach Delay [s/veh]           | 8.57 |      | 0.00 |      | 0.73 |      |
| Approach LOS                          | A    |      | A    |      | A    |      |
| d_I, Intersection Delay [s/veh]       | 2.09 |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |

**Intersection Level Of Service Report  
Intersection 3: S Main Road / Joy Street**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 13.7  |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | B     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.085 |

**Intersection Setup**

| Name                         | S Main Road |        |        | S Main Road |        |        | Joy Street |        |       | Joy Street |        |        |
|------------------------------|-------------|--------|--------|-------------|--------|--------|------------|--------|-------|------------|--------|--------|
| Approach                     | Northbound  |        |        | Southbound  |        |        | Eastbound  |        |       | Westbound  |        |        |
| Lane Configuration           | ↵           |        |        | ↵           |        |        | ↵          |        |       | +          |        |        |
| Turning Movement             | Left        | Thru   | Right  | Left        | Thru   | Right  | Left       | Thru   | Right | Left       | Thru   | Right  |
| Lane Width [ft]              | 12.00       | 12.00  | 12.00  | 12.00       | 12.00  | 12.00  | 12.00      | 12.00  | 12.00 | 12.00      | 12.00  | 12.00  |
| No. of Lanes in Entry Pocket | 1           | 0      | 0      | 1           | 0      | 0      | 0          | 0      | 1     | 0          | 0      | 0      |
| Entry Pocket Length [ft]     | 100.00      | 100.00 | 100.00 | 100.00      | 100.00 | 100.00 | 100.00     | 100.00 | 60.00 | 100.00     | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket  | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0     | 0          | 0      | 0      |
| Exit Pocket Length [ft]      | 0.00        | 0.00   | 0.00   | 0.00        | 0.00   | 0.00   | 0.00       | 0.00   | 0.00  | 0.00       | 0.00   | 0.00   |
| Speed [mph]                  | 35.00       |        |        | 35.00       |        |        | 25.00      |        |       | 25.00      |        |        |
| Grade [%]                    | 0.00        |        |        | 0.00        |        |        | 0.00       |        |       | 0.00       |        |        |
| Crosswalk                    | Yes         |        |        | Yes         |        |        | Yes        |        |       | Yes        |        |        |

**Volumes**

| Name                                    | S Main Road |        |        | S Main Road |        |        | Joy Street |        |        | Joy Street |        |        |
|---|-------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| Base Volume Input [veh/h]               | 9           | 200    | 5      | 9           | 152    | 34     | 33         | 4      | 1      | 1          | 3      | 24     |
| Base Volume Adjustment Factor           | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 11.00       | 1.00   | 20.00  | 0.00        | 3.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   |
| Growth Factor                           | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| In-Process Volume [veh/h]               | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Site-Generated Trips [veh/h]            | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Diverted Trips [veh/h]                  | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Pass-by Trips [veh/h]                   | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Existing Site Adjustment Volume [veh/h] | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Other Volume [veh/h]                    | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Total Hourly Volume [veh/h]             | 9           | 200    | 5      | 9           | 152    | 34     | 33         | 4      | 1      | 1          | 3      | 24     |
| Peak Hour Factor                        | 0.8500      | 0.8500 | 0.8500 | 0.8500      | 0.8500 | 0.8500 | 0.8500     | 0.8500 | 0.8500 | 0.8500     | 0.8500 | 0.8500 |
| Other Adjustment Factor                 | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 3           | 59     | 1      | 3           | 45     | 10     | 10         | 1      | 0      | 0          | 1      | 7      |
| Total Analysis Volume [veh/h]           | 11          | 235    | 6      | 11          | 179    | 40     | 39         | 5      | 1      | 1          | 4      | 28     |
| Pedestrian Volume [ped/h]               | 0           |        |        | 0           |        |        | 1          |        |        | 0          |        |        |

**Intersection Settings**

|                                    |      |      |      |      |
|------------------------------------|------|------|------|------|
| Priority Scheme                    | Free | Free | Stop | Stop |
| Flared Lane                        |      |      |      | No   |
| Storage Area [veh]                 | 0    | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           |      |      | No   | No   |
| Number of Storage Spaces in Median | 0    | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.09  | 0.01  | 0.00 | 0.00  | 0.01  | 0.03 |
| d_M, Delay for Movement [s/veh]       | 7.80 | 0.00 | 0.00 | 7.71 | 0.00 | 0.00 | 13.71 | 13.39 | 9.26 | 12.70 | 12.96 | 9.70 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.03 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.32  | 0.32  | 0.00 | 0.14  | 0.14  | 0.14 |
| 95th-Percentile Queue Length [ft/ln]  | 0.64 | 0.00 | 0.00 | 0.62 | 0.00 | 0.00 | 7.90  | 7.90  | 0.09 | 3.56  | 3.56  | 3.56 |
| d_A, Approach Delay [s/veh]           | 0.34 |      |      | 0.37 |      |      | 13.57 |       |      | 10.19 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | B     |       |      |
| d_I, Intersection Delay [s/veh]       | 2.00 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

**Intersection Level Of Service Report**  
**Intersection 1: Vaughan Lane / S 5th Street**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 10.3  |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | B     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.018 |

**Intersection Setup**

| Name                         | S 5th Street  |        | Vaughan Lane  |        | Vaughan Lane  |        |
|------------------------------|---|--------|---|--------|---|--------|
| Approach                     | Northbound  |        | Eastbound   |        | Westbound   |        |
| Lane Configuration           |  |        |  |        |  |        |
| Turning Movement             | Left  | Right  | Thru  | Right  | Left  | Thru   |
| Lane Width [ft]              | 12.00   | 12.00  | 12.00   | 12.00  | 12.00   | 12.00  |
| No. of Lanes in Entry Pocket | 0   | 0      | 0   | 0      | 0   | 0      |
| Entry Pocket Length [ft]     | 100.00  | 100.00 | 100.00  | 100.00 | 100.00  | 100.00 |
| No. of Lanes in Exit Pocket  | 0   | 0      | 0   | 0      | 0   | 0      |
| Exit Pocket Length [ft]      | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  | 0.00   |
| Speed [mph]                  | 25.00   |        | 40.00   |        | 40.00   |        |
| Grade [%]                    | 0.00  |        | 0.00  |        | 0.00  |        |
| Crosswalk                    | No  |        | No  |        | No  |        |

**Volumes**

| Name                                    | S 5th Street |        | Vaughan Lane |        | Vaughan Lane |        |
|---|--------------|--------|--------------|--------|--------------|--------|
| Base Volume Input [veh/h]               | 11           | 40     | 94           | 27     | 18           | 61     |
| Base Volume Adjustment Factor           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| Heavy Vehicles Percentage [%]           | 11.00        | 0.00   | 1.00         | 0.00   | 0.00         | 2.00   |
| Growth Factor                           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| In-Process Volume [veh/h]               | 0            | 0      | 0            | 0      | 0            | 0      |
| Site-Generated Trips [veh/h]            | 0            | 0      | 0            | 0      | 0            | 0      |
| Diverted Trips [veh/h]                  | 0            | 0      | 0            | 0      | 0            | 0      |
| Pass-by Trips [veh/h]                   | 0            | 0      | 0            | 0      | 0            | 0      |
| Existing Site Adjustment Volume [veh/h] | 0            | 0      | 0            | 0      | 0            | 0      |
| Other Volume [veh/h]                    | 0            | 0      | 0            | 0      | 0            | 0      |
| Total Hourly Volume [veh/h]             | 11           | 40     | 94           | 27     | 18           | 61     |
| Peak Hour Factor                        | 0.8600       | 0.8600 | 0.8600       | 0.8600 | 0.8600       | 0.8600 |
| Other Adjustment Factor                 | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 3            | 12     | 27           | 8      | 5            | 18     |
| Total Analysis Volume [veh/h]           | 13           | 47     | 109          | 31     | 21           | 71     |
| Pedestrian Volume [ped/h]               | 0            |        | 0            |        | 0            |        |

**Intersection Settings**

|                                    |      |      |      |
|------------------------------------|------|------|------|
| Priority Scheme                    | Stop | Free | Free |
| Flared Lane                        | No   |      |      |
| Storage Area [veh]                 | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           | No   |      |      |
| Number of Storage Spaces in Median | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |       |      |      |      |      |      |
|---------------------------------------|-------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.02  | 0.05 | 0.00 | 0.00 | 0.01 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 10.30 | 9.17 | 0.00 | 0.00 | 7.50 | 0.00 |
| Movement LOS                          | B     | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.22  | 0.22 | 0.00 | 0.00 | 0.04 | 0.04 |
| 95th-Percentile Queue Length [ft/ln]  | 5.50  | 5.50 | 0.00 | 0.00 | 0.89 | 0.89 |
| d_A, Approach Delay [s/veh]           | 9.41  |      | 0.00 |      | 1.71 |      |
| Approach LOS                          | A     |      | A    |      | A    |      |
| d_I, Intersection Delay [s/veh]       | 2.47  |      |      |      |      |      |
| Intersection LOS                      | B     |      |      |      |      |      |

**Intersection Level Of Service Report  
Intersection 2: Joy Street / Kingdom Drive**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 8.4   |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | A     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.005 |

**Intersection Setup**

| Name                         | Kingdom Drive |        | Joy Street |        | Joy Street |        |
|------------------------------|---------------|--------|------------|--------|------------|--------|
| Approach                     | Northbound    |        | Eastbound  |        | Westbound  |        |
| Lane Configuration           |               |        |            |        |            |        |
| Turning Movement             | Left          | Right  | Thru       | Right  | Left       | Thru   |
| Lane Width [ft]              | 12.00         | 12.00  | 12.00      | 12.00  | 12.00      | 12.00  |
| No. of Lanes in Entry Pocket | 0             | 0      | 0          | 0      | 0          | 0      |
| Entry Pocket Length [ft]     | 100.00        | 100.00 | 100.00     | 100.00 | 100.00     | 100.00 |
| No. of Lanes in Exit Pocket  | 0             | 0      | 0          | 0      | 0          | 0      |
| Exit Pocket Length [ft]      | 0.00          | 0.00   | 0.00       | 0.00   | 0.00       | 0.00   |
| Speed [mph]                  | 25.00         |        | 25.00      |        | 25.00      |        |
| Grade [%]                    | 0.00          |        | 0.00       |        | 0.00       |        |
| Crosswalk                    | Yes           |        | Yes        |        | Yes        |        |

**Volumes**

| Name                                    | Kingdom Drive |        | Joy Street |        | Joy Street |        |
|---|---------------|--------|------------|--------|------------|--------|
| Base Volume Input [veh/h]               | 0             | 3      | 6          | 3      | 12         | 8      |
| Base Volume Adjustment Factor           | 1.0000        | 1.0000 | 1.0000     | 1.0000 | 1.0000     | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00          | 0.00   | 0.00       | 0.00   | 0.00       | 0.00   |
| Growth Factor                           | 1.0000        | 1.0000 | 1.0000     | 1.0000 | 1.0000     | 1.0000 |
| In-Process Volume [veh/h]               | 0             | 0      | 0          | 0      | 0          | 0      |
| Site-Generated Trips [veh/h]            | 0             | 0      | 0          | 0      | 0          | 0      |
| Diverted Trips [veh/h]                  | 0             | 0      | 0          | 0      | 0          | 0      |
| Pass-by Trips [veh/h]                   | 0             | 0      | 0          | 0      | 0          | 0      |
| Existing Site Adjustment Volume [veh/h] | 0             | 0      | 0          | 0      | 0          | 0      |
| Other Volume [veh/h]                    | 0             | 0      | 0          | 0      | 0          | 1      |
| Total Hourly Volume [veh/h]             | 0             | 3      | 6          | 3      | 12         | 9      |
| Peak Hour Factor                        | 0.6200        | 0.6200 | 0.6200     | 0.6200 | 0.6200     | 0.6200 |
| Other Adjustment Factor                 | 1.0000        | 1.0000 | 1.0000     | 1.0000 | 1.0000     | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 0             | 1      | 2          | 1      | 5          | 4      |
| Total Analysis Volume [veh/h]           | 0             | 5      | 10         | 5      | 19         | 15     |
| Pedestrian Volume [ped/h]               | 2             |        | 0          |        | 0          |        |

**Intersection Settings**

|                                    |      |      |      |
|------------------------------------|------|------|------|
| Priority Scheme                    | Stop | Free | Free |
| Flared Lane                        | No   |      |      |
| Storage Area [veh]                 | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           | No   |      |      |
| Number of Storage Spaces in Median | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 8.89 | 8.38 | 0.00 | 0.00 | 7.26 | 0.00 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.01 | 0.01 | 0.00 | 0.00 | 0.03 | 0.03 |
| 95th-Percentile Queue Length [ft/ln]  | 0.35 | 0.35 | 0.00 | 0.00 | 0.80 | 0.80 |
| d_A, Approach Delay [s/veh]           | 8.38 |      | 0.00 |      | 4.06 |      |
| Approach LOS                          | A    |      | A    |      | A    |      |
| d_I, Intersection Delay [s/veh]       | 3.33 |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |

**Intersection Level Of Service Report  
Intersection 3: S Main Road / Joy Street**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 13.0  |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | B     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.024 |

**Intersection Setup**

| Name                         | S Main Road |        |        | S Main Road |        |        | Joy Street |        |       | Joy Street |        |        |
|------------------------------|-------------|--------|--------|-------------|--------|--------|------------|--------|-------|------------|--------|--------|
| Approach                     | Northbound  |        |        | Southbound  |        |        | Eastbound  |        |       | Westbound  |        |        |
| Lane Configuration           | ↵           |        |        | ↵           |        |        | ↵          |        |       | +          |        |        |
| Turning Movement             | Left        | Thru   | Right  | Left        | Thru   | Right  | Left       | Thru   | Right | Left       | Thru   | Right  |
| Lane Width [ft]              | 12.00       | 12.00  | 12.00  | 12.00       | 12.00  | 12.00  | 12.00      | 12.00  | 12.00 | 12.00      | 12.00  | 12.00  |
| No. of Lanes in Entry Pocket | 1           | 0      | 0      | 1           | 0      | 0      | 0          | 0      | 1     | 0          | 0      | 0      |
| Entry Pocket Length [ft]     | 100.00      | 100.00 | 100.00 | 100.00      | 100.00 | 100.00 | 100.00     | 100.00 | 60.00 | 100.00     | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket  | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0     | 0          | 0      | 0      |
| Exit Pocket Length [ft]      | 0.00        | 0.00   | 0.00   | 0.00        | 0.00   | 0.00   | 0.00       | 0.00   | 0.00  | 0.00       | 0.00   | 0.00   |
| Speed [mph]                  | 35.00       |        |        | 35.00       |        |        | 25.00      |        |       | 25.00      |        |        |
| Grade [%]                    | 0.00        |        |        | 0.00        |        |        | 0.00       |        |       | 0.00       |        |        |
| Crosswalk                    | Yes         |        |        | Yes         |        |        | Yes        |        |       | Yes        |        |        |

**Volumes**

| Name                                    | S Main Road |        |        | S Main Road |        |        | Joy Street |        |        | Joy Street |        |        |
|---|-------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| Base Volume Input [veh/h]               | 3           | 177    | 3      | 23          | 213    | 21     | 10         | 2      | 6      | 3          | 1      | 15     |
| Base Volume Adjustment Factor           | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00        | 3.00   | 0.00   | 0.00        | 1.00   | 5.00   | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   |
| Growth Factor                           | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| In-Process Volume [veh/h]               | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Site-Generated Trips [veh/h]            | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Diverted Trips [veh/h]                  | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Pass-by Trips [veh/h]                   | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Existing Site Adjustment Volume [veh/h] | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Other Volume [veh/h]                    | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Total Hourly Volume [veh/h]             | 3           | 177    | 3      | 23          | 213    | 21     | 10         | 2      | 6      | 3          | 1      | 15     |
| Peak Hour Factor                        | 0.9200      | 0.9200 | 0.9200 | 0.9200      | 0.9200 | 0.9200 | 0.9200     | 0.9200 | 0.9200 | 0.9200     | 0.9200 | 0.9200 |
| Other Adjustment Factor                 | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 1           | 48     | 1      | 6           | 58     | 6      | 3          | 1      | 2      | 1          | 0      | 4      |
| Total Analysis Volume [veh/h]           | 3           | 192    | 3      | 25          | 232    | 23     | 11         | 2      | 7      | 3          | 1      | 16     |
| Pedestrian Volume [ped/h]               | 1           |        |        | 0           |        |        | 0          |        |        | 2          |        |        |

**Intersection Settings**

|                                    |      |      |      |      |
|------------------------------------|------|------|------|------|
| Priority Scheme                    | Free | Free | Stop | Stop |
| Flared Lane                        |      |      |      | No   |
| Storage Area [veh]                 | 0    | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           |      |      | No   | No   |
| Number of Storage Spaces in Median | 0    | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.02  | 0.00  | 0.01 | 0.01  | 0.00  | 0.02 |
| d_M, Delay for Movement [s/veh]       | 7.73 | 0.00 | 0.00 | 7.65 | 0.00 | 0.00 | 12.99 | 12.93 | 9.55 | 12.85 | 12.95 | 9.38 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.01 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.09  | 0.09  | 0.03 | 0.08  | 0.08  | 0.08 |
| 95th-Percentile Queue Length [ft/ln]  | 0.17 | 0.00 | 0.00 | 1.38 | 0.00 | 0.00 | 2.16  | 2.16  | 0.66 | 2.11  | 2.11  | 2.11 |
| d_A, Approach Delay [s/veh]           | 0.12 |      |      | 0.68 |      |      | 11.78 |       |      | 10.08 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | B     |       |      |
| d_I, Intersection Delay [s/veh]       | 1.26 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

Appendix E  
2028 Total Traffic Conditions Worksheets

**Intersection Level Of Service Report**  
**Intersection 1: Vaughan Lane / S 5th Street**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 15.6  |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | C     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.166 |

**Intersection Setup**

| Name                         | S 5th Street  |        | Vaughan Lane  |        | Vaughan Lane  |        |
|------------------------------|---|--------|---|--------|---|--------|
| Approach                     | Northbound  |        | Eastbound   |        | Westbound   |        |
| Lane Configuration           |  |        |  |        |  |        |
| Turning Movement             | Left  | Right  | Thru  | Right  | Left  | Thru   |
| Lane Width [ft]              | 12.00   | 12.00  | 12.00   | 12.00  | 12.00   | 12.00  |
| No. of Lanes in Entry Pocket | 0   | 0      | 0   | 0      | 0   | 0      |
| Entry Pocket Length [ft]     | 100.00  | 100.00 | 100.00  | 100.00 | 100.00  | 100.00 |
| No. of Lanes in Exit Pocket  | 0   | 0      | 0   | 0      | 0   | 0      |
| Exit Pocket Length [ft]      | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  | 0.00   |
| Speed [mph]                  | 25.00   |        | 40.00   |        | 40.00   |        |
| Grade [%]                    | 0.00  |        | 0.00  |        | 0.00  |        |
| Crosswalk                    | No  |        | No  |        | No  |        |

**Volumes**

| Name                                    | S 5th Street |        | Vaughan Lane |        | Vaughan Lane |        |
|---|--------------|--------|--------------|--------|--------------|--------|
| Base Volume Input [veh/h]               | 41           | 75     | 54           | 46     | 84           | 65     |
| Base Volume Adjustment Factor           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00         | 3.00   | 2.00         | 5.00   | 0.00         | 0.00   |
| Growth Factor                           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| In-Process Volume [veh/h]               | 0            | 0      | 0            | 0      | 0            | 0      |
| Site-Generated Trips [veh/h]            | 0            | 0      | 0            | 0      | 0            | 0      |
| Diverted Trips [veh/h]                  | 0            | 0      | 0            | 0      | 0            | 0      |
| Pass-by Trips [veh/h]                   | 0            | 0      | 0            | 0      | 0            | 0      |
| Existing Site Adjustment Volume [veh/h] | 0            | 0      | 0            | 0      | 0            | 0      |
| Other Volume [veh/h]                    | 0            | 0      | 0            | 0      | 0            | 0      |
| Total Hourly Volume [veh/h]             | 41           | 75     | 54           | 46     | 84           | 65     |
| Peak Hour Factor                        | 0.5600       | 0.5600 | 0.5600       | 0.5600 | 0.5600       | 0.5600 |
| Other Adjustment Factor                 | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 18           | 33     | 24           | 21     | 37           | 29     |
| Total Analysis Volume [veh/h]           | 73           | 134    | 96           | 82     | 150          | 116    |
| Pedestrian Volume [ped/h]               | 0            |        | 0            |        | 0            |        |

**Intersection Settings**

|                                    |      |      |      |
|------------------------------------|------|------|------|
| Priority Scheme                    | Stop | Free | Free |
| Flared Lane                        | No   |      |      |
| Storage Area [veh]                 | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           | No   |      |      |
| Number of Storage Spaces in Median | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |       |       |      |      |      |      |
|---------------------------------------|-------|-------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.17  | 0.15  | 0.00 | 0.00 | 0.11 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 15.62 | 11.42 | 0.00 | 0.00 | 7.73 | 0.00 |
| Movement LOS                          | C     | B     | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 1.34  | 1.34  | 0.00 | 0.00 | 0.27 | 0.27 |
| 95th-Percentile Queue Length [ft/ln]  | 33.38 | 33.38 | 0.00 | 0.00 | 6.81 | 6.81 |
| d_A, Approach Delay [s/veh]           | 12.90 |       | 0.00 |      | 4.36 |      |
| Approach LOS                          | B     |       | A    |      | A    |      |
| d_I, Intersection Delay [s/veh]       | 5.89  |       |      |      |      |      |
| Intersection LOS                      | C     |       |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Joy Street / Kingdom Drive-Site Access**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 9.5   |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | A     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.055 |

**Intersection Setup**

| Name                         | Kingdom Drive |        |        | Site Access |        |        | Joy Street |        |        | Joy Street |        |        |
|------------------------------|---------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| Approach                     | Northbound    |        |        | Southbound  |        |        | Eastbound  |        |        | Westbound  |        |        |
| Lane Configuration           | +             |        |        | +           |        |        | +          |        |        | +          |        |        |
| Turning Movement             | Left          | Thru   | Right  | Left        | Thru   | Right  | Left       | Thru   | Right  | Left       | Thru   | Right  |
| Lane Width [ft]              | 12.00         | 12.00  | 12.00  | 12.00       | 12.00  | 12.00  | 12.00      | 12.00  | 12.00  | 12.00      | 12.00  | 12.00  |
| No. of Lanes in Entry Pocket | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Entry Pocket Length [ft]     | 100.00        | 100.00 | 100.00 | 100.00      | 100.00 | 100.00 | 100.00     | 100.00 | 100.00 | 100.00     | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket  | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Exit Pocket Length [ft]      | 0.00          | 0.00   | 0.00   | 0.00        | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   |
| Speed [mph]                  | 25.00         |        |        | 30.00       |        |        | 25.00      |        |        | 25.00      |        |        |
| Grade [%]                    | 0.00          |        |        | 0.00        |        |        | 0.00       |        |        | 0.00       |        |        |
| Crosswalk                    | Yes           |        |        | Yes         |        |        | Yes        |        |        | Yes        |        |        |

**Volumes**

| Name                                    | Kingdom Drive |        |        | Site Access |        |        | Joy Street |        |        | Joy Street |        |        |
|---|---------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| Base Volume Input [veh/h]               | 0             | 0      | 11     | 22          | 0      | 0      | 0          | 20     | 1      | 2          | 17     | 8      |
| Base Volume Adjustment Factor           | 1.0000        | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00          | 0.00   | 0.00   | 2.00        | 2.00   | 2.00   | 2.00       | 0.00   | 0.00   | 0.00       | 6.00   | 2.00   |
| Growth Factor                           | 1.0000        | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| In-Process Volume [veh/h]               | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Site-Generated Trips [veh/h]            | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Diverted Trips [veh/h]                  | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Pass-by Trips [veh/h]                   | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Existing Site Adjustment Volume [veh/h] | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Other Volume [veh/h]                    | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Total Hourly Volume [veh/h]             | 0             | 0      | 11     | 22          | 0      | 0      | 0          | 20     | 1      | 2          | 17     | 8      |
| Peak Hour Factor                        | 0.4700        | 0.4700 | 0.4700 | 0.4700      | 0.4700 | 0.4700 | 0.4700     | 0.4700 | 0.4700 | 0.4700     | 0.4700 | 0.4700 |
| Other Adjustment Factor                 | 1.0000        | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 0             | 0      | 6      | 12          | 0      | 0      | 0          | 11     | 1      | 1          | 9      | 4      |
| Total Analysis Volume [veh/h]           | 0             | 0      | 23     | 47          | 0      | 0      | 0          | 43     | 2      | 4          | 36     | 17     |
| Pedestrian Volume [ped/h]               | 0             |        |        | 0           |        |        | 0          |        |        | 0          |        |        |

**Intersection Settings**

|                                    |      |      |      |      |
|------------------------------------|------|------|------|------|
| Priority Scheme                    | Stop | Stop | Free | Free |
| Flared Lane                        | No   | No   |      |      |
| Storage Area [veh]                 | 0    | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           | No   | No   |      |      |
| Number of Storage Spaces in Median | 0    | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.02 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 9.13 | 9.66 | 8.57 | 9.49 | 9.80 | 8.76 | 7.32 | 0.00 | 0.00 | 7.29 | 0.00 | 0.00 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.07 | 0.07 | 0.07 | 0.18 | 0.18 | 0.18 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 |
| 95th-Percentile Queue Length [ft/ln]  | 1.71 | 1.71 | 1.71 | 4.39 | 4.39 | 4.39 | 0.00 | 0.00 | 0.00 | 0.18 | 0.18 | 0.18 |
| d_A, Approach Delay [s/veh]           | 8.57 |      |      | 9.49 |      |      | 0.00 |      |      | 0.51 |      |      |
| Approach LOS                          | A    |      |      | A    |      |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 3.91 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |      |      |      |      |      |      |

**Intersection Level Of Service Report  
Intersection 3: S Main Road / Joy Street**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 14.2  |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | B     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.120 |

**Intersection Setup**

| Name                         | S Main Road |        |        | S Main Road |        |        | Joy Street |        |       | Joy Street |        |        |
|------------------------------|-------------|--------|--------|-------------|--------|--------|------------|--------|-------|------------|--------|--------|
| Approach                     | Northbound  |        |        | Southbound  |        |        | Eastbound  |        |       | Westbound  |        |        |
| Lane Configuration           |             |        |        |             |        |        |            |        |       |            |        |        |
| Turning Movement             | Left        | Thru   | Right  | Left        | Thru   | Right  | Left       | Thru   | Right | Left       | Thru   | Right  |
| Lane Width [ft]              | 12.00       | 12.00  | 12.00  | 12.00       | 12.00  | 12.00  | 12.00      | 12.00  | 12.00 | 12.00      | 12.00  | 12.00  |
| No. of Lanes in Entry Pocket | 1           | 0      | 0      | 1           | 0      | 0      | 0          | 0      | 1     | 0          | 0      | 0      |
| Entry Pocket Length [ft]     | 100.00      | 100.00 | 100.00 | 100.00      | 100.00 | 100.00 | 100.00     | 100.00 | 60.00 | 100.00     | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket  | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0     | 0          | 0      | 0      |
| Exit Pocket Length [ft]      | 0.00        | 0.00   | 0.00   | 0.00        | 0.00   | 0.00   | 0.00       | 0.00   | 0.00  | 0.00       | 0.00   | 0.00   |
| Speed [mph]                  | 35.00       |        |        | 35.00       |        |        | 25.00      |        |       | 25.00      |        |        |
| Grade [%]                    | 0.00        |        |        | 0.00        |        |        | 0.00       |        |       | 0.00       |        |        |
| Crosswalk                    | Yes         |        |        | Yes         |        |        | Yes        |        |       | Yes        |        |        |

**Volumes**

| Name                                    | S Main Road |        |        | S Main Road |        |        | Joy Street |        |        | Joy Street |        |        |
|---|-------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| Base Volume Input [veh/h]               | 12          | 200    | 5      | 9           | 152    | 39     | 46         | 4      | 10     | 1          | 3      | 24     |
| Base Volume Adjustment Factor           | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 11.00       | 1.00   | 20.00  | 0.00        | 3.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   |
| Growth Factor                           | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| In-Process Volume [veh/h]               | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Site-Generated Trips [veh/h]            | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Diverted Trips [veh/h]                  | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Pass-by Trips [veh/h]                   | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Existing Site Adjustment Volume [veh/h] | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Other Volume [veh/h]                    | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Total Hourly Volume [veh/h]             | 12          | 200    | 5      | 9           | 152    | 39     | 46         | 4      | 10     | 1          | 3      | 24     |
| Peak Hour Factor                        | 0.8500      | 0.8500 | 0.8500 | 0.8500      | 0.8500 | 0.8500 | 0.8500     | 0.8500 | 0.8500 | 0.8500     | 0.8500 | 0.8500 |
| Other Adjustment Factor                 | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 4           | 59     | 1      | 3           | 45     | 11     | 14         | 1      | 3      | 0          | 1      | 7      |
| Total Analysis Volume [veh/h]           | 14          | 235    | 6      | 11          | 179    | 46     | 54         | 5      | 12     | 1          | 4      | 28     |
| Pedestrian Volume [ped/h]               | 0           |        |        | 0           |        |        | 1          |        |        | 0          |        |        |

**Intersection Settings**

|                                    |      |      |      |      |
|------------------------------------|------|------|------|------|
| Priority Scheme                    | Free | Free | Stop | Stop |
| Flared Lane                        |      |      |      | No   |
| Storage Area [veh]                 | 0    | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           |      |      | No   | No   |
| Number of Storage Spaces in Median | 0    | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.12  | 0.01  | 0.01 | 0.00  | 0.01  | 0.03 |
| d_M, Delay for Movement [s/veh]       | 7.82 | 0.00 | 0.00 | 7.71 | 0.00 | 0.00 | 14.20 | 13.86 | 9.34 | 12.99 | 13.10 | 9.70 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.03 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.45  | 0.45  | 0.04 | 0.14  | 0.14  | 0.14 |
| 95th-Percentile Queue Length [ft/ln]  | 0.82 | 0.00 | 0.00 | 0.62 | 0.00 | 0.00 | 11.18 | 11.18 | 1.08 | 3.58  | 3.58  | 3.58 |
| d_A, Approach Delay [s/veh]           | 0.43 |      |      | 0.36 |      |      | 13.36 |       |      | 10.22 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | B     |       |      |
| d_I, Intersection Delay [s/veh]       | 2.49 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

**Intersection Level Of Service Report  
Intersection 4: S 5th Street / Site Access**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 9.4   |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | A     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.016 |

**Intersection Setup**

| Name                         | S 5th Street |        | S 5th Street |        | Site Access |        |
|------------------------------|--------------|--------|--------------|--------|-------------|--------|
| Approach                     | Northbound   |        | Southbound   |        | Westbound   |        |
| Lane Configuration           |              |        |              |        |             |        |
| Turning Movement             | Thru         | Right  | Left         | Thru   | Left        | Right  |
| Lane Width [ft]              | 12.00        | 12.00  | 12.00        | 12.00  | 12.00       | 12.00  |
| No. of Lanes in Entry Pocket | 0            | 0      | 0            | 0      | 0           | 0      |
| Entry Pocket Length [ft]     | 100.00       | 100.00 | 100.00       | 100.00 | 100.00      | 100.00 |
| No. of Lanes in Exit Pocket  | 0            | 0      | 0            | 0      | 0           | 0      |
| Exit Pocket Length [ft]      | 0.00         | 0.00   | 0.00         | 0.00   | 0.00        | 0.00   |
| Speed [mph]                  | 25.00        |        | 25.00        |        | 25.00       |        |
| Grade [%]                    | 0.00         |        | 0.00         |        | 0.00        |        |
| Crosswalk                    | No           |        | No           |        | Yes         |        |

**Volumes**

| Name                                    | S 5th Street |        | S 5th Street |        | Site Access |        |
|---|--------------|--------|--------------|--------|-------------|--------|
| Base Volume Input [veh/h]               | 109          | 0      | 3            | 127    | 0           | 7      |
| Base Volume Adjustment Factor           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000      | 1.0000 |
| Heavy Vehicles Percentage [%]           | 2.00         | 2.00   | 2.00         | 2.00   | 2.00        | 2.00   |
| Growth Factor                           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000      | 1.0000 |
| In-Process Volume [veh/h]               | 0            | 0      | 0            | 0      | 0           | 0      |
| Site-Generated Trips [veh/h]            | 0            | 0      | 0            | 0      | 0           | 0      |
| Diverted Trips [veh/h]                  | 0            | 0      | 0            | 0      | 0           | 0      |
| Pass-by Trips [veh/h]                   | 0            | 0      | 0            | 0      | 0           | 0      |
| Existing Site Adjustment Volume [veh/h] | 0            | 0      | 0            | 0      | 0           | 0      |
| Other Volume [veh/h]                    | 0            | 0      | 0            | 0      | 0           | 0      |
| Total Hourly Volume [veh/h]             | 109          | 0      | 3            | 127    | 0           | 7      |
| Peak Hour Factor                        | 0.5200       | 0.5200 | 0.5200       | 0.5200 | 0.5200      | 0.5200 |
| Other Adjustment Factor                 | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000      | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 52           | 0      | 1            | 61     | 0           | 3      |
| Total Analysis Volume [veh/h]           | 210          | 0      | 6            | 244    | 0           | 13     |
| Pedestrian Volume [ped/h]               | 0            |        | 0            |        | 0           |        |

**Intersection Settings**

|                                    |      |      |      |
|------------------------------------|------|------|------|
| Priority Scheme                    | Free | Free | Stop |
| Flared Lane                        |      |      | No   |
| Storage Area [veh]                 | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           |      |      | No   |
| Number of Storage Spaces in Median | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |       |      |
|---------------------------------------|------|------|------|------|-------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.02 |
| d_M, Delay for Movement [s/veh]       | 0.00 | 0.00 | 7.65 | 0.00 | 11.59 | 9.41 |
| Movement LOS                          | A    | A    | A    | A    | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.00 | 0.00 | 0.01 | 0.01 | 0.05  | 0.05 |
| 95th-Percentile Queue Length [ft/ln]  | 0.00 | 0.00 | 0.25 | 0.25 | 1.19  | 1.19 |
| d_A, Approach Delay [s/veh]           | 0.00 |      | 0.18 |      | 9.41  |      |
| Approach LOS                          | A    |      | A    |      | A     |      |
| d_I, Intersection Delay [s/veh]       | 0.36 |      |      |      |       |      |
| Intersection LOS                      | A    |      |      |      |       |      |

**Intersection Level Of Service Report**  
**Intersection 1: Vaughan Lane / S 5th Street**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 10.4  |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | B     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.024 |

**Intersection Setup**

| Name                         | S 5th Street |        | Vaughan Lane |        | Vaughan Lane |        |
|------------------------------|--------------|--------|--------------|--------|--------------|--------|
| Approach                     | Northbound   |        | Eastbound    |        | Westbound    |        |
| Lane Configuration           |              |        |              |        |              |        |
| Turning Movement             | Left         | Right  | Thru         | Right  | Left         | Thru   |
| Lane Width [ft]              | 12.00        | 12.00  | 12.00        | 12.00  | 12.00        | 12.00  |
| No. of Lanes in Entry Pocket | 0            | 0      | 0            | 0      | 0            | 0      |
| Entry Pocket Length [ft]     | 100.00       | 100.00 | 100.00       | 100.00 | 100.00       | 100.00 |
| No. of Lanes in Exit Pocket  | 0            | 0      | 0            | 0      | 0            | 0      |
| Exit Pocket Length [ft]      | 0.00         | 0.00   | 0.00         | 0.00   | 0.00         | 0.00   |
| Speed [mph]                  | 25.00        |        | 40.00        |        | 40.00        |        |
| Grade [%]                    | 0.00         |        | 0.00         |        | 0.00         |        |
| Crosswalk                    | No           |        | No           |        | No           |        |

**Volumes**

| Name                                    | S 5th Street |        | Vaughan Lane |        | Vaughan Lane |        |
|---|--------------|--------|--------------|--------|--------------|--------|
| Base Volume Input [veh/h]               | 15           | 41     | 94           | 34     | 20           | 61     |
| Base Volume Adjustment Factor           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| Heavy Vehicles Percentage [%]           | 11.00        | 0.00   | 1.00         | 0.00   | 0.00         | 2.00   |
| Growth Factor                           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| In-Process Volume [veh/h]               | 0            | 0      | 0            | 0      | 0            | 0      |
| Site-Generated Trips [veh/h]            | 0            | 0      | 0            | 0      | 0            | 0      |
| Diverted Trips [veh/h]                  | 0            | 0      | 0            | 0      | 0            | 0      |
| Pass-by Trips [veh/h]                   | 0            | 0      | 0            | 0      | 0            | 0      |
| Existing Site Adjustment Volume [veh/h] | 0            | 0      | 0            | 0      | 0            | 0      |
| Other Volume [veh/h]                    | 0            | 0      | 0            | 0      | 0            | 0      |
| Total Hourly Volume [veh/h]             | 15           | 41     | 94           | 34     | 20           | 61     |
| Peak Hour Factor                        | 0.8600       | 0.8600 | 0.8600       | 0.8600 | 0.8600       | 0.8600 |
| Other Adjustment Factor                 | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000       | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 4            | 12     | 27           | 10     | 6            | 18     |
| Total Analysis Volume [veh/h]           | 17           | 48     | 109          | 40     | 23           | 71     |
| Pedestrian Volume [ped/h]               | 0            |        | 0            |        | 0            |        |

**Intersection Settings**

|                                    |      |      |      |
|------------------------------------|------|------|------|
| Priority Scheme                    | Stop | Free | Free |
| Flared Lane                        | No   |      |      |
| Storage Area [veh]                 | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           | No   |      |      |
| Number of Storage Spaces in Median | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |       |      |      |      |      |      |
|---------------------------------------|-------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.02  | 0.05 | 0.00 | 0.00 | 0.02 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 10.41 | 9.23 | 0.00 | 0.00 | 7.52 | 0.00 |
| Movement LOS                          | B     | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.25  | 0.25 | 0.00 | 0.00 | 0.04 | 0.04 |
| 95th-Percentile Queue Length [ft/ln]  | 6.13  | 6.13 | 0.00 | 0.00 | 0.97 | 0.97 |
| d_A, Approach Delay [s/veh]           | 9.54  |      | 0.00 |      | 1.84 |      |
| Approach LOS                          | A     |      | A    |      | A    |      |
| d_I, Intersection Delay [s/veh]       | 2.57  |      |      |      |      |      |
| Intersection LOS                      | B     |      |      |      |      |      |

**Intersection Level Of Service Report**  
**Intersection 2: Joy Street / Kingdom Drive-Site Access**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 9.2   |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | A     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.027 |

**Intersection Setup**

| Name                         | Kingdom Drive |        |        | Site Access |        |        | Joy Street |        |        | Joy Street |        |        |
|------------------------------|---------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| Approach                     | Northbound    |        |        | Southbound  |        |        | Eastbound  |        |        | Westbound  |        |        |
| Lane Configuration           | +             |        |        | +           |        |        | +          |        |        | +          |        |        |
| Turning Movement             | Left          | Thru   | Right  | Left        | Thru   | Right  | Left       | Thru   | Right  | Left       | Thru   | Right  |
| Lane Width [ft]              | 12.00         | 12.00  | 12.00  | 12.00       | 12.00  | 12.00  | 12.00      | 12.00  | 12.00  | 12.00      | 12.00  | 12.00  |
| No. of Lanes in Entry Pocket | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Entry Pocket Length [ft]     | 100.00        | 100.00 | 100.00 | 100.00      | 100.00 | 100.00 | 100.00     | 100.00 | 100.00 | 100.00     | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket  | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Exit Pocket Length [ft]      | 0.00          | 0.00   | 0.00   | 0.00        | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   |
| Speed [mph]                  | 25.00         |        |        | 30.00       |        |        | 25.00      |        |        | 25.00      |        |        |
| Grade [%]                    | 0.00          |        |        | 0.00        |        |        | 0.00       |        |        | 0.00       |        |        |
| Crosswalk                    | Yes           |        |        | Yes         |        |        | Yes        |        |        | Yes        |        |        |

**Volumes**

| Name                                    | Kingdom Drive |        |        | Site Access |        |        | Joy Street |        |        | Joy Street |        |        |
|---|---------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| Base Volume Input [veh/h]               | 0             | 0      | 3      | 15          | 0      | 0      | 0          | 6      | 3      | 12         | 8      | 24     |
| Base Volume Adjustment Factor           | 1.0000        | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00          | 0.00   | 0.00   | 2.00        | 2.00   | 2.00   | 2.00       | 0.00   | 0.00   | 0.00       | 0.00   | 2.00   |
| Growth Factor                           | 1.0000        | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| In-Process Volume [veh/h]               | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Site-Generated Trips [veh/h]            | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Diverted Trips [veh/h]                  | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Pass-by Trips [veh/h]                   | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Existing Site Adjustment Volume [veh/h] | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Other Volume [veh/h]                    | 0             | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 1      | 0      |
| Total Hourly Volume [veh/h]             | 0             | 0      | 3      | 15          | 0      | 0      | 0          | 6      | 3      | 12         | 9      | 24     |
| Peak Hour Factor                        | 0.6200        | 0.6200 | 0.6200 | 0.6200      | 0.6200 | 0.6200 | 0.6200     | 0.6200 | 0.6200 | 0.6200     | 0.6200 | 0.6200 |
| Other Adjustment Factor                 | 1.0000        | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 0             | 0      | 1      | 6           | 0      | 0      | 0          | 2      | 1      | 5          | 4      | 10     |
| Total Analysis Volume [veh/h]           | 0             | 0      | 5      | 24          | 0      | 0      | 0          | 10     | 5      | 19         | 15     | 39     |
| Pedestrian Volume [ped/h]               | 2             |        |        | 0           |        |        | 0          |        |        | 0          |        |        |

**Intersection Settings**

|                                    |      |      |      |      |
|------------------------------------|------|------|------|------|
| Priority Scheme                    | Stop | Stop | Free | Free |
| Flared Lane                        | No   | No   |      |      |
| Storage Area [veh]                 | 0    | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           | No   | No   |      |      |
| Number of Storage Spaces in Median | 0    | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| d_M, Delay for Movement [s/veh]       | 9.06 | 9.65 | 8.38 | 9.19 | 9.67 | 8.58 | 7.32 | 0.00 | 0.00 | 7.26 | 0.00 | 0.00 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.01 | 0.01 | 0.01 | 0.08 | 0.08 | 0.08 | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 | 0.04 |
| 95th-Percentile Queue Length [ft/ln]  | 0.35 | 0.35 | 0.35 | 2.09 | 2.09 | 2.09 | 0.00 | 0.00 | 0.00 | 0.92 | 0.92 | 0.92 |
| d_A, Approach Delay [s/veh]           | 8.38 |      |      | 9.19 |      |      | 0.00 |      |      | 1.89 |      |      |
| Approach LOS                          | A    |      |      | A    |      |      | A    |      |      | A    |      |      |
| d_I, Intersection Delay [s/veh]       | 3.42 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |      |      |      |      |      |      |

**Intersection Level Of Service Report  
Intersection 3: S Main Road / Joy Street**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 13.6  |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | B     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.048 |

**Intersection Setup**

| Name                         | S Main Road |        |        | S Main Road |        |        | Joy Street |        |       | Joy Street |        |        |
|------------------------------|-------------|--------|--------|-------------|--------|--------|------------|--------|-------|------------|--------|--------|
| Approach                     | Northbound  |        |        | Southbound  |        |        | Eastbound  |        |       | Westbound  |        |        |
| Lane Configuration           | ↵           |        |        | ↵           |        |        | ↵          |        |       | +          |        |        |
| Turning Movement             | Left        | Thru   | Right  | Left        | Thru   | Right  | Left       | Thru   | Right | Left       | Thru   | Right  |
| Lane Width [ft]              | 12.00       | 12.00  | 12.00  | 12.00       | 12.00  | 12.00  | 12.00      | 12.00  | 12.00 | 12.00      | 12.00  | 12.00  |
| No. of Lanes in Entry Pocket | 1           | 0      | 0      | 1           | 0      | 0      | 0          | 0      | 1     | 0          | 0      | 0      |
| Entry Pocket Length [ft]     | 100.00      | 100.00 | 100.00 | 100.00      | 100.00 | 100.00 | 100.00     | 100.00 | 60.00 | 100.00     | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket  | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0     | 0          | 0      | 0      |
| Exit Pocket Length [ft]      | 0.00        | 0.00   | 0.00   | 0.00        | 0.00   | 0.00   | 0.00       | 0.00   | 0.00  | 0.00       | 0.00   | 0.00   |
| Speed [mph]                  | 35.00       |        |        | 35.00       |        |        | 25.00      |        |       | 25.00      |        |        |
| Grade [%]                    | 0.00        |        |        | 0.00        |        |        | 0.00       |        |       | 0.00       |        |        |
| Crosswalk                    | Yes         |        |        | Yes         |        |        | Yes        |        |       | Yes        |        |        |

**Volumes**

| Name                                    | S Main Road |        |        | S Main Road |        |        | Joy Street |        |        | Joy Street |        |        |
|---|-------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|--------|--------|
| Base Volume Input [veh/h]               | 13          | 177    | 3      | 23          | 213    | 35     | 19         | 2      | 12     | 3          | 1      | 15     |
| Base Volume Adjustment Factor           | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [%]           | 0.00        | 3.00   | 0.00   | 0.00        | 1.00   | 5.00   | 0.00       | 0.00   | 0.00   | 0.00       | 0.00   | 0.00   |
| Growth Factor                           | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| In-Process Volume [veh/h]               | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Site-Generated Trips [veh/h]            | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Diverted Trips [veh/h]                  | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Pass-by Trips [veh/h]                   | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Existing Site Adjustment Volume [veh/h] | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Other Volume [veh/h]                    | 0           | 0      | 0      | 0           | 0      | 0      | 0          | 0      | 0      | 0          | 0      | 0      |
| Total Hourly Volume [veh/h]             | 13          | 177    | 3      | 23          | 213    | 35     | 19         | 2      | 12     | 3          | 1      | 15     |
| Peak Hour Factor                        | 0.9200      | 0.9200 | 0.9200 | 0.9200      | 0.9200 | 0.9200 | 0.9200     | 0.9200 | 0.9200 | 0.9200     | 0.9200 | 0.9200 |
| Other Adjustment Factor                 | 1.0000      | 1.0000 | 1.0000 | 1.0000      | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 | 1.0000     | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 4           | 48     | 1      | 6           | 58     | 10     | 5          | 1      | 3      | 1          | 0      | 4      |
| Total Analysis Volume [veh/h]           | 14          | 192    | 3      | 25          | 232    | 38     | 21         | 2      | 13     | 3          | 1      | 16     |
| Pedestrian Volume [ped/h]               | 1           |        |        | 0           |        |        | 0          |        |        | 2          |        |        |

**Intersection Settings**

|                                    |      |      |      |      |
|------------------------------------|------|------|------|------|
| Priority Scheme                    | Free | Free | Stop | Stop |
| Flared Lane                        |      |      |      | No   |
| Storage Area [veh]                 | 0    | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           |      |      | No   | No   |
| Number of Storage Spaces in Median | 0    | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |       |       |      |       |       |      |
|---------------------------------------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|
| V/C, Movement V/C Ratio               | 0.01 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.05  | 0.00  | 0.02 | 0.01  | 0.00  | 0.02 |
| d_M, Delay for Movement [s/veh]       | 7.79 | 0.00 | 0.00 | 7.65 | 0.00 | 0.00 | 13.64 | 13.53 | 9.63 | 13.38 | 13.41 | 9.38 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    | B     | B     | A    | B     | B     | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.03 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.16  | 0.16  | 0.05 | 0.09  | 0.09  | 0.09 |
| 95th-Percentile Queue Length [ft/ln]  | 0.81 | 0.00 | 0.00 | 1.38 | 0.00 | 0.00 | 4.12  | 4.12  | 1.25 | 2.16  | 2.16  | 2.16 |
| d_A, Approach Delay [s/veh]           | 0.52 |      |      | 0.65 |      |      | 12.19 |       |      | 10.18 |       |      |
| Approach LOS                          | A    |      |      | A    |      |      | B     |       |      | B     |       |      |
| d_I, Intersection Delay [s/veh]       | 1.68 |      |      |      |      |      |       |       |      |       |       |      |
| Intersection LOS                      | B    |      |      |      |      |      |       |       |      |       |       |      |

**Intersection Level Of Service Report  
Intersection 4: S 5th Street / Site Access**

|                  |                 |                           |       |
|------------------|-----------------|---------------------------|-------|
| Control Type:    | Two-way stop    | Delay (sec / veh):        | 8.6   |
| Analysis Method: | HCM 7th Edition | Level Of Service:         | A     |
| Analysis Period: | 15 minutes      | Volume to Capacity (v/c): | 0.007 |

**Intersection Setup**

| Name                         | S 5th Street |        | S 5th Street |        | Site Access |        |
|------------------------------|--------------|--------|--------------|--------|-------------|--------|
| Approach                     | Northbound   |        | Southbound   |        | Westbound   |        |
| Lane Configuration           |              |        |              |        |             |        |
| Turning Movement             | Thru         | Right  | Left         | Thru   | Left        | Right  |
| Lane Width [ft]              | 12.00        | 12.00  | 12.00        | 12.00  | 12.00       | 12.00  |
| No. of Lanes in Entry Pocket | 0            | 0      | 0            | 0      | 0           | 0      |
| Entry Pocket Length [ft]     | 100.00       | 100.00 | 100.00       | 100.00 | 100.00      | 100.00 |
| No. of Lanes in Exit Pocket  | 0            | 0      | 0            | 0      | 0           | 0      |
| Exit Pocket Length [ft]      | 0.00         | 0.00   | 0.00         | 0.00   | 0.00        | 0.00   |
| Speed [mph]                  | 25.00        |        | 25.00        |        | 25.00       |        |
| Grade [%]                    | 0.00         |        | 0.00         |        | 0.00        |        |
| Crosswalk                    | No           |        | No           |        | Yes         |        |

**Volumes**

| Name                                    | S 5th Street |        | S 5th Street |        | Site Access |        |
|---|--------------|--------|--------------|--------|-------------|--------|
| Base Volume Input [veh/h]               | 51           | 0      | 9            | 45     | 0           | 5      |
| Base Volume Adjustment Factor           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000      | 1.0000 |
| Heavy Vehicles Percentage [%]           | 2.00         | 2.00   | 2.00         | 2.00   | 2.00        | 2.00   |
| Growth Factor                           | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000      | 1.0000 |
| In-Process Volume [veh/h]               | 0            | 0      | 0            | 0      | 0           | 0      |
| Site-Generated Trips [veh/h]            | 0            | 0      | 0            | 0      | 0           | 0      |
| Diverted Trips [veh/h]                  | 0            | 0      | 0            | 0      | 0           | 0      |
| Pass-by Trips [veh/h]                   | 0            | 0      | 0            | 0      | 0           | 0      |
| Existing Site Adjustment Volume [veh/h] | 0            | 0      | 0            | 0      | 0           | 0      |
| Other Volume [veh/h]                    | 0            | 0      | 0            | 0      | 0           | 0      |
| Total Hourly Volume [veh/h]             | 51           | 0      | 9            | 45     | 0           | 5      |
| Peak Hour Factor                        | 0.7400       | 0.7400 | 0.7400       | 0.7400 | 0.7400      | 0.7400 |
| Other Adjustment Factor                 | 1.0000       | 1.0000 | 1.0000       | 1.0000 | 1.0000      | 1.0000 |
| Total 15-Minute Volume [veh/h]          | 17           | 0      | 3            | 15     | 0           | 2      |
| Total Analysis Volume [veh/h]           | 69           | 0      | 12           | 61     | 0           | 7      |
| Pedestrian Volume [ped/h]               | 0            |        | 0            |        | 0           |        |

**Intersection Settings**

|                                    |      |      |      |
|------------------------------------|------|------|------|
| Priority Scheme                    | Free | Free | Stop |
| Flared Lane                        |      |      | No   |
| Storage Area [veh]                 | 0    | 0    | 0    |
| Two-Stage Gap Acceptance           |      |      | No   |
| Number of Storage Spaces in Median | 0    | 0    | 0    |

**Movement, Approach, & Intersection Results**

|                                       |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|
| V/C, Movement V/C Ratio               | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 |
| d_M, Delay for Movement [s/veh]       | 0.00 | 0.00 | 7.36 | 0.00 | 9.36 | 8.65 |
| Movement LOS                          | A    | A    | A    | A    | A    | A    |
| 95th-Percentile Queue Length [veh/ln] | 0.00 | 0.00 | 0.02 | 0.02 | 0.02 | 0.02 |
| 95th-Percentile Queue Length [ft/ln]  | 0.00 | 0.00 | 0.50 | 0.50 | 0.53 | 0.53 |
| d_A, Approach Delay [s/veh]           | 0.00 |      | 1.21 |      | 8.65 |      |
| Approach LOS                          | A    |      | A    |      | A    |      |
| d_I, Intersection Delay [s/veh]       | 1.00 |      |      |      |      |      |
| Intersection LOS                      | A    |      |      |      |      |      |





# NOTICE OF PUBLIC HEARING

## LEBANON PLANNING COMMISSION

**NOTICE IS HEREBY GIVEN** that a public hearing will be held before the Lebanon Planning Commission on **March 18, 2026, at 6:00 p.m.** in the Library Community Room located at 55 Academy Street, to afford the public an opportunity to be heard and give testimony concerning the following matter:

|                               |  |
|-------------------------------|--|
| <b>Planning Case No.:</b>     | S-26-02, VAR-26-01   |
| <b>Applicant:</b>             | Family Tree Real Estate  |
| <b>Location:</b>              | S 5 <sup>th</sup> Street                                       |
| <b>Map &amp; Tax Lot No.:</b> | 12S02W22D 01001  |
| <b>Request:</b>               | Subdivision and Class III Variance                             |
| <b>Decision Criteria:</b>     | Lebanon Development Code Chapters: 16.05, 16.20, 16.22 & 16.29 |

**Request:** The applicant proposes subdividing an existing 6.39-acre parcel into 52 single-small residential lots. In addition, the applicant is requesting a Class III Variance from the 25-foot maximum building height requirement to permit buildings up to 33 feet in height.

**Providing Comments:** The city will be accepting public comments on this item in several ways to afford the public an opportunity to give testimony on the subject matter. Written and verbal testimony will be accepted upon issuance of this notice, **until 5:00 p.m. on Tuesday, March 17, 2026.** Written testimony may be emailed to [development@lebanonoregon.gov](mailto:development@lebanonoregon.gov) or mailed to the City of Lebanon at 925 S. Main Street, Lebanon, OR 97355, or delivered and dropped in the white mailbox in front of City Hall. Persons who desire to access the Zoom meeting to give oral testimony regarding a Public Hearing can contact the [development@lebanonoregon.gov](mailto:development@lebanonoregon.gov) by noon prior to the meeting so that staff can provide instructions.



The public is invited to either participate in person at the Library Community Room or watch the meeting virtually on **March 18, 2026**, at <https://www.youtube.com/user/CityofLebanonOR/videos>.

The agenda and application materials will be available for review on the City's website at <https://www.lebanonoregon.gov/meetings> seven days prior to the hearing.

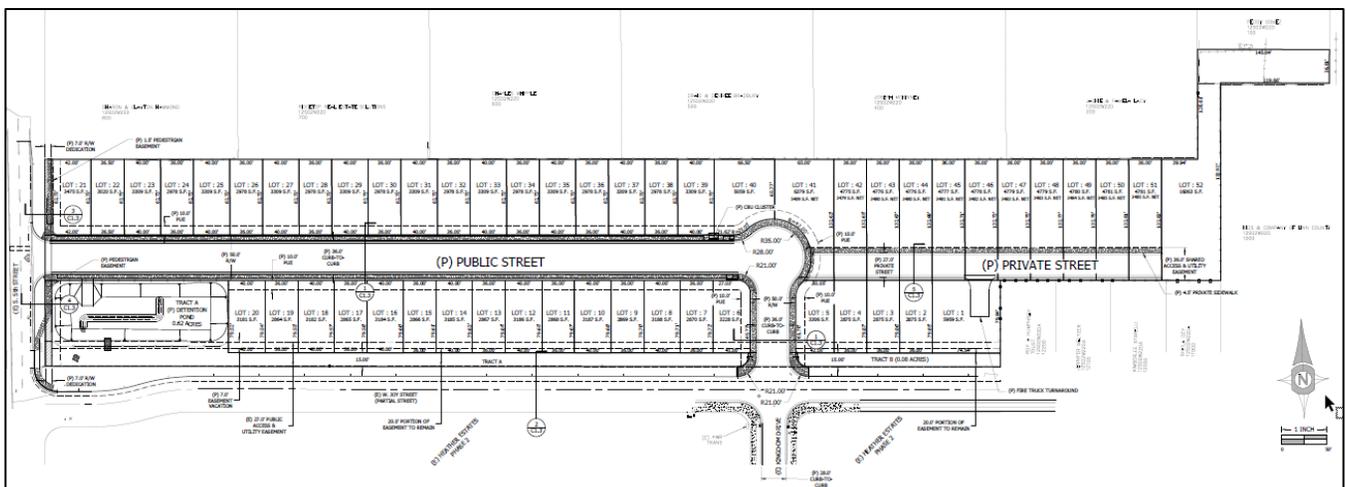
**CITIZENS ARE INVITED TO PARTICIPATE** in the public hearing and give written or oral testimony as described above that address applicable decision criteria during that part of the hearing process designated for testimony in favor of, or opposition to, the proposal. If additional documents or evidence are provided in support of the application subsequent to notice being sent, a party may, prior to the closing of the hearing, request that the record remain open for at least seven days so such material may be reviewed.

**Appeals:** Failure to raise an issue in the hearings, in person or by letter, or failure to provide sufficient specificity to afford the decision makers an opportunity to respond to the issue precludes appeal to the Land Use Board of Appeals based on that issue. Decisions of the Planning Commission may be appealed to the Lebanon City Council within 15 days following the date the Commission’s final written decision is mailed. Only the applicant, a party providing testimony, and/or a person who requests a copy of the decision has rights to appeal a land use decision. The appeal must be submitted on the appeals form as prescribed by City Council with appropriate fee paid and must set forth the criteria issues that were raised which the applicant or party deems itself aggrieved. Please contact our office should you have any questions about our appeals process.

**Obtain Information:** A copy of the application, all documents and evidence relied upon by the applicant, and applicable criteria are available for inspection at no cost and will be provided at the cost of 25 cents per single-sided page. If you have questions or would like additional information, please contact City of Lebanon Community Development Department, 925 Main Street; phone 541-258-4906; email [development@lebanonoregon.gov](mailto:development@lebanonoregon.gov)

**The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired or for other accommodations for persons with disabilities should be made at least 48 hours before the meeting to 541-258-4906.**

## PROPOSED PLAN



Please visit [www.lebanonoregon.gov/landuseactivity](http://www.lebanonoregon.gov/landuseactivity) to view site plan.

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PRELIMINARY SUBDIVISION PLAT &  
VARIANCE (CLASS III) APPLICATION

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Submitted to: City of Lebanon  
Planning Department  
925 S. Main Street  
Lebanon, Oregon 97355

Property Owner/Applicant: Family Tree Real Estate, LLC  
Mark Schneider, Member  
470 53<sup>rd</sup> Ave NW  
Salem, OR 97304  
(541) 409-8774  
[huntbybows@yahoo.com](mailto:huntbybows@yahoo.com)

Applicant's Representative: Udell Engineering and Land Surveying, LLC  
63 E. Ash Street  
Lebanon, OR 97355  
Contact: Andrew Rappé  
Email: Andrew@udelleng.com  
Phone: (541) 451-5125

Site Location: 31707 South Fifth Street, Lebanon, OR 97355

Linn County Assessor's Map No.: 12S-02W-22D Tax Lot 1001

Site Size: ±6.39-acres

Existing Land Use: Unimproved

Zone Designation: Residential Mixed Density (Z-RM)

Comprehensive Plan Designation: Residential Mixed Density (C-RM)

Surrounding Zoning: North: UGA-UGM-10 / Z-RL  
South: Z-RM  
East: Z-RM  
West: UGA-UGM-10 / Z-PU (across SW Fifth Street)

Surrounding Uses: North: Single-Family Residential

South: Single-Family Residential

East: Non-Profit/Education – Kidco Head Start

West: Single-Family Residential



22-139 Schneider  
31707 SW 5th Street  
Subdivision Application

February 13, 2026  
Page 1 of 20

## I. Project Overview

The applicant requests approval of the following applications:

1. A 52-lot, 2-tract residential subdivision "Cedar River Estates".
2. A variance to allow for a 50-foot right-of-way width as opposed to 58-feet.
3. A variance to allow for a maximum building height of 33-feet as opposed to the 25' maximum for small-lot single family detached dwellings.

The property is located north of West Joy Street between South Fifth Street and South Main Street, has an assigned address of 31707 South Fifth Street, and is identified as Linn County Tax Assessor Map No. 12S-02W-22D Tax Lot 1001. The property is approximately ±6.39-acres and unimproved.

The proposal includes a preliminary plan to subdivide the existing 6.39-acre site into 52 residential lots, two tracts for storm drainage improvements and ditches, and the creation of a new public and private street system. On the southern portion of the subdivision parcel there is a City maintained drainage ditch. A 20-foot easement has been established over the drainage ditch for maintenance purposes. Wetlands have been identified on-site and all necessary permits will be obtained prior to disturbance and/or mitigation of these wetlands.

No development has been proposed as part of the subdivision. The residential lots have been designed to meet the minimum development standards for a single-family or duplex development. Each parcel meets the minimum width of 30-feet for a small-lot single family detached residence, or 50-feet to accommodate a single-family residence or duplex. If the subdivision is approved a single family or duplex residence is outright permitted on each lot. If any other housing development is proposed, additional planning permits will be required.

In terms of access, LDC 16.13.030(A)(1) requires that all streets adjacent and interior to a new development be improved to City standards. South Fifth Street is classified as a collector street in the Lebanon Transportation System Plan which typically requires a 75-foot right-of-way width. The existing right-of-way is 60-feet. The Engineering Division has determined that based on the existing development pattern on the west side of the street, the roadway would not be developed to the collector road standard and no additional right-of-way dedication would be required. Joy Street is a partially improved local roadway with a drainage ditch located along the northern portion of the street. The Public Works Department has determined that a standard street improvement on the north end of Joy Street is not feasible due to the maintenance requirements of the drainage ditch and therefore street improvements would not include a traditional sidewalk and landscape strip but would include a full width street improvement for roadway pavement.

As part of the subdivision, a new public street is proposed with a connection to South Fifth Street, then ending in a cul-de-sac at the eastern end of the property. Kingdom Drive would also be extended north from Joy Street to the new public road. The new local streets would be 50-feet in width and improved with curb, gutter and five-foot wide sidewalks and 36-foot street width from curb-to-curb. The



Engineering Division has authorized the deviation from the TSP standard due to the site constraints with the 20-foot storm drainage easement reducing the building lot area and it was determined on-street parking on both sides of the street would be the greater public benefit than landscape strips. A variance is requested as detailed in Section IV below.

According to LDC 16.05.090, small-lot single family detached residences are limited to a maximum building height of 25-feet. Standard single-unit residences are limited to a 40-foot maximum height in the Z-RM zone. Although no development is proposed as part of this application, it is anticipated that many of the small-lot (sub 3,500-square foot) residences will be constructed as two-story dwellings, depending on future market forces. At a 25-foot maximum height and 30-foot dwelling width, a minimum roof pitch of 4:12 is not possible, thereby making 2-story dwellings infeasible. A variance is requested to allow for up to a 33-foot maximum building height as detailed in Section IV below.

For the eastern portion of the subdivision, a private street is proposed from the terminus of the cul-de-sac to serve Lots 1-5 and Lots 42-52. The private street is proposed to be 27-feet wide curb-to-curb, which per Section 16.13.030.N, a maximum of sixteen dwelling units may be permitted.

For new subdivisions, the Development Code establishes maximum block lengths to promote pedestrian connectivity. The block layout provisions in Chapter 16.12.030(K) state that blocks with pedestrian and bicycle connections through the block cannot exceed 800 feet in block length and 2,000 feet in block perimeter. To meet the block length provisions, Kingdom Drive is proposed to be extended north from Joy Street to connect to the new public street in the subdivision. This would allow for pedestrian connectivity through the new subdivision and to the existing subdivision and street network to the south.

For traffic analysis, based upon the Institute of Transportation Engineers (ITE) trip generation rates, single family homes generate 9.43 vehicle trips per day and 0.94 trips during the peak PM traffic hour. The development will create 52 new vacant lots, each of which could be developed with a single dwelling unit. Construction of 52 dwelling units would add about 490 new vehicle trips per day to the public street system. About 49 of those trips would occur during the peak p.m. traffic hour.

According to LDC 16.20.110(B), the City or other road authority may require a Traffic Impact Study as part of an application for development when an increase in site traffic volume generation by 300 Average Daily Trips. Due to the number of daily trips anticipated, the Engineering Division requested a Traffic Impact Study be developed for this project. The study is currently under development by Kittleson and Associates and will be submitted directly to the Engineering Division upon completion.

For utilities, City utility maps show a 10-inch public sewer main and 8-inch water main in Joy Street. There is also a 16-inch water main and 24-inch sewer main in South Fifth Street. A sewer manhole within South Fifth Street, recently constructed as part of the Westside Interceptor project, will serve as the connection point for the subdivision sewer. An extension of both sewer and water mains is proposed within this application through the length of the new public and private streets. Upon development, each lot will be required to install a new sewer and water lateral connection to the public



main. A public storm drainage ditch is available in the southern portion of the subdivision site with a 20-foot easement over the site. The required stormwater detention facility is provided as Tract A in the subdivision.

Finally, the site includes identified wetlands. As part of the subdivision application, a wetland delineation has been provided showing portions of site incumbered with wetlands. A condition will be incorporated to require all necessary approvals through the Army Corps of Engineers, and the Oregon Departments of State Lands and Environmental Quality for the mitigation of the wetlands prior to issuance of any engineering or building permits.

The following section is an analysis of the review criteria (Chapter 16.22 of the LDC) and findings:

## II. Analysis of Development Code Criteria

- A. Chapter 16.22 of the Lebanon Development Code (LDC) establishes the standards for reviewing partitions and subdivisions, with Sections 16.22.030 to 16.22.090 establishing specific requirements for submittal and review. The applicable provisions are outlined in the following Sections.
- B. LDC 16.22.030(A)(B) establishes the general requirements for subdivisions, which includes a two-step review process requiring review and approval of both a preliminary and final plat. In addition to the land division requirements in Chapter 16.22, the proposal must comply with regulations regarding public works improvements, official maps or development plans, Development Code provisions, Fire District requirements, and similar regulations.

FINDINGS: This quasi-judicial review process addresses the requirements for preliminary plat approval. Upon preliminary plat approval, a final plat that conforms to provisions in LDC 16.22.070(B) will be submitted for ministerial review and approval.

- C. LDC 16.22.030(C) notes that subdividing a residential zone into large lots (i.e., greater than four times or 400 percent the minimum lot size allowed by the underlying land use zone), the City may require that the lots be of such size, shape, and orientation as to facilitate future re-division in accordance with the requirements of the land use district and this Code. To meet this requirement a re-division plan must be submitted.

FINDINGS: As proposed, only lots 1, 40, 41, and 52 are large enough to allow for an additional land division. Since the maximum dwelling units of sixteen has already been met for the private street, Lots 1 and 52 are not eligible to be further divided. Lots 40 and 41, however, could be divided into small-unit single family lots, with 30' minimum widths and areas of between 2,500 to 3,500 sf.

- D. LDC 16.22.030(D) establishes provisions for lot averaging, thereby allowing the creation of some lots below the minimum lot size. LDC 16.22.030(E) notes the proposal must comply with floodplain provisions.

FINDINGS: Lot averaging is not proposed with this application as all lots exceed the minimum lot size required for single-family residential use. Floodplain provisions are also not applicable as the

development site is in Zone X, outside of identified special flood hazard areas as shown on FEMA's Flood Insurance Rate Map #41043C0568G, dated September 29, 2010.

- E. LDC 16.22.040 indicates the applicant may request a pre-application meeting, as well as subsequent individual meetings, to review a subdivision.

FINDINGS: Pre-application meetings were conducted mid-2022, July 9, 2024, and January 6, 2026.

- F. LDC 16.22.050 contains special transportation provisions and associated decision criteria. LDC 16.22.050(A) requires notification of the Oregon Department of Transportation (ODOT). The application submittal process includes agency notification even though the development does not impact a state highway. LDC 16.22.050(B) requires plans to address specific access related decision criteria, which are noted as follows:

- 1. LDC 16.22.050.B.1 - Driveway Access Placement: Driveway access shall be properly placed in relation to sight distance, driveway spacing, and other related considerations, including opportunities for joint and cross access.

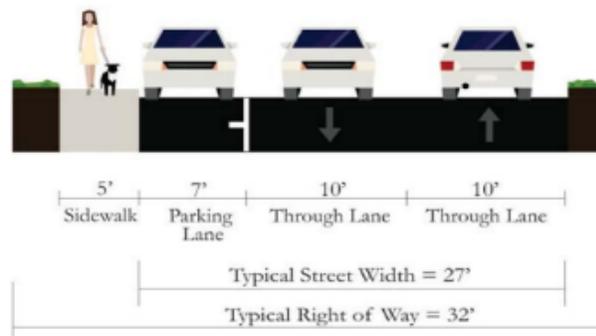
FINDINGS: According to LDC 16.12.020(B)(1)(2), a single parcel must abut a street for a minimum width of 14-feet including a minimum 12-foot-wide driveway. According to LDC 16.12.020(B)(2), two adjacent parcels must abut a street for a minimum of 24-feet with a minimum of 12-feet for each parcel that may include a shared 12-foot-wide driveway serving both.

Per LDC 16.12.030(F)(2)(3), LDC 16.12.030.J.4, LDC 16.12.030(L)(1), single-family and duplex dwellings may be served by a minimum 24-foot-wide shared access easement with a minimum 12-foot-wide driveway provided a shared access easement and coordinated maintenance agreement is recorded.

LDC 16.13.030.N allows the development of private streets for access of 16 or fewer dwelling units when they are not used to avoid connection with public streets and in conformance with City Standards for Private Streets, Figure 15 in the Transportation System Plan and with the Oregon Fire Code and Lebanon Fire District's requirements.

Figure 15 of the TSP illustrates a standard cross-section for a private street in the City of Lebanon.

**Figure 15. Private Roadway (16 or fewer dwelling units only)**



Lots 5 – 41 will have frontage in excess of 14 feet and direct access to a public street. Lots 1-5 and 42-52 will gain access to the public right-of-way via a 27-foot-wide private street in conformance with Figure 15 of the Lebanon Transportation System Plan.

Based on the layout and probable building locations, all dwellings will be less than 150-feet from a public street upon the completion of proposed street improvements. A fire hydrant is to be provided at the intersection of Kingdom Drive and the new public street. The cul-de-sac is designed to meet the turning radius for a fire truck. With the turnaround, placement of fire hydrants, and appropriate access, this criterion has been met.

2. LDC 16.22.050(B)2 - Road/Street System and Building Access: The road/street system shall provide adequate access to the buildings for the appropriate users, such as residents, visitors, patrons, employees, service and delivery vehicles, and emergency vehicles.

FINDINGS: The criterion including the term “adequate access” is not a clear and objective approval criterion as required by Oregon Revised Statute (ORS) 197.307(4) for needed housing (i.e., attached single-family and multi-family housing for owner and renter occupancy) as defined under ORS 197.303. Therefore, this criterion is not applicable.

3. LDC 16.22.050(B)(3) - Pedestrian and Bicycle Facilities: An internal system of sidewalks and/or pathways for pedestrians and bicyclists shall provide connections to both motor vehicle and bicycle parking areas, and entrances to the development and its buildings, as well as open space, recreational and other community facilities associated with the development. Streets shall have sidewalks on both sides unless other configurations have been approved. Pedestrian and bicycle linkages shall connect to the peripheral street system.

FINDINGS: All lots will have frontage on, and/or direct access to, a public street with connectivity to South Fifth Street and West Joy Street. Shared and direct access to public rights-of-way provide connectivity from each of the development sites to abutting public sidewalk and bicycle linkages.

4. LDC 16.22.050.B.4 - Consistency with Transportation System Plan: All access shall be consistent with the access management standards of this Code, the City’s Transportation System Plan, and the Lebanon/Linn County Urban Growth Management Agreement.

FINDINGS: According to LDC 16.12.030.F, when vehicle access is required for development, access must be provided by an alley, private street or shared driveway, or public street, and a minimum of 12 feet per lane is required.

Access to proposed lots is via a public street with a 36-foot-wide curb-to-curb width with parking on both sides of the street.

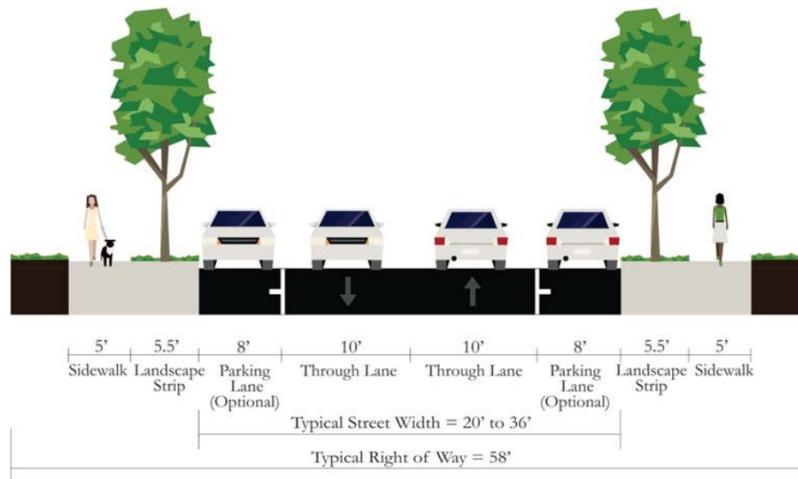
Figure 13 of the TSP illustrates a standard cross-section for a local street in the City of Lebanon. As stated under the Typical Roadway Cross-Section Standards heading of the TSP, the provided cross-sections “are intended to be used as guidelines in the development of new roadways and the upgrade of existing roadways. Planning level right-of-way needs can be determined using these



figures. Under some conditions a variance to the street standards may be requested from the Engineering Services Director to consider the constrained roadway design options or other adjustments. Typical conditions that may warrant consideration of a variance include:

- Infill sites
- Innovative designs (e.g., roundabouts)
- Severe constraints presented by topography, environmental, or other resources present
- Existing developments and/or buildings that make it extremely difficult or impossible to meet the standards”

**Figure 13. Local Roadway**



The south portions of Lots 1 – 20 are encumbered by a 27-foot-wide access and utility easement that was created to allow the city proper access to maintain an existing major drainage ditch (along the W. Joy Street property frontage). This easement reduces the buildable depth of these lots to 67.7 feet. Reducing the depth of these lots by eight additional feet to meet the typical right-of-way standard for local street would constrain future development upon these lots; especially once the required minimum building front setback of 10 to 15 feet and minimum vehicle entrance setback of 20-feet is applied.

Therefore, a variance to the standard local street width is requested to allow curbside sidewalks as opposed to curbside landscaping strips, thus reducing the right-of-way width from the standard of 58-feet to 50-feet, but still accommodating travel lanes in either direction and parking on both sides of the street.

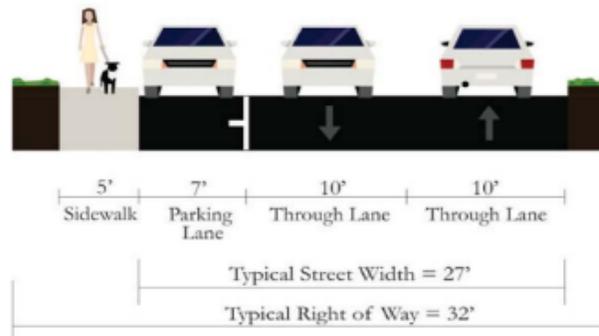
LDC 16.12.030.I states that one street access for single-family and two-family is typical, but two access points may be permitted. All lots are proposed to be served by individual driveway

connections to the abutting public street except for Lots 1-5 and 42-52, which will have access via a 27-foot-wide private street.

LDC 16.13.030.N allows the development of private streets for access of 16 or fewer dwelling units when they are not used to avoid connection with public streets and in conformance with City Standards for Private Streets, Figure 15 in the Transportation System Plan and with the Oregon Fire Code and Lebanon Fire District's requirements.

Figure 15 of the TSP illustrates a standard cross-section for a private street in the City of Lebanon.

**Figure 15. Private Roadway (16 or fewer dwelling units only)**



5. LDC 16.22.050.B.5 Conditions of Approval to Mitigate Significant Impacts or Effects on Transportation Facilities: In situations in which proposed land use actions may cause a significant negative impact or effect on a transportation facility, the Planning Commission may impose additional conditions for approval, such as:
  - a. A Traffic Impact Analysis (or other traffic studies), if the City Engineer finds that the proposed development will have a significant negative impact or effect on the surrounding transportation network. (See Chapter 16.12, Subsection 16.12.010.B).
  - b. The operator of the affected transportation facility shall receive notice of the proposed land use. Such operators may include, but are not limited to, the city, Linn County, the State (e.g., ODOT, Oregon Department of Aviation), and railroad companies. This notice shall include the applicant's full site plan submitted to the City and any traffic impact study or traffic counts, as well as the information noted in paragraph "a." immediately above.
  - c. The determination of transportation impacts or effects and the scope of any impact study shall be coordinated with the Planning Official, the City Engineer, and the operator of the affected transportation facility.
  - d. Dedication of land for streets, transit facilities, sidewalks, bikeways, paths, or accessways where the existing transportation system will be impacted by or is inadequate to handle the additional burden caused by the proposed land use.

- e. Transportation-related improvements where the existing transportation system may be burdened by the proposed land use.

FINDINGS: Based upon the Institute of Transportation Engineers (ITE) trip generation rates, single family homes generate 9.43 vehicle trips per day and 0.94 trips during the peak PM traffic hour. The development will create 52 new vacant lots, each of which could be developed with a single dwelling unit. Construction of 52 dwelling units would add about 490 new vehicle trips per day to the public street system. About 49 of those trips would occur during the peak p.m. traffic hour.

According to LDC 16.20.110(B), the City or other road authority may require a Traffic Impact Study as part of an application for development when an increase in site traffic volume generation by 300 Average Daily Trips. Due to the number of daily trips anticipated, the Engineering Division requested a Traffic Impact Study be developed for this project. The study is currently under development by Kittleson and Associates and will be submitted directly to the Engineering Division upon completion.

No impacts to rails, aviation, or similar transportation facilities are anticipated with this development proposal.

- G. LDC 16.22.060 notes that after a pre-application meeting and/or consultation, the applicant submits a subdivision application on the prescribed form.

FINDINGS: The application submittal included the necessary material consistent with this LDC 16.22.060.

- H. LDC 16.22.070 establishes the procedural review process for subdivision applications. LDC 16.22.070(A)(2) requires preliminary subdivision applications to be processed as a quasi-judicial review with a hearing before the Planning Commission, while the final plat is reviewed by staff as a ministerial decision. Preliminary plat approval is valid for three years.

FINDINGS: As a subdivision, the quasi-judicial public hearing before the Planning Commission complies with provisions in this Section LDC 16.22.070(A)(2). All subsequent provisions apply to the administration, review, or modification of an approved preliminary plat.

- I. LDC 16.22.080 establishes the preliminary plat submittal requirements. The applicable provisions include:

- 1. LDC 16.22.080(A)(1)(2) requires submittal of public facilities and services study (including transportation facilities) and a traffic impact study.

FINDINGS: Water, sanitary sewer, and storm are available to serve the development. All improvements will comply with City design requirements, and for storm drainage, not increase the level of storm runoff on adjacent properties.



Findings regarding the requirements for a transportation impact study can be found under subsection 5, subsection e above and are incorporated here by reference.

2. LDC 16.22.080(A)(3) lists additional information that will or may be required if applicable and warranted:

- a. LDC 16.22.080(A)(3)(a) - Correspondence from appropriate and applicable State and Federal Wetland regulatory agencies.

FINDINGS: Terra Science, Inc. completed a wetland and waters delineation report for the subject property and adjacent road right-of-way in April 2022, which found the presence of Wetlands on the subject property. As such, a Joint Permit Application was submitted to the U.S. Army Corps of Engineers, Oregon Department of State Lands, and Oregon Department of Environmental Quality for review and approval.

- b. LDC 16.22.080(A)(3)(b) - Correspondence from the County or ODOT if access is proposed to any facility under their jurisdiction.

FINDINGS: The adjacent streets are under the City's jurisdiction therefore the provisions in this Section do not apply.

- c. LDC 16.22.080(A)(3)(c) - Correspondence from Oregon Department of Aviation if the proposed development is within the approach or noise impact overlay zones of the Lebanon State Airport.

FINDINGS: According to Figures 16.11.020-1 to 16.11.020-3 the property is in the 594-foot conical surface area of the Lebanon Airport's Airport Safety Zone (AS-OZ). Therefore, notice must be provided to the Oregon Department of Aviation.

- d. LDC 16.22.080(A)(3)(d) - Documentation prepared by a licensed and qualified professional demonstrating that development proposed within a 100-year floodplain or floodway complies with appropriate FEMA, NFIP and City's Floodplain Regulations (see LDC 16.11.070 in Chapter 16.11 of this Code).

FINDINGS: Based on FEMA's Flood Insurance Rate Map, #41043C0568G, dated September 29, 2010, the property is located entirely outside of the special flood hazard area.

- e. LDC 16.22.080(A)(3)(e) - Documentation showing compliance with applicable Special Area Plans.

FINDINGS: The property is not located within a "Special Area Plan".

- f. LDC 16.22.080(A)(3)(f) - Documentation showing compliance with all applicable codes and requirements of the Lebanon Fire District.

FINDINGS: Access and provisions for hydrants have been identified on preliminary plat that comply with Fire District requirements. The Fire District has received a copy of the application materials for review and comment.

- g. LDC 16.22.080(A)(3)(g) - Documentation showing that the proposed land division will not violate any existing property restrictions of record, including easements.

FINDINGS: The existing conditions plan sheet denoting known recorded easements has been submitted with this application.

- h. LDC 16.22.080(A)(3)(h) - Documentation prepared by a licensed and qualified professional demonstrating that areas of soil cut, and fill will comply with erosion control and building code requirements.

FINDINGS: Erosion control and building code requirements will be reviewed and approved as part of the site improvement and/or building permit review process.

- i. LDC 16.22.080(A)(3)(i) - Documentation prepared by a licensed and qualified professional demonstrating that areas of geologic and/or of soils instability can be developed according to applicable City, State, and Federal Environmental Standards.

FINDINGS: The site is relatively flat and is not subject to the requirements of the Steep Slope Development Overlay Zone which are applicable to development in areas with steep slopes equal to or greater than 15 percent.

- j. LDC 16.22.080(A)(3)(j) - Other information determined by the Planning Official and/or City Engineer. Upon the receipt or presentation of credible evidence, the City may require studies or exhibits prepared by qualified and/or licensed professionals to address specific site features or project impacts (e.g., noise, natural resources, environmental features, natural hazards, cultural/archeological, site stability, wetlands, hazmat assessments, etc.), in conformance with this Code, other State and/or Federal regulatory requirements.

FINDINGS: No additional studies or exhibits were deemed necessary by City staff based on the development proposal.

- k. LDC 16.22.080(B)(1)(2)(3) - Establish submittal requirements.

FINDINGS: All necessary material for staff to proceed with the application has been submitted.

### III. Review Criteria

The City may approve, approve with conditions, or deny a preliminary plat based on the criteria contained in LDC 16.22.090(A)(B)(C). Provisions in LDC 16.22.090(A) include the following:

1. LDC 16.22.090(A)(1) - The proposed preliminary plat complies with the applicable Development Code Sections and adopted Master Plans. At a minimum, the provisions of this Chapter, and the applicable Chapters and Sections of Article Two (Land Use and Land Use/Development Zones) and Article Three (Community Development and Use Standards) of this Code shall apply. Where a variance is necessary to receive preliminary plat approval, the application shall also comply with the relevant Sections of Chapter 16.29.



FINDINGS: Within the RM zone, the minimum lot size and lot width is 2,500 square feet and 20-feet for townhouse/rowhouses; 2,500 square feet and 30-feet for a small lot single-family detached dwelling; 3,500 square feet and 40-feet for zero lot line housing; 5,000 square feet and 50-feet for a single-family detached and duplex dwelling; and 9,000 square feet and 60-feet for a multiple-family, triplex, or cottage cluster dwelling.

As shown on the preliminary plat, the “small-lot” net lot sizes of Lots 2-39 and 42-51 range from 2,864 square feet to 3,485 square feet with widths exceeding 30-feet. The net lot sizes of Lots 1, 40, 41, and 52 range from 5,059 square feet to 16,063 feet with widths exceeding 50-feet. Therefore, the lots comply with the dimension requirements of the RM zone for townhouse, zero lot line, small-lot single family detached, single-family detached, or duplex uses found in Article Two. Setbacks and other development specific standards found in Article Two and Three would be evaluated upon development proposal.

The subject property has a frontage along South Fifth Street and West Joy Street. Both rights-of-way are not fully improved to city standards. South Fifth Street is classified as a collector street with an existing right-of-way width of 60-feet with turnpike style design with a travel lane in each direction and drainage ditches on each side. Joy Street is classified as a local street with an existing right-of-way width of 50-feet with partial street improvements along the south side and drainage ditch along the north side. Therefore, partial street improvements will be required along South Fifth Street and West Joy Street. Partial street improvements are depicted on the preliminary lot layout plan sheet.

In addition, two new public streets are proposed to serve the subject property. Both streets are proposed to have a 50-foot right-of-way width, 36-foot curb-to-curb width, and curbside 5-foot-wide sidewalks. The Engineering Director has authorized a deviation from standard public street design to eliminate the landscape planter strips from the right-of-way to provide on-street parking on both sides of the street. The proposed public streets will be built to full city standard as specified in Chapter 16.13 and in conformance with Engineering Standards. Site access for each lot would be designed upon development to meet the driveway spacing and vision clearance requirements for compliance of Chapter 16.12, as such, the proposal conforms with Articles Two and Three.

For the eastern portion of the subdivision, a private street is proposed from the terminus of the cul-de-sac to serve Lots 1-5 and Lots 41-52. The private street is proposed to be 27 feet wide, which per Section 16.13.030.N, a maximum of sixteen dwelling units may be permitted.

For new subdivisions, the Development Code establishes maximum block lengths to promote pedestrian connectivity. The block layout provisions in Chapter 16.12.030(K) state that blocks with pedestrian and bicycle connections through the block cannot exceed 800 feet in block length and 2,000 feet in block perimeter. To meet the block length provisions, Kingdom Drive is proposed to be extended north from Joy Street to connect to the new public street in the subdivision. This would allow for pedestrian connectivity through the new subdivision, to the existing subdivision and street network to the south.



2. LDC 16.22.090(A)(2) - The proposed plat name is not already recorded for another subdivision and satisfies the provisions of ORS Chapter 92 and the County Surveyor.

FINDINGS: Cedar River Estates has been reserved for this site by the Linn County Surveyor.

3. LDC 16.22.090(A)(3) - The proposed streets, roads, sidewalks, bicycle lanes, pathways, utilities, and surface water facilities are laid out to conform or transition to the plats of subdivisions and partitions already approved for adjoining property as to width, general direction and in all other respects. All proposed public improvements and dedications are identified on the preliminary plat.

FINDINGS: All proposed public improvements are depicted in the provided plan set, Sheets C1.2-C4.0.

For utilities, City utility maps show a 10-inch public sewer main and 8-inch water main in Joy Street. There is also a 16-inch water main and 24-inch sewer main in South Fifth Street. A sewer manhole within South Fifth Street, recently constructed as part of the Westside Interceptor project, will serve as the connection point for the subdivision sewer. An extension of both sewer and water mains is proposed within this application through the length of the new public and private streets. Upon development, each lot will be required to install a new sewer and water lateral connection to the public main. A public storm drainage ditch is available in the southern portion of the subdivision site with a 20-foot easement over the site. The required stormwater detention facility is provided as Tract A in the subdivision.

The proposed preliminary plat will result in a 52-lot, 2-tract residential subdivision on the northeast corner of South Fifth Street and Joy Street. LDC 16.13.030(A)(1) requires that all streets adjacent and interior to new development be improved to City standards. South Fifth Street is identified as a collector street in the Transportation System Plan which would require a 75-foot right-of-way width. The existing right-of-way is 60-feet. The Engineering Department has determined that based on the existing development pattern on the west side of the street, the roadway would not be developed to the collector road standard and no additional right-of-way dedication would be required. Joy Street is a partially improved local roadway with a drainage ditch located along the northern portion of the street. The Public Works Department has determined that a standard street improvement on the north end of the street is not feasible due to the maintenance requirements of the drainage ditch and therefore Joy Street improvements would not include a traditional sidewalk and landscape strip but would include a full depth half-street improvement for pavement.

As part of the subdivision, a new public street is proposed with a connection to South Fifth Street, then ending in a cul-de-sac at the eastern end of the property. To provide connectivity between the existing subdivision to the south and meet the block length standards, Kingdom Drive would be extended north from Joy Street to the new public road. The new local streets would be 50-feet in width and improved with curb, gutter and five-foot wide sidewalk and 36-foot street width from curb-to-curb. The Engineering Department has authorized the deviation from the TSP standard due to the site constraints with the 27-foot storm drainage easement reducing the building lot area and



it was determined on-street parking on both sides of the street would be the greater public benefit than landscape strips. The TSP authorizes the Engineering Department this level of deviation. As such, the proposed subdivision meets this criterion.

4. LDC 16.22.090(A)(4) - All proposed private common areas and improvements (e.g., homeowner association property) are identified on the preliminary plat.

FINDINGS: All proposed improvements are depicted in the provided plan set, Sheets C1.2-C4.0.

5. LDC 16.22.090(A)(5) - Evidence that all City, County, State and Federal regulatory agency identified or mapped special management areas have been accurately and effectively identified on the appropriate maps and plans submitted to the City for review.

FINDINGS: As noted, no special management areas were found in association to the subject site (see Existing Conditions, Sheet C101).

6. LDC 16.22.090(A)(6) - Evidence that improvements or conditions required by the City, road authority, Linn County, special districts, utilities, and/or other service providers, as applicable to the project, have been or can be met.

FINDINGS: All public improvements will be located within the city or private rights-of-way and subject to City public works design and construction standards.

7. LDC 16.22.090(A)(7) - If any part of the site is located within a Special Area Plan or District, Overlay Zone, or previously approved Planned Development, it shall conform to the applicable regulations and/or conditions.

FINDINGS: As noted above, the property is in the 594-foot conical surface of the Lebanon Airport's Airport Safety Zone (AS-OZ). Therefore, notice must be provided to the Oregon Department of Aviation.

- J. LDC 16.22.090(B) establishes the criteria for the layout of the subdivision and includes the following:

1. LDC 16.22.090(B)(1) - All lots shall comply with the lot area, setback, and dimensional requirements of the applicable land use zone (Chapters 16.05 – 16.10), and the standards of Chapter 16.12 (Subsection 16.12.030(K), Street Connectivity and Formation of Blocks).

Findings: Within the RM zone, the minimum lot size and lot width is 2,500 square feet and 20-feet for townhouse/rowhouses; 2,500 square feet and 30-feet for a small lot single-family detached dwelling; 3,500 square feet and 40-feet for zero lot line housing; 5,000 square feet and 50-feet for a single-family detached and duplex dwelling; and 9,000 square feet and 60-feet for a multiple-family, triplex, or cottage cluster dwelling.

As shown on the preliminary plat, the "small-lot" net lot sizes of Lots 2-39 and 42-51 range from 2,864 square feet to 3,485 square feet with widths exceeding 30-feet. The net lot sizes of Lots 1, 40, 41, and 52 range from 5,059 square feet to 16,063 feet with widths exceeding 50-feet. Therefore, the lots comply with the dimension requirements of the RM zone for townhouse, zero



lot line, small-lot single family detached, single-family detached, or duplex uses found in Article Two. Setbacks and other development specific standards found in Article Two and Three would be evaluated upon development proposal.

The block layout provisions in Chapter 16.12.030(K)(1)(c) state that blocks without pedestrian and bicycle connections through the block cannot exceed 600-800 feet in block length and 1,600-2,000 feet in block perimeter with exceptions to block lengths under LDC 16.12.030(K)(3). A block length of 852 feet and block perimeter of 1,892 feet largely conform with the standards which is permissible as the existing development pattern precludes meeting the established standards.

2. LDC 16.22.090(B)(2) - Setbacks shall be as required by the applicable land use zone (Chapters 16.05 – 16.10).

FINDINGS: According to LDC Table 16.05-9: minimum setbacks in the RM zone are as follows: 10-foot front yard; 10/15-foot street side yard; 5-foot side (interior) yard and 10/20-foot to the rear yard. As shown on the preliminary plat, there is adequate area provided to accommodate future development conforming to the minimum setback requirements. Conformance will be reviewed upon development during building permit review.

3. LDC 16.22.090(B)(3) - Each lot shall conform to the standards of Chapter 16.12 (Access and Circulation).

FINDINGS: According to LDC 16.12.020(B)(1)(2), a single parcel must abut a street for a minimum width of 14-feet including a minimum 12-foot-wide driveway. According to LDC 16.12.020(B)(2), two adjacent parcels must abut a street for a minimum of 24-feet with a minimum of 12-feet for each parcel that may include a shared 12-foot-wide driveway serving both.

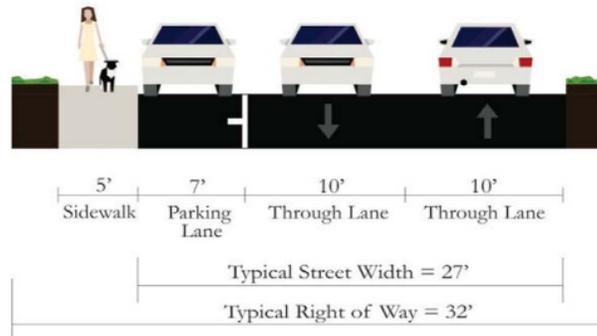
Per LDC 16.12.030(F)(2)(3), LDC 16.12.030.J.4, LDC 16.12.030(L)(1), single-family and duplex dwellings may be served by a minimum 24-foot-wide shared access easement with a minimum 12-foot-wide driveway, provided a shared access easement and coordinated maintenance agreement is recorded.

LDC 16.13.030.N allows the development of private streets for access of 16 or fewer dwelling units when they are not used to avoid connection with public streets and in conformance with City Standards for Private Streets, Figure 15 in the Transportation System Plan and with the Oregon Fire Code and Lebanon Fire District's requirements.

Figure 15 of the TSP illustrates a standard cross-section for a private street in the City of Lebanon.



**Figure 15. Private Roadway (16 or fewer dwelling units only)**



Lots 5 – 41 will have frontage in excess of 14 feet and direct access to a public street. Lots 1-5 and 42-52 will gain access to the public right-of-way via a 27-foot-wide private street in conformance with Figure 15 of the Lebanon Transportation System Plan.

4. LDC 16.22.090(B)(4) - Landscape or other screening may be required to maintain privacy for abutting uses. See Chapters 16.05 – 16.10 (Land Use Zones), and Chapter 16.15 (Landscaping, Street Trees, etc.).

FINDINGS: Residential landscaping requirements for all lots will be reviewed upon development during the building permit review process. Please refer to the attached Preliminary Street Tree Plan, Sheet C4.0.

5. LDC 16.22.090(B)(5) - In conformance with the Oregon Fire Code, a 20-foot-wide fire apparatus access road shall be provided to serve all portions of a building that are located more than 150 feet from a public or private road or approved access drive. See Chapter 16.12 (Access and Circulation).

FINDINGS: As shown on the preliminary plat, all lots will be accessible from a public street accordance with the Oregon Fire Code.

6. LDC 16.22.090(B)(6) - Where a common drive is to be provided to serve more than one lot, a reciprocating access easement and maintenance agreement shall be recorded with the approved subdivision or partition plat.

FINDINGS: As shown on the preliminary plat, lots 1-5 and 42-52 will benefit from a reciprocal access easement with coordinated maintenance agreement. A reciprocal access and maintenance agreement shall be filed as part of the final plat process.

7. LDC 16.22.090(B)(7) - All applicable engineering design standards for streets, utilities, surface water management, and easements shall be met.

FINDINGS: Findings related to access and circulation are provided in the sections above and incorporated here by reference. City utility maps show a 10-inch public sewer main and 8-inch water main in Joy Street. There is also a 16-inch water main and 24-inch sewer main in South Fifth

Street. A sewer manhole within South Fifth Street, recently constructed as part of the Westside Interceptor project, will serve as the connection point for the subdivision sewer. An extension of both sewer and water mains is proposed within this application through the length of the new public and private streets. Upon development, each lot will be required to install a new sewer and water lateral connection to the public main. A public storm drainage ditch is available in the southern portion of the subdivision site with a 20-foot easement over the site. The required stormwater detention facility is provided as Tract A in the subdivision.

As shown on the preliminary plan, a 10-foot-wide private utility and franchise utility easement is proposed along the frontage of all lots. This easement will be recorded on the final plat. There is also an existing public access and utility easement over the southern portion of the subdivision (Lots 1-20) that is proposed to be partially vacated, reducing the width from 27-feet to 20-feet. A 27-foot-wide private street is proposed to serve lots 1-5 and 42-52. A reciprocal access and maintenance agreement for the private street shall be filed as part of the final plat process. No other easements are proposed within this subdivision. With the access, utility extensions, and easements identified, this criterion has been met.

- K. LDC 16.22.090(C) allows the City to establish conditions to carry out Code provisions and other applicable ordinances.

FINDINGS: Conditions of approval are not required as the proposed development complies with all applicable code provisions.

- L. LDC 16.22.100 to 16.22.140 establish administrative procedures for recording plats, improvement agreements and bonding.

FINDINGS: It is acknowledged that the applicant and City staff must comply with these requirements prior to recordation of a final plat.



#### IV. VARIANCE (CLASS III) REVIEW

The City may approve, approve with conditions, or deny a class III Variance based on the criteria contained in LDC 16.29.050(D). Provisions in LDC 16.22.090(A) include the following:

##### CRITERION 1

The proposed Variance will not be materially detrimental to the purposes of this Code, to any other applicable policies and standards, or to other properties in the same land use zone or vicinity.

FINDINGS: The following two variances are requested:

1. A variance to allow for a 50-foot right-of-way width as opposed to 58-feet
2. A variance to allow for a maximum building height of 33-feet as opposed to the 25-foot maximum for small-lot single family detached dwellings.

##### Right-of-Way Width Variance

The new local streets would be 50-feet in width and improved with curb, gutter and five-foot wide sidewalks and 36-foot street width from curb-to-curb. The Engineering Department previously authorized the deviation from the TSP standard due to the site constraints with the 20-foot storm drainage easement reducing the building lot area. It was determined on-street parking on both sides of the street would be the greater public benefit than landscape strips. The resulting 36-foot curb-to-curb street and sidewalk continue to meet City engineering standards. No negative impacts to adjoining residential properties or overall RM-zone properties are anticipated.

##### Building Height Variance

The requested height variance will not create any material detriment to surrounding properties or to the intent of the Lebanon Development Code. Within the RM zone, the standard maximum building height for small-lot single-family detached dwellings is 25 feet; however, this height limit does not accommodate customary two-story construction when using standard roof pitches of 6:12 or 9:12, which are typical for single unit dwelling designs. Per LDC 16.32.020, the building height definition must account for the grade plane in the vicinity of the building. In this case, even with the standard minimum roof pitch of 4:12, the 25-foot standard would make two-story dwellings infeasible. The applicant therefore requests an increase in maximum height to 33 feet. This would accommodate 2-story dwellings with a 9:12 roof pitch and while also accounting for grading slopes adjacent to the dwellings.

The increase does not alter the permitted residential use, nor does it introduce intensity, massing, or scale inconsistent with other allowed development in the RM zone. Standard single-family dwellings in the RM zone are permitted up to 40 feet in height, demonstrating that the zone anticipates and accommodates taller residential structures. The proposed variance therefore remains well within the development standards already considered acceptable in this district.



No adverse impacts related to privacy, shading, or character are anticipated for adjacent properties. The lot sizes, widths, and setbacks required within the subdivision provide appropriate separation between structures, ensuring compatibility with surrounding residential development patterns. Public facilities, utilities, and emergency access provisions are unaffected by the requested height modification, and all other development standards will continue to be met.

For these reasons, the proposed height variance maintains consistency with the purposes of the Development Code, poses no material detriment to nearby properties, and aligns with the overall residential character anticipated within the RM zoning district.

## **CRITERION 2**

A hardship to development exists that is peculiar to the lot size or shape, topography, or other similar circumstances related to the property over which the applicant has no control, and that are not applicable to other properties in the vicinity (e.g., the same Land Use Zone).

FINDINGS: A 20-foot-wide City drainage easement runs along the entire southern boundary through lots 1-20 and Tracts A/B. This easement is unique to this property and constrains the buildable depth by over 20%. Similar RM-zoned residential properties do not face this constraint. The hardship is therefore site-specific and not common to neighboring parcels.

## **CRITERION 3**

The use proposed will be the same as permitted under this Code and City standards will be maintained to the greatest extent that is reasonably possible while permitting reasonable economic use of the land.

FINDINGS: The proposal includes the development of 52 residential lots for future development of primarily single-unit detached dwellings with potentially several duplex dwellings. According to Table 16.05-2, these dwelling types are permitted outright. Therefore, proposed future uses are permitted under the RM zoning district and as outlined in Section III, will meet or exceed city standards with approval of the requested variances. Therefore, this criterion is met.

## **CRITERION 4**

Existing physical and natural systems, such as but not limited to traffic, drainage, natural resources, and parks will not be adversely affected any more than would occur if the development occurred as specified by the subject Code standard.

FINDINGS: No existing or natural systems will be adversely affected any more than would occur if the development occurred as specified by the subject Code standards.

## **CRITERION 5**

The hardship is not self-imposed.

FINDINGS: The hardship results from pre-existing infrastructure constraints outside the applicant's control. The existing drainage and access easement pre-dates the subdivision proposal and is a City



controlled public storm facility. As stated under Criterion 1 above, the variance to allow for a 50-foot right-of-way width as opposed to 58-feet is necessary to mitigate the reduction in available building area due to the existing easement. The variance to allow for a maximum building height of 33-feet as opposed to the 25-foot maximum for small-lot single family detached dwellings is necessary to allow for two-story dwellings, provide a more efficient use of the buildable area, and mitigate against the hardship caused by the existing easement.

#### **CRITERION 6**

The Variance requested is the minimum Variance that would alleviate the hardship.

FINDINGS: The variances requested are the only variances necessary in association with this application.

#### **OVERALL CONCLUSION**

As proposed, applications for preliminary subdivision plat and variances satisfies all applicable review criteria as proposed and outlined above.

#### **ENCLOSURES**

- A. Tentative Subdivision Plan Set
  - 1. Cover Sheet,
  - 2. Existing Conditions, Sheet C1.0
  - 3. Preliminary Lot Layout, Sheet C2.0
  - 4. Preliminary Utility Plan, Sheet C3.0
  - 5. Preliminary Grading and Drainage Plan, Sheet C4.0
- B. Subdivision Name Reservation Approval
- C. Property Deed



22-139 Schneider  
31707 SW 5th Street  
Subdivision Application

February 13, 2026  
Page 20 of 20



# LAND USE APPLICATION

## PROPERTY INFORMATION

|  |
|--|
| Site Address(es):                                    |
| Assessor's Map & Tax Lot No.(s):                     |
| Comprehensive Plan Designation / Zoning Designation: |
| Current Property Use:                                |
| Project Description:                                 |
|  |
|  |

## APPLICANT / PRIMARY CONTACT INFORMATION

|  |        |
|--|--------|
| Applicant:   | Phone: |
| Address:   | Email: |
| City/State/Zip:  |        |
| <i>I hereby certify that the statements, attachments, exhibits, plot plan and other information submitted as a part of this application are true; that the proposed land use activity does not violate State and/or Federal Law, or any covenants, conditions and restrictions associated with the subject property; and, any approval granted based on this information may be revoked if it is found that such statements are false.</i> |        |

|                     |       |
|---------------------|-------|
| APPLICANT SIGNATURE | Date: |
|---------------------|-------|

## PROPERTY OWNER INFORMATION (IF DIFFERENT THAN ABOVE)

|                 |        |
|-----------------|--------|
| Owner:          | Phone: |
| Address:        | Email: |
| City/State/Zip: |        |

|                 |       |
|-----------------|-------|
| OWNER SIGNATURE | Date: |
|-----------------|-------|

## ADDITIONAL CONTACT INFORMATION

|                      |        |
|----------------------|--------|
| Engineer / Surveyor: | Phone: |
| Address:             | Email: |
| City/State/Zip:      |        |

|                 |        |
|-----------------|--------|
| Architect:      | Phone: |
| Address:        | Email: |
| City/State/Zip: |        |

|                 |        |
|-----------------|--------|
| Other:          | Phone: |
| Address:        | Email: |
| City/State/Zip: |        |

THE CITY THAT FRIENDLINESS BUILT

## REQUIRED SUBMITTALS

- Application and Filing Fee
- Narrative Describing the Proposed Development and addressing the Decision Criteria
  - LDC Article Two Land Uses and Land Use Zones
  - LDC Article Three Development Standards
  - LDC Article Four Review & Decision Requirements
  - LDC Article Five Exceptions to Standards (eg Variance, Non-Conforming Uses)
- Site Plan(s) drawn to scale with dimensions, Include other drawings if applicable
- Copy of current Property Deed showing Ownership, Easements, Property Restrictions

## FOR OFFICE USE

\*If more than one review process is required, applicant pays highest priced fee, then subsequent applications charged at half-price.

| Land Use Review Process  | Fee     | Land Use Review Process                      | Fee              |
|--|---------|--|------------------|
| Administrative Review  | \$750   | Property (Lot) Line Adjustment               | \$250            |
| Administrative Review (Planning Commission)                      | \$1,500 | Planned Development – Preliminary            | \$2,500          |
| Annexation   | \$2,500 | Planned Development – Final (Ministerial)    | \$250            |
| Appeal [min \$250 or 50% of original fee (whichever is greater)] | \$250   | Planned Development – Final (Administrative) | \$750            |
| Code Interpretation  | \$750   | Planned Development – Final (Quasi-Judicial) | \$1,500          |
| Code Interpretation (Planning Commission)                        | \$1,500 | Subdivision Tentative                        | \$1,500          |
| Comprehensive Plan Map/Text Amendment                            | \$2,500 | Subdivision Final                            | \$750            |
| Conditional Use  | \$1,500 | Tree Felling Permit (Steep Slopes only)      | \$150 + \$5/tree |
| Fire District Plan Review  | \$125   | UGB Amendment                                | Actual Cost      |
| Historic Preservation Review or Register                         | Varies  | Variance (Class 1 – Minor Adjustment)        | \$250            |
| Land Partition   | \$750   | Variance (Class 2 – Adjustment)              | \$750            |
| Ministerial Review   | \$250   | Variance (Class 3)                           | \$1,500          |
| Non-Conforming Use/Development                                   | \$750   | Zoning Map Amendment                         | \$2,500          |

## APPLICATION RECEIPT & PAYMENT

|                |                |              |
|----------------|----------------|--------------|
| Date Received: | Date Complete: | Receipt No.: |
| Received By:   | Total Fee:     | File No.:    |

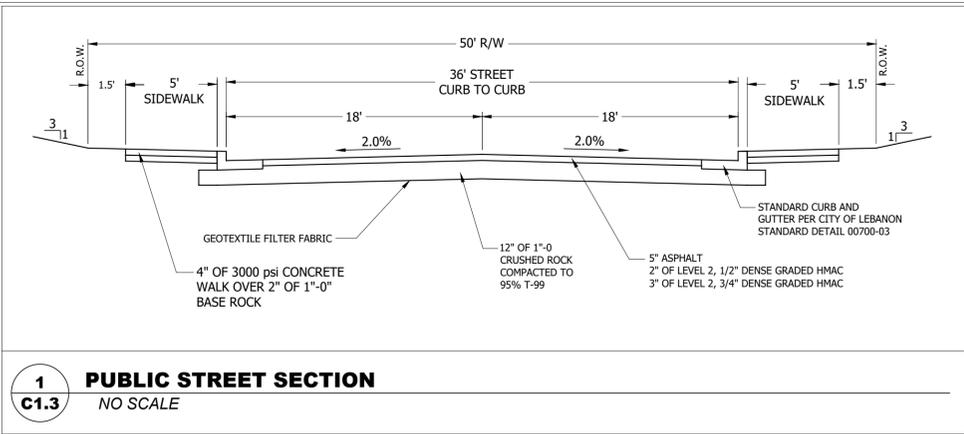
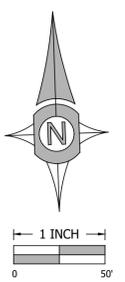
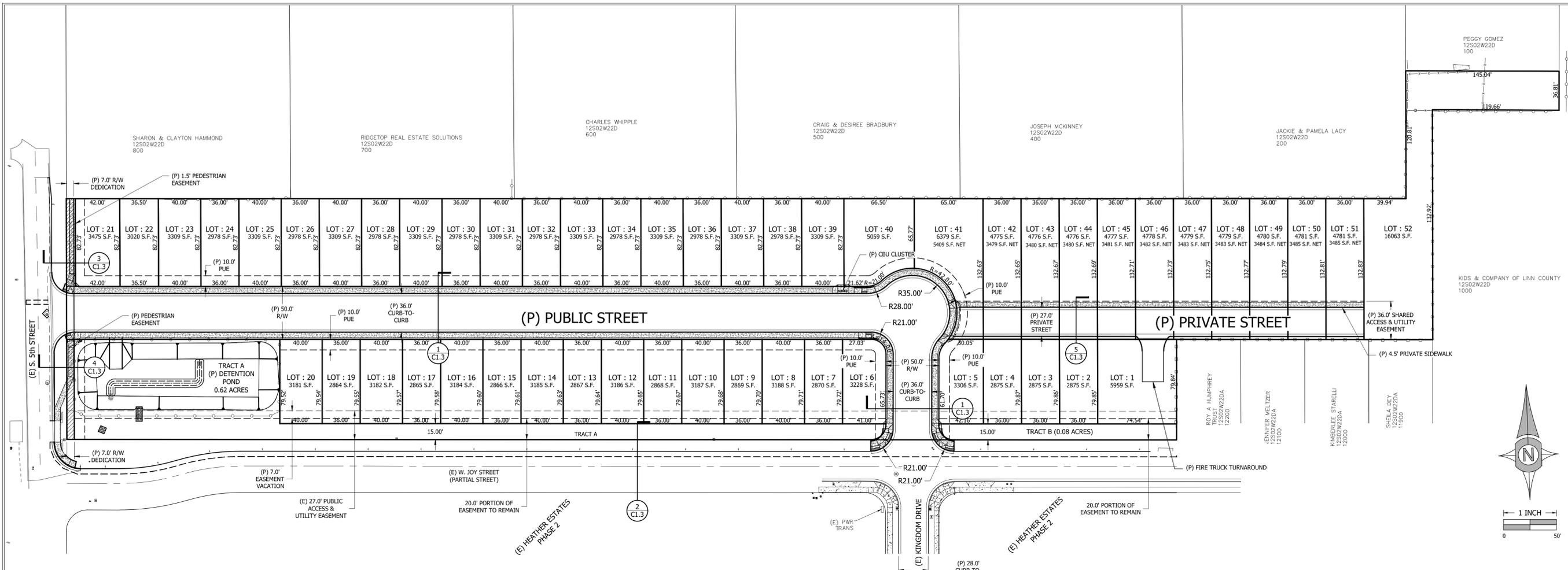
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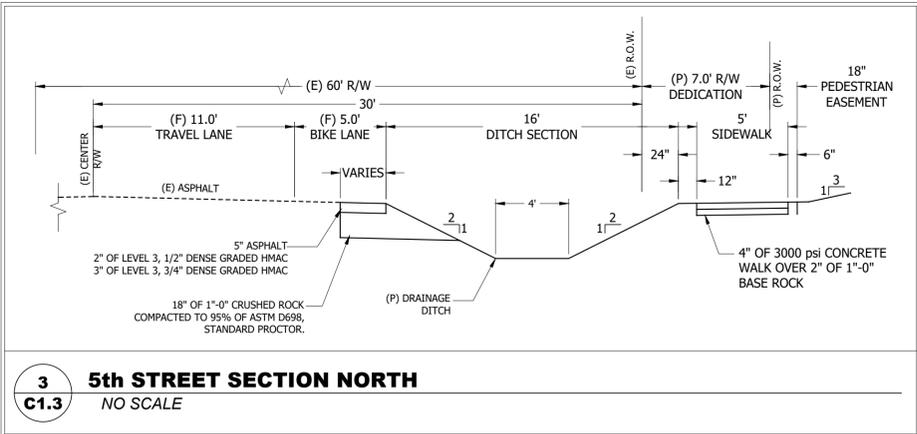




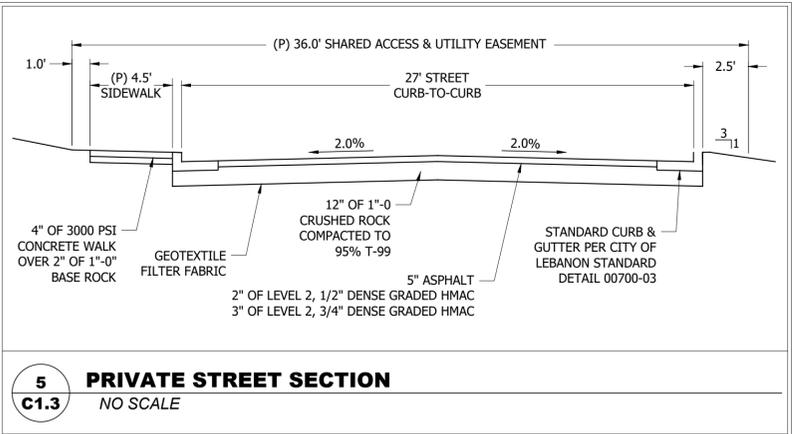




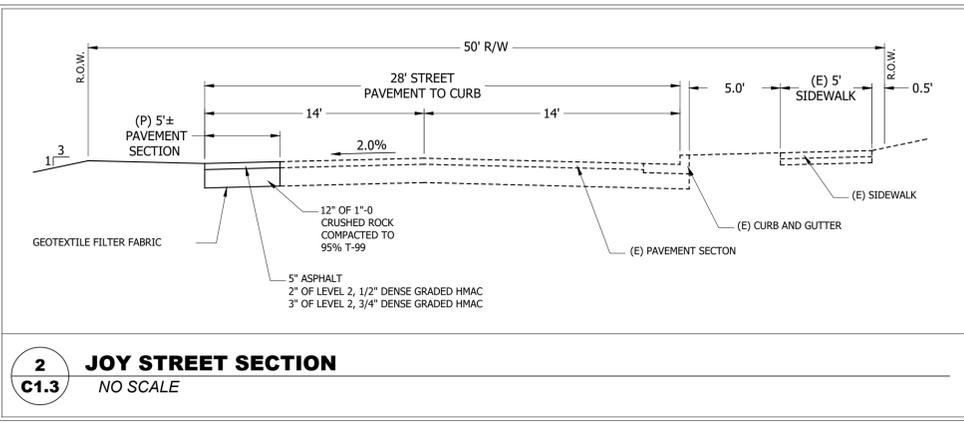
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C1.3 NO SCALE



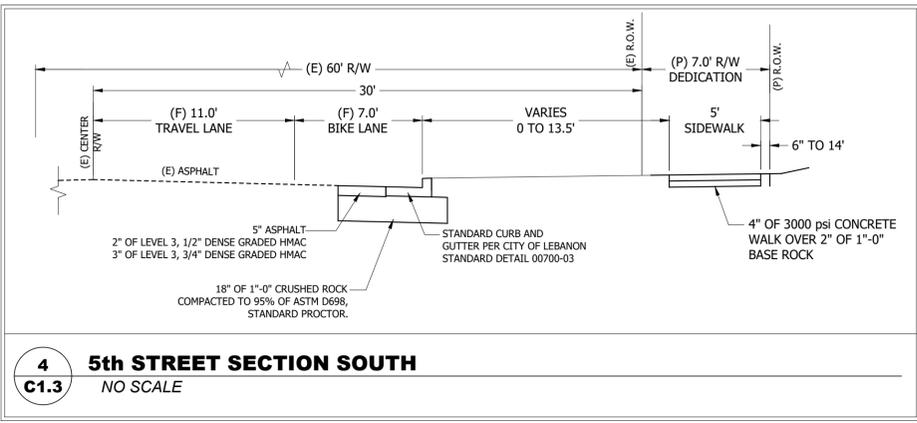
**3 5th STREET SECTION NORTH**  
C1.3 NO SCALE



**5 PRIVATE STREET SECTION**  
C1.3 NO SCALE



**2 JOY STREET SECTION**  
C1.3 NO SCALE



**4 5th STREET SECTION SOUTH**  
C1.3 NO SCALE

| PROJECT AREA SUMMARY |            |
|----------------------|------------|
| GROSS LAND AREA:     | 6.38 ACRES |
| TRACT 'A':           | 0.62 ACRES |
| TRACT 'B':           | 0.08 ACRES |
| PUBLIC STREET:       | 1.12 ACRES |
| NET LAND AREA:       | 4.56 ACRES |

NOTE: SIDEWALKS ARE TO BE CONSTRUCTED WITH INDIVIDUAL BUILDING PERMITS. SIDEWALKS ARE SHOWN ON PLAN VIEW FOR REFERENCE ONLY.

| PLAN REVISIONS | DATE |
|----------------|------|
|                |      |
|                |      |
|                |      |

**CLIENT:**  
FAMILY TREE REAL ESTATE, LLC  
ATTN: MARK SCHNEIDER  
470 53RD AVE NW  
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(541) 409-8774  
huntsbybrows@yahoo.com

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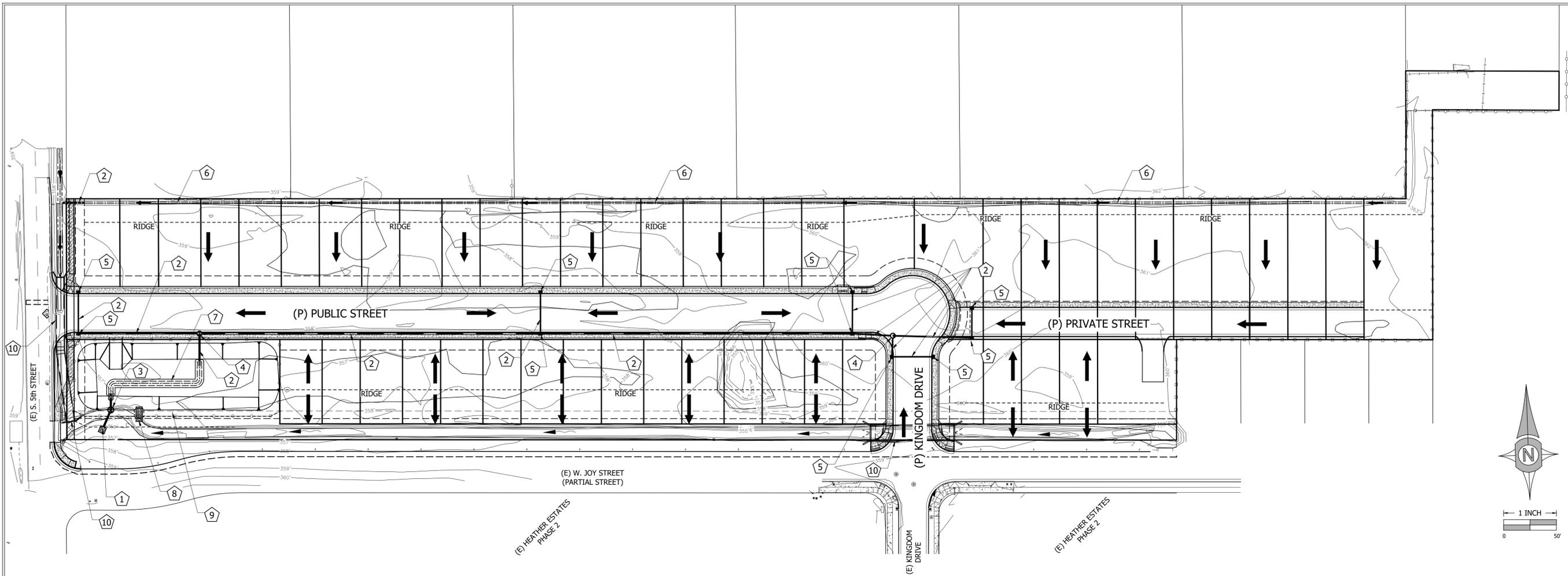
**TENTATIVE LOT LAYOUT**  
CEDAR RIVER ESTATES  
SUBDIVISION  
LEBANON, OREGON

DATE: FEBRUARY 13, 2026  
PROJECT: 22-139 SCHNEIDER JOY ST  
DRAWN BY: MUM, ATR  
CHECKED BY: BSJ

THIS MAP WAS PREPARED FOR PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION

Sheet **C1.2**  
SCALE: SEE BARS/SCALE





| STORM DRAIN NOTES |   |
|-------------------|---|
| 1                 | CONNECT TO EXISTING STORM DRAIN DITCH.  |
| 2                 | (P) STORM WATER CONVEYANCE PIPE - SIZE TO BE DETERMINED WITH BUILDING PERMIT SET. |
| 3                 | (P) FLOW CONTROL MANHOLE.   |
| 4                 | (P) STORM DRAIN MANHOLE.  |
| 5                 | (P) STORM DRAIN CURB INLET.   |
| 6                 | (P) PROPERTY LINE DRAINAGE DITCH.   |
| 7                 | (P) WATER QUALITY SWALE.  |
| 8                 | (P) RIP-RAP OVERFLOW.   |
| 9                 | (P) STORM DRAIN DETENTION POND.   |
| 10                | (P) BOX CULVERT WITH WING WALLS.  |

| GRADING LEGEND |                                      |
|----------------|--------------------------------------|
|                | - EXISTING SURFACE CONTOUR ELEVATION |
|                | - EXISTING SURFACE DRAIN DIRECTION   |
|                | - DESIGN SURFACE DRAIN DIRECTION     |

| PLAN REVISIONS | DATE |
|----------------|------|
|                |      |
|                |      |
|                |      |
|                |      |

  
**CLIENT:**  
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 huntbybows@yahoo.com

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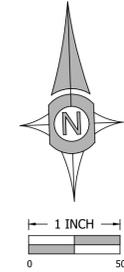
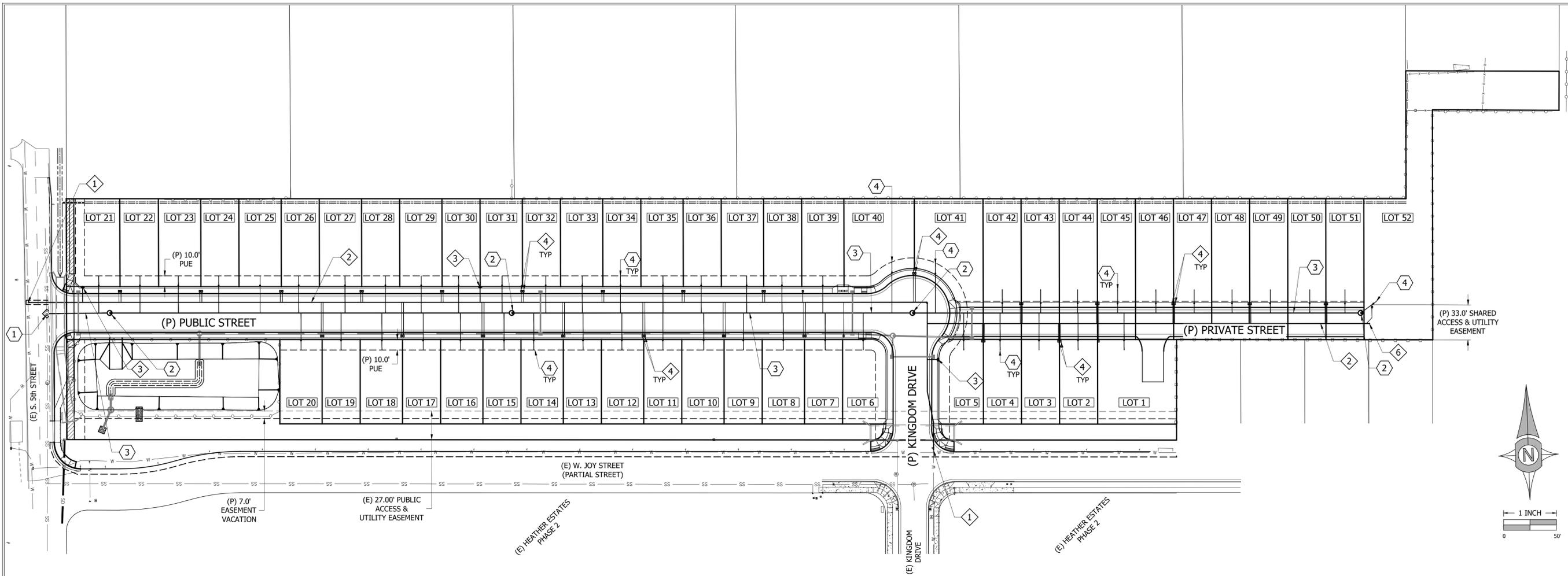
**PRELIMINARY GRADING & DRAINAGE PLAN**  
**CEDAR RIVER ESTATES SUBDIVISION**  
**LEBANON, OREGON**

DATE: FEBRUARY 13, 2026  
 PROJECT: 22-139 SCHNEIDER JOY ST  
 DRAWN BY: MLM, ATR  
 CHECKED BY: [Signature]  
 1837

**THIS MAP WAS PREPARED FOR PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION**

Sheet **C2.0**  
 SCALE: SEE BARSCALE





| SEWER NOTES |   |
|-------------|---|
| 1           | (P) CONNECTION TO EXISTING PUBLIC SANITARY SEWER. |
| 2           | (P) PUBLIC SEWER MANHOLE.                         |
| 3           | (P) PUBLIC 8" SANITARY SEWER.                     |
| 4           | (P) PUBLIC 4" SANITARY SEWER SERVICE LATERAL.     |

| WATER NOTES |  |
|-------------|--|
| 1           | (P) CONNECTION TO EXISTING PUBLIC WATERLINE. |
| 2           | (P) PUBLIC 6-INCH WATERLINE.                 |
| 3           | (P) PUBLIC FIRE HYDRANT.                     |
| 4           | (P) PUBLIC 1" WATER SERVICE.                 |
| 5           | (P) PUBLIC 8-INCH WATERLINE.                 |
| 6           | (P) PUBLIC MAINLINE BLOW-OFF.                |

**FRANCHISED UTILITY NOTE**

FRANCHISED UTILITIES WILL BE INSTALLED UNDERGROUND TO EACH LOT IN THE PROVIDED PUE. INCLUDING:

- \* NW NATURAL GAS
- \* COMMUNICATIONS
- \* POWER

| PLAN REVISIONS | DATE |
|----------------|------|
|                |      |
|                |      |
|                |      |
|                |      |

**CLIENT:**  
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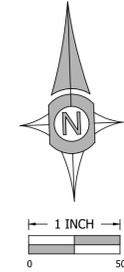
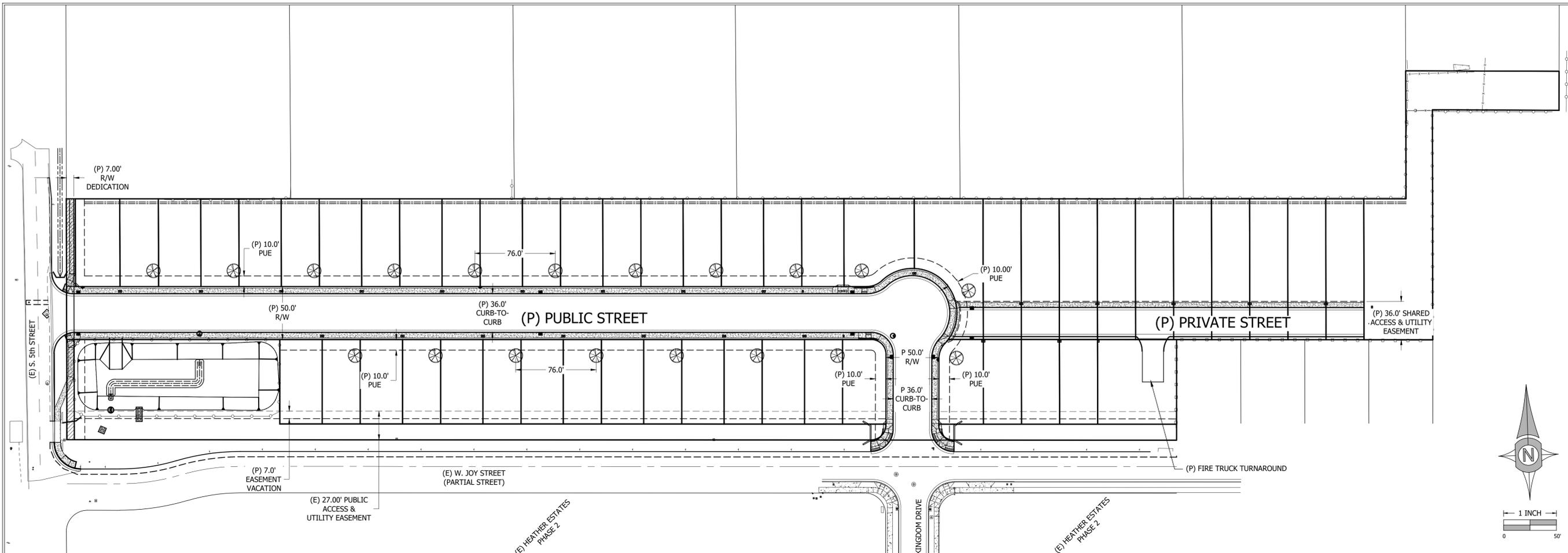
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 CEDAR RIVER ESTATES SUBDIVISION  
 LEBANON, OREGON

DATE: FEBRUARY 13, 2026  
 PROJECT: 22-139 SCHNEIDER JOY ST  
 DRAWN BY: MLM, ATR  
 CHECKED BY: BSV

THIS MAP WAS PREPARED FOR PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION

Sheet **C3.0**  
 SCALE: SEE BARSCALE





**TREE LEGEND**

(P) STREET TREE PER CITY OF LEBANON STANDARDS

**NOTE:**  
TREE LOCATIONS WILL BE CONFIRMED AT TIME OF BUILDING PERMIT TO AVOID CONFLICTS WITH PROPOSED DRIVEWAYS.

**CLIENT:**  
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(541) 451-5125 PH.  
(541) 451-1366 FAX

**PRELIMINARY STREET TREE PLAN**  
**CEDAR RIVER ESTATES SUBDIVISION**  
**LEBANON, OREGON**

DATE: FEBRUARY 13, 2026  
PROJECT: 22-139 SCHNEIDER JOY ST  
DRAWN BY: MLM, ATR  
CHECKED BY: BSV

THIS MAP WAS PREPARED FOR PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION

| PLAN REVISIONS | DATE |
|----------------|------|
|                |      |
|                |      |
|                |      |

Sheet **C4.0**  
SCALE: SEE BARSCALE