# City of Sutherlin
# Planning Commission Meeting
# Tuesday, October 17, 2023
# 7:00 p.m. – Sutherlin Civic Auditorium
# Agenda

**Pledge of Allegiance**

**Introduction of Media**

**Approval of Minutes**

September 19, 2023 – Regular Meeting

**Approval of Findings of Facts**

1. **FOREST EDGE INVESTMENTS, LLC,** request for a Conditional Use Permit and Tree Falling Permit (greater than 5 acres) on a 14.40± acre portion of the 240.24 acre subject property located south of S. State Street. 119.71± acres of the subject property are inside the City of Sutherlin, with the remaining located outside city limits. The subject property is described as Tax Lot 800 in Section 21, T25S, R5W, W.M., Property I.D. No(s). R22984 & R22952 (CO portion). The portion inside the city limits is designated Forestry by Sutherlin Comprehensive Plan and zoned (FR-20) Forest Resource. **PLANNING DEPARTMENT FILE NO. 23-S011**.

**Quasi-Judicial Hearing(s)**

1. **SAM ROBINSON, ET/AL,** request for a Comprehensive Plan Map Amendment from Low Density Hillside to Medium Density and Zone Map Change from (RH) Residential Hillside to (R-2) Medium Density Residential on a 3.81 acre property located on the east side of Fir Grove Lane and inside the City of Sutherlin. The subject property is described as Tax Lot(s) 201, 300 and 400 in Section 19C, T25S, R5W, W.M., and Property I.D. Nos. R46993, R47000 and R47007. **PLANNING DEPARTMENT FILE NO. 23-S010**.

2. **GOODFELLAS OF SUTHERLIN**, request for a Subdivision to be developed in three phases that total 91 lots on a 22.00± acre portion of the 193.11 acre subject property. The subject property is located north of Scardi Blvd in the City of Sutherlin. The subject property is described as Tax Lot 1500 in Section 7, and Tax Lot(s) 100 and 203 in Section 18, all in T25S, R5W, W.M; Property ID Nos. R20392; R21680 and R138405. It is designated Low Density and Low Density Hillside by the Sutherlin Comprehensive Plan and zoned (R-1) Low Density Residential and (RH) Residential Hillside. **PLANNING DEPARTMENT FILE NO. 23-S009**.

**Monthly Activity Report**

**Public Comment**

**Commission Comments**

**Adjournment**

**CITY OF SUTHERLIN**
**PLANNING COMMISSION MEETING**
**CIVIC AUDITORIUM – 7:00 PM**
**TUESDAY, SEPTEMBER 19, 2023**

**COMMISSION MEMBERS PRESENT:** Michael Hogsett, John Banducci, Tom Schaub, Tom Maloney and Norman Davidson

**COMMISSION MEMBERS EXCUSED:** Alan Woods

**COMMISSION MEMBERS ABSENT:** Adam Sarnoski

**CITY STAFF:** Jamie Fugate, City Planner, Brandi Medeiros, Community Development Assistant and Kristi Gilbert, Community Development Director

Meeting called to order at 7:00 pm by Chair Davidson

**MEDIA PRESENT:** None

**WELCOME NEW PLANNING COMMISSION MEMBER:** Tom Schaub, Commissioner Schaub was introduced by Jamie Fugate, City Planner and then gave a brief background.

**AUDIENCE:** Keith McCracken, Lois Bunch, Royce Bunch, Jan Turkey, Bev Hathaway, Trish Hall, Aaron Bowman, Ken Grant, Carol Harding, Richard Hathaway, Ken and Shirley Smedley, Kristen Gordan, Veronica Eytalis, Roberta Town, Douglas Town, Anita Covington, Bruce Belfils, Ken Knowles, Valeria Knowles, Elaine Tlague, Arthur Covington, Thom Hoch, Jack Vance, Bob Grant, G.W. Booth Jr, Melinda Stanfield, Dick Rauscher, Dianne Good, Mary Dennis, Dian Cox, Jerry Tilley, Marcie Tilley, Kristine Godbeg, Bert and Tricia Nuckals, Brent and Anita Hunsaker, Paul Nelson, Jeannine Bartholomew, Russ Bartholomew, Mike Frost, Chris Owens, Jackie Deal and Steve Jones.

**FLAG SALUTE**

**APPROVAL OF MINUTES**

A motion made by Commissioner Hogsett to approve the minutes of the August 15, 2023 Planning Commission meeting; second made by Commissioner Banducci.

In favor: Commissioners Banducci, Schaub, Hogsett, Maloney and Chair Davidson
Opposed: None
Excused: None
Motion carried unanimously

**QUASI-JUDICIAL PUBLIC HEARING(S)**

1. **FOREST EDGE INVESTMENTS, LLC,** request for a Conditional Use Permit and Tree Falling Permit (greater than 5 acres) on a 14.40± acre portion of the 240.24 acre subject property located south of S. State Street. 119.71± acres of the subject property are inside the City of Sutherlin, with the remaining located outside city limits. The subject property is

described as Tax Lot 800 in Section 21, T25S, R5W, W.M., Property I.D. No(s). R22984 & R22952 (CO portion). The portion inside the city limits is designated Forestry by Sutherlin Comprehensive Plan and zoned (FR-20) Forest Resource. **PLANNING DEPARTMENT FILE NO. 23-S011**.

Chair Davidson opened the hearing, with reading of the disclosure (legal) statement; app persons testifying shall be deemed parties to appeal the application and must provide full name and mailing address if they wish to be notified of the decision, continuances, appeals, or procedural actions required by the Code. The Sutherlin Development Code and Sutherlin Municipal Code specify applicable criteria to be relied upon in making a decision.

Chair Davidson asked the Commission if there were any conflicts of interest or personal bias; Chair Davidson asked the audience if there were any challenges of impartiality of any person(s) on the Commission. Hearing none, Chair Davidson asked for the Staff Report.

**Jamie Fugate, City Planner,** identified Brandan McGarr, Battalion Chief, Sutherlin Fire Department and Aaron Swan, Sutherlin Public Works Director as having party status. Then proceeded to enter Staff Exhibits 1-9 listed within the staff report, including Staff Exhibit 10, an amended comment from Aaron Swan, Public Works Director. Mrs. Fugate then proceeded to summarized the Staff Report, with the recommendation of action alternative number 1.

**APPLICANT'S TESTIMONY – Keith McCracken, representative for the property owner/applicant** was asked to attend and is available to answer any questions that there might be.

**TESTIMONY IN FAVOR -** No testimony in favor.

**TESTIMONY IN OPPOSITION –**

**Doug Town, Timber Valley RV Park, Sutherlin**, stated he has three (3) main concerns – border is 10 – 30 yards, currently trees provide a filter and protect them from wind, without trees they will breath in dust and poison oak. Mr. Town asked for a 30 yard buffer to remain to filter air. Third when the piles are burned this will cause smoke and people will breath more poison oak, people in the park are older and susceptible.

**Richard Hathaway, 800 S. State Street (SKP Park), Sutherlin,** has questions regarding the existing 35' – 50' buffer, noted in staff exhibit #3, page 5 is vague. Mr. Hathaway stated it appears the harvest area is next to the property line. The area is identified as relatively flat, which is not the case. The runoff and drainage is also a concern, there are three (3) streams on the property that run into SKP Park's drainage.

**Jacqueline Deal, 800 S. State Street (SKP Park), Sutherlin,** not opposed to logging of forestry. Years ago, they logged the property above them (SKP Park), runoff made a big ditch and that was not nearly as close. Erosion is also a big concern.

**Ken Grant, 800 S. State Street (SKP Park), Sutherlin,** told the commission they should come look at the trees from the park, they need to leave a 30 yard buffer. This would also make the city look a lot better.

**Doug Town, Timber Valley RV Park, Sutherlin**, when logged, the wind and dirt will be stronger and greater.

**Steve Jones, 800 S. State Street (SKP Park), Sutherlin**, stated he has concerns with wind. Their trees are protecting the SKP trees, which will cause ours to come down, must leave a buffer.

**Bruce Belfils, 800 S. State Street (SKP Park), Sutherlin**, erosion and debris is a concern, they should leave a buffer. Stated the hillside was forested in 1995 and asked the question, "Why did they not take it to the property line then?"

**Dick Rauscher, 800 S. State Street (SKP Park), Sutherlin**, conversations are occurring in the park with the primary concern being water runoff, especially with heavy rains.

**Trish Hull, 800 S. State Street (SKP Park), Sutherlin**, come and look at the beautiful park and S. State Street. Lower hill top has lots nested next to the trees, flooding, wind and mud will be coming down onto the RV's and they will get all the runoff.

**Brent Hunsaker, Ridgeview Street, Sutherlin**, stated he used to live in the park. Floods existed without logging, can't imagine what it will look like after the harvest. The existing sewer system and dump station can have issues if the buffer is not left. The esthetics/view will be ruined.

**Beverly Hathaway, 800 S. State Street (SKP Park), Sutherlin**, stated she has health concerns and if they have to leave the park who will help them financially during this time and with medical bills that this will cause. This beautiful place that this is, but they will take the last remaining beautiful spot of hillside and it will be ugly for Sutherlin.

**RECEIVE NEUTRAL -** No neutral testimony.

**APPLICANT'S REBUTTAL**

**Keith McCracken**, **representative for the property owner/applicant,** came back to the podium and stated there is an existing buffer of trees on SKP Park's property, it is the property owner's intent to harvest up to their existing property line. Mr. McCracken also stated that the trees being harvested are approximately 100 years old and are becoming a safety concern and losing value, if they don't remove the trees they may fall and cause more damage. As far as erosion and slope concerns, it is the full intent to comply with forest management and forest practices act, along with the city permitting to help eliminate concerns.

Chair Davidson allowed additional testimony from those in opposition.

**TESTIMONY IN OPPOSITION –**

**Carol Harding, 800 S. State Street (SKP Park), Sutherlin,** RV's with propane tanks, Mrs. Harding stated she has three propane tanks and one spark will cause fire, make them build a wall.

**Thom Hoch, 800 S. State Street (SKP Park), Sutherlin,** stated a couple hundred feet that property line is a small buffer, he met with John (property owner/applicant) and asked him to leave a buffer. He stated John was undecided what he would do.

**Kent Grant, 800 S. State Street (SKP Park), Sutherlin,** has a drainage ditch behind his lot and asks for a 30 yard buffer.

**Bob Grant, 800 S. State Street (SKP Park), Sutherlin,** consider a select cut vs clear cut.

**Beverly Hathaway, 800 S. State Street (SKP Park), Sutherlin**, 0– 5% slope, has gone down an 8% grade and was scared, they need to put in a dam to stop everything.

**APPLICANT'S REBUTTAL -**

**Keith McCracken**, **representative for the property owner/applicant,** came back to the podium to clarify slopes in terms of harvesting operations, a 0-30% is gentle, 30-60% is intermediate and above 60% slopes cause concerns with drainage. In forest terms, 0-15% is considered flat.

**TESTIMONY IN OPPOSITION –**

**Steve Jones, 800 S. State Street (SKP Park), Sutherlin,** worried about the "slopes sagging" and tending to slide. What if the ground gets saturated and slides, then what?

**Dick Hathaway, 800 S. State Street (SKP Park), Sutherlin,** come walk the trail and you will get to see it visually, you will see that it will slide into the park.

**Ken Knowles, 800 S. State Street (SKP Park), Sutherlin,** has medical problems (heart problems), who's responsible when it causes him more problems?

**RECEIVE NEUTRAL -** No neutral testimony

Closed public portion of the Hearing

**DISCUSSION** – Commissioner Schaub stressed the importance of safety and his concerns he has and doesn't want a "domino effect". If there is a risk, can an analysis be done. Commissioner Banducci asked staff for clarification of the geological impact report (Geotech Report). Commissioner Hogsett noted that logging has been done a lot of times, contractors (loggers) know what they should do. Commissioner Davidson noted that when trees are that old, its best to harvest them. The Planning Commission expressed the importance of a Geotech Report being completed with regards to the drainage concerns and requirements outlined in the Sutherlin Development Code. No other objections to the proposed request were stated.

A motion was made by Commissioner Hogsett to approve the request for a Conditional Use Permit and Tree Falling Permit (greater than 5 acres) on a 14.40± acre portion of the subject property. **PLANNING DEPARTMENT FILE NO. 23-S011.** Motion seconded by Commissioner Maloney.

In favor: Commissioners Hogsett, Maloney, Banducci, and Chair Davidson
Opposed: Schaub
Excused: None
Motion carried with a 4-1 vote

**MONTHLY ACTIVITY REPORT –** no questions asked.

**PUBLIC COMMENT –**

**Dick Rausher, 800 S. State Street (SKP Park), Sutherlin,** stated that an expert needs to go up and assess the situation for logging to reduce anxiety.

**COMMISSION COMMENTS** – Commissioner Banducci stated that we need to remember fire safety, there is a need to get ahead of the potential fire danger and it's not a bad idea to make it safer.

**ADJOURNMENT -** With no further business the meeting was adjourned at 8:02 p.m.

Respectfully submitted,

_____
Jamie Fugate, City Planner

***APPROVED BY COMMISSION ON THE _____ DAY OF _____, 2023.***

_____
Norman Davidson, Commission Chair

**BEFORE THE PLANNING COMMISSION OF THE CITY OF SUTHERLIN**

| | | |
|---|---|---|
| IN THE MATTER of a Conditional Use Permit and Tree Falling Permit (greater than 5 acres) on a 14.40± acre portion of the 240.24 acre subject property located south of S. State Street. The property is identified as Tax Lot (pt) 800 in Section 21, in T25S, R5W, W.M.; Property I.D. No's. R22984 and R22952 (CO portion). | ] | **FINDINGS OF FACT AND DECISION**<br><br>Applicant: Forest Edge Investments, LLC<br>Subject: Conditional Use Permit and Tree Falling (greater than 5 acres)<br>File No.: 23-S011 |

## PROCEDURAL FINDINGS OF FACT

1. The Conditional Use Permit and Tree Falling Permit (greater than 5 acres) applications were deemed complete by the City on August 22, 2023.

2. Pursuant to Section 4.2.140.C of the Sutherlin Development Code (SDC), notice of the public hearing was given by publication in the *News Review* on September 5, 2023, which was a least 14 days prior to the date of the public hearing.

3. Notice of a Public Hearing on the Conditional Use Permit and Tree Falling Permit (greater than 5 acres) applications before the Planning Commission was given in accordance with Section 4.2.140.C as a Type III procedure. Notice was sent to affected property owners of record within 100 feet of the subject property, property owners affected by this decision, service providers, and governmental agencies on August 29, 2023. Two (2) written comments on the proposal were received.

4. The Planning Commission held a public hearing on this matter on September 19, 2023.

5. At the public hearing on September 19, 2023, there were no declarations of ex parte contact or other conflicts of interest made by the Planning Commission. No objections were raised and the Commission was qualified to hear the matter.

6. The Planning Commission declared the following as parties at the September 19, 2023 hearing:

    a. Brandan McGarr, Battalion Chief, Sutherlin Fire Department
    b. Aaron Swan, Sutherlin Public Works Director
    c. Keith McCracken, representative on behalf of the property owner(s)
    d. Doug Town, adjacent resident (SKP Park)
    e. Richard Hathaway, adjacent resident (SKP Park)
    f. Jacqueline Deal, adjacent resident (SKP Park)
    g. Ken Grant, adjacent resident (SKP Park)
    h. Steve Jones, adjacent resident (SKP Park)
    i. Bruce Belfils, adjacent resident (SKP Park)
    j. Dick Rauscher, adjacent resident (SKP Park)
    k. Trish Hall, adjacent resident (SKP Park)
    l. Brent Hunsaker, adjacent resident (SKP Park)
    m. Beverly Hathaway, adjacent resident (SKP Park)
    n. Carol Harding, adjacent resident (SKP Park)

o. Thom Hoch, adjacent resident (SKP Park)
p. Bob Grant, adjacent resident (SKP Park)
q. Ken Knowles, adjacent resident (SKP Park)

7. Reference was made to the September 12, 2023 Staff Repot and findings of fact addressing compliance with the applicable provisions of the Chapter 2, Section 2.6 (FR-20 zone), Chapter 4, Section 4.5 (Conditional Use Permit) of the SDC and Chapter 5.16 (Timber Harvesting) of the Sutherlin Municipal Code (SMC) at the September 19, 2023 hearing.

8. Planning Staff presented the Staff Report dated September 19, 2023 and entered Staff Exhibits 1-9 into the record, including Staff Exhibit 10, an amended comment from the Sutherlin Public Works Director. The Staff Report was summarized, with staff giving the recommendation of action alternative number 1 at the September 19, 2023 hearing.

9. The Planning Commission provided opportunity to receive clarifying oral testimony from the applicant. Keith McCracken, representative for the property owner/applicant, stated he is available to answer any questions.

10. The Planning Commission provided opportunity to receive clarifying questions and oral testimony from persons in favor to the application. No persons were present.

11. The Planning Commission provided opportunity to receive clarifying questions and oral testimony from persons in opposition to the application. Doug Town, Richard Hathaway, Jacqueline Deal, Ken Grant, Steve Jones, Bruce Belfils, Dick Rauscher, Trish Hall, Brent Hunsaker and Beverly Hathaway spoke in opposition.

12. The Planning Commission provided opportunity to receive clarifying questions and oral testimony in rebuttal to the application. Keith McCracken, representative for the property owners/applicant responded to some of the concerns of the adjacent residents. Stating that there is a buffer of trees that are on the SKP Park property, that the property owner will be harvesting up too their property line. The trees within the proposed harvest area are between 80-100 years old and the trees are becoming a safety concern. The property owner/applicant intends to fully comply with forest management and harvesting practices, as well as the city permit (requirements).

13. The Planning Commission provided an additional opportunity to receive clarifying questions and oral testimony from persons in opposition to the application. Carol Harding, Thom Hoch, Ken Grant and Beverly Hathaway spoke in opposition.

14. The Planning Commission provided opportunity to receive clarifying response and oral rebuttal from the applicant. Keith McCracken, representative for the property owner/applicant clarified the slopes and what percentages pertain to harvesting and concerns with drainage.

15. The Planning Commission then provided an additional opportunity to receive clarifying questions and oral testimony from persons in opposition to the application. Steve Jones, Richard (Dick) Hathaway and Ken Knowles spoke in opposition.

16. The Planning Commission provided opportunity to receive neutral comments, questions and/or oral testimony from persons to the application. No persons were present.

17. The Planning Commission closed the public portion of the hearing and commenced discussion on the application.

## FINDINGS OF FACT RELATED TO DECISION

Commissioner Schaub stressed the importance of safety and his concerns he has and doesn't want a "domino effect". If there is a risk, can an analysis be done. Commissioner Banducci asked staff for clarification of the geological impact report (Geotech Report). Commissioner Hogsett noted that logging has been done a lot of times, contractors (loggers) know what they should do. Commissioner Davidson noted that when trees are that old, its best to harvest them. The Planning Commission expressed the importance of a Geotech Report being completed with regards to the drainage concerns and requirements outlined in the Sutherlin Development Code. No other objections to the proposed request were stated.

## FINDINGS OF FACT

Finding No. 1. The Planning Commission finds the subject property is designated Forestry by the Sutherlin Comprehensive Plan and zoned (FR-20) Forest Resource by the SDC.

Finding No. 2. The Planning Commission adopts by reference the findings of the Staff Report dated September 12, 2023.

Finding No. 3. The Planning Commission finds that the requested conditional use permit standards were processed as a Type III procedure, subject to the applicable provisions of the Sutherlin Comprehensive Plan, Chapter 2, Section 2.6 (FR-20 zone) and Chapter 4, Section 4.5 (Conditional Use Permit) of the SDC.

Finding No. 4. The Planning Commission finds, based upon the staff report, application materials and the oral testimony provided, that the proposed conditional use permit is designed to meet the requirements of Section 2.6 (FR-20 zone) and Section 2.7.210 (RH Zone and slopes greater than 12%, development standards) with regard to the requirement of a Geotech Report for any cut, fill, excavation, removal of trees or ground cover and/or grading.

Finding No. 5. The Planning Commission finds, based upon the staff report, application materials and the oral testimony provided, that the tree falling permit (greater than 5 acres) standards were processed subject to the applicable criteria and requirements outlined within Chapter 5.16 (Timber Harvesting) of the SMC.

Finding No. 6. The Planning Commission finds, based upon the staff report, application materials and the oral testimony provided, that the proposed tree falling permit (greater than 5 acres) will substantially meet the standards Chapter 5.16 [Timber Harvesting], Sections 5.16.050 [Tree falling permits for more than five acres], 5.16.060 [Criteria for tree falling], 5.16.070 [Reforestation] of the SMC and that appropriate conditions of approval have been imposed to ensure continued compliance. As proposed, the subject property will be harvesting of timber on approximately 14.40± acres of the 240.24 acre subject property where 119.71± acres are located within the city limits of Sutherlin.

Finding No. 7. The Planning Commission finds, base upon the staff report, application materials and oral testimony provided, that the property owner/responsible party is trying to harvest the timber on 14.40± acres of the 240.24 acre subject property to clear cut 80-100 year old timber.

Finding No. 8. The Planning Commission finds, based upon the staff report, application materials and the oral testimony provided the proposed conditional use permit and tree falling permit (greater than 5 acres), the property owner/responsible party shall coordinate with Sutherlin Public Works regarding the proposed roadways being utilized for the hauling of logs out of the city limits.

Finding No. 9. The Planning Commission finds, based upon the staff report, application materials and the oral testimony provided that the proposed development will substantially meet the approval criteria outlined in Chapter 4, Section 4.5 (Conditional Use Permit) of the SDC.

Finding No. 10. The Planning Commission finds, based upon the staff report, application materials and the oral testimony provided that the proposed development will substantially meet the approval criteria outlined in Chapter 5.16 of the SMC (Timber Harvesting) proposal and that appropriate criteria and conditions of approval have been imposed to ensure continued compliance.

## CONCLUSION

1. A motion was made by Commissioner Hogsett and seconded by Commissioner Maloney to approve action alternative number 1 and **APPROVE** the requested Conditional Use Permit and Tree Falling Permit (greater than 5 acres) on a 14.40± acre portion of the 240.24 acre subject property located south of S. State Street. The motion passed on a 4-1 vote, with Commissioner Schaub opposing.

2. The Commission adopts the findings of the staff report in support of their decision.

NOW, THEREFORE, based upon the foregoing findings of fact and the oral testimony provided, the Sutherlin Planning Commission **APPROVES** the requested Conditional Use Permit and Tree Falling Permit (greater than 5 acres) on a 14.40± acre portion of the 240.24 acre subject property, subject to the following conditions of approval:

1. The property owner/responsible party shall provide video documentation of the proposed access (haul route) prior to the start of the proposed timber harvesting to the Sutherlin Public Works Director. The property owner/responsible party shall notify the Sutherlin Public Works Director when the proposed timber harvesting is complete. Once the timber harvest is complete the Sutherlin Public Works Director will re-evaluate by additional video footage along with visual inspection the access (easement) and affected city streets (S. State Street).
    a. The property owner/responsible party is responsible for any damages that may occur to the existing gravel road (easement road) and paved roadway (S. State Street), and must be repaired beginning condition and/or better condition.

2. The property owner/responsible party shall conform to Chapter 8.16.170 [Noise Disturbance] of the Sutherlin Municipal Code (SMC).

3. Property owner/responsible party shall submit a Geotechnical Impact Statement addressing the portions of the proposed timber harvest portion that have slopes greater than 12% prior to the start of the proposed timber harvesting, meeting the requirements of Section 2.7.210 of the Sutherlin Development Code (SDC).

4. Property owner/responsible party must submit an approved permit from the Oregon Department of Forestry (ODF).

5. The property owner/responsible party shall comply with the Forest Practices Act.

6. The property owner/responsible party is responsible (and planning) for reforestation of the subject property meeting the requirements within Section 5.16.070.A of the SMC. A minimum of two hundred fifty (250) trees planted per acre within one year. After twelve (12) month period the property owner/responsible party shall demonstrate (and submit documentation) a minimum of seventy-five (75) percent survival rate.

7. All debris and slash realized from the tree falling shall be either removed or piled and burned within sixty (60) days following the removal of the harvested trees unless a time extension is granted by the planning commission due to unusual or extenuating circumstances; however, such time extension shall not exceed a maximum of twelve (12) months from the date of the completed harvest. Property owner/responsible party shall submit documentation compliance with this requirement.

8. Property owner/responsible party must submit a 24/7 Emergency Contact information document for project management on site provided by the Sutherlin Fire Department.

9. Property owner/responsible party is required to follow all rules from DFPA (Douglas Forest Protective Association) during Fire Season.

10. Obtain a City of Sutherlin Overweight Truck Hauling Permit that is to be approved pursuant to Section 10.32.030 of the Sutherlin Municipal Code (SMC).

11. Property owner/responsible party is responsible to be aware of posted load requirements on all bridges located inside city limits.

12. Obtain the necessary Planning Clearance Worksheet approval from the Community Development Department, once the above conditions have been met authorizing the proposed Timber Harvesting.

**ADVISORY STATEMENTS:**

13. The property owner/responsible party shall not negatively impact adjacent properties with storm drainage, soil erosion and/or water runoffs.

14. The property owner/responsible party shall comply with all applicable local, county, state and federal regulations as applicable to the Tree Falling.

DATED THE _____ DAY OF _____, 2023.

_____
NORMAN DAVIDSON, CHAIR

*Community Development*
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856
Fax (541) 459-9363
www.ci.sutherlin.or.us

# City of Sutherlin

## NOTICE OF PUBLIC HEARING
### PLAN AMENDMENT & ZONE CHANGE – 842; 880; 940 FIR GROVE LANE

Date of Notice: September 25, 2023

**NOTICE IS HEREBY GIVEN** that the Sutherlin Planning Commission will conduct a public hearing on **Tuesday, October 17, 2023 at 7:00 p.m.** in the Sutherlin Civic Auditorium, 175 E. Everett Street. The purpose of the public hearing is to take public testimony, either written or oral, while considering the following land use application:

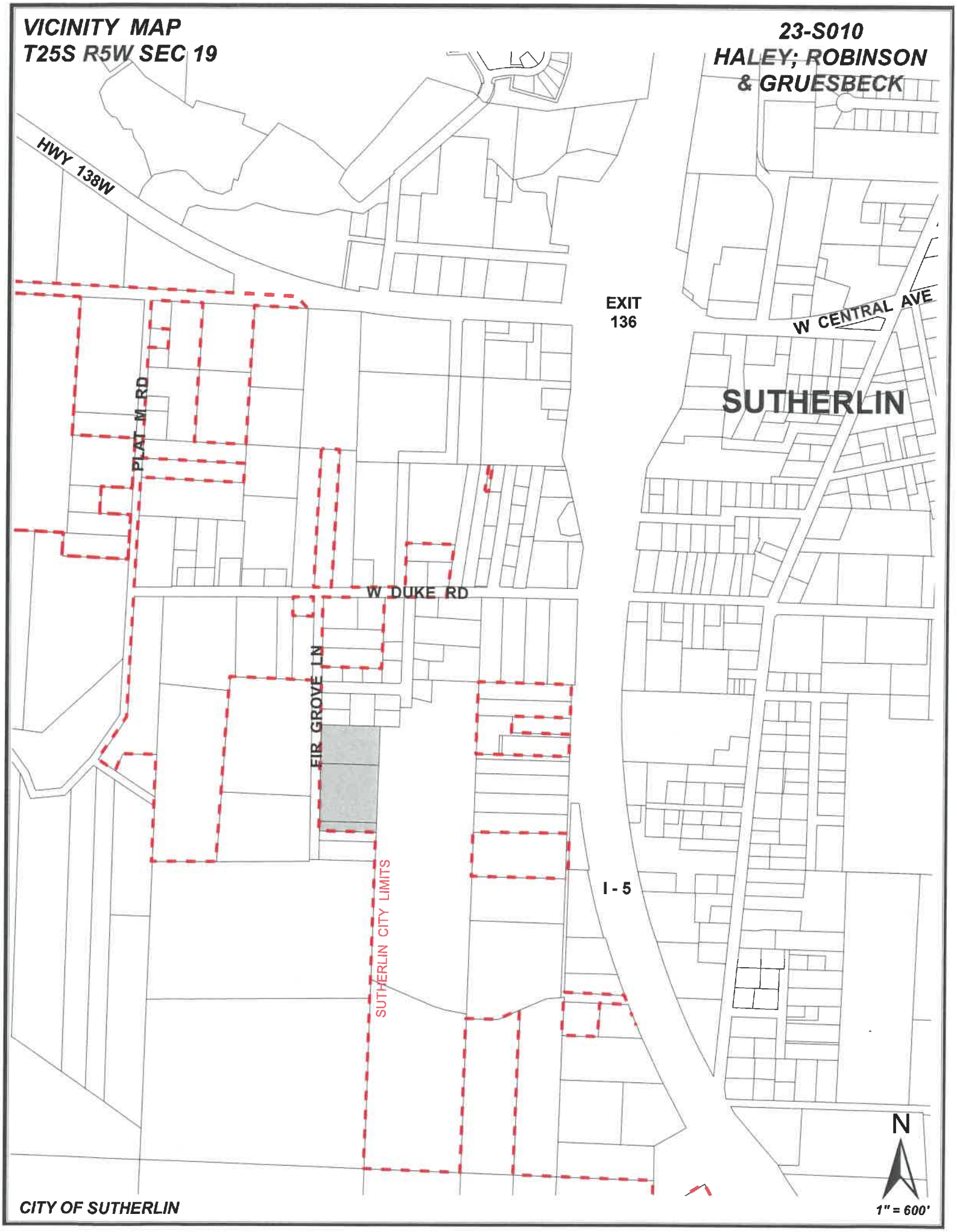
> **SAM ROBINSON, ET/AL,** request for a Comprehensive Plan Map Amendment from Low Density Hillside to Medium Density and Zone Map Change from (RH) Residential Hillside to (R-2) Medium Density Residential on a 3.81 acre property located on the east side of Fir Grove Lane and inside the City of Sutherlin. The subject property is described as Tax Lot(s) 201, 300 and 400 in Section 19C, T25S, R5W, W.M., and Property I.D. Nos. R46993, R47000 and R47007. **PLANNING DEPARTMENT FILE NO. 23-S010.**

The application is being processed as a Type IV procedure, governed by the applicable Statewide Planning Goals and Oregon Administrative Rules, the Sutherlin Comprehensive Plan and Sections 4.8 and 4.11 of the Sutherlin Development Code. Pursuant to Sections 4.2.140.C and 4.2.150.D of the Sutherlin Development Code, notice of this land use application has been mailed to affected agencies and all property owners of record within 100 feet of the subject property described above. Owners of property within 100 feet, or any other person who can demonstrate that they are affected by the proposed land use action, may request party status in this matter by filing a written statement with the Sutherlin Community Development Department, or by appearing at the hearing and requesting party status. Written statements must contain the name, address and telephone number of the person filing the statement; how the person qualifies as a party; comments the party wishes to make concerning the application, and whether the person desires to appear and be heard at the hearing. Written statements must be filed with the Community Development Department, 126 E. Central Avenue, Sutherlin, Oregon, 97479, **no later than 5:00 p.m. on October 9, 2023**, to be included with the mailing of the staff report.

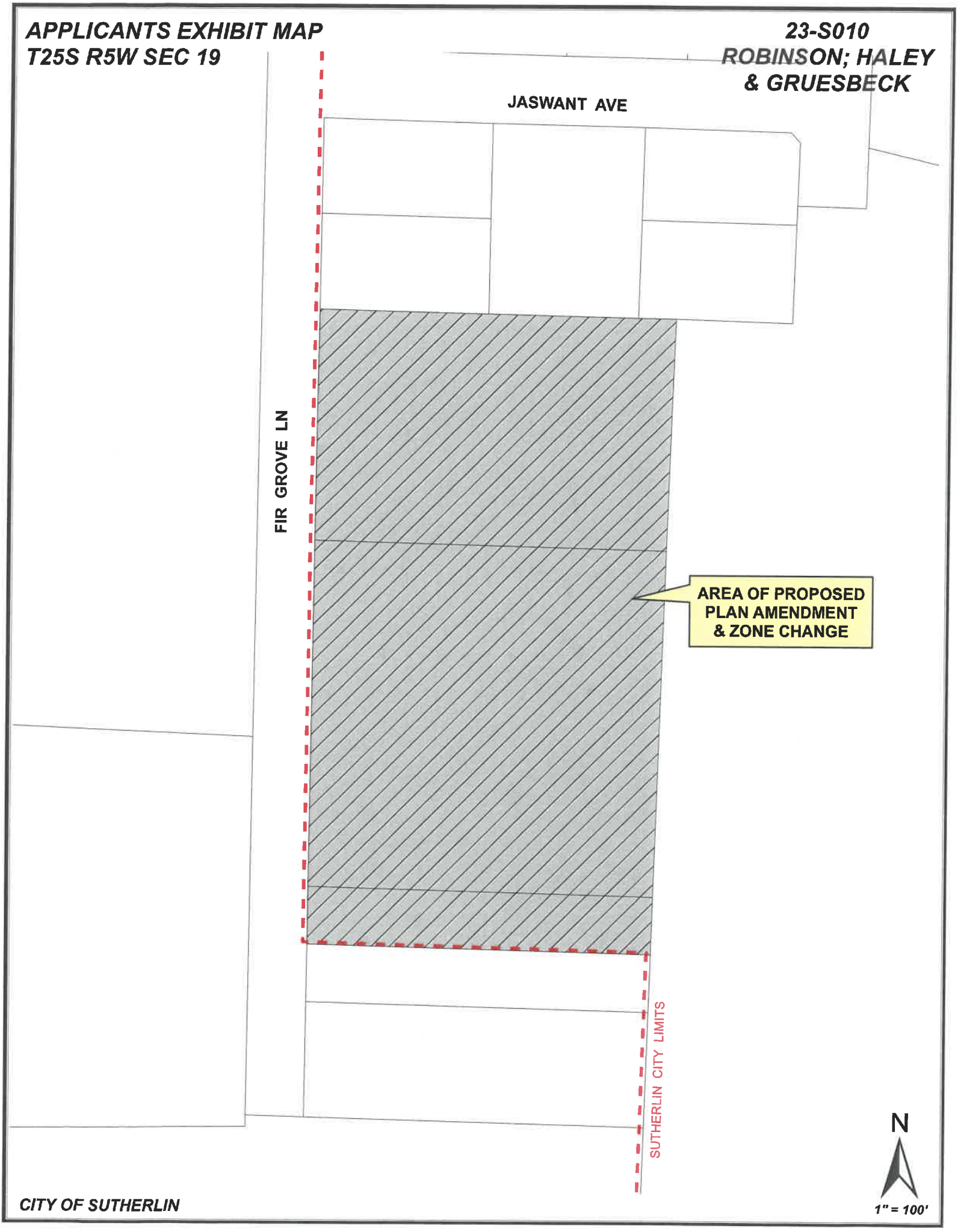
The public hearing will include presentations of the City staff and the applicant. Parties in support, opposition or with neutral comments will then be heard, as well as rebuttal by the applicant. Failure of an issue to be raised at the hearing, whether in writing or by oral testimony, or failure to provide statements or evidence in sufficient specificity to afford the Planning Commission and parties an opportunity to respond to the issue, will preclude an appeal on that issue and may thereafter bar any legal standing in the event of an appeal.

A copy of the application and supporting documents and evidence, and the applicable criteria are available for inspection at no cost and copies can be provided at reasonable cost. The staff report will be available for inspection at no cost at least seven days prior to the hearing and copies can be provided at reasonable cost.

For more information on this application, please contact Jamie Fugate in the Community Development Department at 541-459-2856 during normal business hours or email at j.fugate@ci.sutherlin.or.us


VICINITY MAP
T25S R5W SEC 19
23-S010
HALEY; ROBINSON
& GRUESBECK
HWY 138W
EXIT
136
W CENTRAL AVE
SUTHERLIN
PLAT M RD
W DUKE RD
FIR GROVE LN
SUTHERLIN CITY LIMITS
I - 5
N
CITY OF SUTHERLIN
1" = 600'


ASSESSOR MAP
T25S R5W SEC 19
23-S010
ROBINSON; HALEY & GRUESBECK
JASWANT AVE
PAUL & PARDUE
SRIKUREJA LIVING TRUST DATED 5/27/2015
SRIKUREJA LIVING TRUST
SRIKUREJA LIVING TRUST DATED 5/27/2015
SRIKUREJA LIVING TRUST DATED 5/27/2015
RESNER
FIR GROVE LN
ROBINSON LIVING TRUST DATED 5/8/2017
HALEY; ROBINSON & GRUESBECK
BAY & BAY
TIMS
TIMS
SUTHERLIN CITY LIMITS
N
1" = 100'
CITY OF SUTHERLIN


APPLICANTS EXHIBIT MAP
T25S R5W SEC 19
23-S010
ROBINSON; HALEY & GRUESBECK
JASWANT AVE
FIR GROVE LN
AREA OF PROPOSED PLAN AMENDMENT & ZONE CHANGE
SUTHERLIN CITY LIMITS
N
1" = 100'
CITY OF SUTHERLIN

STAFF EXHIBIT NO. 2

**Jamie Fugate**

**From:** DLCD Plan Amendments <plan.amendments@dlcd.oregon.gov>
**Sent:** Monday, September 11, 2023 11:12 AM
**To:** Jamie Fugate
**Subject:** Confirmation of PAPA Online submittal to DLCD

**[EXTERNAL SOURCE - USE CAUTION]**
**Sutherlin**

Your notice of a proposed change to a comprehensive plan or land use regulation has been received by the Oregon Department of Land Conservation and Development.
Local File #: 23-S010
DLCD File #: 001-23
Proposal Received: 9/11/2023
First Evidentiary Hearing: 10/17/2023
Final Hearing Date: 1/8/2024
Submitted by: jchartier

If you have any questions about this notice, please reply or send an email to plan.amendments@dlcd.oregon.gov.

STAFF EXHIBIT NO. 3

# Affidavit of Publication

## *The News-Review*

Of Douglas County

Roseburg, Oregon

ISSUED DAILY EXCEPT MONDAY & SATURDAY

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STATE OF OREGON

COUNTY OF DOUGLAS } ss.

I, LAURA STUDEBAKER, being first duly sworn, depose and say that I am the CLASSIFIEDS MANAGER, of The News-Review, a newspaper of general circulation, as defined by ORS 193.010 and 193.020; printed and published at Roseburg in the aforesaid county and state; that the _____

#92476 Legal Notice of #9031 NO. 23-S010_PC

a printed copy of which is hereto annexed, was published in the entire issue of said newspaper for 1 successive and consecutive days in the following issue:

09/29/2023

The fee actually charged by such newspaper for such publication is $232.56

Subscribed and sworn to before me this 28th day of September, 2023.

_____

Notary Public of Oregon

OFFICIAL STAMP
DARLA COOK
NOTARY PUBLIC-OREGON
COMMISSION NO. 1037430
MY COMMISSION EXPIRES MAY 30, 2027

NOTICE IS HEREBY GIVEN that the Sutherlin Planning Commission will conduct a public hearing on Tuesday, October 17, 2023 at 7:00 p.m. in the Sutherlin Civic Auditorium, 175 E. Everett Street. The purpose of the public hearing is to take public testimony, either written or oral, while considering the following land use application:

SAM ROBINSON, ET/AL, request for a Comprehensive Plan Map Amendment from Low Density Hillside to Medium Density and Zone Map Change from (RH) Residential Hillside to (R-2) Medium Density Residential on a 3.81 acre property located on the east side of Fir Grove Lane and inside the City of Sutherlin. The subject property is described as Tax Lot(s) 201, 300 and 400 in Section 19C, T25S, R5W, W.M., and Property I.D. Nos. R46993, R47000 and R47007. PLANNING DEPARTMENT FILE NO. 23-S010.

The application is being processed as a Type IV procedure, governed by the applicable Statewide Planning Goals and Oregon Administrative Rules, the Sutherlin Comprehensive Plan and Sections 4.8 and 4.11 of the Sutherlin Development Code. Pursuant to Sections 4.2.140.C and 4.2.150.D of the Sutherlin Development Code, notice of this land use application has been mailed to affected agencies and all property owners of record within 100 feet of the subject property described above. Owners of property within 100 feet, or any other person who can demonstrate that they are affected by the proposed land use action, may request party status in this matter by filing a written statement with the Sutherlin Community Development Department, or by appearing at the hearing and requesting party status. Written statements must contain the name, address and telephone number of the person filing the statement; how the person qualifies as a party; comments the party wishes to make concerning the application, and whether the person desires to appear and be heard at the hearing. Written statements must be filed with the Community Development Department, 126 E. Central Avenue, Sutherlin, Oregon, 97479, no later than 5:00 p.m. on October 9, 2023, to be included with the mailing of the staff report.

The public hearing will include presentations of the City staff and the applicant. Parties in support, opposition or with neutral comments will then be heard, as well as rebuttal by the applicant. Failure of an issue to be raised at the hearing, whether in writing or by oral testimony, or failure to provide statements or evidence in sufficient specificity to afford the Planning Commission and parties an opportunity to respond to the issue, will preclude an appeal on that issue and may thereafter bar any legal standing in the event of an appeal.

A copy of the application and supporting documents and evidence, and the applicable criteria are available for inspection at no cost and copies can be provided at reasonable cost. The staff report will be available for inspection at no cost at least seven days prior to the hearing and copies can be provided at reasonable cost.

For more information on this application, please contact Jamie Fugate in the Community Development Department at 541-459-2856 during normal business hours or email at j.fugate@ci.sutherlin.or.us

#9031 Pub. Dates: September 29, 2023

City of Sutherlin

***Community Development***
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856
Fax (541) 459-9363
www.ci.sutherlin.or.us

October 10, 2023

**STAFF REPORT**

TO: Sutherlin Planning Commission

FROM: Jamie Fugate, City Planner

RE: **SAM ROBINSON, ET/AL,** request for a Comprehensive Plan Map Amendment from Low Density Hillside to Medium Density and Zone Map Change from (RH) Residential Hillside to (R-2) Medium Density Residential on a 3.81 acre property located on the east side of Fir Grove Lane and inside the City of Sutherlin. The subject property is described as Tax Lot(s) 201, 300 and 400 in Section 19C, T25S, R5W, W.M., and Property I.D. Nos. R46993, R47000 and R47007. **PLANNING DEPARTMENT FILE NO. 23-S010**.

## STAFF EXHIBITS

1. Notice of Public Hearing
2. DLCD Notice of Proposed Amendment with email of submittal
3. Copy of legal notice posted in the *News Review*
4. Property Owners within 100 Feet
5. Staff Report with Responses attached
6. Comprehensive Plan & Zone Change applications and attachments
7. Vicinity Map
8. Assessor Map
9. Comprehensive Plan Map
10. Zoning Map
11. Aerial Map

## INTRODUCTION

The applicant, Sam Robinson, et/al, is requesting a Comprehensive Plan Map Amendment from Low Density Hillside to Medium Density and Zone Map Change from (RH) Residential Hillside to (R-2) Medium Density Residential on a 3.81 acre property.

This staff report concerns a proposed Plan Amendment and Zone Change. Current law requires Planning Commission and City Council approval of any amendment to the Sutherlin Comprehensive Plan and Zoning Maps. The property owners request a Plan Amendment and Zone Change from a Low Density Hillside (RLH) plan designation to a Medium Density (RM) plan designation together with a change of current zoning from Residential Hillside (RH) to (R-2) Medium Density Residential on a total of 3.81 acres to allow for future development of multifamily (3 or 4 dwellings) and single family dwelling units. The subject property proposed for amendment is located directly off Fir Grove Lane, south of its intersection with Jaswant Avenue. The subject property is described as Tax Lot(s) 201, 300 and 400 all in Section 19C, T25S, R05W, W.M.; Property ID No(s). R46993, R47000 and R47007. The subject property is owned by the applicant, along with Adam and Nanette Haley and Kenneth and Yvonne Gruesbeck, who are making this request.

During the public hearing on October 17, 2023, the Planning Commission will accept public testimony and make a recommendation to City Council on the application after the public hearing. As part of the hearing, the Planning Commission will review the applicant's request for compliance with the Statewide Planning Goals and the general goals and policies of the Sutherlin Comprehensive Plan and the applicable criteria of the Sutherlin Development Code (SDC) and adopt Findings of Fact.

After the public hearing, the Planning Commission must make a written recommendation and forward it to the City Council in the form of a Findings of Fact and Decision document, which justifies its decision and recommendation. The Council will consider the Commission's recommendation, hold a public hearing, and make a decision to grant, amend or deny the request.

## PROCEDURAL FINDINGS OF FACT

1. The Comprehensive Plan Map Amendment and Zone Map Change applications were filed with the City on August 17, 2023, and were deemed complete on August 21, 2023.

2. DLCD Notice of Proposed Amendment was electronically submitted to the Department of Land Conservation and Development on September 11, 2023, which was at least 35 days prior to the first evidentiary public hearing to be held on October 17, 2023.

3. Pursuant to Sections 4.2.140.C and 4.2.150.D, notice of the public hearing was given by publication in the News Review on September 29, 2023, which was at least fourteen (14) days prior to the date of the public hearing.

4. Notice of a Public Hearing on the applications for the Comprehensive Plan Map Amendment and Zone Map Change before the Planning Commission was given in accordance with Sections 4.2.140.C and 4.2.150.D. Notice was sent to affected property owners of record within 100 feet of the subject property, service providers, and governmental agencies on September 25, 2023.

    a. Kathy Wall, Senior Planner with Douglas County Planning Department, replied to the notice of public hearing that the DC Planning Department has no concerns or comments related to this request.

    b. Mathew Hogan, Fair Housing Council of Oregon submitted an email stating that they would like to obtain the staff report and all corresponding attachments for 23-S010 when available.

We will be reviewing the staff report predominantly for Statewide Planning Goal 10 compliance.

c. At the time of the mailing of this staff report, no other written comments or remonstrances have been received.

5. Present Situation: Tax Lot 201 is developed with a manufactured home and accessory buildings, tax lot 300 has a single family dwelling under construction and tax lot 400 has an existing accessory building.

6. Plan Designation: Low Density Hillside. The applicant is requesting a plan map amendment to the Medium Density plan designation.

7. Zone Designation: Residential Hillside (RH). The applicant is requesting a zone map amendment to the Medium Density Residential (R-2) zoning designation.

8. Public Water: Currently, tax lot 201 is served by an existing well. Plans have been submitted (and approved) for the extension of the existing water main to serve the subject properties.

9. Sanitary Sewer: Currently, tax lot 201 is served by an existing septic system. Plans have been submitted (and approved) for the extension of the existing sanitary sewer main to serve the subject properties.

10. Transportation System: Fir Grove Lane where it fronts the subject property is designated a local access road under the jurisdiction of Douglas County's Land Use and Development Ordinance.

11. Overlay: A portion of the subject property may contain wetlands, per the Department of State Lands (DSL) wetlands mapping.

**Finding:** The procedural findings noted above are adequate to support the Planning Commission's recommendation on the requested Comprehensive Plan Map Amendment and Zone Map Change**.**

## APPLICABLE CRITERIA & FINDINGS

Pursuant to Section 4.11.110.C of the Sutherlin Development Code, the proposed amendment to the land use plan's text or map must be (1) consistent to the applicable statewide planning goals as adopted by the Land Conservation and Development Commission (LCDC), and (2) consistent with the remainder of the comprehensive plan, including inventory documents and facility plans incorporated therein.

Based upon the application materials and information submitted by the applicant and other evidence provided, staff presents the following findings to address the applicable criteria:

### CONSISTENCY WITH THE STATEWIDE PLANNING GOALS

1. **Goal 1- Citizen Involvement**: To provide for widespread public involvement in the planning process, so citizens can be involved in all phases of the planning process and to allow citizens the

opportunity to review and comment on proposed changes to comprehensive land use plans prior to any formal public hearing to consider the proposed changes.

**Finding:** Statewide Planning Goal 1 requires cities and counties to create and use a citizen involvement process designed to include affected area residents in planning activities and decision-making. Since acknowledgement of the City's Comprehensive Plan, the Sutherlin Planning Commission has been responsible for ensuring continued citizen involvement in planning matters and land use decisions. On September 25, 2023, City staff mailed copies of a Notice of Public Hearing to all owners of property within 100 feet of the subject property. The same notice was published in the News-Review, a local newspaper of general circulation, on September 29, 2023. Written evidence relied on by the land use decision-making bodies (i.e. the applications and supporting material) was available for public review at Sutherlin City Hall at least seven days prior to the first public hearing. These various forms of individual and public notice assure that local citizens have an opportunity to become informed about, and participate in, the public hearing process. The requested plan amendment and zone change are being processed in a manner that assures full compliance with Statewide Goal No. 1.

2. **Goal 2- Land Use Planning:** To establish a land use planning process and policy framework as a basis for all decisions and actions related to land use and to ensure a factual base for such decisions and actions.

**Finding:** Sutherlin's acknowledged Comprehensive Plan and implementing ordinances provide a State-approved process for land use decision making, and a policy framework derived from a proper factual base. The City's Comprehensive Plan and implementing ordinances provide the local criteria by which applicant's amendment request must be evaluated in light of relevant Findings of Fact. The requested plan amendment and zone change are complying with the requirements of Statewide Goal No. 2.

3. **Goal 3- Agricultural Lands:** To preserve, protect and maintain agricultural lands.

**Finding:** Previous legislative determination by the City of Sutherlin via the adoption of the Comprehensive Plan and when the subject property was annexed into the city limits as residential hillside zone, not agricultural. The Statewide Agricultural Goal is not applicable to this proposed comprehensive plan and zone map change request.

4. **Goal 4- Forest Lands:** To conserve forest lands for forest by maintaining the forest land base and to protect the state's forest economy by making possible economically efficient forest practices that assure the continuous growing and harvesting of forest tree species as the leading use on forest land....

**Finding:** There has previously been a legislative determination by the City of Sutherlin via adoption of the Comprehensive Plan and during the annexation process, the subject property is not forest land. This finding is validated by the fact that the site is irrevocably committed to urban use, and by the fact that the site is within the city limits of Sutherlin and the urban growth boundary. Statewide Planning Goal No. 4 is not applicable to this proposed plan amendment and zone change.

5. **Goal 5- Open Spaces, Scenic and Historic Area, and Natural Resources:** To conserve open space and protect natural and scenic resources.

**Finding:** As outlined within the applicant's submitted supporting documentation, the subject property has not been included in any inventory of needed open space or scenic areas, nor has it been identified in the Comprehensive Plan as having any historic or cultural resources which need to be preserved and/or protected. Further, the property will be developed to protect any significant natural resources in accordance with the provisions of the Comprehensive Plan. Based on the foregoing findings, the requested plan amendment and zone change will not conflict with any identified Goal 5 resources.

6. **Goal 6- Air, Water and Land Resource Quality:** To maintain and improve the quality of air, water and land resources of the state.

**Finding:** Statewide Planning Goal 6 requires that air, land and water resources of the state be maintained and improved by assuring that future development, in conjunction with existing development, does not violate applicable state and federal environmental quality standards, and does not exceed the carrying capacity of local air sheds, degrade land resources or threaten the availability of such recourses. and process discharges from future development combined with that of existing development do not violate State or Federal environmental quality regulations. There has been a previous legislative determination by the City of Sutherlin that development of the subject property with urban uses will not result in degradation of air, water and land resources within the Sutherlin urban area or the state of Oregon. The subject property is situated in an area where the full range of urban services is available, including public water, public sewer and storm drainage systems (either above or in ground).

The proposed R-2 zoning is an acknowledgement of the existing development pattern near the subject property and surrounding area and its suitability for residential zoning due to its proximity to other R-1 zoned property and the clear need for more housing units as demonstrated in the housing needs analysis. Furthermore, the City of Sutherlin has sufficient regulatory measures in place to ensure that subsequent development of the site with urban uses will not result in deleterious or unanticipated impacts on the air, water and land resources of the urban area. The requested amendment is being evaluated in a manner that assures compliance with Statewide Goal No. 6.

7. **Goal 7- Areas Subject to Natural Disasters and Hazards:** To protect life and property from natural disasters and hazards.

**Finding:** The subject property has not been identified in any inventory of areas which have the likely potential to be subjected to natural disasters and hazards. The location of the site puts it well above any identified flood plain and any danger of flooding. The property proposed for amendment is generally flat or gently sloping on its northern portion increasing in slope to and through its south boundary. The land is similar in topography to adjoining and nearby properties that are already planned and zoned for the similar uses as contemplated by applicant.

The City of Sutherlin has adopted specific review and development standards for all properties within the city to ensure that their development and use does not pose a hazard to life and property. Any subsequent development of the subject property will be subject to such review and will be required to fully comply with all applicable development regulations. The requested amendment will not conflict with the purpose and intent of Statewide Goal No. 7.

8. **Goal 8- Recreational Needs:** To satisfy the recreational needs of the citizens of the State and visitors and, where appropriate, to provide for the siting of necessary recreation facilities including destination resorts.

**Finding:** The subject property has not been designated by the City of Sutherlin as land needed for recreational needs of the citizens of, or visitors to, the state of Oregon. Identified recreational needs have been provided for on other sites within the Sutherlin urban area. The proposed amendment will not conflict with Statewide Goal No. 8.

9. **Goal 9- Economic Development:** To provide adequate opportunities throughout the State for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.

**Finding:** The subject properties are currently inside the city limits and planned and zoned for residential development. The conversion of this property to a higher density plan will have a positive impact on the current need for housing developments and will not impact the current commercial and industrial lands within the city.

Commercial and industrial zoning have been applied to other lands containing existing commercial and industrial uses, as well as to an appropriate amount of undeveloped land that is intended to accommodate future commercial and industrial development within the Sutherlin urban area. The Sutherlin Urban Area Comprehensive Plan contains specific policies to ensure that opportunities for economic development are enhanced in the Sutherlin urban area. The proposed plan amendment will not conflict with the Statewide Economic Development Goal.

10. **Goal 10- Housing:** To provide for the housing needs of citizens of the State.

**Finding:** The primary purpose of Goal 10, within the context of amending the Comprehensive Plan, is to ensure that sufficient buildable land is available to allow for the full range of housing needs within the urban area and to avoid creating shortages of residential land which could artificially restrict market choices in housing type, price range or location. The subject property is currently planned Low Density Hillside and is zoned RH. The current plan designation for area proposed for amendment allows up to 3 dwelling units per acre under its current plan designation. Applicant is requesting the RM plan which provides for up to 12 dwelling units per acre. The proposed plan amendment and zone change, and subsequent development of the site with either single family, duplex or multiple family (3-4) units will enhance the present inventory of developable residential land, and will, therefore, increase potential future opportunities to provide additional higher-density housing.

**Finding:** The proposal submitted would allow the property to be zoned at a higher density. Thus, allowing for an increase in housing inventory within the city limits and help with the need for available residential land and housing opportunities. This proposed plan amendment and zone change is consistent with Goal 10, and will promote both purpose and intent of the Statewide Housing Goal.

11. **Goal 11- Public Facilities and Services:** To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

**Finding:** The subject properties are within the Sutherlin urban area, which public facilities and services are provided by the City of Sutherlin, Douglas County and several special districts. Policies concerning the coordination, timing and location of public facilities and services in the urban area are contained within the Public Facilities and Land Use Elements of the Comprehensive Plan. Specific measures intended to implement these policies are contained in various inter-governmental agreements, including the Sutherlin/Douglas County Urban Growth Management Agreement.

The City maintains an existing 8-inch sewer main that runs along Jaswant Avenue just north of the property. The applicant has consulted with the City regarding the of sanitary sewer service from the proposed extension of the existing main to the subject property for the type of development contemplated. The City indicates that sewer service is available to the subject property with the cost of extending new service into the site being applicant's/developers responsibility.

Water service to the subject site is provided by the City of Sutherlin via an existing 8-inch main in Jaswant Avenue. Applicant/developer will extend water service to the subject property at the time of development and will coordinate water improvements with the City of Sutherlin to assure proper location for installing a service line sufficient to serve the contemplated residential development.

The existing facilities are sized to provide the property with a supply of water that is adequate for anticipated residential service and for fire protection. Fire protection service is provided by the City of Sutherlin Fire Department. An existing fire hydrant is located on Jaswant Avenue just north of applicant's property. A new hydrant will be required in proximity to the subject property at the time of development. Police services in the area are provided by the City of Sutherlin Police Department. Street maintenance, storm drainage and street lighting in the area are also provided by the City of Sutherlin and Douglas County. The design and installation of onsite storm drainage facilities, if required, will be the responsibility of applicant/developer at the time of development. Plans for the installation of these and any other on-site and off-site facilities will be subject to review and approval of the City of Sutherlin, Douglas County and any other agency having jurisdiction over public facilities and services in the area.

**Finding:** On the basis of the foregoing facts, the requested plan amendment and zone change will not adversely impact the present or future provision of public facilities and services in the area. The full range of urban services appropriate for the subject property's proposed residential designation is available and can be provided in a timely, orderly and efficient manner consistent with the purpose and intent of Statewide Goal No. 11. This conclusion is based on consideration of the existing public service delivery systems and plans that are in place in the area to ensure coordination of the types, locations and delivery of the public facilities and services needed to support existing and proposed land uses in the area.

12. **Goal 12- Transportation:** To provide and encourage a safe, convenient and economic transportation system.

**Finding:** As previously noted, the subject property has frontage along Fir Grove Lane which is improved to a gravel surface with no curbs, gutters or sidewalks. Fir Grove Lane is classified as a local access road under the jurisdiction of Douglas County and is not maintained by Douglas County. Estimates of the average number of daily vehicle trips generated by a specific land use can be obtained from a number of reliable sources. One of the commonly referenced sources for such data is Trip Generation, published by the Institute of Transportation Engineers (ITE). Average daily trip generation rates published by ITE are based primarily on field data obtained from direct observation of actual land use activities. Trip generation rates

are reported as an average of vehicle counts taken at numerous sites having the same classification of land use. Trip generation rates are often broken down into specific time frames, such as "Average Daily Trips (ADT)", "Average Peak Hour Trips", and "AM and PM Peak Hour Trips". For most land use activities, including both multi-family residential and duplexes uses, ITE defines an "average daily trip" as a one-way vehicular movement between a single origin and a single destination.

Based on the functional classification and existing service levels of adjacent and nearby transportation facilities, the proposed plan amendment and zone change will be consistent with the identified function, capacity, and level of service of those facilities. Nevertheless, specific transportation-related policies and development standards are included with the City of Sutherlin Comprehensive Plan, as well as the City's zoning code to ensure that the statewide transportation goal is implemented on a site-specific basis at the time of development.

**Finding:** The applicant's proposed zone change from RH to R-2 on the subject site will facilitate construction of additional residential housing units as set forth on the conceptual site plan included in the submitted supporting documents (See Figure 1) within the application considering the existing dwelling potential in comparison to the future potential under the proposed plan and zone. The subject site proposed for amendment will accommodate up to eight additional residential units considering site conditions and limitations. At the present time, public roads in the area are adequate to accommodate both existing traffic and potential future traffic volumes likely to be generated as a consequence of the requested plan amendment and zone change. No special traffic controls or other mitigation measures will be required due to the relatively low volume of traffic associated with the requested plan amendment and zone change until development of the subject property. As development occurs, road improvements to Douglas County, as well as city standards and requirements will be required, allowing for safe travel and connectivity to nearby roadways.

**Finding:** As outlined within the applicant's proposal and submitted materials, considering that there will be limited increase in potential traffic levels as a result of the proposed amendment, will not result in a change in the functional classification of existing or planned transportation facilities serving the area, nor will it result in changes to existing development standards or alter the functional classification of existing or planned transportation facilities. Neither will it allow types of levels of land uses which would result in levels of travel or access which are inconsistent with the functional classification of near-by transportation facilities, or otherwise reduce the level of service of existing and planned transportation facilities below minimum acceptable levels. The proposed plan amendment and zone change will not conflict with the Statewide Transportation Goal. Compliance with the intent of Goal 12 will be assured through the application of specific local policies and standards at the time specific development plans for the subject property are formulated and submitted for review and approval.

13. **Goal 13- Energy Conservation:** To conserve energy.

**Finding:** The statewide energy conservation goal is intended to assure that land and uses developed on land are managed and controlled to maximize the conservation of all forms of energy, based upon sound economic principles. The subject property is situated within the established urban area where its subsequent development will promote the efficient energy-related use of existing and planned transportation facilities. Major public facilities and services are immediately available to the site, thus reducing the energy-related inefficiencies associated with extending such services beyond existing urban development. Furthermore, specific energy conservation policies and development standards are included within the Sutherlin Urban

Area Comprehensive Plan and the City's zoning code to ensure that the statewide energy conservation goal is implemented on a site-specific basis at the time the property is developed. The proposed plan amendment and zone change will not conflict with the Statewide Energy Conservation Goal No. 13.

14. **Goal 14- Urbanization:** To provide for an orderly and efficient transition from rural to urban land use.

**Finding:** The subject properties, including adjacent properties to the east and south are located within the Sutherlin Urban Growth Boundary (UGB). Urbanization goal requires that land to be within the UGB and shall be considered available over time for urban uses. Inclusion of the property within the UGB and city limits demonstrates the City's legislative intent to allow urban development to occur on the proposed sites. The proposed plan amendment and zone change will have no effect on the present status of the UGB, nor will it conflict with the purpose and intent of statewide planning Goal 14.

**CONSISTENCY WITH SUTHERLIN COMPREHENSIVE PLAN POLICIES FOR COMPREHENSIVE PLAN AMENDMENTS**

## Plan Amendment Criteria No. 2 – Conformance with the Comprehensive Plan

The Sutherlin Urban Area Comprehensive Plan contains policy statements which are intended to provide the City with direction when considering a proposal to amend the Plan. Written policies that are applicable to the proposed plan amendment and zone change are contained in various elements of the Plan document, including the Natural Resources Element, the Public Facilities Element, the Housing Element, the Transportation Element, and the Land Use Element. The following proposed findings address each of the Plan policies that are applicable to this plan amendment and zone change request:

**HOUSING POLICIES**

B. GOAL: To enable all members of the community to live in housing appropriate to their needs.

Housing Policy No. 2 - *Encourage innovative designs for various types of multi-family housing in order to meet the diverse needs of smaller households such as those of the elderly and young families.*

**Finding:** The subject property is situated within a mix of residential zoned properties as outlined within this staff report. The requested plan amendment and zone change would allow for a higher density and increased housing opportunities within the proposed R-2 zone.

C. GOAL: To locate future housing so that available land is both used efficiently and developed for a high degree of livability.

Housing Policy No. 1 - *Encourage infilling of the existing residential areas by incentives for new construction in already-serviced areas.*

**Finding:** The proposed amendment will promote efficient development of the property by using the existing public access, facilities and services that already exist in the area. The proposed use of the property for increased density residential housing is consistent with the established uses on the surrounding properties and the character of other existing urban residential uses. Public facilities, including sewer, water and storm drainage, are currently under construction and being installed to adequately serve the property.

The site will be developed in a manner that fully conforms to the applicable development standards for residential uses, including access and internal circulation, signage, lighting, buffering and landscaping. Conceptual site development plans are submitted with this application for the future residential development. The site plan review process at the time of development will assure that the subject property will be developed in the manner represented by the plan amendment and zone change applications and will further assure that development of the site will fully comply with all applicable development standards.

**PUBLIC FACILITIES POLICIES**

A. GOAL: To provide efficient public facilities and services in an orderly, planned manner so as to meet the needs of Sutherlin's residents and businesses.

Public Facilities and Services Policy No. 1 - *The city shall ensure that appropriate support systems are installed prior to or concurrent with the development of a particular area. Costs of constructing water and sewer ties to new developments shall be borne by the developer.*

**Finding:** City water, sewer, storm water, transportation and fire hydrant will need to be install to serve the subject properties, the construction to city standards are the responsibility of the property owner(s)/developer. The applicant has submitted engineered plans for the proposed infrastructure to the city and also submitted a drainage assessment to demonstrate consistency with the drainage requirements with the applications supporting documents.

Public Facilities Policy No. 12 - *The city shall provide sewer and water service to areas within the Urban Growth Boundary.*

**Finding:** As noted previously, the subject property has city water and sewer available. Existing water and sanitary sewer are located within the right-of-way of Jaswant Avenue, to the north. These improvements, meeting city standards will need to be extended to serve the subject properties.

Public Facilities Policy No. 14 - *Ensure that as new development occurs, public facilities and services to support the development are available or will be available within a reasonable time.*

**Finding:** The subject properties have public water and sanitary sewer available, the property owner(s)/developer are currently working towards getting the needed public utilities installed to the site and available for necessary development.

C: GOAL: To conserve energy resources and encourage utilization of renewable energy resources.

Public Facilities and Services Policy No. 8 - *Redevelopment of large lots and infilling and development of undersized lots will be encouraged where appropriate.*

**Finding:** The applicant is proposing through the plan amendment and zone change applications a higher density zone, which would facilitate the development of the 3.81 acres, utilizing renewable energy resources as available.

**TRANSPORTATION POLICIES (set out in Public Facilities element)**

B. GOAL: To provide and encourage a safe, convenient, aesthetic, and economical transportation system.

Transportation Development Policy No. 1 - *Encourage the expansion of the street improvement program and also coordinate the program with the future street plan, and thus ensure that those streets that have been designated to carry high volumes of traffic (arterials and collectors) are in satisfactory and safe condition*.

**Finding:** As previously noted, the subject property has access via Fir Grove Lane which is improved to a gravel surface with no curbs, gutters or sidewalks. Fir Grove Lane is classified as a local access road under the jurisdiction of Douglas County and is not maintained by Douglas County. As development occurs, the property owner(s)/developer will be required to improve a portion of Fir Grove Lane, providing curb, gutters and sidewalks to allow for safe and economical transportation. The interior circulation plan for the proposed residential units will connect to the public street system at points of access to the property as directed by the City which connections will be improved in accordance with City design standards and requirements.

**SECTION 4.8 ZONING DISTRICT MAP AMENDMENTS**

**4.8.100 Purpose.** The purpose of this section is to provide standards and procedures for legislative and quasi-judicial amendments to the zoning district map. These will be referred to as "zoning map amendments." Map amendments may be necessary from time to time to reflect changing community conditions, needs and desires, to correct mistakes, or to address changes in the law.

**4.8.110 Criteria for Amendment.** The planning commission shall approve, approve with conditions or deny an application for a quasi-zoning map amendment based on all of the following criteria:

1. *Demonstration of compliance with all applicable comprehensive plan policies and map designations. Where this criterion cannot be met, a comprehensive plan amendment shall be a prerequisite to approval;*

**Finding:** The proposed zone map amendment is being reviewed in conjunction with a comprehensive plan amendment to change the subject 3.81 acres from low density hillside to medium density. As outlined and addressed previous findings within the document, the applicant's proposal is consistent with all the applicable comprehensive plan policies and implementing ordinances.

2. *Demonstration that the most intense uses and density that would be allowed, outright in the proposed zone, considering the sites characteristics, can be served through the orderly extension of urban facilities and services, including a demonstration of consistency with OAR 660-012-0060; and*

**Finding:** The application and supporting documents outlines how the requested proposal to medium density will allow the construction of duplex units or multifamily dwellings (3 or 4 dwellings) on the units of land under the applicable criteria set out immediately above as a permitted use under the R-2 zone. The subject property can be served through the orderly extension of urban services and is consist with OAR 660-012-0060. Public utilities (i.e. water and sanitary sewer) are located within the existing right-of-way of Jaswant Avenue.

3. *Evidence of change in the neighborhood or community, or a mistake or inconsistency between the comprehensive plan or zoning district map regarding the subject property which warrants the amendment.*

**Finding:** The requested application is not the result of a mistake or inconsistency between the comprehensive plan or zoning district map. The subject property was recently annexed into Sutherlin city limits, concurrently with an urban growth boundary expansion. When the subject property was considered for the UGB Exchange and annexation into the city limits, the majority of lands considered were residentially zoned and the exchange would be a like for like designation of residential zones. Thus, resulting in the subject properties being zoned residential hillside.

**SECTION 4.11 AMENDMENTS TO THE SUTHERLIN DEVELOPMENT CODE AND LAND USE PLANS**

**4.11.100 Purpose and Applicability.** These regulations provide the procedures and criteria the city will follow when it considers making an amendment to the city's development code or a land use plan, including amendments to the comprehensive plan text or map, annexations and amendments to the urban growth boundary.

**4.11.110 Approval Criteria**. The planning commission's recommendation and the city council's decision shall be based on the following approval criteria.

1. *For a proposed amendment to the city's development code, the proposed amendment is consistent with applicable provisions of the comprehensive plan, including inventory documents and facility plans incorporated therein.*

**Finding:** As outlined and addressed in previous findings within the document, the applicant's proposal is consistent with all the applicable comprehensive plan policies, including inventory documents and implementing ordinances.

2. *For a proposed amendment to a land use plan's text or map:*
   a. *The proposed amendment is consistent with applicable statewide planning goals as adopted by the Land Conservation and Development Commission; and*
   b. *The proposed amendment is consistent with the remainder of the comprehensive plan, including inventory documents and facility plans incorporated therein.*

**Criteria A**: The proposed amendment is consistent with applicable statewide planning goals as adopted by the Land Conservation and Development Commission.

**Finding:** Findings for the statewide planning goals adopted by Department of Land and Conservation and Development (DLCD) are addressed on an individual basis in previous section of this document. Each of the applicable goals contains findings of compliance, and no exceptions to those goals are proposed. The Plan Amendment and Zone Change satisfy the statewide planning goals.

**Criteria B:** The proposed amendment is consistent with the remainder of the comprehensive plan, including inventory documents and facility plans incorporated therein.

**Finding:** As stated throughout this staff report document and outlined within the findings, the proposed amendment is consistent with the necessary comprehensive plan, including inventory documents and facility plans.

## CONCLUSION

City Staff recommends that the Planning Commission forward a recommendation for approval to the Sutherlin City Council of the requested Comprehensive Plan Map Amendment from Low Density Hillside to Medium Density and Zone Map Change from (RH) Residential Hillside to (R-2) Medium Density Residential on the subject 3.81 acre properties.

## DECISION OPTIONS

Based on the applicant's findings, the City Staff Report and the testimony and evidence provided during the public hearing, the Planning Commission can move to either:

1. Close the public hearing and, after deliberating on the matter, pass a motion to **recommend** to the City Council **approval** of the requested Comprehensive Plan Map and Zoning Map Amendments on the subject 3.81 acre properties; or

2. Close the public hearing and, after deliberating on the matter, pass a motion to **recommend** to the City Council approval of the requested Comprehensive Plan Map and Zoning Map amendments with specified **conditions**; or

3. Pass a motion to **continue the public hearing** to a specified date and time, or to close the public hearing and to leave the record open to a specified date and time for submittal of additional evidence and rebuttal; or

4. Close the public hearing and, after deliberating on the matter, pass a motion to **recommend denial** of the requested Comprehensive Plan Map and Zoning Map amendments on the grounds that the proposal does not satisfy the applicable approval criteria.

N:\Planning\2023 Land Use\23-S010 ROBINSON PA ZC\23-S010_Robinson_PAZC_PC staff report.docx

## Jamie Fugate

**From:** Kathy Z. Wall <Kathy.Wall@douglascountyor.gov>
**Sent:** Monday, October 9, 2023 10:54 AM
**To:** Jamie Fugate
**Subject:** Robinson, et al.; File No. 23-S010

**[EXTERNAL SOURCE - USE CAUTION]**
Hi Jamie,

Thanks for taking my call this morning.
As I mentioned the DC Planning Department has no concerns or comments related to this request.

Have a great week,
Kathy

DOUGLAS COUNTY
PLANNING DEPARTMENT
**Kathy Wall | Senior Planner**
Douglas County Courthouse | Room 106 | Justice Building | Roseburg, OR 97470
Phone: 541-440-4289 | Email: kathy.wall@douglascountyor.gov

## Jamie Fugate

**From:** Mathew Hogan from Fair Housing Counsel of Oregon <mathew.jamesfhco@gmail.com>
**Sent:** Monday, October 9, 2023 5:27 PM
**To:** Jamie Fugate
**Subject:** PAPA file 23-S010

**[EXTERNAL SOURCE - USE CAUTION]**
Good morning Jamie,

My name is Mathew Hogan and I am conducting outreach for the Fair Housing Council of Oregon (FHCO). I was hoping to obtain the staff report and all corresponding attachments for 23-S010 the "P/A (LOW DENSITY HILLSIDE TO MEDIUM DENSITY) & Z/C (RESIDENTIAL HILLSIDE TO MEDIUM DENSITY RESIDENTIAL)" when available. We will be reviewing the staff report predominantly for Statewide Planning Goal 10 compliance.

If we do have any commentary or concerns my colleague Sam Goldberg will be in touch to advise. We hope this can be a collaborative process. Please confirm receipt of this e-mail, and I look forward to hearing from you soon.

Very Respectfully,

**Mathew Hogan**
Fair Housing Council of Oregon
**Phone: (406) 439 0950**
**E-mail: Mathew.JamesFHCO@gmail.com**
*For the latest on the PAPA Project and our feedback & technical advice methodology, please read the PAPAs section at our partner website, here.*

# CITY OF SUTHERLIN
# COMPREHENSIVE PLAN AMENDMENT APPLICATION

**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

**FILE NO.** 23-S010 **DATE FILED:** 8-17-23

**FEE:** $1200.00 + Legal Fees (non-refundable)

**STAFF EXHIBIT NO.** 6

**THE UNDERSIGNED OWNER(S) OR AUTHORIZED AGENT(S) HEREBY REQUEST FROM THE CITY OF SUTHERLIN A COMPREHENSIVE PLAN AMENDMENT**

Low Density Hillside (RLH) (Current Comp Plan) **TO** Medium Density Residential (RM) (Proposed Comp Plan)

## 1. APPLICATION INFORMATION

APPLICANT:

Name(s): Sam Robinson et/al

Address(s): P. O. Box 917, Sutherlin, OR 97479

Phone(s): 541.817.3468 Email: robinsontradingcompany@yahoo.com

TITLEHOLDER OF SUBJECT PROPERTY:

Name(s): Sam Robinson et/al

Address(s): P. O. Box 917, Sutherlin, OR 97479

Phone(s): 541.817.3468 Email: robinsontradingcompany@yahoo.com

AUTHORIZED AGENT(s):

Name(s): Mark Garrett Land Use Planning Services

Address: P. O. Box 2191, Roseburg, Oregon 97470

Phone(s): 541.825.3708 Email: markgarrett@frontiernet.net

## 2. PROPERTY DESCRIPTION

A. T 25S R 5W Sec 19C Tax Lot(s) 201, 300 and 400

B. Property No. ID(s): R46993, R47000 and R47007

**City of Sutherlin**
**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

C. Present Size of Parcel: 3.81 acres

D. Total land area involved in the request: Acres: 3.81 acres SQ FT: 165,963 sq. ft.

E. 1. List all existing addresses located on the property
824 Jaswant; 842, 862 and 946 Fir Grove Lane

2. Indicate the subject property's location in relationship to nearest streets (i.e., NE corner of Umatilla St. and 5th Ave.) .) Property is located at the intersection of Jaswant Avenue and Fir Grove Lane approximately 400 feet south of Duke Road.

## 3. EXISTING AND ANTICIPATED USE INFORMATION

A. Current Use: Residential and vacant

B. Current Zoning: Residential Hillside (RH)

C. Current Comprehensive Plan: Low Density Hillside (RLH)

D. Proposed Changed Designation: Medium Density Residential (RM)

E. Proposed use of the site for which this change is being requested
Applicant proposes to develop duplex units on residential lots

F. Is it anticipated that structures will be removed/demolished from the property?
YES or NO X If yes, a separate application for demolition is required.

G. Are any historic structures or historically significant features on the subject property?
____YES __X__ NO If yes, describe the impacts to such features.

H. Is it anticipated that a land division or partitioning will occur as a result of the change granted? __X__YES_____ NO If yes, compliance with Sutherlin Development Code (ORD. 976) and a separate application for subdivision, PUD, partition.

I. What is the anticipated time for development? Fall, 2023

J. Will this development be in phases? YES or NO If yes, number and timeline of additional phase completion Undetermined

K. What additional public and private utilities will be needed for the proposed development?
Applicant will extend the existing public services to the development including sewer, water, power, gas and phone.

**City of Sutherlin**
**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

## 4. REQUIRED ATTACHMENTS (Please submit all tentative plans/plats electronically)

A. General Information:

1. A plot map showing boundaries, proposed change, current plan designation, access, utilities, and 5' contours.
2. Date, north arrow, and scale of drawing;
3. Location of the development sufficient to define its location in the city, boundaries, and a legal description of the site;
4. Names, addresses and telephone numbers of the owners, project designer, engineer(s), and or surveyor, and the date of the survey; if applicable.

B. Impact Statement: Shall include a narrative addressing each area of impact listed below:

1. Quantify/assess the effect of the development on public facilities and services;
2. Address, at a minimum, the transportation system, including pedestrian ways and bikeways, the drainage system, the parks system, the water system, the sewer system, and the noise impacts of the development; and
3. For each public facility system and type of impact, the study shall propose improvements necessary to meet city standards and to minimize the impact of the development on the public at large, public facilities systems, and affected private property users.

C. Applicant shall submit a narrative that addresses each of the approval criteria listed below:

1. For a proposed amendment to the city's development code, the proposed amendment is consistent with applicable provisions of the comprehensive plan, including inventory documents and facility plans incorporated therein.
2. For a proposed amendment to a land use plan's text or map:
   a. The proposed amendment is consistent with applicable statewide planning goals as adopted by the Land Conservation and Development Commission; and
   b. The proposed amendment is consistent with the remainder of the comprehensive plan, including inventory documents and facility plans incorporated therein.

## 5. SIGNATURES

I hereby apply for a Comprehensive Plan Amendment as requested on this form and certify that the attachments are complete and correct. (Any and all engineering cost incurred by the City of Sutherlin associated with this application shall be the responsibility of the applicant.) **Attach sheet if additional signatures are required.**

**City of Sutherlin**
**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

SIGNATURE REQUIRED:

We, Sam Robinson, Adam Haley, Nanette Haley, Kenneth Gruesbeck and Yvonne Gruesbeck, are
(Print Name(s) in Full)
the titleholder(s) or contract purchaser(s) [under a duly executed written contract] of the property described in this application and hereby certify that the statements and information contained herein are in all aspects true, complete and correct to the best of my (our) knowledge and belief.

SIGNED: _____
(see attached authorization forms)

DATE: July 24, 2023

Any other owner or option holder or buyer who does not sign this application shall provide a signed statement providing their authorization for submission of this request.

## COMPLETENESS CHECK

The Community Development Director shall check an application for completeness as per Development Code, Section 4.2.160 (E)(3). The Community Development Director shall notify the applicant of any missing materials within 30 days of receiving the application. If the application was complete with first submitted or the applicant submits the requested additional information within one hundred, eighty (180) days of the date the application was first submitted, approval or denial of the application shall be based upon the standards and criteria that were applicable at the time the application was first submitted.

Submittal of payment for an application does not classify an application as complete. The Community Development Director will contact the applicant on the status of the application within the 30 days allowed to determine if the application is complete.

This application has been inspected by me and found to be sufficiently complete to initiate the review process.

Planner: _____
Fee Receipt No: 58835
Date: 8.21.23

# CITY OF SUTHERLIN
# ZONE CHANGE APPLICATION

**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

**FILE NO.** _____ **DATE FILED** _____
**FEE: $1200.00 + Legal Fees (non-refundable)**

**THE UNDERSIGNED OWNER(S) OR AUTHORIZED AGENT(S) HEREBY REQUEST FROM THE CITY OF SUTHERLIN A ZONE CHANGE FROM**

RH **TO** R2

**(Current Zoning)** **(Proposed Zoning)**

## 1. APPLICATION INFORMATION

APPLICANT:

Name(s): Sam Robinson et/al

Address(s): P. O. Box 917, Sutherlin, OR 97459

Phone(s): 541.817.3468 Email: robinsontradingcompany@yahoo.com

Name(s): Sam Robinson et/al

Address(s): P. O. Box 917, Sutherlin, OR 97459

Phone(s): 541.817.3468 Email: robinsontradingcompany@yahoo.com

AUTHORIZED AGENT(s):

Name(s): Mark Garrett Land Use Planning Services

Address: P. O. Box 2191, Roseburg, Oregon 97470

Phone(s): 541.825.3708 Email: markgarrett@frontiernet.net

## 2. PROPERTY DESCRIPTION

T 25S R 5S Sec 19C Tax Lot(s) 201, 300 and 400

Property I.D. No(s). R46993, R47000 and R47007

Comprehensive Plan: Low Density Hillside (RLH) Zone: Residential Hillside

Property Site Address: 842 Fir Grove Lane (there are multiple addresses)

Size of Parcel: ~~2.43~~ 3.81 acres

Total land area involved in the Zone Change request: Acres: 3.81 ac. SQ FT: 165,963

**City of Sutherlin**
**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

## 3. EXISTING AND ANTICIPATED USE INFORMATION

A. Current Use: Residential and vacant

B. City Zoning: Residential Hillside

C. Comprehensive Plan: Low Density Hillside (RH)

D. Proposed Zoning Designation: Medium Density Residential (RM)

E. Proposed Use of the site for which this change is being requested:
Applicant proposes to develop duplex units on residential lots

F. Is it anticipated that structures will be removed/demolished from the required property? ____YES _X_NO If yes, a separate application for demolition is required.

G. Are any historic structures or historically significant features on the subject property? ___YES _X_ NO If yes, describe any impacts to such features.

H. Is it anticipated that a land division or partitioning will occur as a result of the Zone Change being granted? _✓_ YES or ___ NO If yes, compliance with Sutherlin Development Code (ORD. 976) and a separate application for subdivision, PUD, partition.

I. What is the anticipated time for development? Fall, 2023

J. Will this development be in phases? YES or NO If yes, number and timeline of additional phase completion Undetermined

K. What additional public and private utilities will be needed for the proposed development? Applicant will extend the existing public services to the development including sewer, water, power, gas and phone.

## 4. REQUIRED ATTACHMENTS (Please submit all tentative plans/plats electronically)

A. General Information:

1. A plot map showing boundaries, proposed zone, current plan designation, access, utilities, and 5' contours.
2. Date, North arrow, and scale of drawing;
3. Location of the development sufficient to define its location in the city, boundaries, and a legal description of the site;
4. Names, addresses and telephone numbers of the owners, project designer, engineer(s), and/or surveyor, and the date of the survey; if applicable.

**City of Sutherlin**
**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

B. Impact Statement: Shall include a narrative addressing each area of impact listed below:

1. Quantify/assess the effect of the development on public facilities and services;
2. Address, at a minimum, the transportation system, including pedestrian ways and bikeways, the drainage system, the parks system, the water system, the sewer system, and the noise impacts of the development; and
3. For each public facility system and type of impact, the study shall propose improvements necessary to meet city standards and to minimize the impact of the development on the public at large, public facilities systems, and affected private property users.

C. The applicant shall submit a narrative that addresses each of the approval criteria listed below:

1. Demonstration of compliance with all applicable comprehensive plan policies and map designations. Where this criterion cannot be met, a comprehensive plan amendment shall be a prerequisite to approval;
2. Demonstration that the most intense uses and density that would be allowed, outright in the proposed zone, considering the sites characteristics, can be served through the orderly extension of urban facilities and services, including a demonstration of consistency with OAR 660-012-0060; and
3. Evidence of change in the neighborhood or community, or a mistake or inconsistency between the comprehensive plan or zoning district map regarding the subject property which warrants the amendment.

**City of Sutherlin**
**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

## 5. SIGNATURES

I hereby apply for a Zone Change as requested on this form and certify that the attachments are complete and correct. (Any and all engineering cost incurred by the City of Sutherlin associated with this application shall be the responsibility of the applicant.) **Attach sheet if additional signatures are required.**

SIGNATURE REQUIRED:

We, Sam Robinson, Adam Haley, Nanette Haley, Kenneth Gruesbeck and Yvonne Gruesbeck, are
(Print Name(s) in Full)
the titleholder(s) or contract purchaser(s) [under a duly executed written contract] of the property described in this application and hereby certify that the statements and information contained herein are in all aspects true, complete and correct to the best of my (our) knowledge and belief.

SIGNED: _____
(see attached authorization forms)

DATE: July 24, 2023

Any other owner or option holder or buyer who does not sign this application shall provide a signed statement providing their authorization for submission of this request.

## COMPLETENESS CHECK

The Community Development Director shall check an application for completeness as per Development Code, Section 4.2.160 (E)(3). The Community Development Director shall notify the applicant of any missing materials within 30 days of receiving the application. If the application was complete with first submitted or the applicant submits the requested additional information within one hundred, eighty (180) days of the date the application was first submitted, approval or denial of the application shall be based upon the standards and criteria that were applicable at the time the application was first submitted.

Submittal of payment for an application does not classify an application as complete. The Community Development Director will contact the applicant on the status of the application within the 30 days allowed to determine if the application is complete.

This application has been inspected by me and found to be sufficiently complete to initiate the review process.

Planner: _____

Fee Receipt No: 58835

**City of Sutherlin**
**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

Date: 8-21-23

# LAND USE ACTION
# OWNER AUTHORIZATION

The City of Sutherlin Land Use Ordinance requires a signature of one or more owners of property which is the subject of an application. This form, when duly executed, allows an owner to authorize an agent to sign on the owner's behalf in all matters related to making application.

## AUTHORIZATION AS AGENT

I (We), hereby, authorize Mark Garrett to act as my (our) agent in this application for a Plan Amendment and Zone Change on Property ID No(s). R47000; R47007 and R46993.

Adam Haley (Print) — Adam Haley (Signature)

Nanette Haley (Print) — Nanette F Haley (Signature)

Kenneth Gruesbeck (Print) — Kenneth Gruesbeck (Signature)

Yvonne Gruesbeck (Print) — Yvonne Gruesbeck (Signature)

6-27-2023 (Date)

**Important Disclaimer**: If there are multiple owners, purchasers or lessees of record for each property involved in the application, and less than all of the required signatures are obtained, then each of the owners, purchasers, or lessees of record will be notified in processing the application and will have an opportunity to respond. If a timely objection is received from one of the owners within 15 days of the notice, then the application will be deemed by the Director to be withdrawn by the applicant.

AGENT.REL (Rev.05/01) INF6

# LAND USE ACTION
# OWNER AUTHORIZATION

The City of Sutherlin Land Use Ordinance requires a signature of one or more owners of property which is the subject of an application. This form, when duly executed, allows an owner to authorize an agent to sign on the owner's behalf in all matters related to making application.

## AUTHORIZATION AS AGENT

I (We), hereby, authorize Mark Garrett to act as my (our) agent in this application for a Plan Amendment and Zone Change on Property ID No(s). R47000; R47007 and R46993.

Sam Robinson (Print) — Sam C Robinson (Signature)

Nanette Haley (Print) — Nanette Haley (Signature)

8-18-2023 (Date)

**Important Disclaimer**: If there are multiple owners, purchasers or lessees of record for each property involved in the application, and less than all of the required signatures are obtained, then each of the owners, purchasers, or lessees of record will be notified in processing the application and will have an opportunity to respond. If a timely objection is received from one of the owners within 15 days of the notice, then the application will be deemed by the Director to be withdrawn by the applicant.

AGENT.REL (Rev.05/01) INF6

**SAM ROBINSON ET/AL**
**PLAN AMENDMENT AND ZONE CHANGE**

**Table of Contents**

**Page**

**List of Attachments**

**Attachment**



**List of Figures**

# APPLICATION OF SAM ROBINSON ET/AL
# FOR A COMPREHENSIVE PLAN MAP AMENDMENT
# AND CONCURRENT ZONE CHANGE

## Organization of This Application

This application will be heard by the City of Sutherlin Planning Commission will be in the fall of 2023. This will be the first evidentiary hearing to review this application, exhibits and evidence submitted into the record to determine whether the requested amendment and zone change meet the applicable review criteria set forth in the Oregon Revised Statutes, Administrative Rules, City of Sutherlin Municipal Code.

This document begins with a table of contents which includes Applicant's exhibits that are incorporated as part of this application. The application is organized and presented to the Commission in accordance with the relevant review standards. Part 1 contains the introduction and background of this request. Part 2 addresses the Statewide Planning Goals. Part 3 addresses City of Sutherlin Comprehensive Plan policies for the proposed Medium Density Residential (MR) Plan designation. Part 4 addresses the City of Sutherlin criteria for a Zone Change.

The complete text of all relevant review criteria are set out in *italicized* font with an abbreviated introductory portion of each criterion in **bold** font, without quotation marks. Quotations are in *italicized* font with quotation marks. All other narrative in this application appears in regular font.

# I. INTRODUCTION & BACKGROUND

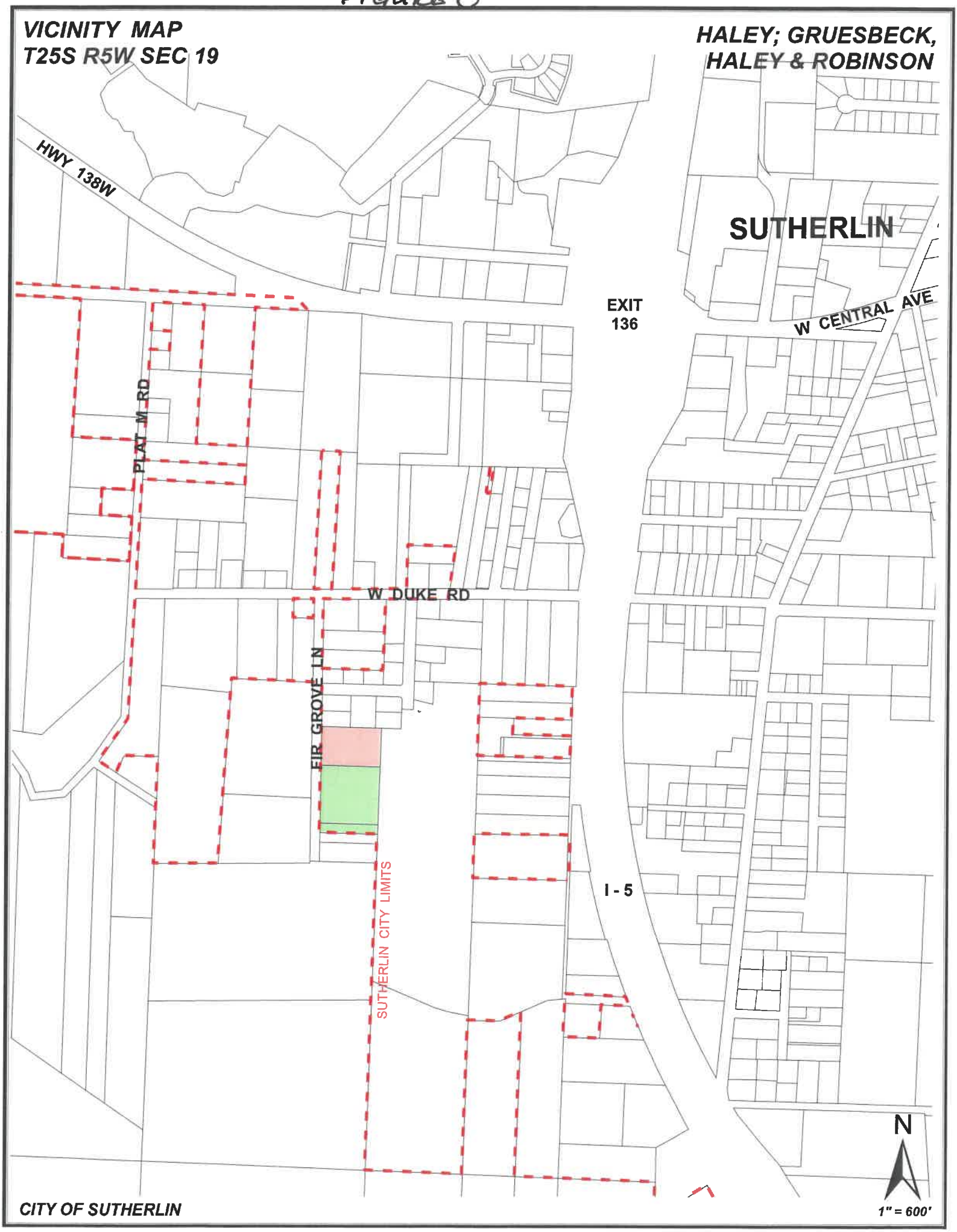
This matter comes before the City of Sutherlin Planning Commission on application filed by Sam Robinson, et/al, herein referred to as Applicant, which is the owner of the subject property. The subject 3.81 acres property is multiple lots created by Fir Grove Tracts subdivision and subsequent divisions and is located on east side of Fir Grove Lane just south of Jaswant Avenue in the western portion of city of Sutherlin. (See Figure 0 – Vicinity Map following this page) The majority of subject property is undeveloped with a shop on the most southerly parcel and two dwellings at the north end of the ownerships. The subject site and is identified in the Douglas County Assessor's records as Tax Lots 201, 300 and 400, Section 19C, Township 25S, Range 5W, W.M., Account Nos. R46993, R47000 and R47007. (See Attachment A - copy of legal description for the area proposed for amendment).

Applicant is proposing an amendment to the Sutherlin Urban Area Comprehensive Plan map designation from "Residential Hillside" to "Medium Density", together with a concurrent zone change from Residential Hillside (RH) to Medium Density Residential (R2), on the property described above.

Applicant intends to develop the ownership with a mix of multiple-family and single-family housing units under the proposed zoning. (See Figure 1 - development plan) following this page. The proposed development will be similar in nature to other residential development in the area.

The subject property is designated for residential hillside development by the City and is located at the western edge of the city. The land is in a mixed-use area comprised of single-family housing units along with some rural residential properties to the west and south. Properties to the north and east are zoned and developed with single-family residences with the property immediately east being undeveloped. The land to the south and west is outside the City boundary.

FIGURE O


VICINITY MAP
T25S R5W SEC 19
HALEY; GRUESBECK, HALEY & ROBINSON
HWY 138W
SUTHERLIN
EXIT 136
W CENTRAL AVE
PLAT M RD
W DUKE RD
FIR GROVE LN
SUTHERLIN CITY LIMITS
I - 5
N
CITY OF SUTHERLIN
1" = 600'

Copies of the City of Sutherlin and Douglas County zoning maps are included to generally identify the land uses and the area surrounding the subject property. (See Figures 2a and 2b, respectively – Zoning Maps following this page)

## A. Comprehensive Plan Amendment Criteria

Proposed amendments to the Sutherlin Urban Area Comprehensive Plan are subject to review by the Sutherlin Planning Commission, and ultimately must be reviewed and approved by the Sutherlin City Council. After receiving and accepting Applicant's request for an amendment to the Comprehensive Plan, the City is required to give notice of the proposed amendment to the Oregon Department of Land Conservation and Development (DLCD) at least 35 days prior to the first scheduled public hearing on the matter. Any amendment of the Comprehensive Plan must be reviewed by DLCD to ensure that the proposed action meets the criteria established under the statewide planning goals and applicable administrative rules.

The specific procedures and criteria for reviewing a proposed Comprehensive Plan Amendment are set forth in the Sutherlin Urban Area Comprehensive Plan, the Sutherlin Municipal Code and the administrative rules that have been adopted by the Land Conservation and Development Commission (LCDC).

The Sutherlin Urban Area Comprehensive Plan, like other Comprehensive Plans, is generally understood to require that two basic standards, or criteria, be addressed prior to approving a proposed amendment to the Plan. Generally stated, these criteria require amendments to the Plan to be supported by Findings of Fact which demonstrate that the amendment is consistent with all applicable statewide planning goals adopted by LCDC; and, that the amendment is consistent with the written policies contained within the Comprehensive Plan document itself along with supporting inventory documents and facility plans. If the City proposes to take an exception to any of the statewide planning goals, Findings of Fact showing why the exception is justified must also be adopted. In the following sections of this supplemental application document, Applicant proposes Findings of Fact which demonstrate that the proposed amendment is

FIGURE 2a.


ZONING MAP
T25S R5W SEC 19
HALEY; GRUESBECK, HALEY & ROBINSON
W DUKE RD
ROBERT LAVERN ST
JASWANT AVE
RH
FIR GROVE LN
C3
R1
SUTHERLIN CITY LIMITS
N
CITY OF SUTHERLIN
1" = 200'

FIGURE 1.

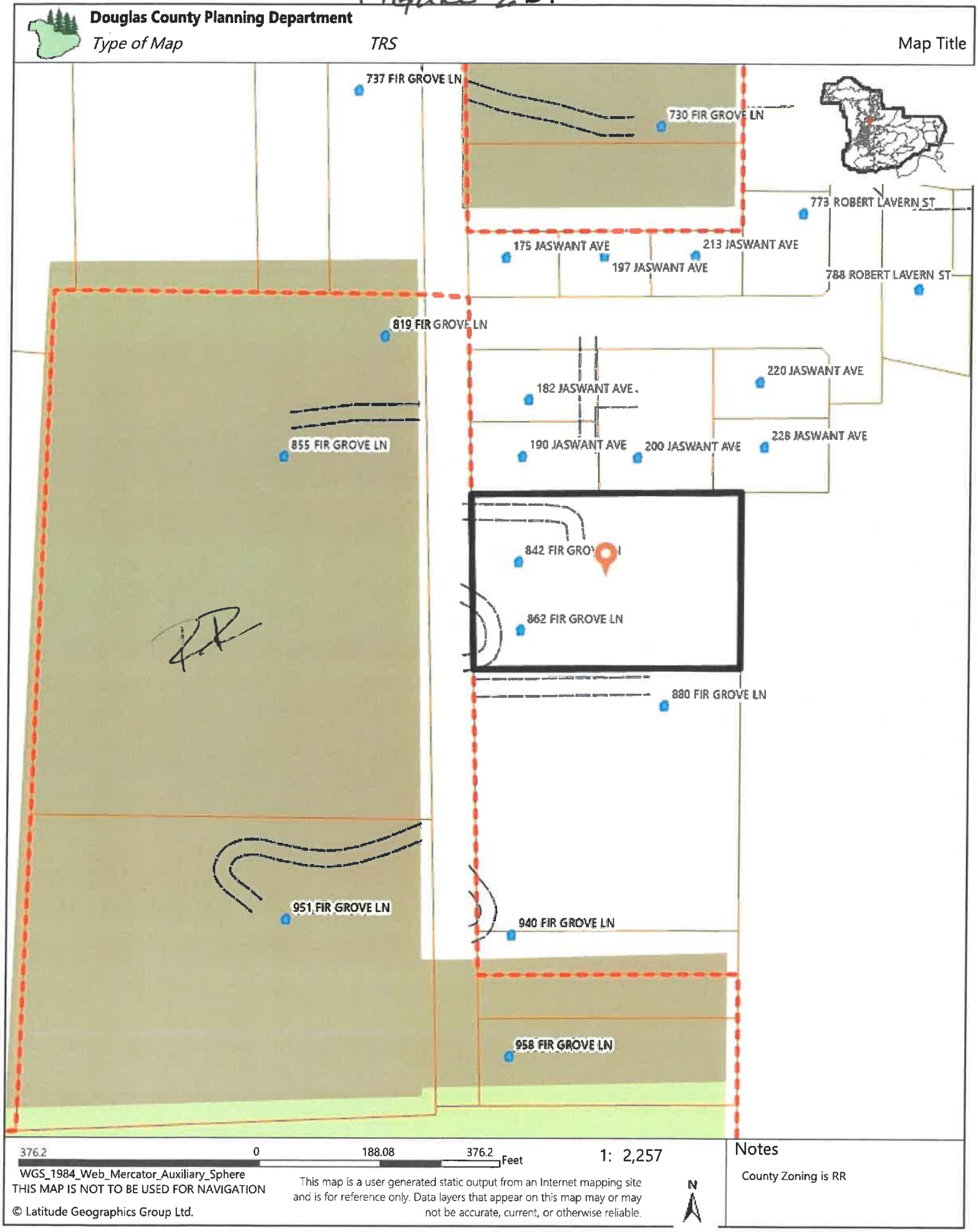
# FIR GROVE LN PROPOSED LOT LAYOUT EXHIBIT



ie
509 SE Pine Street
Roseburg, Oregon 97470
PHONE (541) 671-0155
FAX (541) 440-9392


PROJECT NO. 0582-19
DWG BY: AW

FIGURE 2.6.


Douglas County Planning Department
Type of Map
TRS
Map Title
737 FIR GROVE LN
730 FIR GROVE LN
773 ROBERT LAVERN ST
175 JASWANT AVE
213 JASWANT AVE
197 JASWANT AVE
788 ROBERT LAVERN ST
819 FIR GROVE LN
220 JASWANT AVE
182 JASWANT AVE
855 FIR GROVE LN
190 JASWANT AVE
200 JASWANT AVE
228 JASWANT AVE
842 FIR GROVE LN
862 FIR GROVE LN
880 FIR GROVE LN
951 FIR GROVE LN
940 FIR GROVE LN
958 FIR GROVE LN
376.2
0
188.08
376.2
Feet
1: 2,257
WGS_1984_Web_Mercator_Auxiliary_Sphere
THIS MAP IS NOT TO BE USED FOR NAVIGATION
© Latitude Geographics Group Ltd.
This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
N
Notes
County Zoning is RR

consistent with all applicable Statewide Planning Goals. Consequently, no goal exceptions are proposed.

## II. COMPLIANCE WITH THE STATEWIDE PLANNING GOALS

### Plan Amendment Criteria No. 1 - Conformity with Statewide Planning Goals.

The Statewide Planning Goals have been acknowledged as being applicable to the City of Sutherlin Comprehensive Plan. A proposal to amend the Comprehensive Plan and Zone must comply with all applicable Statewide Planning Goals unless an exception to one or more of the goals is proposed. There is no exception being proposed as part of this application. The City of Sutherlin must make a finding that Applicant's proposal complies with each of the relevant goals. The following information regarding the Statewide Planning Goals shows how this request complies with them.

### Goal No. 1 - Citizen Involvement

*To ensure the opportunity for citizen involvement in all phases of the planning process.*

The City of Sutherlin will provide written notice of the requested plan amendment and zone change to surrounding property owners within 100 feet of the subject property and will cause public notice of the request and public hearing to be published in the local newspaper at least ten days prior to the first evidentiary hearing. These various forms of individual and public notice assure that local citizens have an opportunity to become informed about, and participate in, the public hearing process. The requested plan amendment and zone change are being processed in a manner that assures full compliance with Statewide Goal No. 1.

### Goal No. 2 - Land Use Planning

*To establish a land use planning process and policy framework as a basis for all decisions and actions related to the use of land and to assure an adequate factual base for such decisions and actions.*

The City of Sutherlin has established policies and procedures which require a detailed evaluation

of proposals to amend its Comprehensive Plan. Specific criteria and standards have been set forth against which Applicant's amendment request must be evaluated in light of relevant Findings of Fact. The City's ultimate decision in this matter will be based on the weight of those relevant findings. The requested plan amendment and zone change are being evaluated in a manner that assures full compliance with Statewide Goal No. 2.

## Goal No. 3 - Agricultural Lands

*To preserve and maintain agricultural lands.*

There has previously been a legislative determination by the City of Sutherlin via adoption of the Sutherlin Urban Area Comprehensive Plan that the subject property is not agricultural land. This finding is validated by the fact that the site is irrevocably committed to urban use because the site is within the Sutherlin city limits and urban growth boundary and has been given an urban land use designation. The Statewide Agricultural Goal is not applicable to this proposed Comprehensive.

## Goal 4 - Forest Lands

*To preserve forest lands for forest use.*

There has previously been a legislative determination by the City of Sutherlin via adoption of the Comprehensive Plan that the subject property is not forest land. This finding is validated by the fact that the site is irrevocably committed to urban use, and by the fact that the site is within the Sutherlin city limits and urban growth boundary with an urban land use designation. Statewide Goal No. 4 is not applicable to this proposed plan amendment and zone change.

## Goal No. 5 - Open Space, Scenic and Historic Areas, and Natural Resources

*To conserve open space and protect natural and scenic resources.*

Goal 5 addresses a variety of resources not specifically covered by other statewide planning goals and sets out a process requiring inventory and evaluation of potential resources. Steps in

the process require that the level of significance of potential resources be determined, and if an identified resource appears to be significant, further evaluation is required. Such evaluation may lead to alternative courses of action, including fully protecting the identified resource.

Goal 5 addresses the following resources:

1. Open space.
2. Mineral and aggregate resources.
3. Energy resources.
4. Fish and wildlife areas and habitats.
5. Ecologically and scientifically significant resources.
6. Outstanding scenic views and sites.
7. Water areas, wetlands, watersheds and groundwater resources.
8. Wilderness areas.
9. Historic areas, sites, structures and objects.
10. Cultural areas.
11. Oregon recreational trails.
12. Wild and scenic waterways.

All of the lands within and surrounding the city limits and urban growth boundary, including the lands within the subject site, have previously been subjected to extensive surveys intended to inventory and evaluate all Goal 5 resources. These inventories, which are incorporated into both Sutherlin Urban Area Comprehensive Plan and the Douglas County Comprehensive Plan, have previously received acknowledgment of compliance with Statewide Goal 5. The subject property has not been included in any inventory of needed open space or scenic areas as defined by Goal 5, nor has it been identified in the Comprehensive Plan as having any historic, cultural or natural resources which need to be preserved and/or protected. This previous determination has been reviewed and accepted by the Oregon Department of Fish and Wildlife with respect to potential fish and wildlife habitat on the site, as well as by other state agencies having jurisdiction over other natural resources that might exist on the site. Nevertheless, Applicant has conducted an independent evaluation of the potential impact of the proposed Plan amendment on Goal 5

resources and propose the following findings:

A. Land Needed or Desirable for Open Space

The need or desirability of the subject site for use as open space land was adequately addressed prior to its inclusion in the city. There was a legislation determination at that time that the property contains no special topographic, vegetative, or other natural features which would make it needed or desirable for open space use.

B. Mineral and Aggregate Resources

No known mineral or aggregate resources have been identified on or in the vicinity of the subject site.

C. Energy Sources

Goal 5 energy resources refers to sites and resources for the generation of energy (i.e. natural gas, oil, coal, hydroelectric, geothermal, uranium, and solar). No known energy sources have been identified on or in the vicinity of the subject property. The property does have solar access, but no more so than most other land in the urban area.

D. Fish and Wildlife Areas and Habitat

The subject site is not located near any streams identified as a scenic, recreational and natural resource of the Sutherlin area by the Comprehensive Plan. There are no scenic, recreational or natural resources that require protection.

E. Ecologically and Scientifically Significant Natural Areas

No identified ecologically or scientifically significant natural areas are present on or in the vicinity of the subject site.

F. Outstanding Scenic Views and Sites

No identified scenic views or sites exist on the subject property. As noted under Open Space, above, the site has so much in common with many other locations in the general area that its

scenic value is not considered unique or significant. The property possesses no prominent topographic features or vegetation which would otherwise give it scenic significance.

G. Water Areas, Wetlands, Watersheds, and Groundwater Resources

The subject property contains no inventoried water areas, watersheds or identified groundwater resources that have been determined through the plan process to be needed and or protected for their resource values.

The U. S. Fish and Wildlife Service has completed mapping of wetlands in the City of Sutherlin under the National Wetlands Inventory (NWI) program. The NWI mapping indicates that there may be a narrow corridor of mapped wetlands on the subject property. Any jurisdictional wetland will be avoided or mitigated at the time of development in coordination with the city and the Oregon Division of State Lands. A copy of the NWI map is included in this document (Figure 3). The Federal Flood Insurance Rate Map for the area shows that the elevation of the property puts it outside any identified 100 year flood plain area (see Goal 7 for discussion).

H. Wilderness Areas

The subject site is not within, adjacent to, or part of, a designated wilderness area.

I. Historic Areas, Sites, Structures, and Objects

There are no identified or inventoried historic structures or objects on, or adjacent to, the subject property.

J. Cultural Areas

There are no identified or inventoried archaeological or cultural resources on the subject site.

K. Potential and Approved Oregon Recreation Trails

There are no designated or planned recreational trails on or adjacent to the subject site.

L. Wild and Scenic Waterways

The site is not within any designated or planned wild and scenic waterway, nor has such a

U.S. Fish and Wildlife Service

# National Wetlands Inventory

FIGURE 3
FIR GROVE LN


April 3, 2023

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

designation been given to other lands or resources in the general vicinity of the subject property.

The subject property has not been included in any inventory of needed open space or scenic areas, nor has it been identified in the Comprehensive Plan as having any historic or cultural resources which need to be preserved and/or protected. Further, the property will be developed to protect any significant natural resources in accordance with the provisions of the Comprehensive Plan. Based on the foregoing findings, the requested plan amendment and zone change will not conflict with any identified Goal 5 resources.

## Goal No. 6 - Air, Water and Land Resources Quality

*To maintain and improve the quality of the air, water and land resources of the state.*

Statewide Goal 6 requires that air, land and water resources of the state be maintained and improved by assuring that future development, in conjunction with existing development, does not violate applicable state and federal environmental quality standards, and does not exceed the carrying capacity of local air sheds, degrade land resources or threaten the availability of such resources. There has been a previous legislative determination by the City of Sutherlin that development of the subject property with urban uses will not result in degradation of air, water and land resources within the Sutherlin urban area or the state of Oregon. The subject property is situated in an area where the full range of urban services is available, including public water, public sewer and storm drainage systems (either above or in ground). Furthermore, the City of Sutherlin has sufficient regulatory measures in place to ensure that subsequent development of the site with urban uses will not result in deleterious or unanticipated impacts on the air, water and land resources of the urban area. The requested amendment is being evaluated in a manner that assures compliance with Statewide Goal No. 6.

## Goal No. 7 - Areas Subject to Natural Disasters and Hazards

*To protect life and property from natural disasters and hazards.*

The subject property has not been identified in any inventory of areas which have the likely potential to be subjected to natural disasters and hazards. The elevation of the site puts it well above any identified flood plain and any danger of flooding. The property proposed for amendment is generally flat or gently sloping on its northern portion increasing in slope to and through its south boundary. The land is similar in topography to adjoining and nearby properties that are already planned and zoned for the similar uses as contemplated by Applicant.

The City of Sutherlin has adopted specific review and development standards for all properties within the city to ensure that their development and use does not pose a hazard to life and property. Any subsequent development of the subject property will be subject to such review and will be required to fully comply with all applicable development regulations. The requested amendment will not conflict with the purpose and intent of Statewide Goal No. 7.

## Goal No. 8 - Recreational Needs

*To satisfy the recreational needs of the citizens of the state.*

There has been a previous legislative determination by the City of Sutherlin through its comprehensive planning process that the subject property is not needed for recreational facilities or opportunities. Identified recreational needs have been provided for on other sites within the Sutherlin urban area. The proposed amendment will not conflict Statewide Goal No. 8.

## Goal No. 9 - Economy of the State

*To diversify and improve the economy of the state.*

The Statewide Economic Development Goal is intended to be applied on an urban area-wide basis and requires that future economic growth be accommodated, in part, by ensuring that there is sufficient suitable land planned and zoned for commercial and industrial uses. Goal 9 specifically requires that local land use plans "*provide for at least an adequate supply of sites of suitable sizes, types, locations, and service levels for a variety of industrial and commercial uses consistent with plan policies.*"

Commercial and industrial zoning have been applied to lands containing existing commercial and industrial uses, as well as to an appropriate amount of undeveloped land that is intended to accommodate future commercial and industrial development within the Sutherlin urban area. The Sutherlin Urban Area Comprehensive Plan contains specific policies to ensure that opportunities for economic development are enhanced in the Sutherlin urban area. The subject property is already designated for residential uses and Applicant's request will not impact the current inventory of commercial or industrial lands in the city. The proposed plan amendment will not conflict with the Statewide Economic Development Goal.

## Goal No. 10 - Housing

*To provide for the housing needs of the citizens of the state.*

The primary purpose of Goal 10, within the context of amending the Comprehensive Plan, is to ensure that sufficient buildable land is available to allow for the full range of housing needs within the urban area and to avoid creating shortages of residential land which could artificially restrict market choices in housing type, price range or location. The subject property is currently planned Residential Hillside and is zoned RH. The current plan designation for area proposed for amendment allows up to 3.63 dwelling units per acre under its current plan designation. Applicant is requesting the RM plan which provides for up to 14.52 dwelling units per acre. The proposed plan amendment and zone change, and subsequent development of the site with duplex or multiple family units will enhance the present inventory of developable residential land, and will, therefore, increase potential future opportunities to provide additional higher-density housing.

On the basis of the foregoing facts and analysis, the increase in the allowed residential density of the subject parcel from the present inventory of available residential land will increase housing opportunities in the urban area. The proposed plan amendment and zone change is consistent with and will promote both purpose and intent of the Statewide Housing Goal.

## Goal No. 11 - Public Facilities and Service

*To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban development.*

Public facilities and services within the Sutherlin urban area are provided by the City of Sutherlin, Douglas County and several special districts. Policies concerning the coordination, timing and location of public facilities and services in the urban area are contained within the Public Facilities and Land Use Elements of the Comprehensive Plan. Specific measures intended to implement these policies are contained in various inter-governmental agreements, including the Sutherlin/Douglas County Urban Growth Management Agreement.

Properties within the urban area receive sewer service from the City of Sutherlin. The City maintains an existing 8-inch sewer main that runs along Jaswant Avenue just north of the property. Applicant has consulted with the City regarding the of sanitary sewer service from the proposed extension of the existing main to the subject property for the type of development contemplated. The City indicates that sewer service is available to the subject property with the cost of extending new service into the site being Applicant's responsibility.

Water service to the subject site is provided by the City of Sutherlin via an existing 8-inch main in Jaswant Avenue. Applicant will extend water service to the subject property at the time of development and will coordinate water improvements with the City of Sutherlin to assure proper location for installing a service line sufficient to serve the contemplated residential development.

The existing facilities are sized to provide the property with a supply of water that is adequate for anticipated residential service and for fire protection. Fire protection service is provided by the City of Sutherlin Fire Department. An existing fire hydrant is located on Jaswant Avenue just north of Applicant's property. A new hydrant will be required in proximity to the subject property at the time of development. Police services in the area are provided by the City of Sutherlin Police Department. Street maintenance, storm drainage and street lighting in the area are also provided by the City of Sutherlin. The design and installation of onsite storm drainage

facilities, if required, will be the responsibility of Applicant at the time of development. Plans for the installation of these and any other on-site and off-site facilities will be subject to review and approval of the City of Sutherlin and any other agency having jurisdiction over public facilities and services in the area.

On the basis of the foregoing facts, the requested plan amendment and zone change will not adversely impact the present or future provision of public facilities and services in the area. The full range of urban services appropriate for the subject property's proposed residential designation is available and can be provided in a timely, orderly and efficient manner consistent with the purpose and intent of Statewide Goal No. 11.

This conclusion is based on consideration of the existing public service delivery systems and plans that are in place in the area to ensure coordination of the types, locations and delivery of the public facilities and services needed to support existing and proposed land uses in the area.

## Goal No. 12 - Transportation

*To provide and encourage a safe, convenient and economic transportation system.*

Specific transportation-related policies and development standards are included within Sutherlin's Comprehensive Plan and land use ordinances. The applicable development standards assure that the intent of the statewide transportation goal is implemented through the application of local transportation standards at the time of development. The intent of Statewide Goal 12 is also implemented on a site-specific basis by the Transportation Planning Rule (TPR) as set out under Oregon Administrative Rules, Chapter 660, Division 12. OAR 660-12-060(1) requires that " *Amendments to functional plans, acknowledged comprehensive plans, and land use regulations which significantly affect a transportation facility shall assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g. level of service, volume to capacity ratio, etc.) of the facility*".

In order to determine whether a proposed Comprehensive Plan amendment will significantly affect a transportation facility, the TPR establishes a set of specific criteria against which the proposed amendment is to be evaluated. The TPR states that "*a plan or land use regulation amendment significantly affects a transportation facility if it:*

*a) Changes the functional classification of an existing or planned transportation facility;*

*b) Changes standards implementing a functional classification system;*

*c) Allows types or levels of land uses which would result in levels of travel or access which are inconsistent with the functional classification of a transportation facility; or*

d) *Would reduce the performance standards of the facility below the minimum acceptable level identified in the TSP.*

The subject property has frontage along Fir Grove Lane which is improved to a gravel surface with no curbs, gutters or sidewalks. Estimates of the average number of daily vehicle trips generated by a specific land use can be obtained from a number of reliable sources. One of the commonly referenced source for such data is Trip Generation, published by the Institute of Transportation Engineers (ITE). Average daily trip generation rates published by ITE are based primarily on field data obtained from direct observation of actual land use activities. Trip generation rates are reported as an average of vehicle counts taken at numerous sites having the same classification of land use. Trip generation rates are often broken down into specific time frames, such as "Average Daily Trips (ADT)", "Average Peak Hour Trips", and "AM and PM Peak Hour Trips". For most land use activities, including both multi-family residential and duplexes uses, ITE defines an "average daily trip" as a one-way vehicular movement between a single origin and a single destination.

Applicant's proposed zone change from RH to R2 on the subject site will facilitate construction of additional residential housing units as set forth on the conceptual site plan included in this application considering the existing dwelling potential in comparison to the future potential

under the proposed plan and zone. The subject site proposed for amendment will accommodate up to eight additional residential units considering site conditions and limitations. (See Figure 1)

Comparison of the trip generation of the proposed housing under the proposed R2 zoning with potential uses under the current RH zoning demonstrates a slight increase in the potential traffic impacts on the area road system. Based on the ITE numbers, there will be an increase of 77 ADT on the area road system from what is currently possible under the current RH zoning. Access connections along Fir Grove Lane, Jaswant Avenue and Duke Road, which are classified Local Streets and a Collector Street, respectively, will be limited as directed by the City of Sutherlin and considered in the traffic analysis completed by Applicant's engineer (See Attachment C – Traffic Assessment/Access - i.e. Engineering letter)

At the present time, public roads in the area are adequate to accommodate both existing traffic and potential future traffic volumes likely to be generated as a consequence of the requested plan amendment and zone change. No special traffic controls or other mitigation measures will be required due to the relatively low volume of traffic associated with the requested plan amendment and zone change until development of the subject property.

Based on the functional classification and existing service levels of adjacent and nearby transportation facilities, the proposed plan amendment and zone change will be consistent with the identified function, capacity, and level of service of those facilities. Nevertheless, specific transportation-related policies and development standards are included with the City of Sutherlin Comprehensive Plan, as well as the City's zoning code to ensure that the statewide transportation goal is implemented on a site-specific basis at the time of development.

It is Applicant's intent to develop the subject property in full compliance with all applicable transportation-related policies and development standards. The proposed plan amendment and zone change will not conflict with the Statewide Transportation Goal. Compliance with the intent of Goal 12 will be assured through the application of specific local policies and standards at the

time specific development plans for the subject property are formulated and submitted for review and approval.

Applicant's proposal, considering that there will be limited increase in potential traffic levels as a result of the proposed amendment, will not result in a change in the functional classification of existing or planned transportation facilities serving the area, nor will it result in changes to any existing development standards or alter the functional classification of existing or planned transportation facilities. Neither will it allow types or levels of land uses which would result in levels of travel or access which are inconsistent with the functional classification of near-by transportation facilities, or otherwise reduce the level of service of existing and planned transportation facilities below minimum acceptable levels. Applicant's proposal is consistent with Goal 12.

## Goal No. 13 - Energy Conservation

*To conserve energy.*

The statewide energy conservation goal is intended to assure that land and uses developed on land are managed and controlled to maximize the conservation of all forms of energy, based upon sound economic principles. The subject property is situated within the established urban area where its subsequent development will promote the efficient energy-related use of existing and planned transportation facilities. Major public facilities and services are immediately adjacent to the site, thus reducing the energy-related inefficiencies associated with extending such services beyond existing urban development. Furthermore, specific energy conservation policies and development standards are included within the Sutherlin Urban Area Comprehensive Plan and the City's zoning code to ensure that the statewide energy conservation goal is implemented on a site-specific basis at the time the property is developed. The proposed plan amendment and zone change will not conflict with the Statewide Energy Conservation Goal.

## Goal No. 14 - Urbanization

*To provide for an orderly and efficient transition from rural to urban land use.*

The statewide urbanization goal provides the standards and procedures for establishing or expanding the Sutherlin Urban Growth Boundary (UGB). The urbanization goal requires that land within the UGB *"...shall be considered available over time for urban uses."* As previously noted, the subject property is located within both the Sutherlin city limits and UGB. Inclusion of the property within the UGB and city limits demonstrates the City's legislative intent to allow urban development to occur on the site. The proposed plan amendment and zone change will have no effect on the present status of the UGB of Sutherlin, nor will it otherwise conflict with the purpose and intent of the statewide urbanization goal.

Based on the foregoing findings, the proposed plan amendment and zone change conform to all applicable statewide planning goals.

# III. COMPLIANCE WITH CITY OF SUTHERLIN COMPREHENSIVE PLAN POLICIES FOR COMPREHENSIVE PLAN AMENDMENTS

## Plan Amendment Criteria No. 2 – Conformance With The Comprehensive Plan

The Sutherlin Urban Area Comprehensive Plan contains policy statements which are intended to provide the City with direction when considering a proposal to amend the Plan. Written policies that are applicable to the proposed plan amendment and zone change are contained in various elements of the Plan document, including the Natural Resources Element, the Public Facilities Element, the Housing Element, the Transportation Element, and the Land Use Element. The following proposed findings address each of the Plan policies that are applicable to this plan amendment and zone change request:

### HOUSING POLICIES

B. GOAL....
Housing Policy No. 2
*Encourage innovative designs for various types of multi-family housing in order to meet the*

*diverse needs of smaller households such as those of the eldierly and young families.*

C. GOAL....
Housing Policy No. 1
*Encourage infilling of the existing residential areas by incentives for new construction in already-serviced areas.*

The subject property is situated on the east side of Fir Grove Lane in west Sutherlin. The site is flat to gently sloped with scattered vegetative and tree cover on the property. As previously mentioned, all the properties to the north and east are within the city limits of Sutherlin and the lands south and west are outside of the city boundaries. Properties lying north and east are zoned R1 and are developed with single family dwellings. The lands to the east are undeveloped. The properties to the south and west are designated and zoned Rural Residential 2 Acre (RR) and contain single family dwellings.

The proposed amendment will promote efficient development of the property by using the existing public access, facilities and services that already exist in the area. The proposed use of the property for increased density residential housing is consistent with the established uses on the surrounding properties and the character of other existing urban residential uses. Public facilities, including sewer, water and storm drainage, are already in place and are adequate to serve the property. The site will be developed in a manner that fully conforms to the applicable development standards for residential uses, including access and internal circulation, signage, lighting, buffering and landscaping. Conceptual site development plans are submitted with this application for the future residential development. The site plan review process at the time of development will assure that the subject property will be developed in the manner represented by the plan amendment and zone change applications and will further assure that development of the site will fully comply with all applicable development standards.

**PUBLIC FACILITIES POLICIES**

A. GOAL....

Public Facilities and Services Policy No. 1

*The city shall ensure that appropriate support systems are installed prior to or concurrent with the development of a particular area. Costs of constructing water and sewer ties to new developments shall be borne by the developer.*

Public Facilities Policy No. 12

*The city shall provide sewer and water service to areas within the Urban Growth Boundary*

Public Facilities Policy No. 14

*Ensure that as new development occurs, public facilities and services to support the development are available or will be available within a reasonable time.*

C: GOAL....
Public Facilities and Services Policy No. 8

*Redevelopment of large lots and infilling and development of undersized lots will be encouraged where appropriate.*

The subject 2.43-acre parcel is situated on the west side of the Sutherlin urban area where a full range of public facilities and services are already in place and are adequate to accommodate the types of uses allowed by the proposed R2 zoning at a density greater than currently allowed. Properties within the urban area receive sewer service from the City of Sutherlin. The City maintains an existing 8-inch sewer main that are located in Jaswant Avenue just north of the subject property. The City has previously indicated that sanitary sewer service is available from the existing main to the area property for the type of residential development contemplated. Applicant understands that the cost of sewer improvements into the site will be paid by the developer.

Water service to the subject site is provided by the City of Sutherlin via an existing 8-inch main located in Jaswant Avenue just north of Applicant's property. The existing mainline will be extended on Fir Grove Lane to the subject property and will serve as the logical location for

installing new service lines to serve the contemplated residential development. The existing facilities are sized to provide the property with a supply of water that is adequate for both residential service and fire protection. Fire protection service is provided by the Sutherlin Fire Department. An existing fire hydrant is located in Jaswant Avenue near the subject site. Police services in the area are provided by the City of Sutherlin Police Department. Street maintenance, storm drainage and street lighting in the area are also provided by the City of Sutherlin. Applicant has prepared a drainage assessment to demonstrate consistency with the drainage requirements of the city. (See Attachment C – i.e. Engineering Drainage Letter) The design and installation of on-site storm drainage will be the responsibility of Applicant at the time of development. Plans for the installation of these and any other on-site and off-site improvements will be subject to review and approval from the City of Sutherlin and any other agency having jurisdiction over public facilities and services in the area.

It does not appear that additional public expenditures for service and facility extensions will be necessary to allow the development of the property. Any additional facility improvements necessary for Applicant's proposed development plan will be funded by the property owner.

It is important to note that development of vacant and/or underutilized urban parcels that can be readily served by existing public facilities and utilities supports the policy statements of the Comprehensive Plan.

On the basis of the foregoing findings, the requested plan amendment and zone change will not adversely impact the present or future provision of public facilities and services in the area. The full range of urban services appropriate for the subject property's proposed residential land use classification are available and can be provided in a timely, orderly and efficient manner consistent with the intent and purpose of Public Facilities Policies set out above.

**TRANSPORTATION POLICIES (set out in Public Facilities element)**
B. GOAL....

Transportation Development Policy No. 1

*Encourage the expansion of the street improvement program and also coordinate the program with the future street plan, and thus ensure that those streets that have been designated to carry high volumes of traffic (arterials and collectors) are in satisfactory and safe condition.*

Access to the subject property is from an existing connection to Fir Grove Lane. There are no internal streets in the proposed development. Fir Grove Lane is a dedicated public right-of-way that is maintained by the City of Sutherlin. The interior circulation plan for the proposed residential units will connect to the public street system at points of access to the property as directed by the City which connections will be improved in accordance with City design standards and requirements.

Current traffic volumes on the adjacent section of Fir Grove Lane, including peak hour volumes, are below the facility's design capacity as set under Goal 12 above. Other public streets in the area are also adequate to accommodate both existing and potential future traffic volumes likely to be generated as a consequence of the requested plan amendment and zone change. The proposed amendment will have limited additional traffic associated with it. Development of the subject site under the requested residential designation and zoning will not result in a significantly higher volume of traffic than would occur if the site were to be developed under its present designation and zoning. (See Attachment C)

The proposed plan amendment and zone change considering the current level of improvements for the area road system will not result in a change in the functional classification of existing or planned transportation facilities serving the area, nor will it result in changes to any existing development standards or alter the functional classification of existing or planned transportation facilities. Neither will it allow types or levels of land uses which would result in levels of travel or access which are inconsistent with the functional classification of near-by transportation facilities, or otherwise reduce the level of service of existing and planned transportation facilities below minimum acceptable levels.

Specific findings addressing the suitability of the subject site for the proposed plan and zone and the intended use are included in preceding sections of this supplemental application document.

Those earlier findings demonstrate that the subject site is well suited for Applicant's proposal with respect to the physical characteristics of the property, availability of necessary and appropriate public facilities and services, adequate access and accessibility to local transportation facilities, and compatibility with adjacent and nearby land use activities. The site is suitable for the proposed zone and its intended use.

## IV. COMPLIANCE WITH THE CITY OF SUTHERLIN ZONE CHANGE CRITERIA

In addition to the criteria to be addressed when proposing an amendment to the Comprehensive Plan, the City of Sutherlin Development Code (SDC) also establishes criteria that must be considered when a change in zoning is proposed. The criteria for a zone change found in SDC at Section 4.8.110 require the Planning Commission to find:

> *1. Demonstration of compliance with all applicable comprehensive plan policies and map designations. Where this criterion cannot be met, a comprehensive plan amendment shall be a prerequisite to approval;*
>
> *2. Demonstration that the most intense uses and density that would be allowed, outright in the proposed zone, considering the sites characteristics, can be served through the orderly extension of urban facilities and services, including a demonstration of consistency with OAR 660-012-0060. The determination of consistency with OAR 660-012-0060 can be deferred to development review pursuant to 4.3.120 for those zone changes that are located within the approved interchange 136 IAMP area and do not require a comprehensive plan amendment; and*
>
> *3. Evidence of change in the neighborhood or community, or a mistake or inconsistency between the comprehensive plan or zoning district map regarding the subject property which warrants the amendment.*

The requested change in zoning from RH to R2 on the subject property is predicated on a

concurrent request to amend the Comprehensive Plan map relative to the zoning in question. The proposed amendment will allow construction of duplex units on the parcels under the applicable criteria set out immediately above as a permitted use under the R2 zone. If Applicant's plan amendment request is approved, the requested zone change will conform to the amended Comprehensive Plan. Findings demonstrating that the requested change in plan designation will conform to the Statewide Planning Goals and the applicable policies found throughout the Comprehensive Plan are included in preceding sections of this supplemental application document. The rezoning will also conform to the applicable sections of the Comprehensive Plan. Therefore, the remaining zone change criteria set out in 2. and 3. above do not apply to the requested change in zoning.

Based on the facts and findings set out above, the proposed plan amendment and zone change are consistent with the Statewide Planning Goals, the Oregon Administrative Rules and the Sutherlin Comprehensive Plan and Development Code. Applicant requests that the Planning Commission forward a recommendation of approval of this request to the Sutherlin City Council.

ATTACHMENT A

# Exhibit A

A tract of land being LOTS 7 and 8 (Instrument Number 2005-11322, Deed Records of Douglas County) and LOTS 9 through 11 and a portion of LOT 12 (Instrument Number 2023-04273, Deed Records of Douglas County) of the plat of FIR GROVE TRACTS, Volume 9, Page 20, Douglas County Plat Records, located in the Southwest Quarter of Section 19, Township 25 South, Range 5 West, Willamette Meridian, Douglas County, Oregon, more particularly described as follows:

All of said LOTS 7 through 11.

TOGETHER WITH the North one-half of said LOT 12.

civil
structural
surveying
architecture
planning

i.e. Engineering, Inc.
809 SE Pine St.
P.O. Box 1271
Roseburg, OR 97470

ieengineering.com
541-673-0166

ATTACHMENT B

August 4, 2023
City of Sutherlin
Community Development
126 E. Central Avenue
Sutherlin, Oregon 97479

RE: T.25S R.5W. W.M. Sect 19C Tax Lots 201, 300, & 400
Zone Change Request
Traffic Impact Memo

The purpose of this memo is to document to the City of Sutherlin the anticipated traffic impact of the proposed zone change at T.25S R.5W. W.M. Sect 19C Tax Lots 201, 300, & 400 will create as compared to the existing potential use of the parcels. A current assessor's plat and proposed lot layout is attached.

The existing zoning is RH Residential Hillside District. Using the Institute of Transportation Engineers (ITE) Trip Generation Manual 7th Edition, the existing Class Code for this land use is Single-Family Detached Housing, which corresponds Land Use 210. The definition for this Land Use Code is:

"Single-family detached housing includes all single-family detached homes on individual lots. A typical site surveyed is a suburban subdivision.

This specific Class Code generates 9.57 weekday trips per day/dwelling unit. The maximum development of the area described would result in 12 dwellings. Using this case code, the potential trip generation of the SR Single-Family Residential District was approximately 115 trips per day.

The proposed zoning is R2 Medium Density District. Again, using the Institute of Transportation Engineers (ITE) Trip Generation Manual 7th Addition, the proposed Class Code for this land use is Single-Family Detached Housing, which corresponds Land Use 210, as defined above.

This specific Class Code generates 9.57 weekday trips per day/dwelling unit. Considering topography and wetlands, the maximum number of dwellings is 20. 17 lots are proposed and 3 lots are sized to place duplexes. Using this case code, the proposed potential trip generation of the SR Single-Family Residential District was approximately 191 trips per day.

Therefore, the full development of the described land changing from RH to R2 use would result in an additional 8 dwellings. Using the appropriate class codes, the additional new trip generation for this area described above will be approximately 77 trips per day.

In Summary, the estimated net trip increase of 77 trips per day will be the result of this zone change. This land use action will not have a significant impact on Fir Grove Ln., nor will it have any significant impact on traffic patterns or circulation in the area.

If you have any comments or questions, please give me a call at 541-673-0166.

Sincerely,

Derek M. Miller, P.E.

Project Engineer

civil
structural
surveying
architecture
planning

i.e. Engineering, Inc.
809 SE Pine St.
P.O. Box 1271
Roseburg, OR 97470

ieengineering.com
541-673-0166

ATTACHMENT C

August 4, 2023
City of Sutherlin
Community Development
126 E. Central Avenue
Sutherlin, Oregon 97479

RE: T.25S R.5W. W.M. Sect 19C Tax Lots 201, 300, & 400
Zone Change Request
Drainage Impact Memo

The purpose of this memo is to document to the City of Sutherlin the anticipated drainage impact of the proposed zone change at T.25S R.5W. W.M. Sect 19C Tax Lots 201, 300, & 400 will create as compared to the existing potential use of the parcels.

The existing zoning is RH Residential Hillside District. The maximum development of the area described would result in 12 dwellings.

Due to topography and wetlands, the proposed number of dwellings is less than the maximum development. 17 lots are proposed and 3 lots are sized to place duplexes. The actual development of the area described would result in 20 dwellings.

In respect to the topography and wetlands, the full development of the described parcels changing from RH to R2 use could result in an additional 8 dwellings.

The additional 8 dwellings could increase the storm water runoff by approximately 1.3 cfs. This increased runoff will be split due to topography. The majority of the runoff will be collected by the existing natural drainage in the back of the property. A smaller portion of the additional runoff will be collected by the future storm drainage to be designed and installed in the Fir Grove Lane storm improvements.

The natural drainage and the future Fir Grove Lane storm improvements will combine the storm runoff at the intersection of Jaswante Avenue & Robert Lavern St. The 30" existing storm pipe is more than adequate to handle an additional 1.3 CFS.

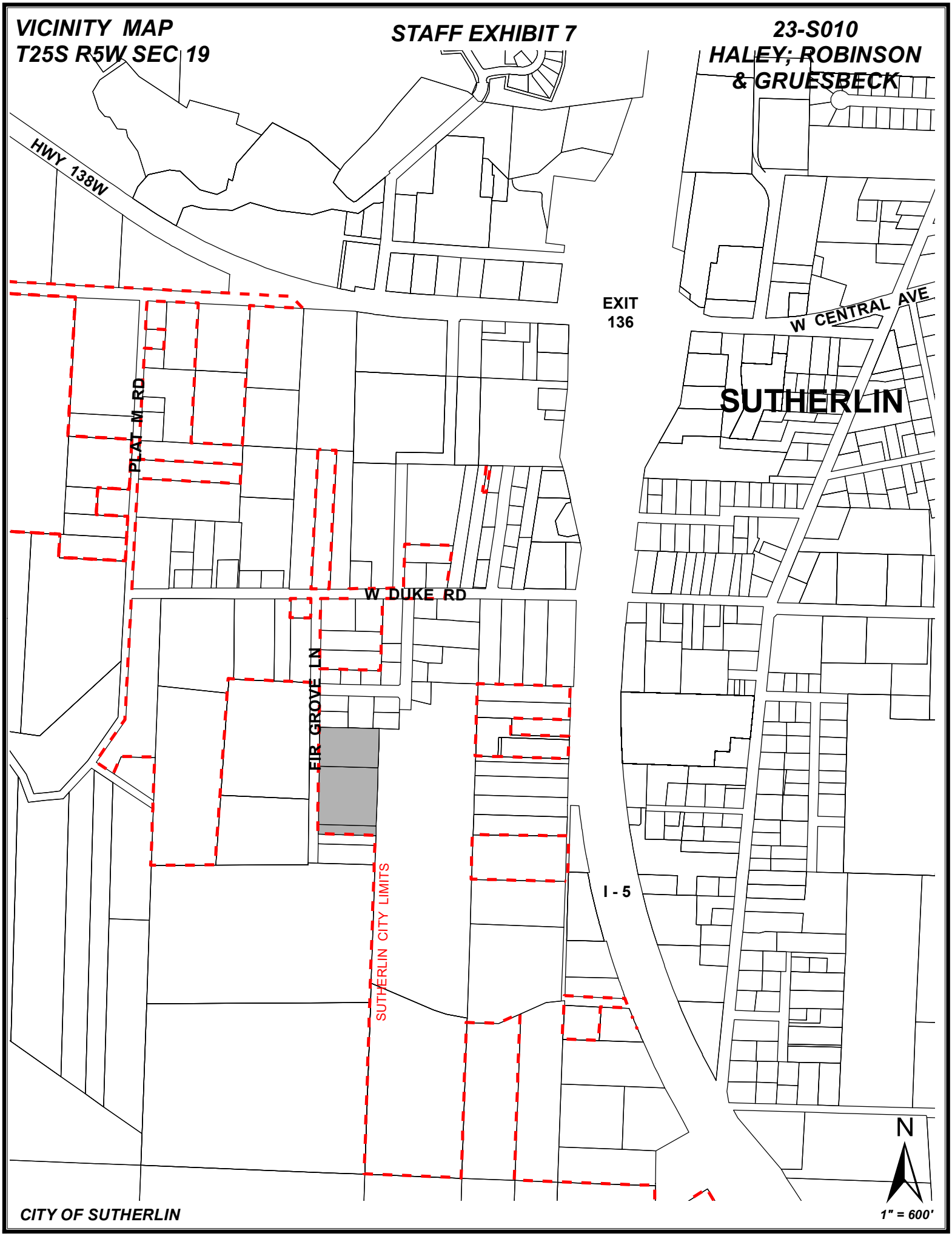
In Summary, the small increase in storm runoff will not adversely impact the neighbors or downstream storm drain systems. This land use action will not cause a significant impact due to storm runoff.

If you have any comments or questions, please give me a call at 541-673-0166.

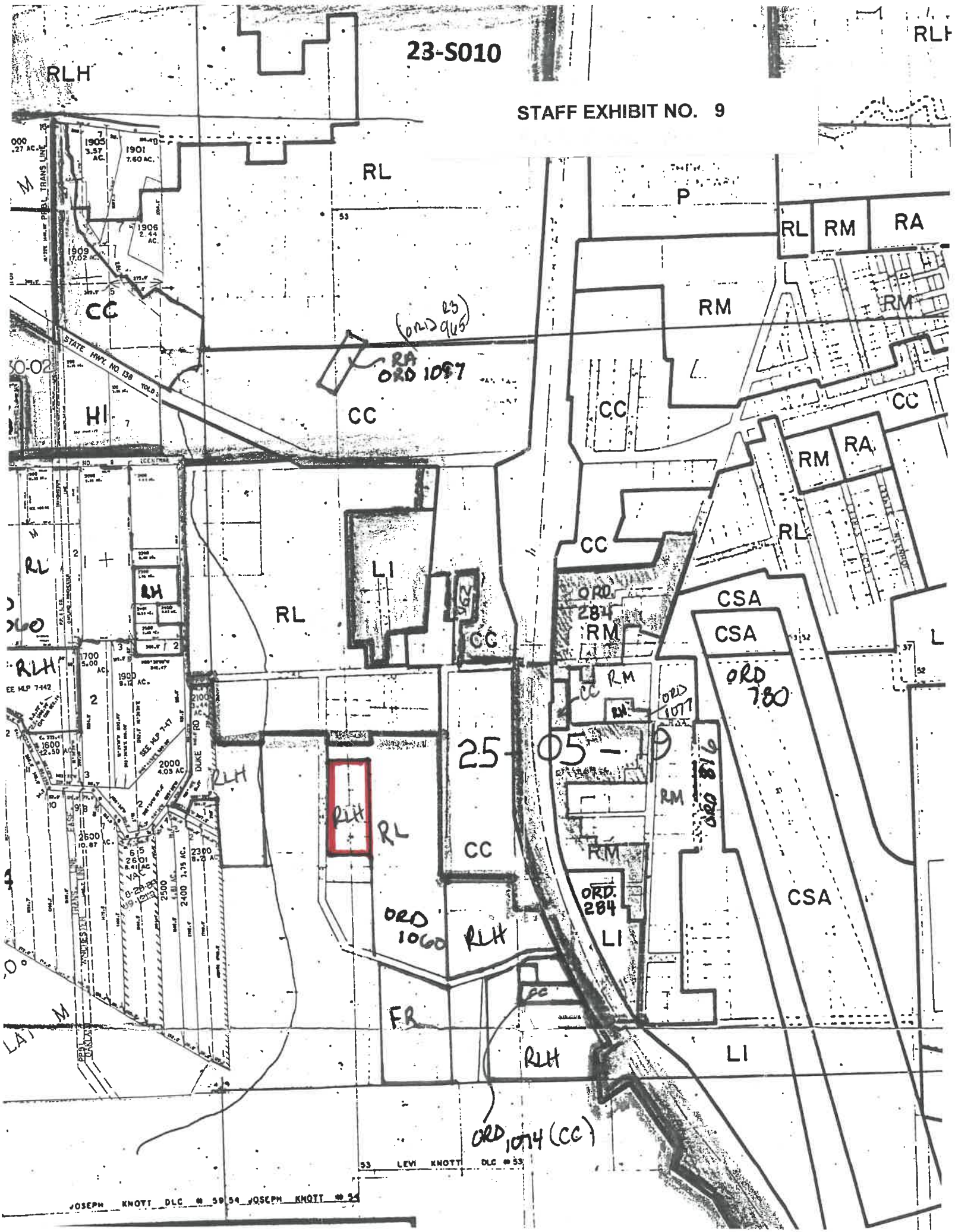
Sincerely,

Derek M. Miller, P.E.

Project Engineer


VICINITY MAP
T25S R5W SEC 19
STAFF EXHIBIT 7
23-S010
HALEY; ROBINSON
& GRUESBECK
HWY 138W
EXIT
136
W CENTRAL AVE
SUTHERLIN
PLAT M RD
W DUKE RD
FIR GROVE LN
SUTHERLIN CITY LIMITS
I - 5
N
CITY OF SUTHERLIN
1" = 600'

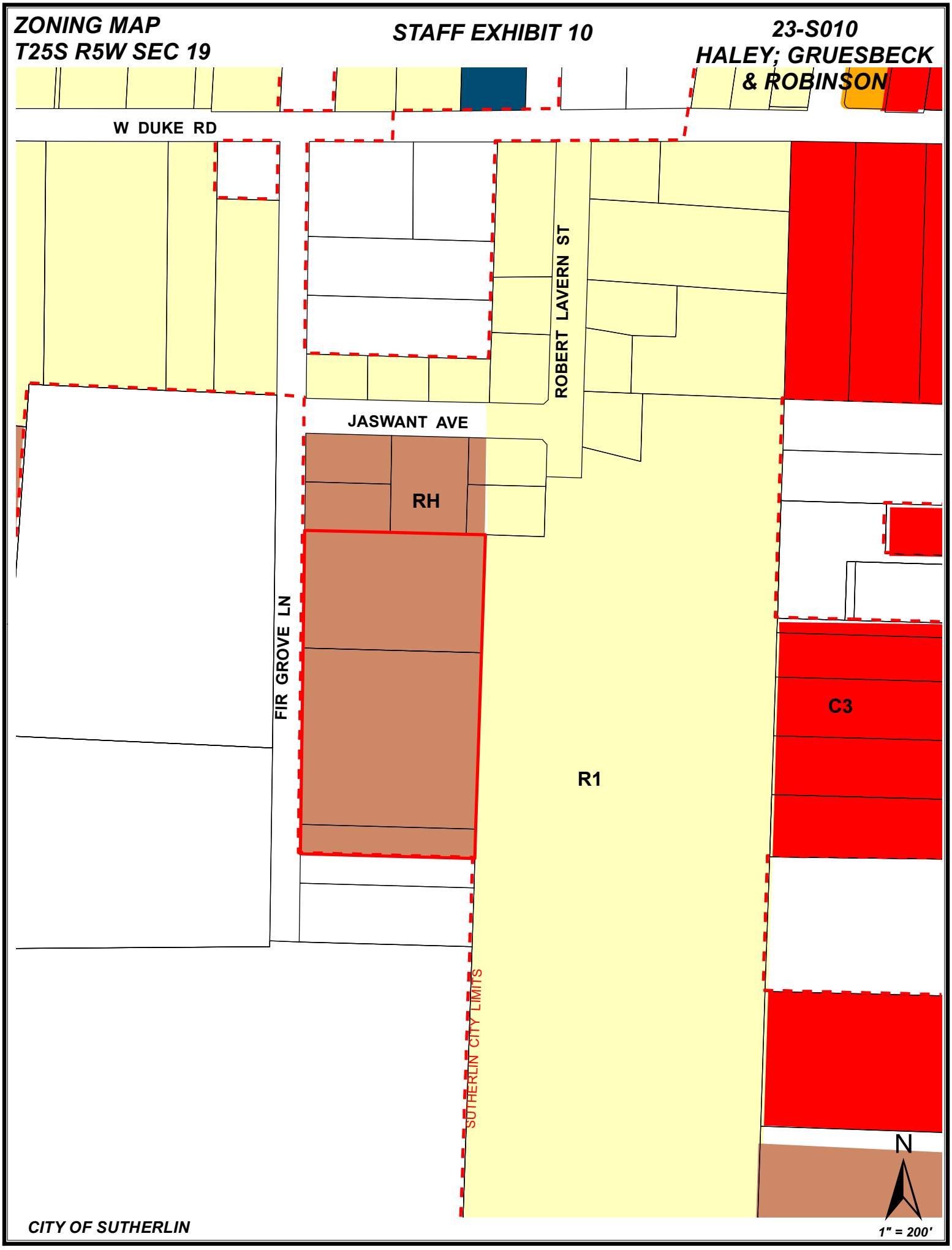

ASSESSOR MAP
T25S R5W SEC 19
STAFF EXHIBIT 8
23-S010
ROBINSON; HALEY & GRUESBECK
JASWANT AVE
PAUL & PARDUE
SRIKUREJA LIVING TRUST DATED 5/27/2015
SRIKUREJA LIVING TRUST
SRIKUREJA LIVING TRUST DATED 5/27/2015
SRIKUREJA LIVING TRUST DATED 5/27/2015
FIR GROVE LN
RESNER
ROBINSON LIVING TRUST DATED 5/8/2017
HALEY; ROBINSON & GRUESBECK
BAY & BAY
TIMS
TIMS
SUTHERLIN CITY LIMITS
N
1" = 100'
CITY OF SUTHERLIN


23-S010
STAFF EXHIBIT NO. 9
RLH
RL
P
RM
RA
CC
HI
LI
CSA
ORD 1087
ORD 284
ORD 780
ORD 1077
ORD 1060
ORD 1074 (CC)
25-05-19
STATE HWY. NO. 138
DUKE RD
LEVI KNOTT DLC # 33
JOSEPH KNOTT DLC # 59
JOSEPH KNOTT # 54

## PLAN DESIGNATIONS

| | |
|---|---|
| | RESIDENTIAL |
| RL | Low Density |
| RLH | Low Density Hillside |
| RM | Medium Density |
| RA | High Density |
| | COMMERCIAL |
| CBD | Commercial Business District |
| CC | Commercial Community |
| | INDUSTRIAL |
| LI | Light Industrial |
| HI | Heavy Industrial |
| | COMMUNITY |
| CSA | Community Service Airport |
| P | Public |
| F | Forestry |

SP-28-30


ZONING MAP
T25S R5W SEC 19
STAFF EXHIBIT 10
23-S010
HALEY; GRUESBECK & ROBINSON
W DUKE RD
ROBERT LAVERN ST
JASWANT AVE
RH
FIR GROVE LN
C3
R1
SUTHERLIN CITY LIMITS
N
CITY OF SUTHERLIN
1" = 200'

**AERIAL MAP**
**T25S R5W SEC 19**

**STAFF EXHIBIT 11**

**23-S010**
**HALEY; GRUESBECK & ROBINSON**


**CITY OF SUTHERLIN**

**1" = 100'**

City of Sutherlin

*Community Development*
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856
Fax (541) 459-9363
www.ci.sutherlin.or.us

# NOTICE OF PUBLIC HEARING
## SUBDIVISION – 0 SCARDI BLVD

Date of Notice: September 21, 2023

**NOTICE IS HEREBY GIVEN** that the Sutherlin Planning Commission will conduct a public hearing on **Tuesday, October 17, 2023 at 7:00 p.m.** in the Sutherlin Civic Auditorium, 175 E. Everett Street. The purpose of the public hearing is to take public testimony, either written or oral, while considering the following land use application:

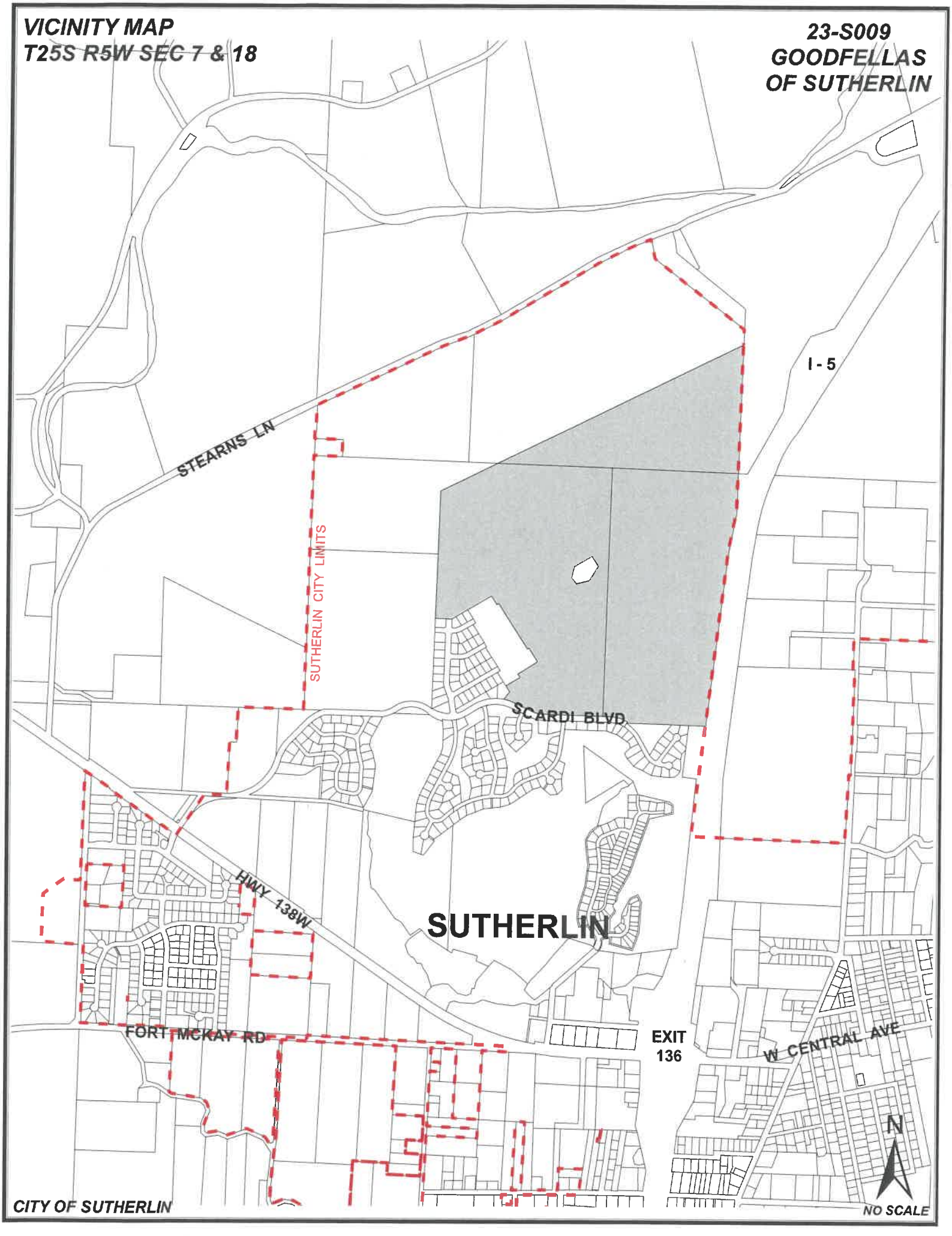
> **GOODFELLAS OF SUTHERLIN**, request for a Subdivision to be developed in three phases that total 91 lots on a 22.00± acre portion of the 193.11 acre subject property. The subject property is located north of Scardi Blvd in the City of Sutherlin. The subject property is described as Tax Lot 1500 in Section 7, and Tax Lot(s) 100 and 203 in Section 18, all in T25S, R5W, W.M; Property ID Nos. R20392; R21680 and R138405. It is designated Low Density and Low Density Hillside by the Sutherlin Comprehensive Plan and zoned (R-1) Low Density Residential and (RH) Residential Hillside. **PLANNING DEPARTMENT FILE NO. 23-S009.**

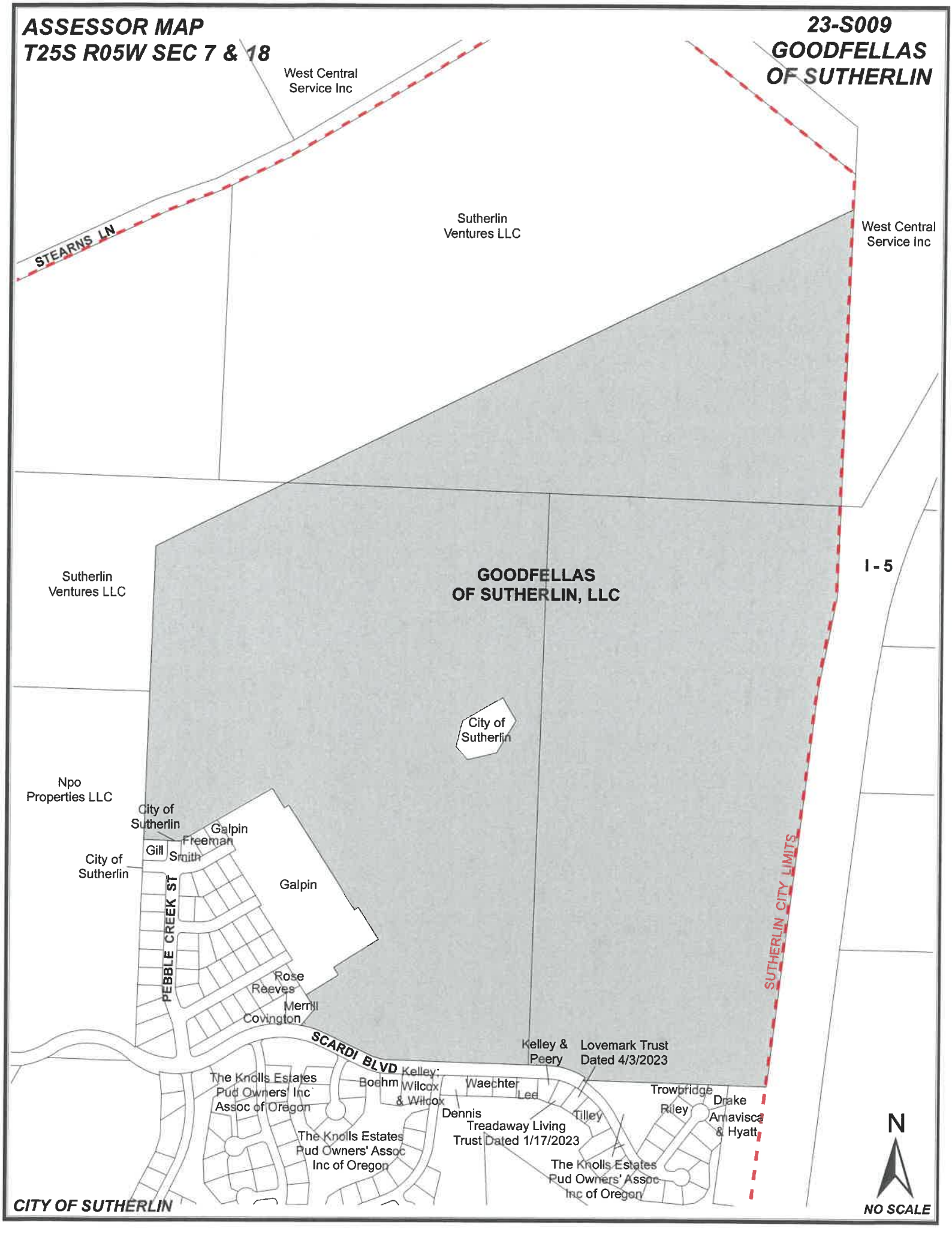
The applicant requested a subdivision under Section 4.4.130 of the Sutherlin Development Code. The application is being processed as a Type III procedure upon referral of the Community Development Director for a subdivision, and is governed by the applicable provisions of Chapter 2, Section 2.2 (R-1 and RH zone), Chapter 3 (Design Standards) and Chapter 4, Section 4.4 (Land Division) all of the Sutherlin Development Code. Pursuant to Sections 4.2.140.C of the Sutherlin Development Code, notice of this land use application has been mailed to affected agencies and all property owners of record within 100 feet of the subject property described above and property owners who have responded to the Type II notice of application. Owners of property within 100 feet, or any other person who can demonstrate that they are affected by the proposed land use action, may request party status in this matter by filing a written statement with the Sutherlin Community Development Department, or by appearing at the hearing and requesting party status. Written statements must contain the name, address and telephone number of the person filing the statement; how the person qualifies as a party; comments the party wishes to make concerning the application, and whether the person desires to appear and be heard at the hearing. Written statements must be filed with the Community Development Department, 126 E. Central Avenue, Sutherlin, Oregon, 97479, **no later than 5:00 p.m. on October 9, 2023,** to be included with the mailing of the staff report.

The public hearing will include presentations of the City staff and the applicant. Parties in support, opposition or with neutral comments will then be heard, as well as rebuttal by the applicant. Failure of an issue to be raised at the hearing, whether in writing or by oral testimony, or failure to provide statements or evidence in sufficient specificity to afford the Planning Commission and parties an opportunity to respond to the issue, will preclude an appeal on that issue and may thereafter bar any legal standing in the event of an appeal.

A copy of the application and supporting documents and evidence, and the applicable criteria are available for inspection at no cost and copies can be provided at reasonable cost. The staff report will be available for inspection at no cost at least seven days prior to the hearing and copies can be provided at reasonable cost.

For more information on this application, please contact Jamie Fugate in the Community Development Department at 541-459-2856 during normal business hours or by email at: j.fugate@ci.sutherlin.or.us

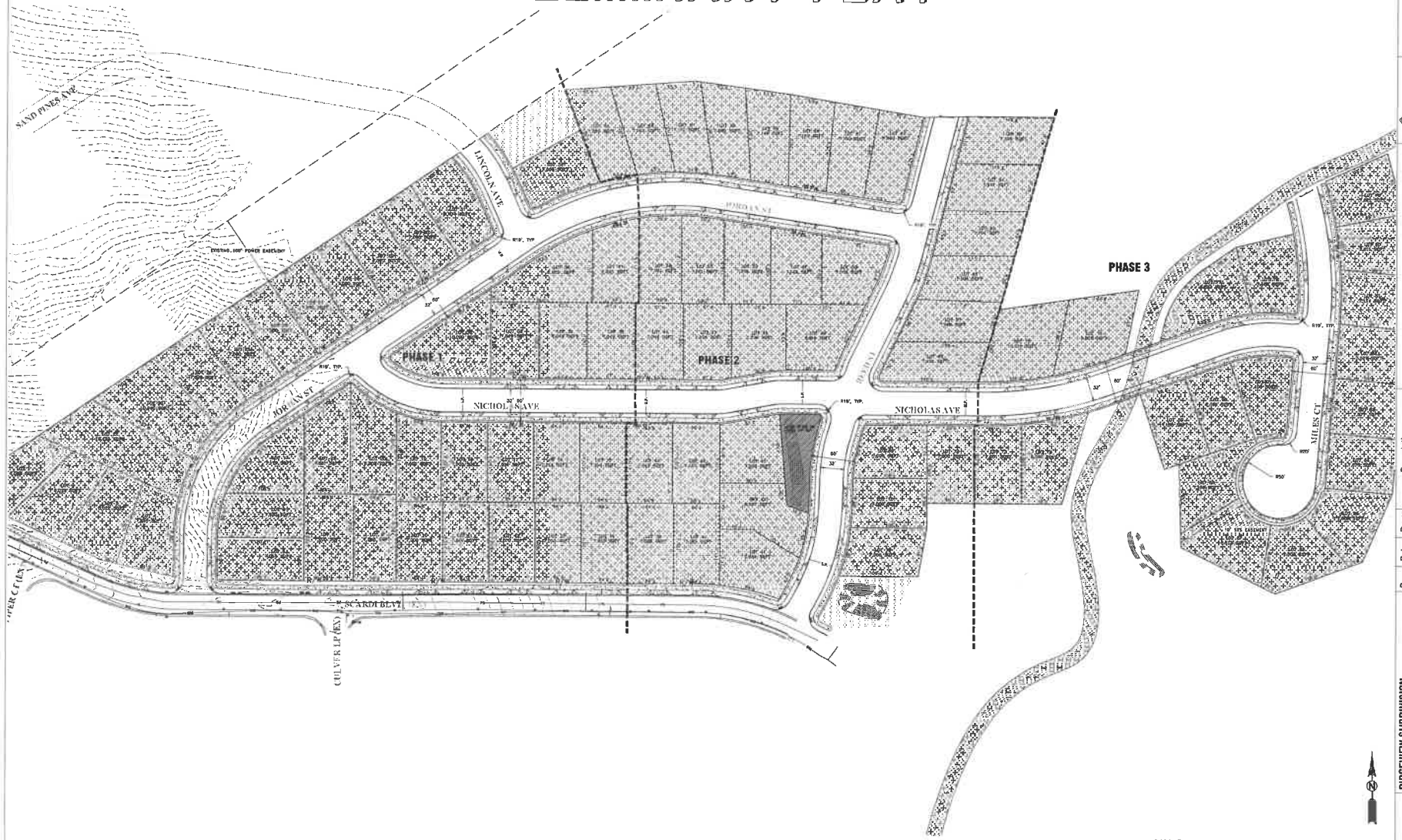

VICINITY MAP
T25S R5W SEC 7 & 18
23-S009
GOODFELLAS
OF SUTHERLIN
I - 5
STEARNS LN
SUTHERLIN CITY LIMITS
SCARDI BLVD
HWY 138W
SUTHERLIN
FORT MCKAY RD
EXIT
136
W CENTRAL AVE
N
CITY OF SUTHERLIN
NO SCALE


ASSESSOR MAP
T25S R05W SEC 7 & 18
23-S009
GOODFELLAS
OF SUTHERLIN
West Central
Service Inc
STEARNS LN
Sutherlin
Ventures LLC
West Central
Service Inc
I - 5
Sutherlin
Ventures LLC
GOODFELLAS
OF SUTHERLIN, LLC
City of
Sutherlin
Npo
Properties LLC
City of
Sutherlin
Galpin
Freeman
Gill
Smith
City of
Sutherlin
Galpin
PEBBLE CREEK ST
Rose
Reeves
Merrill
Covington
SUTHERLIN CITY LIMITS
SCARDI BLVD
Kelley &
Peery
Lovemark Trust
Dated 4/3/2023
The Knolls Estates
Pud Owners' Inc
Assoc of Oregon
Boehm
Kelley;
Wilcox
& Wilcox
Waechter
Lee
Trowbridge
Riley
Drake
Amavisca
& Hyatt
Dennis
Tilley
Treadaway Living
Trust Dated 1/17/2023
The Knolls Estates
Pud Owners' Assoc
Inc of Oregon
The Knolls Estates
Pud Owners' Assoc
Inc of Oregon
CITY OF SUTHERLIN
N
NO SCALE

APPLICANT'S EXHIBIT

23-S009

# RIDGEVIEW SUBDIVISION
# PRELIMINARY PLAT




civil
structural
surveying
architecture
planning

PRELIMINARY

| Rev. | Date | Dwn | Description |
|---|---|---|---|
| | | | |

RIDGEVIEW SUBDIVISION

0 SCARDI BLVD
SUTHERLIN, OR 9479

OVERALL PLAN

SCALE AS SHOWN
JULY 5, 2023
RIDGE PRELIMINARY.SET

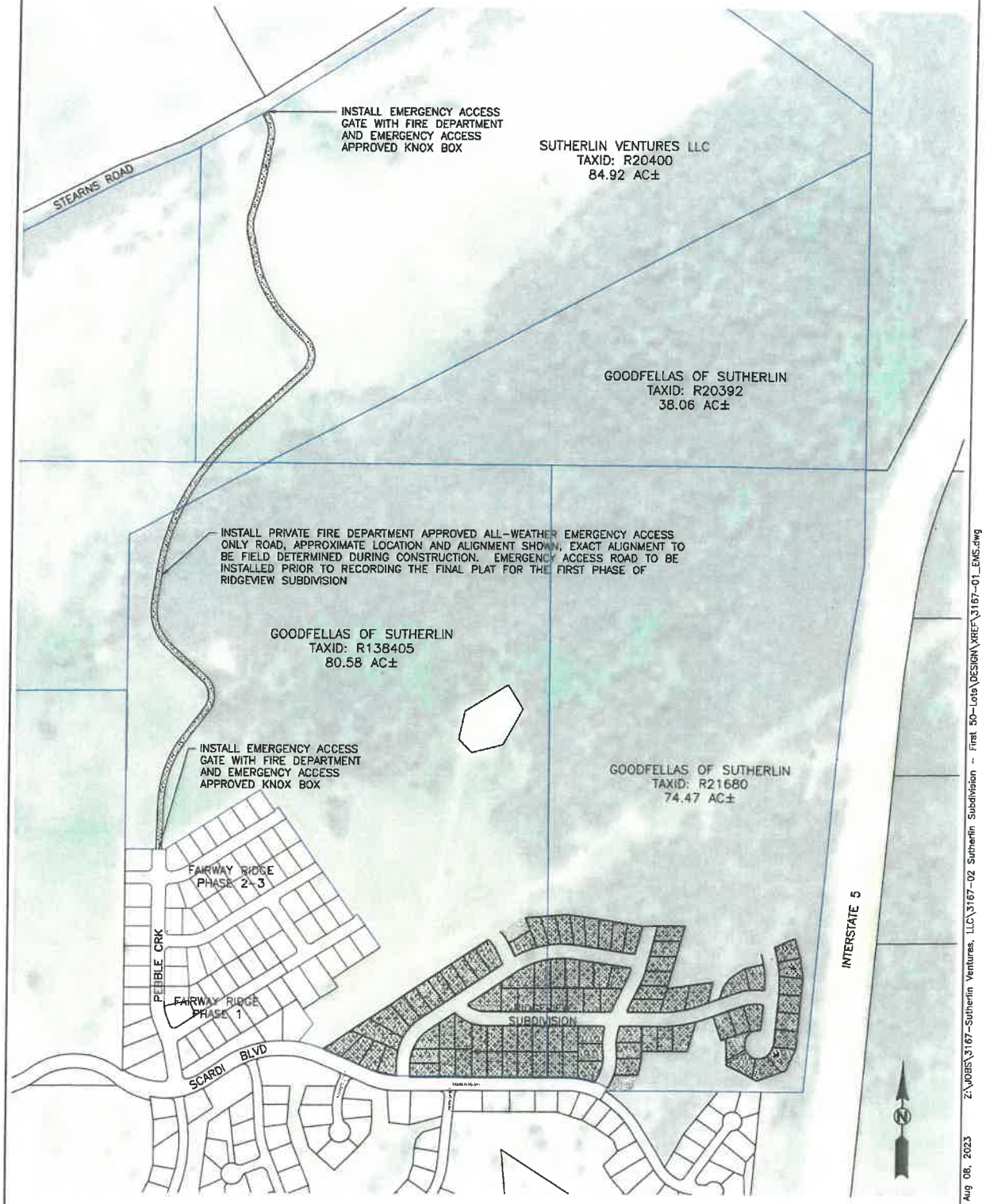
PROJECT NO. 3197-02
DRW AAW
CHK EBR

C2

23-S009

APPLICANT'S EXHIBIT

# RIDGEVIEW SUBDIVISION
# PRELIMINARY EMS ACCESS EXHIBIT





ie
809 SE Pine Street
Roseburg, Oregon 97470
PHONE (541) 673-0166
FAX (541) 440-9392


PROJECT NO. 3167-02
DWG BY: KLW

Aug 08, 2023 kristiw Z:\JOBS\3167-Sutherlin Ventures, LLC\3167-02 Sutherlin Subdivision -- First 50-Lots\DESIGN\XREF\3167-01_EMS.dwg

STAFF EXHIBIT 2

## Affidavit of Publication

***The News-Review***

Of Douglas County

Roseburg, Oregon

ISSUED DAILY EXCEPT MONDAY & SATURDAY

---

STATE OF OREGON

COUNTY OF DOUGLAS } ss.

I, LAURA STUDEBAKER, being first duly sworn, depose and say that I am the CLASSIFIEDS MANAGER, of The News-Review, a newspaper of general circulation, as defined by ORS 193.010 and 193.020; printed and published at Roseburg in the aforesaid county and state; that the _____

#92470 Legal Notice of #9030 NO. 23-S009_PC

a printed copy of which is hereto annexed, was published in the entire issue of said newspaper for 1 successive and consecutive days in the following issue:

09/29/2023

The fee actually charged by such newspaper for such publication is $254.32

Subscribed and sworn to before me this 28th day of September, 2023.

Notary Public of Oregon

OFFICIAL STAMP
DARLA COOK
NOTARY PUBLIC-OREGON
COMMISSION NO. 1037430
MY COMMISSION EXPIRES MAY 30, 2027

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A copy of the applications, supporting documents and evidence, and the applicable criteria are available for inspection at no cost and copies can be provided at reasonable cost. The staff report will be available for inspection at no cost at least seven days prior to the hearing and copies can be provided at reasonable cost.

For more information on this application, please contact the Community Development Department at 541-459-2856.

#9030 Pub. Dates: September 29, 2023

NPO PROPERTIES LLC
223 WANDA DR
ROSEBURG, OR 97471

SUTHERLIN VENTURES LLC
2985 NW 144TH AVE
BEAVERTON, OR 97006

WEST CENTRAL SERVICE INC
2009 STEARNS LN
OAKLAND, OR 97462

CITY OF SUTHERLIN
126 E CENTRAL AVE
SUTHERLIN, OR 97479

GILL, SHAUN & TASHA
907 PEBBLE CREEK ST
SUTHERLIN, OR 97479

SMITH, DANIEL W. & TAMMY K.
815 DURHAM AVE
SUTHERLIN, OR 97479

FREEMAN, CAROL
839 DURHAM AVE
SUTHERLIN, OR 97479

GALPIN, C A
744 CARDLEY AVE, STE 100
MEDFORD, OR 97504

REEVES, CAROLYN
880 SAND PINES AVE
SUTHERLIN, OR 97479

ROSE, SANDRA
PO BOX 484
SUTHERLIN, OR 97479

COVINGTON, MARK & PATRCIA A.
1627 QUAIL CIRCLE
ROSEVILLE, CA 95661

MERRILL, ROBERT W. & VICKI
PO BOX 1352
SUTHERLIN, OR 97479

THE KNOLLS ESTATES PUD OWNERS'S
ASSOC INC OF OREGON
PO BOX 1498
SUTHERLIN, OR 97479

BOEHM, CARTER & MARILYN
1818 SCARDI BLVD
SUTHERLIN, OR 97479

KELLEY, CAROL, WILCOX, DONALD &
WILCOX, LYNN
1789 CULVER LOOP
SUTHERLIN, OR 97479

DENNIS, ROBERT J. & MARY
1780 SCARDI BLVD
SUTHERLIN, OR 97479

WAECHTER, JOSHUA & HEATHER
1764 SCARDI BLVD
SUTHERLIN, OR 97479

LEE, MIKE & JENNIFER
1756 SCARDI BLVD
SUTHERLIN, OR 97479

KELLEY, SHARON & PEERY, STEVEN
1748 SCARDI BLVD
SUTHELRIN, OR 97479

TREADAWAY LIVING TRUST
DATED 1/17/2023
25332 WESTBORNE DR
DANA POINT, CA 92629

LOVEMARK TRUST DATED 4/3/2023
1732 SCARDI BLVD
SUTHERLIN, OR 97479

TILLEY, JERRY & MARCIE
1724 SCARDI BLVD
SUTHERLIN, OR 97479

RILEY, BILL LEE JR & SANDRA D
719 SLAZENGER CT
SUTHERLIN, OR 97479

TROWBRIDGE, REBECCA & NICHOLAS
725 SLAZENGER CT
SUTHERLIN, OR 97479

DRAKE, LATHEN & PEGGY
726 SLAZENGER CT
SUTHERLIN, OR 97479-9602

AMAVISCA, ZACHARY &
HYATT, TASIA
720 SLAZENGER CT
SUTHERLIN, OR 97479

GOODFELLAS OF SUTHERLIN, LLC
2985 NW 144TH AVE
BEAVERTON, OR 97006

I.E. ENGINEERING
809 SE PINE ST
ROSEBURG, OR 97470

DOUGLAS COUNTY PLANNING
ATTN: CITY/COUNTY CORDINATOR
JUSTICE BLDG RM #106
ROSEBURG, OR 97470

DOUGLAS COUNTY PUBLIC WORKS
ATTN: SCOTT ADAMS
1036 SE DOUGLAS AVE, RM #304
ROSEBURG, OR 97470

READING

KRISTI

AARON

SUTHERLIN POLICE

AVISTA UTILITIES
ROSEBURG DISTRICT
1404 GREEN SIDING RD
ROSEBURG, OR 97471

PACIFIC POWER
ATTN: NEW CONNECTS MANAGER
4025 OLD HIGHWAY 99S
ROSEBURG, OR 97471

SUTHERLIN SCHOOL
DISTRICT #130
531 E CENTRAL AVE
SUTHERLIN, OR 97479

AMS (POST OFFICE)
7007 NE CORNFOOT RD,
DEPT 600
PORTLAND, OR 97218-9303

SUTHERLIN MUNICPAL FIRE

CENTURYLINK
920 SE MAIN STREET
ROSEBURG, OR 97470

ODOT REGION 3
ATTN: MICAH HOROWITZ
100 ANTELOPE ROAD
WHITE CITY, OR 97503-1674

CHARTER COMMUNICATION
ATTN: ROD JUSTICE
310 NE BOSTON ST
ROSEBURG, OR 97470

UMPQUA TRANSIT
3076 NE DIAMOND LAKE BLVD
ROSEBURG, OR 97470

DOUGLAS COUNTY ASSESSOR
1036 SE DOUGLAS AVE
ROSEBURG, OR 97470

DEPUTY STATE FIRE MARSHALL
RICHARD HOLLOWAY
(EMAIL)

BRANDI

SURVEYOR
(EMAIL)

DOUGLAS SERVICES, INC
2350 NW AVIATION DR
ROSEBURG, OR 97470

DOUGLAS COUNTY PUBLIC WORKS
ATTN: JOSH HEACOCK
(EMAIL)

BRANDON MCGARR
(EMAIL)

DOUGLAS ELECTRIC
PO BOX 1327
ROSEBURG, OR 97470

CAROLE WELLS
1827 CULVER LOOP
SUTHERLIN, OR 97479

KEVIN BUTCHER
811 PEBBLE CREEK ST
SUTHERLIN, OR 97479

GORDON AVERY
565 PEBBLE CREEK ST
SUTHERLIN, OR 97479

FRANCES MASTROIANNI
820 MEDINA AVENUE
SUTHERLIN, OR 97479

LANCE WETTELAND
825 MEDINA AVE
SUTHERLIN, OR 97479

CARRIE ALLEN
834 MEDINA AVE
SUTHERLIN, OR 97479

DARLENE ALBERTS
829 PEBBLE CREEK ST
SUTHERLIN, OR 97479

WILLIAM EARL WAGNER
810 DURHAM AVE
SUTHERLIN, OR 97479

SHIRLEY SAETER
818 DURHAM AVE
SUTHERLIN, OR 97479

BRIAN MANSFIELD
854 DURHAM AVE
SUTHERLIN, OR 97479

TAMMY SMITH
815 DURHAM AVE
SUTHERLIN, OR 97479

JOSEPH LEE
773 PEBBLE CREEK ST
SUTHERLIN, OR 97479

TASHA GILL
907 PEBBLE CREEK ST
SUTHERLIN, OR 97479

CAROL FREEMAN
839 DURHAM AVE
SUTHERLIN, OR 97479

LEON BRILLON
807 MEDINA AVE
SUTHERLIN, OR 97479

CLINT MCBRIDE
755 PEBBLE CREEK ST
SUTHERLIN, OR 97479

CHANTELE BANGS
791 PEBBLE CREEK ST
SUTHERLIN, OR 97479

CHRIS ACUNA STANDISH
856 MEDINA AVE
SUTHERLIN, OR 97479

BAYLEE GOMEZ
881 MEDINA AVE
SUTHELRIN, OR 97479

TAMRA DEDEKER MEDLEY
784 PEBBLE CREEK ST
SUTHERLIN, OR 97479

DAVID GUYER
768 PEBBLE CREEK ST
SUTHERLIN, OR 97479

TILLEY, JERRY & MARCIE
1724 SCARDI BLVD
SUTHERLIN, OR 97479

RILEY, BILL LEE JR
719 SLAZENGER CT
SUTHERLIN, OR 97479

KAREN BUTCHER
811 PEBBLE CREEK ST
SUTHERLIN, OR 97479

DRAKE, LATHEN & PEGGY
726 SLAZENGER CT
SUTHERLIN, OR 97479-9602

AMAVISCA, ZACHARY &
HYATT, TASIA
720 SLAZENGER CT
SUTHERLIN, OR 97479

WARREN HANUSSAK
871 SAND PINES AVE
SUTHERLIN, OR 97479

LISA WERTZ
868 SAND PINES AVE
SUTHERLIN, OR 97479

NANCY ADAIR WEATHERSPOON
739 PEBBLE CREEK ST
SUTHERLIN, OR 97479

BROOKS SMALLWOOD
870 MEDINA AVE
SUTHERLIN, OR 97479

MICHAEL WILLIAMS
863 MEDINA AVE
SUTHERLIN, OR 97479

STANLEY NICKEL
806 SAND PINES AVE
SUTHERLIN, OR 97479

VICKI MERRILL
1951 SCARDI BLVD
SUTHERLIN, OR 97479

MARK COVINGTON
1967 SCARDI
SUTHERLIN, OR 97479

GLENDA SCHMIDT
818 SAND PINES AVE
SUTHERLIN, OR 97479

RICHARD JOHNSON
832 SAND PINES AVE
SUTHERLIN, OR 97479

CAROLYN REEVES
880 SAND PINES AVE
SUTHERLIN, OR 97479

SANDRA ROSE
892 SAND PINES AVE
SUTHERLIN, OR 97479

JAMES DAVENPORT
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# City of Sutherlin

October 10, 2023

**STAFF REPORT**

TO: Sutherlin Planning Commission

FROM: Jamie Fugate, City Planner

RE: **GOODFELLAS OF SUTHERLIN**, request for a Subdivision to be developed in three phases that total 91 lots on a 22.00± acre portion of the 193.11 acre subject property. The subject property is located north of Scardi Blvd in the City of Sutherlin. The subject property is described as Tax Lot 1500 in Section 7, and Tax Lot(s) 100 and 203 in Section 18, all in T25S, R5W, W.M; Property ID Nos. R20392; R21680 and R138405. It is designated Low Density and Low Density Hillside by the Sutherlin Comprehensive Plan and zoned (R-1) Low Density Residential and (RH) Residential Hillside. **PLANNING DEPARTMENT FILE NO. 23-S009**.

## STAFF EXHIBITS

1. Notice of Public Hearing
2. Copy of Legal Notice for the News Review
3. Property Owners within 100 Feet and those whom provided a letter of remonstrance
4. Staff Report with Responses
5. Subdivision application and attachments
6. Traffic Impact Anaylsis
7. Vicinity Map
8. Assessor Maps
9. Zoning Map
10. Aerial Photograph

## INTRODUCTION

The applicant, Goodfellas of Sutherlin, is requesting s Subdivision to be developed in three phases that total 91 lots on a 22.00± acre portion of the 193.11 acre subject property.

The subject property is located on the north side of Scardi Blvd in the City of Sutherlin. It is described as Tax Lot 1500 in Section 7, and Tax Lot(s) 100 and 203 in Section 18, all in T25S, R5W, W.M.; Property I.D. No(s). R20392, R21680 and R138405. The property is currently undeveloped.

The subject property is designated Low Density and Low Density Hillside by the Sutherlin Comprehensive Plan and zoned (R-1) Low Density Residential and (RH) Residential Hillside by the Sutherlin Development Code (SDC). It is located in an area of residential (R-1) zoned properties to the south and west, industrial (M-2) to the north and Interstate 5 to the east. The properties to the south and west are developed residential neighborhoods, while the property to the north is undeveloped industrial lands located inside city limits.

The applicant requested a subdivision under Section 4.4.130 of the SDC. The application is being processed as a Type III procedure upon referral of the Community Development Director for a subdivision. As part of the hearing, the Planning Commission will review the applicant's request for compliance with the applicable provisions of the Sutherlin Comprehensive Plan, Chapter 2, Section 2.2 (R-1 zone), Chapter 3 (Design Standards), and Chapter 4, Section 4.4 (Land Divisions) of the SDC.

During the public hearing on October 17, 2023, the Planning Commission will accept public testimony and make a decision on the application after the public hearing. Upon rendering a decision, the Planning Commission must make a written Findings of Fact and Decision document, which justifies its decision.

## PROCEDURAL FINDINGS OF FACT

1. The Subdivision applications were deemed complete by the City on August 8, 2023. All applicable application fees were paid to the City.

2. Notice of the proposed Administrative Land Use Action before the Community Development Director was given in accordance with Section 4.2.130.C of the SDC on August 11, 2023.

3. Pursuant to Section 4.2.140.C of the SDC, notice of the public hearing was given by publication in the News Review on September 29, 2023, which was at least fourteen (14) days prior to the date of the public hearing.

4. Upon referral of the Community Development Director, the Notice of a Public Hearing for the Subdivision application before the Planning Commission was given in accordance with Section 4.2.140.C. Notice was sent to affected property owners of record within 100 feet of the subject property, service providers, and governmental agencies on September 21, 2023.

- Notice of the Administrative Land Use Action mailed on August 11, 2023 received 59 responses within the fourteen (14) day opportunity to comment period, three (3) responses where received after the fourteenth day. These responses are now carried forward with the referral of the Community Development Director. The main concerns summarized within the letters pertain to:
    i. Safety as it relates to transportation – congestion, ingrees/egrees, gated EMS access road, speed
    ii. Types of dwellings proposed
    iii. Notification area/distance
    iv. Water availability
    v. Lot size(s)
    - The concerns of adjacent property owners are duly noted and will be addressed within this Staff Report. With regards to the questions, concerns and statements pertaining to the type of dwellings, the City cannot restrict the type of dwelling constructed or manufactured on the subject property. This is not applicable criteria to this application.

- Kathy Wall, Senior Planner, Douglas County Planning, commented that they have reviewed the notice and have no concerns with the requested application.

- Brandan McGarr, Division Chief/Emergency Manager, Sutherlin Fire Department, commented the following:
*Below are Sutherlin Fire Department comments on the Ridgeview Subdivision. Please note that all requirements are subject to meet the Oregon Fire Code (OFC) or relevant City of Sutherlin (COS) ordinances.*
*REQUIREMENTS:*
    - *Emergency access gates shall meet OFC Appendix D requirements on width, construction, etc.*
    - *Sutherlin Fire Department keyed Knoxbox padlocks would be required for emergency access road gates. They can be purchased from www.knoxbox.com . OFC & COS ordinance.*
    - *Emergency access road must be built to meet OFC requirements in Appendix D including widths, signs, loads, etc.*
    - *Hydrant spacing is required to follow OFC Appendix C for spacing requirements.*
    - *Cul-de-sac and road widths are to follow OFC Appendix D.*
    - *Cul-de-sac and road turning radius are to follow OFC Appendix D.*
    - *Per OFC Appendix D, dead end streets will be required to have a fire apparatus turn-a-round for any dead-end roads greater than 150'.*

*RECOMMENDATIONS:*
    - *With prospective development, a second means of egress is recommended to be built out to Stearns Lane.*
    - *A 30' fire break is recommended around the subdivision to protect the homes from wildfire. It is recommended that the HOA be required to maintain.*

        - *During construction it is recommended to use fire resistant building materials (hardy plank siding, asphalt shingles, fire resistant vents, etc).*
        - *It is recommended that you do not place bark mulch around the first five feet around the foundations and decks/patios. Rick is a safer alternative for preventing fire spread.*
        - *Fire resistant plants should be located near the home in place of fire prone vegetation.*
        - *Fire apparatus turn-a-rounds or pullouts every 150-feet on the emergency access road.*
    - The requirements and concerns from the Sutherlin Fire Department will be addressed throughout the Staff Report and be a condition of approval.

- Micah Horowitz, Region 3 Development Review Planner, Oregon Department of Transportation (ODOT), responded August 23, 2023 to the original administrative notice asking, *"if a traffic study to determine what mitigation is necessary associated with previous findings on this site. That they had not seen a traffic stuffy and the conditions of approval state the City will require a traffic study for each new phase of development to inform timing of required mitigation.*
- *Letter of remonstrance submitted August 25, 2023 from Micah Horowitz, Region 3 Development Review Planner, ODOT*
    - The applicant submitted a Traffic Impact Analysis to the City and ODOT on September 19, 2023 for review.
        *i.* Mr. Horowitz responded to the Public Hearing Notice*, "ODOT requests a continuance of the hearing for file no. 23-S009 scheduled for next Tuesday, Oct 17. We are still working with the applicant in refining the traffic analysis and can not provide a letter of support at this point in time."*

- Aaron Swan, Public Works Director, City of Sutherlin, commented the following: *For the application (file no. 22-S009) the applicant will need to provide plans for the subdivision that adhere to City of Sutherlin construction specifications. These plans must include but are not limited to an 8" minimum water line extension detail, a 4" pressure sewer line extension, along with main and lateral details, street detail including width, sidewalk and subgrade detail, and a storm water plan that includes detention ponds. Developer should pay close attention to elevation as they are at the upper reaches of the city water system. While a minimum (20 lbs PSI is required at the meter) will be met, the pressure that people are used to may not be attained without booster pumps.*
    - Public utilities will be addressed throughout this Staff Report and also be listed as condition(s) of approval

**Comments submitted during the Administrative Land Use Notice Period where carried forward. The responses below where received during the Public Hearing Notice Period, and where not required if a previous comment was submitted.**

- Richard and Sara Thigpen, adjacent property owners, submitted a comment regarding the proposed subdivision as follows:

*We have concerns regarding the proposed subdivision planned for the land North of Knolls Estates and East of Fairway Ridge. The 91 lots could easily bring 150 or more vehicles. The only entrance/exit will be on Dovetail at Hwy 138. This intersection is already a safety concern for the two existing subdivisions. Development is good, but only when infrastructure can sustain it. Reduced speed on that section of Hwy 138 and a stoplight at the intersection of Hwy 138 and Dovetail should be contingent for approval of any land use application in this area. We loving living in Sutherlin. It is a great city. Please put the safety and wellbeing of its citizens over the eagerness for growth and development.*

- The neighbor's concerns are duly noted and the concerns will be addressed with this Staff Report.

- Alicia Hart, adjacent property owner, submitted a comment regarding the proposed subdivision as follows:
  *I am opposed to any development regarding the Goodfellas of Sutherlin and Ridgeview Subdivision EMS Access. Any additional construction is a hazard to the residence in the area. An emergency access gate is NOT acceptable. An accessible 24 hour paved road should be added.*
  *There is ONLY one entrance and one exit off of Highway 138 onto Dovetail. An additional entrance and exit is needed.*
  *It is not IF an emergency will occur but WHEN. As a resident on Eagle Loop, my life, property, and neighbors, many who are elderly, are in danger of being trapped because there is Only One Way out!*
  - The neighbor's concerns are duly noted and the concerns will be addressed with this Staff Report.

- Greg T. Gardner, adjacent property owner and Knolls Estate PUD President, submitted a letter on behalf of himself and the entire 160 homeowners with the following concerns:
  *As a community member, as well as the president living in Knolls Estates subdivision to the fairway ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY** concerned as an individual and as the president of Knolls Estates HOA representing all 160 homeowners. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the Highly Traveled State Hwy 138. The homeowners including myself in phase 3 of Knolls Estates are at the very end of Scardi Blvd & Slazenger Ct. We would have the greatest difficulty in getting to Hwy 138, possibly creating safety concerns with the additional traffic onto Scardi Blvd from the proposed new development. As president of the knolls Estates HOA and our Board, we have been getting swamped with homeowners concerns about the safety of themselves and their children. With very little traffic control (high speeds) from the police dept. on Dovetail and Scardi Blvd. The additional subdivision, will be even more hazardous for every homeowner.*
  *I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for the community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and*

*Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval,*
*An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.*
*Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes. I will not be able to attend the meeting to give my concerns in person, but would appreciate that this correspondence be considered.*

- The Knoll's HOA concerns are duly noted and the concerns will be addressed with this Staff Report.

- At the time of the mailing of this staff report, no other written comments or remonstrances have been received.

5. Present Situation: The subject property is currently unimproved and undeveloped.

6. Plan Designation: Low Density (RL) and Low Density Hillside (RLH); proposed improvement is completely within the RL plan designation.

7. Zone Designation: Low Density Residential (R-1) and Residential Hillside (RH); proposed improvement is completely within the R-1 zone designation.

8. Public Water: The subject property has access to public water from the City of Sutherlin within the ROW of Scardi Blvd. Public water will have to be extended to accommodate the development of the site.

9. Sanitary Sewer: The subject property has access to the pressure sanitary sewer from the City of Sutherlin within the ROW of Scardi Blvd. The pressure sanitary sewer will have to be extended from the west to accommodate the development of the site, with individual lots required to have a STEP (Septic Tank Effluent Pump) System installed.

10. Transportation System: Scardi Blvd is designated as a local residential street within the Sutherlin Transportation System Plan. Access to the proposed development is via Dovetail Lane and Scardi Blvd, both local residential streets under the City of Sutherlin's jurisdiction and maintenance.

11. Overlay: The subject property is not located within the 100 year flood plain, a portion of the property contains wetlands per the National Wetlands Mapper (the subject property was not included in the Local Wetlands Inventory).

**FINDING:** The procedural findings noted above are adequate to support the Planning Commission's recommendation on the requested Subdivision application.

**FINDINGS OF FACT**

**RESIDENTIAL DISTRICTS**

1. Residential Zone District, Low Density Residential, R-1 Zone (Section 2.2.100):

   a. The subject 193.11 acre parcel is vacant of structures, and the 22.00± acre portion the proposed improvement is proposed only within the (R-1) Low Density Residential zoned area. The minimum lot area is 7,000 sq.ft. for a single family non-attached lot, with a minimum lot width at frontage 50 feet for a standard lot and 20 feet for a flag lot, and a minimum lot depth of 100 feet where there is no alley right-of-way. The maximum lot coverage for development is 50 percent, with a minimum dwelling unit size of 1,000 sq.ft.

2. **FINDINGS:**

   a. As proposed, the City finds:

      i. The applicant is proposing a three phase, 91-lot subdivision (Ridgeview Subdivision). The subdivision consists of 91 lots, with a 7,000 sq ft minimum lot size and a 10,000 sq ft maximum lot size. Lot width frontage of each lot will be at least 50+ feet.

   b. The applicant will be advised that at the time of a new building proposal for each lot, compliance with all applicable design standards within the R-1 zone will be required.

**DESIGN STANDARDS**

3. **Design Standards**
   a. 3.2.100 Vehicular Access and Circulation
   b. 3.5.100 Infrastructure Standards

4. The access to each proposed parcel will be via a proposed local residential street as indicated on the preliminary map. Each proposed lot will have direct access either onto a proposed internal local residential street or Scardi Blvd.

   Section 3.2 Vehicle Access and Circulation

   ***Applicability.*** *All development in the city must comply with the provisions of chapter 3, Design Standards. Development projects requiring land division, conditional use permit, and/or site design review approval require detailed findings demonstrating compliance with each section of chapter 3, as applicable. For smaller, less complex projects, fewer code provisions may apply and detailed findings may not be required where no discretionary land use or development permit decision is made.*

   3.2.110 Vehicular Access and Circulation. This section is intended to manage vehicle access to development through a connected street system with shared driveways, where practicable, and circulation systems that allow multiple transportation modes and technology, while preserving the flow of traffic in terms of safety, roadway capacity, and efficiency. This section applies to all public roads, streets, and alleys within the city and to all properties abutting them.

***C. Access Permit Required.*** *Access to a public street requires an access permit in accordance with the following procedures:*

*1. Permits for access to City streets shall be subject to review and approval by city staff based on the standards contained in this section, and the provisions of section 3.5, Infrastructure Standards. Access permit applications are available at Sutherlin City Hall.*

*2. Permits for access to state highways shall be subject to review and approval by Oregon Department of Transportation (ODOT) except when ODOT has delegated this responsibility to the city. The city will coordinate with ODOT on such permits as necessary.*

*3. Permits for access to county highways shall be subject to review and approval by Douglas County. The city will coordinate with the county on such permits as necessary.*

**FINDING:** Upon completion of the subdivision, there will be five (5) local residential streets constructed. Access to the individual lots will need to be coordinated with the City for review and approval to ensure access locations meet access separation and other applicable city standards. An access permit for any existing and/or proposed accesses and necessary work to be performed within Scardi Blvd's right-of-way (ROW) will need to be obtained from Sutherlin's Community Development Department.

***D. Traffic Study Requirements.*** *The city or other agency with access jurisdiction may require a traffic study prepared by a traffic engineer to determine access, circulation and other transportation requirements. (See also, section 3.5, Infrastructure.)*

**FINDING:** As part of the 2007 Alaska Sutherland Knolls Corp (ASKC), Plan Amendment and Zone Change applications (PA-07-3/ZC-07-4), Oregon Department of Transportation (ODOT) responded recommending the City to adopt specific transportation policies and findings into their Ordinance, then allowing approval of the proposed plan amendment and zone change. A portion of the applicants proposed development is within a portion of the recommended policy put into place. Policy 4 – Transportation Improvements: *The City will require the applicant to summit a detailed TIS for each new phase of development on the ASKC property.* With this the property owner(s)/developer hire a Traffic Engineer, licensed in the State of Oregon, to complete a Traffic Impact Analysis (TIA). The TIA was submitted to ODOT and to the City of Sutherlin for review. The submitted TIA evaluated the transportation impacts as per the City of Sutherlin and ODOT criteria, evaluating adjacent roadway and intersection operation with the addition of development traffic for the year of completion and a 5-year future analysis.

**FINDING:** The submitted TIA gave the following findings:

- All studied intersections operate within the mobility standards with and without the development traffic.
- The addition of development traffic does not substantially increase queuing conditions.

- The project will include the construction of an emergency access road from the northern terminus of Pebble Creek Street north to Stearns Lane. The emergency road is sufficient for the anticipated need.
- The previous findings for the Plan Amendment and Zone Change associated with this property identified several transportation improvements; see Attachment A in Appendix B (on file). The following are findings relevant to the transportation improvements warranted for this phase of development.
    1. This project is described as "install a traffic signal and eastbound right-turn lane on OR 138W." It is assumed that the turn pocket and traffic signal are to be placed at OR 138 and Park Hill intersection.

       The v/c meets the standard of 0.95, and the queuing does not exceed the available storage of 200 feet for the northbound left turn and 350 feet for the westbound left turn. There are no operational issues that would trigger mitigation for this phase of development
       Signal warrant analysis was performed for this intersection using ODOT's Preliminary Traffic Signal Warrant. The traffic volumes for the major approaches (Highway 138) and minor approach (Park Hill) do not meet the warrant volumes for either Case A or Case B. Therefore, a traffic signal at this location is not warranted.

       The right turn pocket meets the traffic volume criterion. However, there is insufficient ROW to construct a full right turn pocket, given the location of the power poles along the southern edge of the roadway. A right turn pocket is not recommended at this time.

    2. This improvement is the installation of a westbound right turn lane on OR 138W at Dovetail Lane. This improvement has been completed. There is a separated right turn pocket with approximately 95 feet of storage and n180 feet of taper. The queuing analysis estimates no more than a 25-foot queue for the right turn pocket. There is not additional right turn pocket or taper length needed for this right turn.

    3. This improvement is the installation of a median on OR 138W at Dovetail Lane to restrict the access to right-in/right-out only and install a new east-west Collector Street connection from Dovetail to Stearns Lane.

       During the AM peak hour in the year 2030, with this phase of development completed, the v/c is 0.18 and LOS is B. During the PM peak hour in the year 2030. With this phase of development completed, the v/c is 0.22 and LOS is C. The operation of the intersection does not trigger the restrictions of Dovetail to right-in/right-out.

       The creation of a new east-west Collector Street connection from Dovetail Lane to Stearns Lane would require construction on

property not owned by this applicant, as there is no right-of-way available for this connection. This connection is not feasible at this time.

4. This improvement is the installation of Exit 136 southbound exit ramp in the northwest quadrant of the interchange and the installation of a traffic signal or roundabout at OR138W/Dakota Street.

   The installation of Exit 136 southbound exit ramp is a substantial improvement project that far extends the impact of this project on the interchange. This improvement is not necessary for the interchange area to meet the v/c standards with the completion of this phase of development.

   A signal warrant analysis was performed for the OR138W/Dakota Street intersection using ODOT's Preliminary Traffic signal Warrant. The traffic volumes for the major approaches (Highway 138) and minor approach (Dakota Street) do not meet the warrant volumes for Case A, but does meet the warrant volumes of Case B. The intersection operates within the v/c standard with this phase of development in place. Therefore, mitigation by this phase of development does not trigger improvements at this intersection. A traffic signal is not recommended at this time.

**FINDING:** Per ODOT's memo dated September 18, 2007 RE: Revised ASKC Comprehensive Plan Amendment/Zone Chante (PA-07-3/ZC-07-4). Recommended Policy 1 – Transportation System Plan (TSP) Update, the city finds the Sutherlin TSP update was adopted June 8, 2020.

**FINDING:** Per ODOT's memo dated September 18, 2007 RE: Revised ASKC Comprehensive Plan Amendment/Zone Chante (PA-07-3/ZC-07-4). Recommended Policy 2 – Traffic Forecast – the City shall use the ASKC TIS updated 2027 traffic forecast for the west-side of Interstate 5. The city finds the TIA submitted by the applicant utilizes the current TSP to establish parameters for measuring and addressing traffic impacts.

**FINDING:** Per ODOT's memo dated September 18, 2007 RE: Revised ASKC Comprehensive Plan Amendment/Zone Chante (PA-07-3/ZC-07-4). Recommended Policy 3 - Funding Mechanisms. State the City's System Development Charge (SDC) program will fund the TSP 20 year road network improvements through the Capital Improvement Plan (CIP). The city finds that several funding mechanisms, including Transportation SDC's can be utilized to help fund necessary road improvements.

***E. Conditions of Approval.*** *The city or other agency with access permit jurisdiction may require the closing or consolidation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e., for shared driveways), development of a frontage street, installation of traffic control devices, and/or other mitigation as a condition of granting an access permit, to ensure the safe, functional, and efficient operation of the street and highway system.*

**FINDING:** Access requirements shall be a condition of approval to aid and ensure the safety and efficient operation is maintained. An access permit for existing and/or proposed access and necessary work within the right-of-way of Scardi Blvd will be required to be obtained from the City of Sutherlin (Community Development or Public Works department).

***F. Backing Movement.*** *Vehicle access to and from off-street parking areas, except for access to and from residential developments with one (1) or two (2) dwellings, shall not involve backing onto a public street.*

**FINDING:** The proposed lots are for single family homes; therefore, the back-up access restrictions, as described in the above standard, are not required.

***G. Access Standards and Options.*** *When vehicle access is required for development (i.e., for off-street parking, delivery, service, drive-through facilities, etc.), access shall be provided by one of the following methods (a minimum of ten (10) feet per lane is required). These methods are "options" to the developer/subdivider, unless one method is specifically required by the city as a condition of approval.*

*1. Option 1. Access is from an existing or proposed alley or mid-block lane. If a property has access to an alley or lane, direct access to a public street is not permitted.*

*2. Option 2. Access is from a private street or driveway developed to city standards and connected to an adjoining property that has direct access to a public street (i.e., "shared driveway"). A joint maintenance agreement and reciprocal access easement covering the driveway shall be recorded in this case to assure access to the closest public street for all users of the private street/drive. The city may approve a private street under this option by a planned unit development (PUD), provided that public funds shall not be used to construct or maintain a private road, street, or drive. The city may require a public access easement as needed for emergency response access or refuse access.*

*3. Option 3. Access is from a public street adjacent to the development parcel. If practicable, the owner/developer may be required to close or consolidate an existing access point as a condition of approving a new access if the site abuts an arterial or collector street. Street accesses shall comply with the access spacing standards in subsection I, below.*

*4. Subdivisions Fronting Onto an Arterial Street. Subdivision lots fronting onto an arterial street shall not receive access onto the arterial street, except when alternate access (i.e., alleys or secondary streets) cannot be provided due to topographic or other physical constraints. In such cases, the city may require that access be provided by consolidating driveways for clusters of two (2) or more lots or for multiple buildings on a lot (e.g., includes flag lots and mid-block lanes).*

*5. Double-Frontage Lots. When a lot has frontage onto two (2) or more streets, access shall be provided first from the street with the lowest classification. For example, access shall be provided from a local street*

*before a collector or arterial street. A second access may be permitted only as necessary to accommodate projected traffic volumes. Except for corner lots, the creation of new double-frontage lots shall be prohibited in the residential district, unless topographic or physical constraints require the formation of such lots. When a fence or wall is built adjacent to the street in this case, a landscape buffer with trees and/or shrubs and ground cover not less than ten (10) feet wide shall be provided between the fence/wall and the sidewalk or street; maintenance shall be assured by the owner (i.e., through homeowner's association, etc.).*

*6. Important Cross-References to Other Code Sections. Section 3.6 requires that buildings be placed at or near the front property line in some zones, and driveways and parking areas be oriented to the side or rear yard for multiple family and commercial uses. Section 3.5.110 contains private street standards.*

**FINDING:** The proposed 91-lots will each access onto either one of the five proposed streets or onto Scardi Blvd, as outlined above in Option 3. Upon completion of this development, each of the proposed streets will be dedicated to the City of Sutherlin as a public street and will be incorporated into the City's street maintenance system. The development does not front onto an arterial street and no double-frontage lots are proposed. Future residential development of a single family dwelling on each proposed lot will require off-street parking in accordance with residential standards. Each lot will have access to a public local residential street via an individual driveway. Any shared driveways will require compliance with the applicable driveway standards, including the 25 foot access separation between driveways, and any necessary reciprocal access easement(s) recorded.

***H. New Street.*** *The City may require the dedication of public right-of-way and construction of a street (e.g., frontage road, alley or other street) when access cannot otherwise be provided from an existing street, in conformance with city standards. The city considers the development impact in considering whether a new street is needed. See also Section 3.5 Infrastructure Standards.*

**FINDING:** With this application the property owner(s)/developer is proposing five (5) internal local residential streets. The proposed local residential streets shall be constructed and dedicated to the City meeting the standards listed above.

***I. Access Spacing.*** *Driveway accesses shall be separated from other driveways and street intersections in accordance with the following standards and procedures:*

*1. Local Streets. A minimum of twenty-five (25) feet separation (as measured from the sides of the driveway/street) shall be required on local streets (i.e., streets not designated as collectors or arterials.*

*2. Arterial and Collector Streets. Access spacing on collector and arterial streets, and at controlled intersections (i.e., with four-way stop sign or traffic signal) shall be determined based on the policies and standards contained in the city's transportation system plan.*

*3. Special Provisions for All Streets. Direct street access may be restricted for some land use types. For example, access consolidation,*

*shared access, and/or access separation greater than that specified by Subsections 1-2, may be required by the city, county or ODOT for the purpose of protecting the function, safety and operation of the street for all users. Where no other alternatives exist, the permitting agency may allow construction of an access connection along the property line farthest from an intersection. In such cases, directional connections (i.e., right in/out, right in only, or right out only) may be required.*

**FINDING:** Each lot will have access onto either an existing local residential street (Scardi Blvd) or one of the five proposed local residential streets via an individual driveway as depicted on the preliminary plan. Any shared driveways will require compliance with the applicable driveway standards, including the 25 foot access separation between driveways, and any necessary reciprocal access easement(s), to insure access to a proposed public street.

***J. Number of Access Points.*** *For single-family (detached and attached), two (2) family, and three (3) family housing types, one (1) street access point is permitted per lot; except that two (2) access points may be permitted for two (2) family and three (3) family housing on corner lots (i.e., no more than one (1) access per street), subject to the access spacing standards in subsection I, above. The number of street access points for multiple family, commercial, industrial, and public/institutional developments shall be minimized to protect the function, safety and operation of the street(s) and sidewalk(s) for all users. Shared access may be required, in conformance with section K, below, in order to maintain the required access spacing, and minimize the number of access points.*

**FINDING:** As proposed, the applicant proposes a maximum of 91 individual access points onto a new City local residential street that will be constructed. Shared driveways may be required, as necessary in order to meet the requirements stated above.

***K. Shared Driveways.*** *The number of driveways intersecting a public street shall be minimized by the use of shared driveways on adjoining lots where feasible. The city may require shared driveways as a condition of land division or site plan review, as applicable, for traffic safety and access management purposes in accordance with the following standards:*

*1. Shared driveways and frontage streets may be required to consolidate access onto a collector or arterial street. When shared driveways or frontage streets are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway or street temporarily ends at the property line, but may be extended in the future as the adjacent parcel develops. "Developable" means that a parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).*

*2. Access easements and joint maintenance agreements (i.e., for the benefit of affected properties) shall be recorded for all shared driveways, including any pathways and landscaping along such driveways, at the time*

*of final plat approval (section 4.4) or as a condition of site development approval (Section 4.3).*

**FINDING:** Each lot is proposed to access on one of the five local residential streets or Scardi Blvd via an individual driveway as depicted on the preliminary plan. Any shared driveway will require compliance with the applicable driveway standards listed above, if a shared driveway is proposed the necessary reciprocal access easement(s) document will need to be recorded to insure access to the proposed public street.

***L. Street Connectivity and Formation of Blocks Required.*** *In order to promote efficient vehicular and pedestrian circulation throughout the city, land divisions and large site developments shall produce complete blocks bounded by a connecting network of public and/or private streets, in accordance with the following standards:*

*1. Block Length and Perimeter. The maximum block length and perimeter, measured along the property/right-of-way line, shall not exceed:*

*a. Residential Zoning. Six hundred (600) feet length and one thousand eight hundred (1,800) feet perimeter unless the previous adjacent layout or topographical conditions justify a variation;*

*b. C-1 Zoning. Four hundred (400) feet length and one thousand four hundred (1,400) feet perimeter;*

*c. C-3 Zoning. Six hundred (600) feet length only.*

*d. Industrial Zoning. No Standard.*

*Figure 3.2.110L Street Connectivity and Formation of Blocks*

*2. Exception. Exceptions to standards in subsection L1 may be granted when blocks are divided by one or more pathway(s), in conformance with the provisions of section 3.2.120.A. Pathways shall be located to minimize out-of-direction travel by pedestrians and may be designed to accommodate bicycles.*

**FINDING:** The proposed subdivision shall conform to the standards listed above. The proposed preliminary plan indicates future street connectivity to the adjacent development to the west. This will allow for future circulation as development occurs.

***M. Driveway Openings.*** *Driveway openings shall be the minimum width necessary to provide the required number of vehicle travel lanes (ten (10) feet for each travel lane). The following standards (i.e., as measured where the front property line meets the sidewalk or right-of-way) are required to provide adequate site access, minimize surface water runoff, and avoid conflicts between vehicles and pedestrians:*

*1. Single family, two (2) family, and three (3) family uses shall have a minimum driveway width of ten (10) feet, and a maximum width of twenty-four (24) feet, except that one (1) recreational vehicle pad driveway may be provided in addition to the standard driveway for lots containing more than seven thousand (7,000) square feet of area….*

**FINDNG:** As proposed, each proposed lot will access directly onto a local residential street. Shared driveways may be required, as necessary, to ensure the required 25 foot

driveway separation is maintained. Driveways shall be a minimum of 10 feet wide and a maximum of 24 feet wide, complying with the above standard(s).

***N. Fire Access and Parking Area Turn-Arounds.*** *A fire equipment access drive shall be provided for any portion of an exterior wall of the first story of a building that is located more than one hundred fifty (150) feet from an existing public street or approved fire equipment access drive. Parking areas shall provide adequate aisles or turn-around areas for service and delivery vehicles so that all vehicles may enter the street in a forward manner.*

**FINDING:** As part of this request, the property owner(s)/developer coordinated with the City Fire Department and the State Fire Marshall. The property owner(s)/developer are required to construct an emergency access gate(s) meeting Oregon Fire Code, Appendix D, along with the installation of a keyed knoxbox on all emergency access gates, improved Emergency access road to be constructed meeting Oregon Fire Code requirements outlined in Appendix D (including widths, signs, load, etc), cul-de-sac and road withs/turning radius are to follow Oregon Fire Code, Appendix D and dead end streets greater than 150' in length will be required to have a fire apparatus turn-around. These requirements will be listed as conditions of approval.

***O. Vertical Clearances.*** *Driveways, private streets, aisles, turn-around areas and ramps shall have a minimum vertical clearance of thirteen (13) feet six (6) inches for their entire length and width.*

**FINDING:** The proposed development will be required to meet the standards of vertical clearances as stated above.

***P. Vision Clearance.*** *No signs, structures or vegetation in excess of three (3) feet in height shall be placed in "vision clearance areas", as shown in figure 3.2.110P. The minimum required vision clearance area may be increased by the city upon finding that more sight distance is required (i.e., due to traffic speeds, roadway alignment, etc.).*

**FINDING:** Future residential development will require compliance with the applicable vision clearance standards.

***Q. Flag Lots.*** *Flag lots may be created where the configuration of a parcel does not allow for standard width lots. A flag pole access drive may serve no more than two (2) dwelling units, including accessory dwellings and dwellings on individual lots. A drive serving more than one lot shall conform to the standards in subsections 1-4 below:*

*1. <u>Driveway and Lane</u> width of all shared drives and lanes shall be twenty (20) feet of pavement with a minimum lot frontage width of twenty-five (25) feet wide throughout the driveway;*

*2. <u>Easement</u>. Where more than one (1) lot is to receive access from a flag pole drive, the owner shall record an easement granting access to all lots that are to receive access. The easement shall be so indicated on the preliminary plat;*

*3. Maximum Drive Lane Length. The maximum drive lane length is subject to requirements of the uniform fire code, but shall not exceed one hundred fifty (150) feet without an emergency turnaround approved by the city; and*

*4. Area Calculation. The flag pole portion of a lot shall not be counted for the purpose of meeting lot area requirements or determining setbacks.*

**FINDING:** No flag lots are proposed with the requested subdivision application.

***R. Construction.*** *The following standards shall apply to all driveways and private streets:*

*1. Surface Options. Driveways, parking areas, aisles, and turn-arounds shall be paved with asphalt, concrete or comparable surfacing; alternatively, a durable non-paving material such as pavers, or other materials approved by the city may be used to reduce surface water runoff and protect water quality.*

*2. Driveway Aprons. When driveway approaches or "aprons" are required to connect driveways to the public right-of-way, they shall be constructed to city standards and paved with concrete surfacing. See subsection M, above.*

**FINDING:** As construction occurs, each lot will be required to meet the driveway, parking area and driveway apron requirements listed above. This will be an advisory condition of approval.

5. **INFRASTRUCTURE STANDARDS**

**SECTION 3.5.100 Purpose and Applicability.**

***A. Purpose.*** *This section provides planning and design standards for transportation, sewer, water, and storm drainage infrastructure.*

***B. When Standards Apply.*** *All development shall be served with adequate infrastructure including transportation, sewer, water, and storm drainage, in conformance with this section and consistent with the City's engineering design criteria.*

***C. Standard Specifications.*** *The City of Sutherlin general engineering requirements and standard specifications for street, storm drain, sewer, and waterline construction are incorporated in this code by reference.*

***D. Conditions of Development Approval.*** *No development may occur unless required public infrastructure is in place or guaranteed, in conformance with the provisions of this code. Improvements required as a condition of development approval, when not voluntarily accepted by the applicant, shall be roughly proportional to the impact of development. Findings in the development approval shall indicate how the required improvements are roughly proportional to the impact.*

**FINDING:** Development of the proposed subdivision will be required to meet the City of Sutherlin standards and specifications and Section 3.5 of the SDC. Development will require the extension of the sanitary sewer, storm drains and water main lines from their

existing mains located within the ROW of Scardi Blvd. Utilities will be required to be extended underground from Scardi Blvd. The design for the installation of the utilities will have to be coordinated with Sutherlin Public Works. The property owner(s)/developer is required to submit engineered plans of the proposed infrastructure, these plans will be reviewed by City Staff as well as the City's Engineer of Record.

**SECTION 3.5.110: Transportation Standards.**

> ***A. Purpose.*** *The purpose of this section is to implement the Transportation System Plan and protect the City's investment in the public street system. Upon dedication of streets to the public, the City accepts maintenance responsibility for the street. Failure to meet City standards may place an undue maintenance burden on the public, which may be only marginally benefited by the street improvement. Variances to street standards must be evaluated in this context.*
>
> ***B. Development Standards.*** *No development shall occur unless the development has frontage onto or approved access from a public street, in conformance with the provisions of section 3.2, Access and Circulation, and the applicable standards of Section 3.5.110.B are met.*

**FINDING:** The proposed subdivision will create 91-lots that will each access directly either onto one of the five proposed local residential streets or Scardi Blvd. Access and Circulation shall meet the development standards within the SDC, Section 3.2 and Section 3.5.110.B. Furthermore, the city finds the proposed streets shall meet the requirements outlined in the Transportation System Plan (TSP) for local residential streets.

> ***C. Creation of Rights-of-Way for Streets and Related Purposes.*** *Streets shall be created through the approval and recording of a final subdivision or partition plat, or quit claim deed, provided that the street is deemed essential by the city for the purpose of implementing the comprehensive plan / transportation system plan, and the deeded right-of-way conforms to the standards of this code. All deeds of dedication shall be in a form prescribed by the city and shall name "the public," as grantee.*

**FINDING:** The City finds that five local residential streets are proposed and will be created as part of this development and dedicated as public ROW. Dedication of the streets as public ROW will occur in conjunction with the recording of the final subdivision plat. The proposed local residential street requirements and dedication be a condition of approval and meet the above stated requirement.

**FINDING:** The City shall coordinate the proposed street names with the Douglas County Addressing Department to verify the names are not a duplicate or similar too existing street name.

> ***D. Creation of Access Easements.*** *Access easements are only allowed with a private street or drive meeting city standards for one single family unit. Access easements are discouraged in all residential districts, unless they are an integral part of a PUD, or required by the city for access management reasons (i.e., shared driveways along arterial streets). The city may approve an access easement*

*established by deed when the easement is necessary to provide for access and circulation in conformance with section 3.2.110 (K).*

**FINDING:** The City finds that each lot will have access onto one of the five proposed local residential streets or existing Scardi Blvd via an individual driveway. If any shared driveways are proposed, they will require reciprocal access easement(s) and driveway maintenance agreement(s) between the affected lots and be identified on the face of the final plat, in accordance with the above requirements.

***E. Street Location, Width and Grade**. Except as noted below, the location, width and grade of all streets shall conform to the transportation system plan, as applicable; and an approved street plan or subdivision plat. Street location, width and grade shall be determined in relation to existing and planned streets, topographic conditions, public convenience and safety, and in appropriate relation to the proposed use of the land to be served by such streets:*

*1. Street grades shall be approved by the city, in accordance with the design standards in subsection N, below; and*

*2. Where the location of a street is not shown in an existing street plan (see subsection H), the location of streets in a development shall either:*

*a. Provide for the continuation and connection of existing streets in the surrounding areas, conforming to the street standards of this section; or*

*b. Conform to a street plan adopted by the city council, if it is impractical to connect with existing street patterns because of particular topographical or other existing conditions of the land. Such a plan shall be based on the type of land use to be served, the volume of traffic, the capacity of adjoining streets and the need for public convenience and safety.*

**FINDING:** The improvement of the five proposed local residential streets will be required to meet City standards for street widths, grade and improvement, along with the design, engineering and construction in accordance with the standards above.

***F. Minimum Rights-of-Way and Street Sections.** Street rights-of-way and improvements shall be the widths in Table 3.5.110. A variance shall be required in conformance with section 5.2.110 to vary the standards in Table 3.5.110. Where a range of width is indicated, the width shall be determined by the decision-making authority based upon a variety of factors, as outlined in this section….*

**FINDING:** Scardi Blvd has an existing 60’ ROW where it abuts the subject property. The preliminary plan indicates the five local residential streets will be 60’ in ROW, exceeding the required minimum of 48’ ROW width with parking on both sides. The ROW is within the range for a local residential street width of 48 feet to 64 feet.

***H. Future Street Plan and Extension of Streets.***

*1. The City shall require the submittal of a future street plan in conjunction with an application for a subdivision or partition when the subject request could affect development of the city’s future street system. The purpose of the future street plan is to facilitate orderly development of an interconnected street system, provide greater certainty to the city and neighboring property owners, and allow for future growth in conformance*

*with the comprehensive plan and transportation system plan. The plan shall show the pattern of existing and proposed future streets from the boundaries of the proposed land division and shall include other parcels within six hundred (600) feet surrounding and adjacent to the proposed land division. The street plan is not binding; rather it is intended to show potential future street extensions with future development*

*2. Streets shall be extended to the boundary lines of the parcel or tract to be developed, when the city determines that the extension is necessary to give street access to, or permit a satisfactory future division of, adjoining land. Developers are encouraged to also install conduits for other utilities in coordination with those utilities. The point where the streets temporarily end shall conform to a-c, below:*

*a. These extended streets or street stubs to adjoining properties are not considered to be cul-de-sacs since they are intended to continue as through streets when the adjoining property is developed.*

*b. A reflective barricade (e.g., fence, bollards, or similar vehicle barrier) shall be constructed at the end of the street by the partitioner or subdivider and shall not be removed until authorized by the city or other applicable agency with jurisdiction over the street. The cost of the barricade shall be included in the street construction cost.*

*c. Temporary turnarounds (e.g., hammerhead or bulb-shaped configuration) shall be constructed for stub streets over one hundred (150) feet in length.*

**FINDING:** The property owner(s)/developer has indicated on their submitted preliminary plan the extension of the two (2) streets to the north for future development of the subject property. Along with one (1) street (proposed Lincoln Ave) to connect to the existing Fairway Ridge, Phase 3 development to allow for connectivity. This will allow for future circulation as development occurs to the north. As condition of approval, the property owner(s)/developer will be required to install a barricade at the end of any dead-end streets less than 150' in length, at each location meeting the above requirements.

**FINDING:** Any dead-end street greater than 150' in length will be required to install a fire apparatus turn-around meeting the requirements of the Oregon Fire Code (OFC), Appendix D.

***I. Street Alignment and Connections.***

*1. Staggering of streets making "T" intersections at collectors and arterials shall not be designed so that jogs of less than three hundred (300) feet on such streets are created, as measured from the centerline of the intersecting streets.*

*2. Spacing between local street intersections shall have a minimum separation of one hundred twenty-five (125) feet, except where more closely spaced intersections are designed to provide an open space, pocket park, common area or similar neighborhood amenity. This standard applies to four-way and three-way (off-set) intersections.*

*3. All local and collector streets that abut or stub to a development site shall be extended within the site to provide through circulation unless prevented by environmental or topographical constraints, existing development patterns or compliance with other standards in this Code. This exception applies when it is not possible to redesign or reconfigure the street pattern to provide required extensions. Land is considered topographically constrained if the slope is greater than fifteen (15) percent for a distance of two hundred fifty (250) feet or more. In the case of environmental or topographical constraints, the mere presence of a constraint is not sufficient to show that a street connection is not possible. The applicant must show why the environmental or topographic constraint precludes some reasonable street connection.*

*4. Proposed streets or street extensions shall be located to provide direct access to existing or planned commercial services and other neighborhood facilities, such as schools, shopping areas and parks.*

*5. In order to promote efficient vehicular and pedestrian circulation throughout the city, the design of subdivisions and alignment of new streets shall conform to the following standards in chapter 3.2, Access and Circulation. The maximum block length shall not exceed:*

*a. Residential districts – Six hundred (600) feet; . . .*

*Exceptions to the standards in a-b may be granted when an access way is provided at or near mid-block, in conformance with the provisions of section 3.2.120A.*

**FINDING:** The Subdivision application proposes to improve two access locations onto the portion of Scardi Blvd that is under the jurisdiction of the City of Sutherlin. Scardi Blvd is classified as a local residential street, requiring a minimum of 125' separation as stated above and shall meet the requirements outlined in Section 3.5.110.K

**J.** ***Sidewalks, Planter Strips, Bicycle Lanes.*** *Sidewalks, planter strips, and bicycle lanes shall be installed in conformance with the standards in Table 3.5.110F, applicable provisions of the transportation system plan, the comprehensive plan, and adopted street plans. Maintenance of sidewalks, curbs, and planter strips is the continuing obligation of the adjacent property owner.*

**FINDING:** The property owner(s)/developer are required to construct sidewalks as depicted in the local residential street requirements (Figure 10, Section 3.5.110). Planter strips are not required along the five (5) proposed local residential streets, however a planter strip is required along Scardi Blvd and will be listed as a condition of approval.

***K. Intersection Angles.*** *Streets shall be laid out so as to intersect at an angle as near to a right angle as practicable, except where topography requires a lesser angle or where a reduced angle is necessary to provide an open space, pocket park, common area or similar neighborhood amenity. In addition, the following standards shall apply:*

*1. Streets shall have at least twenty-five (25) feet of tangent adjacent to the right-of-way intersection unless topography requires a lesser distance;*

*2. Intersections which are not at right angles shall have a minimum corner radius of twenty (20) feet along the right-of-way lines of the acute angle; and*

*3. Right-of-way lines at intersection with arterial streets shall have a corner radius of not less than twenty (20) feet.*

**FINDING:** The intersection of the proposed street will need to be designed and constructed to meet the standards above.

***L. Existing Rights-of-Way.*** *Whenever existing rights-of-way adjacent to or within a tract are of less than standard width, additional rights-of-way shall be provided at the time of partition, subdivision, or development, subject to the provision of section 3.5.100.D.*

**FINDING:** The City finds that no additional ROW is required to be dedicated at this time.

***M. Cul-de-sacs.*** *A dead-end street shall be no more than four hundred (400) feet long, and shall only be used when open space (e.g., street ends at park or greenway), environmental, or topographical constraints; existing development patterns; or compliance with other standards in this code preclude street extension and through circulation. Such dead-end-street shall conform to all of the following standards:*

*1. The city may require a dead-end or cul-de-sac street to stub to the outer property line of the development when future street extension may be possible through redevelopment of an adjacent property (e.g., existing development on adjacent property could redevelop and allow extension in foreseeable future).*

*2. All cul-de-sacs exceeding one hundred fifty (150) feet shall terminate with a circular or hammer-head turnaround. Circular turnarounds shall have a radius of no less forty (40) feet (i.e., from center to edge of pavement); except that turnarounds may be larger when they contain a landscaped island or parking bay in their center. When an island or parking bay is provided, there shall be a fire apparatus lane of twenty (20) feet in width; and*

*3. The length of the cul-de-sac shall be measured along the centerline of the roadway from the near side of the intersecting street to the farthest point of the cul-de-sac.*

**FINDING:** The preliminary plan indicates one cul-de-sac is proposed with this application. The proposed cul-de-sac must comply with the above standard and with the Oregon Fire Code, Appendix D (road widths, turning radius, etc).

***N. Grades and Curves.*** *Grades shall not exceed ten (10) percent on arterials, twelve (12) percent on collector streets, or twelve (12) percent on any other street (except that local or residential access streets may have segments with grades up to 15% for distances of no greater than 250 feet) when approved by the city engineer, and:*

*1. Curb radii shall not be less than seven hundred (700) feet on arterials, five hundred (500) feet on major collectors, three hundred fifty*

*(350) feet on minor collectors, or one hundred (100) feet on other streets; and*

*2. Streets intersecting with a minor collector or greater functional classification street, or streets intended to be posted with a stop sign or signalization shall provide a landing averaging five percent or less. Landings are that portion of the street within twenty (20) feet of the edge of the intersecting street at full improvement.*

**FINDING:** The City finds the proposed new local residential streets shall be constructed and improved to conform and meet the grade and curb radii listed above.

***O. Curbs, Curb Cuts, Ramps, and Driveway Approaches***. *Concrete curbs, curb cuts, wheelchair and bicycle ramps, and driveway approaches shall be constructed in accordance with standards specified in section 3.2 Access and Circulation.*

**FINDING:** Construction of the future driveway accesses for each lot will be required to comply with the applicable standards outlined above.

***T. Street Names***. *No street name shall be used that duplicates or could be confused with the names of existing streets in the vicinity of the city, except for extensions of existing streets. Street names, signs and numbers shall conform to the established pattern in the surrounding area, except as requested by emergency service providers. Street names shall conform to section 12.24, as amended, of the Sutherlin Municipal Code.*

**FINDING:** The property owner(s)/developer have proposed the following road names: Jordan Street, Nicholas Avenue, Lincoln Avenue, Miles Court and Reed Street as road names within the subdivision. The City will coordinate with the Douglas County Addressing section to determine if the names meet the above listed requirements and are sufficient.

***U. Filed Street Survey and Survey Monuments Required.*** *Upon completion of a street improvement and prior to acceptance by the city, it shall be the responsibility of the developer's registered professional land surveyor to provide certification to the city that all boundary and interior monuments shall be reestablished and protected and required street survey(s) have been filed.*

**FINDING:** The property owner(s)/developer upon completion of the street improvements and prior to the acceptance by the city shall provide certification of the street improvements as stated within this section.

***V. Street Signs.*** *The city, county or county with jurisdiction shall install all signs for traffic control and street names. The cost of signs required for new development shall be the responsibility of the developer. Street name signs shall be installed at all street intersections. Stop signs and other signs may be required.*

**FINDING:** The property owner(s)/developer shall coordinate with the City for the necessary street signs to be ordered. It is the responsibility of the property

owner(s)/developer to pay for necessary street signage as needed with the proposed subdivision. This will be noted as a condition of approval.

***W. Mail Boxes.*** *Plans for mail boxes to be used shall be approved by the United States Postal Service.*

**FINDING:** Prior to final approval, mail boxes to be used for the development will be required to be approved by the U.S. Postal Service, as outlined above.

***X. Street Light Standards.*** *Street lights shall be installed in accordance with city standards.*

**FINDING:** The preliminary subdivision plat indicates eight (8) street lights will be installed. Property owner(s)/developer are responsible for coordinating with the City and for the installation of streetlights within the subdivision per city street light policy (Resolution No. 2006-03). Location of the street lights will require coordination with the Community Development Department.

***Y. Street Cross-Sections.*** *The final lift of asphalt or concrete pavement shall be placed on all new constructed public roadways prior to final city acceptance of the roadway.*

1. *Sub-base and leveling course shall be of select crushed rock;*
2. *Surface material shall be of Class C or B asphaltic concrete;*
3. *The final lift shall be Class C asphaltic concrete as defined by A.P.W.A. standard specifications; and*
4. *No lift shall be less than one and one half (1 ½) inches in thickness.*

**FINDING:** The final plans and construction of the new local residential streets will require compliance with the above street cross-sections prior to final city acceptance of the roadway.

***Z. Traffic Impact Studies****. The following provisions establish when a proposal must be reviewed for potential transportation impacts; when a Traffic Impact Study (TIS) must be submitted with a development application in order to determine whether conditions are needed to minimize impacts to and protect transportation facilities; the required contents of a TIS; and who is qualified to prepare the analysis.*

1. *When a Transportation Impact Study (TIS) is required. The City or other road authority with jurisdiction may require a TIS as part of an application for development, a change in use, or a change in access. A TIS shall be required where a change of use or a development would involve one or more of the following:*
   a. *A change in zoning or a plan amendment designation;*
   b. *Operational or safety concerns documented in writing by a road authority;*
   c. *An increase in site traffic volume generation by 300 Average Daily Trips (ADT) or more;……*

*2. TIS Preparation. The TIS shall be prepared by a professional engineer with competence in traffic engineering, licensed in the State of Oregon. If the TIS identifies level of service conditions less than the minimum standard established in the Transportation System Plan, improvements and funding strategies mitigating the problem shall be considered concurrent with the development proposal.*

*3. Approval Criteria. The TIS shall be reviewed according to the following criteria:*

*a. The analysis complies with the content requirements set forth by the City and/or other road authorities as appropriate;*

*b. The study demonstrates that adequate transportation facilities exist to serve the proposed land use action or identifies mitigation measures that resolve identified traffic safety problems in a manner that is satisfactory to the road authority;*

*c. For affected City facilities, the study demonstrates that the project meets mobility and other applicable performance standards established in the SDC and TSP, and includes identification of multi-modal solutions used to meet these standards, as needed; and*

*d. Proposed design and construction of transportation improvements are in accordance with the design standards and the access spacing standards specified in the SDC and TSP.*

*4. Conditions of Approval.*

*a. The City may deny, approve, or approve a proposal with conditions necessary to meet operational and safety standards; provide the necessary right-of-way for planned improvements; and require construction of improvements to ensure consistency with the future planned transportation system.*

*b. Construction of off-site improvements, including those related to bicycle and pedestrian facilities, may be required to mitigate impacts resulting from development that relate to capacity deficiencies and public safety; and/or to upgrade or construct public facilities to City standards.*

*c. Where the existing transportation system is shown to be impacted by the proposed use, improvements such as paving; curbing; installation of or contribution to traffic signals; and/or construction of sidewalks, bikeways, access ways, paths, or streets that serve the proposed use may be required.*

*d. Improvements required as a condition of development approval, when not voluntarily provided by the applicant, shall be roughly proportional to the impact of the development on transportation facilities. Findings in the development approval shall indicate how the required improvements directly relate to and are roughly proportional to the impact of development.*

**FINDING:** As previously stated within this staff report, part of the 2007 Alaska Sutherland Knolls Corp (ASKC), Plan Amendment and Zone Change applications (PA-07-3/ZC-07-4), Oregon Department of Transportation (ODOT) responded recommending the City to adopt specific transportation policies and findings into their Ordinance, then allowing approval of the proposed plan amendment and zone change. A portion of the

applicants proposed development is within a portion of the recommended policy put into place. Policy 4 – Transportation Improvements: *The City will require the applicant to summit a detailed TIS for each new phase of development on the ASKC property*. With this the property owner(s)/developer hired a Traffic Engineer, licensed in the State of Oregon, to complete a Traffic Impact Analysis (TIA). The TIA was submitted to ODOT and to the City of Sutherlin for review. The submitted TIA evaluated the transportation impacts as per the City of Sutherlin and ODOT criteria, evaluating adjacent roadway and intersection operation with the addition of development traffic for the year of completion and a 5-year future analysis. The TIA indicated that all studied intersections operate within the mobility standards with and without the development traffic. Part of the development will include the construction of an emergency access road that is sufficient for the anticipated need.

6. **SECTION 3.5.120 PUBLIC USE AREAS**

**A.** ***Dedication Requirements.***

*1. Where a proposed park, open space, playground, public facility, or other public use shown in a plan adopted by the city is located in whole or in part in a partition or subdivision, the city may require the dedication or reservation of this area on the final plat for the partition or subdivision.*

*2. If determined by the planning commission to be in the public interest in accordance with adopted comprehensive plan policies, and where an adopted plan of the city does not indicate proposed public use areas, the city may require the dedication or reservation of areas within the subdivision of a character, extent and location suitable for the development of parks and other public uses.*

*3. All required dedications of public use areas shall conform to section 3.5.100D regarding conditions of approval and proportionality of exactions.*

***B. Acquisition by Public Agency.*** *If the developer is required to reserve land area for a park, playground, or other public use, the land shall be conveyed to a public agency or other entity approved by the city for management and maintenance within twelve (12) months of final plat approval, or the reservation shall be released to the property owner.*

***C. System Development Charge Credit.*** *Dedication of land to the city for public use areas shall be eligible as a credit toward any required system development charge for parks, water, sewer, or storm water, as applicable.*

**FINDING:** As proposed, no public use areas, including parks, open space, playground, public facility or other public use, are proposed to be dedicated as part of this subdivision.

**SECTION 3.5.130 SANITARY SEWER AND WATER SERVICE IMPROVEMENTS**

**A.** ***Sewers and Water Mains Required.*** *Sanitary sewers and water mains shall be installed to serve each new development and to connect developments to existing mains in accordance with the city's construction specifications and the applicable comprehensive plan policies.*

***B. Sewer and Water Plan Approval.*** *Development permits for sewer and water improvements shall not be issued until the city engineer of record has approved all*

*sanitary sewer and water plans in conformance with city standards.*

***C.*** ***Over-sizing.*** *Proposed sewer and water systems shall be sized to accommodate additional development within the area as projected by the comprehensive plan. The developer shall be entitled to system development charge credits for the over-sizing.*

***D.*** ***Permits Denied.*** *Development permits may be restricted by the city through moratoria, in conformance with ORS 197.505, where a deficiency exists in the existing water or sewer system that cannot be rectified by the development, and which if not rectified will result in a threat to public health or safety, surcharging of existing mains, or violations of county or federal standards pertaining to operation of domestic water and sewerage treatment systems.*

**FINDING:** The condition(s) of approval will require the property owner(s)/developer to coordinate with Sutherlin Public Works for the design, engineering and installation of the required sanitary sewer and water service improvements, along with the submittal of engineered plans meeting the above standards. The proposed infrastructure requires three (3) sets of engineered plans submitted to the Community Development Department. The City Engineer of Record is required to review the plans, the fee for this review is the responsibility of the property owner(s)/developer.

7. **SECTION 3.5.140 STORM DRAINAGE**

**A.** ***General Provisions.*** *The city shall issue a development permit only where adequate provisions for storm water and flood water runoff have been made.*

***B.*** ***Accommodation of Upstream Drainage.*** *Culverts and other drainage facilities shall be large enough to accommodate potential runoff from the entire upstream drainage area, whether inside or outside the development, in conformance with the city's storm drainage master plan. Such facilities shall be subject to review and approval by the city engineer.*

***C.*** ***Effect on Downstream Drainage.*** *The effect on downstream drainage shall be evaluated in all project proposals, and all projects shall conform to the storm drainage master plan. Where it is anticipated by the city that the additional runoff resulting from the development will overload an existing drainage facility, the city shall withhold approval of the development until provisions have been made for improvement of the potential condition or until provisions have been made for storage of additional runoff caused by the development in accordance with city standards.*

***D.*** ***Easements.*** *Where a development is traversed by a watercourse, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way provided for conveyance of storm water. The easement shall be subject to review and approval by the city engineer and shall include at a minimum the watercourse and such further width as will be adequate for conveyance and maintenance.*

***E.*** ***Certification of No Impact to Neighboring Property.*** *Developers shall submit a stamped certification by a licensed engineer stating that the rate of storm water drainage during and after development will not increase as a result of the proposed development. The certification shall further state that the developer will adhere to all applicable storm drainage, grading, erosion, and sediment control requirements. The city may impose conditions of approval and/or require submittal*

*of engineered plans that demonstrate there will be no impact to neighboring properties.*

**FINDINGS:** Surface and storm water management will be required to be addressed by the property owner(s)/developer as part of the design, engineering and construction of the development. The design for construction of the improvements will have to be coordinated with City of Sutherlin Public Works and be engineered. Future development on each lot will be required to meet the standards for the surfacing of driveways and parking areas, and surface water management. A certification by a licensed engineer stating that the rate of storm water drainage during and after development will not increase as a result of the proposed development. Thus, demonstrating there will be no impact to neighboring properties. A condition of approval requires the developer to submit a stamped certification by a licensed engineer stating that the rate storm water drainage during and after development will not increase as a result of the proposed development and does not impact the existing system as outlined above.

8. **SECTION 3.5.150 UTILITIES**

**A.** ***Underground Utilities.*** *Except where above-ground utility lines already exist, all new or relocated utility lines including, but not limited to, those required for electric, communication, lighting and cable television services and related facilities shall be placed underground. This requirement does not apply to surface mounted connection boxes and meter cabinets, temporary utility service facilities during construction, and high capacity electric lines operating at fifty thousand (50,000) volts or above. In order to facilitate underground placement of utilities as required by this section, the following additional standards apply to all new subdivisions:*

1. *The developer shall make all necessary arrangements with the serving utility to provide the underground services. Care shall be taken to ensure that all above ground equipment does not obstruct vision clearance areas for vehicular traffic (section 3.2);*
2. *The city reserves the right to approve the location of all surface mounted facilities;*
3. *All underground utilities, including sanitary sewers and storm drains installed in streets by the developer, shall be constructed prior to the surfacing of the streets; and*
4. *Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.*

***B.*** ***Easements.*** *Easements shall be provided for all underground utility facilities.*

***C.*** ***Exception to Under-Grounding Requirement.*** *Pursuant to a Type II process, an exception to the under-grounding requirement may be granted due to physical constraints, such as steep topography, sensitive lands (section 3.6), or existing development conditions.*

**FINDING:** The conditions of approval require the property owner(s)/developer to provide and/or install underground utilities to serve the proposed lots, as outlined above, including any necessary utility easements.

9. **SECTION 3.5.160 EASEMENTS**

***Easements.*** *Easements for sewers, storm drainage and water quality facilities, water mains, electric lines or other public utilities shall be dedicated on a final plat, or provided for in the deed restrictions. See also, section 4.3 Development Review and Site Plan Review, and chapter 4.4 Land Divisions and Lot Line Adjustments. The developer or applicant shall make arrangements with the city, the applicable district and each utility franchise for the provision and dedication of utility easements necessary to provide full services to the development. The city's standard minimum width for public main line utility easements shall be fifteen (15) feet unless otherwise specified by the utility company, applicable district, or city engineer.*

**FINDING:** Easement for sewers, storm drainage and water quality facilities, water mains, electric lines or other public utilities, as outlined above, be dedicated on the final plat or provided for in the deed restrictions.

**SECTION 3.5.170 CONSTRUCTION PLAN APPROVAL AND ASSURANCES**

***Construction Plan Approval and Assurances.*** *No public improvements, including sanitary sewers, storm sewers, streets, sidewalks, curbs, lighting, parks, or other requirements shall be undertaken except after the plans have been approved by the city, permit fee paid, and permit issued. The permit fee shall be set by city council. The city may require the developer or subdivider to provide bonding or other performance guarantees to ensure completion of required public improvements. See also, section 4.3 Development Review and Site Plan Review, and section 4.4 Land Divisions and Property Line Adjustments.*

**FINDING:** The conditions of approval require that construction plan approval for the public improvements be undertaken as outlined above.

10. **SECTION 3.5.180 INSTALLATION**

**A.** ***Conformance Required.*** *Improvements installed by the developer either as a requirement of these regulations or at his/her own option, shall conform to the requirements of this chapter, approved construction plans, and to improvement standards and specifications adopted by the city.*

***B.*** ***Adopted Installation Standards.*** *The city's general engineering requirements and standard specifications and the Oregon Chapter A.P.W.A. standard specifications shall be a part of the city's adopted installation standard(s). Where conflict occurs, the A.P.W.A standards shall prevail. Other standards may also be required upon recommendation of the city engineer of record.*

***C.*** ***Commencement.*** *Work shall not begin until the city has been notified in advance.*

***D.*** ***Resumption.*** *If work is discontinued for more than one (1) month, it shall not be resumed until the city is notified.*

***E.*** ***Engineer's Certification and As-Built Plans.*** *A registered civil engineer (or as appropriate) licensed in Oregon shall provide written certification in a form required by the city that all improvements, workmanship and materials are in accord with current and standard engineering and construction practices, conform to approved plans and conditions of approval, and are of high grade, prior to city acceptance of the public improvements, or any portion thereof, for operation and maintenance. The developer's engineer shall also provide two (2) set(s) of "as-*

*built" plans, in conformance with the city engineer's specifications, for permanent filing with the city.*

***F.*** ***City Inspection.*** *Improvements shall be constructed under the inspection and to the satisfaction of the city. The city may require minor changes in typical sections and details if unusual conditions arising during construction warrant such changes in the public interest. Modifications requested by the developer shall be subject to review and approval under section 4.7, Modifications to Approved Plans and Conditions of Approval. Any monuments that are disturbed before all improvements are completed by the subdivider shall be replaced prior to final acceptance of the improvements.*

**FINDING:** The conditions of approval require that improvements installed by the property owner(s)/developer either as a requirement of these regulations or at his/her own option, shall conform to the requirements of Chapter 3 of the SDC, approved construction plans, and to improvement standards and specifications adopted by the city, as specified above. Also, a registered civil engineer (or as appropriate) licensed in Oregon shall provide written certification in a form required by the city that all improvements, workmanship, and materials are in accordance with current and standard engineering and construction practices, conform to approved plans and conditions of approval, and are of high grade, prior to city acceptance of the public improvements, or any portion thereof, for operation and maintenance.

## 11. APPROVAL CRITERIA – TENTATIVE PLAN

***SECTION 4.4.140 Approval Criteria-Tentative Plan.*** *The city shall approve, approve with conditions or deny a tentative plan based on the following approval criteria:*

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

**FINDING:** The City finds, according to the County Surveyor, that the proposed plat name (Ridgeview Subdivision) is not already been recorded for another subdivision within the County, and satisfies the provisions of ORS Chapter 92.

***B.*** *The proposed streets, roads, sidewalks, bicycle lanes, pathways, utilities, and surface water management facilities are laid out so as to uniformly transition to such facilities in existing or approved subdivisions and partitions on adjoining property as to width, general direction and in all other respects.*

**FINDING:** As previously stated with this report, the 91-lot subdivision will be developed with internal local residential streets that allow for future connectivity to adjacent development. The property owner(s)/developer will be required to improve the proposed streets to City standards prior to final acceptance by the City.

***C.*** *Lot Size and Residential Density. The subdivision meets the lot size and residential density standards required by the zoning district (chapter 2).*

**FINDING:** The City finds the R-1 residential lot size standards have been or will be met, as discussed earlier in this report. The property owner(s)/developer is proposing the development of 91-lots to be developed, meeting the development standards outlined in

Chapter 2 of the SDC.

***D.*** *When dividing a tract into large lots or parcels (i.e. greater than two times or 200 percent the minimum lot size allowed in the underlying zoning district, the lots parcels are of such size, shape and orientation as to facilitate future re-division in accordance with the requirements of the zoning district and this code.*

**FINDING:** As proposed, the subdivision will create 91-lots to be developed, on a 22.00± acre portion of the 193.11 acre subject property. Upon completion of the development, there will be sufficient area to permit further redevelopment of the remaining lot, therefor a redevelopment plan is required for this project.

**E.** *Block and lot standards. All proposed blocks (i.e., one (1) or more lots bound by public streets), lots and parcels conform to the specific requirements below:*

1. *All lots and blocks shall comply with the lot area, setback, and dimensional requirements of the applicable zoning district (chapter 2), and the standards of section 3.2 Access and Circulation, and the flag lot standards of section 3.2.110 (Q), if applicable.*
2. *Setbacks shall be as required by the applicable zoning district (chapter 2).*
3. *Every lot shall conform to the standards of section 3.2, Access and Circulation.*
4. *The applicant may be required to install landscaping, walls, fences, or other screening as a condition of subdivision approval. See also, chapter 2 Zoning Districts, and section 3.3, Landscaping, Street Trees, Fences and Walls.*
5. *In conformance with the uniform fire code, a twenty (20) foot width fire apparatus access drive shall be provided to serve all portions of a building that are located more than one hundred fifty (150) feet from a public right-of-way or approved access drive. See also, section 3.2 Access and Circulation.*
6. *Where a common private drive is to be provided to serve more than one lot, a reciprocal easement which will ensure access and maintenance rights shall be recorded with the approved subdivision or partition plat and the county clerk's reference number shown on the face of the plat.*

**FINDING:** The property owner(s)/developer shall comply with the above listed block and lot standards outlined in the SDC.

***F.*** ***Minimize Flood Damage.*** *All subdivisions and partitions shall be designed based on the need to minimize the risk of flood damage. No new building lots shall be created entirely within a floodway. All new lots shall be buildable without requiring development within the floodway. Development in a one hundred (100) year flood plain shall comply with federal emergency management agency requirements, including filling to elevate structures above the base flood elevation. The applicant shall be responsible for obtaining such approvals from the appropriate agency before city approval of the final plat.*

**FINDING:** The City finds the subject property is not located in a designated flood plain, as indicated on the FEMA maps dated February 17, 2010.

***G.*** ***Determination of Base Flood Elevation.*** *Where a development site consists of ten (10) or more lots, or is located in or near areas prone to inundation, and the base flood elevation has not been provided or is not available from another authoritative source, it shall be prepared by a qualified professional, as determined by the Director.*

**FINDING:** Although more than ten (10) lots are proposed, the City finds that the subject property is not located within a designated floodplain, as indicated on the FEMA maps dated February 17, 2010.

***H.*** ***Need for Adequate Utilities.*** *All lots created through land division shall have adequate public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to prevent or minimize flood damage to the extent practicable.*

**FINDING:** The City finds public and private utilities can be made available to the proposed lots.

***Need for Adequate Drainage.*** *All subdivision and partition proposals shall have adequate surface water drainage provided to reduce exposure to flood damage. Water quality or quantity control improvements may be required.*

**FINDING:** The subject property is not located in a designated floodplain; however, the City finds that surface drainage and storm water will have to be addressed as part of the development of this subdivision, along with the grading and construction of the proposed streets.

***I.*** ***Floodplain, Park, and Open Space Dedications***. *Where land filling and/or development is allowed within or adjacent to the one hundred (100) year flood plain outside the zero-foot rise flood plain, and the comprehensive plan designates the subject flood plain for park, open space, or trail use, the City may require the dedication of sufficient open land area for a greenway adjoining or within the flood plain. When practicable, this area shall include portions at a suitable elevation for the construction of a pedestrian/bicycle pathway within the flood plain in accordance with the city's adopted trails plan or pedestrian and bikeway plans, as applicable. The city shall evaluate individual development proposals and determine whether the dedication of land is justified based on the development's impact to the park and/or trail system, consistent with section 3.5, and section 3.5.100.D in particular.*

**FINDING:** The City finds the Sutherlin Comprehensive Plan does not designate the property as floodplain, or as a future park or open space development. The proposed lots are planned for single family residential development.

**K.** ***Phased Development.*** *The city may approve a time schedule for developing a subdivision in phases, but in no case shall the actual construction time period*

*(i.e., for required public improvements, utilities, streets) for any partition or subdivision phase be greater than two (2) years without reapplying for a tentative plan approval. The criteria for approving a phased land division proposal are:*

*1. Public facilities shall be constructed in conjunction with or prior to each phase;*

*2. The development and occupancy of any phase dependent on the use of temporary public facilities shall require city receipt of bonding or other assurances to cover the cost of required permanent public improvements, in accordance with Section 4.4.180. A temporary public facility is any facility not constructed to the applicable city standard;*

*3. The phased development shall not result in requiring the city or a third party (e.g., owners of lots) to construct public facilities that were required as part of the approved development proposal.*

**FINDING:** As proposed, the property owner(s)/developer plans to develop the proposed 91-lot subdivision in three phases. Phase 1 will consist of 38 lots and shall include a temporary fire turn-around at the end of each street, Phase 2 will consist of 34 lots, including the extension of the streets constructed in Phase 1. Phase 3 will consist of 19 lots, the remainder of streets, including a 50' radius cul-de-sac. The City finds that the proposed public facilities, including public water and sanitary sewer will be constructed in conjunction with or prior to each phase. The City further finds that the development and occupancy of any phase dependent on the use of temporary public facilities shall require city bonding or other assurances to cover the cost of the required permanent public improvements, as outlined above, and shall comply with the bonding mechanisms provided in the SDC. Furthermore, the phased development shall not result in requiring the city or a third party (.e.g. owners of lots) to construct public facilities that were required as part of the approved development proposal.

**L.** ***Lot Size Averaging.*** *The city may allow residential lots or parcels less than the minimum lot size under the applicable zoning district for projects that provide common open space or active recreation land and facilities. Such open space shall provide public access easements containing paved trials. The lot or parcel sizes shall meet the following:*

*1. The average area for all residential lots or parcels shall not be less than that allowed by the underlying zone; and*

*2. No lot or parcel created under this provision shall be less than eighty (80) percent of the minimum lot size allowed in the underlying zone.*

*For example, if the minimum lot size is seven thousand (7,000) square feet, the following three (3) parcels could be created as part of a single partition application: six thousand (6,000) square feet, seven thousand (7,000) square feet, and nine thousand (9,000) square feet.*

**FINDING:** The City finds this criterion for lot averaging is not applicable because the subdivision will not create any lots less than the 7,000 sq. ft. minimum lot size, therefore meeting the requirement of the R-1 zone.

**M.** ***Temporary Sales Office.*** *A temporary sales office in conjunction with a subdivision may be approved as set forth in section 4.10.100, Temporary Uses.*

**FINDING:** The property owner(s)/developer has not requested a temporary sales office as part of their request. The City finds this criterion is not applicable.

**N.** ***Conditions of Approval****. The city may attach such conditions as are necessary to carry out provisions of this code, and other applicable ordinances and regulations, and may require landscape screening between uses, or access reserve strips granted to the city for the purpose of controlling access to adjoining undeveloped properties. See also, section 3.5.100.D (Infrastructure).*

**FINDING:** The City finds there are conditions necessary to assure the subdivision is recorded in compliance with City requirements as stated in this report. The conditions are listed below in the staff report.

***4.4.160 Final Plat Submission Requirements and Approval Criteria.***

***A. Submission Requirements.*** *Final plats shall be reviewed and approved by the city prior to recording with Douglas County. The applicant shall submit the final plat within two (2) years of the approval of the tentative plan as provided by section 4.4.120. Specific information about the format and size of the plat, number of copies and other detailed information can be obtained from the city. The city will not accept as complete an application for final plat until the tentative plan has been approved.*

***B. Approval Criteria.*** *By means of a Type I procedure, the Community Development Director shall review the final plat and shall approve or deny the final plat based on findings regarding compliance with the following criteria:*

*1. The final plat complies with the approved tentative plan, and all conditions of approval have been satisfied;*

*2. All public improvements required by the tentative plan have been installed and approved by the Community Development Director. Alternatively, the developer has provided a performance guarantee in accordance with section 4.4.180;*

*3. The streets and roads for public use are dedicated without reservation or restriction other than revisionary rights upon vacation of any such street or road and easements for public utilities;*

*4. The streets and roads held for private use have been approved by the city as conforming to the tentative plan and, where applicable, the associated PUD;*

*5. Surface Water Management. When a paved surface is used, all driveways, parking areas, aisles and turn-arounds shall have on-site collection or infiltration of surface waters to minimize sheet flow of such waters onto public rights-of-way and abutting property. Surface water facilities shall be constructed in conformance with city standards.*

*6. The plat contains a dedication to the public of all public improvements, including but not limited to streets, public pathways and trails, access reserve strips, parks, and sewage disposal, storm drainage, and water supply systems;*

*7. The applicant has provided copies of all recorded homeowners association Codes, Covenants, and Restrictions (CC&R's), deed restrictions, private easements and agreements (e.g., for access, common*

*areas, parking, etc.), and other recorded documents pertaining to common improvements recorded and referenced on the plat;*

*8. Water and sanitary sewer service is available to each and every lot, is provided; or bond, contract or other assurance has been provided by the subdivider to the city that such services will be installed in accordance with section 3.5, Infrastructure Standards, and the bond requirements of section 4.4.180. The amount of the bond, contract or other assurance by the subdivider shall be determined by a registered professional engineer, subject to review and approval by the city; and*

*9. The plat contains an affidavit by the surveyor who surveyed the land represented on the plat to the effect the land was correctly surveyed and marked with proper monuments as provided by ORS Chapter 92, and indicating the initial point of the survey, and giving the dimensions and kind of such monument, and its reference to some corner established by the U.S. Geological Survey or giving two or more permanent objects for identifying its location.*

**FINDING:** The City finds the property owner(s)/developer shall meet the final plat submission requirements and approval criteria in the SDC, section 4.4.160 listed above along with conforming to all applicable requirements of section 3.5, Infrastructure Standards of the SDC.

***4.4.170 Public Improvement Approval.*** *Before city approval is certified on the final plat, all required public improvements shall be installed, inspected, and approved, or the subdivier shall provide a performance guarantee, in accordance with section 4.4.180.*

**FINDING:** Prior to the Community Development Director signature on the final plat, the property owner(s)/developer shall meet the above referenced public improvement requirements outlined in Section 4.4.180 of the SDC.

## ACTION ALTERNATIVES

Based on the applicant's findings, the city staff report and the testimony and evidence provided during the public hearing, the Planning Commission can close the public hearing and move to either:

**Action Alternative No. 1** **Approve** the requested Subdivision for 91-lots to be developed in three phases (Phase 1, 1-38 lots, Phase 2, 39-72, and Phase 3, 73-91) application on a 22.00± acre portion of the total 193.11 acre subject property, subject to the following conditions:

1. The property owner(s)/developer shall submit a final Subdivision Plat which substantially conforms to the approved preliminary Plan in all aspects except as specifically conditioned by the Planning Commission, as well as the general standards and survey plat requirements prescribed by the SDC. Any alterations shall be reviewed by the Community Development Department.

2. The property owner(s)/developer shall meet all requirements of final plat submission and approval criteria in Section 4.4.160 of the SDC. Each phase is approved for a period of two (2) year, for a total of six (6) years for this approval, unless an extension to the applicable phase is granted pursuant to Section 4.4.120 of the SDC.

3. Prior to final plat approval property owner(s)/developer shall provide detailed engineered construction plans to be approved by the City of Sutherlin prior to construction. These plans include but are not limited to design of streets, water, sewer, storm water, grading, and erosion control. Three (3) sets of detailed engineered plans are required to be submitted to the Community Development Department and be routed to the appropriate City Departments; along with a review conducted by the City Engineer of Record. The fee for the review conducted by the City Engineer of Record is required to be paid by the property owner(s)/developer at time of review.

4. Property owner(s)/developer shall coordinate with the City Public Works for the design and installation of water lines with valves, laterals and water meters at the property line to city standards. The water main(s) are required to be sized at 8" diameter; and have a minimum depth of 36" to allow for future connections. Three (3) sets of detailed engineered plans are required to be submitted to the Community Development Department and be routed to the appropriate City Departments; along with a review conducted by the City Engineer of Record. The fee for the review conducted by the City Engineer of Record is required to be paid by the property owner(s)/developer at time of review.

5. Property owner(s)/developer shall coordinate with the City Public Works for the design and installation of sanitary sewer improvements to city standards. This requires an extension of the 4" pressure sewer main that is located within the right-of-way of Scardi Blvd, along with the installation of a manhole every 300' to 400'. Three (3) sets of detailed plans (main and lateral detail) of engineered plans are required to be submitted to the Community Development Department and be routed to the appropriate City Departments; along with a review conducted by the City Engineer of Record. The fee for the review conducted by the City Engineer of Record is required to be paid by the property owner/developer at time of review.

6. Prior to submitting a final subdivision plat, the developer shall install an engineered, properly sized, and City approved storm drainage system that captures all street and rooftop runoff in the subdivision and pipes it into the existing storm drainage system. The subdivision's storm drainage system shall be designed and constructed to accommodate the existing runoff volumes from the contributory slopes uphill of the subject property.

7. The property owner(s)/developer shall improve and dedicate the required ROW for the interior local residential streets (60' ROW). The design of the proposed streets shall include two 11' travel lanes, two 7' parking lanes, two 6' sidewalks and two 6" curbs. The new streets shall be designed, engineered and constructed in accordance with the standards of the SDC, along with meeting the requirements of the Oregon Fire Code, Appendix D and
    i. ***Prior to*** commencing excavation, site preparation or construction of the road, the applicant shall submit three (3) copies of the design plan for the road, prepared by an Oregon Licensed Professional Engineer, to Community Development for routing to necessary departments for review and consistency with the City's design standards.
    ii. The City (staff) may require additional information to ensure full compliance with design requirements.

iii. The City's Engineer of Record will review the plans submitted, fee is the responsibility of the property owner/developer and they can require additional information/changes to ensure full compliance with city standards.
iv. The applicant shall provide a title report showing clear title to the affected strip of land.

8. Prior to beginning construction, the property owner of the subject property shall sign a Development Agreement with the City to complete approved improvements located in city right-of-way to city standards. Prior to final plat approval the developer shall install all required improvements as directed by the City, or submit to the City an acceptable agreement for improvements and Irrevocable Letter of Credit or bond mechanism as specified in Section 4.3.170 of the SDC.

9. Property owner(s)/developer shall install city standard fire hydrants meeting the requirements of the Sutherlin Fire Department and Oregon Fire Code, Appendix C.

10. The property owner(s)/developer is required to construct an Emergency Access Road meeting the width, load, sign requirements, along with gate(s), keyed Knoxbox padlocks installed meeting the requirements in the Oregon Fire Code, Appendix D, Chapter 15.04 of the Sutherlin Municipal Code and the Sutherlin Fire Department.

11. The property owner(s)/developer shall install an 8' landscape strip along Scardi Blvd, outlined in Table 3.5.110, Figure 10 of the SDC.

12. Temporary fire turn-arounds must be installed between construction of Phase 1, Phase 2 and Phase 3. Coordination with the Sutherlin Fire Department is required and shall provide a letter from the Sutherlin Fire Department that all required improvements have been constructed.

13. The property owner(s)/developer shall submit a redevelopment plan for the subject property not included in the proposed subdivision application, meeting the standards of Section 4.4.130.D of the SDC.

14. All utilities shall be designed per standards and to be located underground, pursuant to Section 3.5.150 of the SDC.

15. The property owner(s)/developer shall obtain the necessary ROW activity permit(s) for improvements and access within the ROW of Scardi Blvd from the City of Sutherlin.

16. Property owner(s)/developer shall submit a stamped certification by a licensed engineer stating that the rate of storm water drainage during and after development will not increase as a result of the proposed development. The certification shall further state that the developer will adhere to all applicable storm drainage, grading, erosion, and sediment control requirements. The City may impose conditions of approval and/or require submittal of engineered plans that demonstrate there will be no impact to neighboring properties.

17. Property owner(s)/developer shall submit an Engineer's Certification by a registered civil engineer (or as appropriate) license in Oregon shall provide written certification in a form

required by the city that all improvements, workmanship and materials are in accord with current and standard engineering and construction practices, conform to approved plans and conditions of approval, and are of high grade, prior to city acceptance of the public improvements, or any portion thereof, for operation and maintenance.

18. Property owner(s)/developer shall provide two (2) set(s) of "as-built" plans, in conformance with the city's engineers specifications, for permanent filing with the city.

19. All necessary easements shall be shown and referenced on the final subdivision plat. Required recorded easements and agreements, reciprocal easements and maintenance agreements for the shared private drives, storm water drainage easements, public and private utility easements.

    a. All easements outside of dedicated rights-of-way must be shown and described as to type and use on the face of the final plat.

20. Property owner(s)/developer shall obtain a 1200-C NPDES Storm Water Discharge Permit prior to construction as required by the Oregon Department of Environmental Quality.

21. Any shared driveways shall be identified on the face of the final plat. Property owner/developer shall provide and record on the plat any reciprocal access and maintenance agreements for any affected lots

22. Property owner(s)/developer shall install eight (8) streetlights as indicated on the preliminary plan and per city street light policy (Resolution No. 2006-03). Coordination of the street lights with the Sutherlin Community Development Department is required,

23. Property owner(s)/developer shall install mailboxes in accordance with city standards. Plans for mail boxes shall be approved by the US Postal Service.

24. Property owner(s)/developer shall submit the proposed street names to the City of Sutherlin Community Development Department. The proposed street names will need to be verified that they are not in conflict with existing street names with the Douglas County's Addressing section.

25. In order to assure future extensions of public streets remain available as proposed, the property owner(s)/developer will be required to install reflective barricades in accordance with city standards and be coordinated with the City of Sutherlin Public Works Director.

26. Any dead-street greater than 150' in length is required to install a fire apparatus turn-around meeting the requirements of Appendix D of the Oregon Fire Code.

27. The cost of all necessary street signs is the responsibility of the property owner(s)/developer. Coordination with the Sutherlin Community Development Department is required for the ordering of the necessary street signs. Sutherlin Public Works Department will be responsible for the installation of the necessary street signs.

28. The property owner(s)/developer shall pay $25.00 fee to the City of Sutherlin for each lot for the issuance of an address and to coordinate this with Community Development.

29. All necessary easements shall be shown and referenced on the final subdivision plat. Required recorded easements and agreements, reciprocal easements and maintenance agreements for the shared private drives, storm water drainage easements, public and private utility easements.

    a. All easements outside of dedicated ROW must be shown and described as to type and use on the face of the final plat.

30. The approved subdivision shall be surveyed and monumented as required by ORS Chapter 92, and a final submission plat prepared for City signature. The final plat shall comply with all applicable provisions of ORS Chapter 92, including the standards of ORS 92.050, the survey and monumenting provisions of ORS 92.060, and the declaration requirements of ORS 92.075. The final subdivision plat shall bear the stamp and signature of the Professional Land Surveyor, and shall include a signature line for the Sutherlin Community Development Director and the Planning File Number.

31. If any covenants are to be placed on the subdivision, the applicant shall provide a copy, including the volume and page(s) of the recording with Douglas County, to the City. The applicant shall place a reference on the final plat indicating any covenant restrictions governing the development of the proposed subdivision.

32. The property owner(s)/developer shall provide a letter from the Sutherlin Public Works Director that all required improvements have been constructed and installed to City Construction Specifications.

33. Subdivision plan or plat approval does not constitute home construction approval. Development of the site shall be subject to review and approval of the City of Sutherlin prior to commencing any home construction or site development work.

34. Development of the property shall be subject to City of Sutherlin System Development Charges (SDCs), as well as applicable SDC credits, and such other permits and fees as may apply.

35. An electronic copy (pdf) of recorded final subdivision plat, shall be submitted to the Sutherlin Community Development Department within 10 days after recording.

**ADVISORY STATEMENTS**

36. The property owner(s)/developer shall comply with applicable local, county, state and federal regulations as applicable to the Subdivision.

37. For the development of the individual lots, developer must meet City of Sutherlin private driveway standards stated in Chapter 3 of the SDC. Driveways must maintain a minimum separation of 25 feet.

38. At the time of a building permit proposal on any of the new parcels, the permit shall indicate compliance with SDC Section 2.2 R-1 building setbacks and lot coverage requirements; and Vehicle Access and Circulation listed in section 3.2.110 of the SDC.

a. Where a street or driveway is to be paved, the building permit application shall include provisions for on-site storm water collection or infiltration in accordance with city specifications.

**Action Alternative No. 2** **Approve** the requested Subdivision application, subject to modifications or additional conditions of approval;

**Action Alternative No. 3** **Continue the public hearing** to a specified date and time, or to close the public hearing and to leave the record open to a specified date and time for submittal of additional evidence and rebuttal; or

**Action Alternative No. 4** **Deny** the requested Subdivision application on the subject property on the grounds that the proposal does not satisfy the applicable approval criteria.

## STAFF RECOMMENDATION

City Staff recommends that the Planning Commission select Action Alternative No. 1 and **APPROVE** the Subdivision for 91-lots to be developed in three phases (Phase 1, 1-38 lots, Phase 2, 39-72, and Phase 3, 73-91) application on a 22.00± acre portion of the total 193.11 acre subject property, subject to the conditions of approval.

August 23, 2023

RECEIVED
8/23/23
2:32P
BM

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Nancy Adair Weatherspoon
Signature

Nancy Adair Weatherspoon
Printed Name

739 Pebble Creek
Address

360-378-7556
Phone/Email

Over – Additional Signatures

Signature

Brooks Smallwood
Printed Name

870 Medina Ave.
Address

(985) 710-2480
Phone/Email

Signature

Printed Name

Address

Phone/Email

Signature

Michael Williams
Printed Name

863 Medina
Address

775-233-2455
Phone/Email

Signature

Stanley C. Nickel
Printed Name

806 Sand Piper Ave
Address

949-257-9172 snickelcuhs@yahoo.com
Phone/Email

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Respectfully submitted:

Chantele Bangs
Signature

Chantele Bangs
Printed Name

791 Pebble Creek ST Sutherlin, OR 97479
Address

541-643-4554 bangsinafrica@yahoo.com
Phone/Email

Over – Additional Signatures

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Chris Acuna Standish
Printed Name

856 Medina Ave
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541-643-7082 Chris.Standish@hotmail.com
Phone/Email

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Printed Name

881 Medina Ave
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pirwin0414@gmail.com 541-921-0011
Phone/Email

Signature

Tamra L. DedekerMedley
Printed Name

784 Pebble Creek St.
Address

530-961-3751 tamradm@protonmail.com
Phone/Email

Signature

DAVID GUYER
Printed Name

768 PEBBLE CRK ST.
Address

530.919.9079
Phone/Email

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Respectfully submitted:

Darlene Alberts
Signature

Darlene Alberts
Printed Name

829 Pebble Cr St
Address

541-217-9331
Phone/Email

darlenealberts21@gmail.com

Over – Additional Signatures

William Earl Wagner
Signature

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Printed Name

810 Durham AVE
Address

541-680-7217 williamearlwagner@yahoo.com
Phone/Email

Shirley D. Saeter
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SHIRLEY D. SAETER
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818 DURHAM AVE.
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(541) 315-2010
Phone/Email

Barbara K. Mansfield
Signature

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209 247 7456 mansfieldbkm@gmail.com
Phone/Email

Tammy Smith
Signature

Tammy Smith
Printed Name

815 Durham Ave
Address

916-812-3224 / Dantams98@aol.com
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Respectfully submitted:

Chantele Bangs
Signature

Chantele Bangs
Printed Name

791 Pebble Creek ST Sutherlin, OR 97479
Address

541-643-4554 bangsinafrica@yahoo.com
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Respectfully submitted:

Nancy Adair Weatherspoon
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Nancy Adair Weatherspoon
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739 Pebble Creek
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Michael Williams
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863 Medina
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Stanley C. Nickel
Printed Name

806 Sand Piper Ave
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949-257-9172 snickelcuhs@yahoo.com
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Tamra L. DedekerMedley
Printed Name

784 Pebble Creek St.
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530-961-3751 tamradm@protonmail.com
Phone/Email

Signature

DAVID GUYER
Printed Name

768 PEBBLE CRK ST.
Address

530.919.9079
Phone/Email

Dear Panning Commission,

Oct. 1, 2023

We have concerns regarding the proposed subdivision planned for the land North of Knolls Estates and East of Fairway Ridge. The 91 lots could easily bring 150 or more vehicles. The only entrance/exit will be on Dovetail at Hwy 138. This intersection is already a safety concern for the two existing subdivisions. Development is good, but only when infrastructure can sustain it. Reduced speed on that section of Hwy138 and a stoplight at the intersection of Hwy 138 and Dovetail should be contingent for approval of any land use application in this area.

We love living in Sutherlin. It is a great city. Please put the safety and wellbeing of its citizens over the eagerness for growth and development.

Sincerely,

Richard and Sara Thigpen
2082 Culver Loop
Sutherlin, Or. 97479
rthigpen123@gmail.com

Sara Thigpen
Richard Thigpen

## Jamie Fugate

**From:** Alicia Hart <isaiah54ah4_8@yahoo.com>
**Sent:** Friday, October 6, 2023 3:54 PM
**To:** Jamie Fugate
**Subject:** Notice of public hearing-subdivision – 0 Scardi Blvd. Ridgeview Subdivision Preliminary Plat

[EXTERNAL SOURCE - USE CAUTION]

I am opposed to any development regarding the Goodfellas of Sutherlin and Ridgeview Subdivision EMS Access. Any additional construction is a hazard to the residence in the area. An emergency access gate is NOT acceptable. An accessible 24 Hour paved road should be added.

There is ONLY one entrance and one exit off of Highway 138 onto Dovetail. An additional entrance and exit is needed.

It is not IF an emergency will occur but WHEN. As a resident on Eagle Loop, my life, property, and neighbors, many who are elderly, are in danger of being trapped because there is Only One Way out!

Please consider the safety and lives of the residents.

Alicia Hart
2234 Eagle Loop
Sutherlin, OR
626-524-2664
Sent from my iPhone

August 23, 2023

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

RECEIVED 8/23/23 2:32 P

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

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Respectfully submitted:

Darlene Alberts
Signature

Darlene Alberts
Printed Name

829 Pebble Cr St
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541-217-9331
Phone/Email

darlenealberts21@gmail.com

Over – Additional Signatures

William Earl Wagner
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SHIRLEY D. SAETER
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Barbara K. Mansfield
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Barbara K. Mansfield
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Phone/Email

Tammy Smith
Signature

Tammy Smith
Printed Name

815 Durham Ave
Address

916-812-3224 / Dantams98@aol.com
Phone/Email

RECEIVED 8/25/23

August 25, 2023

Sutherlin City Hall
c/o Sutherlin City Community Development and Planning Department
126 E. Central Avenue
Sutherlin, Oregon 97479

Attn: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Re: Subdivision – 0 Scardi Boulevard, Planning Department File No. 23-S009

We live in the Knolls Estates subdivision, it has been brought to our attention that there is a proposed addition of 91 homes to an area that already has approximately 235 homes existing. We don't have a problem with growth as long as the planning includes adequate entrance and exit in the community.

Since the development of Fairway Ridge subdivision, we have already noticed an impact on traffic and safety on Dovetail and at the intersection of Hwy 138 and Dovetail. This has occurred based on the increased traffic. If we had an emergency and everyone needed to evacuate, one way out is not acceptable. We have already heard people say they will drive across the golf course if it comes to it.

We are asking for the Planning Department to please give serious consideration to additional entrance and exit options to allow for the increase of traffic that will occur with the 91 more homes and for the safety of all the residents in this growing community.

Sincerely,

Tammy Axton
2266 Eagle Loop
Sutherlin, Oregon 97479
Phone: (Cell) 916-709-2152
Email: b4golfin@att.net

Ray Axton
2266 Eagle Loop
Sutherlin, Oregon 97479
Phone: (Cell) 916-616-7754
Email: b4golfin@att.net

August 23, 2023

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

RECEIVED
8/23/23
2:32 P
BM

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Chantele Bangs
Signature

Chantele Bangs
Printed Name

791 Pebble Creek ST Sutherlin, OR 97479
Address

541-643-4554 bangsinafrica@yahoo.com
Phone/Email

Over – Additional Signatures

Signature

Chris Acuna Standish
Printed Name

856 Medina Ave
Address

541-643-7082 Chris.Standish@hotmail.com
Phone/Email

Signature

Printed Name

881 Medina Ave
Address

pirwin0414@gmail.com 541-921-0011
Phone/Email

Signature

Tamra L. DedekerMedley
Printed Name

784 Pebble Creek St.
Address

530-961-3751 tamradm@protonmail.com
Phone/Email

Signature

DAVID GUYER
Printed Name

768 PEBBLE CRK ST.
Address

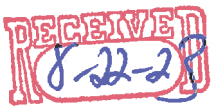
530.919.9079
Phone/Email

Date: August 22, 2023

Sutherlin Community Development Director

126 E Central Avenue

Sutherlin Oregon 97479




SUBJECT: Subdivision

We recently received the notice of a proposed development off Scardi Blvd in Sutherlin, adjacent to Knolls Estates.

We understand the notice of the development was provided only to those residences within 100 feet of said development. Because the project has implications that impact the whole of Knolls Estates and, to lesser degree, surrounding developments, I find it rather incomprehensive why the Development Department limited notification to the few residences within 100 feet of the project.

The first concern that our family has is what the proposal description does NOT disclose such as the type of residences they plan to build. What will be the home values, the type of structures (mobile homes, pre-fab homes, etc.)? What will be the value between the least and most expensive residences, what will be the square footage as to the, size of the homes (smallest to largest), and the size of the lots? None of these things are disclosed on the information I received through secondary sources.

This information is very important insomuch as the existing property owners within Knolls Estates and other developments close to the build must have an idea of how the proposed development will impact the value of their homes. It is difficult to imagine how the city of Sutherlin could have approved a project this size without notifying ALL residents within at least a mile of the project, rather than 100 feet. Rumors abound that one of the principals of the project is involved with a manufacturer of prefab homes. I would oppose manufactured homes so close to Knowles estates simply because common sense would indicate prefab or mobile structures would negatively impact the value of existing homes on or close to the golf course.

The proposal submitted by Goodfellas to the Sutherlin Planning Department, File No. 23-S009 would appear to have to have been reviewed and approved by the counsel long before August 11, 2023. If this is true, why then did the city provide such a short 14-day response time (August 11, 2023 to August 25, 2023)?

Probably one other point of contention would involve the infrastructure problems as they will certainly relate to the size of the development. Will the city not will be required to improve (widen) Scardi Blvd to accommodate the increase in traffic the development will impose? Will it not be required that the city install some kind of traffic light on highway 138 to accommodate the increase in traffic resulting from the 90 plus residences as planned?

The above concerns are only a brief discussion of what I believe must be a multitude of concerns that I am sure other city residents have.

Respectfully submitted:

John Blakely

John P. Blakely

Knowles Estate homeowner


Carter R. Boehm
Marilyn J. Boehm
1818 Scardi Blvd.
Sutherlin, OR 97479
541-459-0400

TO: Sutherlin Community Development Director

RE: Goodfellas of Sutherlin Ridgeview Subdivision

August 15, 2023

Dear Sir / Madam;

We know that Sutherlin is an attractive area to live and are not apposed to building new homes. We chose to build our home in the Knolls Estate a private unit development, on Scardi Blvd in 2004. One concern we had at that time was having only one ingress and one digress. We were told at that time there would be another road planed to connect our community to Sterns Ln.

Knolls Estate has 177 Lots, Fairway Ridge has 75 Lots, Ridgeview is planning 91 Lots. That is a total of 343 homes using Dovetail/Scardi to Hwy. 138. If there is an emergency or catastrophe closing Dovetail/Scardi there is no other way out of our communities.

In the last few years the traffic on Dovetail and Scardi has really increased. The average vehicles per family nation wide is 1.88. If you use that average 644 vehicles will use the these two streets to inter or leave the community. No longer a quiet residential area.

Respectfully yours,
Carter R. Boehm

Carter R. Boehm
Marilyn J. Boehm

Date: August 22, 2023


Sutherlin Community Development Director

126 E Central Avenue

Sutherlin Oregon 97479

SUBJECT: Subdivision

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We understand the notice of the development was provided only to those residences within 100 feet of said development. Because the project has implications that impact the whole of Knolls Estates and, to lesser degree, surrounding developments, I find it rather incomprehensive why the Development Department limited notification to the few residences within 100 feet of the project.

The first concern that our family has is what the proposal description does NOT disclose such as the type of residences they plan to build. What will be the home values, the type of structures (mobile homes, pre-fab homes, etc.)? What will be the value between the least and most expensive residences, what will be the square footage as to the, size of the homes (smallest to largest), and the size of the lots? None of these things are disclosed on the information I received through secondary sources.

This information is very important insomuch as the existing property owners within Knolls Estates and other developments close to the build must have an idea of how the proposed development will impact the value of their homes. It is difficult to imagine how the city of Sutherlin could have approved a project this size without notifying ALL residents within at least a mile of the project, rather than 100 feet. Rumors abound that one of the principals of the project is involved with a manufacturer of prefab homes. I would oppose manufactured homes so close to Knowles estates simply because common sense would indicate prefab or mobile structures would negatively impact the value of existing homes on or close to the golf course.

The proposal submitted by Goodfellas to the Sutherlin Planning Department, File No. 23-S009 would appear to have to have been reviewed and approved by the counsel long before August 11, 2023. If this is true, why then did the city provide such a short 14-day response time (August 11, 2023 to August 25, 2023)?

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The above concerns are only a brief discussion of what I believe must be a multitude of concerns that I am sure other city residents have.

Respectfully submitted:

Arthur Dwight Branco

Arthur Dwight Branco

Knowles Estate homeowner

August 23, 2023

RECEIVED 8-24-23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Carlan Bratton
Signature

CARLAN BRATTON
Printed Name

2230 EAGLE LOOP, SUTHERLIN
Address

541-459-1561
Phone/Email

August 23, 2023

RECEIVED 8-24-23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Irene Bratton
Signature

Irene Bratton
Printed Name

2230 Eagle Loop - Sutherlin, OR 97479
Address

~~541-~~ 541-680-1561
Phone/Email

ireneb_7@msn.com

August 23, 2023

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

RECEIVED 8/23/23 2:32P

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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Respectfully submitted:

J. Lee
Signature

Joseph Lee
Printed Name

773 Pebble creek st
Address

541-315-8359 / JoeyLang95@yahoo.com
Phone/Email

Over – Additional Signatures

Signature

Tasha Gill
Printed Name

907 Pebble Creek St.
Address

541-643-4375 tashabgill@icloud.com
Phone/Email

Carol Freeman
Signature

CAROL FREEMAN
Printed Name

839 Durham
Address

541-817-2474 · freemanctal@charter.net
Phone/Email

Leon Brillon
Signature

Leon Brillon
Printed Name

807 Mednia Ave.
Address

(760) 936-2877 leonbrillon@att.net
Phone/Email

Clint McBride
Signature

CLINT MCBRIDE
Printed Name

755 Pebble Creek St.
Address

458-221-2788
Phone/Email

August 23, 2023

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

RECEIVED 8/23/23 2:32P

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
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Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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Respectfully submitted:

J. Lee
Signature

Joseph Lee
Printed Name

773 Pebble creek st
Address

541-315-8359 / JoeyLang95@yahoo.com
Phone/Email

Over – Additional Signatures

Signature

Tasha Gill
Printed Name

907 Pebble Creek St.
Address

541-643-4375 tashabgill@icloud.com
Phone/Email

Carol Freeman
Signature

CAROL FREEMAN
Printed Name

839 Durham
Address

541-817-2474 · freemanctal@charter.net
Phone/Email

Leon Brillon
Signature

Leon Brillon
Printed Name

807 Mednia Ave.
Address

(760) 936-2877 leonbrillon@att.net
Phone/Email

Clint McBride
Signature

CLINT MCBRIDE
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Address

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RECEIVED 8/24/23

August 23, 2023

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Sutherlin, OR 97479

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Jamie Fugate, City Planner
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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

C Brummel
Signature

Charles D. Brummel
Printed Name

547 Saint Andrews Court, Sutherlin, Or 97479
Address

Chuck brummel home@yahoo.com
Phone/Email 541-459-4179

August 23, 2023

RECEIVED 8/24/23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

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Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Peggy Brummel
Signature

PEGGY BRUMMEL
Printed Name

547 St. Andrews Court - Sutherlin
Address

541-459-4119 peggybrummel36@gmail.com
Phone/Email

August 23, 2023

RECEIVED 8/23/23 2:32pm TM

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c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

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Respectfully submitted:

K Butch
Signature

Kevin Butcher
Printed Name

811 Pebble Creek St
Address

541-315-1984 KLAKM@Comcast.Net
Phone/Email

Over – Additional Signatures

Signature

GORDON AVERY
Printed Name

~~565 Sand Pebble~~ Pebble Creek St.
Address

541-580-1458
Phone/Email gravery@gmail.com

Frances Mastroianni
Signature

Frances Mastroianni
Printed Name

820 Medina Ave.
Address

408-348-0382 fmastro@comcast.net
Phone/Email

Lance C Wetteland
Signature

LANCE C. WETTELAND
Printed Name

825 MEDINA AVE
Address

541-580-1988 / LCWETT@HOTMAIL.COM
Phone/Email

Carrie Allen
Signature

Carrie Allen
Printed Name

834 Medina Ave
Address

541-430-4344 AllenCarrie8@Gmail.com
Phone/Email

August 23, 2023

RECEIVED 8/23/23 2:32 P BM

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
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Respectfully submitted:

Vicki Merrill
Signature

Vicki Merrill
Printed Name

1951 Scardi Blvd
Address

541-254-0927
Phone/Email

Over – Additional Signatures

Signature

Mark V. Covington

Printed Name

1967 Sand Pines Ave

Address

Phone/Email

Signature

Glenda J Schmidt

Printed Name

816 Sand Pines Ave

Address

Phone/Email

Signature

Richard Johnson

Printed Name

832 Sand Pines

Address

209-535-4071

Phone/Email

Signature

CAROLYN R. REEVES

Printed Name

880 SAND PINES AVE

Address

541-802-1051

Phone/Email

## Jamie Fugate

**From:** Dian Cox <dian1cox@yahoo.com>
**Sent:** Monday, August 21, 2023 2:29 PM
**To:** Jamie Fugate
**Cc:** Kristi Gilbert
**Subject:** Re: Letter of Concern RE: Subdivision - 0 Scardi Blvd.; Goodfellas of Sutherlin, Planning Dept. File No. 23-S009

**[EXTERNAL SOURCE - USE CAUTION]**
Thank you for catching the typo. Unfortunately, I was unable to respond to correct the year to 2023 from the email, so I am forwarding both of the letters of concern of my husband's and my own. I know these should be signed, however my skills don't allow for me to complete this task.. I will bring hard copies signed, into the City Hall soon. Dian Cox

**Concern Letter #1.**

August 20, 2023

Sutherlin City Hall

Attention: Sutherlin Community Development / Planning Department

126 E. Central Avenue

Sutherlin, OR 97479

To Whom It May Concern:

RE: Subdivision – 0 Scardi Blvd;

Goodfellas of Sutherlin, Planning Department File No. 23-S009

As a resident of the Knolls Estate community, I am noting my concern of the proposed addition of the neighboring subdivision-0 Scardi, Planning Dept. File No. 23-S009. My concern is with the safety of all people traveling along only one ingress and egress to safely navigate entering onto a highly traveled state Hwy 138. I believe the city code ( 3.5.110 G) requires further investigation of this considerably hazardous road dilemma.

Also in regards to the safety along the Scardi and Dovetail Streets, there will be a decline in the pass ability of two-way traffic due to the housing proposed with drive-way entrances and parking on street. There is already this situation with a couple of homes that exist on these two streets. See city code 3.5.110 F Figure 11.

Respectfully,

Larry D. Cox

2066 Culver Loop

Sutherlin, Oregon 97479

(559)479-0387 cell#

email- larrydcox47@yahoo.com

**Concern Letter #2.**

**August 20, 2023**

**Sutherlin City Hall**

**Attention: Sutherlin Community Development / Planning Department**

**126 E. Central Avenue**

**Sutherlin, OR 97479**

**To Whom It May Concern:**

RE: Subdivision – 0 Scardi Blvd;

Goodfellas of Sutherlin, Planning Department File No. 23-S009

I am writing to bring a couple issues of concern regarding the proposed Goodfellas of Sutherlin subdivision, file no. 23-S009. Concern #1 is that the RH zoning for the housing proposed on this property would have a negative impact on the natural water flow received upon the mountain. Visual observation of the natural ravines being diverted strengthen the idea that a negative impact on the vegetation and wildlife down slope would occur. I feel that the city code chapter 2.7.210 sections E, F, G, H, I, J, K support this concern.

Concern # 2 is that of water and sewer. The addition of additional dwellings also brings the need for more water and sanitation for these homes. Is the current water storage and sewer treatment facility, able to supply the additional needs of this many homes? The Public Works Intermediate plan just to secure funding for a million gallon storage tank at Oak Knolls Site doesn't occur until 2025-2026. The city code 3.5.130 A, B, C, D helps identify this issue.

Finally, concern # 3, the inclusion of a public use area or green space for the given subdivision. The city code 3.5.120 A, B, C addresses this issue. Assuming some of the housing will also bring children, there needs to be an area set aside for their needs along with a transit/bus stop; code 3.2.120 A #5.

Respectfully Submitted,

Dian E. Cox

2066 Culver Loop

Sutherlin, Oregon 97479

(559)479-0386 Cell#

email: dian1cox@yahoo.com

On Monday, August 21, 2023 at 08:25:39 AM PDT, Jamie Fugate <j.fugate@ci.sutherlin.or.us> wrote:

Hi,

Thank you for your response, before I put it in the file could you update the date?

Thanks,

Jamie Fugate

**From:** Dian Cox <dian1cox@yahoo.com>
**Sent:** Sunday, August 20, 2023 11:20 PM
**To:** Kristi Gilbert <k.gilbert@ci.sutherlin.or.us>
**Cc:** Jamie Fugate <j.Fugate@ci.sutherlin.or.us>
**Subject:** Letter of Concern RE: Subdivision - 0 Scardi Blvd.; Goodfellas of Sutherlin, Planning Dept. File No. 23-S009

**[EXTERNAL SOURCE - USE CAUTION]**

August 20, 2013

Sutherlin City Hall

Attention: Sutherlin Community Development / Planning Department

126 E. Central Avenue

Sutherlin, OR 97479

To Whom It May Concern:

RE: Subdivision – 0 Scardi Blvd;

Goodfellas of Sutherlin, Planning Department File No. 23-S009

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Respectfully,

Larry D. Cox

2066 Culver Loop

Sutherlin, Oregon 97479

(559)479-0387 cell#

email- larrydcox47@yahoo.com

August 23, 2023


Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Rick E Cozad
Signature

Rick E. Cozad
Printed Name

2206 Eagle Loop Sutherlin OR.
Address

360-904-1385 cozyrv60@hotmail.com
Phone/Email

Sharon E Cozad

Sharon E. Cozad
2206 Eagle Loop
Sutherlin OR 97479
360-904-1385

Sutherlin Planning
Dept.

Aug. 21, 2023


To whom it may concern
Letter of concern:
Good fellows Sutherlin, Plan Dept.
File # 23-5009.

My husband and I are very concerned about the impact & safety in our Knolls Estates subdivision of approxmately 156 homes. We also have Avery homes, which will be 75 homes when completed.

We don't know about further plans with the 400 acre's, just the 91 homes so far. This will create a huge impact and safety concern with only one entrance and exit for 322 homes! I cannot believe that it's legal to have one entrance & exit for that many homes!

We don't even know, when completed with 400 acre's, how many homes it will have.

(over)

I've heard about a fire exit, but It will
gated + locked. Do you realize what
an impact we will have to deal with,
even on a daily basis?

concerned neighbor,

Catherine Cutler

Catherine Glen Cutler
1956 Culver Loop
Sutherlin OR 97479
(541) 315-2614 - home #

August 20, 2023

Sutherlin City Hall
Attention: Sutherlin Community Development / Planning Department
126 E. Central Avenue
Sutherlin, OR 97479

To Whom It May Concern:

RE: Subdivision – 0 Scardi Blvd;
Goodfellas of Sutherlin, Planning Department File No. 23-S009

I am writing to bring a couple issues of concern regarding the proposed Goodfellas of Sutherlin subdivision, file no. 23-S009. Concern #1 is that the RH zoning for the housing proposed on this property would have a negative impact on the natural water flow received upon the mountain. Visual observation of the natural ravines being diverted strengthen the idea that a negative impact on the vegetation and wildlife down slope would occur. I feel that the city code chapter 2.7.210 sections E, F, G, H, I, J, K support this concern.

Concern # 2 is that of water and sewer. The addition of additional dwellings also brings the need for more water and sanitation for these homes. Is the current water storage and sewer treatment facility, able to supply the additional needs of this many homes? The Public Works Intermediate plan just to secure funding for a million gallon storage tank at Oak Knolls Site doesn't occur until 2025-2026. The city code 3.5.130 A, B, C, D helps identify this issue.

Finally, concern # 3, the inclusion of a public use area or green space for the given subdivision. The city code 3.5.120 A, B, C addresses this issue. Assuming some of the housing will also bring children, there needs to be an area set aside for their needs along with a transit/bus stop; code 3.2.120 A #5.

Respectfully Submitted,

Dian E. Cox

Dian E. Cox
2066 Culver Loop
Sutherlin, Oregon 97479
(559)479-0386 Cell#
email: dian1cox@yahoo.com

August 23, 2023

RECEIVED 8/23/23 2:32P Tow

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Sandra L. Rose
Signature

Sandra L. Rose
Printed Name

892 Sand Pines Ave.
Address

541-529-2913 SLRose2020gmail.com.
Phone/Email

Over – Additional Signatures

Signature

JAMES A. DAVENPORT
Printed Name

899 SAND PINES AVE
Address

541-554-9957 jim2imada@G-MAIL
Phone/Email

Signature

JOYCE & FRANK SCHUIERER
Printed Name

885 SAND PINES AVE
Address

808-634-7339
Phone/Email Joyce97479@gmail.com

Signature

JEAN FALLON
Printed Name

857 SAND PINES AVE
Address

541-643-1381 onfall@gmail.com
Phone/Email

Anna Davis
Signature

Anna Davis
Printed Name

821 Sand Pines Ave.
Address

541-580-7003 annvinciguerra@hotmail.com
Phone/Email

August 23, 2023

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Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
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Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Sandra L. Rose
Signature

Sandra L. Rose
Printed Name

892 Sand Pines Ave.
Address

541-529-2913 SLRose2020gmail.com.
Phone/Email

Over – Additional Signatures

Signature

JAMES A. DAVENPORT
Printed Name

899 SAND PINES AVE
Address

541-554-9957 jim2imada@G-MAIL
Phone/Email

Signature

JOYCE & FRANK SCHUIERER
Printed Name

885 SAND PINES AVE
Address

808-634-7339
Phone/Email Joyce97479@gmail.com

Signature

JEAN FALLON
Printed Name

857 SAND PINES AVE
Address

541-643-1381 onfall@gmail.com
Phone/Email

Anna Davis
Signature

Anna Davis
Printed Name

821 Sand Pines Ave.
Address

541-580-7003 annvinciguerra@hotmail.com
Phone/Email

## Jamie Fugate

**From:** Kathy Z. Wall <Kathy.Wall@douglascountyor.gov>
**Sent:** Tuesday, September 26, 2023 2:46 PM
**To:** Jamie Fugate
**Subject:** File No. 23-S009

**[EXTERNAL SOURCE - USE CAUTION]**
Hi Jamie,

I am writing to let you know that the Douglas County Planning Department has no concerns with the referenced request for a Subdivision.

Regards,
Kathy

DOUGLAS COUNTY
PLANNING DEPARTMENT
Kathy Wall | Senior Planner
Douglas County Courthouse | Room 106 | Justice Building | Roseburg, OR 97470
Phone: 541-440-4289 | Email: kathy.wall@douglascountyor.gov

August 20, 2023


City of Sutherlin

Community Development Department

Letter of Concern, RE: Ridgeview Subdivision, Scardi Blvd
Goodfellas of Sutherlin, Planning Department File No. 23-S009

My home is within 100 feet of this proposed development and my concerns are as follows:

- Between the existing Knolls Estates and Fairview Ridge subdivisions plus the proposed development that includes 91 homes, I feel adding just an emergency access road is not sufficient in case of an emergency, especially since it will have a locked gate. There would be a great number of vehicles attempting to leave the area with only one egress available (Scardi Blvd/Dovetail) and access to Hwy 138 can take a while, even at the best of times. I can't even imagine how long it would take for several hundred cars.
- I sincerely hope, given the fact that the hillside can be seen from Interstate 5, that the development will be one Sutherlin can be proud of for years to come.

Thank you,

Robert (Jim) Dennis
1780 Scardi Blvd
Sutherlin, OR 97479
(503) 784-9012

August 21, 2023



City of Sutherlin
Community Development Dept.
126 E. Central Ave.
Sutherlin, OR 97479

RE: Subdivision 0 Scardi Blvd., Goodfellas of Sutherlin

To Whom It May Concern:

This letter is in response to your letter dated August 11, 2023, to the residents being affected by the land use of the above proposed subdivision.

1. The main impact of this subdivision would be the public's safety with the additional traffic from 91 additional homes. We have only one entrance and one exit for all these homes. Highway 138 is extremely busy at times and can be a real hazard as it is.
2. The second concern is the amount of water available for an additional subdivision. We are being asked to conserve water now so where are we getting additional water resources to serve this many more homes.

We hope that you will take these issues into consideration before giving your approval for another subdivision off Scardi Blvd.

Sincerely,

Lathen Drake Peggy J. Drake

Lathen W. & Peggy J. Drake
726 Slazenger Court
Sutherlin, OR 97479
541-459-9192
pdrake5254@msn.com

Rick Edwards
725 Sandpiper Ct.
Sutherlin, OR 97479
541-459-5051

To the Community Development Department,

I live in the Knolls Estates subdivision just south of where the proposed subdivision is planned. My concern is the city water situation with an additional 91 lots proposed. With this possible addition of proposed housing, does the city have the capability and resources to provide clean treated water for this additional housing and homeowners. In the last few years, the City of Sutherlin has asked their citizens to conserve water, if not going farther and asking for a reduction in use. I find it difficult in these changing environmental times that adding additional homes and usage to a city that may be already pushing it limitations. Not to say the city is at that point, but without a plan for additional clean water upgrades and sources I find it may be dangerous to add usage before solutions are in placed or planned.

Sincerely,
Rick Edwards

August 23, 2023

RECEIVED 8/23/23 2:32P Tow

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Sandra L. Rose
Signature

Sandra L. Rose
Printed Name

892 Sand Pines Ave.
Address

541-529-2913 SLRose2020gmail.com.
Phone/Email

Over – Additional Signatures

Signature

JAMES A. DAVENPORT
Printed Name

899 SAND PINES AVE
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541-554-9957 jim2imada@G-MAIL
Phone/Email

Signature

JOYCE & FRANK SCHUIERER
Printed Name

885 SAND PINES AVE
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Phone/Email Joyce97479@gmail.com

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Printed Name

857 SAND PINES AVE
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541-643-1381 onfall@gmail.com
Phone/Email

Anna Davis
Signature

Anna Davis
Printed Name

821 Sand Pines Ave.
Address

541-580-7003 annvinciguerra@hotmail.com
Phone/Email

**PAT FINLEY**
**616 Arnie Court**
**Sutherlin, Oregon 97479**
**(707) 542-2977**
**Pfinley57@icloud.com**

8-20-2023

City of Sutherlin
ATTN: Jamie Fugate
Community Development Department
126 East Central Avenue
Sutherlin, Oregon 97479

Dear Jamie Fugate:

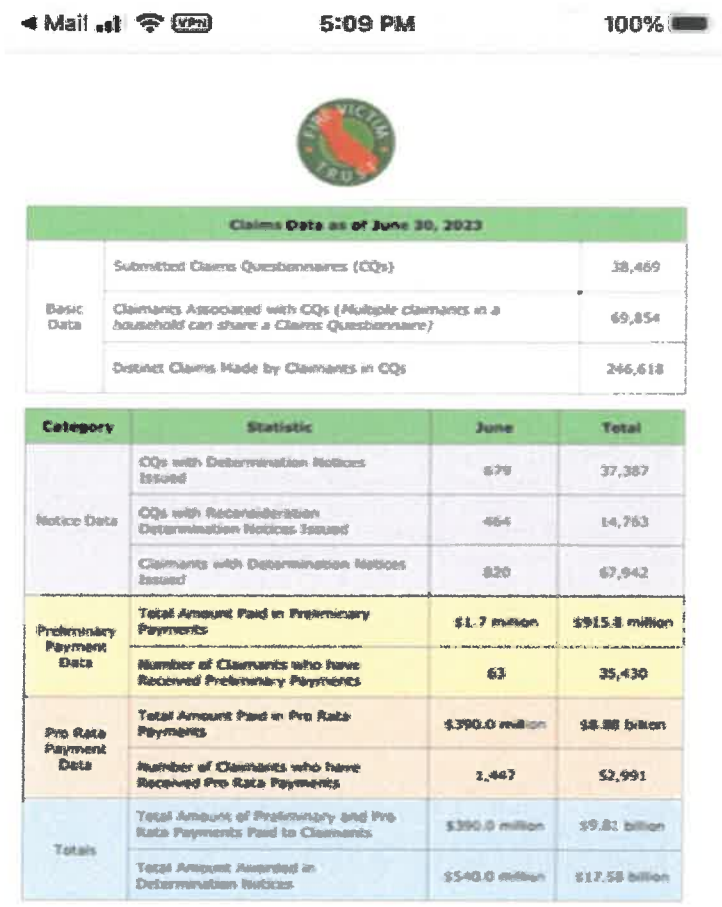
I live in Knolls Estates and am writing regarding the proposed Ridgeway Subdivision, to add 91 homes above Fairway Estates. Planning Department File # 23-S009

Currently there is one road out from both Knolls Estates, and Fairway Estates. We have two subdivisions already using a limited two-lane exit road, to Scardi, to Dovetail, to Hwy 138.

I understand there are going to be emergency exits from the new development out to Stearns Road, which sounds fine now with new homes and fresh ground, but would be a problem in the future if evacuations are necessary for any reason, to have exits behind a locked gate (a knox box) used only for fire access. If evacuations are necessary for any reason, a locked gate is rendered useless, and people will be backed up in vehicles on Scardi, or camping on the south end of the golf course.

I lived through the Tubbs Fire in Santa Rosa, California in 2017. Poor planning in Sonoma County, neglected dry forest, unprepared property owners, and downed power lines caused a disaster that caused 22 deaths, and went on with five years of litigation and billions of dollars in damages. Fire came 10 miles down a dry hill taking many homes including my mothers' home at the base, not even in the hills, that I inherited and was nearly done being remodeled. The home was in Mark West Estates, an HOA similar to ours, in a wildland interface. Of 195 homes, 180 were destroyed, and I'm thankful I hadn't moved in yet. One lady perished escaping down the treacherous 2-lane narrow road by going over an embankment. Another couple could not get out with downed trees and flaming branches blocking the road, but they survived by staying in their swimming pool all night. These stories make me cringe and why I rejected buying any home in or near the forest or wildland urban interface. Fire was so out of control with it's own tornado winds, after traveling 10 miles downhill it then jumped the highway and destroyed blocks and blocks of more homes and businesses. [Please see page 2..]

I am one of 70,000 clients involved in the North Bay Fires mass-tort lawsuit in which the power company (PG&E) had a choice of securing a fire victim trust amounting to $13,500,000,000., or dissolving the company and turning it over to the state.




| Claims Data as of June 30, 2023 | | |
|---|---|---|
| Basic Data | Submitted Claims Questionnaires (CQs) | 38,469 |
| | Claimants Associated with CQs (*Multiple claimants in a household can share a Claims Questionnaire*) | 69,854 |
| | Distinct Claims Made by Claimants in CQs | 246,618 |

| Category | Statistic | June | Total |
|---|---|---|---|
| Notice Data | CQs with Determination Notices Issued | 679 | 37,387 |
| | CQs with Reconsideration Determination Notices Issued | 464 | 14,763 |
| | Claimants with Determination Notices Issued | 820 | 67,942 |
| Preliminary Payment Data | Total Amount Paid in Preliminary Payments | $1.7 million | $915.8 million |
| | Number of Claimants who have Received Preliminary Payments | 63 | 35,430 |
| Pro Rata Payment Data | Total Amount Paid in Pro Rata Payments | $390.0 million | $8.88 billion |
| | Number of Claimants who have Received Pro Rata Payments | 1,447 | 52,991 |
| Totals | Total Amount of Preliminary and Pro Rata Payments Paid to Claimants | $390.0 million | $9.81 billion |
| | Total Amount Awarded in Determination Notices | $540.0 million | $17.58 billion |


I'm hoping the new access road will be a true access road, not one to lock people in.

Thank you ahead of time for not dismissing the red flags.

Sincerely,

Pat Finley

**PAT FINLEY**
**616 Arnie Court**
**Sutherlin, Oregon 97479**
**(707) 542-2977**
**Pfinley57@icloud.com**



8-20-2023

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Community Development Department
126 East Central Avenue
Sutherlin, Oregon 97479

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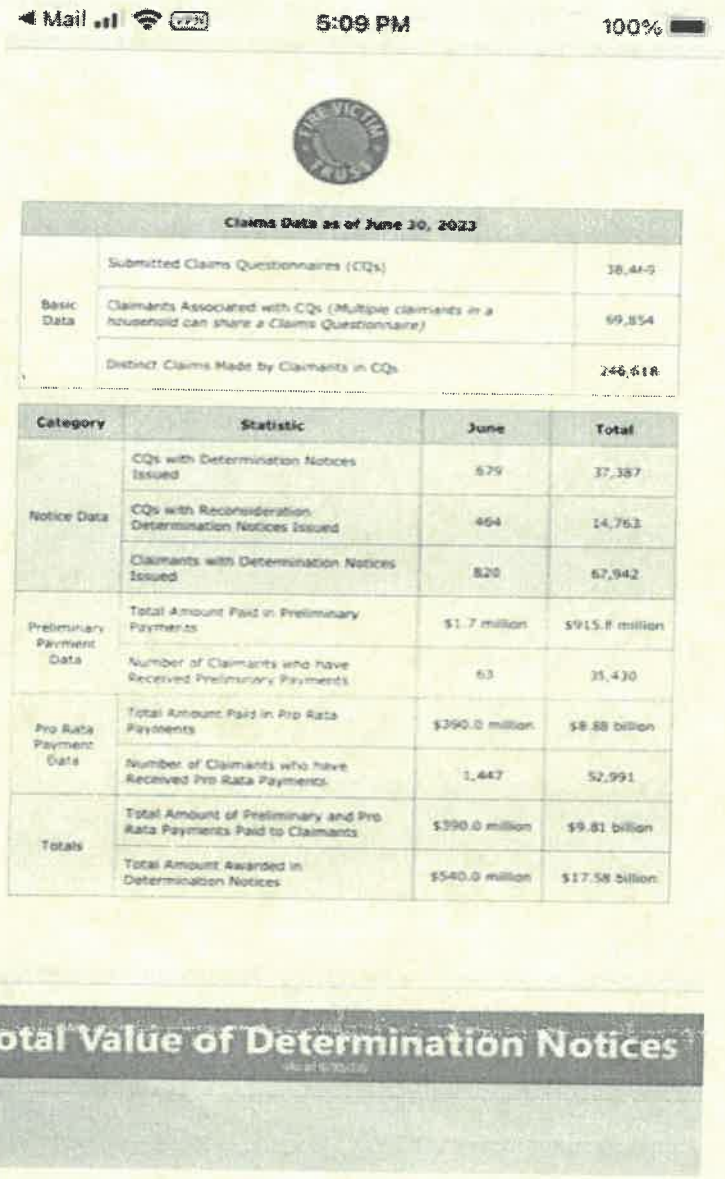

Mail 5:09 PM 100%

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Total Value of Determination Notices

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Sincerely,

P. Finley

Pat Finley

August 23, 2023

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

RECEIVED 8/23/23 2:32P

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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Respectfully submitted:

J. Lee
Signature

Joseph Lee
Printed Name

773 Pebble creek st
Address

541-315-8359 / JoeyLang95@yahoo.com
Phone/Email

Over – Additional Signatures

Signature

Tasha Gill
Printed Name

907 Pebble Creek St.
Address

541-643-4375 tashabgill@icloud.com
Phone/Email

Carol Freeman
Signature

CAROL FREEMAN
Printed Name

839 Durham
Address

541-817-2474 · freemanctal@charter.net
Phone/Email

Leon Brillon
Signature

Leon Brillon
Printed Name

807 Mednia Ave.
Address

(760) 936-2877 leonbrillon@att.net
Phone/Email

Clint McBride
Signature

CLINT MCBRIDE
Printed Name

755 Pebble Creek St.
Address

458-221-2788
Phone/Email

August 23, 2023

RECEIVED 8/23/23

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c/o: Sutherlin City Community Development & Planning Department.
126 E. Central Ave
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment:
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member, as well as the president living in Knolls Estates subdivision to the fairway ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY** concerned as an individual and as the president of Knolls Estates HOA representing all 160 homeowners. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the Highly Traveled State Hwy 138. The homeowners including myself in phase 3 of Knolls Estates are at the very end of Scardi Blvd & Slazenger Ct. We would have the greatest difficulty in getting to Hwy 138, possibly creating safety concerns with the additional traffic onto Scardi Blvd from the proposed new development. As president of the knolls Estates HOA and our Board, we have been getting swamped with homeowners concerns about the safety of themselves and their children. With very little traffic control (high speeds) from the police dept. on Dovetail and Scardi Blvd. The additional subdivision, will be even more hazardous for every homeowner.

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Respectfully submitted:

Greg T Gardner

Greg T Gardner
707 Slazenger Ct
Sutherlin, OR 97479
Cell: 253-651-9960
Gtg100@msn.com

October 8, 2023 Notice of Public Hearing, Tuesday October 17, 2023 at 7:00pm

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Department.
126 E. Central Ave
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment:
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009: Goodfellas of Sutherlin

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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes. I will not be able to attend the meeting to give my concerns in person, but would appreciate that this correspondence be considered.

Respectfully submitted:

Greg T Gardner
707 Slazenger Ct
Sutherlin, OR 97479
Cell: 253-651-9960
Gtg100@msn.com

**Jamie Fugate**

---

**From:** Knolls Estates HOA <ske97479@gmail.com>
**Sent:** Sunday, October 8, 2023 3:44 PM
**To:** Jamie Fugate
**Subject:** Goodfellas of Sutherlin, Subdivision-Scardi Blvd; October 8, 2023
**Attachments:** Goodfellas of Sutherlin Subdivision-Scardi Blvd. File 23-S009.pdf

[EXTERNAL SOURCE - USE CAUTION]

Dear Jamie Fugate

Attached is the written statement for the notice of public hearing, Tuesday October 17, 2023 at 7pm.

Being a homeowner at 707 Slazenger Ct and the current president of knolls estates PUD. Myself and the entire 160 homeowners have many concerns. The statement gives the major concern for the development that is planned by Goodfellas of Sutherlin.
I will not be able to attend the meeting, but would appreciate you taking into consideration the statement provided of my concerns.

Thank You
Greg Gardner
President; Knolls Estates PUD
707 Slazenger Ct

August 23, 2023

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

RECEIVED 8/23/23 2:32P

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

J. Lee
Signature

Joseph Lee
Printed Name

773 Pebble creek st
Address

541-315-8359 / JoeyLang95@yahoo.com
Phone/Email

Over – Additional Signatures

Signature

Tasha Gill
Printed Name

907 Pebble Creek St.
Address

541-643-4375 tashabgill@icloud.com
Phone/Email

Carol Freeman
Signature

CAROL FREEMAN
Printed Name

839 Durham
Address

541-817-2474 · freemanctal@charter.net
Phone/Email

Leon Brillon
Signature

Leon Brillon
Printed Name

807 Mednia Ave.
Address

(760) 936-2877 leonbrillon@att.net
Phone/Email

Clint McBride
Signature

CLINT MCBRIDE
Printed Name

755 Pebble Creek St.
Address

458-221-2788
Phone/Email

To: Sutherlin City Planning Committee



From: Greg Good

Re: Ridgeview subdivision

Dear committee members,

I would like to express my thoughts on the proposed Ridgeview subdivision that will currently be an agenda item and addressed by you.

Having lived in Sutherlin for 55+ years and Knolls Estates for the past 15 years, I feel a connection to the city that I have called home for so long. At this time, I am against anymore development in the area around my home and the proposed Ridgeview subdivision. The most obvious issue is the traffic issue that we currently have on Dovetail and Scardi streets without an additional 91 more homes adding to that. Getting on to highway 138 is already a nightmare during certain parts of the day, and one can only imagine what that will be like with more houses and no other traffic outlet. Witnessing the aftermath of the fatal wreck at that corner a few years ago has only deepened those concerns. The tragic fires in Maui and Paradise have shown what problems can occur with limited access to roads during those emergencies, and we will always have a threat of fire during the summer.

Another concern is the infrastructure of the city itself. We keep getting notices to curb our water use during the summer because of the Nonpareil treatment plant, just wondering how that gets better with more houses as we are now consistently having severe droughts?

I know this isn't necessarily in your purview, but driving around some of the neighborhoods that make up the Sutherlin I grew up in, leave a lot to be desired. Roads that need repair, streets that are now parking lots for homeowners, trailers, unregistered cars, and RV's in yards and driveways, some even appear to be occupied, and ordinances that the city isn't enforcing regarding junk and vegetation. If we can't take care of those things infrastructure and aesthetic issues now, how are they going to get better with more housing development?

I urge you to please consider the safety factors and quality of life issues that this development will cause if approved at this time. If you have any further questions regarding this matter, please feel free to call me at (541) 580-7572.

Sincerely

Greg Good
1966 Kapela Ct
Sutherlin, OR

October 8, 2023 Notice of Public Hearing, Tuesday October 17, 2023 at 7:00pm

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Department.
126 E. Central Ave
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment:
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009: Goodfellas of Sutherlin

As a community member, as well as the president living in Knolls Estates subdivision to the fairway ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY** concerned as an individual and as the president of Knolls Estates HOA representing all 160 homeowners. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the Highly Traveled State Hwy 138. The homeowners including myself in phase 3 of Knolls Estates are at the very end of Scardi Blvd & Slazenger Ct. We would have the greatest difficulty in getting to Hwy 138, possibly creating safety concerns with the additional traffic onto Scardi Blvd from the proposed new development. As president of the knolls Estates HOA and our Board, we have been getting swamped with homeowners concerns about the safety of themselves and their children. With very little traffic control (high speeds) from the police dept. on Dovetail and Scardi Blvd. The additional subdivision, will be even more hazardous for every homeowner.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for the community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval,

An Emergency “gated road” to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes. I will not be able to attend the meeting to give my concerns in person, but would appreciate that this correspondence be considered.

Respectfully submitted:

Greg T Gardner
707 Slazenger Ct
Sutherlin, OR 97479
Cell: 253-651-9960
Gtg100@msn.com

August 23, 2023

RECEIVED 8-24-23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Kala Grotting
Signature

Kala Grotting
Printed Name

2284 Chi Chi Ln
Address

733 4073 grottij@msn.com
Phone/Email

August 23, 2023

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

RECEIVED
8/23/23
2:32 P
BM

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Chantele Bangs
Signature

Chantele Bangs
Printed Name

791 Pebble Creek ST Sutherlin, OR 97479
Address

541-643-4554 bangsinafrica@yahoo.com
Phone/Email

Over – Additional Signatures

Signature

Chris Acuna Standish
Printed Name

856 Medina Ave
Address

541-643-7082 Chris.Standish@hotmail.com
Phone/Email

Signature

Printed Name

881 Medina Ave
Address

pirwin0414@gmail.com 541-921-0011
Phone/Email

Signature

Tamra L. DedekerMedley
Printed Name

784 Pebble Creek St.
Address

530-961-3751 tamradm@protonmail.com
Phone/Email

Signature

DAVID GUYER
Printed Name

768 PEBBLE CRK ST.
Address

530.919.9079
Phone/Email

August 23, 2023

RECEIVED 8/23/23 2:32p

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

K Butcher
Signature

Karen Butcher
Printed Name

811 Pebble Crk St.
Address

541-530-7576 butcherkaren811@gmail.com
Phone/Email

Over – Additional Signatures

Warren Hanussak
Signature

Warren Hanussak
Printed Name

871 Sand Pines Ave.
Address

951 526 5136 warren.hanussak@vesers.com
Phone/Email

Lisa Werts
Signature

Lisa Werts
Printed Name

868 Sand Pines Ave
Address

970-608-9229 lwerts1@gmail.com
Phone/Email

Signature

Printed Name

Address

Phone/Email

Signature

Printed Name

Address

Phone/Email

**Jamie Fugate**

---

**From:** Christine Hart <iseeyouareat@yahoo.com>
**Sent:** Friday, August 25, 2023 1:15 PM
**To:** Kristi Gilbert; Jamie Fugate
**Subject:** Subdivision- Scardi Blvd: Planning Depart. File # 23-S009

[EXTERNAL SOURCE - USE CAUTION]

August 25, 2023

Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner Sutherlin Planning Commission Member

As a community member living in Knolls Estates Subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision. I am deeply concerned with the proposed addition of 91 homes to an area that already has approximately 235 homes. My concern is the shared **ONE ENTRANCE/EXIT** on Dove Tail Lane and HWY 138.

At this time there is dry brush surrounding the Knolls Estates area and it is prohibited to use **ANY** machinery gas or electric. It will be impossible to evacuated the residents and allow the fire department to have access to the community as there is only **ONE ENTRANCE/EXIT**.

I strongly request **SAFETY** be the # one priority for the welfare of the community. A second road available to all 24/7 is needed for the safety of the residents. Adding an emergency "gated road" to be used by law enforcement and fire personnel does not provide any safety for the residents.

On the west of Dove Tail Lane and North of Hwy 138 is the Avista Utilities station and across the utility station is a field, in which the owner has **NOT** cut back the tall dry brush and it is too late to do so. As I mentioned before **All use of electric or gas machinery is prohibited**. We are residents sitting on a time table of...

**It is not IF we will have a fire in the area without escape but WHEN will it happen.**

Thank you for your time in considering our **SERIOUS** request of denying the Proposed Request until such time as an approved second Paved Road for Entrance and Exit is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Alicia Hart

2234 Eagle Loop
Sutherlin, OR 97479
686-524-2664
iseeyouareat@yahoo.com

August 23, 2023

RECEIVED 8/23/23 2:32 P BM

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Vicki Merrill
Signature

Vicki Merrill
Printed Name

1951 Scardi Blvd
Address

541-254-0927
Phone/Email

Over – Additional Signatures

Signature

Mark V. Covington

Printed Name

1967 Sand Pines Ave

Address

Phone/Email

Signature

Glenda J Schmidt

Printed Name

816 Sand Pines Ave

Address

Phone/Email

Signature

Richard Johnson

Printed Name

832 Sand Pines

Address

209-535-4071

Phone/Email

Signature

CAROLYN R. REEVES

Printed Name

880 SAND PINES AVE

Address

541-802-1051

Phone/Email

**Jamie Fugate**

**From:** Kristi Gilbert
**Sent:** Thursday, August 17, 2023 2:44 PM
**To:** Jamie Fugate
**Subject:** FW: Planning Department File No. 23-8009 - Proposed land use objection - Ridgeview Subdivision

***Kristi Gilbert***
***Community Development Director***
***City of Sutherlin***

**From:** Susan Jordan <jordan.susan.303@gmail.com>
**Sent:** Thursday, August 17, 2023 2:18 PM
**To:** Kristi Gilbert <k.gilbert@ci.sutherlin.or.us>
**Cc:** Michael Jordan <majordan303@gmail.com>
**Subject:** Planning Department File No. 23-8009 - Proposed land use objection - Ridgeview Subdivision

**[EXTERNAL SOURCE - USE CAUTION]**

Michael and Susan Jordan

2286 Eagle Loop

Sutherlin, OR 97479

303.350.9310

email: jordan.susan.303@gmail.com

Re: Planning Department File No. 23-8009 - Proposed land use objection

Please note our **strong objections** to this planned development due to its significant impact on traffic and safety on Scardi Blvd through Dovetail and to the Intersection at Dovetail and Hwy 138. The intersection needs a permanent traffic signal light at this time for the existing Knolls Estates and Fairway Ridge developments and the development across the highway.

Michael Jordan is a disabled Veteran. The single exit from Knolls Estates is already of concern before the addition of construction vehicles, and then 91 more households using the existing roads as a single exit from the Ridgeview Subdivision.

An alternative, permanent exit to Stearns Road from the proposed subdivision must be included in the plans. The proposed subdivision cannot exit onto Scardi Blvd.

Sincerely,

Michael and Susan Jordan

## Jamie Fugate

**From:** Kristi Gilbert
**Sent:** Friday, August 18, 2023 9:16 AM
**To:** Jamie Fugate
**Subject:** FW: Subdivision - 0 SCARDI BLVD File No. 23-S009

***Kristi Gilbert***
***Community Development Director***
***City of Sutherlin***

**From:** fixer12.1@charter.net <fixer12.1@charter.net>
**Sent:** Friday, August 18, 2023 9:07 AM
**To:** Kristi Gilbert <k.gilbert@ci.sutherlin.or.us>
**Subject:** Subdivision - 0 SCARDI BLVD File No. 23-S009

**[EXTERNAL SOURCE - USE CAUTION]**

We want to express our great concern for the continued expansion of home building, ongoing and planned, in the Oak Hills Estates area with no regard for common sense or safety issues created by only having one road in and out for so many houses.

We have lived here since 1995, when only 3 homes existed in phase 1. During that time we have been told several times that a second entrance/exit road would be constructed when the homes and lots being built exceeded 30 in the Avery sub-division.

That has not happened and now you are considering a large sub-division by Goodfellas of Sutherlin LLC, be added to an already dangerous one way in and out situation.

In the time we have lived here we had two events that closed Dovetail/Scardi to access. One due to flooding and one due to a jack knifed trailer. Both closed the road for several hours and fortunately there were no emergencies during those times that required help to get in.

Now with the large number of homes here and many more seniors, we need to have another entrance/exit road option...not just a "gated private emergency road".

Another concern is the maintaining of Scardi with all the additional car and truck traffic? Do you expect our PUD to do that?

We know and you know, this is going to be a major safety issue at some point and is just a common sense decision to have the developers put in a second road.

We will also be checking with the state development offices to see if there are sub-division guidelines regarding house saturation vs. access roads.

Lets do this correctly without the lip service we have received for so many years.

Richard & Barbara Jorge
2226 Eagle Loop
Sutherlin, OR 97479
(541) 459-3242

August 23, 2023

RECEIVED 8/28/23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Diana G. Keadey
Signature

Diana G. Keadey
Printed Name

2257 Eagle Loop
Address

541-643-6701
Phone/Email

August 23, 2023

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Signature

Joe D. Keady

Printed Name

2257 Eagle Loop, Sutherlin

Address

541-733-6701

Phone/Email

Stop the "Good ol Boy" system and start working for the people that pay your salaries.

October 8, 2023 Notice of Public Hearing, Tuesday October 17, 2023 at 7:00pm

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Department.
126 E. Central Ave
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment:
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009: Goodfellas of Sutherlin

As a community member, as well as the president living in Knolls Estates subdivision to the fairway ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY** concerned as an individual and as the president of Knolls Estates HOA representing all 160 homeowners. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the Highly Traveled State Hwy 138. The homeowners including myself in phase 3 of Knolls Estates are at the very end of Scardi Blvd & Slazenger Ct. We would have the greatest difficulty in getting to Hwy 138, possibly creating safety concerns with the additional traffic onto Scardi Blvd from the proposed new development. As president of the knolls Estates HOA and our Board, we have been getting swamped with homeowners concerns about the safety of themselves and their children. With very little traffic control (high speeds) from the police dept. on Dovetail and Scardi Blvd. The additional subdivision, will be even more hazardous for every homeowner.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for the community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval,

An Emergency “gated road” to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes. I will not be able to attend the meeting to give my concerns in person, but would appreciate that this correspondence be considered.

Respectfully submitted:

Greg T Gardner
707 Slazenger Ct
Sutherlin, OR 97479
Cell: 253-651-9960
Gtg100@msn.com

August 20, 2023

Sutherlin City Hall
Attention: Sutherlin Community Development / Planning Department
126 E. Central Avenue
Sutherlin, OR 97479

To Whom It May Concern:

RE: Subdivision – 0 Scardi Blvd;
Goodfellas of Sutherlin, Planning Department File No. 23-S009

As a resident of the Knolls Estate community, I am noting my concern of the proposed addition of the neighboring subdivision-0 Scardi, Planning Dept. File No. 23-S009. My concern is with the safety of all people traveling along only one ingress and egress to safely navigate entering onto a highly traveled state Hwy 138. I believe the city code ( 3.5.110 G) requires further investigation of this considerably hazardous road dilemma.

Also in regards to the safety along the Scardi and Dovetail Streets, there will be a decline in the pass ability of two-way traffic due to the housing proposed with drive-way entrances and parking on street. There is already this situation with a couple of homes that exist on these two streets. See city code 3.5.110 F Figure 11.

Respectfully,

Larry D. Cox

Larry D. Cox
2066 Culver Loop
Sutherlin, Oregon 97479
(559)479-0387 cell#
email- larrydcox47@yahoo.com

## Jamie Fugate

**From:** John Lahley <johnlahley@gmail.com>
**Sent:** Thursday, August 24, 2023 9:09 AM
**To:** Jamie Fugate
**Cc:** Kristi Gilbert
**Subject:** Subdivision - 0 Scardi Blvd; Goodfellows of Sutherlin Plan Dept. File #23-S009

[EXTERNAL SOURCE - USE CAUTION]

August 24, 2023
LETTER OF CONCERN as related to the above identified noted "Subject".
Attention: Sutherlin Planning Advisory Commission Members;
Davidson, Maloney, Sarnoski, Banducci, Hogsott, Woods

I write this Letter of Concern out of the sincere belief that ALL Sutherlin Residents would agree with the Sutherlin City Mission Statement whereby it is noted the City Leaders are committed to decisions which reflect what is best for the community/ citizens while keeping a Focus upon SAFETY.

I am a resident of Knolls Estates (160 homes) adjacent to Fairway Ridge (50 homes currently) with soon to be added 25 homes, thus these two subdivisions will total 235 homes, ALL using the single Entry-Exit Intersection of Dovetail & State Hwy #138.

Using the National Vehicle per home average of 1.88 we have the potential of Four Hundred Fourty-One (441) vehicles needing to use the Entry-Exit. Noting the proposed addition of the above request File #23-S009 which reflect the expectation of 91 homes, that simply compounds the Single Entry-Exit by 171 more vehicles. Together in the case of an Emergency this means a composite total of vehicles anywhere from 326 (1 vehicle/home) up to 612 vehicles (1.88 vehicle/ home) needing to Exit onto State Hwy #138. Surely it is apparent that approval of the above File #23-S009 would create an extremely dangerous intersection of Dovetail & #138, adding to what currently is already a DANGEROUS Intersection.

"SAFETY" in various manners is noted within the Sutherlin Mission Statement, along with part of those Missions noted by both Fire and Police Departments AND well documented in many of the Sutherlin Planning Codes. Given it is such a Focus and Commitment by the City Leaders, there is No Apparent way an approval can be given to the above File #123 Request UNTIL such time there is a secondary "paved road" attached to any future building request adjacent to Knolls Estates and Fairway Ridge. Specifically there should be No Approved Future Request pertaining to Lots:
Tax ID: R20400; Tax ID R20392; Tax R138405; Tax R21680.
With the request of File #23-S009, there is noted an Emergency Gated road (with Knox Box), designed apparently and solely for Emergency Vehicles. In an emergency, that road may serve those Responders along with Residents, BUT it does not serve the many City Mission Statements nor the Planning Dept Codes of "developments does not creat safety circumstances".

Restating my Concerns, Safety is paramount for All Sutherlin Citizens. No additional new construction of homes or businesses ought to be approved UNTIL the Entry-Exit Intersection of Dovetail & State Hwy #138 is addressed for the Safety of those 235 current residents.

Respectfully,

John H. Lahley
2070 Culver Loop
541-643-6581
Johnlahley@gmail.com

From: John Lahley JohnLahley@gmail.com
Subject: Subdivision - 0 Scardi Blvd; Goodfellows of Sutherlin Plan Dept. File #23-S009
Date: Aug 24, 2023 at 9:08:58 AM
To: j.fugate@ci.sutherlin.or.us
Cc: k.gilbert@ci.sutherlin.or.us
Bcc: nansandpops6@gmail.com

August 24, 2023

LETTER OF CONCERN as related to the above identified noted "Subject".

Attention: Sutherlin Planning Advisory Commission Members;
Davidson, Maloney, Sarnoski, Banducci, Hogsott, Woods

I write this Letter of Concern out of the sincere belief that ALL Sutherlin Residents would agree with the Sutherlin City Mission Statement whereby it is noted the City Leaders are committed to decisions which reflect what is best for the community/ citizens while keeping a Focus upon SAFETY.

I am a resident of Knolls Estates (160 homes) adjacent to Fairway Ridge (50 homes currently) with soon to be added 25 homes, thus these two subdivisions will total 235 homes, ALL using the single Entry-Exit Intersection of Dovetail & State Hwy #138.

Using the National Vehicle per home average of 1.88 we have the potential of Four Hundred Fourty-One (441) vehicles needing to use the Entry-Exit. Noting the proposed addition of the above request File #23-S009 which reflect the expectation of 91 homes, that simply compounds the Single Entry-Exit by 171 more vehicles. Together in the case of an Emergency this means a composite total of vehicles anywhere from 326 (1 vehicle/home) up to 612 vehicles (1.88 vehicle/ home) needing to Exit onto State Hwy #138. Surely it is apparent that approval of the above File #23-S009 would create an extremely dangerous intersection of Dovetail & #138, adding to what currently is already a DANGEROUS Intersection.

"SAFETY" in various manners is noted within the Sutherlin Mission Statement, along with part of those Missions noted by both Fire and Police Departments AND well documented in many of the Sutherlin Planning Codes.

Given it is such a Focus and Commitment by the City Leaders, there is No Apparent way an approval can be given to the above File #123 Request UNTIL such time there is a secondary "paved road" attached to any future building request adjacent to Knolls Estates and Fairway Ridge. Specifically there should be No Approved Future Request pertaining to Lots:

Tax ID: R20400; Tax ID R20392; Tax R138405; Tax R21680.

With the request of File #23-S009, there is noted an Emergency Gated road (with Knox Box), designed apparently and solely for Emergency Vehicles. In an emergency, that road may serve those Responders along with Residents, BUT it does not serve the many City Mission Statements nor the Planning Dept Codes of "developments does not creat safety circumstances".

Restating my Concerns, Safety is paramount for All Sutherlin Citizens. No additional new construction of homes or businesses ought to be approved UNTIL the Entry-Exit Intersection of Dovetail & State Hwy #138 is addressed for the Safety of those 235 current residents.

Respectfully,

John H. Lahley
2070 Culver Loop
541-643-6581
Johnlahley@gmail.com

August 23, 2023

RECEIVED 8/24/23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Anna Lahley
Signature

Anna Lahley
Printed Name

2070 Culver Loop
Address

541-580-2667 nansandpops6@gmail.com
Phone/Email

RECEIVED
8-18-23

City of Sutherlin Community Development
126 E. Central Ave.
Sutherlin, OR. 97479

TO: Sutherlin Community Development Director

RE: Goodfellas of Sutherlin Ridgeview Subdivision

August 18, 2023

Dear Sir/Madam:

Thank you for giving us the opportunity to comment on the proposed Subdivision by Goodfellas of Sutherlin.

We know Sutherlin is a fast and growing community and are not opposed to the building of new homes. Our main concern is public safety if this development moves forward. This is especially important today as we reach high fire season.

The second reason for concern would be if there is an emergency catastrophe closure of Dovetail/Scardi to Hwy 138. There is no other way out of our communities here in Knolls Estates.

After reviewing of Goodfellas proposal, we would be in harms way if there would be an emergency evacuation.

Traffic has already increased on Dovetail/Scardi with the Avery Development. More traffic control would need to be inforced by local lawenforcement as speeding is also a concern. Currently there is only one ingress and digress for ALL HOMES...with no other way out.

Respectfully yours,

Martin Larner  Jessie M. Larner

Martin & Jessie Larner
1793 Culver Loop
Sutherlin, OR. 97479

August 23, 2023

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

RECEIVED 8/23/23 2:32P

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

J. Lee
Signature

Joseph Lee
Printed Name

773 Pebble creek st
Address

541-315-8359 / JoeyLang95@yahoo.com
Phone/Email

Over – Additional Signatures

Signature

Tasha Gill
Printed Name

907 Pebble Creek St.
Address

541-643-4375 tashabgill@icloud.com
Phone/Email

Carol Freeman
Signature

CAROL FREEMAN
Printed Name

839 Durham
Address

541-817-2474 · freemanctal@charter.net
Phone/Email

Leon Brillon
Signature

Leon Brillon
Printed Name

807 Mednia Ave.
Address

(760) 936-2877 leonbrillon@att.net
Phone/Email

Clint McBride
Signature

CLINT MCBRIDE
Printed Name

755 Pebble Creek St.
Address

458-221-2788
Phone/Email

August 23, 2023

RECEIVED 8-24-23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit**, then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Gary Lee
Signature

Gary Lee
Printed Name

1829 Cutlock Loop
Address

559-707-2475 Oneroadworker@yahoo.com
Phone/Email

August 23, 2023

RECEIVED 8-24-23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Lorrie Lee
Signature

LORRIE LEE
Printed Name

1829 Culvek Loop
Address

559-707-2476 gandlee58@Hotmail.com
Phone/Email

**Jamie Fugate**

**From:** Kristi Gilbert
**Sent:** Friday, August 18, 2023 7:02 AM
**To:** Jamie Fugate
**Subject:** FW: Additional Scardi subdivision

***Kristi Gilbert***
***Community Development Director***
***City of Sutherlin***

**From:** Pat Lynch <p.lynch@ci.sutherlin.or.us>
**Sent:** Thursday, August 17, 2023 6:30 PM
**To:** Kristi Gilbert <k.gilbert@ci.sutherlin.or.us>
**Subject:** Additional Scardi subdivision

Kristi,

I live in Phase I of the Knolls Estates development. The natives are getting restless here and I would like to provide good information. Adding the Avery buildout and the proposed Ridgeview development seems to add about 170 homes and 400-500 people and 350 vehicles or so to what is already a single access and egress location. I am also requesting "party status" following the August 11 announcement as a resident impacted directly and negatively by significant additional vehicular and construction traffic in the event of this subdivision's approval. Here are my questions and comments:

1. Will a traffic study on Dovetail/Scardi/Hwy 138 be required? If not, why not?
2. Has Scardi been evaluated lately ? Since I walk this every day, I will note that the road condition is deteriorating almost certainly due to the enormous impact of hundreds of (speeding) rock and soil trucks and semi-truck and trailer traffic. Cracks and alligatoring is evident and beginning to spread and expand. Additional heavy traffic on a road never constructed with this load in mind will certainly accelerate this degradation.
3. I assume that the proper site preparation permits are in place. I am also assuming that trip counts and remediation of road deterioration was not required.
4. Has a second - or third - access and egress road been established and required in this submission? This seems to come up somewhat regularly as a concern and the native drums tell me that this new subdivision will trigger a response from current residents.
5. What are the code cites that control requirements for access and egress for life safety and emergency response? Are State agencies involved? I find it difficult to believe that current conditions are sufficient to meet the requirements of our area with this significant additional build out.

Thanks for your time. I will appreciate your help in getting good information out to me and my neighbors!

Pat

Patrick Lynch

Library Director

Livability Services Director

Principal Grant Writer

RE: Planning Department File # 23-S009

RECEIVED 8/23/23 JF

RESPONDENT: Scott McGinnis
1684 Scardi Boulevard
Sutherlin OR 97479

RESPONDENT QUAIFICATION: Affected resident of Knolls Estates

The singular ingress/egress of Scardi Boulevard to Sutherlin-Elkton Hwy [State Hwy 138] without traffic control at the juncture – and in relation to the proposed two-point additional traffic from the "GOODFELLAS" 91 lot subdivision as shown in the planning file is specifically detrimental to the existing homes on Scardi Boulevard to the EAST of both proposed access roads as shown in the Preliminary EMS exhibit.

Noted is the proximity to INTERSTATE 5 [Southbound] with homes in the KNOLLS subdivision with approximate 200' easement to I-5 while the EASTERN homes of the GOODFELLAS plots appear by plotted EMS ACCESS EXHIBIT to as little as 20'. Interstate 5 is highly prone to roadside fires caused by multiple causes. In the case of a localized, or more to task, spreading wind aided fires, the entirety of the additional 91 lots [and the attendant vehicles] Of the GOODFELLAS proposed lots would be evacuating the traffic in two pinch points – potentially blocking evacuation of the 21 lots to the EAST of the traffic ingress of the similarly positioned Scardi Boulevard and Slazinger Court homes.

The respondent was a resident of Conestoga Hills subdivision, evacuated in the Skeleton Fire in Deschutes County in August of 1996. A neighboring subdivision, Sundance, had 23 homes burned to the ground. Both subdivisions were low density – large parcel [2-5 acre] subdivisions. This is quite unlike this very high-density example. Both the Conestoga and Sundance subdivisions had singular ingress/egress. The rapid, and wind aided nature of the fire's spread created mass exit of car and transport vehicles. This inhibited rescue equipment ingress to fight the fire, and property owner's exit to safety.

The impact was critical in term of fire losses – fortunately there was no loss of life. In clarity it should be noted the population density and proximity of structure was likely 20% of the proposed GOODFELLAS addition.

ANY fire from the EAST, be it localized, or wind aided would be devastating in this Sutherlin example. It could produce a gridlock for the 21 existing homes landlocked and blocked by the developed lots to the Proposed DUAL ingress to the upper reaches of Scardi Boulevard.

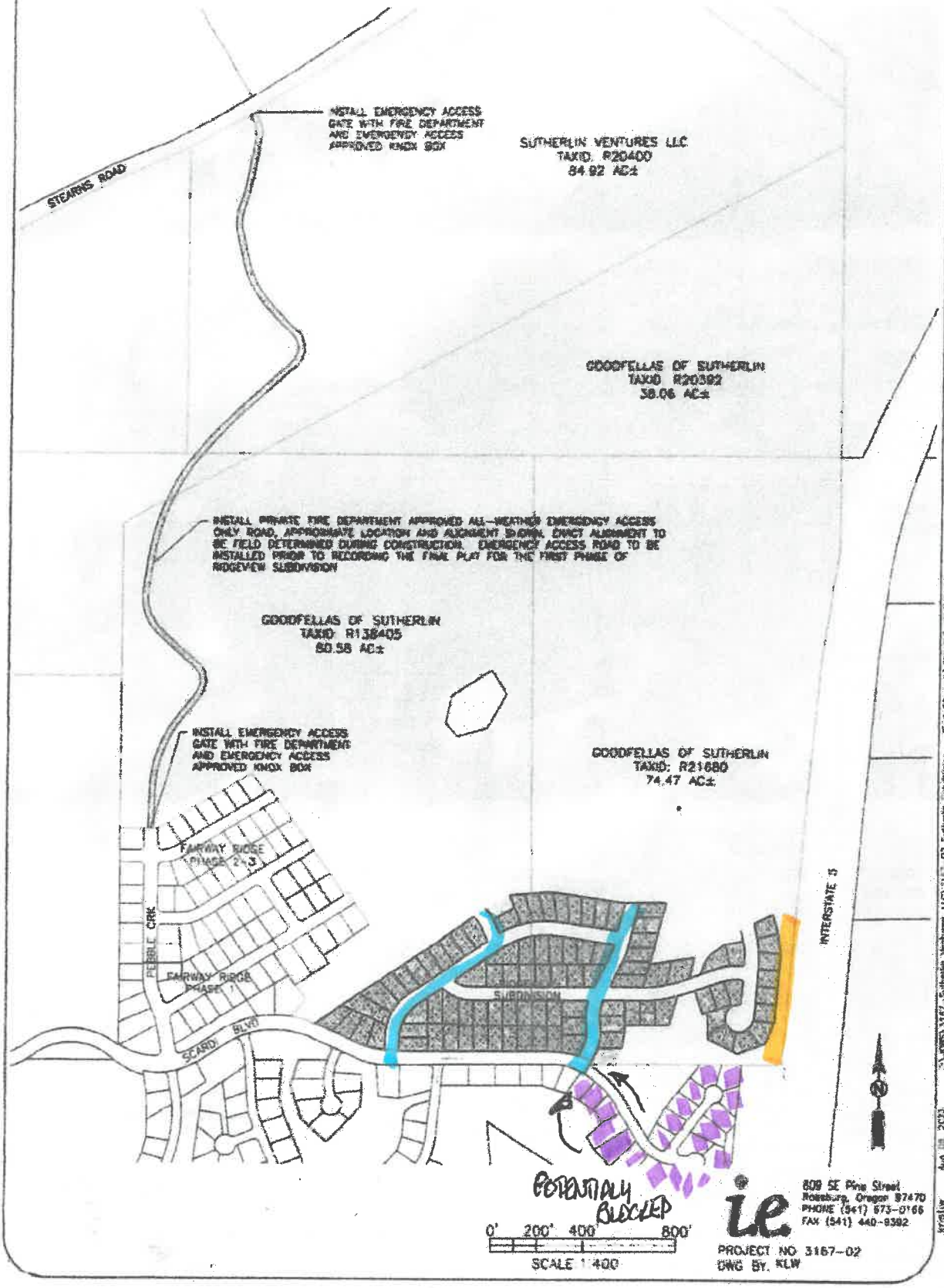
Similar fire situations have occurred in Canyonville and other locations in Douglas County that preclude dismissing the potential herein. I respectfully urge AGAINST the placement to two additional ingress/egress points that pose the risk of isolation of the 23 EASTERLY Scardi Boulevard and Slazinger Court homes

Respectfully submitted this 23rd day of August, 2023

Scott McGinnis

Cindy L. McGinnis

# RIDGEVIEW SUBDIVISION PRELIMINARY EMS ACCESS EXHIBIT



August 23, 2023

RECEIVED 8/23/23 2:32 P BM

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Vicki Merrill
Signature

Vicki Merrill
Printed Name

1951 Scardi Blvd
Address

541-254-0927
Phone/Email

Over – Additional Signatures

Signature

Mark V. Covington

Printed Name

1967 Sand Pines Ave

Address

Phone/Email

Signature

Glenda J Schmidt

Printed Name

816 Sand Pines Ave

Address

Phone/Email

Signature

Richard Johnson

Printed Name

832 Sand Pines

Address

209-535-4071

Phone/Email

Signature

CAROLYN R. REEVES

Printed Name

880 SAND PINES AVE

Address

541-802-1051

Phone/Email

August 23, 2023

RECEIVED 8-22-23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Danna Mock / Robert Mock
Signature

Danna Mock Robert Mock
Printed Name

1826 Culver Loop -
Address

541-680-0839 - dannamock@gmail.com
Phone/Email

August 24, 2023

Sutherlin City Community Development & Planning Dept.
c/o Sutherlin City Hall
126 E. Central Ave.
Sutherlin, OR 97479


To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

RE: SAFTEY CONCERNS: Proposed Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a resident of the Knolls Estates subdivision since 2012, I am writing to request that you please give serious consideration to denying the Proposed Request for a 91-home subdivision, adjacent to our community and the newer subdivision of Fairway Ridge, until which time that a second paved road for entrance and exit be required to be in place prior to any more homes being built above us. I have extreme concerns that this proposed subdivision will create a serious safety issue for the residents of these subdivisions.

Currently there are approximately 235 homes on the hill above the Oak Hills Golf Course on the west side of Sutherlin. Together we share Dovetail Lane/Scardi Blvd as our one road, entrance and exit, to and from an increasingly highly traveled Hwy 138. Please also consider the fact that we have a high population of elderly, including some disabled individuals in our subdivision.

An emergency "gated road", to be used by police and fire personnel only, does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit. In the event of a wildfire, or other necessary evacuation, this could be disastrous.

My biggest concern is for the safety of the residents of this community. When making your decision please keep in mind the Sutherlin Planning Codes clearly state safety for community residents is one of the conditions for any growth consideration.

In conclusion, please deny the proposed request for the 91 homes until such time that an approved second paved road, for egress and ingress, be required as a provision for the construction of more homes being built above us.

Thank you for your time, consideration, and efforts to keep Sutherlin a safe community for all.

Sincerely,

Sierra Moon

Sierra Moon

August 23, 2023

RECEIVED
8/23/23
2:32P
BM

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Nancy Adair Weatherspoon
Signature

Nancy Adair Weatherspoon
Printed Name

739 Pebble Creek
Address

360-378-7556
Phone/Email

Over – Additional Signatures

Signature

Brooks Smallwood
Printed Name

870 Medina Ave.
Address

(985) 710-2480
Phone/Email

Signature

Printed Name

Address

Phone/Email

Signature

Michael Williams
Printed Name

863 Medina
Address

775-233-2455
Phone/Email

Signature

Stanley C. Nickel
Printed Name

806 Sand Piper Ave
Address

949-257-9172 snickelcuhs@yahoo.com
Phone/Email

RECEIVED 8/24/23

August 23, 2023

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Carolyn A. Nielsen
Signature

Carolyn A. Nielsen
Printed Name

523 St. Andrews ct.
Address

541-529-0022
Phone/Email

August 23, 2023

RECEIVED 8/23/24

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Signature

Dale F Nielsen
Printed Name

523 St. Andrews Ct.
Address

503-944-2639
Phone/Email

August 23, 2023


Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Signature Mary A. Nordeen

Printed Name Mary A. Nordeen

Address 2274 Eagle Loop Sutherlin, OR 97479

Phone/Email 541-802-1026

Over – Additional Signatures

## Jamie Fugate

**From:** HOROWITZ Micah <Micah.HOROWITZ@odot.oregon.gov> on behalf of ODOT Region 3 Development Review <R3DevRev@odot.oregon.gov>
**Sent:** Tuesday, October 10, 2023 12:52 PM
**To:** Jamie Fugate; Kristi Gilbert
**Cc:** BROOKS Aaron G; WANG Wei; WELLS David; EPPS Mark; BAKER Michael
**Subject:** 23-S009 - Subdivision notice - Recommendation of denial

**[EXTERNAL SOURCE - USE CAUTION]**
Hi Jamie,

ODOT requests a continuance of the hearing for file no 23-S009 scheduled for next Tuesday Oct 17.

We are still working with the applicants team in refining the traffic analysis and can not provide a letter of support at this point in time.

Best regards,
Micah

**Micah Horowitz** | Development Review Planner
ODOT Region 3 | Southwest Oregon (Coos, Curry, Douglas, Jackson & Josephine Counties)
c: 541.603.8431 |e: micah.horowitz@odot.oregon.gov

**From:** Jamie Fugate j.Fugate@ci.sutherlin.or.us
**Sent:** Tuesday, October 10, 2023 9:41 AM
**To:** ODOT Region 3 Development Review R3DevRev@odot.oregon.gov
**Cc:** Kristi Gilbert k.gilbert@ci.sutherlin.or.us
**Subject:** RE: 23-S009 - Subdivision notice - Recommendation of denial



Hi Micah –

Just reaching out to see if you are sending in a revision to the staff report for file no. 23-S009. The staff report is due today and if you have revised, additional or any comments if we could receive them by 1:00pm. That would be greatly appreciated!

Thanks, have a great day!

Jamie Fugate

**From:** HOROWITZ Micah <Micah.HOROWITZ@odot.oregon.gov> **On Behalf Of** ODOT Region 3 Development Review
**Sent:** Tuesday, October 3, 2023 4:38 PM
**To:** Kristi Gilbert <k.gilbert@ci.sutherlin.or.us>

Oregon
Tina Kotek, Governor

**Department of Transportation**
Region 3 Planning and Programming
100 Antelope Drive
White City, Oregon 97503
Phone: (541) 774-6299

August 25, 2023

Kristi Gilbert
Community Development Director
City of Sutherlin
126 E Central Ave
Sutherlin, OR 97479

Re: Scardi Ridgeview Subdivision – File 23-0S009, Goodfellas of Sutherlin

Dear Ms. Gilbert,

Thank you for providing the Oregon Department of Transportation ("ODOT") with the opportunity to provide comments on the proposed 91 lot subdivision on the 193.11 ac parcel north of Scardi Blvd. in the City of Sutherlin (Lot 1500 in section 7 and tax lots 100 and 203 in section 18 within T25S, R5W).

This property received entitlements in 2007 as part of the land use action PA-07-3/ZC-07-4 (the "Plan Amendment") and the Planning Commission Findings of Fact (the "Findings") were approved in October 18, 2007. The Findings included several Transportation Improvements needed to support the Plan Amendment and a Phasing Schedule, which were recorded as attachment B and have been included for reference as Exhibit A. The Goal 12 section of the Findings outline the City of Sutherlin's (the City") implementation of the Transportation Planning Rule (OAR 660-12-060) and the protocol for determining significant effect. The City committed to several Policies, including Policy 4 which obligates the City to require the applicant to submit a detailed TIS for each new phase of development on the ASCK property. A detailed TIS is needed both to aid the City in making a finding of Significant Effect under the Transportation Planning Rule, and to determine timing of installation of the Transportation Improvements which were conditions of approval during the 2007 Plan Amendment.

Given the lack of a TIS supporting this application ODOT recommends denial of File 23-0S009. ODOT requests to be consulted for scoping the TIS, and the opportunity to review and provide formal comment to the City on the traffic study as several of the potential Transportation Improvements are on State facilities. As a Type II application ODOT requests to be notified of any further action associated with this application, and requests the application be taken to Public Hearing if advanced prior to ODOT concurrence with a TIS. We look forward to working with you, and the applicant on this project as it moves forward. Please feel free to me at Micah.HOROWITZ@odot.state.or.us or 541-603-8431 should you have any questions or concerns.

Sincerely,

Micah Horowitz

Micah Horowitz
Region 3 Development Review Planner

Oregon
Tina Kotek, Governor

**Department of Transportation**
Region 3 Planning and Programming
100 Antelope Drive
White City, Oregon 97503
Phone: (541) 774-6299

Exhibit A

1. Interstate 5 Southbound Ramps: The applicant shall install a traffic signal and eastbound right-turn lane on OR 138W prior to City issuance of Certificate of Occupancy for ASKC's Phase 1. Phase 1 shall not exceed 140 single family units or 1, 340 average daily trips, 100 multi-family units or 586 average daily trips and 16 industrial park acres or 1,010 average daily trips.

2. Dovetail Lane Intersection: The applicant shall install a westbound right-turn lane on OR138W prior to City issuance of Certificate of Occupancy for ASKC Phase 2. Phase 2 shall not exceed 140 single family units or 1,340 average daily trips, 100 multi-family units or 586 average daily trips and 16 industrial park acres or 1,010 average daily trips.

3. Dovetail Lane Intersection: The applicant shall install a raised median on OR 138W to restrict access to right-in/right-out and install a new east-west Collector Street connection from Dovetail Lane to Stearns Lane prior to City issuance of Certificate of Occupancy for ASKC Phase 3. Phase 3 shall not to exceed 140 single family units or 1,340 average daily trips, 100 multi-family units or 586 average daily trips and 16 industrial park acres or 1,010 average daily trips.

4. Interstate 5 Southbound Ramps: The applicant shall install an Exit 136 southbound exit ramp in the northwest quadrant and install a traffic signal or roundabout at OR138W/Dakota Street intersection prior to City issuance of Certificate of Occupancy for ASKC Phase 4. Phase 4 shall not exceed 130 single family units or 1,244 average daily trips, 100 multi-family units or 586 average daily trips and 16 industrial park acres or 1,010 average daily trips. The Phase 4 traffic signal improvement shall relocate the temporary traffic signal installed at the southbound ramps for ASKC Phase 1.

Note that all Interstate 5 southbound ramp improvements must be constructed to conform to OAR 734, Division 20. All traffic signal improvements need to conform to the Traffic Signal Approval Process as established by Oregon Administrative Rules 734-020-0400 to 0490 and the Oregon Traffic Manual, Chapter 6.34. The required signal investigation documentation is the responsibility of the applicant. The documentation is to be submitted to the State Traffic Engineer for approval through the Region 3 Traffic Section.

Oregon
Tina Kotek, Governor

**Department of Transportation**
Region 3 Planning and Programming
100 Antelope Drive
White City, Oregon 97503
Phone: (541) 774-6299

August 25, 2023

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Community Development Director
City of Sutherlin
126 E Central Ave
Sutherlin, OR 97479

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Sincerely,

Micah Horowitz

Micah Horowitz
Region 3 Development Review Planner

Oregon
Tina Kotek, Governor

**Department of Transportation**
Region 3 Planning and Programming
100 Antelope Drive
White City, Oregon 97503
Phone: (541) 774-6299

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## Jamie Fugate

**From:** HOROWITZ Micah <Micah.HOROWITZ@odot.oregon.gov> on behalf of ODOT Region 3 Development Review <R3DevRev@odot.oregon.gov>
**Sent:** Friday, August 25, 2023 3:56 PM
**To:** Jamie Fugate; Kristi Gilbert
**Cc:** BROOKS Aaron G; WANG Wei; WELLS David; EPPS Mark; BAKER Michael
**Subject:** RE: 23-S009 - Subdivision notice - Recommendation of denial
**Attachments:** GoodfellasSubdivision.pdf

**[EXTERNAL SOURCE - USE CAUTION]**
Hi Jamie and Kristi,

Please find our comments attached in which we recommend denial of the application. As discussed on an earlier email thread, a traffic study is necessary and would be glad to work with Sutherlin staff and applicant to help scope and review a new detailed study. I would appreciate if you could let me know how you plan to proceed with this application either way.

Best regards,
Micah

**Micah Horowitz, AICP** | Senior Transportation Planner
ODOT Region 3 | Southwest Oregon (Coos, Curry, Douglas, Jackson & Josephine Counties)
c: 541.603.8431 |e: micah.horowitz@odot.oregon.gov

**From:** Jamie Fugate <j.Fugate@ci.sutherlin.or.us>
**Sent:** Thursday, August 17, 2023 2:50 PM
**To:** HOROWITZ Micah <Micah.HOROWITZ@odot.state.or.us>
**Subject:** 23-S009 - Subdivision notice



Good Afternoon –

Attached is the land use notice for file no. 23-S009 – a copy was also mailed to you.

Thanks,

*Jamie Fugate*
City Planner
541-459-2856
126 E Central Ave
Sutherlin, OR 97479

August 23, 2023

RECEIVED 8-25-23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Jacqueline Potestio
Signature

JACQUELINE POTESTIO
Printed Name

1830 Culver Loop
Address Sutherlin, OR 97479

530-736-7759 jmlrpl369@aol.com
Phone/Email

August 23, 2023

RECEIVED 8-25-23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Signature

DAVID POTESTIO
Printed Name

1830 Cutsaw Loop Sutherlin OR 97479
Address

dapotestio@gmail.com
Phone/Email
530-990-1174

## Jamie Fugate

**From:** Aaron Swan
**Sent:** Wednesday, October 4, 2023 8:46 AM
**To:** Jamie Fugate
**Subject:** FW: Hearing Notice (23-S009)

I guess I sent this reply of the reply to myself. Weird

**From:** Aaron Swan
**Sent:** Wednesday, October 4, 2023 8:45 AM
**To:** Aaron Swan <a.swan@ci.sutherlin.or.us>
**Subject:** RE: Hearing Notice (23-S009)

**From:** Aaron Swan
**Sent:** Wednesday, October 4, 2023 8:12 AM
**To:** Jamie Fugate <j.Fugate@ci.sutherlin.or.us>
**Subject:** RE: Hearing Notice (23-S009)

Re. Goodfellas of Sutherlin Subdivision request File #23-S009
The applicant will need to provide plans for the sub division that adhere to City of Sutherlin construction specifications. These plans must include but are not limited to; An 8'' minimum water line extension detail, A 4'' pressure sewer line extension ( main and lateral detail, Street detail including width, sidewalk and subgrade detail, and a storm water plan that includes detention ponds. Developer should pay close attention to elevation as they are at the upper reaches of the city water system. While minimum pressures (20 lbs. at the meter) will be met, the pressures that people are used to may not be attained without booster pumps.
Aaron Swan
Public Works director
City of Sutherlin

**From:** Jamie Fugate <j.Fugate@ci.sutherlin.or.us>
**Sent:** Tuesday, October 3, 2023 10:56 AM
**To:** Aaron Swan <a.swan@ci.sutherlin.or.us>
**Subject:** Hearing Notice (23-S009)

Aaron –

Please see attached public hearing notice for file number 23-S009 and respond accordingly at your soonest. 😊

Thanks,

*Jamie Fugate*
City Planner
541-459-2856
126 E Central Ave

Carolyn R Reeves
880 Sand Pines Avenue
Sutherlin, OR 97479



August 22, 2023

Sutherlin City Hall
Sutherlin City Community Development & Planning Dept.
126 E. Central Avenue
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Re: Subdivision - 0 Scardi Blvd.; Planning Department File No. 23-S009

As a community member residing in the Fairway Ridge subdivision since August 2019 I am highly concerned about the increase in traffic on Scardi Boulevard and safety of residents with the addition of 91 proposed homes.

~ As a daily walker I often experience vehicles passing me well over 30 MPH on Scardi. The only sidewalk is along the side of Fairway Ridge. The two communities (Knolls Estate & Fairway Ridge) have many daily walkers along Scardi as well as golf carts. Residents from Westview also walk this area. With the addition of 91 homes the number of speeders will increase and safety decrease.

~ Safety for the citizens is important to the City of Sutherlin as evidenced on the city's website. The site has a section on Safety and procedures to follow when there is a natural disaster. With the proposed additional homes and only one entrance/exit to Hwy 138 providing a safe route for this area is highly questionable. When stopped at Dovetail to travel onto Hwy 138 I have imagined what the traffic backup would be like to escape the area because of a natural disaster. Also the NPO property along Scardi has an abundance of fire fuel which cars and RVs in the backup would be waiting along side to get to safety on Hwy 138.

~ It would be an unimaginable tragedy for these wonderful communities to suffer an event like Paradise or Lahaina.

Please seriously consider requiring the developers provide an additional paved road for the ingress and egress of the Knolls Estates, Fairway Ridge and proposed Ridgeview subdivision traffic to insure the safety of the residents.

Sincerely,

Carolyn R Reeves

Carolyn R Reeves
carolynreeves@comcast.net

Carolyn R Reeves
880 Sand Pines Avenue
Sutherlin, OR 97479



August 22, 2023

Sutherlin City Hall
Sutherlin City Community Development & Planning Dept.
126 E. Central Avenue
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

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Please seriously consider requiring the developers provide an additional paved road for the ingress and egress of the Knolls Estates, Fairway Ridge and proposed Ridgeview subdivision traffic to insure the safety of the residents.

Sincerely,

Carolyn R Reeves

Carolyn R Reeves
carolynreeves@comcast.net

## Jamie Fugate

**From:** Bill Riley <riley112457@gmail.com>
**Sent:** Tuesday, August 22, 2023 5:33 PM
**To:** Jamie Fugate
**Subject:** Fwd:

**[EXTERNAL SOURCE - USE CAUTION]**

---------- Forwarded message ---------
From: **Bill Riley** <riley112457@gmail.com>
Date: Tue, Aug 22, 2023 at 5:23 PM
Subject: Fwd:
To: Sandy Riley <sdriley60@gmail.com>

---------- Forwarded message ---------
From: **Sandy Riley** <sdriley60@gmail.com>
Date: Tue, Aug 22, 2023 at 5:13 PM
Subject:
To: Bill Riley <riley112457@gmail.com>

August 23,2023

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision- 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in the Knolls Estates subdivision I am very concerned about the following: Has any studies been done to ensure Scardi Blvd can handle the added traffic? Has any studies been done about traffic from Scardi Blvd to Hwy 138? Has any studies been done from the I-5 Southbound exit onto Hwy 138 West? This should ALL be done before any development is approved.

We are already being asked to cut back on water usage. Does the City of Sutherlin have enough water for the additional 91 new homes? Will the City of Sutherlin wastewater treatment plant be able to process the additional influent?

I have too many concerns and unanswered questions. At this time I'm asking the City of Sutherlin to deny the application.

Several weeks ago Lucas Main Constuction started clearing/grubbing/stripping the 22+/- acres above Scardi Blvd. My concern is there isn't any form of dust or erosion control. Was a clearing permit issued for this work? Who from the City of Sutherlin is in charge of monitoring this work and enforcing the corrections required?

Monday, August 22, 2023 Lucas Main Construction was clearing/grubbing/stripping above my house as late as 3:30pm with a level 3 fire danger in effect. The City of Sutherlin and DFPA were notified. DFPA showed up to address the issue.

With the amount of ground cleared/grubbed/stripped who is responsible for erosion control and who from the city is going to enforce it?

Respectfully submitted:

Bill Riley Jr

———————————————

Signature

Bill "Butch" Riley

———————————————

Printed Name

719 Slazenger Ct Sutherlin

———————————————

Address

Riley112457@gmail.com

———————————————

Phone/Email

Jami, please reply letting me know you have received this email. As you know I am deeply concerned about the way this work is being done. No concerns for fire safety or erosion control, this would include the dust. I feel as if these guys "Lucas Main Construction" are working under no guide lines set period. Thank you for your time Butch Riley 503-969-7394

August 23,2023


Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

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Respectfully submitted:

Bill Riley Jr

Signature

Bill "Butch" Riley

Printed Name

719 SIAZENGER CT. Sutherlin

Address

Riley112452@gmail.com

503-969-7394

Phone/Email

126 E. Central Ave.
Sutherlin, OR 97479

RECEIVED 8/23/23

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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Respectfully submitted:

Danny Robinson

Signature

Danny Robinson

Printed Name

701 Slazenger Ct, Sutherlin

Address

(530) 588-1296 drobinson101@frontiernet.net

Phone/Email

August 23, 2023

RECEIVED 8/23/23 2:32P Tow

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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Respectfully submitted:

Sandra L. Rose
Signature

Sandra L. Rose
Printed Name

892 Sand Pines Ave.
Address

541-529-2913 SLRose2020gmail.com.
Phone/Email

Over – Additional Signatures

Signature

JAMES A. DAVENPORT
Printed Name

899 SAND PINES AVE
Address

541-554-9957 jim2imada@G-MAIL
Phone/Email

Signature

JOYCE & FRANK SCHUIERER
Printed Name

885 SAND PINES AVE
Address

808-634-7339
Phone/Email Joyce97479@gmail.com

Signature

JEAN FALLON
Printed Name

857 SAND PINES AVE
Address

541-643-1381 onfall@gmail.com
Phone/Email

Anna Davis
Signature

Anna Davis
Printed Name

821 Sand Pines Ave.
Address

541-580-7003 annvinciguerra@hotmail.com
Phone/Email

August 23, 2023


Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Signature Mary A. Nordeen

Printed Name Mary A. Nordeen

Address 2274 Eagle Loop Sutherlin, OR 97479

Phone/Email 541-802-1026

Over – Additional Signatures

Signature

JOHN R SAXBERG

Printed Name

2265 EAGLE LOOP

Address

541 459 7447

Phone/Email

Karol Saxberg

Signature

KAROL Saxberg

Printed Name

KAROL SAXBERG

Address

541-459-7447

Phone/Email

Signature

Printed Name

Address

Phone/Email

Signature

Printed Name

Address

Phone/Email

August 23, 2023


Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Signature Mary A. Nordeen

Printed Name Mary A. Nordeen

Address 2274 Eagle Loop Sutherlin, OR 97479

Phone/Email 541-802-1026

Over – Additional Signatures

Signature

JOHN R SAXBERG

Printed Name

2265 EAGLE LOOP

Address

541 459 7447

Phone/Email

Karol Saxberg

Signature

KAROL Saxberg

Printed Name

KAROL SAXBERG

Address

541-459-7447

Phone/Email

Signature

Printed Name

Address

Phone/Email

Signature

Printed Name

Address

Phone/Email

August 23, 2023

RECEIVED 8/23/23 9:52 am

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned.** This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Signature Milo Schauer

Printed Name MILO SCHAUER

Address 1958 CULVER LOOP
SUTHERLIN, OR. 97479

Phone/Email
(541) 580-7747

Over – Additional Signatures

August 23, 2023

RECEIVED
8/23/23
9:52 am

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Signature Milo Schauer

Printed Name MILO SCHAUER

Address 1958 CULVER LOOP
SUTHERLIN, OR. 97479

Phone/Email
(541) 580-7747

Over – Additional Signatures

Karen Schauer
Signature

KAREN SCHAUER
Printed Name

1958 CULVER LOOP - SUTHERLIN, OR. 97479
Address

541 580 7749
Phone/Email

Signature

Printed Name

Address

Phone/Email

Roland S Berry
Signature

ROLAND S. BERRY
Printed Name

1954 CULVER LOOP, SUTHERLIN, OR. 97479
Address

559-246-8811
Phone/Email

Diane L. Berry
Signature

DIANE L. BERRY
Printed Name

1954 Culver Loop, Sutherlin, Or. 97479
Address

559-240-3180
Phone/Email

August 23, 2023

RECEIVED 8/23/23 2:32 P BM

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Vicki Merrill
Signature

Vicki Merrill
Printed Name

1951 Scardi Blvd
Address

541-254-0927
Phone/Email

Over – Additional Signatures

Signature

Mark V. Covington

Printed Name

1967 Sand Pines Ave

Address

Phone/Email

Signature

Glenda J Schmidt

Printed Name

816 Sand Pines Ave

Address

Phone/Email

Signature

Richard Johnson

Printed Name

832 Sand Pines

Address

209-535-4071

Phone/Email

Signature

CAROLYN R. REEVES

Printed Name

880 SAND PINES AVE

Address

541-802-1051

Phone/Email

August 23, 2023

RECEIVED 8/23/23 2:32P Tow

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

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An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Sandra L. Rose
Signature

Sandra L. Rose
Printed Name

892 Sand Pines Ave.
Address

541-529-2913 SLRose2020gmail.com.
Phone/Email

Over – Additional Signatures

Signature

JAMES A. DAVENPORT
Printed Name

899 SAND PINES AVE
Address

541-554-9957 jim2imada@G-MAIL
Phone/Email

Signature

JOYCE & FRANK SCHUIERER
Printed Name

885 SAND PINES AVE
Address

808-634-7339
Phone/Email Joyce97479@gmail.com

Signature

JEAN FALLON
Printed Name

857 SAND PINES AVE
Address

541-643-1381 onfall@gmail.com
Phone/Email

Anna Davis
Signature

Anna Davis
Printed Name

821 Sand Pines Ave.
Address

541-580-7003 annvinciguerra@hotmail.com
Phone/Email

Austin and Alisha Slate
1700 Scardi Blvd.
Sutherlin, Oregon, 97479
slateaustin@outlook.com
702-910-5956
August 23, 2023


Kristi Gilbert, Jamie Fugate, Sutherlin Planning Commission Members
Sutherlin City Community Development & Planning Department
126 E. Central Ave.
Sutherlin, OR, 97479

Subject: Concerns Regarding Safety, Compliance, and Sustainability in Proposed Housing Development

Dear Kristi Gilbert, Jamie Fugate, and Sutherlin Planning Commission Members

I trust this letter finds you in good health. I am writing to express my heartfelt concerns regarding the upcoming housing development near our neighborhood. As a long-standing resident of Knolls Estates, I am deeply invested in the welfare of our community and wish to address several pressing issues surrounding the proposed development.

Foremost among my concerns is the matter of safety. They plan to have the new development share a single entrance and exit with our neighborhood and that raises significant safety risks. The potential traffic congestion and the increased volume of vehicles could create hazardous conditions for both current and future residents. Currently any emergency that arises including but not limited to wildfires, residential fires, flooding, snowstorms, pedestrian, or vehicle accidents on Dove Tail Lane would block residents in Knolls Estates, Fairway Ridge, and the proposed Ridgeview subdivision. The current gated emergency ingress and egress through private land does not reduce the risk unless it is available to residents to utilize in those situations where it is appropriate. I urge you to carefully consider the necessity of an additional permanent entrance and exit for residents of the new proposed subdivision. The increased traffic also poses the risk of vehicle and pedestrian accidents on State Highway 138 at Dove Tail. Additional housing, traffic and citizens also will require additional police and fire resources.

Beyond safety, I am also worried about the new development adhering to building codes, land improvement policies, and regulations. It is crucial that any construction in our city follows the established guidelines to ensure the structural integrity, aesthetics, and overall quality of the neighborhood. I kindly request that the city planning department thoroughly reviews the development plans to ensure full compliance with these standards.

Furthermore, the strain on our already limited water resources is a topic of significant concern. The impact of the proposed housing development on water supply should be assessed comprehensively to ensure that it does not exacerbate existing shortages. Sustainable water management practices must be an integral part of any new development to safeguard the well-being of all residents.

Lastly, I would like to address the type of housing within the new development. Given the character of our neighborhood, I strongly believe that only single-family homes should be permitted in the new development. Apartments, duplexes, trailer homes, or modular homes could alter the overall

ambiance of the area and potentially strain local infrastructure further. Upholding this standard would contribute to the continuity and harmony of our community.

I humbly request that you take these concerns to heart as you evaluate the proposed housing development. The decisions made today will shape the future of our community, and I trust that you will consider the best interests of all residents involved.

Thank you for your time and dedication to the well-being of our city. I look forward to a positive resolution that prioritizes safety, compliance, sustainability, and the preservation of our neighborhood's unique character.

Sincerely,

Austin Slate

August 23, 2023

RECEIVED 8-24-23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Signature

LISA STRICKLAND
Printed Name

536 ST. ANDREWS CT, SUTHERLIN
Address

541-643-5894
Phone/Email

August 23, 2023

RECEIVED 8-23-23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Knolls Estates subdivision adjacent to the Fairway Ridge subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Tom Strickland
Signature

TOM STRICKLAND
Printed Name

536 ST. ANDREWS CT. SUTHERLIN
Address

541-643-5893
Phone/Email

**SUTHERLIN FIRE**
*"SERVING OUR COMMUNITY WITH PRIDE"*

***Brandan McGarr***
**Division Chief**
**250 S. State Street**
**Sutherlin, OR 97479**
**Station: 541-459-1394**

RE: Ridgeview Subdivision

August 24, 2023

Dear Mrs. Fugate,

Below are Sutherlin Fire Departments Comments on the Ridgeview Subdivision. Please note that all requirements are subject to meeting the Oregon Fire Code (OFC) or relevant City of Sutherlin (COS) ordinances.

**Requirements:**

- Emergency access gates shall meet OFC Appendix D requirements on width, construction, etc.
- Sutherlin Fire Department keyed Knoxbox padlocks would be required for emergency access road gates. They can be purchased from www.knoxbox.com. OFC & COS ordinance.
- Emergency access road must be built to meet OFC requirements in Appendix D including widths, signs, load, etc.
- Hydrant spacing is required to follow OFC Appendix C for spacing requirements.
- Cul-de-sac and road widths are to follow OFC Appendix D.
- Cul-de-sac and road turning radius are to follow OFC Appendix D.
- Per OFC Appendix D, dead end streets will be required to have a fire apparatus turn-a-round for any dead-end road greater than 150'.

**Recommendations:**

- With prospective development, a second means of egress is recommended to be built out to Stearns Lane.
- A 30' fire break is recommended around the subdivision to protect the homes from wildfire. It is recommended that the HOA be required to maintain.
- During construction it is recommended to use fire resistant building materials (hardy plank siding, asphalt shingles, fire resistant vents, etc.).
- It is recommended that you do not place bark mulch around the first five feet around the foundations and decks/patios. Rock is a safer alternative for preventing fire spread.
- Fire resistant plants should be located near the home in place of fire prone vegetation.
- Fire apparatus turn-a-rounds or pullouts every 150-feet on the emergency access road.

Please advise if you have any questions. Thank you.

Sincerely,

Brandan McGarr
Division Chief / Emergency Manager
Sutherlin Fire Department

**Jamie Fugate**

---

**From:** Sara Thigpen <craftercat@gmail.com>
**Sent:** Monday, August 21, 2023 1:18 PM
**To:** Kristi Gilbert; Jamie Fugate
**Subject:** 23-S009 Goodfellas of Sutherlin SUBD

**[EXTERNAL SOURCE - USE CAUTION]**

Dear Planning Dept.

We have concerns regarding the proposed subdivision planned for the land North of Knolls Estates and East of Fairway Ridge. The 91 lots could easily bring 150 or more vehicles. The only entrance/exit will be on Dovetail at Hwy 138. This intersection is already a safety concern for the two existing subdivisions. Development is good, but only when infrastructure can sustain it. Reduced speed on that section of Hwy138 and a stoplight at the intersection of Hwy 138 and Dovetail should be contingent for approval of any land use application in this area.

We love living in Sutherlin. It is a great city. Please put the safety and wellbeing of its citizens over the eagerness for growth and development.

Sincerely,

Richard and Sara Thigpen
2082 Culver Loop
Sutherlin, Or. 97479
rthigpen123@gmail.com

RECEIVED 8-24-23

August 24, 2023

Sutherlin Community Development Department:

We are writing this letter for more informed information in regards to the application request of GOODFELLAS OF SUTHERLIN, LLC in their request for a Subdivision called Ridgeview Subdivision located off Scardi Blvd., Sutherlin, Oregon. We are homeowners in Knolls Estates Subdivision and live within 100 feet of the proposed subdivision.

Our concerns are as follows:

1. MOST IMPORTANT: Multi-Access additional full time road to be built into Knolls Estates Subdivision/Avery Subdivision/proposed Ridgeview Subdivision vs. Emergency Access.

2. What type of homes will be built in this subdivision? Stick built homes? Manufactured homes? Section 8 Homes? Homes in this current area are some of the highest tax paying homes in the city.

3. Traffic on Scardi Blvd/Dovetail? The proposed application says 91 homes. How will that affect traffic in the already almost 200 homes currently in this area?

We along with other homeowners in our subdivision are very concerned about the one and only access in and out of Dovetail/Scardi Blvd. The proposed emergency access gate which will be locked at both ends would only be accessible to emergency personnel not the residents who reside in these communities/subdivisions. Safety of all residents is our top priority!!

Jerry & Marcie Tilley
1724 Scardi Blvd.
Sutherlin, OR 97479
541-643-9743
541-643-7465

Marcie Tilley

August 23, 2023

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

RECEIVED 8/23/23 2:32 P

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Darlene Alberts
Signature

Darlene Alberts
Printed Name

829 Pebble Cr St
Address

541-217-9331
Phone/Email

darlenealberts21@gmail.com

Over – Additional Signatures

William Earl Wagner
Signature

William Earl Wagner
Printed Name

810 Durham AVE
Address

541-680-7217 williamearlwagner@yahoo.com
Phone/Email

Shirley D. Saeter
Signature

SHIRLEY D. SAETER
Printed Name

818 DURHAM AVE.
Address

(541) 315-2010
Phone/Email

Barbara K. Mansfield
Signature

Barbara K. Mansfield
Printed Name

854 Durham Ave Sutherlin OR 97479
Address

209 247 7456 mansfieldbkm@gmail.com
Phone/Email

Tammy Smith
Signature

Tammy Smith
Printed Name

815 Durham Ave
Address

916-812-3224 / Dantams98@aol.com
Phone/Email

August 23, 2023

RECEIVED 8/23/23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Carole L Wells
Signature

Carole L Wells
Printed Name

1827 Culver Loop
Address Sutherlin, OR

971-285-2741
Phone/Email

39cwells@gmail.com

August 18, 2023


City of Sutherlin
C/O Planning Department

Letter of concern, RE: File No. 23-S009
Goodfellows of Sutherlin

This is a letter of concern regarding the proposed property development along Scardi Blvd that will include the initial request for 91 lots (homes).

My main concern involves the high level of public safety that the city strives to maintain according to the City of Sutherlin mission statement. There is only one entrance (exit) to the Knolls Estates and Fairway Ridge communities. Development of an additional 27 lots (homes) is already under construction. The additional 91 lots (118 total homes) will create a considerable increase in traffic flow through the community and create pressure on the intersection of Hwy 138 and Dovetail. There have been recent fatal accidents at this intersection.

I have some serious concerns regarding public safety if there is not a plan to develop additional egress for entrance and exit to these communities. The EMS Road is not completely adequate because it can only be accessed during an emergency event. Please take this into consideration.

Best regards,

Terry R. Wells

Terry R Wells
1827 Culver Loop Sutherlin, OR 97479
Terrywells1@msn.com
503-805-9352

August 23, 2023

RECEIVED 8/23/23 2:32p

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

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An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

K Butcher
Signature

Karen Butcher
Printed Name

811 Pebble Crk St.
Address

541-530-7576 butcherkaren811@gmail.com
Phone/Email

Over – Additional Signatures

Warren Hanussak
Signature

Warren Hanussak
Printed Name

871 Sand Pines Ave.
Address

951 526 5136 warren.hanussak@vesers.com
Phone/Email

Lisa Werts
Signature

Lisa Werts
Printed Name

868 Sand Pines Ave
Address

970-608-9229 lwerts1@gmail.com
Phone/Email

Signature

Printed Name

Address

Phone/Email

Signature

Printed Name

Address

Phone/Email

RECEIVED 8/24/23

Aug. 21, 2023

To Whom It May Concern:

We are homeowners, having purchased our home seven years ago in Knolls Estates at 2068 Culver Loop. We are elderly and chose, possibly, our last home, because of it being a quiet, nice environment on the outskirts of Sutherlin, with less traffic and suitable living conditions, including nice well-built homes and surroundings.

As of now, our whole environment is being put in jeopardy; we have only one inlet and outlet road, which is Scardi Lane to accommodate an access to the existing homes. If the entrance to Knolls Estates (Dove Tail) is blocked by accidents, power outages or other emergencies, we cannot extricate ourselves.

Recently new additions have been enabled to start constructions on adjoining acreages, using and destroying our road-ways, belonging to the Knolls Estates homeowners, with numerous trucks and equipment. The most drastic is bull-dozers and heavy equipment leveling trees, brush and dirt making air and dust so intense, covering our homes and the inhabitants can't exist with it. It is a complete Health Hazard.

Another road opening should be obtained for all new housing, plus not use our water storage.

A permit should not be issued until the traffic for new construction is stopped.

Sincerely,

H. Lynn & Carlene Westbrook

559-901-7450

**Jamie Fugate**

---

| | |
|---|---|
| **From:** | Susanne Weston <dragonfly917@reagan.com> |
| **Sent:** | Friday, August 18, 2023 2:26 PM |
| **To:** | k.gibert@ci.sutherlin.or.us |
| **Cc:** | Jamie Fugate |
| **Subject:** | Planning Department File No. 23-8009 Subdivision - 0 SCARDI BLVD |

**[EXTERNAL SOURCE - USE CAUTION]**

My husband and I reside at 1901 Innsbrook Ct. and use Scardi Blvd./Dovetail Ln. exclusively for ingress and egress to and from our home. Having only one street to egress this area in case of an emergency is already somewhat of a problem. There is no way these streets could quickly empty homes in case of a large fire. Adding 91 homes, and their average vehicle count of 180 cars, to this single road access/egress is not safe. We have three vehicles and most of our neighbors do also, so a vehicle count of 180 is probably light. Adding construction equipment going in and out is already a problem, it will only get worse.

If the Goodfellas intend to build out all of their property, they should provide a paved street to Stearns now, so that this new subdivision has safe access out of the area, and consequently, so do homeowners in the surrounding subdivisions. Again, dumping all traffic onto a single two-lane street just does not make sense.

In looking at the subdivision schematics, it would appear that the lot sizes are one-half the size of the surrounding subdivisions. This is not a low-density subdivision when compared to surrounding areas and to the zoning (R-1) and (RH) within the Sutherlin Comprehensive Plan.

The subdivision to the south of Dovetail Lane, across OR-138, has multiple streets to egress the area; over five at least. That makes their traffic patterns less concentrated and provides easier emergency egress than funneling all traffic onto one street.

Having relatives in two fire areas in California, most of the deaths were people caught in their cars trying to escape. We may say "it can't happen here" and eat our words later. Better safe than sorry.

Again, please consider the traffic issue and density of this proposed subdivision.

Thank you,

Jerry & Susanne Weston
1901 Innsbrook Ct.
Sutherlin, OR 97479
541-679-2997

RECEIVED 8/23/23 JF

TO: Sutherlin Community Development Director + City Planners.

RE: Goodfellas of Sutherlin Ridgeview Subdivision

August 23, 2023

FROM: Don + Lynn Wilcox, Carol Kelley 1789 Culver Loop
# 408-930-7032 Sutherlin, OR

To whom it may concern,

We have received a copy of the proposed subdivision plan, File # 23-3009. Thank you for the opportunity to voice our concerns.

We understand + appreciate that growth is inevitable and necessary for the town of Sutherlin and we welcome a responsible, well designed development with sufficient infrastructure. Our primary concern is SAFETY!

The proposed inlet/outlet to Hwy 138 (with the added vehicles) will possibly create a serious, even deadly situation in the event of a disaster. We survived an ~~eerily~~ eerily similar situation in Paradise, CA on Nov. 8TH, 2018. 85 people lost their lives, many in cars trying to escape the flames but with one main road out of town they were not able.

In addition, the added cars will create a backlog exiting from Dovetail onto 138. My suggestion would be for every new road accessing Seadie/Dovetail there should be a new road (for public use) added to Stearns lane. Respectfully, Lynn Wilcox, Don Wilcox CAROL Kelley. Lynn Wilcox, Don Wilcox. Carol E. Kelley

August 23, 2023

RECEIVED
8/23/23
2:32P
BM

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
Re: Subdivision – 0 Scardi Blvd; Planning Department File No. 23-S009

As a community member living in Fairway Ridge subdivision adjacent to the Knolls Estate subdivision and potentially adjacent to the proposed aforementioned subdivision, I am **HIGHLY concerned**. This proposed addition of 91 homes to an area that already has approximately 235 homes will require residents to share only **ONE Entrance** and **Exit,** then safely navigate joining the **Highly Traveled** State Hwy 138.

I understand growth is good, but surely as per Sutherlin Planning Codes are written, **Safety** for community residents is one of the conditions for any growth considerations. With this in mind, surely the Planning Commission and Administrative Personnel must see that the addition of more homes would require newly established safe **Entrance** and **Exit** be conditions for approval.

An Emergency "gated road" to be used by police and fire personnel does not provide additional ingress and egress for the subdivisions. Residents will still be restricted to one available option for entrance and exit.

Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Nancy Adair Weatherspoon
Signature

Nancy Adair Weatherspoon
Printed Name

739 Pebble Creek
Address

360-378-7556
Phone/Email

Over – Additional Signatures

Signature

Brooks Smallwood
Printed Name

870 Medina Ave.
Address

(985) 710-2480
Phone/Email

Signature

Printed Name

Address

Phone/Email

Signature

Michael Williams
Printed Name

863 Medina
Address

775-233-2455
Phone/Email

Signature

Stanley C. Nickel
Printed Name

806 Sand Piper Ave
Address

949-257-9172 snickelcuhs@yahoo.com
Phone/Email

August 23, 2023

RECEIVED 8/24/23

Sutherlin City Hall
c/o: Sutherlin City Community Development & Planning Dept.
126 E. Central Ave.
Sutherlin, OR 97479

To: Kristi Gilbert, Community Development Director
Jamie Fugate, City Planner
Sutherlin Planning Commission Members

Letter of Comment
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Please give **SERIOUS** consideration to denying the Proposed Request until such time as an approved second Paved Road for **Entrance** and **Exit** is required as a provision for the construction of the proposed 91 homes.

Respectfully submitted:

Caron R Wilson-Taylor
Signature

Caron R Wilson-Taylor
Printed Name

2077 Culver Loop, Sutherlin
Address

714-401-2646
Phone/Email


Brandy & Dan Wright
2289 Eagle Loop
Sutherlin OR 97479
541-802-6315
541-802-6314
8/23/2023

Sutherlin Community Development Director
126 E. Central Ave
Sutherlin Or 97479

I'm writing to Sutherlin Community Development Director:

Regarding Subdivision – 0 Scardi Blvd

We have leaved in the Knolls estate for the past 6 years

The construction of 91 new homes in an area with 161+ existing homes with one access road is of concern to me. We have already seen people speeding down Dovetail/Scardi road and many mailboxes and fences have been destroyed. Highway 138 had many fenders bender turning onto Dovetail Ln, resulting in one fatal accident because drivers were in too much of a hurry and did not want to wait for a turning vehicle. Our relative stayed with us this summer, and they commented on the danger it is to merge from Eagle Loop (lower loop road) onto Dovetail Road, they had a car almost hit them when turning on to Dovetail. It is difficult to see anyone coming until it is too late due to the steep hill on Dovetail/Scardi.

The one main road out of the Knolls Estates was blocked for hours following the fatal accident, making it impossible for people to come or go, which I consider to be extremely dangerous. The new construction with Ford's Pond will only result in an increase in traffic on Highway 138.

We need more than one access road from the Knolls estate, speed bumps on Dovetail/Scardi with stop lights at the bottom, and a lower speed limit on Highway 138 between Recreation Lane and SW Church Road. As a result, congestion on Dovetail/Scardi will be reduced, and traffic will be slowed down on Highway 138, enabling traffic to merge safely onto Highway 138.

Even though I do not oppose the construction of more homes or the creation of new recreational opportunities at Fords Pond, I want you to be aware of how unsafe it already is without the additional traffic on Dovetail/Scardi and Highway 138.

Sincerely,
Brandy & Dan Wright

**23 August, 2023 at 11:57:34 PM +00:00**

## To: Community Development

**City of Sutherlin**
**Fax #: +1 (541) 459-9363**

## From: Brandy Wright

**brandy@wrightwaybusinessservices.com (IP: 47.5.242.214)**
**Phone #: +1 (541) 802-6315**

---

Written Statement in regards to the Subdivision - 0 Scardi Blvd

Brandy Wright
541-802-6315
Bwright5710@gmail.com

---

STAFF EXHIBIT NO. 5

# CITY OF SUTHERLIN
# SUBDIVISION APPLICATION

**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

**FILE NO.** 23-S009 **DATE FILED:** 7-28-2023

**FEE: $1000.00 plus $30.00 per unit over 100 + Legal Fees (Non-refundable)**

---

**THE UNDERSIGNED OWNER(S) OR AUTHORIZED AGENT(S) HEREBY SUBMIT A SUBDIVISION APPLICATION TO THE CITY OF SUTHERLIN**

## 1. APPLICATION INFORMATION

APPLICANT:

Name(s): Goodfellas of Sutherlin

Address(s): 2985 NW 144th Ave, Beaverton, OR 97006

Phone(s): 541.660.3661 Email: N/A

TITLEHOLDER OF SUBJECT PROPERTY:

Name(s): Goodfellas of Sutherlin

Address: 2985 NW 144th Ave, Beaverton, OR 97006

Phone(s): 541.660.3661 Email: N/A

AUTHORIZED AGENT(s):

Name(s): i.e. Engineering

Address: 809 SE Pine St, Roseburg, OR 97470

Phone(s): 541.673.0166 Email: palm@ieengineering.com

## 2. PROPERTY DESCRIPTION

A. T 25 R 05 Sec 7, 18 Tax Lot(s) 1500, 203, 100

B. Property No. ID(s): R20392, R138405, R21680

C. Present Size of Parcel: 193.11 acres +/-

C. Total land area involved in the Subdivision request ACRES: 22 +/- SQ FT: 942,270 +/-

**City of Sutherlin**
**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

## 3. EXISTING AND ANTICIPATED USE INFORMATION

A. Current Use: Unimproved - Vacant

B. City Zoning: R1 (Please note the entire proposed subdivision is on R1 Zone property)

C. Comprehensive Plan: Residential

D. Anticipated Use: 91 Lot Subdivision

E. Will there be a HOA (Home Owners Assoc.): _____YES __x__NO

F. Is it anticipated that structures will be removed/demolished from the property?
____YES __x__NO if yes, a separate application for demolition is required.

G. Are any historic structures or historically significant features on the subject property?
____YES __x__NO If yes, describe any impacts to such features.

H. What is the minimum lot size proposed 7,000 SQ FT
What is the maximum lot size proposed 10,210 +/- SQ FT

I. What is the anticipated time for development? Development will start immediately and be completed as soon as possible. Looking for completion by the end of 2024.

J. Will this development be in phases? __x__YES _____ NO If yes, number and timeline of additional phase completion 3-Phases - 6 months for each Phase. Phase 1- 38 Lots; Phase 2- 34 Lots; Phase 3 - 19 Lots

K. Name of the proposed Subdivision (NO DUPLICATE NAMES ALLOWED IN DOUGLAS COUNTY) Ridgeview Subdivision

L. All proposed street names Jordan St, Nicholas Ave, Lincoln Ave, Reed St, and Miles Ct

## 4. REQUIRED ATTACHMENTS (Please submit all tentative plans/plats electronically)

A. General Information:
1. Name of Subdivision (not required for partitions). This name must not duplicate the name of another subdivision in the county in which it is located (please check with county surveyor);
2. Date, North arrow, and scale of drawing;
3. Location of the development sufficient to define its location in the city, boundaries, and a legal description of the site;
4. Names, addresses and phone numbers of the owners, project designer, engineer(s), and or surveyor, and the date of the survey; and
5. Identification of the drawing as a "tentative plan."

B. Site Analysis:
1. Streets: Location, name, present width of all existing streets, alleys and rights-of-way on and

**City of Sutherlin**
**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

B. Site Analysis:

1. Streets: Location, name, present width of all existing streets, alleys and rights-of-way on and abutting the site;
2. Easements: Width, location and purpose of all existing easements of record on and abutting the site;
3. Utilities: Location and identity of all existing utilities on and abutting the site. If water mains and sewers are not on or abutting the site, indicate the direction and distance to the nearest ones;
4. Ground elevations shown by contour lines at five (5) foot vertical intervals for ground slopes exceeding ten (10) percent and at two (2) foot intervals for ground slopes of less than ten (10) percent. Such ground elevations shall be related to some established benchmark or other datum approved by the county surveyor;
5. The location and elevation of the closest benchmark(s) within or adjacent to the site (i.e., for surveying purposes);
6. Potential natural hazard areas, including any flood plains, areas subject to high water table, landslide areas, and areas having a high erosion potential;
7. Wetland and floodplain, including wetland areas, streams, wildlife habitat, and other areas identified by the city or natural resource regulatory agencies as requiring protection;
8. Site features, including existing structures, pavement, areas having unique views, drainage ways, and ditches;
9. Designated historic and cultural resources on the site and adjacent parcels or lots; and
10. The location, size and species of existing trees having a caliper (diameter) of twelve (12) inches or greater at four (4) feet above grade.

C. Proposed Improvements:

1. Proposed public and private streets, tracts, driveways, open space and park land; location, names, right-of-way dimensions, approximate radius of street curves; and approximate finished street center line grades. All streets and tracts which are being held for private use and all reservations and restrictions relating to such private tracts shall be identified;
2. Location, width and purpose of all proposed easements and dedications;
3. Lots and private tracts (e.g., private open space, common area, or street): approximate dimensions, area calculation (e.g., in square feet), and identification numbers for all lots and tracts;
4. Proposed uses of the property, including all proposed common areas or improvements, areas proposed to be dedicated to the public or reserved as open space for the purpose of surface water management, recreation, or other use;
5. Proposed improvements, as required by chapter 3 of the Sutherlin Development Code, Design Standards, and timing of improvements (e.g., in the case of streets, sidewalks, street trees, utilities, etc.);
6. The proposed source of domestic water;
7. The proposed method of sewage disposal, and method of surface water drainage and treatment if required;
8. The approximate location and identity of other utilities, including the locations of street lighting fixtures;
9. Proposed railroad crossing or modifications to an existing crossing, if any, and evidence of contact with Oregon Department of Transportation (ODOT) related to proposed railroad crossing(s);
10. Proposed changes to navigable streams, or other water courses. Provision or closure of public access to these areas shall be shown on the tentative plan, as applicable;

**City of Sutherlin**
**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

11. Identification of the base flood elevation, if applicable to the site;
12. Grading plan, if site is larger than five (5) acres;
13. Evidence of contact with ODOT for any development requiring access to a highway under the state's jurisdiction; and
14. Evidence of contact with the applicable natural resource regulatory agency(ies) for any development within or adjacent to jurisdictional wetlands.
15. Include an impact study for all land division applications proposing ten (10) or more residential lots, and for all site plan applications proposing ten thousand (10,000) square feet or more site area. The impact study shall:
    (1) Quantify/assess the effect of the development on public facilities and services;
    (2) Address, at a minimum, the transportation system, including pedestrian ways and bikeways, the drainage system, the parks system, the water system, the sewer system, and the noise impacts of the development; and
    (3) For each public facility system and type of impact, the study shall propose improvements necessary to meet city standards and to minimize the impact of the development on the public at large, public facilities systems, and affected private property users.

D. Future Re-division Plan: When subdividing or partitioning tracts into large lots (i.e. greater than two times or two hundred (200) percent the minimum lot size allowed by the underlying zoning district), re-division plan showing:
1. Potential future lot division(s) addressing the housing and density standards of chapter 2 of Sutherlin Development Code;
2. Potential street right-of-way alignments to serve future development of the property and connect to adjacent properties, including existing or planned rights-of-way; and
3. A disclaimer that the re-division plan is a conceptual plan intended to show potential future development. It shall not be binding on the city or property owners, except as may be required through conditions of land division approval. For example, dedication and improvement of rights-of-way within the future plan area may be required to provide needed secondary access and circulation.

**THIS AREA LEFT BLANK INTENTIONALLY**
**SIGNATURES NEXT PAGE**

**City of Sutherlin**
**Community Development**
126 E. Central Avenue
Sutherlin, OR 97479
(541) 459-2856

## 5. SIGNATURES

I hereby apply for a Subdivision as requested on this form and certify that the attachments are complete and correct. (Any and all engineering cost incurred by the City of Sutherlin associated with this application shall be the responsibility of the applicant.) **Attach sheet if additional signatures are required.**

_____ 7/26/23
**Applicant Signature** **DATE**

**Printed Name:** Lacos Main
**OWNER** ✓ **AGENT** _____ **OPTION HOLDER** _____ **CONTRACT BUYER** _____

_____ _____
**Applicant Signature** **DATE**

**Printed Name:** _____
**OWNER** _____ **AGENT** _____ **OPTION HOLDER** _____ **CONTRACT BUYER** _____

_____ _____
**Applicant Signature** **DATE**

**Printed Name:** _____
**OWNER** _____ **AGENT** _____ **OPTION HOLDER** _____ **CONTRACT BUYER** _____

_____ _____
**Applicant Signature** **DATE**

**Printed Name:** _____
**OWNER** _____ **AGENT** _____ **OPTION HOLDER** _____ **CONTRACT BUYER** _____

Any other owner or option holder or buyer who does not sign this application shall provide a signed statement providing their authorization for submission of the subdivision request.

## COMPLETENESS CHECK

The Community Development Director shall check an application for completeness as per Development Code, Section 4.2.160.E.3 The Community Development Director shall notify the applicant of any missing materials within 30 days of receiving the application. If the application was complete with first submitted or the applicant submits the requested additional information within one hundred, eighty (180) days of the date the application was first submitted, approval or denial of the application shall be based upon the standards and criteria that were applicable at the time the application was first submitted.

Submittal of payment for an application does not classify an application as complete. The Community Development Director will contact the applicant on the status of the application within the 30 days allowed to determine if the application is complete.

This application has been inspected by me and found to be sufficiently complete to initiate the review process.

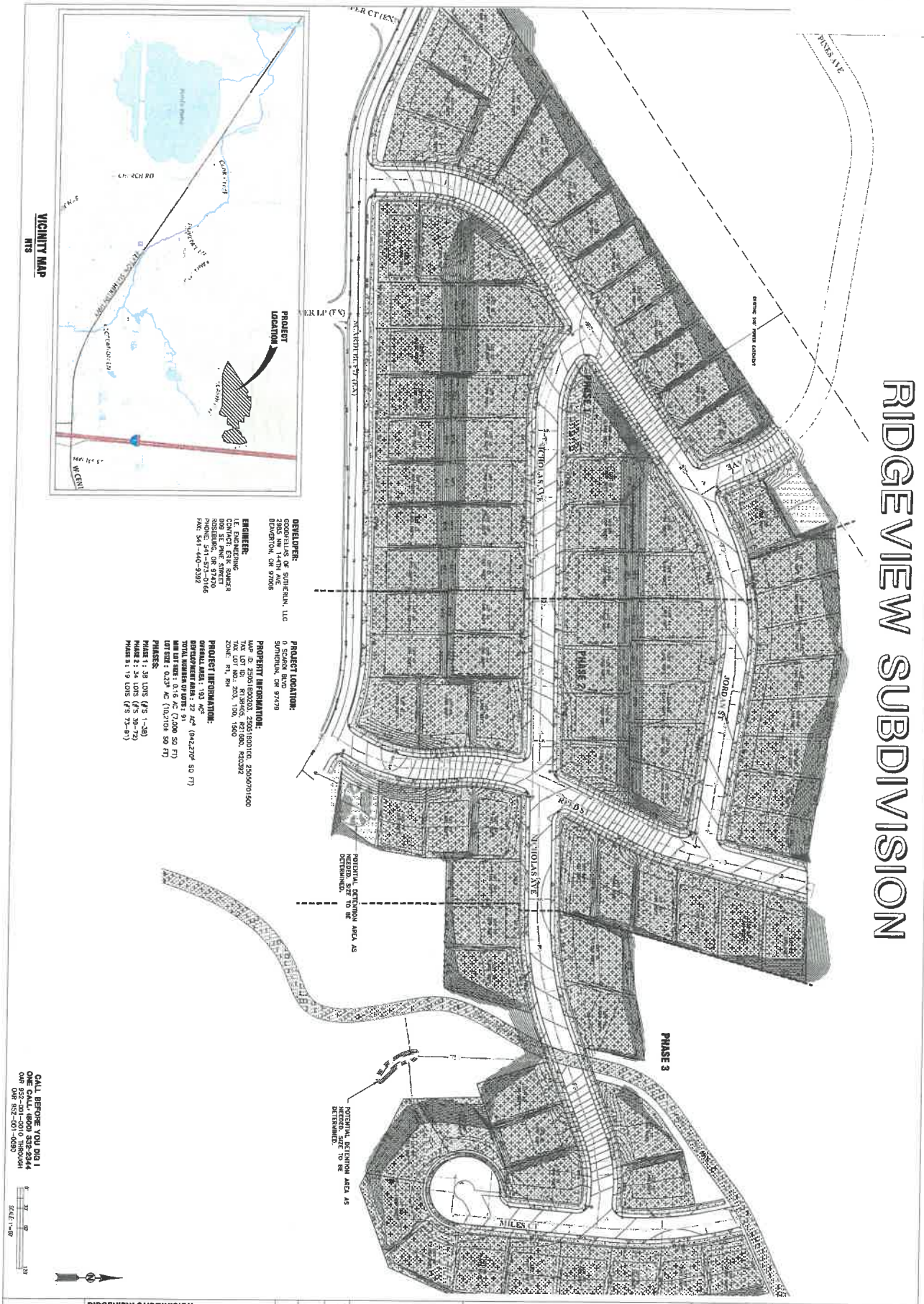
Planner: JF

Fee Receipt No: 58798

Date: 8-8-2023

**23-S009**

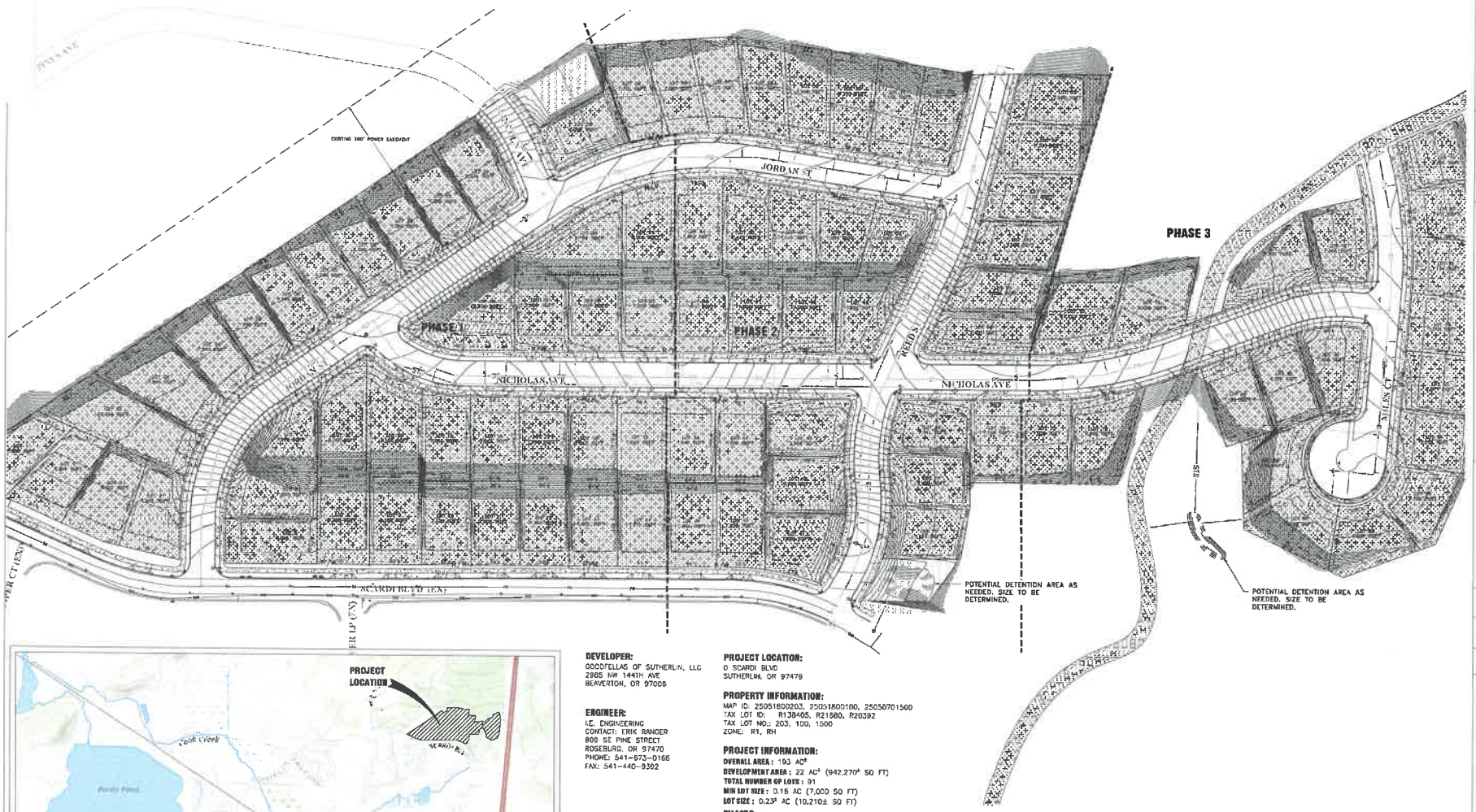
**APPLICANT'S EXHIBIT**

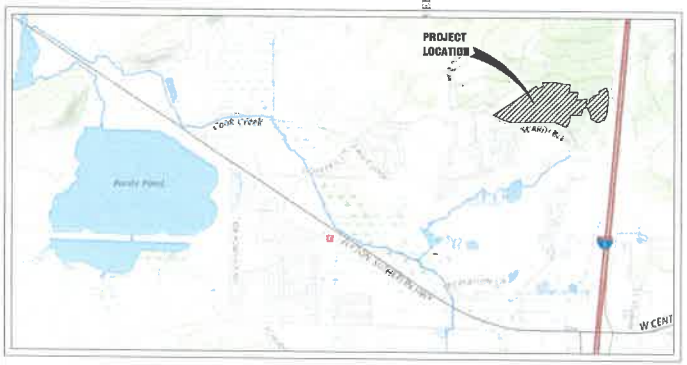


APPLICANT'S EXHIBIT

23-S009

# RIDGEVIEW SUBDIVISION




**VICINITY MAP**
NTS

**DEVELOPER:**
GOODFELLAS OF SUTHERLIN, LLC
2965 NW 144TH AVE
BEAVERTON, OR 97006

**ENGINEER:**
I.E. ENGINEERING
CONTACT: ERIK RANGER
809 SE PINE STREET
ROSEBURG, OR 97470
PHONE: 541-673-0166
FAX: 541-440-9362

**PROJECT LOCATION:**
0 SCARDI BLVD
SUTHERLIN, OR 97479

**PROPERTY INFORMATION:**
MAP ID: 25051800203, 25051800100, 25050701500
TAX LOT ID: R138405, R21580, R20392
TAX LOT NO.: 203, 100, 1500
ZONE: R1, RH

**PROJECT INFORMATION:**
**OVERALL AREA :** 193 AC±
**DEVELOPMENT AREA :** 22 AC± (942,270± SQ FT)
**TOTAL NUMBER OF LOTS :** 91
**MIN LOT SIZE :** 0.15 AC (7,000 SQ FT)
**LOT SIZE :** 0.23± AC (10,210± SQ FT)

**PHASES:**
**PHASE 1 :** 38 LOTS (#'S 1-38)
**PHASE 2 :** 34 LOTS (#'S 39-72)
**PHASE 3 :** 19 LOTS (#'S 73-91)

CALL BEFORE YOU DIG !
ONE CALL: (800) 332-2344
OAR 952-001-0010 THROUGH
OAR 952-001-0090

SCALE: 1"=60'

civil
structural
surveying
architecture
planning

ie

registered professional engineer
OREGON
JULY 10, 2007
E. D. RANGER

PRELIMINARY

EXPIRES: 12/31/2024

| Rev. | Date | Dwn | Description |
|---|---|---|---|
| | | | |

RIDGEVIEW SUBDIVISION

OVERALL PLAN & VICINITY
SCALE: AS SHOWN
JULY 5, 2023
ISSUE: PRELIMINARY SET

PROJECT NO. 23-S009
DSN: AW
CHK: ER

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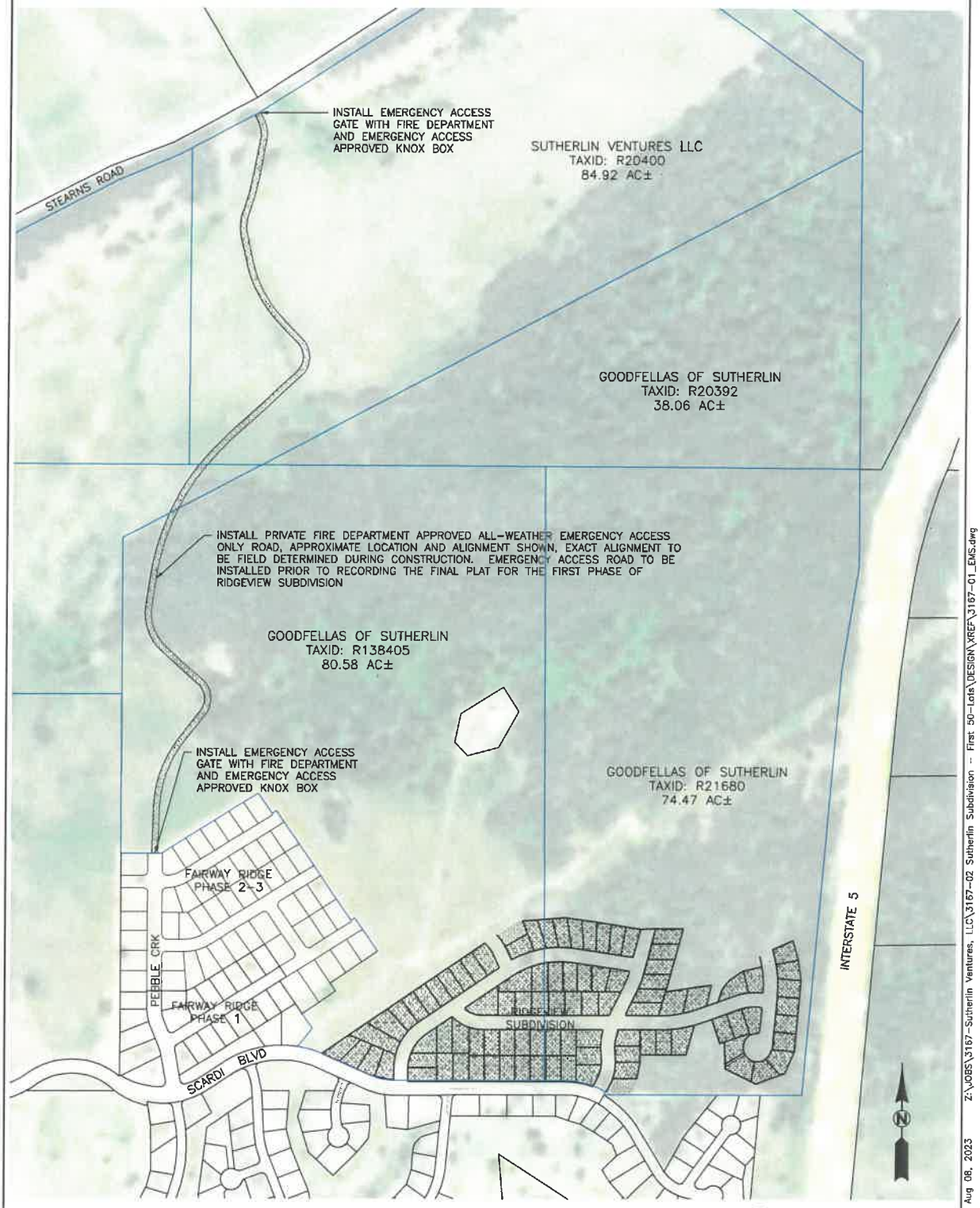
APPLICANT'S EXHIBIT

# RIDGEVIEW SUBDIVISION PRELIMINARY EMS ACCESS EXHIBIT




0' 200' 400' 800'

SCALE: 1:400

ie
809 SE Pine Street
Roseburg, Oregon 97470
PHONE (541) 673-0166
FAX (541) 440-9392

PROJECT NO. 3167-02
DWG BY: KLW

Aug 08, 2023 Kristiw Z:\JOBS\3167-Sutherlin Ventures, LLC\3167-02 Sutherlin Subdivision -- First 50-Lots\DESIGN\XREF\3167-01_EMS.dwg

**MEMORANDUM**

| | |
|---|---|
| DATE: | August 21, 2023 |
| TO: | Lewis Main Construction |
| FROM: | Hailey Gilliland, Project Biologist |
| PROJECT NO: | 75489.000 |
| RE: | Ridgeview Subdivision Wetland Delineation Memo |

PBS Engineering and Environmental (PBS) was contracted by Lucas Main Construction to conduct a wetland delineation in preparation for a future residential subdivision. The 9.19-acre study area is located in Sutherlin, Oregon (Attachment A, Figure 1) and is identified as tax lot 100 (partial) on Douglas County Assessor map 25 5 18[1]. PBS' fieldwork and reporting was conducted by Hailey Gilliland, Wetland Scientist and Brian Beiger, Professional Wetland Scientist.

## METHODS

The field study was conducted on August 8, 2023. The method used for conducting the delineation followed the routine approach of the U.S. Army Corps of Engineers (USACE) *Wetlands Delineation Manual* [2] and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* [3]. Soils, vegetation, and indicators of hydrology were recorded at two sample plot locations on standard wetland determination data forms (Attachment C). Wetland plant ratings were assigned based on the *2020 National Wetland Plant List* [4]. Plot locations were chosen to document areas of relatively low topography and changes in vegetation. No modification of the standard wetland boundary determination methodology was necessary during the delineation.

## LANDSCAPE SETTING

The study area lies in the Klamath Mountains – Umpqua Interior Foothills ecoregion. This ecoregion is characterized by foothills and narrow valleys containing fluvial terraces and floodplains[5]. According to the 2015 Oregon Department of Geology and Mineral Industries (DOGAMI) Oregon Lidar: Upper Umpqua, the study area elevations range from approximately 517 to 598 feet NAVD88[6]. Topography generally slopes south toward Scardi

[1] ORMAP. 2023. The Oregon Map tax map database and viewer. Available online at http://www.ormap.net. Accessed August 21, 2023.

[2] Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual.* Technical Report Y-87-1. U.S. Department of the Army, Corps of Engineers, Waterways Experiment Station, Vicksburg, Mississippi.

[3] U.S. Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0).* ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-10-3. Vicksburg, MS. U.S. Army Corps of Engineer Research and Development Center.

[4] U.S. Army Corps of Engineers. 2020. National Wetland Plant List, version 3.5. U.S. Army Corps of Engineers. Engineer Research and Development Center. Cold Regions Research and Engineering Laboratory, Hanover, NH. Available online at http://wetland-plants.usace.army.mil. Accessed August 21, 2023

[5] USGS. 2023. Ecoregions of Western Washington and Oregon. Map. 1:1,350,000. Washington, D.C.: Department of the Interior. Available online at: https://www.epa.gov/eco-research/ecoregion-download-files-state-region-10#pane-35. Accessed August 21, 2023.

[6] DOGAMI. 2015. Oregon Department of Geology and Mineral Industries (DOGAMI) Oregon Lidar: Upper Umpqua. Salem, Oregon.

Boulevard. Intermittent streams exist in the central and eastern portions of the study area running north to south. The study area is currently vacant and generally lacks land use activities. Construction for a multifamily residential development is underway immediately west of the study area on tax lot 203, Scardi Blvd borders the site to the south, and rural undeveloped lands board to the north and west.

## DEVIATION FROM SWI

The Statewide Wetlands Inventory[7] depicts the National Wetlands Inventory (NWI)[8] and National Hydrology Dataset (NHD)[9] mapping (Attachment A, Figure 2). The SWI shows an NWI polygon in the eastern portion of the study area representing an intermittent stream. This polygon was not confirmed in the field, but likely corresponds to Intermittent Stream 2 found in the eastern portion of the study area. The NHD maps two intermittent streams in the study area. These two streams were confirmed, and the boundaries generally correspond with the streams identified in the field.

## DESCRIPTION OF ALL WETLANDS / WATERS

One wetland and two intermittent streams were identified in the study area (Attachment A, Figure 3).

### Wetland A

Wetland A (0.04 ac.) was identified in the central portion of the study area in close proximity to Intermittent Stream 1. The wetland is located within a sloping depression that drains to the south. The upland edge of the wetland generally sits approximately 6 inches higher than the wetland boundary. Soils within the wetland exhibited hydric soil indicators. In terms of plant communities, the wetland was dominated by pennyroyal (*Mentha pulegium*, OBL) lesser poverty rush (*Juncus tenuis*, FAC), and seep monkey flower (*Mimulus guttatus*, OBL). This wetland is apparently supported by direct precipitation, overland and subsurface water movement. Indicators of flooding from Intermittent Stream 1 were not identified in the field. The Cowardin classification[10] of Wetland A is palustrine, emergent, persistent, seasonally saturated and the hydrogeomorphic classification[11] is slope.

### Intermittent Stream 1

Intermittent Stream 1 (0.02 ac) flows south through the study area (Attachment A, Figure 3). The OHWM/L on this creek is clearly visible owing to its stream banks. The Cowardin classification [10] of the creek is riverine, intermittent, unconsolidated bottom, semi-permanently flooded, and the hydrogeomorphic classification [11] is riverine flow-through. OHWM/L Indicators observed in the field included: rapid changes in elevation, changes in vegetation patterns, erosion and deposition patterns, wracking, and scour lines.

The stream originates in the northern portion of the study area. The stream appears to originate at a topographic high point where precipitation and overland flow are sufficient enough that an identifiable channel is created. No OHWM/L was observed upstream of the mapped stream.

---

[7] DSL. 2023. Statewide Wetlands Inventory. Available online at https://maps.dsl.state.or.us/swi/. Accessed August 21, 2023.
[8] USFWS. 2023. U.S. Fish and Wildlife Service. Publication date 1977 to present. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Available at https://www.fws.gov/wetlands/data/Mapper.html. Accessed August 21, 2023.
[9] USGS. 2023b. National Hydrology Dataset. Washington, D.C.: Department of the Interior. Accessed August 21, 2023.
[10] Cowardin, L. M., C. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. FWS/OBS-78/31. U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services, Washington, D.C.
[11] Adamus, P.R. and D. Field. 2001. Guidebook for Hydrogeomorphic (HGM)-based Assess. of Oregon Wetland and Riparian Sites. I. Willamette Valley Ecoregion, Riverine Impounding and Slope/Flats Subclasses. Vol. IA: Assess. Methods. Oregon Div. of State Lands, Salem, OR.

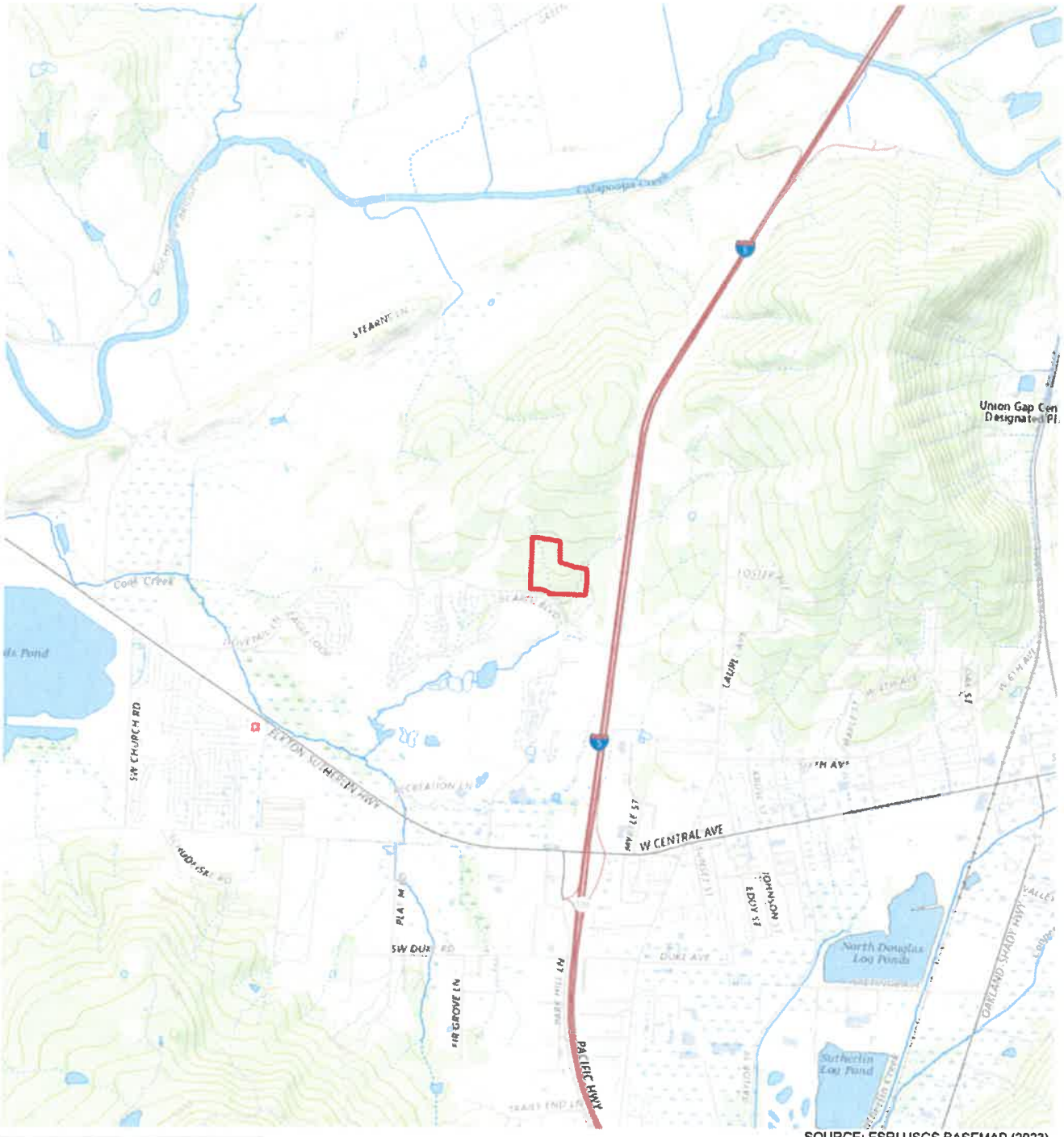
**Intermittent Stream 2**

Intermittent Stream 2 (0.03 ac) flows south through the study area (Attachment A, Figure 3). The OHWM/L on this creek is clearly visible owing to its near vertical stream banks. The Cowardin classification [10] of the creek is riverine, intermittent, unconsolidated bottom, semi-permanently flooded, and the hydrogeomorphic classification[11] is riverine flow-through. OHWM/L Indicators observed in the field included: rapid changes in elevation, changes in vegetation patterns, erosion and deposition patterns, wracking, and scour lines. Intermittent stream 2 originates offsite to the north. In general, the stream banks are more defined than Intermittent Stream 1.

Attachment A: *Figures*
Attachment B: *Ground Level Photographs*
Attachment C: *Wetland Determination Data Forms*

# ATTACHMENT A

**Figures**




Legend

Study Area, 9.19 ac.

SCALE: 1" = 2,000'

0' 1,000' 2,000' 4,000'

PREPARED FOR: LUCAS MAIN CONSTRUCTION.

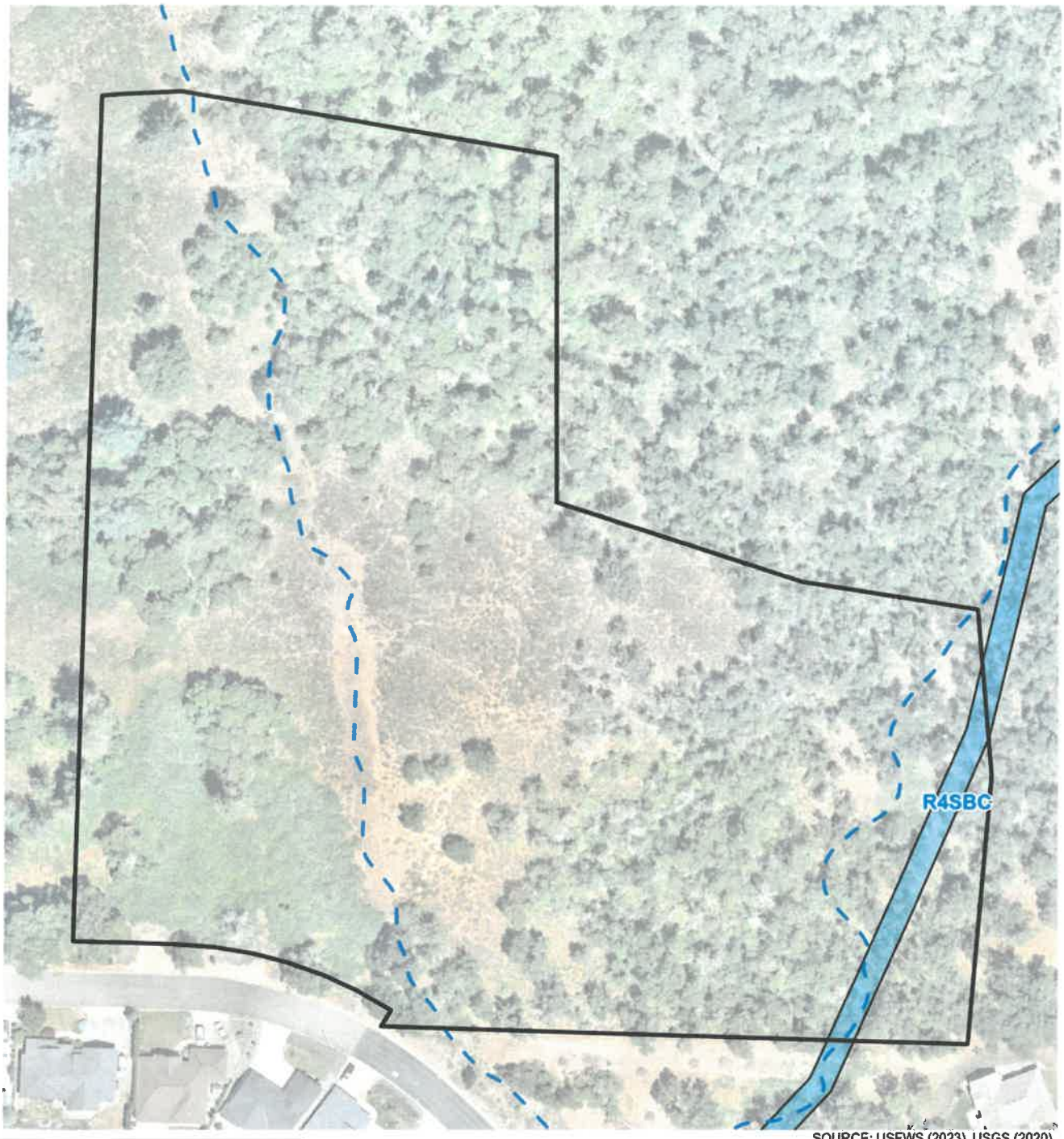
# LOCATION MAP

RIDGEVIEW SUBDIVISON WETLAND DELINEATION
SUTHERLIN, DOUGLAS COUNTY, OREGON

AUG 2023
75489.000

FIGURE
1

Filename: L:\Projects\75000\75400-75499\75489\Mapping\APRX\Ridgeview_Subdivision_Wetland_Delineation\Ridgeview_Subdivision_Wetland_Delineation.aprx Plot Date/Time: 8/9/2023 2:37 PM




SOURCE: USFWS (2023), USGS (2020).

Legend

- NHD Intermittent Stream
- NWI Polygons
- Study Area, 9.19 ac.

**NWI Mapping Within Study Area**

R4SBC - Riverine, intermittent, streambed, seasonally flooded

SCALE: 1" = 120'

0' 60' 120' 240'

PREPARED FOR: LUCAS MAIN CONSTRUCTION.

PBS

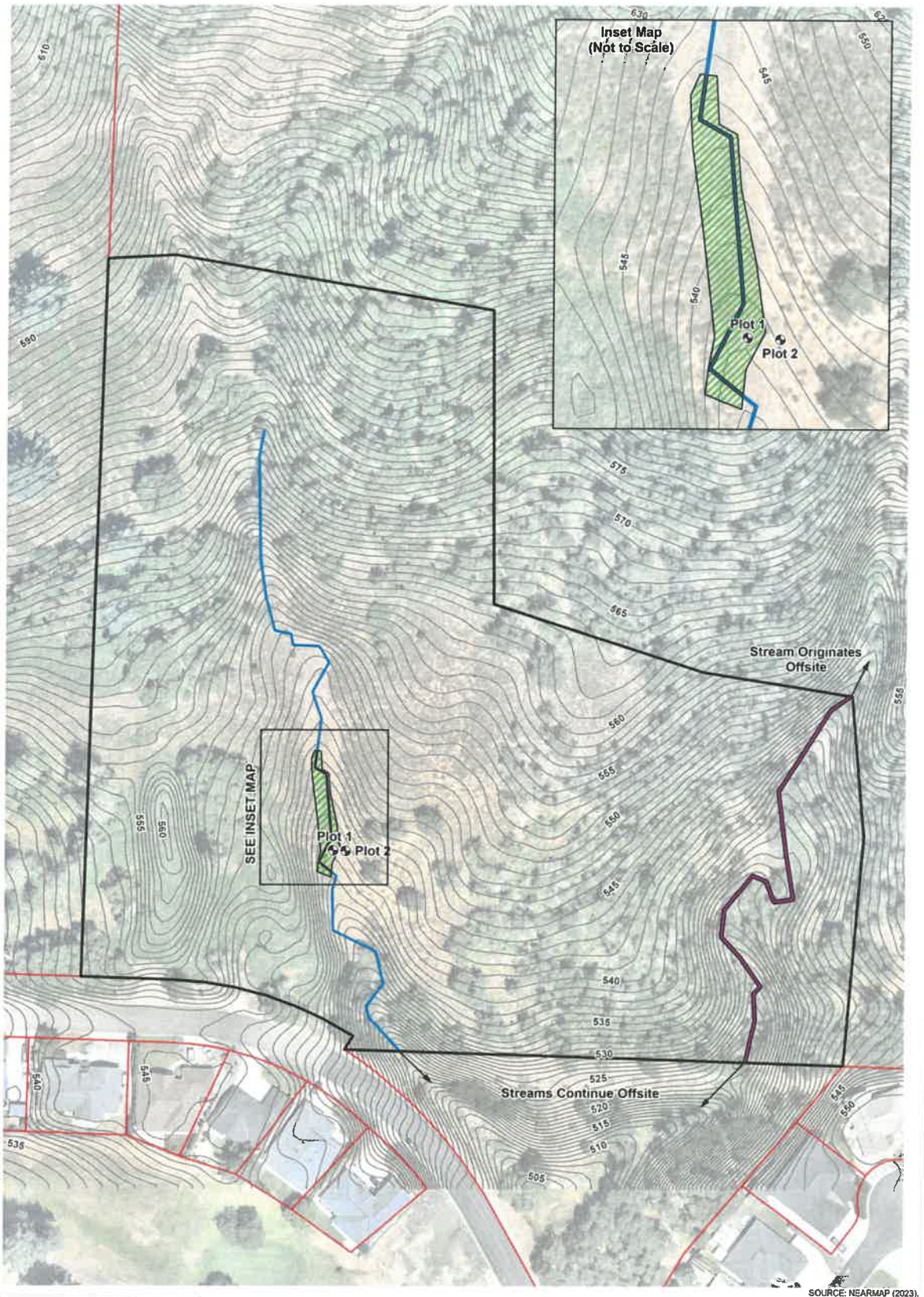
# STATEWIDE WETLANDS INVENTORY MAP

RIDGEVIEW SUBDIVISON WETLAND DELINEATION
SUTHERLIN, DOUGLAS COUNTY, OREGON

AUG 2023
75489.000

FIGURE
2

Filename: L:\Projects\75000\75400-75499\75489\Mapping\APRX\Ridgeview_Subdivision_Wetland_Delineation\Ridgeview_Subdivision_Wetland_Delineation.aprx Plot Date/Time: 8/9/2023 2:36 PM




Legend

- Plots
- Study Area, 9.19 ac.
- Wetland A, 0.04 ac.
- Intermittent Stream 1, 0.02 ac.
- Intermittent Stream 2, 0.03 ac.
- Tax Lots

Sample plots, wetland boundaries, and photo points were mapped using a Trimble DA2 handheld GPS unit. All features collected achieved submeter accuracy after post-processing. Study area boundaries based on tax lot boundaries and aerial photo interpretation (+/-1 m est. accuracy).

SCALE: 1" = 90'

0' 45' 90' 180'

PREPARED FOR: LUCAS MAIN CONSTRUCTION.

PBS

# WETLAND DELINEATION MAP

RIDGEVIEW SUBDIVISON WETLAND DELINEATION
SUTHERLIN, DOUGLAS COUNTY, OREGON

AUG 2023
75489.000
FIGURE
3

Filename: L:\Projects\75000\75400-75499\75489\Mapping\MXD\Ridgeview_Subdivision_Wetland_Delineation\Ridgeview_Subdivision_Wetland_Delineation.aprx Plot Date/Time: 8/9/2023 2:38 PM

# ATTACHMENT B

## Ground Level Photographs

Photo 1. Typical stream characteristics of Intermittent Stream 1.

Photo 2. Large swale where Intermittent Stream 1 is located.

Photo 3. Wetland A is located in the foreground and the upland boundary is in the background.

Photo 4. Typical characteristics of the northern portion of Intermittent Stream 2.

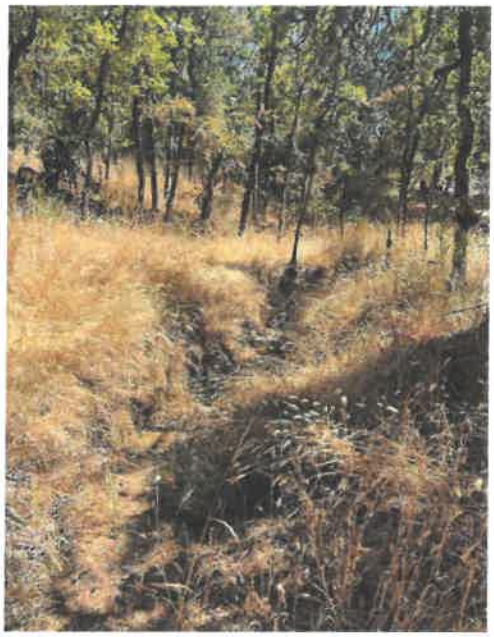


Photo 5. Typical characteristics of the southern portion of Intermittent Stream 2.

Photo 6. Typical upland vegetation consists of oak trees and scotch broom.

# ATTACHMENT C

**Wetland Determination Data Forms**

# WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys and Coast Region

Project/Site: Ridgeview Subdivision Wetland Delineatio | City/County: Sutherlin / Douglas | Sampling Date: 8/8/2023
Applicant/Owner: Lucas Main Construction | State: Oregon | Sampling Point: Plot 1
Investigator(s): H. Gilliland, B. Bieger | Section, Township, Range: Sec. 18, T. 25S, R. 5W
Landform (hillslope, terrace, etc.): Swale | Local relief (concave, convex, none): Concave | Slope (%): 6
Subregion (LRR): LRR A - Northwest Forests and Coast | Lat: 43.396414 | Long: -123.340278 | Datum: WGS84
Soil Map Unit Name: Nonpareil-Oakland complex, 3 to 12 percent slopes | NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes X No ___ (If no, explain in remarks)
Are vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? (If needed, explain any answers in remarks) Yes X No ___
Are vegetation ___, Soil ___, or Hydrology ___ naturally problematic?

## SUMMARY OF FINDINGS - Attach site map showing sampling point location, transects, important features, etc.

| | | | |
|---|---|---|---|
| Hydrophytic vegetation present? | Yes X | No ___ | **Is the sampled area within a wetland?** Yes X No ___ |
| Hydric soil present? | Yes X | No ___ | |
| Indicators of wetland hydrology present? | Yes X | No ___ | |

Remarks:

## VEGETATION -- Use scientific names of plants.

| Tree Stratum (Plot size: 30' r ) | Absolute % Cover | Dominant Species | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | 0 = Total Cover | | |
| **Sapling/Shrub Stratum (Plot size: 30' r )** | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | 0 = Total Cover | | |
| **Herb Stratum (Plot size: 5' r )** | | | |
| 1. *Mentha pulegium* | 35 | Y | OBL |
| 2. *Juncus tenuis* | 30 | Y | FAC |
| 3. *Mimulus guttatus* | 20 | Y | OBL |
| 4. *Anthoxanthum odoratum* | 15 | N | FACU |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 9. | | | |
| 10. | | | |
| 11. | | | |
| | 100 = Total Cover | | |
| **Woody Vine Stratum (Plot size: 30' r )** | | | |
| 1. | | | |
| 2. | | | |
| | 0 = Total Cover | | |

% Bare Ground in Herb Stratum 0

### Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across all Strata: 3 (B)
Percent of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

### Prevalence Index Worksheet

| Total % Cover of: | | Multiply by: | |
|---|---|---|---|
| OBL species | 55 | x 1 = | 55 |
| FACW species | 0 | x 2 = | 0 |
| FAC species | 30 | x 3 = | 90 |
| FACU species | 15 | x 4 = | 60 |
| UPL species | 0 | x 5 = | 0 |
| Column totals | 100 (A) | | 205 (B) |

Prevalence Index = B/A = 2.05

### Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0
___ 4 - Morphological Adaptations* (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

**Hydrophytic vegetation present?** Yes X No ___

Remarks:

## SOIL

**Sampling Point:** Plot 1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (Inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox Features % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-8 | 7.5YR 3/2 | 95 | 7.5YR 4/6 | 95 | C | M | cl | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(Except MRLA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

**Restrictive Layer (if present):**

Type:

Depth (inches):

**Hydric Soil Present?** Yes X No ___

Remarks:

Refusal at 8".

## HYDROLOGY

**Wetland Hydrology Indicators**

Primary Indicators (minimum of one is required; check all that apply

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost Heave Hummocks (D7)

**Field Observations:**

| | | | | | |
|---|---|---|---|---|---|
| Surface Water Present? | Yes | ___ | No X | Depth (inches): | ___ |
| Water Table Present? | Yes | ___ | No X | Depth (inches): | >8 |
| Saturation Present? (includes capillary fringe) | Yes | ___ | No X | Depth (inches): | >8 |

**Wetland Hydrology Present?** Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Aerial photograph

Remarks:

## WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys and Coast Region

Project/Site: Ridgeview Subdivision Wetland Delineatio | City/County: Sutherlin / Douglas | Sampling Date: 8/8/2023
Applicant/Owner: Lucas Main Construction | State: Oregon | Sampling Point: Plot 2
Investigator(s): H. Gilliland, B. Bieger | Section, Township, Range: Sec. 18, T. 25S, R. 5W
Landform (hillslope, terrace, etc.): Terrace | Local relief (concave, convex, none): Concave | Slope (%): 6
Subregion (LRR): LRR A - Northwest Forests and Coast | Lat: 43.396414 | Long: -123.340234 | Datum: WGS84
Soil Map Unit Name: Nonpareil-Oakland complex, 3 to 12 percent slopes | NWI Classification: None
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes X No ___ (If no, explain in remarks)
Are vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? (If needed, explain any answers in remarks) Yes X No ___
Are vegetation ___, Soil ___, or Hydrology ___ naturally problematic?

**SUMMARY OF FINDINGS - Attach site map showing sampling point location, transects, important features, etc.**

| | | | |
|---|---|---|---|
| Hydrophytic vegetation present? | Yes ___ | No X | **Is the sampled area within a wetland?** Yes ___ No X |
| Hydric soil present? | Yes ___ | No X | |
| Indicators of wetland hydrology present? | Yes ___ | No X | |

Remarks: Plot 2 sits 1 foot higher in elevation than Plot 1.

**VEGETATION** -- Use scientific names of plants.

| Tree Stratum (Plot size: 30' r ) | Absolute % Cover | Dominant Species | Indicator Status |
|---|---|---|---|
| 1. *Quercus garryana* | 5 | Y | FACU |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | 5 = Total Cover | | |
| **Sapling/Shrub Stratum** (Plot size: 30' r ) | | | |
| 1. *Cytisus scoparius* | 45 | Y | UPL |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | 45 = Total Cover | | |
| **Herb Stratum** (Plot size: 5' r ) | | | |
| 1. *Bromus japonicus* | 60 | Y | UPL |
| 2. *Taeniatherum caput-medusae* | 30 | Y | UPL |
| 3. *Centaurea jacea* | 10 | N | FACU |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 9. | | | |
| 10. | | | |
| 11. | | | |
| | 100 = Total Cover | | |
| **Woody Vine Stratum** (Plot size: 30' r ) | | | |
| 1. | | | |
| 2. | | | |
| | 0 = Total Cover | | |

% Bare Ground in Herb Stratum 0

**Dominance Test Worksheet**

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across all Strata: 4 (B)
Percent of Dominant Species that are OBL, FACW, or FAC: 0% (A/B)

**Prevalence Index Worksheet**

| Total % Cover of: | | Multiply by: | |
|---|---|---|---|
| OBL species | 0 | x 1 = | 0 |
| FACW species | 0 | x 2 = | 0 |
| FAC species | 0 | x 3 = | 0 |
| FACU species | 15 | x 4 = | 60 |
| UPL species | 135 | x 5 = | 675 |
| Column totals | 150 (A) | | 735 (B) |

Prevalence Index = B/A = 4.90

**Hydrophytic Vegetation Indicators:**

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0
___ 4 - Morphological Adaptations* (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

**Hydrophytic vegetation present?** Yes ___ No X

Remarks:

## SOIL

**Sampling Point:** Plot 2

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth | Matrix | | Redox Features | | | | | |
|---|---|---|---|---|---|---|---|---|
| (Inches) | Color (moist) | % | Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
| 0-10 | 7.5YR 3/3 | 100 | | | | | cl | |
| 10-13 | 10YR 4/4 | 100 | | | | | cl | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(Except MRLA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils[3]:**

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** **Yes** _____ **No** X

Remarks:

## HYDROLOGY

**Wetland Hydrology Indicators**

Primary Indicators (minimum of one is required; check all that apply

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost Heave Hummocks (D7)

**Field Observations:**

| | | | | | | |
|---|---|---|---|---|---|---|
| Surface Water Present? | Yes | _____ | No | X | Depth (inches): | _____ |
| Water Table Present? | Yes | _____ | No | X | Depth (inches): | >13 |
| Saturation Present? (includes capillary fringe) | Yes | _____ | No | X | Depth (inches): | >13 |

**Wetland Hydrology Present?**

**Yes** _____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Aerial photograph

Remarks:

STAFF EXHIBIT 6

# TRAFFIC IMPACT ANALYS

# RIDGEVIEW SUBDIVISION

SUTHERLIN, OREGON

September 19, 2023

160 Madison Street, Suite A
Eugene, Oregon 97402
541.513.3376

SANDOW
ENGINEERING

# Transportation Impact Analysis

# Ridgeview Subdivision


Sutherlin, Oregon

September 19, 2023

Kelly Sandow PE

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ENGINEERING
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Eugene Oregon 97402
541.513.3376
sandowengineering.com

project # 6046

# EXECUTIVE SUMMARY

This report provides the Traffic Impact Analysis and findings prepared for the proposed Ridgeview Subdivision located in Sutherlin, Oregon. The proposal is for a 91-lot subdivision to be constructed with single-family homes.

The analysis evaluates the transportation impacts as per the City of Sutherlin and ODOT criteria, evaluating adjacent roadway and intersection operation with the addition of development traffic for the year of completion and a 5-year future analysis.

The following report recommendations are based on the information and analysis documented in this report.

## FINDINGS

- All studied intersections operate within the mobility standards with and without the development traffic.
- The addition of development traffic does not substantially increase queuing conditions.
- The project will include the construction of an emergency access road from the northern terminus of Pebble Creek Street north to Stearns Lane. The emergency access road is sufficient for the anticipated need.
- The previous findings for the Plan Amendment and Zone change associated with this property identified several transportation improvements; see Attachment A in Appendix B. The following are findings relevant to the transportation improvements warranted for this phase of development.
    1) This project is described as “install a traffic signal and eastbound right-turn lane on OR 138W”. It is assumed that the turn pocket and traffic signal are to be placed at OR 138 and Park Hill Intersection.

       The v/c meets the standard of 0.95, and the queuing does not exceed the available storage of 200 feet for the northbound left turn and 350 feet for the westbound left turn. There are no operational issues that would trigger mitigation for this phase of development.

       Signal warrant analysis was performed for this intersection using ODOT’s Preliminary Traffic Signal Warrant. The traffic volumes for the major approaches (Highway 138) and minor approach (Park Hill) do not meet the warrant volumes for either Case A or Case B. Therefore, a traffic signal at this location is not warranted.

       The right turn pocket meets the traffic volume criterion. However, there is insufficient ROW to construct a full right turn pocket, given the location of the

power poles along the southern edge of the roadway. A right turn pocket is not recommended at this time.

2) This improvement is the installation of a westbound right turn lane on OW 138 at Dovetail Lane. This improvement has been completed. There is a separated right turn pocket with approximately 95 feet of storage and 180 feet of taper. The queuing analysis estimates no more than a 25-foot queue for the right turn pocket. There is no additional right turn pocket or taper length needed for this right turn.

3) This improvement is the installation of a median on OR 138 at Dovetail Lane to restrict the access to right-in/right-out only and install a new east-west Collector Street connection from Dovetail Lane to Stearns Lane.

   During the AM peak hour in the year 2030, with this phase of development completed, the v/c is 0.18 and LOS is B. During the PM peak hour in the year 2030, with this phase of development completed, the v/c is 0.22 and LOS is C. The operation of the intersection does not trigger the restriction of Dovetail to right-in/right-out at this time.

   The creation of a new east-west Collector Street connection from Dovetail Lane to Stearns Lane would require construction on property not owned by this applicant, as there is no right-of-way available for this connection. This connection is not feasible at this time.

4) This improvement is the installation of Exit 136 southbound exit ramp in the northwest quadrant of the interchange and the installation of a traffic signal or roundabout at OR138W/Dakota Street.

   The installation of Exit 136 southbound exit ramp is a substantial improvement project that far extends the impact of this project on the interchange. This improvement is not necessary for the interchange area to meet the v/c standards with the completion of this phase of development.

   A signal warrant analysis was performed for the OR138W/Dakota Street intersection using ODOT's Preliminary Traffic Signal Warrant. The traffic volumes for the major approaches (Highway 138) and minor approach (Dakota St) do not meet the warrant volumes for Case A, but does meet the warrant volumes for Case B. The intersection operates within the v/c standard with this phase of the development in place. Therefore, mitigation by this phase of development does not trigger improvements at this intersection. A traffic signal is not recommended at this time.

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## LIST OF APPENDICES

# 1.0 BACKGROUND

This report provides the Traffic Impact Analysis and findings prepared for the proposed Ridgeview Subdivision in Sutherlin, Oregon. The development proposal is a 91-lot subdivision to be constructed with single-family homes. Appendix A contains the site plan.

## 1.1 SITE INFORMATION

The site is located north of Scandi Boulevard just west of Interstate-5 on a portion of tax lots 203 and 100 of Assessor Map 25-05-08. The site is vacant and is currently zoned R1 and RH. Figure 1 provides the site location and vicinity map.

The development will create new local streets with two connections to Scandi Boulevard. The site will access the larger street network via Dovetail Lane.

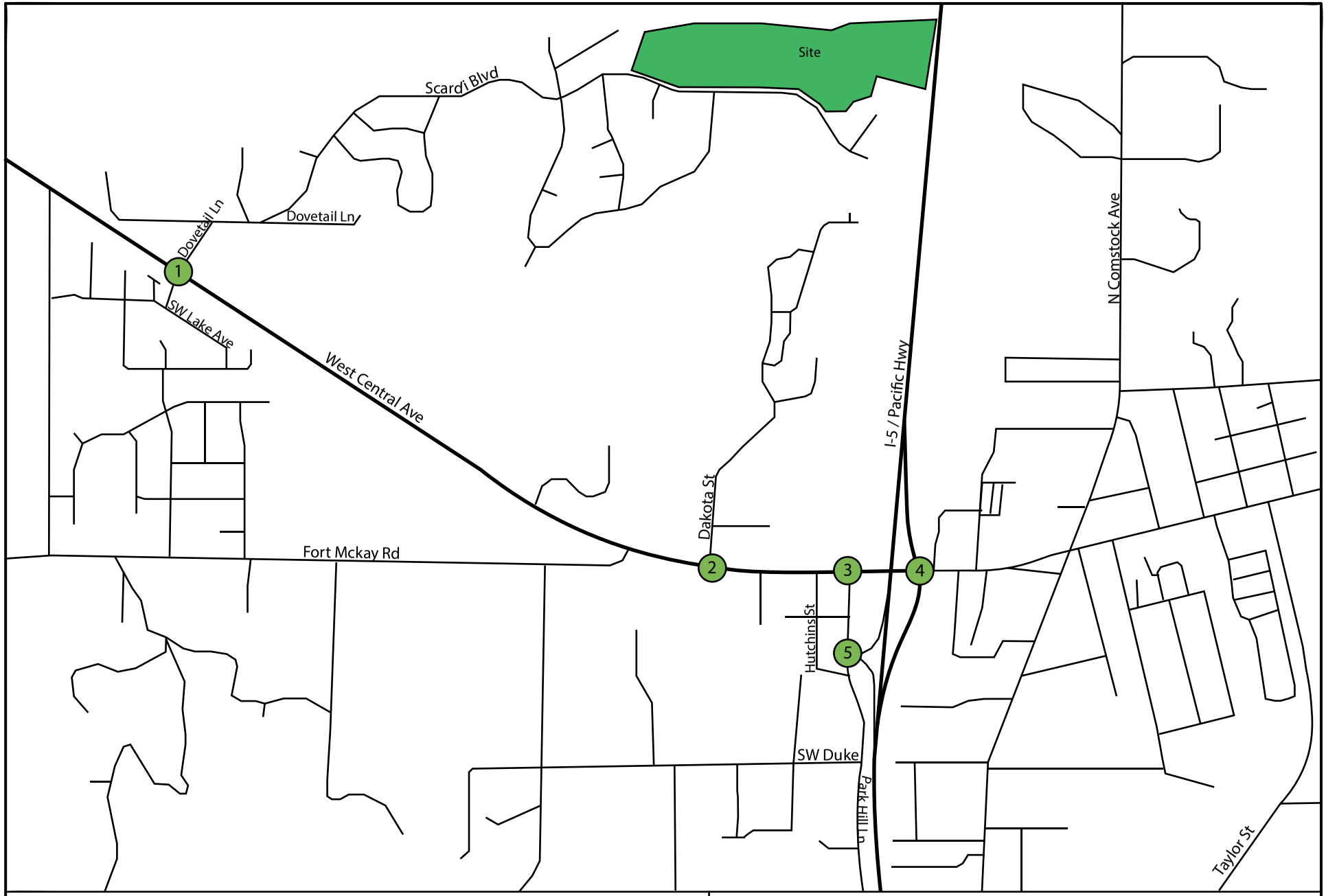
## 1.2 ANALYSIS SCOPE

The traffic study is performed in accordance with the City of Sutherlin and ODOT standards and criteria. Appendix B contains the Scope of Work. An intersection analysis was performed for the adjacent intersections at the following locations:

- Hwy 138 at Dovetail Lane
- Hwy 138 at Dakota Street
- Highway 138 at Park Hill Lane
- Park Hill at Interstate-5 SB Ramps
- Highway 138 at Interstate-5 NB Ramps

The operational analysis was performed at the study area intersections for the weekday AM and PM peak hours. The operational analysis is performed for the following conditions:

- Existing conditions, year 2023
- Year of completion, year 2025, with and without the proposed development
- Five-year planning horizon, the year 2030, with and without the proposed development




Ridgeview Subdivision, Sutherlin, Oregon

Figure 1: Site Location and Vicinity Map

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# 2.0 EXISTING ROADWAY CONDITIONS

## 2.1 STREET NETWORK

Streets included within the study are Hwy 138, Scardi Boulevard, and Dovetail Lane. The roadway characteristics within the study area are included in Table 1. Figure 1 provides a map of the site location and study area, and Figure 2 illustrates the street classifications, intersection geometry, and intersection control within the study area.

TABLE 1: ROADWAY CHARACTERISTICS WITHIN STUDY AREA

| Characteristic | Hwy 138 | Scardi Blvd | Dovetail Lane |
|---|---|---|---|
| **Jurisdiction** | ODOT | City of Sutherlin | City of Sutherlin |
| **Functional Classification** | Major Arterial | Minor Collector/Local | Minor Collector |
| **Lanes per Direction** | 1 | 1 | 1 |
| **Center Left Turn lane** | Turn Pockets | None | None |
| **Restrictions in the Median** | None | None | None |
| **Bikes Lanes Present** | Shoulders | None | None |
| **Sidewalks Present** | None | Intermittent | Intermittent |
| **Transit Route** | None | None | None |
| **On-Street Parking** | None | Yes | Yes |

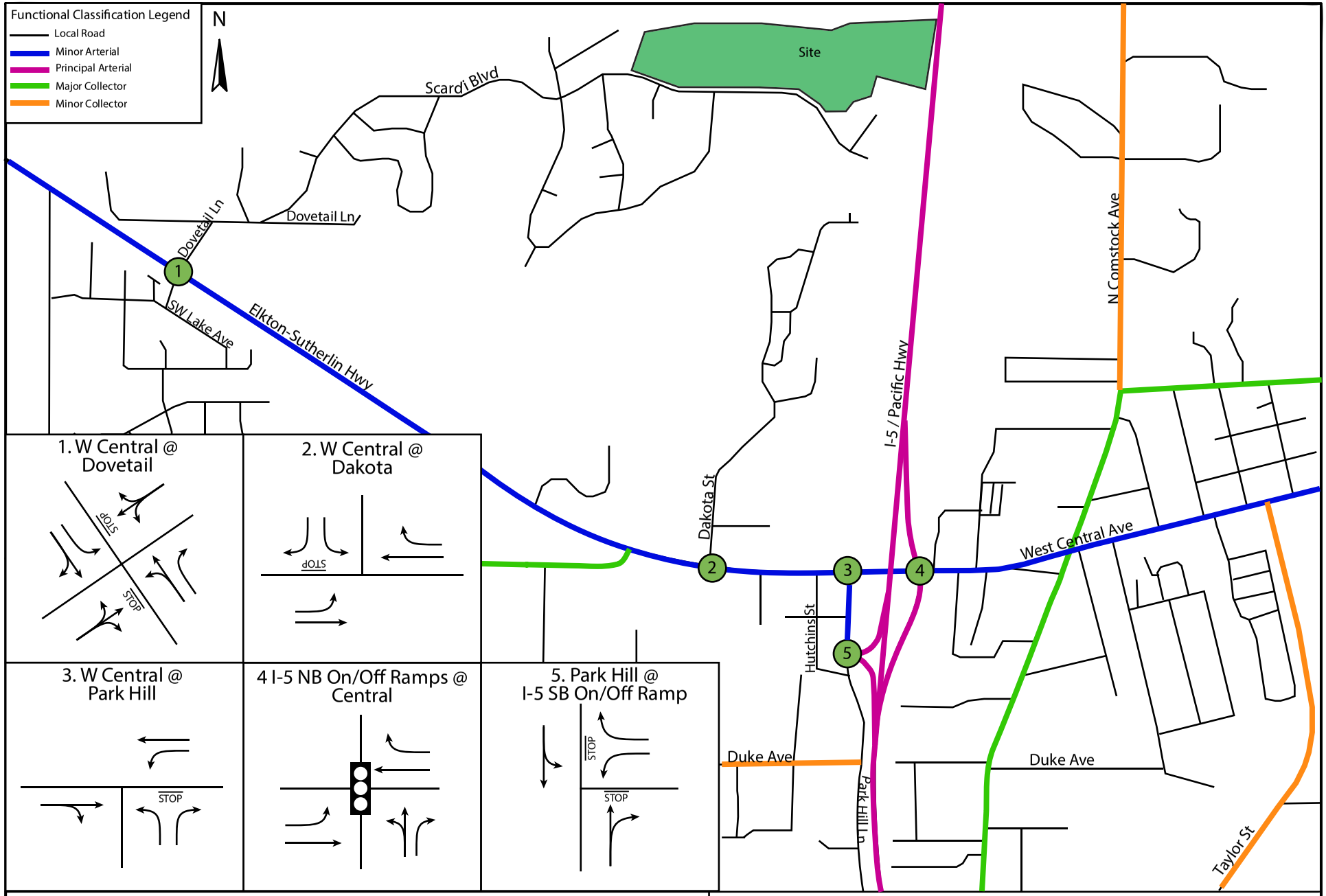


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Figure 2: Lane Configuration and Street Classification

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## 3.0 CRASH ANALYSIS

A crash evaluation was performed for the study area intersections. The analysis investigates crash data available for the most recent 5 years, 1/1/2019-12/31/2021, to determine the crash rate in crashes per million entering vehicles and the type of crashes that occurred. The crash analysis follows the Critical Crash Rate methodology outlined in ODOT's Analysis Procedures Manual. The calculated intersection crash rates are compared to the critical crash rates. The crash data is provided in Appendix C. The critical Crash Rate is illustrated in Table 2. Table 3 summarizes the crash data.

TABLE 2: INTERSECTION CRASH PATTERNS

| Location | Intersection Type | Number of Crashes | AADT | MEV | Crash Rate* | Critical Crash Rate* | |
|---|---|---|---|---|---|---|---|
| **Highway 138 at Dovetail Lane** | Stop Control | 7 | 5,970 | 10.90 | 0.64 | 0.32 | Over |
| **Highway 138 at Dakota St** | Stop Control | 5 | 10,170 | 18.56 | 0.27 | 0.27 | Under |
| **Highway 138 at Park Hill Ln** | Stop Control | 2 | 12,300 | 22.45 | .09 | .25 | Under |
| **Highway 138 at NB Ramps** | Signal | 2 | 13,290 | 24.25 | 0.08 | 0.20 | Under |
| **Park Hill Lane at SB Ramps** | Stop | 2 | 50,140 | 91.51 | 0.02 | .017 | Under |

***(crashes/million entering vehicles)**

TABLE 3: INTERSECTION CRASH PATTERNS

| Location | Number of Crashes | Types of Crashes | | | | | |
|---|---|---|---|---|---|---|---|
| | | Head | Rear | Side | Turn | Other | Pedestrian/ Bike |
| **Highway 138 at Dovetail Lane** | 7 | 0 | 1 | 1 | 2 | 3 | 0 |
| **Highway 138 at Dakota St** | 5 | 0 | 0 | 5 | 0 | 0 | 0 |
| **Highway 138 at Park Hill Ln** | 2 | 0 | 0 | 0 | 2 | 0 | 0 |
| **Highway 138 at NB Ramps** | 2 | 0 | 0 | 0 | 0 | 1 | 1 |
| **Park Hill Lane at SB Ramps** | 2 | 0 | 0 | 0 | 0 | 2 | 0 |

The critical crash rate is exceeded for the intersection of Highway 138 at Dovetail Lane. There have been 7 reported crashes at this location in the past 5 years. There was one rear-end crash, which involved westbound traveling vehicles on Highway 138, resulting in minor injuries. One of the crashes was an eastbound traveling vehicle on Highway 138 that left the roadway and hit a fence. This crash resulted in property damage only. One crash involved a motorcycle and vehicle traveling eastbound on Highway 138. The error for the crash was assigned to the motorcycle for improper passing. This crash resulted in fatality for the motorcyclist and passenger. There were two crashes involving vehicles crossing Highway 138 from north to south. These crashes involved a single vehicle for each crash. The vehicles both hit a fence, resulting in property damage only and were caused by driving too fast. The remaining two crashes involved vehicles making improper

turns and caused by inattention. There is no apparent pattern with the crashes that would indicate the need for corrective action.

There was one reported crash involving a bicycle. This crash was at Highway 138, and the NB ramps signal. This crash occurred on August 5, 2019, at approximately 11 AM. The crash involved a bicycle traveling westbound and a car traveling northbound. The error was assigned to the bicycle for disregarding the traffic signal.

## 4.0 DEVELOPMENT TRIP GENERATION AND DISTRIBUTION

The trips to this site are estimated using The ITE Trip Generation Manual 11th edition. Land Use Code 220- Single Family Residential is used for this site. Table 4 provides the PM peak hour trip generation for this site.

TABLE 4: TRIP GENERATION

| Time of Day | Size | Rate | Trips | In | Out |
|---|---|---|---|---|---|
| **ADT** | 91 | Ln(T)=0.92ln(x)+2.68 | 925 | (50%)<br>463 | (50%)<br>462 |
| **AM Peak Hour** | 91 | Ln(T)=0.91ln(x)+0.12 | 68 | (25%)<br>17 | (75%)<br>51 |
| **PM Peak Hour** | 91 | Ln(T)=0.94ln(x)+0.27 | 91 | (63%)<br>57 | (37%)<br>34 |

The existing travel patterns from the traffic counts are used to estimate how the development trips will use the surrounding transportation system to access the site. The trips are distributed through the study area based on those existing travel patterns as described below:

- 10% to/from the north on Dakota St
- 2% to/from the west on Highway 138
- 50% to/from the east on Highway 138
- 28% to/from I-5 south
- 6% to/from I-5 north
- 4% to/from west on Fort McKay Road

The traffic volumes were distributed within the study area according to the percentages above and are illustrated in Figure 3 for the AM peak hour and Figure 4 for the PM peak hour.

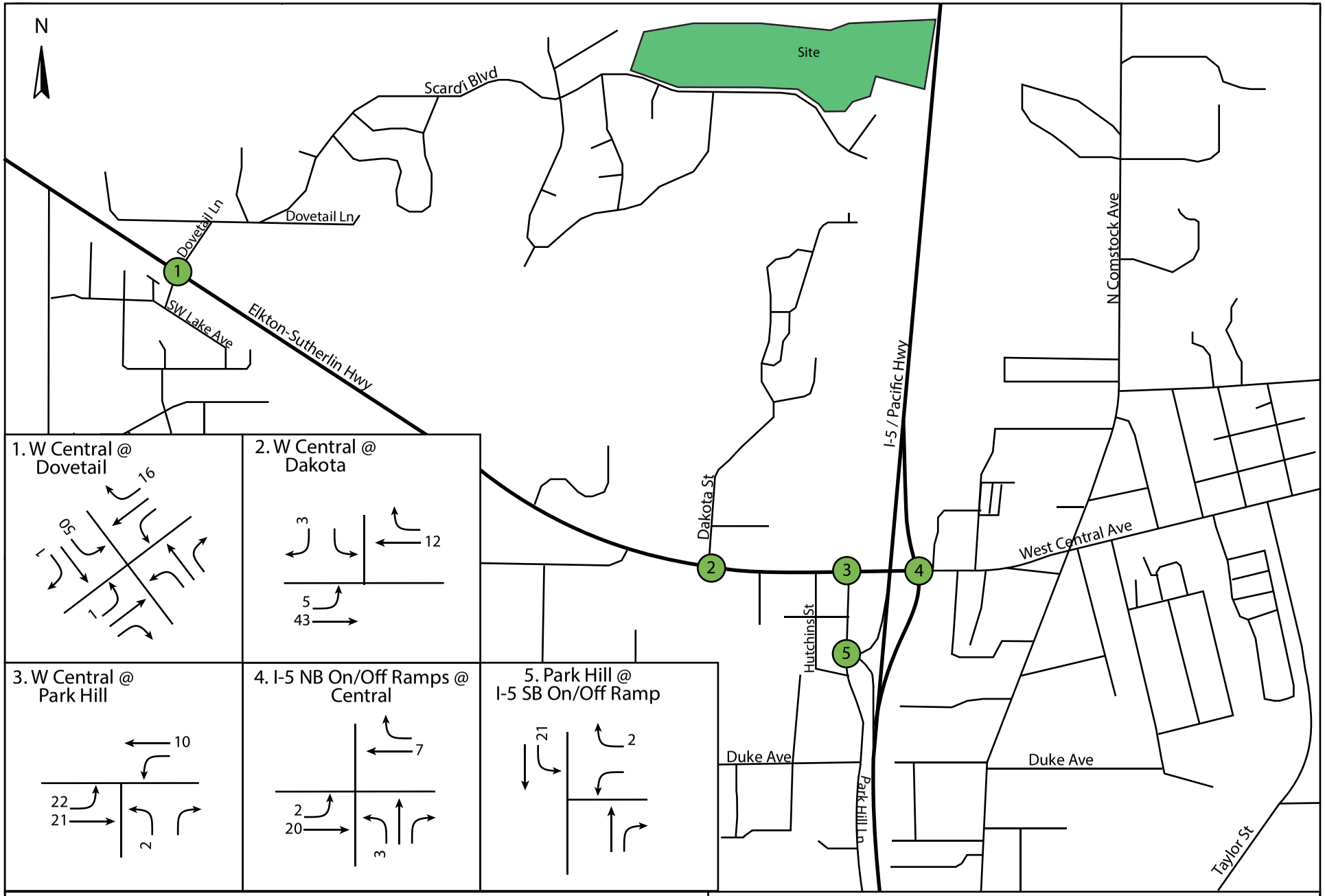


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Figure 3: AM Development Trip Distribution

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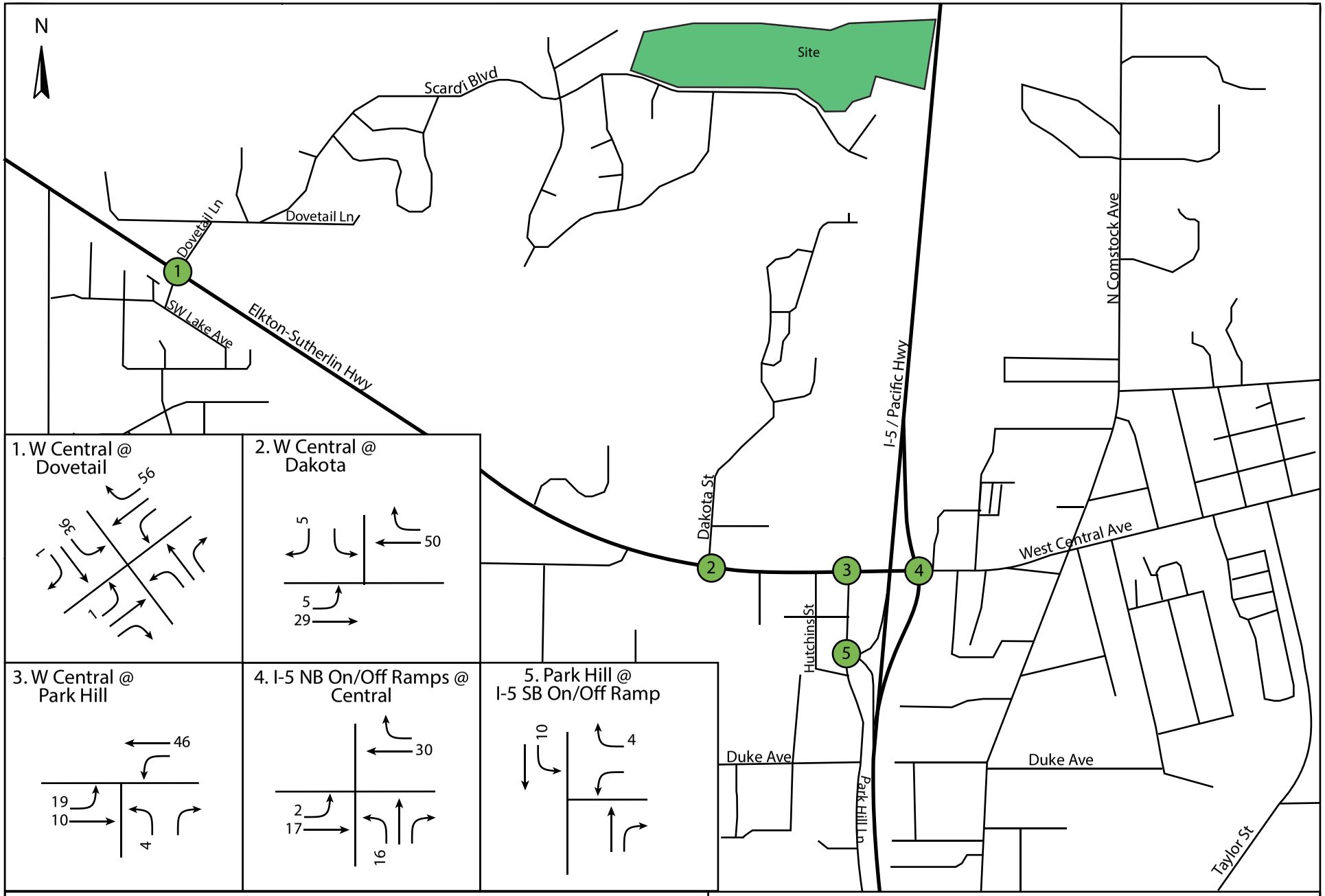


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Figure 4: PM Development Trip Distribution

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# 5.0 BACKGROUND TRAFFIC VOLUMES

## 5.1 INTERSECTION COUNTS

Traffic volumes were collected during January 2021, December 2021, June 2020, and August 2023. Counts were collected during the AM peak period of 6:30-9:30 AM and the PM peak period of 3:30-6:30 PM. The AM peak hour is from 8:00-9:00 AM. The PM peak hour occurs from 4:30-5:30 PM.

The traffic volumes are included in Appendix D.

## 5.2 SEASONAL ADJUSTMENT

The application of seasonal adjustment factors account for the fact that through volumes along State Highways fluctuate from month to month due to changes in recreational behavior, etc. The design hour traffic volumes are adjusted to reflect traffic conditions on roadways during the peak month of the year using a seasonal adjustment factor.

The seasonal adjustment was determined using the methodology outlined by ODOT's *ANALYSIS PROCEDURES MANUAL (APM)*. The seasonal adjustment considers the "commuter" trend, as described within ODOT's *2020 SEASONAL TREND TABLE*. The seasonal adjustment factor for this category is 1.0 for the June Counts, 1.025 for the August counts, 1.229 for the January counts, 1.156 for the December counts, and. The seasonal adjustment calculation is included in Appendix D.

## 5.3 FUTURE YEAR BACKGROUND VOLUMES

The proposed site development is projected to be completed by the year 2025. Consistent with the traffic impact analysis criteria, the intersections were evaluated for the existing year-year 2023, the year of completion-year 2025, and a 5-year planning horizon-year 2030. To account for naturally occurring traffic increases between the count year and the future analysis year, an annual growth rate was applied. The growth rate was estimated using Traffic volumes from the TSP. The year 2018 traffic volumes along Highway 138 were compared with the year 2040 traffic volumes. The resulting growth rate is 3.4% per year. The 3.4% per year growth rate was applied to the TSP base traffic volumes to estimate the year 2023, year 2025, and year 2027 background volumes.

## 5.4 FINAL TRAFFIC VOLUMES

The existing traffic volumes were adjusted according to the methodology described above. Appendix D provides the traffic volume calculations. The development trips are added to the background traffic to volume to represent the build conditions. The traffic volumes are provided in the following figures:

- Figure 5 illustrates the year 2023 AM peak hour background traffic volumes.
- Figure 6 illustrates the year 2023 PM peak hour background traffic volumes.
- Figure 7 illustrates the year 2025 AM peak hour background traffic volumes.

- Figure 8 illustrates the year 2025 PM peak hour background traffic volumes.
- Figure 9 illustrates the year 2030 AM peak hour background traffic volumes.
- Figure 10 illustrates the year 2030 PM peak hour background traffic volumes.
- Figure 11 illustrates the year 2025 AM peak hour traffic volumes with development.
- Figure 12 illustrates the year 2025 PM peak hour traffic volumes with development.
- Figure 13 illustrates the year 2030 AM peak hour traffic volumes with development.
- Figure 14 illustrates the year 2030 PM peak hour traffic volumes with development.

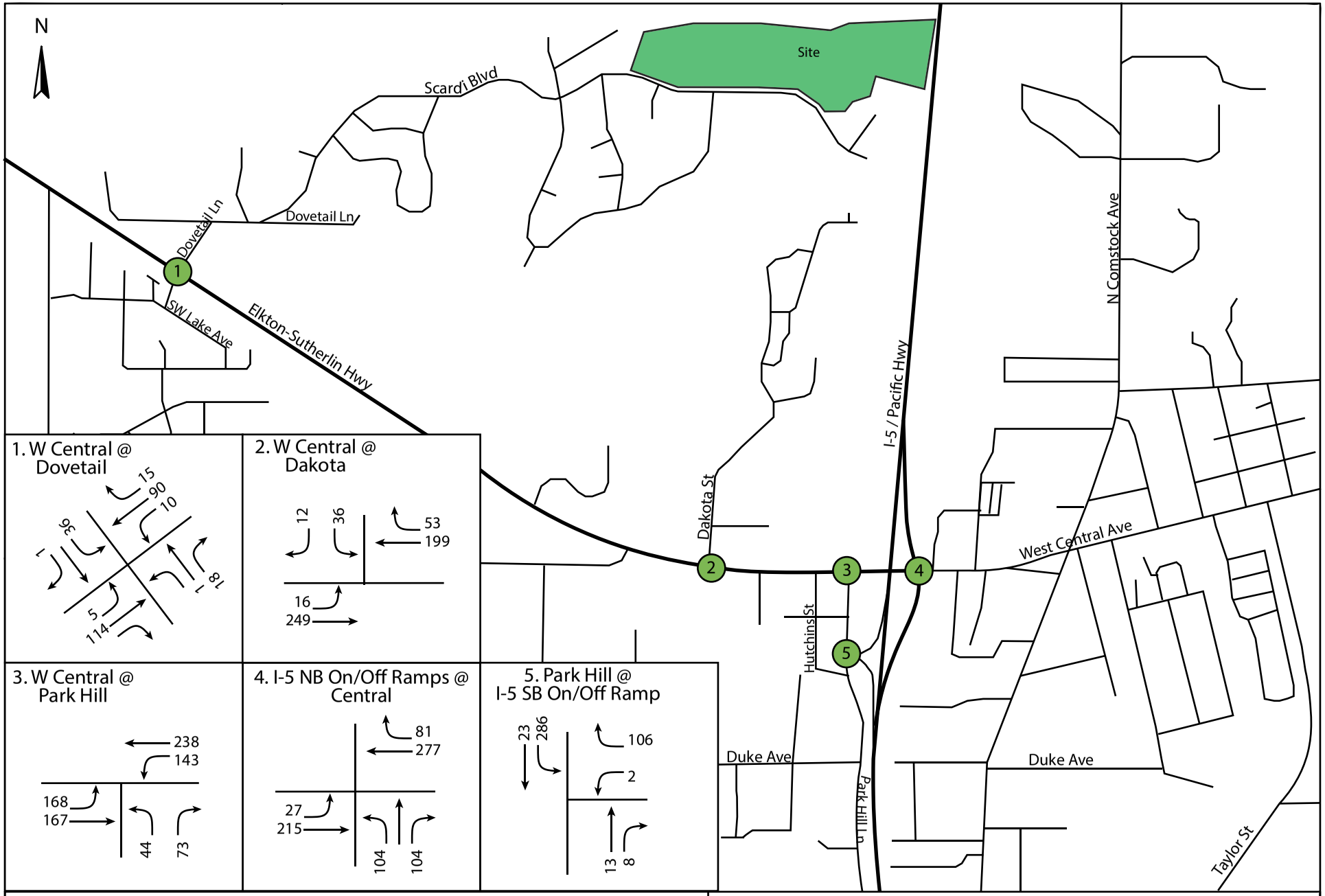


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Figure 5: Year 2023 AM Background Traffic Volumes

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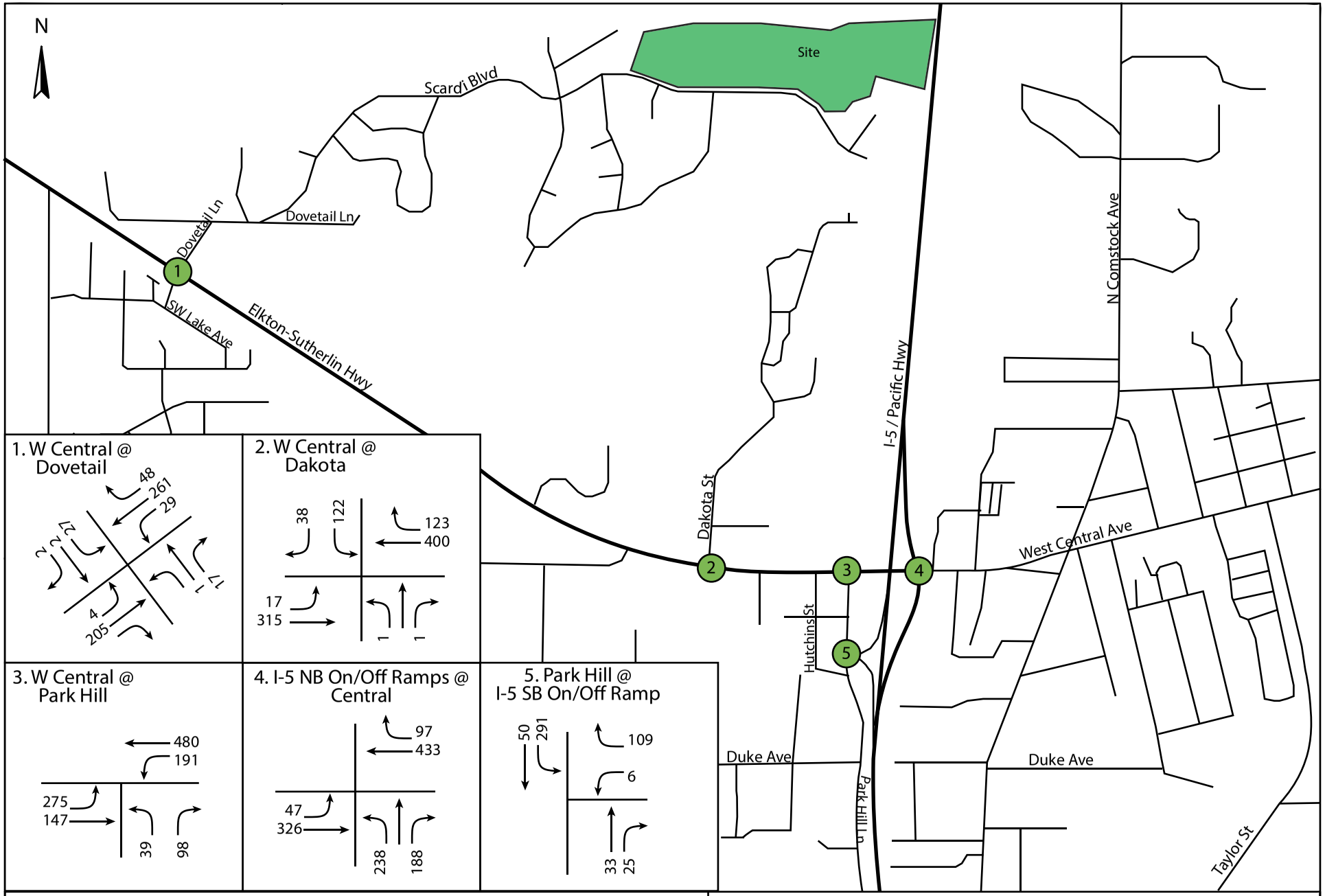


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Figure 6: Year 2023 PM Background Traffic Volumes

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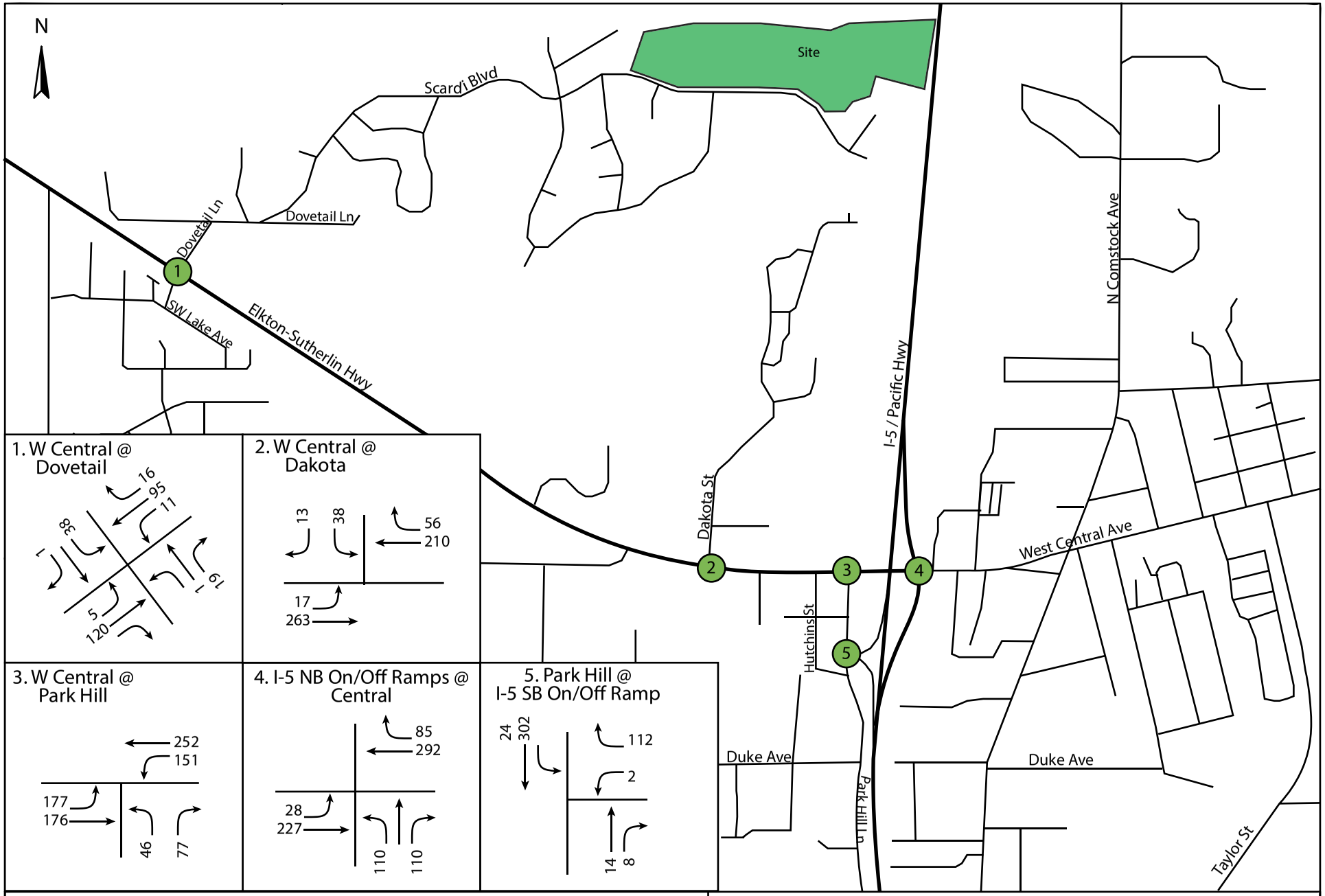


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Figure 7: Year 2025 AM Background Traffic Volumes

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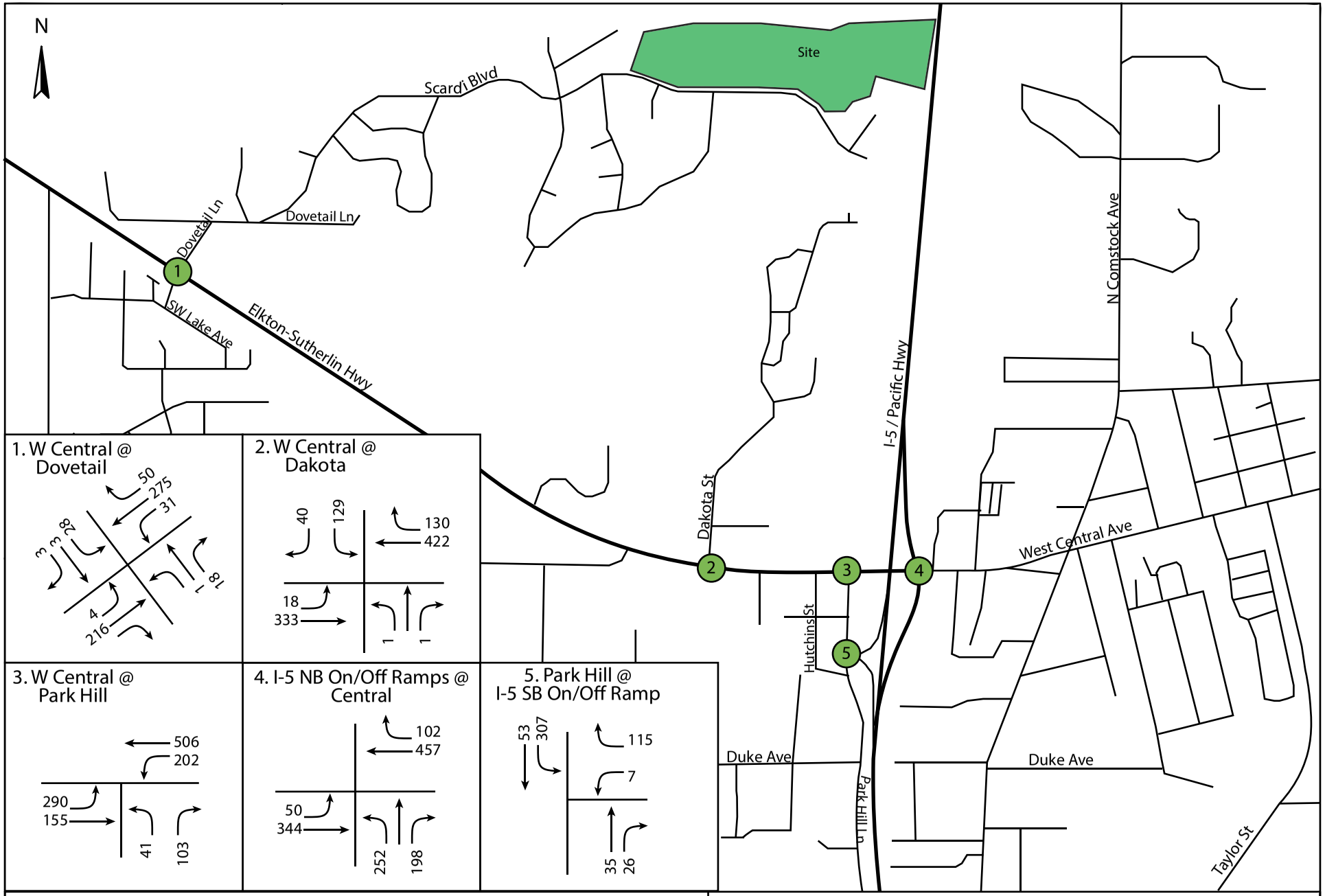


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Figure 8: Year 2025 PM Background Traffic Volumes

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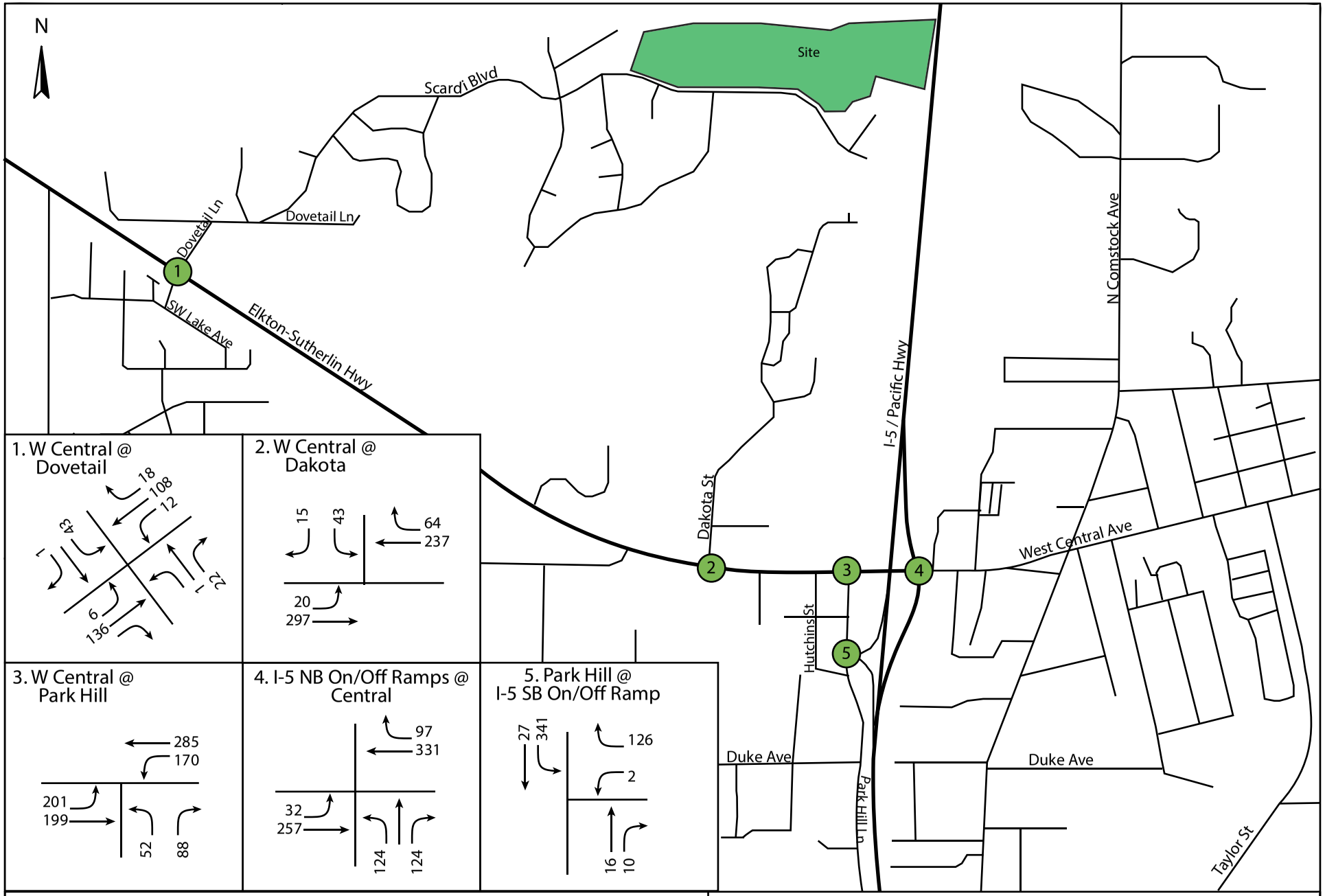


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Figure 9: Year 2030 AM Background Traffic Volumes

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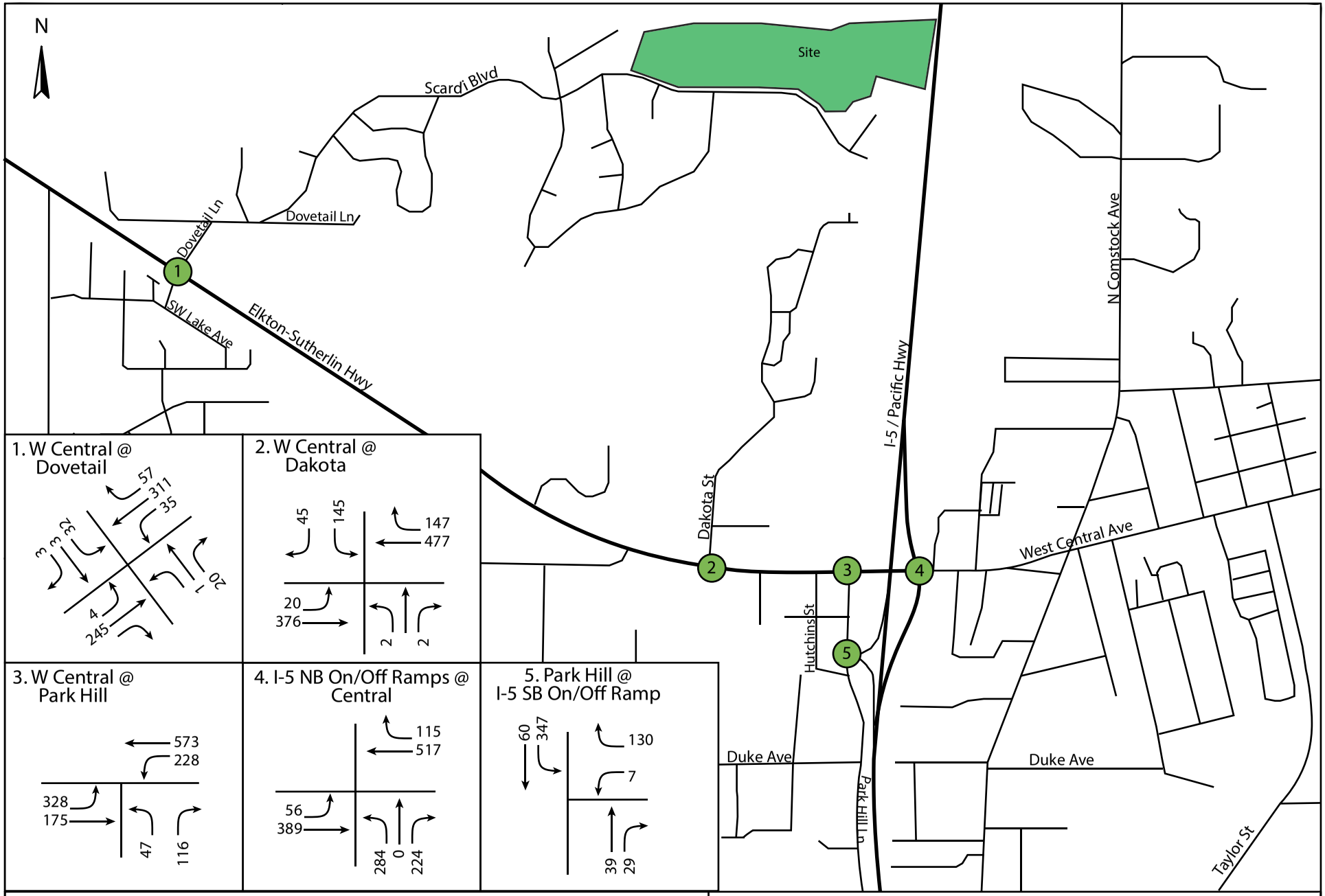


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Figure 10: Year 2030 PM Background Traffic Volumes

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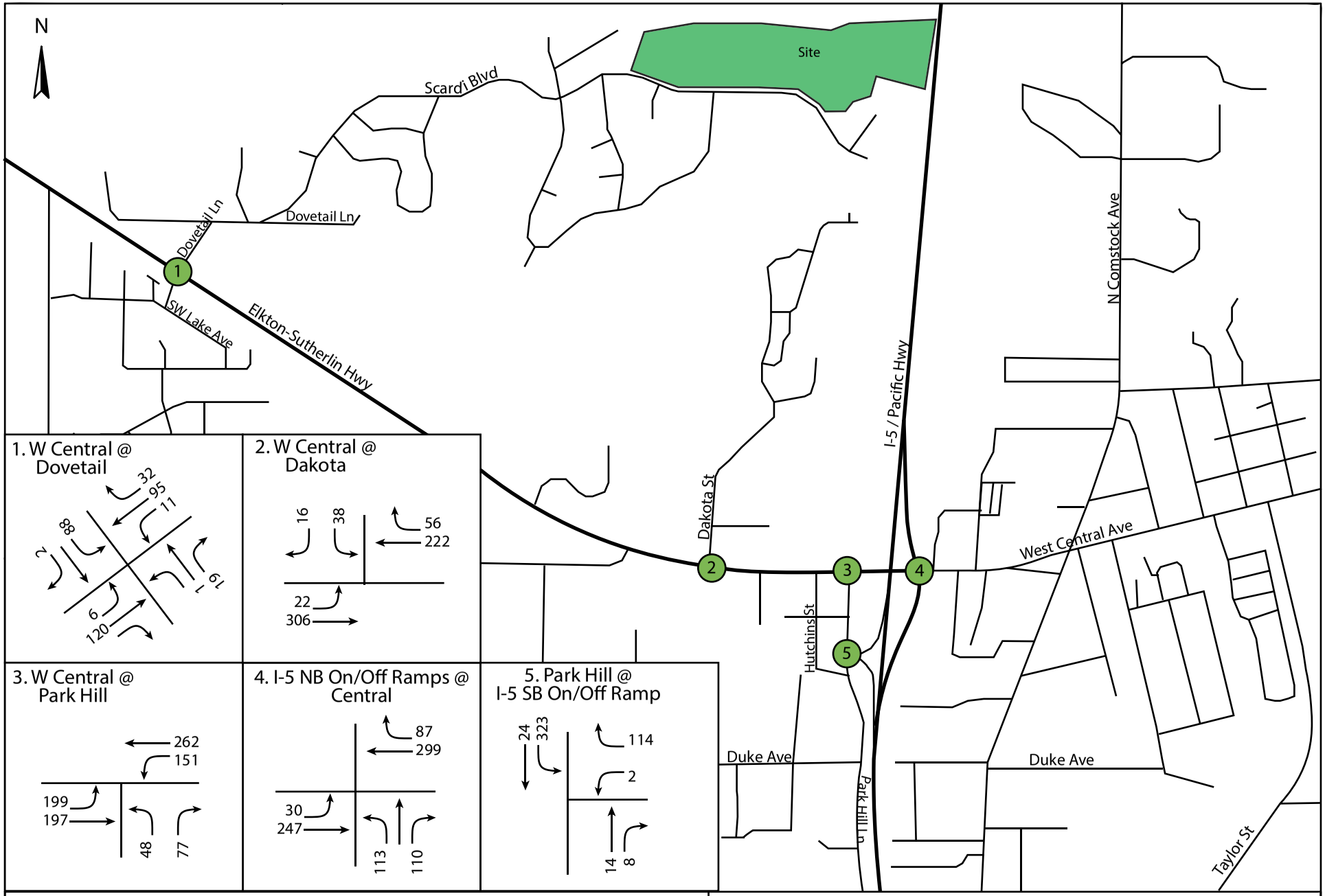


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Figure 11: Year 2025 AM Traffic Volumes with Development

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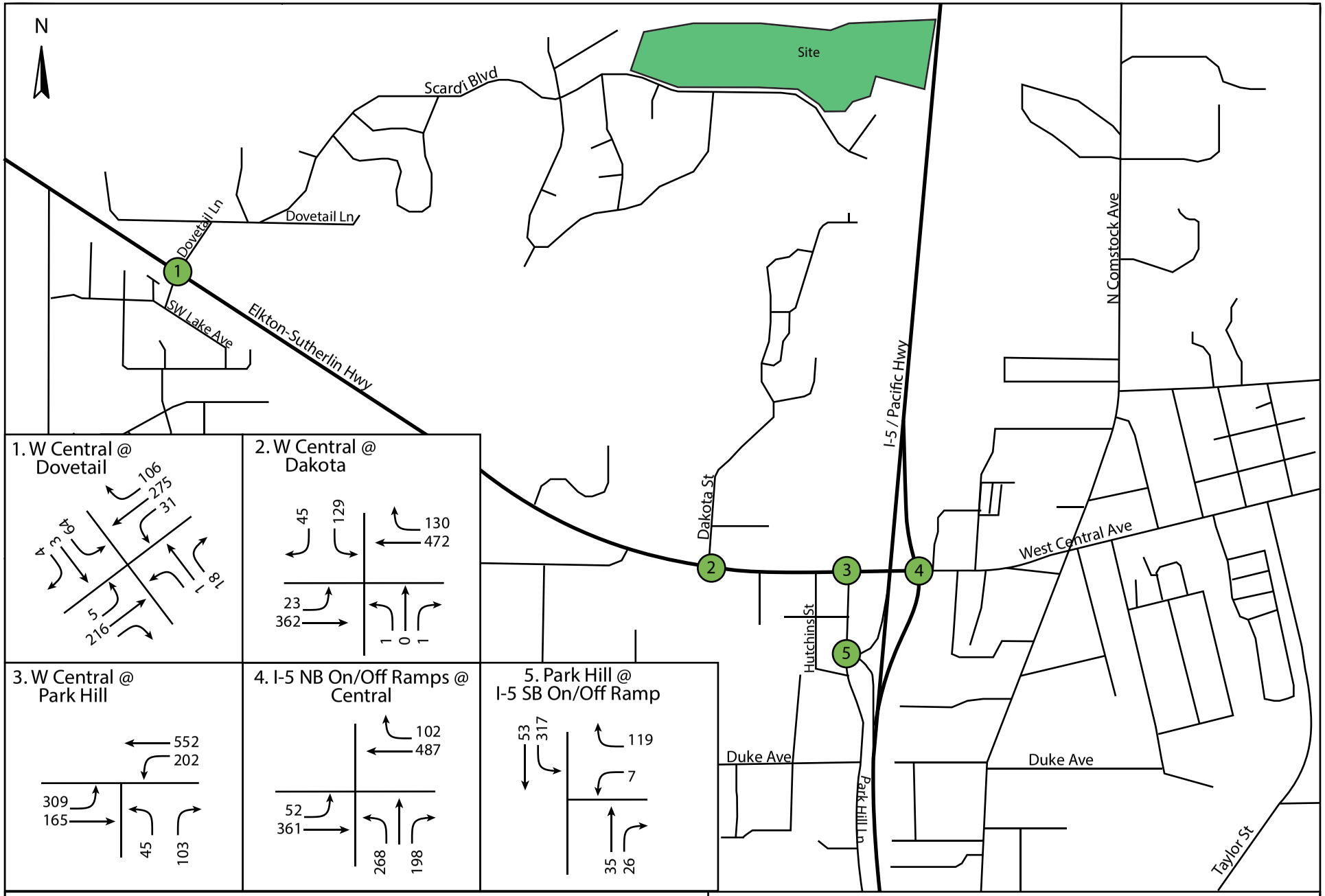


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Figure 12: Year 2025 PM Traffic Volumes with Development

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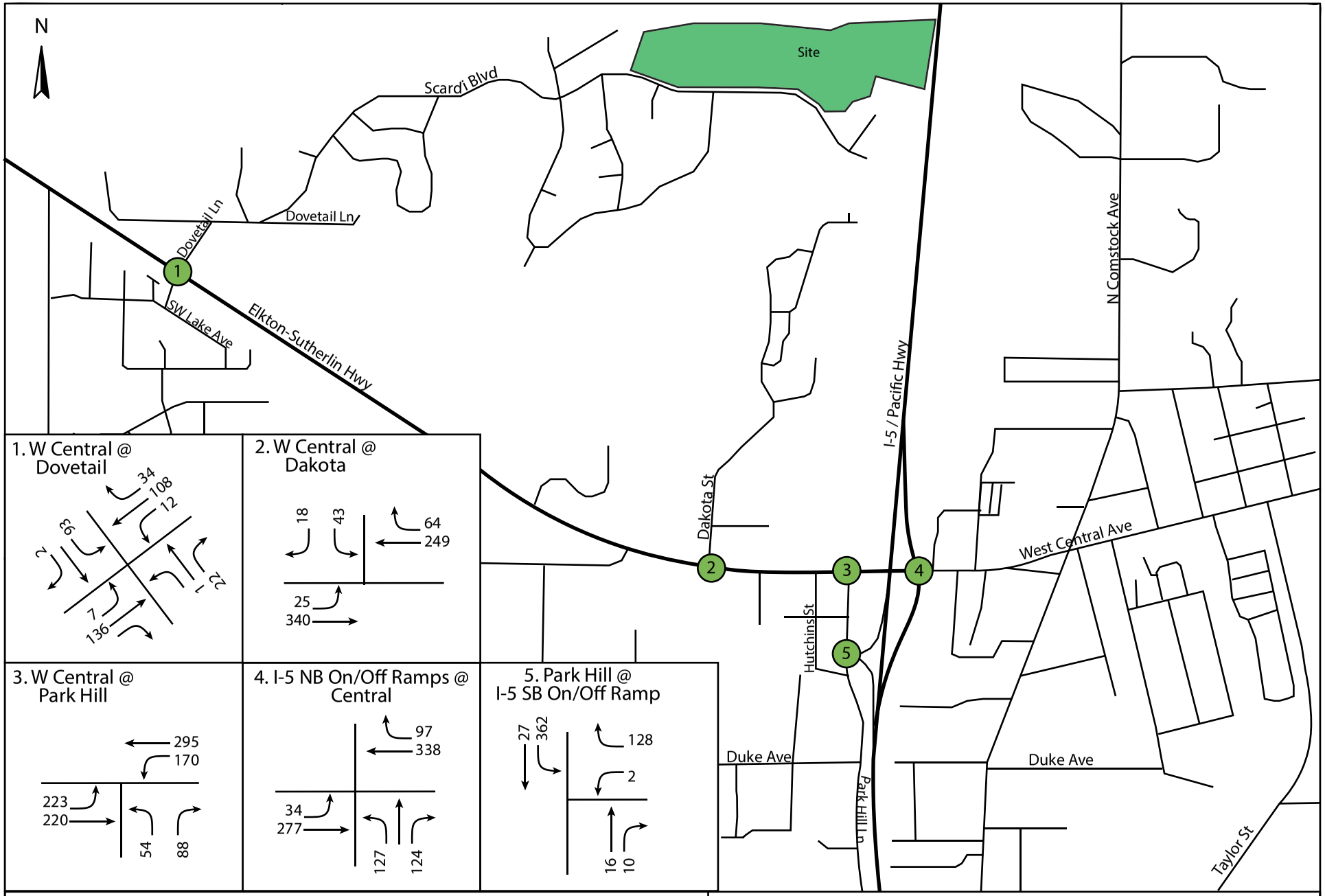


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Figure 13: Year 2030 AM Traffic Volumes with Development

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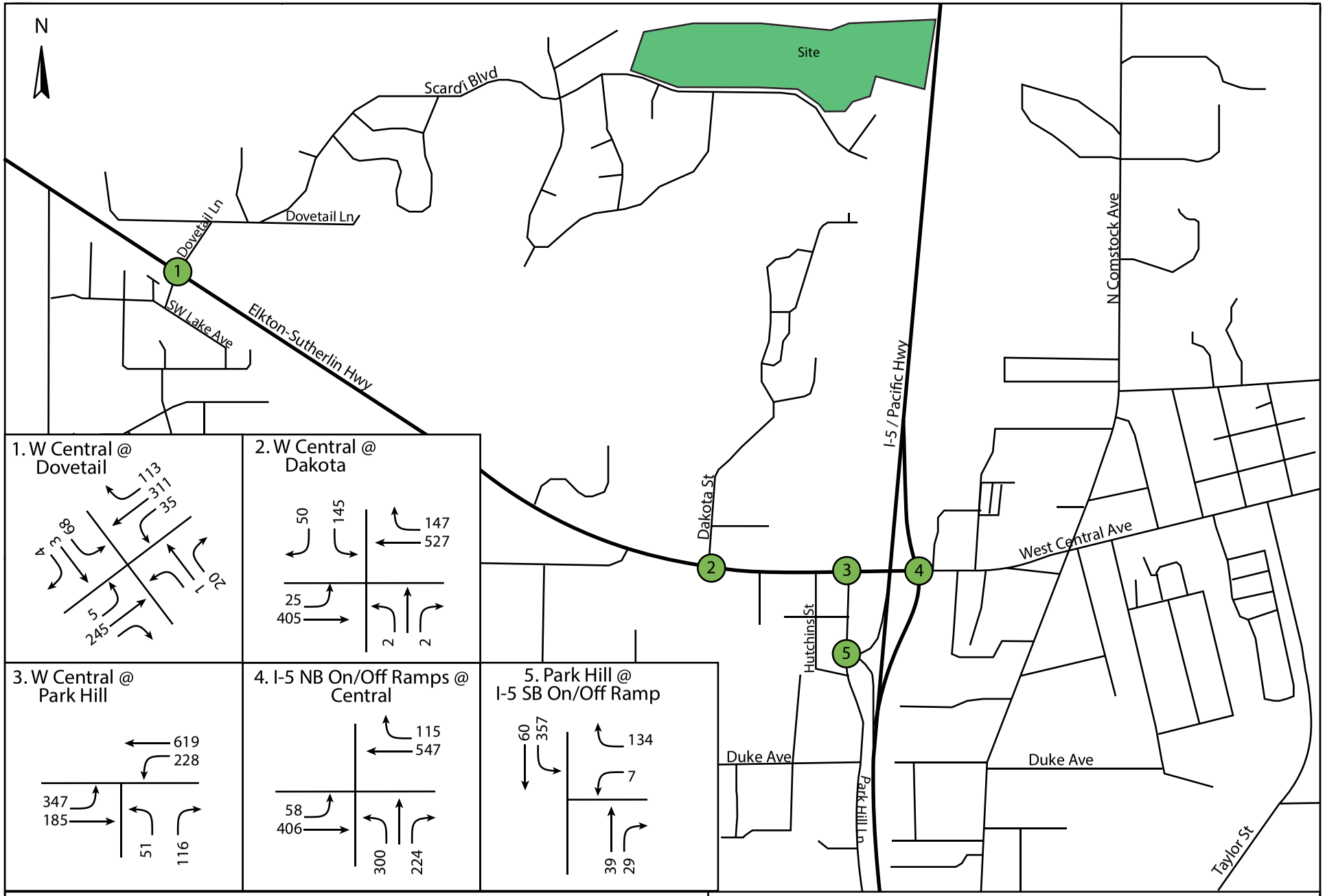


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Figure 14: Year 2030 PM Traffic Volumes with Development

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# 6.0 INTERSECTION ANALYSIS

## 6.1 PERFORMANCE MEASURES

The primary measure of performance for intersections under ODOT's jurisdiction is the volume-to-capacity ratio (v/c). The volume-to-capacity ratio describes the capability of an intersection to meet volume demand based on the maximum number of vehicles that could be served in an hour. V/C is the threshold for which ODOT evaluates the operation of intersections, as defined by the *1999 Oregon Highway Plan*. V/C thresholds are defined based on roadway classification and speed. Highway 138 is a Regional Highway with a posted speed of 30-55 mph. For stopped control intersections, the stopped approach has a v/c threshold of 0.95 at 35 mph or less and 0.90 at 45 mph or higher. The mainline has a v/c threshold of 0.90 at 35 mph or less and 0.85 for 45 mph or higher. For signalized intersections, the v/c threshold is 0.90. For ramp intersections, the v/c threshold is 0.85.

The City of Sutherlin uses a Level of Service (LOS) standard for intersections under the City's jurisdiction. The LOS standard is based on the Highway Capacity Manual (HCM) defined level of service (LOS). LOS is a concept developed to quantify the degree of comfort (including such elements as travel time, number of stops, total amount of stopped delay, and impediments caused by other vehicles) afforded to drivers as they travel through an intersection or along a roadway segment. It was developed to quantify the quality of service of transportation facilities.

LOS is based on average delay, defined as the average total elapsed time from when a vehicle stops at the end of a queue until the vehicle departs from the stop line. Average delay is measured in seconds per vehicle per hour and is then translated into a grade or "level of service" for each intersection. LOS ranges from A to F, with A indicating the most desirable condition and F indicating the most unsatisfactory condition.

The LOS criteria, as defined by the Highway Capacity Manual, for signalized intersections, are provided in Table 5.

TABLE 5: HCM LEVEL OF SERVICE FOR INTERSECTIONS

| | **Stopped Delay Per Vehicle (Seconds per Vehicle)** | |
|---|---|---|
| | **Unsignalized Intersections** | **Signalized Intersections** |
| **A** | ≤ 10.0 | ≤ 10 |
| **B** | > 10.0 and ≤ 15.0 | > 10 and ≤ 20 |
| **C** | > 15.0 and ≤ 25.0 | > 20 and ≤ 35 |
| **D** | > 25.0 and ≤ 35.0 | > 35 and ≤ 55 |
| **E** | > 35.0 and ≤ 50.0 | > 55 and ≤ 80 |
| **F** | > 50.0 | > 80 |

## 6.2 INTERSECTION ANALYSIS RESULTS

A performance analysis was conducted for the studied intersections for the Years 2023, 2025, and 2030 conditions during the AM and PM peak hours. The intersection evaluation was performed using Synchro 10 utilizing HCM 6 methodology. The results are shown in Table 6 for the AM peak hour and Table 7 for the PM peak hour. The SYNCHRO outputs are provided in Appendix E.

TABLE 6: INTERSECTION PERFORMANCE: WEEKDAY AM PEAK HOUR

| Intersection | Mobility Standard v/c | 2023 Background | 2025 Background | 2025 Build | 2030 Background | 2030 Build |
|---|---|---|---|---|---|---|
| **Hwy 138 @ Dovetail** | Side Street 0.90 | 0.06 | 0.07 | 0.16 | 0.08 | 0.18 |
| | Mainline 0.85 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| **Hwy 138 @ Dakota** | Side Street 0.95 | 0.09 | 0.10 | 0.11 | 0.13 | 0.15 |
| | Mainline 0.90 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 |
| **Highway 138 at Park Hill** | Side Street 0.95 | 0.22 | 0.25 | 0.28 | 0.35 | 0.40 |
| | Mainline 0.90 | 0.15 | 0.16 | 0.17 | 0.19 | 0.20 |
| **Park Hill at SB Ramps** | 0.85 | 0.13 | 0.14 | 0.24 | 0.26 | 0.27 |
| **Highway 138 at NB Ramps** | 0.90 | 0.39 | 0.40 | 0.41 | 0.46 | 0.46 |

As illustrated in Table 6, the intersection will meet the applicable mobility standards with the addition of development trips.

TABLE 7: INTERSECTION PERFORMANCE: WEEKDAY PM PEAK HOUR

| Intersection | Mobility Standard v/c | 2023 Background | 2025 Background | 2025 Build | 2030 Background | 2030 Build |
|---|---|---|---|---|---|---|
| **Hwy 138 @ Dovetail** | Side Street 0.90 | 0.08 | 0.09 | 0.19 | 0.11 | 0.22 |
| | Mainline 0.85 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 |
| **Hwy 138 @ Dakota** | Side Street 0.95 | 0.43 | 0.49 | 0.57 | 0.67 | 0.77 |
| | Mainline 0.90 | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 |
| **Highway 138 at Park Hill** | Side Street 0.95 | 0.30 | 0.35 | 0.43 | 0.55 | 0.66 |
| | Mainline 0.90 | 0.19 | 0.20 | 0.21 | 0.24 | 0.25 |
| **Park Hill at SB Ramps** | 0.85 | 0.14 | 0.16 | 0.22 | 0.24 | 0.18 |
| **Highway 138 at NB Ramps** | 0.90 | 0.55 | 0.58 | 0.62 | 0.66 | 0.68 |

As illustrated in Table 7, the intersection will meet the applicable mobility standards with the addition of development trips.

## 7.0 QUEUE ANALYSIS

A queuing analysis was conducted for the studied intersections. The analysis was performed using SimTraffic, a microsimulation software tool that uses the HCM-defined criteria to estimate the queuing of vehicles within the study area. The average and 95$^{th}$ percentile queuing results are illustrated in Table 8 for the AM Peak Hour and Table 9 for the PM peak hour. The SimTraffic outputs are provided in Appendix F.

TABLE 8: INTERSECTION QUEUING: AM PEAK HOUR

| Intersection | | | Available Storage (Feet) | 2023 Background (Feet) | | 2025 Background (Feet) | | 2025 Build (Feet) | | 2030 Background (Feet) | | 2030 Build (Feet) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 95th | Average | 95th | Average | 95th | Average | 95th | Average | 95th | Average |
| Dovetail @ Hwy 138 | EB | LTR | 1000+ | 25 | 25 | 25 | 25 | 25 | 0 | 25 | 0 | 25 | 25 |
| | WB | LT | 1000+ | 25 | 25 | 25 | 0 | 25 | 25 | 25 | 25 | 25 | 25 |
| | NB | LTR | 425 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 |
| | SB | LTR | 250 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 |
| Hwy 138 @ Dakota | EB | L | 160 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| | WB | R | 120 | 25 | 0 | 25 | 0 | 25 | 0 | 0 | 0 | 25 | 0 |
| | SB | L | 250 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 |
| | SB | TR | 100 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 50 | 25 |
| Park Hill @ Hwy 138 | EB | TR | 170 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| | WB | L | 250 | 75 | 50 | 75 | 50 | 100 | 50 | 100 | 50 | 100 | 50 |
| | NB | L | 210 | 100 | 50 | 75 | 50 | 75 | 50 | 100 | 50 | 100 | 50 |
| | NB | R | 185 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| I-5 NB Ramps @ Central | EB | L | 265 | 50 | 25 | 50 | 25 | 75 | 25 | 75 | 25 | 75 | 25 |
| | EB | T | 350 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 |
| | WB | T | 220 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 125 | 50 |
| | WB | R | 110 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 75 | 25 |
| | NB | LT | 1000+ | 75 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 |
| | NB | R | 200 | 50 | 25 | 75 | 25 | 50 | 25 | 75 | 50 | 75 | 50 |
| I-5 NB Ramps @ Park Hill | WB | LR | 810 | 75 | 50 | 75 | 50 | 75 | 50 | 75 | 50 | 75 | 50 |
| | NB | TR | 740 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SB | LT | 225 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 |

As demonstrated in Table 8, the addition of development traffic does not substantially increase the queuing conditions at the studied intersections.

TABLE 9: INTERSECTION QUEUING: WEEKDAY PM PEAK HOUR

| Intersection | | | Available Storage (Feet) | 2023 Background (Feet) | | 2025 Background (Feet) | | 2025 Build (Feet) | | 2030 Background (Feet) | | 2030 Build (Feet) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 95th | Average | 95th | Average | 95th | Average | 95th | Average | 95th | Average |
| Dovetail @ Hwy 138 | EB | LTR | 1000+ | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| | WB | LT | 1000+ | 25 | 25 | 25 | 25 | 50 | 25 | 50 | 25 | 25 | 25 |
| | WB | R | 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | NB | LTR | 425 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 |
| | SB | LTR | 250 | 50 | 25 | 50 | 25 | 75 | 50 | 50 | 25 | 75 | 50 |
| Hwy 138 @ Dakota | EB | L | 160 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 50 | 25 |
| | WB | LT | 490 | 25 | 0 | 25 | 0 | 25 | 0 | 25 | 0 | 25 | 0 |
| | WB | R | 120 | 25 | 0 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| | NB | LTR | 250 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| | SB | L | 250 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 75 | 100 | 75 |
| | SB | TR | 100 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 75 | 25 |
| Park Hill @ Hwy 138 | EB | TR | 170 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 50 | 25 |
| | WB | L | 250 | 75 | 50 | 75 | 50 | 100 | 50 | 100 | 50 | 100 | 75 |
| | NB | L | 210 | 75 | 50 | 75 | 50 | 75 | 50 | 75 | 50 | 75 | 50 |
| | NB | R | 185 | 0 | 0 | 25 | 25 | 25 | 25 | 0 | 0 | 25 | 25 |
| I-5 NB Ramps @ Central | EB | L | 265 | 75 | 50 | 75 | 50 | 75 | 50 | 75 | 50 | 75 | 50 |
| | EB | T | 350 | 100 | 75 | 100 | 75 | 125 | 75 | 125 | 75 | 125 | 75 |
| | WB | T | 220 | 125 | 75 | 150 | 75 | 175 | 100 | 200 | 100 | 200 | 100 |
| | WB | R | 110 | 50 | 25 | 75 | 25 | 50 | 25 | 75 | 25 | 100 | 50 |
| | NB | LT | 1000+ | 125 | 75 | 125 | 75 | 125 | 75 | 150 | 75 | 150 | 100 |
| | NB | R | 200 | 75 | 50 | 75 | 50 | 75 | 50 | 100 | 50 | 100 | 50 |
| I-5 NB Ramps @ Park Hill | WB | LR | 810 | 75 | 50 | 75 | 50 | 50 | 50 | 75 | 50 | 75 | 50 |
| | NB | TR | 740 | 25 | 25 | 25 | 0 | 25 | 0 | 25 | 0 | 25 | 0 |
| | SB | LT | 225 | 50 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 |

As demonstrated in Table 9, the addition of development traffic does not substantially increase the queuing conditions at the studied intersections.

## 8.0 EMERGENCY ACCESS

The project will include the construction of an emergency access road from the northern terminus of Pebble Creek Street north to Stearns Lane. This emergency access will contain fire department and emergency access approved gates at the southern and northern terminus. The emergency access road will be constructed with the width and all-weather surface as required by the fire department. The proposed alignment is included in Figure 15 below. Final alignment will be field verified during construction to ensure all EMS roadway requirements are met. The emergency access road is sufficient for the anticipated need.

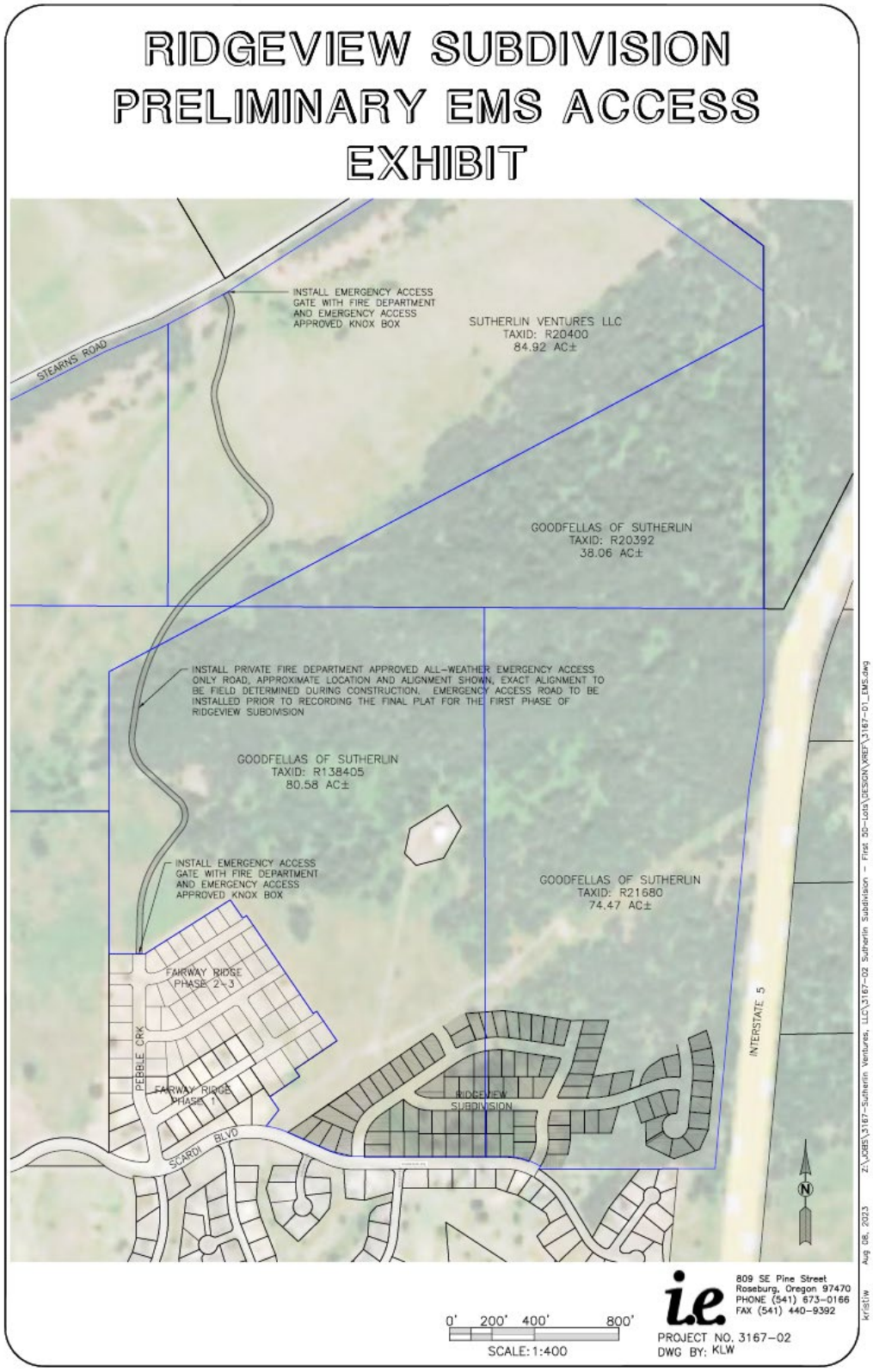



FIGURE 15 – EMERGENCY ACCESS ROAD

# 9.0 OFFSITE INTERSECTION IMPROVEMENTS

The Plan Amendment and Zone Change for the ASKS property (PA-07-3/ZC-07-4) identified several offsite intersection improvements as per Attachment A included in the Scope of Work letter included in Appendix B of this TIA. The improvements were evaluated to determine the need during this phase of development.

## 1) INTERSATE-5 SOUTHBOUND RAMPS

This project is described as "install a traffic signal and eastbound right-turn lane on OR 138W". It is assumed that the turn pocket and traffic signal are to be placed at OR 138 and Park Hill Intersection.

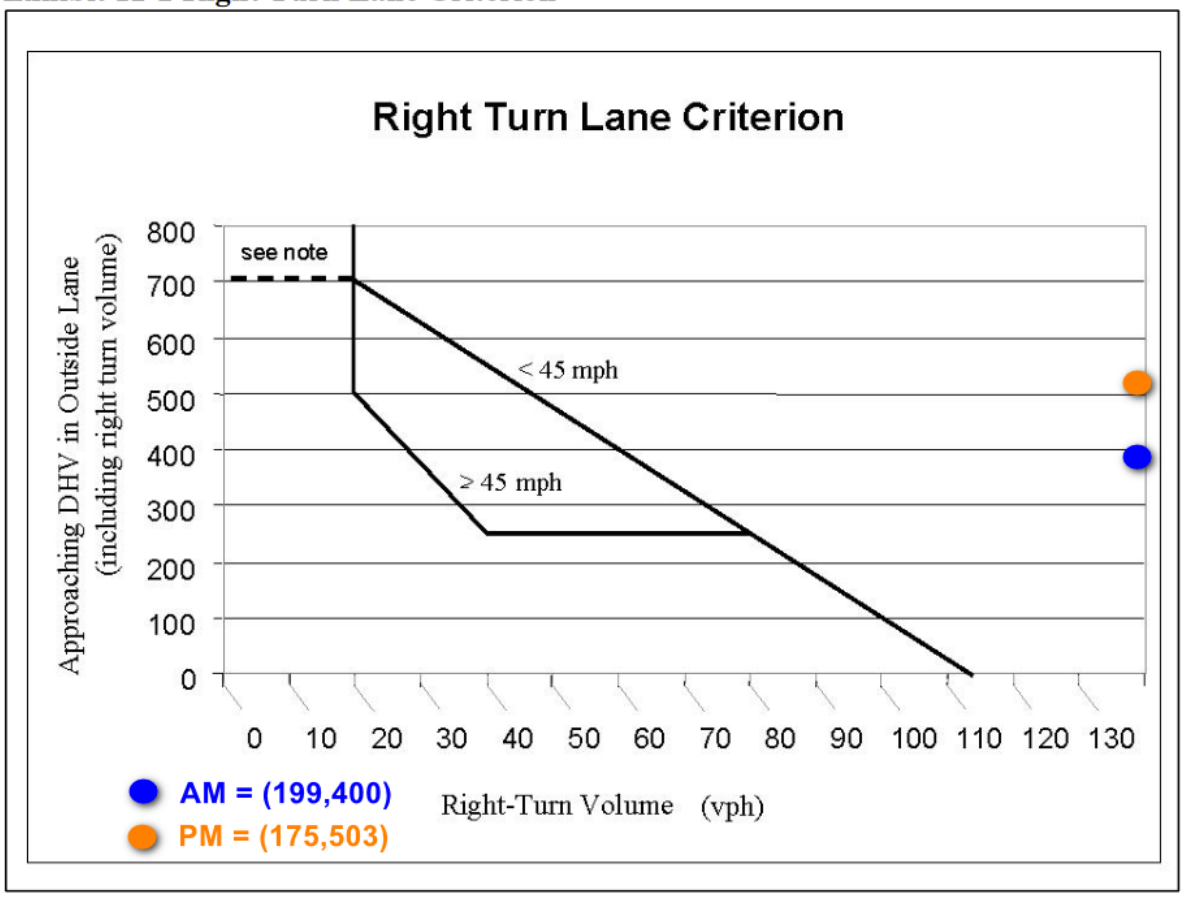
As demonstrated in Section 6.0 above, the intersection of OR 138 at Park Hill is anticipated to have a v/c of 0.40 during the AM peak hour and a v/c of 0.66 during the PM peak hour with this phase of development. The v/c meets the standard of 0.95.

The longest queue lengths occur for the northbound left turn at 100 feet and the westbound left turn at 100 feet. The queuing does not exceed the available storage of 200 feet for the northbound left turn and 350 feet for the westbound left turn.

Signal warrant analysis was performed for this intersection using ODOT's Preliminary Traffic Signal Warrant. This warrant was prepared for the year 2030 PM peak hour conditions with this proposed development in place. The PM peak hour has a higher overall traffic volume on all approaches. Therefore, it is the more appropriate to use. The 70% warrant was considered due to the population of Sutherlin being less than 10,000. The signal warrant output is included in Appendix G. The traffic volumes for the major approaches (Highway 138) and minor approach (Park Hill) do not meet the warrant volumes for either Case A or Case B. Therefore, a traffic signal at this location is not warranted.

The need for an eastbound right turn pocket was evaluated following ODOT right turn warrants found within the Analysis Procedures Manual. The right turn warrants consider the total approaching volumes, right turning volumes, and roadway speed. For the year 2030 conditions with this development in place, during the AM peak hour, the total approaching volume is 400, and the right turn is 199. For the PM peak hour, the total approaching volume is 503, and the right turn is 175. The speed of Highway 130 at this location is 30 mph. The graph below illustrates the turn pocket criterion.

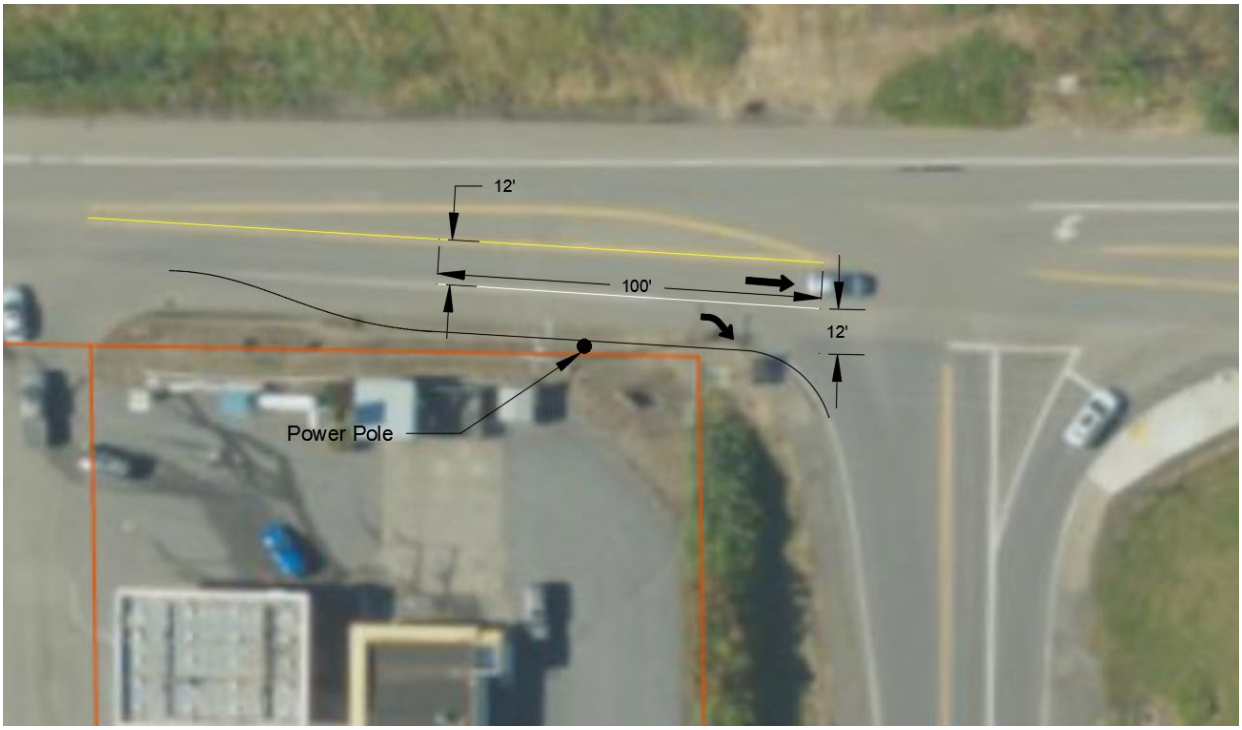
**Exhibit 12-2 Right Turn Lane Criterion**




Note: If there is no right turn lane, a shoulder needs to be provided. If this intersection is in a rural area and is a connection to a public street, a right turn lane is needed.

The right turn pocket meets the traffic volume criterion. However, there is insufficient ROW to construct a full right turn pocket, given the location of the power poles along the southern edge of the roadway. A right turn pocket is not recommended at this time.


**Highway 138 Looking East, Just West of Park Hill.**




**Rith Turn layout at Highway 138 and Park Hill**

## 2) DOVETAIL LANE INTERSECTION

This improvement is the installation of a westbound right turn lane on OW 138. This improvement has been completed. There is a separated right turn pocket with approximately 95 feet of storage and 180 feet of taper. The queuing analysis estimates no more than a 25-foot queue for the right turn pocket. There is no additional right turn pocket or taper length needed for this right turn.

## 3) DOVETAIL LANE INTERSECTION

This improvement is the installation of a median on OR 138 to restrict the access to right-in/right-out only and install a new east-west Collector Street connection from Dovetail Lane to Stearns Lane.

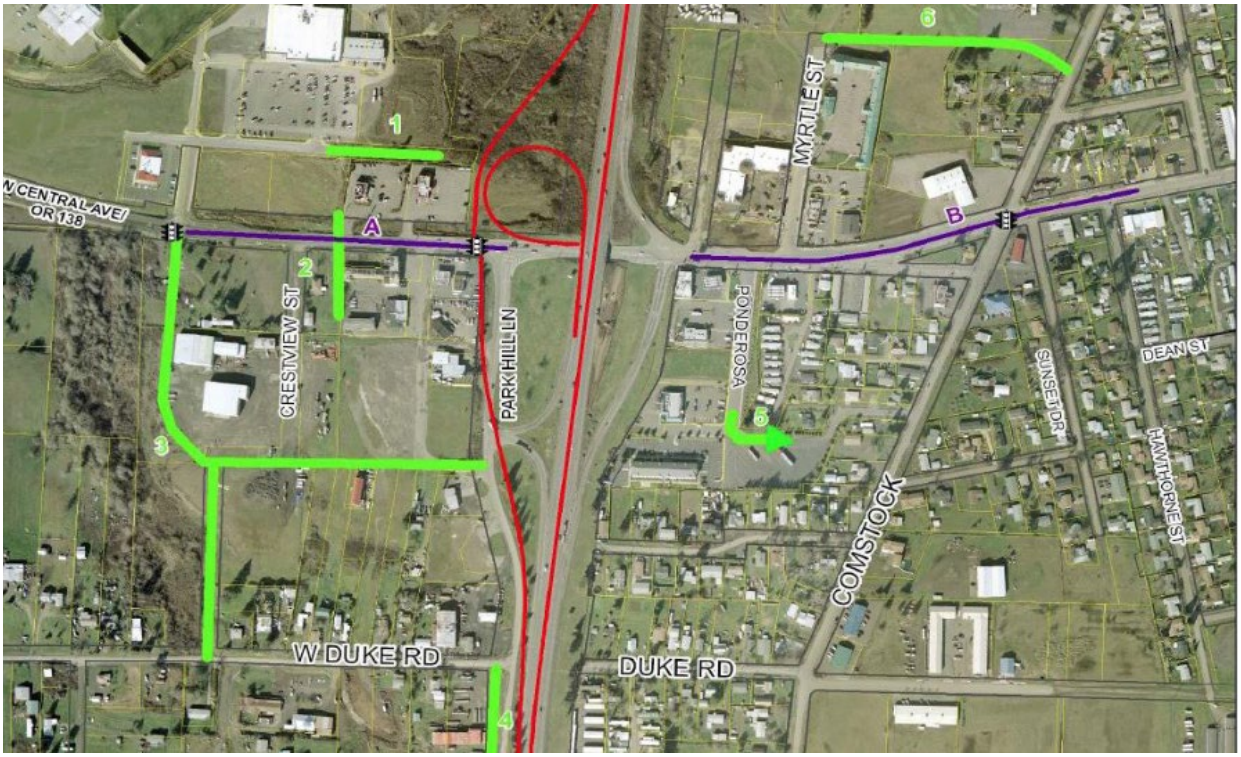
As demonstrated within Section 6.0, during the AM peak hour in the year 2030 with this phase of development completed, the v/c is 0.18, and LOS is B. During the PM peak hour in the year 2030 with the phase of development completed, the v/c is 0.22, and LOS is C. The operation of the intersection does not trigger the restriction of Dovetail to right-in/right-out at this time.

The creation of a new east-west Collector Street connection from Dovetail Lane to Stearns Lane would require construction on property not owned by this applicant, as there is no right-of-way available for this connection. This connection is not feasible at this time.

## 4) INTERSTATE-5 SOUTHBOUND RAMPS

This improvement is the installation of Exit 136 southbound exit ramp in the northwest quadrant and the installation of a traffic signal or roundabout at OR138W/Dakota Street.

Exit 136 Interchange Management Plan, completed by ODOT in April of 2009, has the preferred alternative illustrated below. This alternative and surrounding improvement was adopted as part of the City of Sutherlin's Transportation System Plan, dated July 2020. This alignment illustrates a southbound exit ramp and westbound-to-southbound on-ramp located in the northwest quadrant of the interchange. This is a substantial improvement project that far extends the impact of this project on the interchange. This improvement is not necessary for the interchange area to meet the v/c standards with the completion of this phase of development.




**Exit 136 IAMP Preferred Alternative (source Sutherin TSP**

As demonstrated in Section 6.0 above, the intersection of OR 138 at Dakota Lane is anticipated to have a v/c of 0.15 during the AM peak hour and a v/c of 0.77 during the PM peak hour with this phase of development. The v/c meets the standard of 0.95.

The longest queue lengths occur for the southbound left turn at 100 feet. The queuing does not exceed the available storage of 250 feet for the southbound approach.

A signal warrant analysis was performed for this intersection using ODOT's Preliminary Traffic Signal Warrant. This warrant was prepared for the year 2030 PM peak hour conditions with this proposed development in place. The PM peak hour has a higher overall traffic volume on all approaches. Therefore, it was the more appropriate to use. The 70% warrant was considered due to the population of Sutherlin being less than 10,000. The signal warrant output is included in Appendix G. The traffic volumes for the major approaches (Highway 138) and minor approach (Dakota) do not meet the warrant volumes for Case A but does meet the warrant volumes for Case B. However, given that the v/c standards are met, this phase of development does not trigger improvements at this location. Therefore, a traffic signal is not recommended at this time.

# 10.0 CONCLUSION

This report provides the Traffic Impact Analysis and findings prepared for the proposed 91-unit subdivision located north of Scardi Boulevard in Sutherlin, Oregon. The analysis evaluates the transportation impacts as per the City of Sutherlin and ODOT, evaluating adjacent roadway and intersection operation with the addition of development traffic for the year of completion and 5 years into the future.

## FINDINGS

- All studied intersections operate within the mobility standards with and without the development traffic.
- The addition of development traffic does not substantially increase queuing conditions.
- The project will include the construction of an emergency access road from the northern terminus of Pebble Creek Street north to Stearns Lane. The emergency access road is sufficient for the anticipated need.
- The previous findings for the Plan Amendment and Zone change associated with this property identified several transportation improvements; see Attachment A in Appendix B. The following are findings relevant to the transportation improvements warranted for this phase of development.
    1) This project is described as “install a traffic signal and eastbound right-turn lane on OR 138W”. It is assumed that the turn pocket and traffic signal are to be placed at OR 138 and Park Hill Intersection.

       The v/c meets the standard of 0.95, and the queuing does not exceed the available storage of 200 feet for the northbound left turn and 350 feet for the westbound left turn. There are no operational issues that would trigger mitigation for this phase of development.

       Signal warrant analysis was performed for this intersection using ODOT’s Preliminary Traffic Signal Warrant. The traffic volumes for the major approaches (Highway 138) and minor approach (Park Hill) do not meet the warrant volumes for either Case A or Case B. Therefore, a traffic signal at this location is not warranted.

       The right turn pocket meets the traffic volume criterion. However, there is insufficient ROW to construct a full right turn pocket, given the location of the power poles along the southern edge of the roadway. A right turn pocket is not recommended at this time.

    2) This improvement is the installation of a westbound right turn lane on OW 138 at Dovetail Lane. This improvement has been completed. There is a separated right turn pocket with approximately 95 feet of storage and 180 feet of taper.

The queuing analysis estimates no more than a 25-foot queue for the right turn pocket. There is no additional right turn pocket or taper length needed for this right turn.

3) This improvement is the installation of a median on OR 138 at Dovetail Lane to restrict the access to right-in/right-out only and install a new east-west Collector Street connection from Dovetail Lane to Stearns Lane.

   During the AM peak hour in the year 2030, with this phase of development completed, the v/c is 0.18 and LOS is B. During the PM peak hour in the year 2030, with this phase of development completed, the v/c is 0.22 and LOS is C. The operation of the intersection does not trigger the restriction of Dovetail to right-in/right-out at this time.

   The creation of a new east-west Collector Street connection from Dovetail Lane to Stearns Lane would require construction on property not owned by this applicant, as there is no right-of-way available for this connection. This connection is not feasible at this time.

4) This improvement is the installation of Exit 136 southbound exit ramp in the northwest quadrant of the interchange and the installation of a traffic signal or roundabout at OR138W/Dakota Street.

   The installation of Exit 136 southbound exit ramp is a substantial improvement project that far extends the impact of this project on the interchange. This improvement is not necessary for the interchange area to meet the v/c standards with the completion of this phase of development.

   A signal warrant analysis was performed for the OR138W/Dakota Street intersection using ODOT's Preliminary Traffic Signal Warrant. The traffic volumes for the major approaches (Highway 138) and minor approach (Dakota St) do not meet the warrant volumes for Case A, but does meet the warrant volumes for Case B. The intersection operates within the v/c standard with this phase of the development in place. Therefore, mitigation by this phase of development does not trigger improvements at this intersection. A traffic signal is not recommended at this time.

APPENDIX A:

SITE PLAN

RIDGEVIEW SUBDIVISION

SANDOW ENGINEERING

# RIDGEVIEW SUBDIVISION


CALL BEFORE YOU DIG !
ONE CALL: (800) 332-2344
OAR 952-001-0010 THROUGH
OAR 952-001-0090

SCALE: 1"=60'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planning

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809 SE Pine St
Roseburg, OR

ieengineering.com


REGISTERED PROFESSIONAL ENGINEER
72673PE
OREGON
DECEMBER 13, 2007
K. D. RANGER

PRELIMINARY

| Rev. | Date | Dwg | Description |
|---|---|---|---|
| | | | |

**RIDGEVIEW SUBDIVISION**

0 SCARDI BLVD
SUTHERLIN, OR 97479

**OVERALL PLAN**

SCALE: AS SHOWN
JULY 5, 2023
ISSUE: PRELIMINARY SET

PROJECT NO. 3167-02
DRW: ANV
CHK: EBR

**C2**

krlstlw Jul 19, 2023 Z:_JOBS\3167-Sutherlin Ventures, LLC\3167-02 Sutherlin Subdivision - Fmr 50-Lots\DESIGN\CADD\3167-02_C.dwg

APPENDIX B:

SCOPE OF WORK

RIDGEVIEW SUBDIVISION

SANDOW ENGINEERING

Oregon
Tina Kotek, Governor

**Oregon Department of Transportation**
Region 3, District 8
100 Antelope Road
White City, OR 97503
Phone (541) 774-6316
FAX (541) 774-6397

FILE CODE:

**Date:** **August 30, 2023** File:

**Address:** **Kelly Sandow P.E.**
**Sandow Engineering**
**160 Madison Street, Suite A**
**Eugene, OR 97402**

**Subject:** **Preliminary Traffic Impact Analysis Scope of Work:**
**Ridge View Subdivision**

The purpose of this letter is to define the scope of work for a Traffic Impact Study (TIS), which evaluates the impact for the Ridgeview Subdivision. The total acreage is approximately 22.00 acres and the project is proposing a 91-unit subdivision located north of Scandi Boulevard in Sutherlin Oregon. The site is currently zoned R1-Low Density Residential, and this is not a zone change. The information identifying the limits of the project shall be defined in the TIS and shall be pre -approved by the Sutherlin and ODOT before continuing the evaluation.

# Scope of Work:

## GENERAL

### 1. Executive Summary

Provide a description of the development, site location and study area (including a site map). Briefly describe the purpose of the analysis, principal findings, recommendations and conclusions.

### 2. Analysis Study Area

Provide a text description (including tax-lot descriptions) of the proposed development; and a graphic showing the intersections and access points to be evaluated as part of this analysis.

**A. Major Intersections to be evaluated:**

*a) Dakota Street & Hwy 138*
*b) Dovetail Lane & Hwy 138*
*c) I-5 NB & SB Ramps & Hwy 138*

# TRAFFIC DATA

## 1. Traffic Counts

For all major intersections where significant signal modifications or where signals are being proposed, the traffic volume counts shall be a minimum of 16-hours long, with 15-minute breakdowns in the A.M. and P.M. peak hours, unless pre-approved for a lesser time. Justification for deviation from these counts will be required. For all other intersections and approaches, the counts must be at least 3-hours long, made during both the morning and afternoon peaks, with 15-minute breakdowns. The morning peak hour occurs during 6:30 AM to 9:30 AM and the afternoon peak occurs during 3:30 PM to 6:30 PM. ODOT and the City are not aware of any "false" peaks for this area of the City. If there are indications of problems during these time frames, the traffic evaluation shall address all concerns.

Raw traffic volumes will not be accepted for use in traffic analysis. All traffic volumes shall be seasonally adjusted to represent the 30$^{th}$ Highest Hour Volumes (30HV) for the Current Year, each anticipated phase completion, and the Future Year "background traffic" conditions, all with and with-out the development. ODOT does not normally accept traffic volumes deviating more than 30% of the average volume. Justification for deviation will be required. For guidance, please refer to ODOT's APM Analysis Procedure Manual v2 Chapter 5:
http://www.oregon.gov/ODOT/Planning/Pages/APM.aspx

## 2. Site Trip Generation, Distribution and Assignment

Site trip generation shall utilize the most recent edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual to estimate daily and peak hour trip volumes originating from and destined to the proposed development. In the case of an existing approval where specific land uses have not been identified, a reasonable worst-case land use scenario should be assumed based on the allowed uses under the current and requested zone(s). All assumptions and adjustments shall be documented and discussed in the TIS, or in an appendix. Trip generation may be adjusted with additional information and refinement. Pass-by, Diverted and Internal trips should be calculated based on ITE Trip Generation hand book.

This analysis should use available transportation models in conjunction with the City of Sutherlin Transportation System Plan and the Comprehensive Plan to estimate traffic distribution patterns. This TIS could be a significant amendment to the current Comprehensive Plan and the Transportation System Plan. Approved computer models, such as Vistro, or manual calculations may also be used for determining trip assignments for site-generated traffic volumes on roadways within the study area.

***Note: Pre-approval of trip generation and distribution parameters shall be obtained from ODOT prior to commencing the further analysis.***

# ANALYSIS PROCEDURES

For ODOT's *Analysis Procedures Manual Refer to*:
http://www.oregon.gov/ODOT/Planning/Pages/APM.aspx

and for ODOT's *Development Review Guidelines Refer to:*
http://www.oregon.gov/ODOT/Planning/Documents/Development-Review-Guidelines.pdf

### 1. Capacity Analysis

Capacity analysis of signalized intersections, unsignalized intersections, and roadway segments shall follow the established methodologies of the current Highway Capacity Manual (HCM 6th Edition). For signalized intersections, the overall intersection V/C shall be reported which will require manual calculations in accordance with the HCM 6th Edition. For unsignalized intersections, the highest approach V/C shall be reported, along with an indication of its corresponding movement and the related impacts created by the development.

Attached **Table 3.3.7** lists the ODOT default values for use in signalized intersection analysis. If multiple intersections are analyzed, the traffic volumes shall be balanced between intersection nodes. All intersection capacity analyses shall include heavy vehicles percentages by approach, as determined from manual counts. Planning level mobility results (V/C) from the TIS will be compared against Highway Mobility Standards (Policy 1F) and the Maximum V/C Ratios provided in Table 6 of the 1999 Oregon Highway Plan (OHP).

Application of Computer software shall closely follow ODOT-approved analysis methodologies using ODOT standard parameter values. HCS 7 and Synchro/SimTraffic are examples of accepted analysis software. For further guidance, contact ODOT's Transportation Planning Analysis Unit (TPAU).

### 2. Queue Length Analysis

Intersection operation analysis shall include the effects of queuing and blocking. Average queue lengths and 95th Percentile queue lengths shall be reported for all study area intersections. The 95th Percentile queuing shall be used for design purposes, and will be reported to the next highest 25 foot increment. Any methodology used to determine queue length shall be approved in advance by either TPAU or the Region Traffic Section.

## ANALYSIS REQUIREMENTS

### 1. Intersection Sight Distance

Adequate intersection sight distance shall be verified for all proposed intersections and highway approaches as required in ODOT's 2012 Highway Design Manual. Refer to: http://www.oregon.gov/ODOT/Engineering/Pages/Hwy-Design-Manual.aspx

For guidance, please contact the Region Access Management Engineer.

### 2. Traffic Signal Installations & Modifications

Analysis and recommendations related to new and/or modified traffic signals shall follow ODOT's Traffic Signal Policy and Guidelines, and all subsequent revisions. These documents can found on the web at:
http://www.oregon.gov/ODOT/Engineering/Pages/Signal-Design-Manual.aspx

***Preliminary traffic signal warrants need to be checked for the intersection of Dakota Street & Hwy 138. As part of the signal analysis, a round-about will be consider first, and justified or eliminated before a signal can then be pursued.***

New signal proposals shall show, but are not limited to, the following:

a) A clear indication for the traffic signal; only after other enhancements to nearby signals or intersections are shown to be insufficient to mitigate the new highway related impacts resulting from the proposed project.
b) An assessment of the ability of the existing, planned, and proposed public roads to accommodate proposed project traffic at another location.
c) A detailed description how the proposed project will affect the existing and proposed study area intersections.
d) Documentation of traffic volumes and signal warrant satisfaction; if a new signal is determined to be the correct solution.

Traffic signal spacing requirements shall conform to the 1999 Oregon Highway Plan and all amendments.

All proposed signals shall show the need and warrants as described in Oregon Administrative Rule 734-020-0400-0500, the Oregon Traffic Manual section 6.34 and the above mentioned Traffic Signal Policy and Guidelines. For guidance, please contact TPAU or the Region Traffic Section, or refer to the Preliminary Signal Warrant Guidelines at:
http://www.oregon.gov/ODOT/Engineering/Pages/Signal-Design-Manual.aspx

**NOTE:** It is ultimately up to the State Traffic Engineer to approve all signal installations, modifications and deviations. Just because an intersection may meet the MUTCD Warrants does not insure it will be approved by the State Traffic Engineer.

## ANALYSIS OUTPUT

### 1. Existing Conditions

Identify current year site conditions at the proposed development location. This includes, but is not limited to the following:

a) A description of the site location, zoning, existing use(s), and proposed use(s) of subject property.
b) A description of surrounding and anticipated land uses.
c) A graphic identifying existing lane configurations and traffic control devices at the study area intersections
d) A graphic showing existing 30HV traffic; reported as AM (6:30-9:30 a.m.) and PM (3:30-6:30 p.m.) Peak Hour Volumes (PHV), and also as average daily traffic (ADT). Also include in this graphic a list of heavy vehicle percentages by approach and growth rates used for future volumes.
e) Identify all proposed road segments, public intersections, public or private approaches:
    - where the proposed project can be expected to add additional traffic volumes greater than 20 percent of the current traffic volumes,
    - or at a minimum 500 vehicle trips in a single day,

- or more than 50 additional vehicle trips in any single hour.

f) An analysis of existing intersection operations, reported in terms of both Volume to Capacity (V/C) and Level of Service (LOS).
g) Intersection Crash analysis should refer to the HSM procedures in APM Chapter 4: http://www.oregon.gov/ODOT/Planning/Documents/APMv2_Ch4.pdf

**2. Traffic Volumes & Operations – Year of Opening and Years of Anticipated Phases; with & without Proposed Development**

An analysis shall be made of all study area intersections for the Year of Opening and each anticipated phase, with both "*background traffic*" and "*total traffic*" conditions. "*Total traffic*" conditions are considered "*background traffic*" volumes plus site generated trips and "pipe line" trips. This analysis should provide the following:

a) A graphic showing Year of phase "*background traffic*" and "*total traffic*" volumes.
b) A graphic or table showing V/C and LOS analysis results for both "*background traffic*" and "*total traffic*" volumes.
c) A graphic or table itemizing storage length requirements for all approaches, rounded to the next nearest 25 foot increment.
d) If applicable, a discussion of progression performance along the analysis corridor.

**3. Traffic Volumes & Operations – Future-Year; with & without Proposed Development**

An analysis shall be made of all study area intersections for a **5-year horizon without zone change or 20-year horizon for zone change.** This should be including each completed phase, anticipated development in the surrounding area, and all anticipated improvements on the transportation system for both "*background traffic*" and "*total traffic*" conditions. This analysis should provide the following:

a) A graphic showing Year of Opening "*background traffic*" and "*total traffic*" volumes.
b) A graphic or table showing V/C and LOS analysis results for both "*background traffic*" and "*total traffic*" volumes.
c) A graphic or table itemizing storage length requirements for all approaches, rounded to the next highest 25 foot increment.
d) If applicable, a discussion of progression performance along the analysis corridor.

Planned transportation system improvements anticipated within the **5-year horizon without zone change or 20-year horizon for zone change.** This shall be incorporated into the Future Year analysis. Do not incorporate improvements that are proposed as mitigation for the development. For guidance,
Please refer to the Transportation Planning Rule (TPR) OAR 660-012-0060 at http://transnet.odot.state.or.us/hwy/region2/Shared%20Documents/Development%20Review%20Docs/OAR_660_012_0060.pdf

**4. Capacity & Operation Analysis Inputs**

A summary of traffic analysis variable inputs shall be provided in an appendix. In Synchro, the ***Int: Lanes, Volumes, Timings*** report is the output source for this information. TIS's submitted without an input summary will not be accepted by the Department.

**5. Conclusions and Recommendations**

Summarize existing and future conditions and discuss the proposed development's impacts. Identify any operational, capacity or safety deficiencies and recommend mitigation along with the effectiveness of the mitigation. Summarize how the proposed development complies with all operational, capacity and safety standards in the applicable approval criteria. Also summarize all proposed mitigations and the "assigned" proportionality to the development for all locations.

***Note: Signal timing adjustments will not be considered as mitigation.***

Please submit three stamped, final hard copy versions of the TIA for review to ODOT. Also, **please submit all electronic analysis files for review** to ODOT so staff can verify assumptions, default settings, and other values included in the traffic analysis. If the analysis performed used traffic software other than Trafficware's Synchro/Simtraffic software or Highway Capacity Manual 6th Edition software, please submit the appropriate UTDF (.csv) files for review. You may contact the Region Traffic Analyst for details. ODOT staff will need a minimum of 30 days for review and comment on the TIA.

***Please include this scope of work as an appendix item in the TIA.***

We hope this will provide enough information to get started on the analysis. We are pleased to work with you and your staff to answer any questions that arise during the course of your work. Additional coordination of traffic analysis data may be required during the TIA review process.

Please contact me directly at 541-315-5208 if you have comments, questions, or require additional information regarding traffic engineering issues or contact Mr. Micah Horowitz, ODOT Development Review Planner, at 541-315-5208, if you have comments, questions, or require additional information regarding land use issues. Mr. Horowitz will serve as the lead ODOT Development Review contact for this project.

Sincerely.

Wei (Michael) Wang, P.E. & M.S.
Interim Region 3 Access Management Engineer

***Default Signal Parameters***

| Table 3.3.7: ODOT Default Parameters for Use With Signalized Intersection Analysis Methodologies | |
|---|---|
| Total Lost Time | 4 seconds per phase minimum for typical intersections, more for large or complex intersections. |
| Peak Hour Factor | For future year analysis:<br>• 0.95 for major arterial-major arterial;<br>• 0.92 for major arterial-minor arterial;<br>• 0.90 for minor arterial-minor arterial;<br>• 0.88 for minor arterial-collector;<br>• 0.85 for collector-collector or lower classification<br>Unless better information is available, such as for a school or industrial use. |
| Ideal Saturation Flow Rate | Field measurement should be consistent with methodology laid out in the HCM 2010. Saturation flow rate worksheets must be included in the documentation.<br>Where field measurements are not done,<br>• Outside of the Portland, Salem and Eugene MPO urban areas the unadjusted saturation flow rate is 1750 passenger cars per hour of green per lane (pcphgl).<br>• Inside the Portland, Salem and Eugene MPO urban growth boundaries an unadjusted saturation flow rate of 1900 pcphgl may be used, unless one or more of the following conditions is present, in which case 1750 pcphgl shall be used. Conditions indicating use<br>  • On-street parking<br>  • Greater than 5% trucks<br>  • Roadways intersect at severe skew angle<br>  • One or more driveway approach(es) with a combined volume in excess of 5 vph, are present downstream of the intersection within the functional area (see Chapter 4) or upstream within the length of the standing queue<br>  • Poor signal spacing or observed queue spillbacks between signals during the peak hour, or<br>  • Less than 12 foot travel lanes |

Oregon
Tina Kotek, Governor

**Department of Transportation**
Region 3 Planning and Programming
100 Antelope Drive
White City, Oregon 97503
Phone: (541) 774-6299

Exhibit A

1. Interstate 5 Southbound Ramps: The applicant shall install a traffic signal and eastbound right-turn lane on OR 138W prior to City issuance of Certificate of Occupancy for ASKC's Phase 1. Phase 1 shall not exceed 140 single family units or 1, 340 average daily trips, 100 multi-family units or 586 average daily trips and 16 industrial park acres or 1,010 average daily trips.

2. Dovetail Lane Intersection: The applicant shall install a westbound right-turn lane on OR138W prior to City issuance of Certificate of Occupancy for ASKC Phase 2. Phase 2 shall not exceed 140 single family units or 1,340 average daily trips, 100 multi-family units or 586 average daily trips and 16 industrial park acres or 1,010 average daily trips.

3. Dovetail Lane Intersection: The applicant shall install a raised median on OR 138W to restrict access to right-in/right-out and install a new east-west Collector Street connection from Dovetail Lane to Stearns Lane prior to City issuance of Certificate of Occupancy for ASKC Phase 3. Phase 3 shall not to exceed 140 single family units or 1,340 average daily trips, 100 multi-family units or 586 average daily trips and 16 industrial park acres or 1,010 average daily trips.

4. Interstate 5 Southbound Ramps: The applicant shall install an Exit 136 southbound exit ramp in the northwest quadrant and install a traffic signal or roundabout at OR138W/Dakota Street intersection prior to City issuance of Certificate of Occupancy for ASKC Phase 4. Phase 4 shall not exceed 130 single family units or 1,244 average daily trips, 100 multi-family units or 586 average daily trips and 16 industrial park acres or 1,010 average daily trips. The Phase 4 traffic signal improvement shall relocate the temporary traffic signal installed at the southbound ramps for ASKC Phase 1.

Note that all Interstate 5 southbound ramp improvements must be constructed to conform to OAR 734, Division 20. All traffic signal improvements need to conform to the Traffic Signal Approval Process as established by Oregon Administrative Rules 734-020-0400 to 0490 and the Oregon Traffic Manual, Chapter 6.34. The required signal investigation documentation is the responsibility of the applicant. The documentation is to be submitted to the State Traffic Engineer for approval through the Region 3 Traffic Section.

APPENDIX C:

CRASH ANALYSIS

RIDGEVIEW SUBDIVISON

SANDOW ENGINEERING

**CRASH DATA SUMMARY** 5821 Sutherlin Zone Change

## Central Ave @ NB I5 Ramps

| YEAR | PDO | INJURY | FATAL | HEAD | REAR | SIDE | TURN | OTHER | PED | BIKE | TOTAL | CHECK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2017 | | | | | | | | | | | 0 | OK |
| 2018 | | | | | | | | | | | 0 | OK |
| 2019 | | 1 | | | | | | | | 1 | 1 | OK |
| 2020 | | | | | | | | | | | 0 | OK |
| 2021 | 1 | | | | | | | 1 | | | 1 | OK |
| | | | | | | | | | | | 0 | OK |
| TOTALS: | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | |

| P.M. PEAK HOUR | Number of Years, n | ADT | AVG. ANNUAL MILES (MILLIONS) | AVG. YEARLY CRASHES | CRASH RATE/ MILLION MILES |
|---|---|---|---|---|---|
| 1310 | 5 | 13100 | 4781500.000 | 400000.0 | 0.08 |

| | | |
|---|---|---|
| REAR | | |
| TURN | | |
| BIKE | S-N / E-W | |
| OTHER | E-SE | |

## Central @ Parkhill

| YEAR | PDO | INJURY | FATAL | HEAD | REAR | SIDE | TURN | OTHER | PED | BIKE | TOTAL | CHECK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2017 | | | | | | | | | | | 0 | OK |
| 2018 | | 1 | | | | | 1 | | | | 1 | OK |
| 2019 | | | | | | | | | | | 0 | OK |
| 2020 | | | | | | | | | | | 0 | OK |
| 2021 | 1 | | | | | | 1 | | | | 1 | OK |
| | | | | | | | | | | | 0 | OK |
| TOTALS: | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | |

| P.M. PEAK HOUR | Number of Years, n | ADT | AVG. ANNUAL MILES (MILLIONS) | AVG. YEARLY CRASHES | CRASH RATE/ MILLION MILES |
|---|---|---|---|---|---|
| 1210 | 5 | 12100 | 4416500.000 | 1000000.0 | 0.23 |

| | | |
|---|---|---|
| REAR | | |
| TURN | W-E / S-W | W-E / E-S |
| BIKE | | |
| OTHER | | |

## Dovetail @ Central

| YEAR | PDO | INJURY | FATAL | HEAD | REAR | SIDE | TURN | OTHER | PED | BIKE | TOTAL | CHECK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2017 | | 1 | | | | 1 | | | | | 1 | OK |
| 2018 | | | | | | | | | | | 0 | OK |
| 2019 | 1 | | | | | | | 1 | | | 1 | OK |
| 2020 | 2 | 1 | 1 | | 1 | | 1 | 2 | | | 4 | OK |
| 2021 | 1 | | | | | | 1 | | | | 1 | OK |
| | | | | | | | | | | | 0 | OK |
| TOTALS: | 4 | 2 | 1 | 0 | 1 | 1 | 2 | 3 | 0 | 0 | 7 | |

| P.M. PEAK HOUR | Number of Years, n | ADT | AVG. ANNUAL MILES (MILLIONS) | AVG. YEARLY CRASHES | CRASH RATE/ MILLION MILES |
|---|---|---|---|---|---|
| 675 | 5 | 6750 | 2463750.000 | 1400000.0 | 0.57 |

| | | |
|---|---|---|
| REAR | SE-NW / SE-NW | |
| TURN | SE-NW / SE-SW | SE-SW / SE-NW |
| SIDE | NW-SE / NW-SE | |
| OTHER | SE-NW | 2 NE-SW |

## Dakota @ Central Ave

| YEAR | PDO | INJURY | FATAL | HEAD | REAR | SIDE | TURN | OTHER | PED | BIKE | TOTAL | CHECK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2017 | | 2 | | | | | 2 | | | | 2 | OK |
| 2018 | 1 | | | | | | 1 | | | | 1 | OK |
| 2019 | | | | | | | | | | | 0 | OK |
| 2020 | 1 | | | | | | 1 | | | | 1 | OK |
| 2021 | | 1 | | | | | 1 | | | | 1 | OK |
| | | | | | | | | | | | 0 | OK |
| TOTALS: | 2 | 3 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 5 | |

| P.M. PEAK HOUR | Number of Years, n | ADT | AVG. ANNUAL MILES (MILLIONS) | AVG. YEARLY CRASHES | CRASH RATE/ MILLION MILES |
|---|---|---|---|---|---|
| 258 | 5 | 2580 | 941700.000 | 1000000.0 | 1.06 |

| | | |
|---|---|---|
| REAR | | |
| TURN | 3 N-E / E-W | 2 E-W / N-E |
| BIKE | | |
| OTHER | | |

| | | | # Crashes | ADT | MEV | Crash Rate | Critical Crash Rate | |
|---|---|---|---|---|---|---|---|---|
| 1 | Central Ave @ NB I5 Ramps | Stop | 2 | 13100 | 23.91 | 0.08 | 0.56 | under |
| 2 | Dovetail @ Central | Stop | 7 | 6750 | 12.32 | 0.57 | 0.66 | under |
| 3 | Dakota @ Central Ave | Stop | 5 | 2580 | 4.71 | 1.06 | 0.89 | over |
| 4 | Central @ Parkhill | Signal | 2 | 12100 | 22.08 | 0.09 | 0.22 | under |
| 5 | 0 | Stop | 0 | 0 | 0.00 | #DIV/0! | #DIV/0! | #DIV/0! |
| 6 | 0 | Stop | 0 | 0 | 0.00 | #DIV/0! | #DIV/0! | #DIV/0! |
| 7 | 0 | Stop | 0 | 0 | 0.00 | #DIV/0! | #DIV/0! | #DIV/0! |

Weighted Average

| | | | |
|---|---|---|---|
| Signal | 2 | 22.08 | 0.090569455 |
| Stop | 14 | 40.93 | 0.342007707 |

CITY OF SUTHERLIN, DOUGLAS COUNTY

**CENTRAL AVE at NB ENFR CENTRAL, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

1 - 1 of 1 Crash records shown.

| SER# / INVEST / RD DPT / UNLOC? | S P E D | A L C | D M R U G S | J I N V | S C H L | W O R K | DATE / DAY / TIME / LAT | CLASS / DIST / FROM / LONG | CITY STREET / FIRST STREET / SECOND STREET / LRS | RD CHAR / DIRECT / LOCTN | INT-TYPE (MEDIAN) / LEGS (#LANES) | INT-REL / TRAF-CONTL | OFFRD / RNDBT / DRVWY | WTHR / SURF / LIGHT | CRASH / COLL / SVRTY | SPCL USE / TRLR QTY / OWNER / V# / TYPE | MOVE / FROM / TO | P# / TYPE | PRTC / INJ / SVRTY | A G E | S E X | LICNS / RES | PED LOC | ERROR | ACT | EVENT | CAUSE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 00828 | N | N | N | N | N | N | 09/02/2021 | 16 | CENTRAL AVE | INTER | 3-LEG | N | Y | CLR | FIX OBJ | 01 NONE 9 | TURN-L | | | | | | | | | 057 | 08 |
| STATE | | | TH | | | | | | NB ENFR CENTRAL | SE | | STOP SIGN | N | DRY | FIX | N/A | E -SE | | | | | | | | 000 | | 00 |
| N | | | 3P | | | | | | | 09 | 1 | | N | DAY | PDO | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | | 000 | 000 | | 00 |
| N | | | 43 23 10.8 | | | | | -123 20 20.13 | 0231AD100S00 | | | | | | | | | | | | | | UNK | | | | | |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**CENTRAL AVE at NB ENFR CENTRAL, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2021** | | | | | | | | | | | | | | |
| FIXED / OTHER OBJECT | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| **YEAR 2021 TOTAL** | **0** | **0** | **1** | **1** | **0** | **0** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** |
| **FINAL TOTAL** | **0** | **0** | **1** | **1** | **0** | **0** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** |

CITY OF SUTHERLIN, DOUGLAS COUNTY

**CENTRAL AVE at NB EXTO CENTRAL, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

1 - 1 of 1 Crash records shown.

| SER# / INVEST / RD DPT / UNLOC? | S P E D | A L C | D M R U G S | J I N V | S C H L | W O R K | DATE / DAY / TIME / LAT | CLASS / DIST / FROM / LONG | CITY STREET / FIRST STREET / SECOND STREET / LRS | RD CHAR / DIRECT / LOCTN | INT-TYPE (MEDIAN) / LEGS (#LANES) | INT-REL / TRAF- / CONTL | OFFRD / RNDBT / DRVWY | WTHR / SURF / LIGHT | CRASH / COLL / SVRTY | V# | SPCL USE / TRLR QTY / OWNER / TYPE | MOVE / FROM / TO | P# | PRTC TYPE | INJ SVRTY | A G E | S E X | LICNS RES | PED LOC | ERROR | ACT EVENT | CAUSE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 00765 | N | N | N | N | | | 08/05/2019 | 16 | CENTRAL AVE | INTER | CROSS | N | N | CLR | BIKE | 01 | NONE | STRGHT | | | | | | | | | | 04,18 |
| CITY | | | | | | | MO | | NB EXTO CENTRAL | CN | | TRF SIGNAL | N | DRY | ANGL | | PRVTE | S -N | | | | | | | | 000 | 00 |
| N | | | | | | | 11A | | | 02 | 0 | | N | DAY | INJ | | PSNGR CAR | | 01 | DRVR | NONE | 23 | F | SUSP | | 000 | 000 | 00 |
| N | | | | | | | 43 23 10.8 | -123 20 13.43 | 023100100S00 | | | | | | | | | | | | | | | UNK | | | | |
| | | | | | | | | | | | | | | | | | | - STRGHT E W | 01 | BIKE | INJA | 18 | M | | I INRD | 020 | 035 | 04,18 |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**CENTRAL AVE at NB EXTO CENTRAL, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2019** | | | | | | | | | | | | | | |
| ANGLE | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2019 TOTAL** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |
| **FINAL TOTAL** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |

CITY OF SUTHERLIN, DOUGLAS COUNTY

**SB EX-EN CENTRAL at CENTRAL AVE, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

1 - 2 of 2 Crash records shown.

| SER# / INVEST / RD DPT / UNLOC? | S P E D | A L C | D M R U G S | J N V | S H L | W O R K | DATE / DAY / TIME / LAT | CLASS / DIST / FROM / LONG | CITY STREET / FIRST STREET / SECOND STREET / LRS | RD CHAR / DIRECT / LOCTN | INT-TYPE (MEDIAN) / LEGS (#LANES) | INT-REL / TRAF- / CONTL | OFFRD / RNDBT / DRVWY | WTHR / SURF / LIGHT | CRASH / COLL / SVRTY | V# | SPCL USE / TRLR QTY / OWNER / TYPE | MOVE / FROM / TO | P# | PRTC / TYPE | INJ / SVRTY | A G E | S E X | LICNS / RES | PED LOC | ERROR | ACT | EVENT | CAUSE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01104 | N | N | N | N | N | N | 11/16/2018 | 16 | CENTRAL AVE | INTER | 3-LEG | N | N | CLR | ANGL-OTH | 01 | NONE | STRGHT | | | | | | | | | | 02 |
| CITY | | | FR | | | | | | SB EX-EN CENTRAL | CN | | STOP SIGN | N | DRY | TURN | | PRVTE | W -E | | | | | | | | | 000 | | 00 |
| N | | | 2P | | | | | | | 04 | 0 | | N | DAY | INJ | | PSNGR CAR | | 01 | DRVR | INJB | 88 | M | OR-Y | | 000 | 000 | | 00 |
| N | | | 43 23 10.8 | | | | | -123 20 20.13 | 023100100S00 | | | | | | | | | | | | | | | OR<25 | | | | | |
| | | | | | | | | | | | | | | | | 01 | NONE | STRGHT | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | PRVTE | W -E | | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | PSNGR CAR | | 02 | PSNG | INJC | 00 | M | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | | | 02 | NONE | TURN-L | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | PRVTE | S -W | | | | | | | | | 015 | 00 |
| | | | | | | | | | | | | | | | | | PSNGR CAR | | 01 | DRVR | NONE | 71 | F | OR-Y | | 028 | 000 | 02 |
| | | | | | | | | | | | | | | | | | | | | | | | | OR>25 | | | | |
| 01258 | N | N | N | N | | | 12/24/2021 | 16 | CENTRAL AVE | INTER | 3-LEG | N | N | RAIN | O-1 L-TURN | 01 | NONE | 9 STRGHT | | | | | | | | | | 02,08 |
| NONE | | | FR | | | | | | SB EX-EN CENTRAL | CN | | UNKNOWN | N | WET | TURN | | N/A | W -E | | | | | | | | | 000 | | 00 |
| N | | | 4P | | | | | | | 03 | 0 | | N | DUSK | PDO | | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | | 000 | 000 | | 00 |
| N | | | 43 23 10.84 | | | | | -123 20 20.15 | 023100100S00 | | | | | | | | | | | | | | | UNK | | | | | |
| | | | | | | | | | | | | | | | | 02 | NONE | 9 TURN-L | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | N/A | E -S | | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | | 000 | 000 | | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | UNK | | | | | |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**SB EX-EN CENTRAL at CENTRAL AVE, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2021** | | | | | | | | | | | | | | |
| TURNING MOVEMENTS | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| **YEAR 2021 TOTAL** | **0** | **0** | **1** | **1** | **0** | **0** | **0** | **0** | **1** | **0** | **1** | **1** | **0** | **0** |
| **YEAR: 2018** | | | | | | | | | | | | | | |
| TURNING MOVEMENTS | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2018 TOTAL** | **0** | **1** | **0** | **1** | **0** | **2** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |
| **FINAL TOTAL** | **0** | **1** | **1** | **2** | **0** | **2** | **0** | **1** | **1** | **1** | **1** | **2** | **0** | **0** |

CITY OF SUTHERLIN, DOUGLAS COUNTY

**DAKOTA ST and CENTRAL AVE, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

1 - 4 of 5 Crash records shown.

| SER# / INVEST / RD DPT / UNLOC? | S P E D | A L C | D M R U G | J N S | I H V | C L L | O R K | DATE / DAY / TIME / LAT | CLASS / DIST / FROM / LONG | CITY STREET / FIRST STREET / SECOND STREET / LRS | RD CHAR / DIRECT / LOCTN | INT-TYPE (MEDIAN) / LEGS (#LANES) | INT-REL / TRAF- / CONTL | OFFRD / RNDBT / DRVWY | WTHR / SURF / LIGHT | CRASH / COLL / SVRTY | V# | SPCL USE / TRLR QTY / OWNER / TYPE | MOVE / FROM / TO | P# | PRTC / INJ / SVRTY | A G E | S E X | LICNS / RES | PED LOC | ERROR | ACT | EVENT | CAUSE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 00268 | N | N | N | N | N | N | N | 03/04/2017 | 16 | CENTRAL AVE | INTER | 3-LEG | N | N | RAIN | ANGL-OTH | 01 | NONE | TURN-L | | | | | | | | | | 02 |
| CITY | | | SA | | | | | | | DAKOTA ST | CN | | STOP SIGN | N | WET | TURN | | PRVTE | N -E | | | | | | | | 015 | 00 |
| N | | | 4P | | | | | | | | 01 | 0 | | N | DAY | INJ | | PSNGR CAR | | 01 | DRVR | INJC | 22 | M | OR-Y | | 028 | 000 | 02 |
| N | | | 43 23 11.06 | | -123 20 34.09 | | | | | 023100100S00 | | | | | | | | | | | | | | | OR<25 | | | | |
| | | | | | | | | | | | | | | | | | 01 | NONE | TURN-L | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | PRVTE | N -E | | | | | | | | 015 | 00 |
| | | | | | | | | | | | | | | | | | | PSNGR CAR | | 02 | PSNG | INJC | 21 | M | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | | | | 02 | NONE | STRGHT | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | PRVTE | E -W | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | PSNGR CAR | | 01 | DRVR | NONE | 20 | M | OR-Y | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | OR>25 | | | | |
| 00443 | N | N | N | N | N | N | N | 04/18/2017 | 16 | CENTRAL AVE | INTER | 3-LEG | N | N | CLR | ANGL-OTH | 01 | NONE | TURN-L | | | | | | | | | | 02 |
| CITY | | | TU | | | | | | | DAKOTA ST | CN | | STOP SIGN | N | DRY | TURN | | PRVTE | N -E | | | | | | | | 015 | 00 |
| N | | | 4P | | | | | | | | 01 | 0 | | N | DAY | INJ | | PSNGR CAR | | 01 | DRVR | INJB | 23 | M | OR-Y | | 028 | 000 | 02 |
| N | | | 43 23 11.06 | | -123 20 34.09 | | | | | 023100100S00 | | | | | | | | | | | | | | | OR<25 | | | | |
| | | | | | | | | | | | | | | | | | 02 | NONE | STRGHT | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | PRVTE | E -W | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | PSNGR CAR | | 01 | DRVR | INJB | 63 | M | OR-Y | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | OR<25 | | | | |
| | | | | | | | | | | | | | | | | | 02 | NONE | STRGHT | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | PRVTE | E -W | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | PSNGR CAR | | 02 | PSNG | INJB | 53 | F | | | 000 | 000 | 00 |
| 00900 | N | N | N | N | N | N | N | 10/01/2018 | 16 | CENTRAL AVE | INTER | 3-LEG | N | N | CLR | ANGL-OTH | 01 | NONE | 9 | STRGHT | | | | | | | | | | 02 |
| CITY | | | MO | | | | | | | DAKOTA ST | CN | | STOP SIGN | N | DRY | TURN | | N/A | E -W | | | | | | | | 007 | 00 |
| N | | | 12P | | | | | | | | 01 | 0 | | N | DAY | PDO | | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | | 000 | 000 | 00 |
| N | | | 43 23 11.06 | | -123 20 34.1 | | | | | 023100100S00 | | | | | | | | | | | | | | | UNK | | | | |
| | | | | | | | | | | | | | | | | | 02 | NONE | 9 | TURN-L | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | N/A | | N -E | | | | | | | | 015 | 00 |
| | | | | | | | | | | | | | | | | | | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | UNK | | | | |
| 00952 | N | N | N | N | N | N | N | 11/08/2020 | 16 | CENTRAL AVE | INTER | 3-LEG | N | N | CLD | ANGL-OTH | 01 | NONE | 9 | TURN-L | | | | | | | | | 082 | 02,40 |
| CITY | | | SU | | | | | | | DAKOTA ST | CN | | STOP SIGN | N | DRY | TURN | | N/A | N -E | | | | | | | | 015 | 00 |
| N | | | 1P | | | | | | | | 01 | 0 | | N | DAY | PDO | | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | | 000 | 000 | 00 |
| N | | | 43 23 11.06 | | -123 20 34.09 | | | | | 023100100S00 | | | | | | | | | | | | | | | UNK | | | | |
| | | | | | | | | | | | | | | | | | 02 | NONE | 9 | STRGHT | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | N/A | | E -W | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | UNK | | | | |

CITY OF SUTHERLIN, DOUGLAS COUNTY

**DAKOTA ST and CENTRAL AVE, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

5 - 5 of 5 Crash records shown.

| SER# / INVEST / RD DPT / UNLOC? | S P E D | A L C | D M R G S | J N H V | I C L | S O R K | W | DATE / DAY / TIME / LAT | CLASS / DIST / FROM / LONG | CITY STREET / FIRST STREET / SECOND STREET / LRS | RD CHAR / DIRECT / LOCTN | INT-TYPE (MEDIAN) / LEGS (#LANES) | INT-REL / TRAF- / CONTL | OFFRD / RNDBT / DRVWY | WTHR / SURF / LIGHT | CRASH / COLL / SVRTY | V# | SPCL USE / TRLR QTY / OWNER / TYPE | MOVE / FROM / TO | P# | PRTC / INJ / SVRTY | A G E | S E X | LICNS / RES | PED LOC | ERROR | ACT EVENT | CAUSE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01291 | N | N | N | N | N | N | | 12/31/2021 | 16 | CENTRAL AVE | INTER | 3-LEG | N | N | CLR | ANGL-OTH | 01 | NONE 0 | STRGHT | | | | | | | | 08,02 |
| CITY | | | FR | | | | | | | DAKOTA ST | CN | | STOP SIGN | N | DRY | ANGL | | PRVTE | E -W | | | | | | | 000 | 00 |
| N | | | 2P | | | | | | | | 01 | 0 | | N | DAY | INJ | | PSNGR CAR | | 01 | DRVR | NONE | 40 | M | SUSP | | 000 | 000 | 00 |
| N | | | 43 23 11.06 | | | | | -123 20 34.09 | | 023100100S00 | | | | | | | | | | | | | | | OR<25 | | | | |
| | | | | | | | | | | | | | | | | | 02 | NONE 0 | TURN-L | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | PRVTE | N -E | | | | | | | | 015 | 00 |
| | | | | | | | | | | | | | | | | | | PSNGR CAR | | 01 | DRVR | INJB | 16 | M | OR-Y | | 004,028 | 000 | 08,02 |
| | | | | | | | | | | | | | | | | | | | | | | | | | OR<25 | | | | |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**DAKOTA ST and CENTRAL AVE, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2021** | | | | | | | | | | | | | | |
| ANGLE | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2021 TOTAL** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |
| **YEAR: 2020** | | | | | | | | | | | | | | |
| TURNING MOVEMENTS | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2020 TOTAL** | **0** | **0** | **1** | **1** | **0** | **0** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |
| **YEAR: 2018** | | | | | | | | | | | | | | |
| TURNING MOVEMENTS | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2018 TOTAL** | **0** | **0** | **1** | **1** | **0** | **0** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |
| **YEAR: 2017** | | | | | | | | | | | | | | |
| TURNING MOVEMENTS | 0 | 2 | 0 | 2 | 0 | 5 | 0 | 1 | 1 | 2 | 0 | 2 | 0 | 0 |
| **YEAR 2017 TOTAL** | **0** | **2** | **0** | **2** | **0** | **5** | **0** | **1** | **1** | **2** | **0** | **2** | **0** | **0** |
| **FINAL TOTAL** | **0** | **3** | **2** | **5** | **0** | **6** | **0** | **4** | **1** | **5** | **0** | **5** | **0** | **0** |

CITY OF SUTHERLIN, DOUGLAS COUNTY

**DOVETAIL LN and CENTRAL AVE, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

1 - 4 of 7 Crash records shown.

| SER# / INVEST / RD DPT / UNLOC? | S P E D | A L C | D M R J U G S | I N V | S H L | W O R K | DATE / DAY / TIME / LAT | CLASS / DIST / FROM / LONG | CITY STREET / FIRST STREET / SECOND STREET / LRS | RD CHAR / DIRECT / LOCTN | INT-TYPE (MEDIAN) / LEGS (#LANES) | INT-REL / TRAF- / CONTL | OFFRD / RNDBT / DRVWY | WTHR / SURF / LIGHT | CRASH / COLL / SVRTY | V# | SPCL USE / TRLR QTY / OWNER / TYPE | MOVE / FROM / TO | P# | PRTC TYPE | INJ SVRTY | A G E | S E X | LICNS RES | PED LOC | ERROR | ACT | EVENT | CAUSE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 00093 | N | N | N N N | N | N | N | 02/03/2020 | 16 | DOVETAIL LN | INTER | CROSS | N | N | CLR | S-1STOP | 01 | NONE | STRGHT | | | | | | | | | | 07,29 |
| CITY | | | MO | | | | | | CENTRAL AVE | SE | | NONE | N | DRY | REAR | | PRVTE | SE-NW | | | | | | | | | 000 | | 00 |
| N | | | 10A | | | | | | | 06 | 0 | | N | DAY | INJ | | PSNGR CAR | | 01 | DRVR | INJB | 33 | F | OR-Y | | 043 | 000 | | 07,29 |
| N | | | 43 23 32.56 | | -123 21 27.56 | | | | 023100100S00 | | | | | | | | | | | | | | | OR<25 | | | | | |
| | | | | | | | | | | | | | | | | 02 | NONE | STOP | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | PRVTE | SE-NW | | | | | | | | | 012 | | 00 |
| | | | | | | | | | | | | | | | | | PSNGR CAR | | 01 | DRVR | NONE | 47 | M | OR-Y | | 000 | 000 | | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | OR<25 | | | | | |
| | | | | | | | | | | | | | | | | 02 | NONE | STOP | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | PRVTE | SE-NW | | | | | | | | | 012 | | 00 |
| | | | | | | | | | | | | | | | | | PSNGR CAR | | 02 | PSNG | INJB | 47 | F | | | 000 | 000 | | 00 |
| 00414 | N | N | N N N | N | N | N | 06/08/2020 | 16 | DOVETAIL LN | INTER | CROSS | N | Y | CLR | FIX OBJ | 01 | NONE 9 | STRGHT | | | | | | | | | | 079,121 | 27 |
| CITY | | | MO | | | | | | CENTRAL AVE | NW | | UNKNOWN | N | DRY | FIX | | N/A | SE-NW | | | | | | | | | 000 | | 00 |
| N | | | 11A | | | | | | | 05 | 0 | | N | DAY | PDO | | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | | 000 | 000 | | 00 |
| N | | | 43 23 32.56 | | -123 21 27.56 | | | | 023100100S00 | | | | | | | | | | | | | | | UNK | | | | | |
| 00840 | Y | N | Y N N | N | N | N | 09/29/2020 | 16 | DOVETAIL LN | INTER | CROSS | N | N | CLR | S-1TURN | 01 | NONE 0 | STRGHT | | | | | | | | | | 001 | 06,01 |
| STATE | | | TU | | | | | | CENTRAL AVE | CN | | STOP SIGN | N | DRY | TURN | | PRVTE | SE-NW | | | | | | | | | 031 | | 00 |
| N | | | 1P | | | | | | | 03 | 0 | | N | DAY | FAT | | MTRCYCLE | | 01 | DRVR | KILL | 34 | M | SUSP | | 034,047 | 000 | 001 | 06,01 |
| N | | | 43 23 32.56 | | -123 21 27.56 | | | | 023100100S00 | | | | | | | | | | | | | | | OR<25 | | | | | |
| | | | | | | | | | | | | | | | | 01 | NONE 0 | STRGHT | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | PRVTE | SE-NW | | | | | | | | | 031 | | 00 |
| | | | | | | | | | | | | | | | | | MTRCYCLE | | 02 | PSNG | KILL | 27 | F | | | 000 | 000 | 001 | 00 |
| | | | | | | | | | | | | | | | | 02 | NONE 0 | TURN-L | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | PRVTE | SE-SW | | | | | | | | | 000 | | 00 |
| | | | | | | | | | | | | | | | | | PSNGR CAR | | 01 | DRVR | INJA | 45 | F | OR-Y | | 000 | 000 | | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | OR<25 | | | | | |
| | | | | | | | | | | | | | | | | 02 | NONE 0 | TURN-L | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | PRVTE | SE-SW | | | | | | | | | 000 | | 00 |
| | | | | | | | | | | | | | | | | | PSNGR CAR | | 02 | PSNG | INJC | 68 | F | | | 000 | 000 | | 00 |
| 00945 | N | N | N N | | | | 10/04/2021 | 16 | DOVETAIL LN | INTER | CROSS | N | N | CLR | S-1TURN | 01 | NONE 9 | TURN-L | | | | | | | | | | | 08,02 |
| NO RPT | | | MO | | | | | | CENTRAL AVE | CN | | STOP SIGN | N | DRY | TURN | | N/A | SE-SW | | | | | | | | | 000 | | 00 |
| N | | | 10A | | | | | | | 01 | 0 | | N | DAY | PDO | | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | | 000 | 000 | | 00 |
| N | | | 43 23 32.55 | | -123 21 27.57 | | | | 023100100S00 | | | | | | | | | | | | | | | UNK | | | | | |
| | | | | | | | | | | | | | | | | 02 | NONE 9 | STRGHT | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | N/A | SE-NW | | | | | | | | | 000 | | 00 |
| | | | | | | | | | | | | | | | | | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | | 000 | 000 | | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | UNK | | | | | |

CITY OF SUTHERLIN, DOUGLAS COUNTY

**DOVETAIL LN and CENTRAL AVE, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

| SER# / INVEST / RD DPT / UNLOC? | S P E D | A L C | D M R U G S | J I N V | S C H L | W O R K | DATE / DAY / TIME / LAT | CLASS / DIST / FROM / LONG | CITY STREET / FIRST STREET / SECOND STREET / LRS | RD CHAR / DIRECT / LOCTN | INT-TYPE (MEDIAN) / LEGS (#LANES) | INT-REL / TRAF- / CONTL | OFFRD / RNDBT / DRVWY | WTHR / SURF / LIGHT | CRASH / COLL / SVRTY | V# | SPCL USE / TRLR QTY / OWNER / TYPE | MOVE / FROM / TO | P# | PRTC TYPE | INJ SVRTY | A G E | S E X | LICNS RES | PED LOC | ERROR | ACT | EVENT | CAUSE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01093 | N | N | N | N | N | N | 10/05/2017 | 16 | CENTRAL AVE | STRGHT | | N | N | CLR | S-STRGHT | 01 | NONE | STRGHT | | | | | | | | | | 093 | 27,13,06 |
| STATE | | | TH | | | | | | DOVETAIL LN | SE | (NONE) | UNKNOWN | N | DRY | SS-O | | PRVTE | NW-SE | | | | | | | | | 031 | | 00 |
| N | | | 5P | | | | | | | 03 | | | N | DUSK | INJ | | PSNGR CAR | | 01 | DRVR | INJB | 37 | F | OR-Y | | 016,045 | 038 | 093 | 27,13,06 |
| N | | | 43 23 31.42 | | | | | -123 21 25.16 | 023100100S00 | | (02) | | | | | | | | | | | | | OR>25 | | | | | |
| | | | | | | | | | | | | | | | | 02 | NONE | STRGHT | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | PRVTE | NW-SE | | | | | | | | | 000 | | 00 |
| | | | | | | | | | | | | | | | | | PSNGR CAR | | 01 | DRVR | NONE | 36 | M | OR-Y | | 016 | 038 | 093 | 27 |
| | | | | | | | | | | | | | | | | | | | | | | | | OR<25 | | | | | |
| 00368 | Y | N | N | N | N | N | 04/17/2019 | 19 | DOVETAIL LN | CURVE | | N | Y | CLR | FIX OBJ | 01 | NONE 9 | STRGHT | | | | | | | | | | 121,037 | 01 |
| CITY | | | WE | | | | | 410 | CENTRAL AVE | NE | (NONE) | NONE | N | DRY | FIX | | N/A | NE-SW | | | | | | | | | 000 | | 00 |
| Y | | | 7A | | | | | | | 08 | | | N | DAY | PDO | | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | | 000 | 000 | | 00 |
| N | | | 43 23 36.13 | | | | | -123 21 24.22 | | | (02) | | | | | | | | | | | | | UNK | | | | | |
| 00945 | Y | N | N | N | N | N | 11/06/2020 | 19 | DOVETAIL LN | CURVE | | N | Y | RAIN | FIX OBJ | 01 | NONE 9 | STRGHT | | | | | | | | | | 121 | 32,01 |
| CITY | | | FR | | | | | 415 | CENTRAL AVE | NE | (NONE) | UNKNOWN | N | WET | FIX | | N/A | NE-SW | | | | | | | | | 000 | | 00 |
| Y | | | 8A | | | | | | | 08 | | | N | DAY | PDO | | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | | 000 | 000 | | 00 |
| N | | | 43 23 36.13 | | | | | -123 21 24.2 | | | (02) | | | | | | | | | | | | | UNK | | | | | |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**DOVETAIL LN and CENTRAL AVE, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2021** | | | | | | | | | | | | | | |
| TURNING MOVEMENTS | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2021 TOTAL** | **0** | **0** | **1** | **1** | **0** | **0** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |
| **YEAR: 2020** | | | | | | | | | | | | | | |
| FIXED / OTHER OBJECT | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 2 |
| REAR-END | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| TURNING MOVEMENTS | 1 | 0 | 0 | 1 | 2 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2020 TOTAL** | **1** | **1** | **2** | **4** | **2** | **4** | **0** | **3** | **1** | **4** | **0** | **3** | **0** | **2** |
| **YEAR: 2019** | | | | | | | | | | | | | | |
| FIXED / OTHER OBJECT | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| **YEAR 2019 TOTAL** | **0** | **0** | **1** | **1** | **0** | **0** | **0** | **1** | **0** | **1** | **0** | **0** | **0** | **1** |
| **YEAR: 2017** | | | | | | | | | | | | | | |
| SIDESWIPE - OVERTAKING | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| **YEAR 2017 TOTAL** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** | **1** | **0** | **0** | **0** |
| **FINAL TOTAL** | **1** | **2** | **4** | **7** | **2** | **5** | **0** | **6** | **1** | **6** | **1** | **4** | **0** | **3** |

CITY OF SUTHERLIN, DOUGLAS COUNTY

**PARKHILL LN at SB EX-EN CENTRAL, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

| SER# / INVEST / RD DPT / UNLOC? | S P E D | A L C | D M R U G S | J I N V | S C H L | W O R K | DATE / DAY / TIME / LAT | CLASS / DIST / FROM / LONG | CITY STREET / FIRST STREET / SECOND STREET / LRS | RD CHAR / DIRECT / LOCTN | INT-TYPE (MEDIAN) / LEGS (#LANES) | INT-REL / TRAF- / CONTL | OFFRD / RNDBT / DRVWY | WTHR / SURF / LIGHT | CRASH / COLL / SVRTY | SPCL USE / TRLR QTY / OWNER / V# | MOVE / FROM / TO / TYPE | P# | PRTC TYPE | INJ SVRTY | A G E | S E X | LICNS RES | PED LOC | ERROR | ACT | EVENT | CAUSE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**PARKHILL LN at SB EX-EN CENTRAL, City of Sutherlin, Douglas County, 01/01/2017 to 12/31/2021**

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

*Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirements, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.*

APPENDIX D:

TRAFFIC VOLUMES

RIDGEVIEW SUBDIVISION

**Intersection:** 1: I-5 NB On Off Ramps @ W Central Ave **City:** Sutherlin, OR

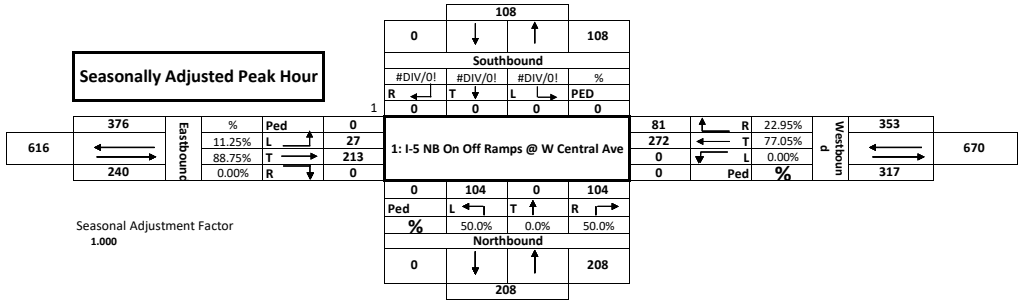
**Counter:** Quality Counts **Date:** Thursday, June 30, 2022

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 6:30 | 6:45 | 0 | 0 | 0 | 0 | 14 | 50 | 0 | 64 | 28 | 0 | 26 | 54 | 0 | 31 | 6 | 37 | 155 | | 0 | 0 | 0 | 0 |
| 6:45 | 7:00 | 0 | 0 | 0 | 0 | 14 | 54 | 0 | 68 | 21 | 0 | 18 | 39 | 0 | 37 | 5 | 42 | 149 | | 0 | 0 | 0 | 0 |
| 7:00 | 7:15 | 0 | 0 | 0 | 0 | 19 | 52 | 0 | 71 | 28 | 0 | 15 | 43 | 0 | 23 | 5 | 28 | 142 | | 0 | 0 | 0 | 0 |
| 7:15 | 7:30 | 0 | 0 | 0 | 0 | 20 | 62 | 0 | 82 | 25 | 0 | 18 | 43 | 0 | 40 | 6 | 46 | 171 | 617 | 0 | 0 | 0 | 0 |
| 7:30 | 7:45 | 0 | 0 | 0 | 0 | 12 | 79 | 0 | 91 | 17 | 0 | 7 | 24 | 0 | 45 | 6 | 51 | 166 | 628 | 0 | 0 | 0 | 0 |
| 7:45 | 8:00 | 0 | 0 | 0 | 0 | 16 | 75 | 0 | 91 | 29 | 0 | 28 | 57 | 0 | 47 | 10 | 57 | 205 | 684 | 0 | 0 | 0 | 0 |
| 8:00 | 8:15 | 0 | 0 | 0 | 0 | 18 | 62 | 0 | 80 | 28 | 0 | 16 | 44 | 0 | 41 | 9 | 50 | 174 | 716 | 0 | 0 | 0 | 0 |
| 8:15 | 8:30 | 0 | 0 | 0 | 0 | 20 | 65 | 0 | 85 | 26 | 0 | 26 | 52 | 0 | 51 | 6 | 57 | 194 | 739 | 0 | 0 | 0 | 0 |
| 8:30 | 8:45 | 0 | 0 | 0 | 0 | 18 | 70 | 0 | 88 | 26 | 0 | 24 | 50 | 0 | 43 | 8 | 51 | 189 | 762 | 0 | 0 | 0 | 0 |
| 8:45 | 9:00 | 0 | 0 | 0 | 0 | 25 | 75 | 0 | 100 | 24 | 0 | 38 | 62 | 0 | 78 | 4 | 82 | 244 | 801 | 0 | 0 | 0 | 0 |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 23 | 82 | 0 | 105 | 28 | 0 | 20 | 48 | 0 | 58 | 5 | 63 | 216 | 843 | 0 | 0 | 0 | 0 |
| 9:15 | 9:30 | 0 | 0 | 0 | 0 | 24 | 67 | 0 | 91 | 27 | 0 | 42 | 69 | 0 | 59 | 7 | 66 | 226 | 875 | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **0** | **0** | **0** | | **223** | **793** | **0** | | **307** | **0** | **278** | | **0** | **553** | **77** | | **2231** | | **0** | **0** | **0** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| **Peak Volumes** | **0** | **0** | **0** | **0** | **81** | **272** | **0** | **353** | **104** | **0** | **104** | **208** | **0** | **213** | **27** | **240** | **801** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.00 | 0.00 | 0.00 | 0.00 | 0.81 | 0.91 | 0.00 | 0.88 | 0.93 | 0.00 | 0.68 | 0.84 | 0.00 | 0.68 | 0.75 | 0.73 | 0.82 | | | | | |
| **Trucks** | 0 | 0 | 0 | | 11 | 20 | 0 | | 5 | 0 | 23 | | 0 | 16 | 7 | | | | | | | |
| **% Trucks** | 0% | 0% | 0% | | 14% | 7% | 0% | | 5% | 0% | 22% | | 0% | 8% | 26% | | | | | | | |


Seasonally Adjusted Peak Hour
108
0
108
Southbound
#DIV/0!
#DIV/0!
#DIV/0!
%
R
T
L
PED
1
0
0
0
0
376
616
240
Eastbound
%
Ped
0
11.25%
L
27
88.75%
T
213
0.00%
R
0
1: I-5 NB On Off Ramps @ W Central Ave
81
R
22.95%
272
T
77.05%
0
L
0.00%
0
Ped
%
Westboun
d
353
670
317
0
104
0
104
Ped
L
T
R
%
50.0%
0.0%
50.0%
Northbound
0
208
208
Seasonal Adjustment Factor
1.000

**1: I-5 NB On Off Ramps @ W Central Ave**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 6:30 AM | | | | | | | 13 | 45 | | | | 27 | | 18 | | | | 24 | 4 | | 131 | |
| 6:45 AM | | | | | | | 12 | 50 | | | | 16 | | 17 | | | | 36 | 3 | | 134 | |
| 7:00 AM | | | | | | | 16 | 46 | | | | 27 | | 10 | | | | 21 | 2 | | 122 | |
| 7:15 AM | | | | | | | 18 | 56 | | | | 21 | | 17 | | | | 35 | 5 | | 152 | 539 |
| 7:30 AM | | | | | | | 12 | 75 | | | | 13 | | 6 | | | | 40 | 6 | | 152 | 560 |
| 7:45 AM | | | | | | | 14 | 72 | | | | 29 | | 19 | | | | 44 | 8 | | 186 | 612 |
| 8:00 AM | | | | | | | 15 | 61 | | | | 25 | | 14 | | | | 39 | 7 | | 161 | 651 |
| 8:15 AM | | | | | | | 17 | 58 | | | | 25 | | 19 | | | | 44 | 4 | | 167 | 666 |
| 8:30 AM | | | | | | | 16 | 66 | | | | 25 | | 20 | | | | 42 | 6 | | 175 | 689 |
| 8:45 AM | | | | | | | 22 | 67 | | | | 24 | | 28 | | | | 72 | 3 | | 216 | 719 |
| 9:00 AM | | | | | | | 22 | 80 | | | | 26 | | 17 | | | | 52 | 4 | | 201 | 759 |
| 9:15 AM | | | | | | | 21 | 64 | | | | 27 | | 35 | | | | 53 | 7 | | 207 | 799 |
| **Total** | 0 | 0 | 0 | 0 | | 0 | 198 | 740 | 0 | | 0 | 285 | 0 | 220 | | 0 | 0 | 502 | 59 | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | | **0** | **70** | **252** | **0** | | **0** | **99** | **0** | **81** | | **0** | **0** | **197** | **20** | | **719** | |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 6:30 AM | | | | | 1 | 5 | | | 1 | | 8 | | | 7 | 2 | | 24 | |
| 6:45 AM | | | | | 2 | 4 | | | 5 | | 1 | | | 1 | 2 | | 15 | |
| 7:00 AM | | | | | 3 | 6 | | | 1 | | 5 | | | 2 | 3 | | 20 | |
| 7:15 AM | | | | | 2 | 6 | | | 4 | | 1 | | | 5 | 1 | | 19 | 78 |
| 7:30 AM | | | | | 0 | 4 | | | 4 | | 1 | | | 5 | 0 | | 14 | 68 |
| 7:45 AM | | | | | 2 | 3 | | | 0 | | 9 | | | 3 | 2 | | 19 | 72 |
| 8:00 AM | | | | | 3 | 1 | | | 3 | | 2 | | | 2 | 2 | | 13 | 65 |
| 8:15 AM | | | | | 3 | 7 | | | 1 | | 7 | | | 7 | 2 | | 27 | 73 |
| 8:30 AM | | | | | 2 | 4 | | | 1 | | 4 | | | 1 | 2 | | 14 | 73 |
| 8:45 AM | | | | | 3 | 8 | | | 0 | | 10 | | | 6 | 1 | | 28 | 82 |
| 9:00 AM | | | | | 1 | 2 | | | 2 | | 3 | | | 6 | 1 | | 15 | 84 |
| 9:15 AM | | | | | 3 | 3 | | | 0 | | 7 | | | 6 | 0 | | 19 | 76 |
| **Total** | 0 | 0 | 0 | | 25 | 53 | 0 | | 22 | 0 | 58 | | 0 | 51 | 18 | | | |
| **Peak Hour** | **0** | **0** | **0** | | **11** | **20** | **0** | | **5** | **0** | **23** | | **0** | **16** | **7** | | **82** | |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | |
| 6:30 AM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:45 AM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:00 AM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:15 AM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:30 AM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:45 AM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:00 AM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:15 AM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:30 AM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:45 AM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 9:00 AM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 9:15 AM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 6:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 7:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 7:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 8:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 9:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 9:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Intersection:** 2: Park Hill Ln @ W Central Ave **City:** Sutherlin, OR

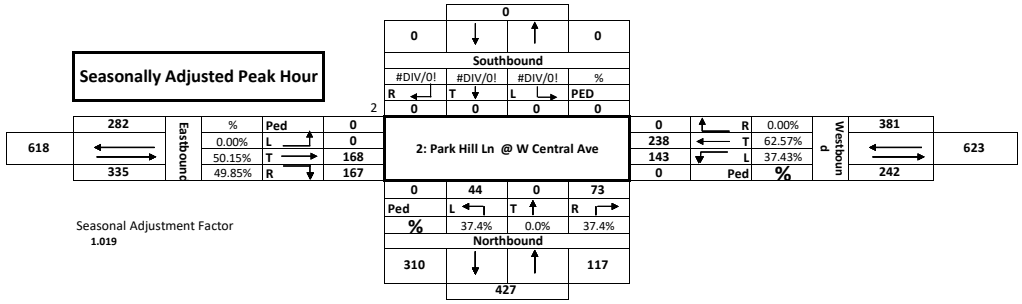
**Counter:** Quality Counts **Date:** Thursday, June 30, 2022

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 6:30 | 6:45 | 0 | 0 | 0 | 0 | 0 | 52 | 20 | 72 | 12 | 0 | 19 | 31 | 26 | 25 | 0 | 51 | 154 | | 0 | 0 | 0 | 0 |
| 6:45 | 7:00 | 0 | 0 | 0 | 0 | 0 | 50 | 21 | 71 | 11 | 0 | 19 | 30 | 33 | 31 | 0 | 64 | 165 | | 0 | 0 | 0 | 0 |
| 7:00 | 7:15 | 0 | 0 | 0 | 0 | 0 | 32 | 35 | 67 | 10 | 0 | 16 | 26 | 36 | 19 | 0 | 55 | 148 | | 0 | 0 | 0 | 0 |
| 7:15 | 7:30 | 0 | 0 | 0 | 0 | 0 | 50 | 33 | 83 | 16 | 0 | 14 | 30 | 27 | 29 | 0 | 56 | 169 | 636 | 0 | 0 | 0 | 0 |
| 7:30 | 7:45 | 0 | 0 | 0 | 0 | 0 | 34 | 47 | 81 | 20 | 0 | 12 | 32 | 59 | 30 | 0 | 89 | 202 | 684 | 0 | 0 | 0 | 0 |
| 7:45 | 8:00 | 0 | 0 | 0 | 0 | 0 | 58 | 45 | 103 | 12 | 0 | 9 | 21 | 52 | 46 | 0 | 98 | 222 | 741 | 0 | 0 | 0 | 0 |
| 8:00 | 8:15 | 0 | 0 | 0 | 0 | 0 | 48 | 30 | 78 | 12 | 0 | 8 | 20 | 44 | 35 | 0 | 79 | 177 | 770 | 0 | 0 | 0 | 0 |
| 8:15 | 8:30 | 0 | 0 | 0 | 0 | 0 | 62 | 30 | 92 | 19 | 0 | 7 | 26 | 30 | 39 | 0 | 69 | 187 | 788 | 0 | 0 | 0 | 0 |
| 8:30 | 8:45 | 0 | 0 | 0 | 0 | 0 | 55 | 44 | 99 | 14 | 0 | 11 | 25 | 53 | 35 | 0 | 88 | 212 | 798 | 0 | 0 | 0 | 0 |
| 8:45 | 9:00 | 0 | 0 | 0 | 0 | 0 | 69 | 36 | 105 | 27 | 0 | 17 | 44 | 37 | 56 | 0 | 93 | 242 | 818 | 0 | 0 | 0 | 0 |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 0 | 54 | 51 | 105 | 23 | 0 | 10 | 33 | 43 | 39 | 0 | 82 | 220 | 861 | 0 | 0 | 0 | 0 |
| 9:15 | 9:30 | 0 | 0 | 0 | 0 | 0 | 74 | 34 | 108 | 18 | 0 | 6 | 24 | 36 | 47 | 0 | 83 | 215 | 889 | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **0** | **0** | **0** | | **0** | **638** | **426** | | **194** | **0** | **148** | | **476** | **431** | **0** | | **2313** | | **0** | **0** | **0** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | | | 1 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| **Peak Volumes** | **0** | **0** | **0** | **0** | **0** | **234** | **140** | **374** | **72** | **0** | **43** | **115** | **164** | **165** | **0** | **329** | **818** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.85 | 0.80 | 0.89 | 0.67 | 0.00 | 0.63 | 0.65 | 0.77 | 0.74 | 0.00 | 0.88 | 0.85 | | | | | |
| **Trucks** | 0 | 0 | 0 | | 0 | 29 | 13 | | 10 | 0 | 11 | | 17 | 12 | 0 | | | | | | | |
| **% Trucks** | 0% | 0% | 0% | | 0% | 12% | 9% | | 14% | 0% | 26% | | 10% | 7% | 0% | | | | | | | |


Seasonally Adjusted Peak Hour
0
0
0
Southbound
#DIV/0!
#DIV/0!
#DIV/0!
%
R
T
L
PED
2
0
0
0
0
282
Eastbound
%
Ped
0
618
0.00%
L
0
50.15%
T
168
335
49.85%
R
167
2: Park Hill Ln @ W Central Ave
0
R
0.00%
238
T
62.57%
143
L
37.43%
0
Ped
%
Westboun
d
381
623
242
0
44
0
73
Ped
L
T
R
%
37.4%
0.0%
37.4%
Northbound
310
117
427
Seasonal Adjustment Factor
1.019

**2: Park Hill Ln @ W Central Ave**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 6:30 AM | | | | | | | | 44 | 16 | | | 8 | | 18 | | | 25 | 19 | | | 130 | |
| 6:45 AM | | | | | | | | 48 | 19 | | | 10 | | 18 | | | 29 | 30 | | | 154 | |
| 7:00 AM | | | | | | | | 28 | 29 | | | 7 | | 14 | | | 32 | 17 | | | 127 | |
| 7:15 AM | | | | | | | | 45 | 29 | | | 10 | | 13 | | | 26 | 29 | | | 152 | 563 |
| 7:30 AM | | | | | | | | 30 | 45 | | | 16 | | 9 | | | 57 | 29 | | | 186 | 619 |
| 7:45 AM | | | | | | | | 51 | 40 | | | 9 | | 7 | | | 47 | 44 | | | 198 | 663 |
| 8:00 AM | | | | | | | | 46 | 29 | | | 11 | | 6 | | | 39 | 32 | | | 163 | 699 |
| 8:15 AM | | | | | | | | 52 | 27 | | | 15 | | 3 | | | 25 | 35 | | | 157 | 704 |
| 8:30 AM | | | | | | | | 50 | 40 | | | 14 | | 9 | | | 50 | 33 | | | 196 | 714 |
| 8:45 AM | | | | | | | | 57 | 31 | | | 22 | | 14 | | | 33 | 53 | | | 210 | 726 |
| 9:00 AM | | | | | | | | 51 | 50 | | | 18 | | 10 | | | 38 | 37 | | | 204 | 767 |
| 9:15 AM | | | | | | | | 67 | 30 | | | 16 | | 5 | | | 34 | 43 | | | 195 | 805 |
| **Total** | 0 | 0 | 0 | 0 | | 0 | 0 | 569 | 385 | | 0 | 156 | 0 | 126 | | 0 | 435 | 401 | 0 | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | | **0** | **0** | **205** | **127** | | **0** | **62** | **0** | **32** | | **0** | **147** | **153** | **0** | | **726** | |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 6:30 AM | | | | | | 8 | 4 | | 4 | | 1 | | 1 | 6 | | | 24 | |
| 6:45 AM | | | | | | 2 | 2 | | 1 | | 1 | | 4 | 1 | | | 11 | |
| 7:00 AM | | | | | | 4 | 6 | | 3 | | 2 | | 4 | 2 | | | 21 | |
| 7:15 AM | | | | | | 5 | 4 | | 6 | | 1 | | 1 | 0 | | | 17 | 73 |
| 7:30 AM | | | | | | 4 | 2 | | 4 | | 3 | | 2 | 1 | | | 16 | 65 |
| 7:45 AM | | | | | | 7 | 5 | | 3 | | 2 | | 5 | 2 | | | 24 | 78 |
| 8:00 AM | | | | | | 2 | 1 | | 1 | | 2 | | 5 | 3 | | | 14 | 71 |
| 8:15 AM | | | | | | 10 | 3 | | 4 | | 4 | | 5 | 4 | | | 30 | 84 |
| 8:30 AM | | | | | | 5 | 4 | | 0 | | 2 | | 3 | 2 | | | 16 | 84 |
| 8:45 AM | | | | | | 12 | 5 | | 5 | | 3 | | 4 | 3 | | | 32 | 92 |
| 9:00 AM | | | | | | 3 | 1 | | 5 | | 0 | | 5 | 2 | | | 16 | 94 |
| 9:15 AM | | | | | | 7 | 4 | | 2 | | 1 | | 2 | 4 | | | 20 | 84 |
| **Total** | 0 | 0 | 0 | | 0 | 69 | 41 | | 38 | 0 | 22 | | 41 | 30 | 0 | | | |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **29** | **13** | | **10** | **0** | **11** | | **17** | **12** | **0** | | **92** | |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | | |
| 6:30 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:45 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:00 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:15 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:30 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:45 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:00 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:15 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:30 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:45 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 9:00 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 9:15 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 6:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 7:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 7:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 8:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 9:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 9:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Intersection:** 3: Park Hill Ln @ I-5 SB On Off Ramps **City:** Sutherlin, OR

**Counter:** Quality Counts **Date:** Thursday, June 30, 2022

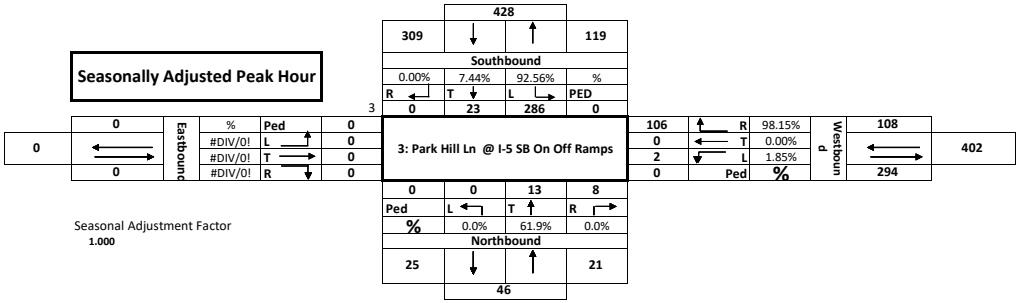
## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 6:30 | 6:45 | 0 | 3 | 45 | 48 | 29 | 0 | 1 | 30 | 6 | 3 | 0 | 9 | 0 | 0 | 0 | 0 | 87 | | 0 | 0 | 0 | 0 |
| 6:45 | 7:00 | 0 | 4 | 51 | 55 | 29 | 0 | 0 | 29 | 2 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 87 | | 0 | 0 | 0 | 0 |
| 7:00 | 7:15 | 0 | 5 | 67 | 72 | 21 | 0 | 0 | 21 | 1 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 96 | | 0 | 0 | 0 | 0 |
| 7:15 | 7:30 | 0 | 3 | 58 | 61 | 29 | 0 | 1 | 30 | 5 | 4 | 0 | 9 | 0 | 0 | 0 | 0 | 100 | 370 | 0 | 0 | 0 | 0 |
| 7:30 | 7:45 | 0 | 5 | 104 | 109 | 35 | 0 | 0 | 35 | 4 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 149 | 432 | 0 | 0 | 0 | 0 |
| 7:45 | 8:00 | 0 | 6 | 89 | 95 | 18 | 0 | 1 | 19 | 2 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 117 | 462 | 0 | 0 | 0 | 0 |
| 8:00 | 8:15 | 0 | 6 | 71 | 77 | 21 | 0 | 0 | 21 | 3 | 3 | 0 | 6 | 0 | 0 | 0 | 0 | 104 | 470 | 0 | 0 | 0 | 0 |
| 8:15 | 8:30 | 0 | 3 | 58 | 61 | 19 | 0 | 0 | 19 | 4 | 5 | 0 | 9 | 0 | 0 | 0 | 0 | 89 | 459 | 0 | 0 | 0 | 0 |
| 8:30 | 8:45 | 0 | 6 | 92 | 98 | 24 | 0 | 2 | 26 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 126 | 436 | 0 | 0 | 0 | 0 |
| 8:45 | 9:00 | 0 | 8 | 65 | 73 | 42 | 0 | 0 | 42 | 1 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 119 | 438 | 0 | 0 | 0 | 0 |
| 9:00 | 9:15 | 0 | 7 | 87 | 94 | 28 | 0 | 0 | 28 | 2 | 4 | 0 | 6 | 0 | 0 | 0 | 0 | 128 | 462 | 0 | 0 | 0 | 0 |
| 9:15 | 9:30 | 0 | 6 | 63 | 69 | 23 | 0 | 0 | 23 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 96 | 469 | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **0** | **62** | **850** | | **318** | **0** | **5** | | **32** | **31** | **0** | | **0** | **0** | **0** | | **1298** | | **0** | **0** | **0** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| **Peak Volumes** | **0** | **23** | **286** | **309** | **106** | **0** | **2** | **108** | **8** | **13** | **0** | **21** | **0** | **0** | **0** | **0** | **438** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.00 | 0.72 | 0.78 | 0.79 | 0.63 | 0.00 | 0.25 | 0.64 | 0.50 | 0.65 | 0.00 | 0.58 | 0.00 | 0.00 | 0.00 | 0.00 | 0.87 | | | | | |
| **Trucks** | 0 | 5 | 28 | | 19 | 0 | 1 | | 1 | 2 | 0 | | 0 | 0 | 0 | | | | | | | |
| **% Trucks** | 0% | 22% | 10% | | 18% | 0% | 50% | | 13% | 15% | 0% | | 0% | 0% | 0% | | | | | | | |

**Seasonally Adjusted Peak Hour**




Seasonal Adjustment Factor

**1.000**

**3: Park Hill Ln @ I-5 SB On Off Ramps**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 6:30 AM | | | 2 | 41 | | | 26 | | 0 | | | 6 | 2 | | | | | | | | 77 | |
| 6:45 AM | | | 3 | 46 | | | 28 | | 0 | | | 2 | 1 | | | | | | | | 80 | |
| 7:00 AM | | | 4 | 57 | | | 18 | | 0 | | | 1 | 0 | | | | | | | | 80 | |
| 7:15 AM | | | 3 | 53 | | | 22 | | 1 | | | 4 | 3 | | | | | | | | 86 | 323 |
| 7:30 AM | | | 4 | 101 | | | 29 | | 0 | | | 4 | 1 | | | | | | | | 139 | 385 |
| 7:45 AM | | | 4 | 81 | | | 14 | | 1 | | | 2 | 1 | | | | | | | | 103 | 408 |
| 8:00 AM | | | 4 | 65 | | | 17 | | 0 | | | 3 | 2 | | | | | | | | 91 | 419 |
| 8:15 AM | | | 2 | 51 | | | 13 | | 0 | | | 3 | 5 | | | | | | | | 74 | 407 |
| 8:30 AM | | | 6 | 84 | | | 22 | | 1 | | | 0 | 2 | | | | | | | | 115 | 383 |
| 8:45 AM | | | 6 | 58 | | | 35 | | 0 | | | 1 | 2 | | | | | | | | 102 | 382 |
| 9:00 AM | | | 6 | 82 | | | 23 | | 0 | | | 2 | 4 | | | | | | | | 117 | 408 |
| 9:15 AM | | | 4 | 61 | | | 20 | | 0 | | | 2 | 2 | | | | | | | | 89 | 423 |
| **Total** | 0 | 0 | 48 | 780 | | 0 | 267 | 0 | 3 | | 0 | 30 | 25 | 0 | | 0 | 0 | 0 | 0 | | | |
| **Peak Hour** | **0** | **0** | **18** | **258** | | **0** | **87** | **0** | **1** | | **0** | **7** | **11** | **0** | | **0** | **0** | **0** | **0** | | **382** | |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 6:30 AM | | 1 | 4 | | 3 | | 1 | | 0 | 1 | | | | | | | 10 | |
| 6:45 AM | | 1 | 5 | | 1 | | 0 | | 0 | 0 | | | | | | | 7 | |
| 7:00 AM | | 1 | 10 | | 3 | | 0 | | 0 | 2 | | | | | | | 16 | |
| 7:15 AM | | 0 | 5 | | 7 | | 0 | | 1 | 1 | | | | | | | 14 | 47 |
| 7:30 AM | | 1 | 3 | | 6 | | 0 | | 0 | 0 | | | | | | | 10 | 47 |
| 7:45 AM | | 2 | 8 | | 4 | | 0 | | 0 | 0 | | | | | | | 14 | 54 |
| 8:00 AM | | 2 | 6 | | 4 | | 0 | | 0 | 1 | | | | | | | 13 | 51 |
| 8:15 AM | | 1 | 7 | | 6 | | 0 | | 1 | 0 | | | | | | | 15 | 52 |
| 8:30 AM | | 0 | 8 | | 2 | | 1 | | 0 | 0 | | | | | | | 11 | 53 |
| 8:45 AM | | 2 | 7 | | 7 | | 0 | | 0 | 1 | | | | | | | 17 | 56 |
| 9:00 AM | | 1 | 5 | | 5 | | 0 | | 0 | 0 | | | | | | | 11 | 54 |
| 9:15 AM | | 2 | 2 | | 3 | | 0 | | 0 | 0 | | | | | | | 7 | 46 |
| **Total** | 0 | 14 | 70 | | 51 | 0 | 2 | | 2 | 6 | 0 | | 0 | 0 | 0 | | | |
| **Peak Hour** | **0** | **5** | **28** | | **19** | **0** | **1** | | **1** | **2** | **0** | | **0** | **0** | **0** | | **56** | |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | | |
| 6:30 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:45 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:00 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:15 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:30 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:45 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:00 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:15 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:30 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:45 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 9:00 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 9:15 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** | | **0** | **0** | **0** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 6:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 7:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 7:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 8:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 9:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 9:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Intersection:** 4: Dakota @ Hwy 138 **City:** Sutherlin, OR

**Counter:** Sandow Engineering **Date:** Tuesday, August 22, 2023

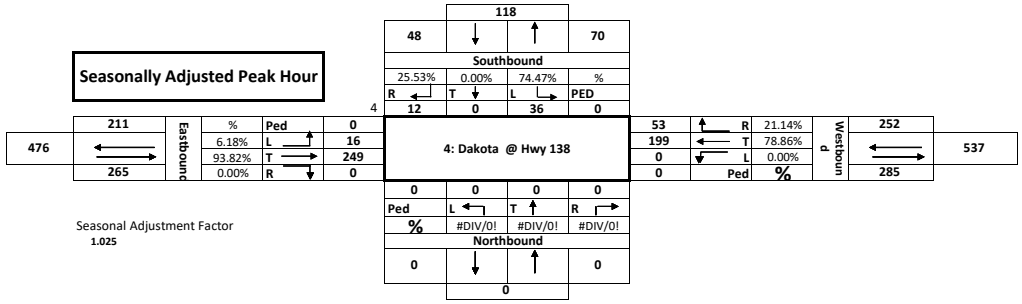
## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 6:30 | 6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 6:45 | 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 7:00 | 7:15 | 2 | 0 | 8 | 10 | 7 | 30 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 66 | 2 | 68 | 115 | | 0 | 0 | 0 | 0 |
| 7:15 | 7:30 | 0 | 0 | 4 | 4 | 8 | 22 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 62 | 2 | 64 | 98 | 213 | 0 | 0 | 0 | 0 |
| 7:30 | 7:45 | 1 | 0 | 12 | 13 | 9 | 37 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | 98 | 3 | 101 | 160 | 373 | 1 | 0 | 0 | 0 |
| 7:45 | 8:00 | 0 | 1 | 9 | 10 | 13 | 25 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 73 | 2 | 75 | 123 | 496 | 1 | 1 | 0 | 0 |
| 8:00 | 8:15 | 3 | 0 | 13 | 16 | 13 | 40 | 0 | 53 | 0 | 0 | 0 | 0 | 0 | 50 | 5 | 55 | 124 | 505 | 0 | 0 | 1 | 0 |
| 8:15 | 8:30 | 6 | 0 | 7 | 13 | 18 | 48 | 0 | 66 | 0 | 0 | 0 | 0 | 0 | 58 | 4 | 62 | 141 | 548 | 1 | 0 | 0 | 0 |
| 8:30 | 8:45 | 2 | 0 | 8 | 10 | 8 | 49 | 0 | 57 | 0 | 0 | 0 | 0 | 0 | 63 | 1 | 64 | 131 | 519 | 3 | 1 | 1 | 0 |
| 8:45 | 9:00 | 1 | 0 | 7 | 8 | 13 | 57 | 0 | 70 | 0 | 0 | 0 | 0 | 0 | 72 | 6 | 78 | 156 | 552 | 0 | 0 | 1 | 0 |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | | 0 | 0 | 0 | 0 |
| 9:15 | 9:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **15** | **1** | **68** | | **89** | **308** | **0** | | **0** | **0** | **0** | | **0** | **543** | **25** | | **1049** | | **6** | **2** | **3** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| **Peak Volumes** | **12** | **0** | **35** | **47** | **52** | **194** | **0** | **246** | **0** | **0** | **0** | **0** | **0** | **243** | **16** | **259** | **552** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.50 | 0.00 | 0.67 | 0.73 | 0.72 | 0.85 | 0.00 | 0.88 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.84 | 0.67 | 0.83 | 0.88 | | | | | |
| **Trucks** | 0 | 0 | 0 | | 0 | 17 | 0 | | 0 | 0 | 0 | | 0 | 13 | 0 | | | | | | | |
| **% Trucks** | 0% | 0% | 0% | | 0% | 9% | 0% | | 0% | 0% | 0% | | 0% | 5% | 0% | | | | | | | |

## Seasonally Adjusted Peak Hour




Seasonal Adjustment Factor

**1.025**

**4: Dakota @ Hwy 138**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 6:30 AM | | | | | | | | | | | | | | | | | | | | | 0 | |
| 6:45 AM | | | | | | | | | | | | | | | | | | | | | 0 | |
| 7:00 AM | | 2 | 0 | 8 | | | 7 | 25 | | | | | | | | | | 62 | 2 | | 106 | |
| 7:15 AM | | 0 | 0 | 4 | | | 8 | 18 | | | | | | | | | | 55 | 2 | | 87 | 193 |
| 7:30 AM | | 1 | 0 | 12 | | | 8 | 29 | | | | | | | | | | 87 | 3 | | 140 | 333 |
| 7:45 AM | | 0 | 0 | 9 | | | 12 | 22 | | | | | | | | | | 65 | 2 | | 110 | 443 |
| 8:00 AM | | 3 | 0 | 13 | | | 11 | 36 | | | 1 | | | | | | | 43 | 5 | | 111 | 448 |
| 8:15 AM | | 6 | 0 | 7 | | | 18 | 38 | | | | | | | | | | 52 | 4 | | 125 | 486 |
| 8:30 AM | | 2 | 0 | 8 | | | 8 | 42 | | | | | | | | | | 57 | 1 | | 118 | 464 |
| 8:45 AM | | 1 | 0 | 7 | | | 13 | 47 | | | | | | | | | | 65 | 6 | | 139 | 493 |
| 9:00 AM | | 0 | 0 | 0 | | | 0 | 0 | | | | | | | | | | 1 | 0 | | 1 | 383 |
| 9:15 AM | | | | | | | | | | | | | | | | | | | | | 0 | 258 |
| **Total** | 0 | 15 | 0 | 68 | | 0 | 85 | 257 | 0 | | 1 | 0 | 0 | 0 | | 0 | 0 | 487 | 25 | | | |
| **Peak Hour** | **0** | **2** | **0** | **35** | | **0** | **50** | **163** | **0** | | **1** | **0** | **0** | **0** | | **0** | **0** | **217** | **16** | | **493** | |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 6:30 AM | | | | | | | | | | | | | | | | | 0 | |
| 6:45 AM | | | | | | | | | | | | | | | | | 0 | |
| 7:00 AM | | 0 | | | 0 | 5 | 0 | | | | | | | 4 | | | 9 | |
| 7:15 AM | | 0 | | | 0 | 4 | 0 | | | | | | | 7 | | | 11 | 20 |
| 7:30 AM | | 0 | | | 1 | 8 | 0 | | | | | | | 11 | | | 20 | 40 |
| 7:45 AM | | 1 | | | 1 | 3 | 0 | | | | | | | 8 | | | 13 | 53 |
| 8:00 AM | | 0 | | | 2 | 4 | 0 | | | | | | | 7 | | | 13 | 57 |
| 8:15 AM | | 0 | | | 0 | 10 | 0 | | | | | | | 6 | | | 16 | 62 |
| 8:30 AM | | 0 | | | 0 | 7 | 0 | | | | | | | 6 | | | 13 | 55 |
| 8:45 AM | | 0 | | | 0 | 10 | 0 | | | | | | | 7 | | | 17 | 59 |
| 9:00 AM | | | | | | | | | | | | | | | | | 0 | 46 |
| 9:15 AM | | | | | | | | | | | | | | | | | 0 | 30 |
| **Total** | 0 | 1 | 0 | | 4 | 51 | 0 | | 0 | 0 | 0 | | 0 | 56 | 0 | | | |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **17** | **0** | | **0** | **0** | **0** | | **0** | **13** | **0** | | **59** | |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | | |
| 6:30 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:45 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:00 AM | | 0 | | | 0 | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:15 AM | | 0 | | | 0 | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:30 AM | | 0 | | | 0 | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:45 AM | | 0 | | | 0 | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:00 AM | | 1 | | | 0 | | | | | | | | | | | | 1 | 0 | 0 | 0 |
| 8:15 AM | | 1 | | | 1 | | | | | | | | | | | | 1 | 1 | 0 | 0 |
| 8:30 AM | | 0 | | | 0 | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:45 AM | | 1 | | | 0 | | | | | | | | | | | | 1 | 0 | 0 | 0 |
| 9:00 AM | | 0 | | | 0 | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 9:15 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 3 | 0 | | 1 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 3 | 1 | 0 | 0 |
| **Peak Hour** | **0** | **3** | **0** | | **1** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** | | **0** | **0** | **0** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | | |
| 6:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 6:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 7:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 7:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 7:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 7:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 8:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 8:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 8:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 8:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 9:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 9:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** |

**Intersection:** 5: Dovetail @ Hwy 138 **City:** Sutherlin, OR

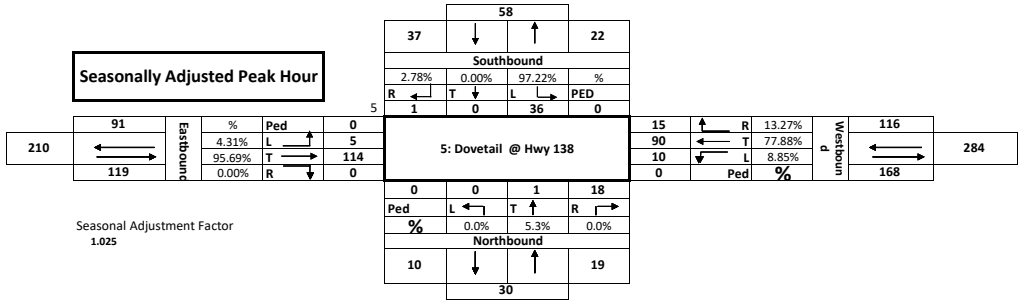
**Counter:** Sandow Engineering **Date:** Tuesday, August 22, 2023

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 6:30 | 6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 6:45 | 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 7:00 | 7:15 | 0 | 0 | 6 | 6 | 6 | 14 | 5 | 25 | 8 | 1 | 0 | 9 | 0 | 24 | 0 | 24 | 64 | | 0 | 0 | 0 | 0 |
| 7:15 | 7:30 | 0 | 1 | 6 | 7 | 2 | 11 | 1 | 14 | 3 | 0 | 0 | 3 | 0 | 35 | 0 | 35 | 59 | 123 | 0 | 0 | 0 | 0 |
| 7:30 | 7:45 | 0 | 0 | 15 | 15 | 5 | 8 | 2 | 15 | 5 | 0 | 0 | 5 | 0 | 43 | 0 | 43 | 78 | 201 | 0 | 0 | 0 | 0 |
| 7:45 | 8:00 | 0 | 0 | 13 | 13 | 5 | 9 | 4 | 18 | 5 | 0 | 1 | 6 | 0 | 26 | 0 | 26 | 63 | 264 | 0 | 0 | 0 | 0 |
| 8:00 | 8:15 | 0 | 0 | 10 | 10 | 4 | 17 | 1 | 22 | 1 | 0 | 0 | 1 | 0 | 20 | 1 | 21 | 54 | 254 | 0 | 0 | 0 | 0 |
| 8:15 | 8:30 | 0 | 0 | 6 | 6 | 3 | 28 | 3 | 34 | 3 | 0 | 0 | 3 | 0 | 28 | 1 | 29 | 72 | 267 | 0 | 0 | 0 | 0 |
| 8:30 | 8:45 | 1 | 0 | 11 | 12 | 3 | 21 | 4 | 28 | 4 | 0 | 0 | 4 | 0 | 33 | 1 | 34 | 78 | 267 | 1 | 0 | 1 | 0 |
| 8:45 | 9:00 | 0 | 0 | 8 | 8 | 5 | 22 | 2 | 29 | 10 | 1 | 0 | 11 | 0 | 30 | 2 | 32 | 80 | 284 | 1 | 0 | 1 | 0 |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 9:15 | 9:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **1** | **1** | **75** | | **33** | **130** | **22** | | **39** | **2** | **1** | | **0** | **239** | **5** | | **548** | | **2** | **0** | **2** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | Approach | Westbound | | | Approach | Northbound | | | Approach | Eastbound | | | Approach | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Total | Right | Thru | Left | Total | Right | Thru | Left | Total | Right | Thru | Left | Total | | | SB | WB | NB | EB |
| **Peak Volumes** | **1** | **0** | **35** | **36** | **15** | **88** | **10** | **113** | **18** | **1** | **0** | **19** | **0** | **111** | **5** | **116** | **284** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.25 | 0.00 | 0.80 | 0.75 | 0.75 | 0.79 | 0.63 | 0.83 | 0.45 | 0.25 | 0.00 | 0.43 | 0.00 | 0.84 | 0.63 | 0.85 | 0.89 | | | | | |
| **Trucks** | 0 | 0 | 0 | | 2 | 18 | 0 | | 2 | 0 | 0 | | 0 | 12 | 0 | | | | | | | |
| **% Trucks** | 0% | 0% | 0% | | 13% | 20% | 0% | | 11% | 0% | 0% | | 0% | 11% | 0% | | | | | | | |


Seasonally Adjusted Peak Hour
58
37
22
Southbound
2.78%
0.00%
97.22%
%
R
T
L
PED
5
1
0
36
0
91
Eastbound
%
Ped
0
210
4.31%
L
5
5: Dovetail @ Hwy 138
95.69%
T
114
119
0.00%
R
0
15
R
13.27%
116
90
T
77.88%
284
10
L
8.85%
Westboun
d
0
Ped
%
168
0
0
1
18
Ped
L
T
R
%
0.0%
5.3%
0.0%
Northbound
10
19
30
Seasonal Adjustment Factor
1.025

**5: Dovetail @ Hwy 138**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 6:30 AM | | | | | | | | | | | | | | | | | | | | | 0 | |
| 6:45 AM | | | | | | | | | | | | | | | | | | | | | 0 | |
| 7:00 AM | | | | 6 | | | 4 | 11 | 4 | | | 8 | 1 | | | | | 20 | | | 54 | |
| 7:15 AM | | | | 6 | | | 2 | 11 | 1 | | | 3 | | | | | | 33 | | | 56 | 110 |
| 7:30 AM | | | | 15 | | | 5 | 6 | 2 | | | 5 | | | | | | 33 | | | 66 | 176 |
| 7:45 AM | | | | 12 | | | 1 | 9 | 4 | | | 5 | | 1 | | | | 22 | | | 54 | 230 |
| 8:00 AM | | | | 10 | | | 3 | 16 | 1 | | | 1 | | | | | | 18 | 1 | | 50 | 226 |
| 8:15 AM | | | | 6 | | | 2 | 20 | 3 | | | 3 | | | | | | 26 | 1 | | 61 | 231 |
| 8:30 AM | 1 | 1 | | 11 | | | 3 | 19 | 4 | | 1 | 4 | | | | | | 28 | 1 | | 71 | 236 |
| 8:45 AM | | | | 8 | | | 5 | 15 | 2 | | | 8 | 1 | | | | | 27 | 2 | | 68 | 250 |
| 9:00 AM | | | | | | | | | | | | | | | | | | | | | 0 | 200 |
| 9:15 AM | | | | | | | | | | | | | | | | | | | | | 0 | 139 |
| **Total** | 1 | 1 | 0 | 74 | | 0 | 25 | 107 | 21 | | 1 | 37 | 2 | 1 | | 0 | 0 | 207 | 5 | | | |
| **Peak Hour** | **1** | **1** | **0** | **35** | | **0** | **13** | **70** | **10** | | **1** | **16** | **1** | **0** | | **0** | **0** | **99** | **5** | | **250** | |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 6:30 AM | | | | | | | | | | | | | | | | | 0 | |
| 6:45 AM | | | | | | | | | | | | | | | | | 0 | |
| 7:00 AM | | | | | 2 | 3 | 1 | | | | | | | 4 | | | 10 | |
| 7:15 AM | | 1 | | | | | | | | | | | | 2 | | | 3 | 13 |
| 7:30 AM | | | | | | 2 | | | | | | | | 10 | | | 12 | 25 |
| 7:45 AM | | | 1 | | 4 | | | | | | | | | 4 | | | 9 | 34 |
| 8:00 AM | | | | | 1 | 1 | | | | | | | | 2 | | | 4 | 28 |
| 8:15 AM | | | | | 1 | 8 | | | | | | | | 2 | | | 11 | 36 |
| 8:30 AM | | | | | | 2 | | | | | | | | 5 | | | 7 | 31 |
| 8:45 AM | | | | | | 7 | | | 2 | | | | | 3 | | | 12 | 34 |
| 9:00 AM | | | | | | | | | | | | | | | | | 0 | 30 |
| 9:15 AM | | | | | | | | | | | | | | | | | 0 | 19 |
| **Total** | 0 | 1 | 1 | | 8 | 23 | 1 | | 2 | 0 | 0 | | 0 | 32 | 0 | | | |
| **Peak Hour** | **0** | **0** | **0** | | **2** | **18** | **0** | | **2** | **0** | **0** | | **0** | **12** | **0** | | **34** | |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | | |
| 6:30 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:45 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:00 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:15 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:30 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 7:45 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:00 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:15 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:30 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 8:45 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 9:00 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 9:15 AM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** | | **0** | **0** | **0** | **0** |

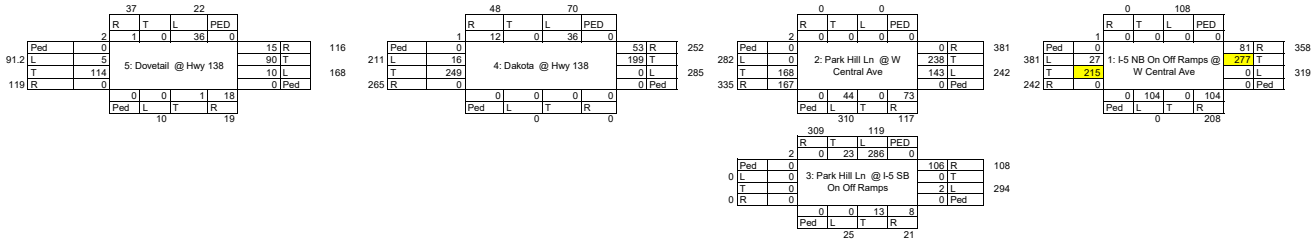
**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | | |
| 6:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 6:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 7:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 7:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 7:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 7:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 8:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 8:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 8:30 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 8:45 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 9:00 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 9:15 AM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** |

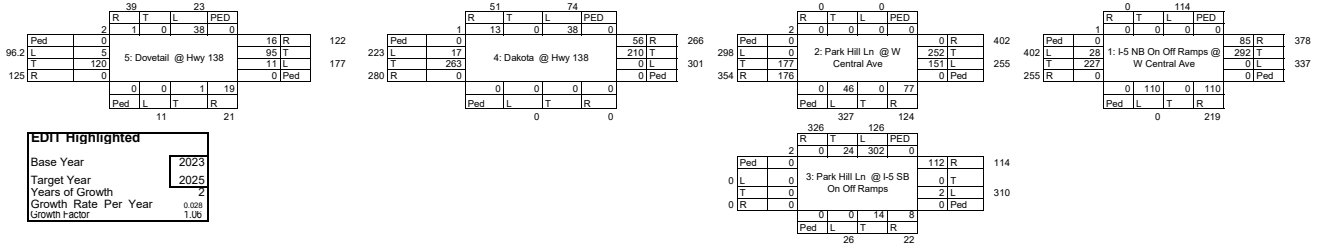
| | | Intersections | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1: I-5 NB On Off Ramps @ W Central Ave | 2: Park Hill Ln @ W Central Ave | 3: Park Hill Ln @ I-5 SB On Off Ramps | 4: Dakota @ Hwy 138 | 5: Dovetail @ Hwy 138 | |
| Time Period | | Volume | Volume | Volume | Volume | Volume | Total |
| 6:30 AM | 7:30 AM | 617 | 636 | 370 | 213 | 123 | **1959** |
| 6:45 AM | 7:45 AM | 628 | 684 | 432 | 373 | 201 | **2318** |
| 7:00 AM | 8:00 AM | 684 | 741 | 462 | 496 | 264 | **2647** |
| 7:15 AM | 8:15 AM | 716 | 770 | 470 | 505 | 254 | **2715** |
| 7:30 AM | 8:30 AM | 739 | 788 | 459 | 548 | 267 | **2801** |
| 7:45 AM | 8:45 AM | 762 | 798 | 436 | 519 | 267 | **2782** |
| 8:00 AM | 9:00 AM | 801 | 818 | 438 | 552 | 284 | **2893** |
| 8:15 AM | 9:15 AM | 843 | 861 | 462 | - | - | **2166** |
| 8:30 AM | 9:30 AM | 875 | 889 | 469 | - | - | **2233** |
| | | 875 | 889 | 470 | 552 | 284 | 2893 |

Peak Hour 8:00 AM
8:15 AM
8:30 AM
8:45 AM

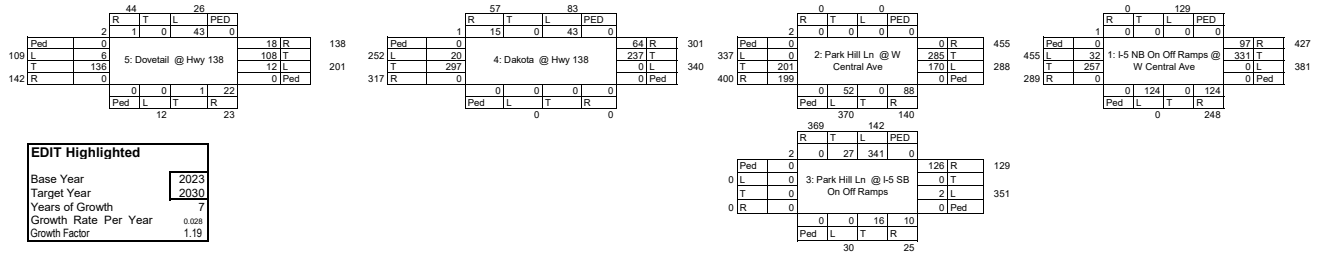
**Existing 2023 AM Volumes**



**Existing 2025 AM Volumes**




| EDIT Highlighted | |
|---|---|
| Base Year | 2023 |
| Target Year | 2025 |
| Years of Growth | 2 |
| Growth Rate Per Year | 0.028 |
| Growth Factor | 1.06 |




| EDIT Highlighted | |
|---|---|
| Base Year | 2023 |
| Target Year | 2030 |
| Years of Growth | 7 |
| Growth Rate Per Year | 0.028 |
| Growth Factor | 1.19 |

**Intersection:** 1: I-5 NB On Off Ramps @ W Central Ave **City:** Sutherlin, OR

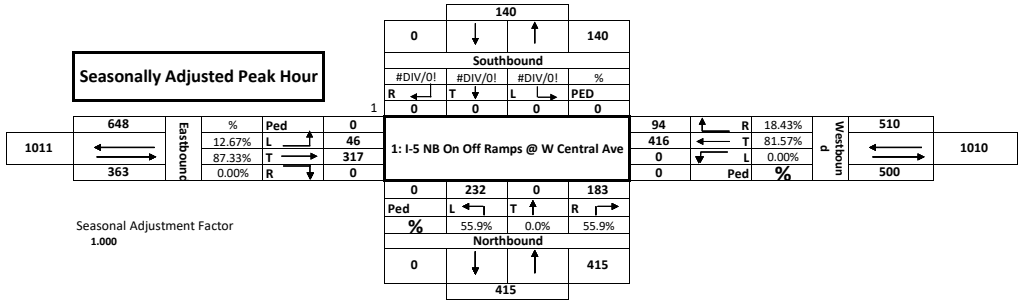
**Counter:** Quality Counts **Date:** Thursday, June 30, 2022

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 15:30 | 15:45 | 0 | 0 | 0 | 0 | 28 | 113 | 0 | 141 | 29 | 0 | 52 | 81 | 0 | 77 | 13 | 90 | 312 | | 0 | 0 | 0 | 0 |
| 15:45 | 16:00 | 0 | 0 | 0 | 0 | 17 | 74 | 0 | 91 | 40 | 2 | 51 | 93 | 0 | 83 | 20 | 103 | 287 | | 0 | 0 | 0 | 0 |
| 16:00 | 16:15 | 0 | 0 | 0 | 0 | 16 | 100 | 0 | 116 | 29 | 0 | 45 | 74 | 0 | 62 | 6 | 68 | 258 | | 0 | 0 | 0 | 0 |
| 16:15 | 16:30 | 0 | 0 | 0 | 0 | 34 | 104 | 0 | 138 | 56 | 0 | 53 | 109 | 0 | 76 | 7 | 83 | 330 | 1187 | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 0 | 0 | 0 | 0 | 34 | 94 | 0 | 128 | 41 | 0 | 50 | 91 | 0 | 77 | 14 | 91 | 310 | 1185 | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 24 | 112 | 0 | 136 | 48 | 0 | 50 | 98 | 0 | 82 | 8 | 90 | 324 | 1222 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 0 | 0 | 0 | 0 | 19 | 113 | 0 | 132 | 46 | 0 | 68 | 114 | 0 | 80 | 13 | 93 | 339 | 1303 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 0 | 0 | 0 | 17 | 97 | 0 | 114 | 48 | 0 | 64 | 112 | 0 | 78 | 11 | 89 | 315 | 1288 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 0 | 0 | 0 | 0 | 20 | 94 | 0 | 114 | 42 | 0 | 47 | 89 | 0 | 72 | 11 | 83 | 286 | 1264 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 0 | 0 | 0 | 21 | 79 | 0 | 100 | 40 | 0 | 54 | 94 | 0 | 53 | 17 | 70 | 264 | 1204 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 6 | 89 | 0 | 95 | 33 | 0 | 45 | 78 | 0 | 64 | 11 | 75 | 248 | 1113 | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 17 | 87 | 0 | 104 | 31 | 0 | 44 | 75 | 0 | 64 | 8 | 72 | 251 | 1049 | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **0** | **0** | **0** | | **253** | **1156** | **0** | | **483** | **2** | **623** | | **0** | **868** | **139** | | **3524** | | **0** | **0** | **0** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| **Peak Volumes** | **0** | **0** | **0** | **0** | **94** | **416** | **0** | **510** | **183** | **0** | **232** | **415** | **0** | **317** | **46** | **363** | **1288** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.00 | 0.00 | 0.00 | 0.00 | 0.69 | 0.92 | 0.00 | 0.94 | 0.95 | 0.00 | 0.85 | 0.91 | 0.00 | 0.97 | 0.82 | 0.98 | 0.95 | | | | | |
| **Trucks** | 0 | 0 | 0 | | 5 | 13 | 0 | | 6 | 0 | 6 | | 0 | 12 | 2 | | | | | | | |
| **% Trucks** | 0% | 0% | 0% | | 5% | 3% | 0% | | 3% | 0% | 3% | | 0% | 4% | 4% | | | | | | | |


Seasonally Adjusted Peak Hour
140
0
140
Southbound
#DIV/0!
#DIV/0!
#DIV/0!
%
R
T
L
PED
1
0
0
0
0
648
Eastbound
%
Ped
0
1011
12.67%
L
46
87.33%
T
317
363
0.00%
R
0
1: I-5 NB On Off Ramps @ W Central Ave
94
R
18.43%
416
T
81.57%
0
L
0.00%
0
Ped
%
Westboun
d
510
1010
500
0
232
0
183
Ped
L
T
R
%
55.9%
0.0%
55.9%
Northbound
0
415
415
Seasonal Adjustment Factor
1.000

**1: I-5 NB On Off Ramps @ W Central Ave**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 3:30 PM | | | | | | | 27 | 109 | | | | 29 | 0 | 49 | | | | 73 | 13 | | 300 | |
| 3:45 PM | | | | | | | 17 | 71 | | | | 39 | 2 | 46 | | | | 78 | 18 | | 271 | |
| 4:00 PM | | | | | | | 16 | 94 | | | | 24 | 0 | 42 | | | | 58 | 5 | | 239 | |
| 4:15 PM | | | | | | | 33 | 103 | | | | 55 | 0 | 50 | | | | 72 | 7 | | 320 | 1130 |
| 4:30 PM | | | | | | | 32 | 91 | | | | 38 | 0 | 50 | | | | 74 | 13 | | 298 | 1128 |
| 4:45 PM | | | | | | | 23 | 108 | | | | 47 | 0 | 48 | | | | 80 | 8 | | 314 | 1171 |
| 5:00 PM | | | | | | | 18 | 108 | | | | 45 | 0 | 66 | | | | 77 | 12 | | 326 | 1258 |
| 5:15 PM | | | | | | | 16 | 96 | | | | 47 | 0 | 62 | | | | 74 | 11 | | 306 | 1244 |
| 5:30 PM | | | | | | | 18 | 90 | | | | 42 | 0 | 46 | | | | 70 | 10 | | 276 | 1222 |
| 5:45 PM | | | | | | | 20 | 78 | | | | 39 | 0 | 52 | | | | 53 | 17 | | 259 | 1167 |
| 6:00 PM | | | | | | | 6 | 85 | | | | 32 | 0 | 41 | | | | 62 | 9 | | 235 | 1076 |
| 6:15 PM | | | | | | | 17 | 85 | | | | 31 | 0 | 41 | | | | 59 | 8 | | 241 | 1011 |
| **Total** | 0 | 0 | 0 | 0 | | 0 | 243 | 1118 | 0 | | 0 | 468 | 2 | 593 | | 0 | 0 | 830 | 131 | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | | **0** | **89** | **403** | **0** | | **0** | **177** | **0** | **226** | | **0** | **0** | **305** | **44** | | **1244** | |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 3:30 PM | | | | | 1 | 4 | | | 0 | | 3 | | | 4 | 0 | | 12 | |
| 3:45 PM | | | | | 0 | 3 | | | 1 | | 5 | | | 5 | 2 | | 16 | |
| 4:00 PM | | | | | 0 | 6 | | | 5 | | 3 | | | 4 | 1 | | 19 | |
| 4:15 PM | | | | | 1 | 1 | | | 1 | | 3 | | | 4 | 0 | | 10 | 57 |
| 4:30 PM | | | | | 2 | 3 | | | 3 | | 0 | | | 3 | 1 | | 12 | 57 |
| 4:45 PM | | | | | 1 | 4 | | | 1 | | 2 | | | 2 | 0 | | 10 | 51 |
| 5:00 PM | | | | | 1 | 5 | | | 1 | | 2 | | | 3 | 1 | | 13 | 45 |
| 5:15 PM | | | | | 1 | 1 | | | 1 | | 2 | | | 4 | 0 | | 9 | 44 |
| 5:30 PM | | | | | 2 | 4 | | | 0 | | 1 | | | 2 | 1 | | 10 | 42 |
| 5:45 PM | | | | | 1 | 1 | | | 1 | | 2 | | | 0 | 0 | | 5 | 37 |
| 6:00 PM | | | | | 0 | 4 | | | 1 | | 4 | | | 2 | 2 | | 13 | 37 |
| 6:15 PM | | | | | 0 | 2 | | | 0 | | 3 | | | 5 | 0 | | 10 | 38 |
| **Total** | 0 | 0 | 0 | | 10 | 38 | 0 | | 15 | 0 | 30 | | 0 | 38 | 8 | | | |
| **Peak Hour** | **0** | **0** | **0** | | **5** | **13** | **0** | | **6** | **0** | **6** | | **0** | **12** | **2** | | **44** | |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | | |
| 3:30 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 3:45 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:00 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** | | **0** | **0** | **0** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | | |
| 3:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 3:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 4:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** |

**Intersection:** 2: Park Hill Ln @ W Central Ave **City:** Sutherlin, OR

**Counter:** Quality Counts **Date:** Thursday, June 30, 2022

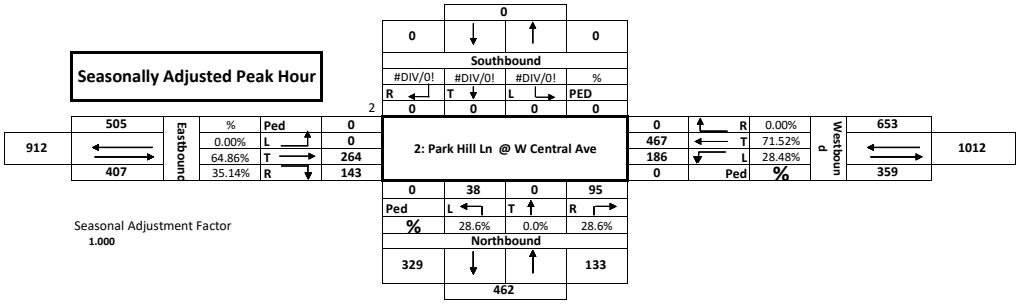
## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 15:30 | 15:45 | 0 | 0 | 0 | 0 | 0 | 114 | 46 | 160 | 24 | 0 | 10 | 34 | 52 | 62 | 0 | 114 | 308 | | 0 | 0 | 0 | 0 |
| 15:45 | 16:00 | 0 | 0 | 0 | 0 | 0 | 90 | 38 | 128 | 19 | 0 | 7 | 26 | 31 | 85 | 0 | 116 | 270 | | 0 | 0 | 0 | 0 |
| 16:00 | 16:15 | 0 | 0 | 0 | 0 | 0 | 99 | 40 | 139 | 24 | 0 | 11 | 35 | 31 | 46 | 0 | 77 | 251 | | 0 | 0 | 0 | 0 |
| 16:15 | 16:30 | 0 | 0 | 0 | 0 | 0 | 108 | 48 | 156 | 28 | 0 | 8 | 36 | 29 | 54 | 0 | 83 | 275 | 1104 | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 0 | 0 | 0 | 0 | 0 | 97 | 48 | 145 | 26 | 0 | 9 | 35 | 40 | 66 | 0 | 106 | 286 | 1082 | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 0 | 118 | 43 | 161 | 25 | 0 | 5 | 30 | 30 | 62 | 0 | 92 | 283 | 1095 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 0 | 0 | 0 | 0 | 0 | 126 | 53 | 179 | 21 | 0 | 14 | 35 | 37 | 70 | 0 | 107 | 321 | 1165 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 0 | 0 | 0 | 0 | 126 | 42 | 168 | 23 | 0 | 10 | 33 | 36 | 66 | 0 | 102 | 303 | 1193 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 0 | 0 | 0 | 0 | 0 | 121 | 23 | 144 | 18 | 0 | 12 | 30 | 29 | 64 | 0 | 93 | 267 | 1174 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 0 | 0 | 0 | 0 | 100 | 34 | 134 | 21 | 0 | 12 | 33 | 24 | 52 | 0 | 76 | 243 | 1134 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 86 | 49 | 135 | 24 | 0 | 13 | 37 | 24 | 49 | 0 | 73 | 245 | 1058 | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 94 | 39 | 133 | 23 | 0 | 8 | 31 | 24 | 47 | 0 | 71 | 235 | 990 | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **0** | **0** | **0** | | **0** | **1279** | **503** | | **276** | **0** | **119** | | **387** | **723** | **0** | | **3287** | | **0** | **0** | **0** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | Approach | Westbound | | | Approach | Northbound | | | Approach | Eastbound | | | Approach | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Total | Right | Thru | Left | Total | Right | Thru | Left | Total | Right | Thru | Left | Total | | | SB | WB | NB | EB |
| **Peak Volumes** | **0** | **0** | **0** | **0** | **0** | **467** | **186** | **653** | **95** | **0** | **38** | **133** | **143** | **264** | **0** | **407** | **1193** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.93 | 0.88 | 0.91 | 0.91 | 0.00 | 0.68 | 0.95 | 0.89 | 0.94 | 0.00 | 0.95 | 0.93 | | | | | |
| **Trucks** | 0 | 0 | 0 | | 0 | 14 | 5 | | 5 | 0 | 2 | | 8 | 9 | 0 | | | | | | | |
| **% Trucks** | 0% | 0% | 0% | | 0% | 3% | 3% | | 5% | 0% | 5% | | 6% | 3% | 0% | | | | | | | |

**Seasonally Adjusted Peak Hour**




Seasonal Adjustment Factor

**1.000**

**2: Park Hill Ln @ W Central Ave**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 3:30 PM | | | | | | | | 110 | 42 | | | 22 | | 10 | | | 47 | 60 | | | 291 | |
| 3:45 PM | | | | | | | | 86 | 34 | | | 15 | | 7 | | | 31 | 82 | | | 255 | |
| 4:00 PM | | | | | | | | 96 | 35 | | | 21 | | 8 | | | 26 | 44 | | | 230 | |
| 4:15 PM | | | | | | | | 105 | 46 | | | 25 | | 8 | | | 26 | 53 | | | 263 | 1039 |
| 4:30 PM | | | | | | | | 95 | 47 | | | 23 | | 8 | | | 35 | 65 | | | 273 | 1021 |
| 4:45 PM | | | | | | | | 114 | 41 | | | 25 | | 5 | | | 30 | 60 | | | 275 | 1041 |
| 5:00 PM | | | | | | | | 121 | 51 | | | 20 | | 13 | | | 37 | 67 | | | 309 | 1120 |
| 5:15 PM | | | | | | | | 123 | 42 | | | 22 | | 10 | | | 33 | 63 | | | 293 | 1150 |
| 5:30 PM | | | | | | | | 119 | 20 | | | 17 | | 11 | | | 25 | 62 | | | 254 | 1131 |
| 5:45 PM | | | | | | | | 98 | 34 | | | 20 | | 10 | | | 23 | 52 | | | 237 | 1093 |
| 6:00 PM | | | | | | | | 82 | 44 | | | 23 | | 13 | | | 24 | 47 | | | 233 | 1017 |
| 6:15 PM | | | | | | | | 90 | 38 | | | 21 | | 8 | | | 24 | 44 | | | 225 | 949 |
| **Total** | 0 | 0 | 0 | 0 | | 0 | 0 | 1239 | 474 | | 0 | 254 | 0 | 111 | | 0 | 361 | 699 | 0 | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | | **0** | **0** | **453** | **181** | | **0** | **90** | **0** | **36** | | **0** | **135** | **255** | **0** | | **1150** | |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 3:30 PM | | | | | | 4 | 4 | | 2 | | 0 | | 5 | 2 | | | 17 | |
| 3:45 PM | | | | | | 4 | 4 | | 4 | | 0 | | 0 | 3 | | | 15 | |
| 4:00 PM | | | | | | 3 | 5 | | 3 | | 3 | | 5 | 2 | | | 21 | |
| 4:15 PM | | | | | | 3 | 2 | | 3 | | 0 | | 3 | 1 | | | 12 | 65 |
| 4:30 PM | | | | | | 2 | 1 | | 3 | | 1 | | 5 | 1 | | | 13 | 61 |
| 4:45 PM | | | | | | 4 | 2 | | 0 | | 0 | | 0 | 2 | | | 8 | 54 |
| 5:00 PM | | | | | | 5 | 2 | | 1 | | 1 | | 0 | 3 | | | 12 | 45 |
| 5:15 PM | | | | | | 3 | 0 | | 1 | | 0 | | 3 | 3 | | | 10 | 43 |
| 5:30 PM | | | | | | 2 | 3 | | 1 | | 1 | | 4 | 2 | | | 13 | 43 |
| 5:45 PM | | | | | | 2 | 0 | | 1 | | 2 | | 1 | 0 | | | 6 | 41 |
| 6:00 PM | | | | | | 4 | 5 | | 1 | | 0 | | 0 | 2 | | | 12 | 41 |
| 6:15 PM | | | | | | 4 | 1 | | 2 | | 0 | | 0 | 3 | | | 10 | 41 |
| **Total** | 0 | 0 | 0 | | 0 | 40 | 29 | | 22 | 0 | 8 | | 26 | 24 | 0 | | | |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **14** | **5** | | **5** | **0** | **2** | | **8** | **9** | **0** | | **43** | |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | | |
| 3:30 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 3:45 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:00 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 3:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Intersection:** 3: Park Hill Ln @ I-5 SB On Off Ramps **City:** Sutherlin, OR

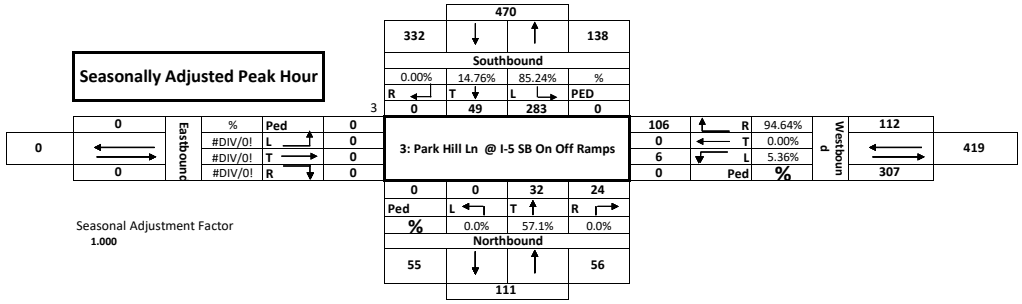
**Counter:** Quality Counts **Date:** Thursday, June 30, 2022

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 15:30 | 15:45 | 0 | 8 | 90 | 98 | 21 | 0 | 2 | 23 | 6 | 9 | 0 | 15 | 0 | 0 | 0 | 0 | 136 | | 0 | 0 | 0 | 0 |
| 15:45 | 16:00 | 0 | 13 | 54 | 67 | 18 | 0 | 3 | 21 | 5 | 8 | 0 | 13 | 0 | 0 | 0 | 0 | 101 | | 0 | 0 | 0 | 0 |
| 16:00 | 16:15 | 0 | 10 | 60 | 70 | 28 | 0 | 2 | 30 | 6 | 8 | 0 | 14 | 0 | 0 | 0 | 0 | 114 | | 0 | 0 | 0 | 0 |
| 16:15 | 16:30 | 0 | 19 | 58 | 77 | 29 | 0 | 3 | 32 | 4 | 6 | 0 | 10 | 0 | 0 | 0 | 0 | 119 | 470 | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 0 | 12 | 74 | 86 | 25 | 0 | 1 | 26 | 4 | 10 | 0 | 14 | 0 | 0 | 0 | 0 | 126 | 460 | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 11 | 65 | 76 | 24 | 0 | 4 | 28 | 6 | 8 | 0 | 14 | 0 | 0 | 0 | 0 | 118 | 477 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 0 | 18 | 73 | 91 | 26 | 0 | 1 | 27 | 5 | 9 | 0 | 14 | 0 | 0 | 0 | 0 | 132 | 495 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 8 | 71 | 79 | 31 | 0 | 0 | 31 | 9 | 5 | 0 | 14 | 0 | 0 | 0 | 0 | 124 | 500 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 0 | 8 | 43 | 51 | 22 | 0 | 1 | 23 | 2 | 8 | 0 | 10 | 0 | 0 | 0 | 0 | 84 | 458 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 9 | 49 | 58 | 25 | 0 | 0 | 25 | 3 | 8 | 0 | 11 | 0 | 0 | 0 | 0 | 94 | 434 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 19 | 53 | 72 | 28 | 0 | 1 | 29 | 5 | 11 | 0 | 16 | 0 | 0 | 0 | 0 | 117 | 419 | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 14 | 49 | 63 | 21 | 0 | 5 | 26 | 3 | 8 | 0 | 11 | 0 | 0 | 0 | 0 | 100 | 395 | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **0** | **149** | **739** | | **298** | **0** | **23** | | **58** | **98** | **0** | | **0** | **0** | **0** | | **1365** | | **0** | **0** | **0** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | Approach | Westbound | | | Approach | Northbound | | | Approach | Eastbound | | | Approach | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Total | Right | Thru | Left | Total | Right | Thru | Left | Total | Right | Thru | Left | Total | | | SB | WB | NB | EB |
| **Peak Volumes** | **0** | **49** | **283** | **332** | **106** | **0** | **6** | **112** | **24** | **32** | **0** | **56** | **0** | **0** | **0** | **0** | **500** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.00 | 0.68 | 0.96 | 0.91 | 0.85 | 0.00 | 0.38 | 0.90 | 0.67 | 0.80 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.95 | | | | | |
| **Trucks** | 0 | 0 | 13 | | 5 | 0 | 1 | | 1 | 1 | 0 | | 0 | 0 | 0 | | | | | | | |
| **% Trucks** | 0% | 0% | 5% | | 5% | 0% | 17% | | 4% | 3% | 0% | | 0% | 0% | 0% | | | | | | | |


Seasonally Adjusted Peak Hour
470
332
138
Southbound
0.00%
14.76%
85.24%
%
R
T
L
PED
3
0
49
283
0
0
Eastbound
%
Ped
0
#DIV/0!
L
0
#DIV/0!
T
0
#DIV/0!
R
0
3: Park Hill Ln @ I-5 SB On Off Ramps
106
R
94.64%
0
T
0.00%
6
L
5.36%
0
Ped
%
Westboun
d
112
307
0
0
419
0
0
32
24
Ped
L
T
R
%
0.0%
57.1%
0.0%
Northbound
55
56
111
Seasonal Adjustment Factor
1.000

**3: Park Hill Ln @ I-5 SB On Off Ramps**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 3:30 PM | | | 8 | 80 | | | 18 | | 2 | | | 5 | 9 | | | | | | | | 122 | |
| 3:45 PM | | | 11 | 52 | | | 16 | | 3 | | | 5 | 6 | | | | | | | | 93 | |
| 4:00 PM | | | 8 | 53 | | | 23 | | 1 | | | 6 | 7 | | | | | | | | 98 | |
| 4:15 PM | | | 18 | 53 | | | 25 | | 3 | | | 4 | 6 | | | | | | | | 109 | 422 |
| 4:30 PM | | | 12 | 68 | | | 24 | | 1 | | | 4 | 9 | | | | | | | | 118 | 418 |
| 4:45 PM | | | 11 | 63 | | | 24 | | 3 | | | 6 | 8 | | | | | | | | 115 | 440 |
| 5:00 PM | | | 18 | 71 | | | 24 | | 1 | | | 5 | 9 | | | | | | | | 128 | 470 |
| 5:15 PM | | | 8 | 68 | | | 29 | | 0 | | | 8 | 5 | | | | | | | | 118 | 479 |
| 5:30 PM | | | 8 | 36 | | | 21 | | 1 | | | 2 | 8 | | | | | | | | 76 | 437 |
| 5:45 PM | | | 9 | 48 | | | 22 | | 0 | | | 3 | 8 | | | | | | | | 90 | 412 |
| 6:00 PM | | | 17 | 50 | | | 27 | | 1 | | | 5 | 11 | | | | | | | | 111 | 395 |
| 6:15 PM | | | 14 | 48 | | | 19 | | 5 | | | 3 | 8 | | | | | | | | 97 | 374 |
| **Total** | 0 | 0 | 142 | 690 | | 0 | 272 | 0 | 21 | | 0 | 56 | 94 | 0 | | 0 | 0 | 0 | 0 | | | |
| **Peak Hour** | **0** | **0** | **49** | **270** | | **0** | **101** | **0** | **5** | | **0** | **23** | **31** | **0** | | **0** | **0** | **0** | **0** | | **479** | |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 3:30 PM | | 0 | 10 | | 3 | | 0 | | 1 | 0 | | | | | | | 14 | |
| 3:45 PM | | 2 | 2 | | 2 | | 0 | | 0 | 2 | | | | | | | 8 | |
| 4:00 PM | | 2 | 7 | | 5 | | 1 | | 0 | 1 | | | | | | | 16 | |
| 4:15 PM | | 1 | 5 | | 4 | | 0 | | 0 | 0 | | | | | | | 10 | 48 |
| 4:30 PM | | 0 | 6 | | 1 | | 0 | | 0 | 1 | | | | | | | 8 | 42 |
| 4:45 PM | | 0 | 2 | | 0 | | 1 | | 0 | 0 | | | | | | | 3 | 37 |
| 5:00 PM | | 0 | 2 | | 2 | | 0 | | 0 | 0 | | | | | | | 4 | 25 |
| 5:15 PM | | 0 | 3 | | 2 | | 0 | | 1 | 0 | | | | | | | 6 | 21 |
| 5:30 PM | | 0 | 7 | | 1 | | 0 | | 0 | 0 | | | | | | | 8 | 21 |
| 5:45 PM | | 0 | 1 | | 3 | | 0 | | 0 | 0 | | | | | | | 4 | 22 |
| 6:00 PM | | 2 | 3 | | 1 | | 0 | | 0 | 0 | | | | | | | 6 | 24 |
| 6:15 PM | | 0 | 1 | | 2 | | 0 | | 0 | 0 | | | | | | | 3 | 21 |
| **Total** | 0 | 7 | 49 | | 26 | 0 | 2 | | 2 | 4 | 0 | | 0 | 0 | 0 | | | |
| **Peak Hour** | **0** | **0** | **13** | | **5** | **0** | **1** | | **1** | **1** | **0** | | **0** | **0** | **0** | | **21** | |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | | |
| 3:30 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 3:45 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:00 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** | | **0** | **0** | **0** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | | |
| 3:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 3:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 4:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** |

**Intersection:** 4: Dakota St @ Hwy 138 **City:** Sutherlin, OR

**Counter:** Sandow Engineering **Date:** Tuesday, January 19, 2021

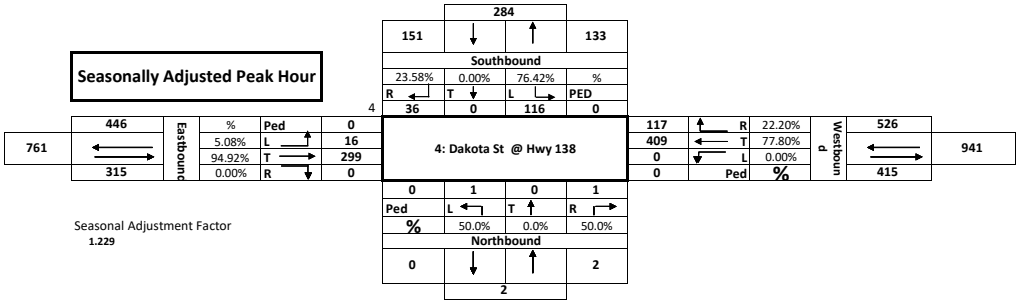
## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 15:30 | 15:45 | 5 | 0 | 26 | 31 | 15 | 67 | 0 | 82 | 0 | 0 | 0 | 0 | 0 | 58 | 4 | 62 | 175 | | 0 | 0 | 0 | 0 |
| 15:45 | 16:00 | 6 | 0 | 17 | 23 | 28 | 55 | 0 | 83 | 0 | 0 | 0 | 0 | 0 | 68 | 3 | 71 | 177 | | 0 | 0 | 0 | 0 |
| 16:00 | 16:15 | 4 | 0 | 13 | 17 | 19 | 79 | 1 | 99 | 0 | 0 | 0 | 0 | 0 | 56 | 3 | 59 | 175 | | 0 | 0 | 0 | 0 |
| 16:15 | 16:30 | 6 | 0 | 19 | 25 | 29 | 66 | 0 | 95 | 0 | 0 | 0 | 0 | 0 | 56 | 7 | 63 | 183 | 710 | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 6 | 0 | 25 | 31 | 18 | 83 | 0 | 101 | 0 | 0 | 1 | 1 | 0 | 79 | 4 | 83 | 216 | 751 | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 8 | 0 | 20 | 28 | 27 | 75 | 0 | 102 | 1 | 0 | 0 | 1 | 0 | 77 | 1 | 78 | 209 | 783 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 11 | 0 | 28 | 39 | 25 | 80 | 0 | 105 | 0 | 0 | 0 | 0 | 0 | 43 | 1 | 44 | 188 | 796 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 4 | 0 | 21 | 25 | 25 | 95 | 0 | 120 | 0 | 0 | 0 | 0 | 0 | 44 | 7 | 51 | 196 | 809 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 6 | 0 | 20 | 26 | 23 | 53 | 0 | 76 | 0 | 0 | 0 | 0 | 0 | 49 | 4 | 53 | 155 | 748 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 18 | 0 | 16 | 34 | 21 | 78 | 0 | 99 | 0 | 0 | 0 | 0 | 0 | 38 | 5 | 43 | 176 | 715 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 14 | 0 | 23 | 37 | 18 | 39 | 0 | 57 | 0 | 0 | 0 | 0 | 0 | 40 | 4 | 44 | 138 | 665 | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 5 | 0 | 14 | 19 | 13 | 59 | 0 | 72 | 0 | 0 | 0 | 0 | 0 | 30 | 4 | 34 | 125 | 594 | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **93** | **0** | **242** | | **261** | **829** | **1** | | **1** | **0** | **1** | | **0** | **638** | **47** | | **2113** | | **0** | **0** | **0** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | Approach | Westbound | | | Approach | Northbound | | | Approach | Eastbound | | | Approach | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Total | Right | Thru | Left | Total | Right | Thru | Left | Total | Right | Thru | Left | Total | | | SB | WB | NB | EB |
| **Peak Volumes** | **29** | **0** | **94** | **123** | **95** | **333** | **0** | **428** | **1** | **0** | **1** | **2** | **0** | **243** | **13** | **256** | **809** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.66 | 0.00 | 0.84 | 0.79 | 0.88 | 0.88 | 0.00 | 0.89 | 0.25 | 0.00 | 0.25 | 0.50 | 0.00 | 0.77 | 0.46 | 0.77 | 0.94 | | | | | |
| **Trucks** | 0 | 0 | 2 | | 0 | 7 | 0 | | 0 | 0 | 0 | | 0 | 11 | 1 | | | | | | | |
| **% Trucks** | 0% | 0% | 2% | | 0% | 2% | 0% | | 0% | 0% | 0% | | 0% | 5% | 8% | | | | | | | |

**Seasonally Adjusted Peak Hour**




Seasonal Adjustment Factor

**1.229**

**4: Dakota St @ Hwy 138**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 3:30 PM | | 5 | | 26 | | | 15 | 64 | | | | | | | | | | 51 | 4 | | 165 | |
| 3:45 PM | | 6 | | 17 | | | 27 | 52 | | | | | | | | | | 66 | 3 | | 171 | |
| 4:00 PM | | 4 | | 13 | | | 19 | 78 | 1 | | | | | | | | | 49 | 3 | | 167 | |
| 4:15 PM | | 6 | | 17 | | | 28 | 65 | | | | | | | | | | 56 | 7 | | 179 | 682 |
| 4:30 PM | | 6 | | 23 | | | 18 | 81 | | | | | | 1 | | | | 74 | 3 | | 206 | 723 |
| 4:45 PM | | 8 | | 20 | | | 27 | 72 | | | | 1 | | | | | | 72 | 1 | | 201 | 753 |
| 5:00 PM | | 11 | | 28 | | | 25 | 80 | | | | | | | | | | 42 | 1 | | 187 | 773 |
| 5:15 PM | | 4 | | 21 | | | 25 | 93 | | | | | | | | | | 44 | 7 | | 194 | 788 |
| 5:30 PM | | 6 | | 20 | | | 23 | 52 | | | | | | | | | | 48 | 4 | | 153 | 735 |
| 5:45 PM | | 18 | | 16 | | | 21 | 75 | | | | | | | | | | 38 | 5 | | 173 | 707 |
| 6:00 PM | | 14 | | 23 | | | 18 | 38 | | | | | | | | | | 36 | 4 | | 133 | 653 |
| 6:15 PM | | 5 | | 14 | | | 13 | 58 | | | | | | | | | | 29 | 4 | | 123 | 582 |
| **Total** | 0 | 93 | 0 | 238 | | 0 | 259 | 808 | 1 | | 0 | 1 | 0 | 1 | | 0 | 0 | 605 | 46 | | | |
| **Peak Hour** | **0** | **21** | **0** | **92** | | **0** | **95** | **326** | **0** | | **0** | **1** | **0** | **1** | | **0** | **0** | **232** | **12** | | **788** | |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 3:30 PM | | | | | | 3 | | | | | | | | 7 | | | 10 | |
| 3:45 PM | | | | | 1 | 3 | | | | | | | | 2 | | | 6 | |
| 4:00 PM | | | | | | 1 | | | | | | | | 7 | | | 8 | |
| 4:15 PM | | | 2 | | 1 | 1 | | | | | | | | | | | 4 | 28 |
| 4:30 PM | | | 2 | | | 2 | | | | | | | | 5 | 1 | | 10 | 28 |
| 4:45 PM | | | | | | 3 | | | | | | | | 5 | | | 8 | 30 |
| 5:00 PM | | | | | | | | | | | | | | 1 | | | 1 | 23 |
| 5:15 PM | | | | | | 2 | | | | | | | | | | | 2 | 21 |
| 5:30 PM | | | | | | 1 | | | | | | | | 1 | | | 2 | 13 |
| 5:45 PM | | | | | | 3 | | | | | | | | | | | 3 | 8 |
| 6:00 PM | | | | | | 1 | | | | | | | | 4 | | | 5 | 12 |
| 6:15 PM | | | | | | 1 | | | | | | | | 1 | | | 2 | 12 |
| **Total** | 0 | 0 | 4 | | 2 | 21 | 0 | | 0 | 0 | 0 | | 0 | 33 | 1 | | | |
| **Peak Hour** | **0** | **0** | **2** | | **0** | **7** | **0** | | **0** | **0** | **0** | | **0** | **11** | **1** | | **21** | |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | |
| 3:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 3:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 3:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Intersection:** 5: Dovetail Ln @ Hwy 138 **City:** Sutherlin, OR

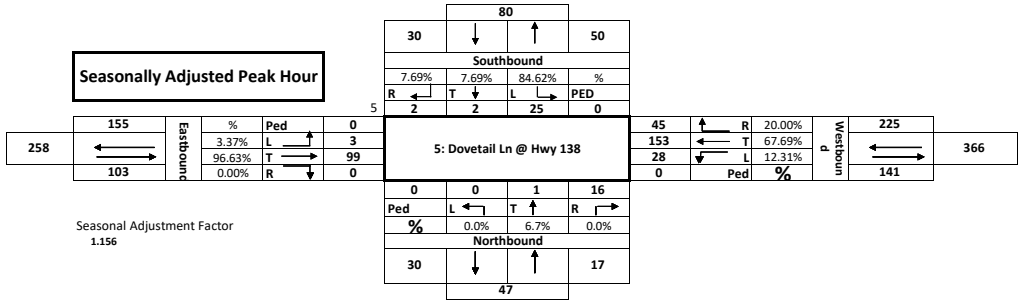
**Counter:** Sandow Engineering **Date:** Wednesday, December 15, 2021

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 15:30 | 15:45 | 0 | 0 | 11 | 11 | 9 | 26 | 6 | 41 | 5 | 1 | 0 | 6 | 0 | 24 | 0 | 24 | 82 | | 0 | 0 | 0 | 0 |
| 15:45 | 16:00 | 3 | 1 | 6 | 10 | 8 | 17 | 7 | 32 | 0 | 1 | 0 | 1 | 0 | 19 | 2 | 21 | 64 | | 0 | 0 | 0 | 0 |
| 16:00 | 16:15 | 1 | 0 | 10 | 11 | 6 | 24 | 7 | 37 | 5 | 0 | 0 | 5 | 0 | 12 | 0 | 12 | 65 | | 0 | 0 | 0 | 0 |
| 16:15 | 16:30 | 0 | 1 | 13 | 14 | 10 | 36 | 4 | 50 | 4 | 1 | 0 | 5 | 0 | 30 | 1 | 31 | 100 | 311 | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 1 | 1 | 7 | 9 | 8 | 31 | 10 | 49 | 4 | 0 | 0 | 4 | 0 | 18 | 0 | 18 | 80 | 309 | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 0 | 7 | 7 | 2 | 32 | 3 | 37 | 3 | 1 | 0 | 4 | 0 | 29 | 1 | 30 | 78 | 323 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 1 | 1 | 5 | 7 | 17 | 30 | 4 | 51 | 4 | 0 | 0 | 4 | 0 | 22 | 1 | 23 | 85 | 343 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 0 | 3 | 3 | 12 | 39 | 7 | 58 | 3 | 0 | 0 | 3 | 0 | 17 | 1 | 18 | 82 | 325 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 1 | 0 | 6 | 7 | 8 | 27 | 5 | 40 | 1 | 1 | 0 | 2 | 0 | 13 | 1 | 14 | 63 | 308 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 0 | 2 | 2 | 8 | 29 | 5 | 42 | 2 | 0 | 0 | 2 | 0 | 15 | 1 | 16 | 62 | 292 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 1 | 0 | 7 | 8 | 7 | 20 | 6 | 33 | 4 | 1 | 1 | 6 | 1 | 11 | 0 | 12 | 59 | 266 | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 7 | 7 | 8 | 21 | 1 | 30 | 1 | 0 | 0 | 1 | 0 | 7 | 2 | 9 | 47 | 231 | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **8** | **4** | **84** | | **103** | **332** | **65** | | **36** | **6** | **1** | | **1** | **217** | **10** | | **867** | | **0** | **0** | **0** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | Approach | Westbound | | | Approach | Northbound | | | Approach | Eastbound | | | Approach | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Total | Right | Thru | Left | Total | Right | Thru | Left | Total | Right | Thru | Left | Total | | | SB | WB | NB | EB |
| **Peak Volumes** | **2** | **2** | **22** | **26** | **39** | **132** | **24** | **195** | **14** | **1** | **0** | **15** | **0** | **86** | **3** | **89** | **325** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.50 | 0.50 | 0.79 | 0.72 | 0.57 | 0.85 | 0.60 | 0.84 | 0.88 | 0.25 | 0.00 | 0.94 | 0.00 | 0.74 | 0.75 | 0.74 | 0.96 | | | | | |
| **Trucks** | 0 | 0 | 2 | | 0 | 1 | 0 | | 0 | 0 | 0 | | 0 | 13 | 0 | | | | | | | |
| **% Trucks** | 0% | 0% | 9% | | 0% | 1% | 0% | | 0% | 0% | 0% | | 0% | 15% | 0% | | | | | | | |


Seasonally Adjusted Peak Hour
80
30
50
Southbound
7.69%
7.69%
84.62%
%
R
T
L
PED
5
2
2
25
0
155
Eastbound
%
Ped
0
258
3.37%
L
3
5: Dovetail Ln @ Hwy 138
96.63%
T
99
103
0.00%
R
0
45
R
20.00%
153
T
67.69%
28
L
12.31%
0
Ped
%
Westboun
d
225
366
141
0
0
1
16
Ped
L
T
R
%
0.0%
6.7%
0.0%
Northbound
30
17
47
Seasonal Adjustment Factor
1.156

**5: Dovetail Ln @ Hwy 138**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 3:30 PM | | | | 11 | | | 9 | 26 | 6 | | | 5 | 1 | | | | | 24 | | | 82 | |
| 3:45 PM | | 3 | 1 | 6 | | | 8 | 17 | 7 | | | | 1 | | | | | 19 | 2 | | 64 | |
| 4:00 PM | | 1 | | 10 | | | 6 | 24 | 7 | | | 5 | | | | | | 12 | | | 65 | |
| 4:15 PM | | | 1 | 13 | | | 10 | 36 | 4 | | | 4 | 1 | | | | | 30 | 1 | | 100 | 311 |
| 4:30 PM | | 1 | 1 | 7 | | | 8 | 31 | 10 | | | 4 | | | | | | 18 | | | 80 | 309 |
| 4:45 PM | | | | 7 | | | 2 | 32 | 3 | | | 3 | 1 | | | | | 29 | 1 | | 78 | 323 |
| 5:00 PM | | 1 | 1 | 5 | | | 17 | 30 | 4 | | | 4 | | | | | | 22 | 1 | | 85 | 343 |
| 5:15 PM | | | | 3 | | | 12 | 39 | 7 | | | 3 | | | | | | 17 | 1 | | 82 | 325 |
| 5:30 PM | | 1 | | 6 | | | 8 | 27 | 5 | | | 1 | 1 | | | | | 13 | 1 | | 63 | 308 |
| 5:45 PM | | | | 2 | | | 8 | 29 | 5 | | | 2 | | | | | | 15 | 1 | | 62 | 292 |
| 6:00 PM | | 1 | | 7 | | | 7 | 20 | 6 | | | 4 | 1 | 1 | | | 1 | 11 | | | 59 | 266 |
| 6:15 PM | | | | 7 | | | 8 | 21 | 1 | | | 1 | | | | | | 7 | 2 | | 47 | 231 |
| **Total** | 0 | 8 | 4 | 84 | | 0 | 103 | 332 | 65 | | 0 | 36 | 6 | 1 | | 0 | 1 | 217 | 10 | | | |
| **Peak Hour** | **0** | **4** | **2** | **22** | | **0** | **39** | **132** | **24** | | **0** | **14** | **1** | **0** | | **0** | **0** | **86** | **3** | | **325** | |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 3:30 PM | | | | | | | | | | | | | | | | | 0 | |
| 3:45 PM | | | | | | | | | | | | | | | | | 0 | |
| 4:00 PM | | | | | | | | | | | | | | | | | 0 | |
| 4:15 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| 4:45 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| 6:00 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | | |
| **Peak Hour** | **0** | **0** | **2** | | **0** | **1** | **0** | **0** | **0** | **0** | **0** | | **0** | **13** | **0** | | **0** | |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | | |
| 3:30 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 3:45 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:00 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** | | **0** | **0** | **0** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 3:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

| | | Intersections | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1: I-5 NB On Off Ramps @ W Central Ave | 2: Park Hill Ln @ W Central Ave | 3: Park Hill Ln @ I-5 SB On Off Ramps | 4: Dakota St @ Hwy 138 | 5: Dovetail Ln @ Hwy 138 | |
| Time Period | | Volume | Volume | Volume | Volume | Volume | Total |
| 3:30 PM | 4:30 PM | 1,187 | 1,104 | 470 | 710 | 311 | **3782** |
| 3:45 PM | 4:45 PM | 1,185 | 1,082 | 460 | 751 | 309 | **3787** |
| 4:00 PM | 5:00 PM | 1,222 | 1,095 | 477 | 783 | 323 | **3900** |
| 4:15 PM | 5:15 PM | 1,303 | 1,165 | 495 | 796 | 343 | **4102** |
| 4:30 PM | 5:30 PM | 1,288 | 1,193 | 500 | 809 | 325 | **4115** |
| 4:45 PM | 5:45 PM | 1,264 | 1,174 | 458 | 748 | 308 | **3952** |
| 5:00 PM | 6:00 PM | 1,204 | 1,134 | 434 | 715 | 292 | **3779** |
| 5:15 PM | 6:15 PM | 1,113 | 1,058 | 419 | 665 | 266 | **3521** |
| 5:30 PM | 6:30 PM | 1,049 | 990 | 395 | 594 | 231 | **3259** |
| | | 1303 | 1193 | 500 | 809 | 343 | 4115 |

Peak Hour
4:30 PM
4:45 PM
5:00 PM
5:15 PM

**Base count volumes**

2021 Count

| | | | R | T | L | PED | | |
|---|---|---|---|---|---|---|---|---|
| | | 2 | 2 | 2 | 25 | 0 | | |
| | Ped | 0 | | | | | 45 | R |
| 154.9 | L | 3 | | 5: Dovetail Ln @ Hwy 138 | | | 153 | T |
| | T | 99 | | | | | 28 | L |
| 102.88 | R | 0 | | | | | 0 | Ped |
| | | | 0 | 0 | 1 | 16 | | |
| | | | Ped | L | T | R | | |

30 50 30 17 225 141 346

2021 Count

| | | | R | T | L | PED | | |
|---|---|---|---|---|---|---|---|---|
| | | 2 | 36 | 0 | 116 | 0 | | |
| 446 | Ped | 0 | | | | | 117 | R |
| | L | 16 | | 4: Dakota St @ Hwy 138 | | | 409 | T |
| | T | 299 | | | | | 0 | L |
| 315 | R | 0 | | | | | 0 | Ped |
| | | | 0 | 1 | 0 | 1 | | |
| | | | Ped | L | T | R | | |

151 133 0 2 526 415 843

2022 Count

| | | | R | T | L | PED | | |
|---|---|---|---|---|---|---|---|---|
| | | 2 | 0 | 0 | 0 | 0 | | |
| 505 | Ped | 0 | | | | | 0 | R |
| | L | 0 | | 2: Park Hill Ln @ W | | | 467 | T |
| | T | 264 | | Central Ave | | | 186 | L |
| 407 | R | 143 | | | | | 0 | Ped |
| | | | 0 | 38 | 0 | 95 | | |
| | | | Ped | L | T | R | | |

0 0 329 133 653 359 1193

2022 Count

| | | | R | T | L | PED | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 0 | 0 | 0 | 0 | | |
| 648 | Ped | 0 | | | | | 94 | R |
| | L | 46 | | 1: I-5 NB On Off Ramps @ W | | | 416 | T |
| | T | 317 | | Central Ave | | | 0 | L |
| 363 | R | 0 | | | | | 0 | Ped |
| | | | 0 | 232 | 0 | 183 | | |
| | | | Ped | L | T | R | | |

0 140 0 415 510 500 925

2022 Count

| | | | R | T | L | PED | | |
|---|---|---|---|---|---|---|---|---|
| | | 2 | 0 | 49 | 283 | 0 | | |
| | Ped | 0 | | | | | 106 | R |
| 0 | L | 0 | | 3: Park Hill Ln @ I-5 SB | | | 0 | T |
| | T | 0 | | On Off Ramps | | | 6 | L |
| 0 | R | 0 | | | | | 0 | Ped |
| | | | 0 | 0 | 32 | 24 | | |
| | | | Ped | L | T | R | | |

332 138 55 56 112 307 419

**Existing 2023 PM Volumes**

**EDIT Highlighted**

| | |
|---|---|
| Base Year | 2021 |
| Target Year | 2023 |
| Years of Growth | 2 |
| Growth Rate Per Year | 0.028 |
| Growth Factor | 1.06 |

| | | | R | T | L | PED | | |
|---|---|---|---|---|---|---|---|---|
| | | 2 | 2 | 2 | 27 | 0 | | |
| | Ped | 0 | | | | | 48 | R |
| 263.44 | L | 4 | | 5: Dovetail Ln @ Hwy 138 | | | 261 | T |
| | T | 205 | | | | | 29 | L |
| 208.66 | R | 0 | | | | | 0 | Ped |
| | | | 0 | 0 | 1 | 17 | | |
| | | | Ped | L | T | R | | |

32 52 32 18 338 249 597

| | | | R | T | L | PED | | |
|---|---|---|---|---|---|---|---|---|
| | | 2 | 38 | 0 | 122 | 0 | | |
| 439 | Ped | 0 | | | | | 123 | R |
| | L | 17 | | 4: Dakota St @ Hwy 138 | | | 400 | T |
| | T | 315 | | | | | 0 | L |
| 332 | R | 0 | | | | | 0 | Ped |
| | | | 0 | 1 | 0 | 1 | | |
| | | | Ped | L | T | R | | |

160 140 0 3 523 438 1017

| | | | R | T | L | PED | | |
|---|---|---|---|---|---|---|---|---|
| | | 2 | 0 | 0 | 0 | 0 | | |
| 519 | Ped | 0 | | | | | 0 | R |
| | L | 0 | | 2: Park Hill Ln @ W | | | 480 | T |
| | T | 275 | | Central Ave | | | 191 | L |
| 422 | R | 147 | | | | | 0 | Ped |
| | | | 0 | 39 | 0 | 98 | | |
| | | | Ped | L | T | R | | |

0 0 338 137 671 373 1230

| | | | R | T | L | PED | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 0 | 0 | 0 | 0 | | |
| 671 | Ped | 0 | | | | | 97 | R |
| | L | 47 | | 1: I-5 NB On Off Ramps @ W | | | 433 | T |
| | T | 326 | | Central Ave | | | 0 | L |
| 373 | R | 0 | | | | | 0 | Ped |
| | | | 0 | 238 | 0 | 188 | | |
| | | | Ped | L | T | R | | |

0 144 0 426 530 514 1329

| | | | R | T | L | PED | | |
|---|---|---|---|---|---|---|---|---|
| | | 2 | 0 | 50 | 291 | 0 | | |
| | Ped | 0 | | | | | 109 | R |
| 0 | L | 0 | | 3: Park Hill Ln @ I-5 SB | | | 0 | T |
| | T | 0 | | On Off Ramps | | | 6 | L |
| 0 | R | 0 | | | | | 0 | Ped |
| | | | 0 | 0 | 33 | 25 | | |
| | | | Ped | L | T | R | | |

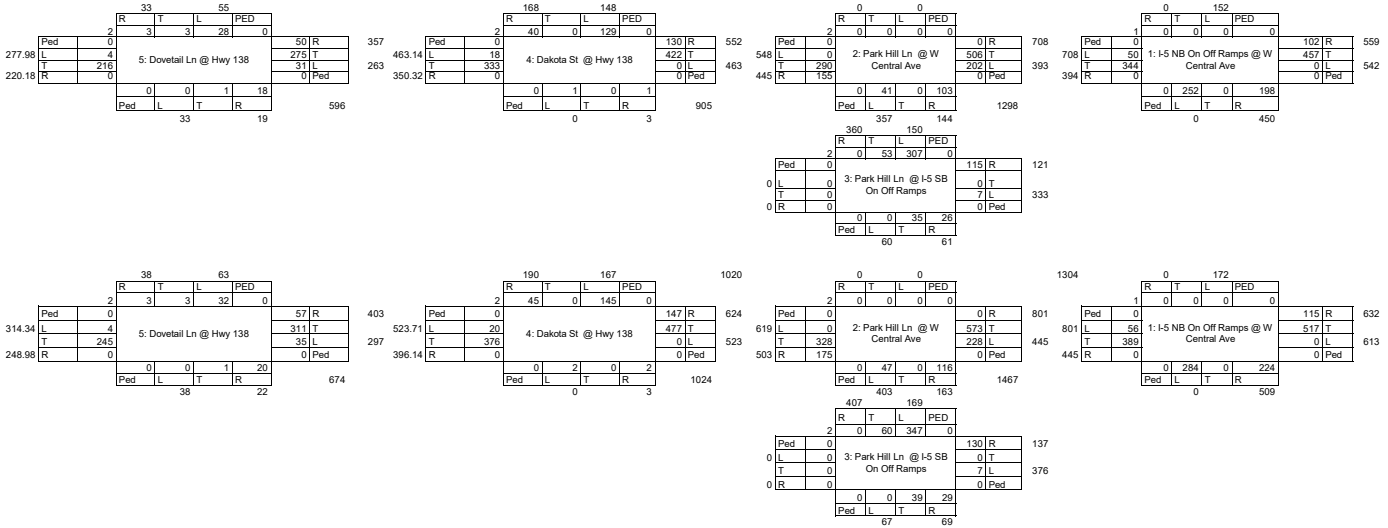
341 142 57 58 115 315 514

**EDIT Highlighted**

| | |
|---|---|
| Base Year | 2022 |
| Target Year | 2023 |
| Years of Growth | 1 |
| Growth Rate Per Year | 0.028 |
| Growth Factor | 1.03 |

**Existing 2025 PM Volumes**

| EDIT Highlighted | |
|---|---|
| Base Year | 2023 |
| Target Year | 2025 |
| Years of Growth | 2 |
| Growth Rate Per Year | 0.028 |
| Growth Factor | 1.06 |




**Existing 2030 PM Volumes**

| EDIT Highlighted | |
|---|---|
| Base Year | 2023 |
| Target Year | 2030 |
| Years of Growth | 7 |
| Growth Rate Per Year | 0.028 |
| Growth Factor | 1.19 |

RIDGEVIEW SUBDIVISION

APPENDIX E: SYNCHRO OUTPUTS

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↰ | ↗ | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 114 | 0 | 10 | 90 | 15 | 0 | 1 | 18 | 36 | 0 | 1 |
| Future Vol, veh/h | 5 | 114 | 0 | 10 | 90 | 15 | 0 | 1 | 18 | 36 | 0 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 135 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 11 | 0 | 0 | 20 | 13 | 0 | 0 | 11 | 0 | 0 | 0 |
| Mvmt Flow | 6 | 128 | 0 | 11 | 101 | 17 | 0 | 1 | 20 | 40 | 0 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 118 | 0 | 0 | 128 | 0 | 0 | 272 | 280 | 128 | 274 | 263 | 101 |
| Stage 1 | - | - | - | - | - | - | 140 | 140 | - | 123 | 123 | - |
| Stage 2 | - | - | - | - | - | - | 132 | 140 | - | 151 | 140 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.31 | 7.1 | 6.5 | 6.2 |
| 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 | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.399 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1483 | - | - | 1470 | - | - | 685 | 632 | 898 | 683 | 646 | 960 |
| Stage 1 | - | - | - | - | - | - | 868 | 785 | - | 886 | 798 | - |
| Stage 2 | - | - | - | - | - | - | 876 | 785 | - | 856 | 785 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1483 | - | - | 1470 | - | - | 678 | 624 | 898 | 660 | 638 | 960 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 678 | 624 | - | 660 | 638 | - |
| Stage 1 | - | - | - | - | - | - | 865 | 782 | - | 882 | 792 | - |
| Stage 2 | - | - | - | - | - | - | 868 | 779 | - | 832 | 782 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.6 | 9.2 | 10.8 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 878 | 1483 | - | - | 1470 | - | - | 666 |
| HCM Lane V/C Ratio | 0.024 | 0.004 | - | - | 0.008 | - | - | 0.062 |
| HCM Control Delay (s) | 9.2 | 7.4 | 0 | - | 7.5 | 0 | - | 10.8 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 16 | 249 | 0 | 0 | 199 | 53 | 0 | 0 | 0 | 36 | 0 | 12 |
| Future Vol, veh/h | 16 | 249 | 0 | 0 | 199 | 53 | 0 | 0 | 0 | 36 | 0 | 12 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | - | - | - | 115 | - | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 0 | 5 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 18 | 283 | 0 | 0 | 226 | 60 | 0 | 0 | 0 | 41 | 0 | 14 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 286 | 0 | 0 | 283 | 0 | 0 | 582 | 605 | 283 | 545 | 545 | 226 |
| Stage 1 | - | - | - | - | - | - | 319 | 319 | - | 226 | 226 | - |
| Stage 2 | - | - | - | - | - | - | 263 | 286 | - | 319 | 319 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| 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 | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1288 | - | - | 1291 | - | - | 427 | 415 | 761 | 452 | 449 | 818 |
| Stage 1 | - | - | - | - | - | - | 697 | 657 | - | 781 | 721 | - |
| Stage 2 | - | - | - | - | - | - | 747 | 679 | - | 697 | 657 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1288 | - | - | 1291 | - | - | 415 | 409 | 761 | 447 | 443 | 818 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 415 | 409 | - | 447 | 443 | - |
| Stage 1 | - | - | - | - | - | - | 687 | 648 | - | 770 | 721 | - |
| Stage 2 | - | - | - | - | - | - | 735 | 679 | - | 687 | 648 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 0 | 12.8 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1288 | - | - | 1291 | - | - | 447 | 818 |
| HCM Lane V/C Ratio | - | 0.014 | - | - | - | - | - | 0.092 | 0.017 |
| HCM Control Delay (s) | 0 | 7.8 | - | - | 0 | - | - | 13.9 | 9.5 |
| HCM Lane LOS | A | A | - | - | A | - | - | B | A |
| HCM 95th %tile Q(veh) | - | 0 | - | - | 0 | - | - | 0.3 | 0.1 |

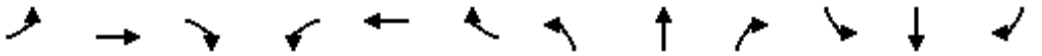
| Intersection | |
|---|---|
| Int Delay, s/veh | 3.7 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 168 | 167 | 143 | 238 | 44 | 73 |
| Future Vol, veh/h | 168 | 167 | 143 | 238 | 44 | 73 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | Stop |
| Storage Length | - | - | 190 | - | 0 | 200 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 7 | 10 | 9 | 12 | 26 | 14 |
| Mvmt Flow | 198 | 196 | 168 | 280 | 52 | 86 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 394 | 0 | 912 | 296 |
| Stage 1 | - | - | - | - | 296 | - |
| Stage 2 | - | - | - | - | 616 | - |
| Critical Hdwy | - | - | 4.19 | - | 6.66 | 6.34 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.66 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.66 | - |
| Follow-up Hdwy | - | - | 2.281 | - | 3.734 | 3.426 |
| Pot Cap-1 Maneuver | - | - | 1127 | - | 276 | 716 |
| Stage 1 | - | - | - | - | 703 | - |
| Stage 2 | - | - | - | - | 495 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1127 | - | 235 | 716 |
| Mov Cap-2 Maneuver | - | - | - | - | 235 | - |
| Stage 1 | - | - | - | - | 703 | - |
| Stage 2 | - | - | - | - | 421 | - |

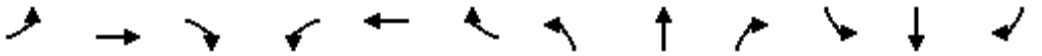
| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 3.3 | 15.9 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 235 | 716 | - | - | 1127 | - |
| HCM Lane V/C Ratio | 0.22 | 0.12 | - | - | 0.149 | - |
| HCM Control Delay (s) | 24.6 | 10.7 | - | - | 8.8 | - |
| HCM Lane LOS | C | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 0.8 | 0.4 | - | - | 0.5 | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 27 | 215 | 0 | 0 | 277 | 81 | 104 | 0 | 104 | 0 | 0 | 0 |
| Future Volume (vph) | 27 | 215 | 0 | 0 | 277 | 81 | 104 | 0 | 104 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 |
| Total Lost time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 | | | |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | | 1.00 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (prot) | 1319 | 1620 | | | 1636 | 1305 | | 1363 | 1417 | | | |
| Flt Permitted | 0.56 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (perm) | 774 | 1620 | | | 1636 | 1305 | | 1363 | 1417 | | | |
| Peak-hour factor, PHF | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Adj. Flow (vph) | 33 | 262 | 0 | 0 | 338 | 99 | 127 | 0 | 127 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 52 | 0 | 0 | 95 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 33 | 262 | 0 | 0 | 338 | 47 | 0 | 127 | 32 | 0 | 0 | 0 |
| Heavy Vehicles (%) | 26% | 8% | 0% | 0% | 7% | 14% | 22% | 0% | 5% | 0% | 0% | 0% |
| Turn Type | Perm | NA | | | NA | Perm | Perm | NA | Perm | | | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | | |
| Permitted Phases | 4 | | | | | 8 | 2 | | 2 | | | |
| Actuated Green, G (s) | 13.8 | 13.8 | | | 13.8 | 13.8 | | 5.9 | 5.9 | | | |
| Effective Green, g (s) | 13.8 | 13.8 | | | 13.8 | 13.8 | | 7.3 | 7.3 | | | |
| Actuated g/C Ratio | 0.47 | 0.47 | | | 0.47 | 0.47 | | 0.25 | 0.25 | | | |
| Clearance Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 5.4 | 5.4 | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 2.5 | 2.5 | | | |
| Lane Grp Cap (vph) | 367 | 768 | | | 775 | 618 | | 341 | 355 | | | |
| v/s Ratio Prot | | 0.16 | | | c0.21 | | | | | | | |
| v/s Ratio Perm | 0.04 | | | | | 0.04 | | 0.09 | 0.02 | | | |
| v/c Ratio | 0.09 | 0.34 | | | 0.44 | 0.08 | | 0.37 | 0.09 | | | |
| Uniform Delay, d1 | 4.2 | 4.8 | | | 5.1 | 4.2 | | 9.0 | 8.4 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 0.1 | 0.4 | | | 0.5 | 0.1 | | 0.5 | 0.1 | | | |
| Delay (s) | 4.3 | 5.2 | | | 5.6 | 4.2 | | 9.5 | 8.4 | | | |
| Level of Service | A | A | | | A | A | | A | A | | | |
| Approach Delay (s) | | 5.1 | | | 5.3 | | | 9.0 | | | 0.0 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 6.2 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.41 | | |
| Actuated Cycle Length (s) | 29.1 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 37.3% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 27 | 215 | 0 | 0 | 277 | 81 | 104 | 0 | 104 | 0 | 0 | 0 |
| Future Volume (veh/h) | 27 | 215 | 0 | 0 | 277 | 81 | 104 | 0 | 104 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1395 | 1641 | 0 | 0 | 1654 | 1559 | 1450 | 1750 | 1682 | | | |
| Adj Flow Rate, veh/h | 33 | 262 | 0 | 0 | 338 | 99 | 127 | 0 | 127 | | | |
| Peak Hour Factor | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | | | |
| Percent Heavy Veh, % | 26 | 8 | 0 | 0 | 7 | 14 | 22 | 0 | 5 | | | |
| Cap, veh/h | 497 | 675 | 0 | 0 | 681 | 544 | 433 | 0 | 370 | | | |
| Arrive On Green | 0.41 | 0.41 | 0.00 | 0.00 | 0.41 | 0.41 | 0.20 | 0.00 | 0.26 | | | |
| Sat Flow, veh/h | 771 | 1641 | 0 | 0 | 1654 | 1321 | 1667 | 0 | 1425 | | | |
| Grp Volume(v), veh/h | 33 | 262 | 0 | 0 | 338 | 99 | 127 | 0 | 127 | | | |
| Grp Sat Flow(s),veh/h/ln | 771 | 1641 | 0 | 0 | 1654 | 1321 | 1667 | 0 | 1425 | | | |
| Q Serve(g_s), s | 0.8 | 2.7 | 0.0 | 0.0 | 3.7 | 1.2 | 1.6 | 0.0 | 1.8 | | | |
| Cycle Q Clear(g_c), s | 4.5 | 2.7 | 0.0 | 0.0 | 3.7 | 1.2 | 1.6 | 0.0 | 1.8 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 497 | 675 | 0 | 0 | 681 | 544 | 433 | 0 | 370 | | | |
| V/C Ratio(X) | 0.07 | 0.39 | 0.00 | 0.00 | 0.50 | 0.18 | 0.29 | 0.00 | 0.34 | | | |
| Avail Cap(c_a), veh/h | 812 | 1348 | 0 | 0 | 1359 | 1085 | 821 | 0 | 702 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 7.0 | 5.0 | 0.0 | 0.0 | 5.3 | 4.6 | 7.8 | 0.0 | 7.3 | | | |
| Incr Delay (d2), s/veh | 0.1 | 0.5 | 0.0 | 0.0 | 0.8 | 0.2 | 0.3 | 0.0 | 0.4 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.4 | 0.0 | 0.0 | 0.6 | 0.2 | 0.2 | 0.0 | 0.2 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 7.0 | 5.5 | 0.0 | 0.0 | 6.1 | 4.8 | 8.1 | 0.0 | 7.7 | | | |
| LnGrp LOS | A | A | A | A | A | A | A | A | A | | | |
| Approach Vol, veh/h | | 295 | | | 437 | | | 254 | | | | |
| Approach Delay, s/veh | | 5.7 | | | 5.8 | | | 7.9 | | | | |
| Approach LOS | | A | | | A | | | A | | | | |
| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 10.3 | | 14.0 | | | | 14.0 | | | | |
| Change Period (Y+Rc), s | | * 5.4 | | 4.0 | | | | 4.0 | | | | |
| Max Green Setting (Gmax), s | | * 11 | | 20.0 | | | | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 3.8 | | 6.5 | | | | 5.7 | | | | |
| Green Ext Time (p_c), s | | 0.6 | | 2.8 | | | | 4.3 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 6.3 |
| HCM 6th LOS | A |

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection | |
|---|---|
| Int Delay, s/veh | 7.5 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 2 | 106 | 13 | 8 | 286 | 23 |
| Future Vol, veh/h | 2 | 106 | 13 | 8 | 286 | 23 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 50 | 18 | 15 | 13 | 10 | 22 |
| Mvmt Flow | 2 | 122 | 15 | 9 | 329 | 26 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 704 | 20 | 0 | 0 | 24 | 0 |
| Stage 1 | 20 | - | - | - | - | - |
| Stage 2 | 684 | - | - | - | - | - |
| Critical Hdwy | 6.9 | 6.38 | - | - | 4.2 | - |
| Critical Hdwy Stg 1 | 5.9 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.9 | - | - | - | - | - |
| Follow-up Hdwy | 3.95 | 3.462 | - | - | 2.29 | - |
| Pot Cap-1 Maneuver | 339 | 1013 | - | - | 1540 | - |
| Stage 1 | 892 | - | - | - | - | - |
| Stage 2 | 422 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 265 | 1013 | - | - | 1540 | - |
| Mov Cap-2 Maneuver | 265 | - | - | - | - | - |
| Stage 1 | 892 | - | - | - | - | - |
| Stage 2 | 330 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.3 | 0 | 7.4 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 963 | 1540 | - |
| HCM Lane V/C Ratio | - | - | 0.129 | 0.213 | - |
| HCM Control Delay (s) | - | - | 9.3 | 8 | 0 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.4 | 0.8 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↰ | ↗ | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 120 | 0 | 11 | 95 | 16 | 0 | 1 | 19 | 38 | 0 | 1 |
| Future Vol, veh/h | 5 | 120 | 0 | 11 | 95 | 16 | 0 | 1 | 19 | 38 | 0 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 135 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 11 | 0 | 0 | 20 | 13 | 0 | 0 | 11 | 0 | 0 | 0 |
| Mvmt Flow | 6 | 135 | 0 | 12 | 107 | 18 | 0 | 1 | 21 | 43 | 0 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 125 | 0 | 0 | 135 | 0 | 0 | 288 | 296 | 135 | 289 | 278 | 107 |
| Stage 1 | - | - | - | - | - | - | 147 | 147 | - | 131 | 131 | - |
| Stage 2 | - | - | - | - | - | - | 141 | 149 | - | 158 | 147 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.31 | 7.1 | 6.5 | 6.2 |
| 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 | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.399 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1474 | - | - | 1462 | - | - | 668 | 619 | 890 | 667 | 633 | 953 |
| Stage 1 | - | - | - | - | - | - | 860 | 779 | - | 877 | 792 | - |
| Stage 2 | - | - | - | - | - | - | 867 | 778 | - | 849 | 779 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1474 | - | - | 1462 | - | - | 661 | 611 | 890 | 644 | 625 | 953 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 661 | 611 | - | 644 | 625 | - |
| Stage 1 | - | - | - | - | - | - | 857 | 776 | - | 873 | 785 | - |
| Stage 2 | - | - | - | - | - | - | 858 | 771 | - | 824 | 776 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.7 | 9.2 | 10.9 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 870 | 1474 | - | - | 1462 | - | - | 649 |
| HCM Lane V/C Ratio | 0.026 | 0.004 | - | - | 0.008 | - | - | 0.068 |
| HCM Control Delay (s) | 9.2 | 7.5 | 0 | - | 7.5 | 0 | - | 10.9 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 17 | 263 | 0 | 0 | 210 | 56 | 0 | 0 | 0 | 38 | 0 | 13 |
| Future Vol, veh/h | 17 | 263 | 0 | 0 | 210 | 56 | 0 | 0 | 0 | 38 | 0 | 13 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | - | - | - | 115 | - | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 0 | 5 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 19 | 299 | 0 | 0 | 239 | 64 | 0 | 0 | 0 | 43 | 0 | 15 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 303 | 0 | 0 | 299 | 0 | 0 | 616 | 640 | 299 | 576 | 576 | 239 |
| Stage 1 | - | - | - | - | - | - | 337 | 337 | - | 239 | 239 | - |
| Stage 2 | - | - | - | - | - | - | 279 | 303 | - | 337 | 337 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| 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 | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1269 | - | - | 1274 | - | - | 406 | 396 | 745 | 431 | 431 | 805 |
| Stage 1 | - | - | - | - | - | - | 681 | 645 | - | 769 | 711 | - |
| Stage 2 | - | - | - | - | - | - | 732 | 667 | - | 681 | 645 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1269 | - | - | 1274 | - | - | 394 | 390 | 745 | 426 | 425 | 805 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 394 | 390 | - | 426 | 425 | - |
| Stage 1 | - | - | - | - | - | - | 671 | 635 | - | 757 | 711 | - |
| Stage 2 | - | - | - | - | - | - | 719 | 667 | - | 671 | 635 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 0 | 13.2 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1269 | - | - | 1274 | - | - | 426 | 805 |
| HCM Lane V/C Ratio | - | 0.015 | - | - | - | - | - | 0.101 | 0.018 |
| HCM Control Delay (s) | 0 | 7.9 | - | - | 0 | - | - | 14.4 | 9.6 |
| HCM Lane LOS | A | A | - | - | A | - | - | B | A |
| HCM 95th %tile Q(veh) | - | 0 | - | - | 0 | - | - | 0.3 | 0.1 |

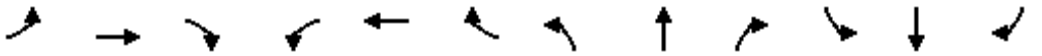
| Intersection | |
|---|---|
| Int Delay, s/veh | 3.9 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 177 | 176 | 151 | 252 | 46 | 77 |
| Future Vol, veh/h | 177 | 176 | 151 | 252 | 46 | 77 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | Stop |
| Storage Length | - | - | 190 | - | 0 | 200 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 7 | 10 | 9 | 12 | 26 | 14 |
| Mvmt Flow | 208 | 207 | 178 | 296 | 54 | 91 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 415 | 0 | 964 | 312 |
| Stage 1 | - | - | - | - | 312 | - |
| Stage 2 | - | - | - | - | 652 | - |
| Critical Hdwy | - | - | 4.19 | - | 6.66 | 6.34 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.66 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.66 | - |
| Follow-up Hdwy | - | - | 2.281 | - | 3.734 | 3.426 |
| Pot Cap-1 Maneuver | - | - | 1107 | - | 256 | 701 |
| Stage 1 | - | - | - | - | 691 | - |
| Stage 2 | - | - | - | - | 476 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1107 | - | 215 | 701 |
| Mov Cap-2 Maneuver | - | - | - | - | 215 | - |
| Stage 1 | - | - | - | - | 691 | - |
| Stage 2 | - | - | - | - | 399 | - |

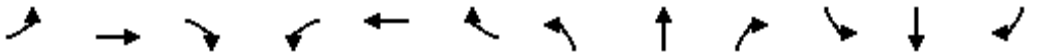
| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 3.3 | 17 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 215 | 701 | - | - | 1107 | - |
| HCM Lane V/C Ratio | 0.252 | 0.129 | - | - | 0.16 | - |
| HCM Control Delay (s) | 27.3 | 10.9 | - | - | 8.9 | - |
| HCM Lane LOS | D | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 1 | 0.4 | - | - | 0.6 | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 28 | 227 | 0 | 0 | 292 | 85 | 110 | 0 | 110 | 0 | 0 | 0 |
| Future Volume (vph) | 28 | 227 | 0 | 0 | 292 | 85 | 110 | 0 | 110 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 |
| Total Lost time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 | | | |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | | 1.00 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (prot) | 1319 | 1620 | | | 1636 | 1305 | | 1363 | 1417 | | | |
| Flt Permitted | 0.55 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (perm) | 761 | 1620 | | | 1636 | 1305 | | 1363 | 1417 | | | |
| Peak-hour factor, PHF | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Adj. Flow (vph) | 34 | 277 | 0 | 0 | 356 | 104 | 134 | 0 | 134 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 55 | 0 | 0 | 100 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 34 | 277 | 0 | 0 | 356 | 49 | 0 | 134 | 34 | 0 | 0 | 0 |
| Heavy Vehicles (%) | 26% | 8% | 0% | 0% | 7% | 14% | 22% | 0% | 5% | 0% | 0% | 0% |
| Turn Type | Perm | NA | | | NA | Perm | Perm | NA | Perm | | | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | | |
| Permitted Phases | 4 | | | | | 8 | 2 | | 2 | | | |
| Actuated Green, G (s) | 14.0 | 14.0 | | | 14.0 | 14.0 | | 6.1 | 6.1 | | | |
| Effective Green, g (s) | 14.0 | 14.0 | | | 14.0 | 14.0 | | 7.5 | 7.5 | | | |
| Actuated g/C Ratio | 0.47 | 0.47 | | | 0.47 | 0.47 | | 0.25 | 0.25 | | | |
| Clearance Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 5.4 | 5.4 | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 2.5 | 2.5 | | | |
| Lane Grp Cap (vph) | 361 | 768 | | | 776 | 619 | | 346 | 360 | | | |
| v/s Ratio Prot | | 0.17 | | | c0.22 | | | | | | | |
| v/s Ratio Perm | 0.04 | | | | | 0.04 | | 0.10 | 0.02 | | | |
| v/c Ratio | 0.09 | 0.36 | | | 0.46 | 0.08 | | 0.39 | 0.09 | | | |
| Uniform Delay, d1 | 4.3 | 4.9 | | | 5.2 | 4.2 | | 9.1 | 8.4 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 0.2 | 0.4 | | | 0.6 | 0.1 | | 0.5 | 0.1 | | | |
| Delay (s) | 4.4 | 5.3 | | | 5.8 | 4.3 | | 9.6 | 8.5 | | | |
| Level of Service | A | A | | | A | A | | A | A | | | |
| Approach Delay (s) | | 5.2 | | | 5.5 | | | 9.1 | | | 0.0 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 6.3 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.43 | | |
| Actuated Cycle Length (s) | 29.5 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 38.5% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 28 | 227 | 0 | 0 | 292 | 85 | 110 | 0 | 110 | 0 | 0 | 0 |
| Future Volume (veh/h) | 28 | 227 | 0 | 0 | 292 | 85 | 110 | 0 | 110 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1395 | 1641 | 0 | 0 | 1654 | 1559 | 1450 | 1750 | 1682 | | | |
| Adj Flow Rate, veh/h | 34 | 277 | 0 | 0 | 356 | 104 | 134 | 0 | 134 | | | |
| Peak Hour Factor | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | | | |
| Percent Heavy Veh, % | 26 | 8 | 0 | 0 | 7 | 14 | 22 | 0 | 5 | | | |
| Cap, veh/h | 486 | 690 | 0 | 0 | 696 | 556 | 432 | 0 | 369 | | | |
| Arrive On Green | 0.42 | 0.42 | 0.00 | 0.00 | 0.42 | 0.42 | 0.20 | 0.00 | 0.26 | | | |
| Sat Flow, veh/h | 755 | 1641 | 0 | 0 | 1654 | 1321 | 1667 | 0 | 1425 | | | |
| Grp Volume(v), veh/h | 34 | 277 | 0 | 0 | 356 | 104 | 134 | 0 | 134 | | | |
| Grp Sat Flow(s),veh/h/ln | 755 | 1641 | 0 | 0 | 1654 | 1321 | 1667 | 0 | 1425 | | | |
| Q Serve(g_s), s | 0.9 | 2.9 | 0.0 | 0.0 | 4.0 | 1.2 | 1.7 | 0.0 | 1.9 | | | |
| Cycle Q Clear(g_c), s | 4.8 | 2.9 | 0.0 | 0.0 | 4.0 | 1.2 | 1.7 | 0.0 | 1.9 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 486 | 690 | 0 | 0 | 696 | 556 | 432 | 0 | 369 | | | |
| V/C Ratio(X) | 0.07 | 0.40 | 0.00 | 0.00 | 0.51 | 0.19 | 0.31 | 0.00 | 0.36 | | | |
| Avail Cap(c_a), veh/h | 773 | 1314 | 0 | 0 | 1325 | 1058 | 801 | 0 | 685 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 7.1 | 5.0 | 0.0 | 0.0 | 5.3 | 4.5 | 8.1 | 0.0 | 7.6 | | | |
| Incr Delay (d2), s/veh | 0.1 | 0.5 | 0.0 | 0.0 | 0.8 | 0.2 | 0.3 | 0.0 | 0.4 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.5 | 0.0 | 0.0 | 0.7 | 0.2 | 0.3 | 0.0 | 0.3 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 7.2 | 5.6 | 0.0 | 0.0 | 6.2 | 4.8 | 8.4 | 0.0 | 8.0 | | | |
| LnGrp LOS | A | A | A | A | A | A | A | A | A | | | |
| Approach Vol, veh/h | | 311 | | | 460 | | | 268 | | | | |
| Approach Delay, s/veh | | 5.8 | | | 5.9 | | | 8.2 | | | | |
| Approach LOS | | A | | | A | | | A | | | | |
| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 10.5 | | 14.5 | | | | 14.5 | | | | |
| Change Period (Y+Rc), s | | * 5.4 | | 4.0 | | | | 4.0 | | | | |
| Max Green Setting (Gmax), s | | * 11 | | 20.0 | | | | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 3.9 | | 6.8 | | | | 6.0 | | | | |
| Green Ext Time (p_c), s | | 0.7 | | 2.9 | | | | 4.5 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 6.4 |
| HCM 6th LOS | A |

**Notes**

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection | |
|---|---|
| Int Delay, s/veh | 7.5 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 2 | 112 | 14 | 8 | 302 | 24 |
| Future Vol, veh/h | 2 | 112 | 14 | 8 | 302 | 24 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 50 | 18 | 15 | 13 | 10 | 22 |
| Mvmt Flow | 2 | 129 | 16 | 9 | 347 | 28 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 743 | 21 | 0 | 0 | 25 | 0 |
| Stage 1 | 21 | - | - | - | - | - |
| Stage 2 | 722 | - | - | - | - | - |
| Critical Hdwy | 6.9 | 6.38 | - | - | 4.2 | - |
| Critical Hdwy Stg 1 | 5.9 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.9 | - | - | - | - | - |
| Follow-up Hdwy | 3.95 | 3.462 | - | - | 2.29 | - |
| Pot Cap-1 Maneuver | 321 | 1012 | - | - | 1539 | - |
| Stage 1 | 891 | - | - | - | - | - |
| Stage 2 | 404 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 247 | 1012 | - | - | 1539 | - |
| Mov Cap-2 Maneuver | 247 | - | - | - | - | - |
| Stage 1 | 891 | - | - | - | - | - |
| Stage 2 | 311 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.3 | 0 | 7.4 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 960 | 1539 | - |
| HCM Lane V/C Ratio | - | - | 0.136 | 0.226 | - |
| HCM Control Delay (s) | - | - | 9.3 | 8 | 0 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.5 | 0.9 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↰ | ↗ | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 6 | 120 | 0 | 11 | 95 | 32 | 0 | 1 | 19 | 88 | 0 | 2 |
| Future Vol, veh/h | 6 | 120 | 0 | 11 | 95 | 32 | 0 | 1 | 19 | 88 | 0 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 135 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 11 | 0 | 0 | 20 | 13 | 0 | 0 | 11 | 0 | 0 | 0 |
| Mvmt Flow | 7 | 135 | 0 | 12 | 107 | 36 | 0 | 1 | 21 | 99 | 0 | 2 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 143 | 0 | 0 | 135 | 0 | 0 | 299 | 316 | 135 | 291 | 280 | 107 |
| Stage 1 | - | - | - | - | - | - | 149 | 149 | - | 131 | 131 | - |
| Stage 2 | - | - | - | - | - | - | 150 | 167 | - | 160 | 149 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.31 | 7.1 | 6.5 | 6.2 |
| 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 | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.399 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1452 | - | - | 1462 | - | - | 657 | 603 | 890 | 665 | 632 | 953 |
| Stage 1 | - | - | - | - | - | - | 858 | 778 | - | 877 | 792 | - |
| Stage 2 | - | - | - | - | - | - | 857 | 764 | - | 847 | 778 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1452 | - | - | 1462 | - | - | 648 | 595 | 890 | 641 | 623 | 953 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 648 | 595 | - | 641 | 623 | - |
| Stage 1 | - | - | - | - | - | - | 854 | 774 | - | 873 | 785 | - |
| Stage 2 | - | - | - | - | - | - | 847 | 757 | - | 821 | 774 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0.6 | 9.3 | 11.6 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 868 | 1452 | - | - | 1462 | - | - | 646 |
| HCM Lane V/C Ratio | 0.026 | 0.005 | - | - | 0.008 | - | - | 0.157 |
| HCM Control Delay (s) | 9.3 | 7.5 | 0 | - | 7.5 | 0 | - | 11.6 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.6 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 22 | 306 | 0 | 0 | 222 | 56 | 0 | 0 | 0 | 38 | 0 | 16 |
| Future Vol, veh/h | 22 | 306 | 0 | 0 | 222 | 56 | 0 | 0 | 0 | 38 | 0 | 16 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | - | - | - | 115 | - | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 0 | 5 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 25 | 348 | 0 | 0 | 252 | 64 | 0 | 0 | 0 | 43 | 0 | 18 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 316 | 0 | 0 | 348 | 0 | 0 | 691 | 714 | 348 | 650 | 650 | 252 |
| Stage 1 | - | - | - | - | - | - | 398 | 398 | - | 252 | 252 | - |
| Stage 2 | - | - | - | - | - | - | 293 | 316 | - | 398 | 398 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| 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 | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1256 | - | - | 1222 | - | - | 362 | 359 | 700 | 385 | 391 | 792 |
| Stage 1 | - | - | - | - | - | - | 632 | 606 | - | 757 | 702 | - |
| Stage 2 | - | - | - | - | - | - | 719 | 659 | - | 632 | 606 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1256 | - | - | 1222 | - | - | 348 | 352 | 700 | 379 | 383 | 792 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 348 | 352 | - | 379 | 383 | - |
| Stage 1 | - | - | - | - | - | - | 619 | 594 | - | 742 | 702 | - |
| Stage 2 | - | - | - | - | - | - | 702 | 659 | - | 619 | 594 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 0 | 13.9 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1256 | - | - | 1222 | - | - | 379 | 792 |
| HCM Lane V/C Ratio | - | 0.02 | - | - | - | - | - | 0.114 | 0.023 |
| HCM Control Delay (s) | 0 | 7.9 | - | - | 0 | - | - | 15.7 | 9.7 |
| HCM Lane LOS | A | A | - | - | A | - | - | C | A |
| HCM 95th %tile Q(veh) | - | 0.1 | - | - | 0 | - | - | 0.4 | 0.1 |

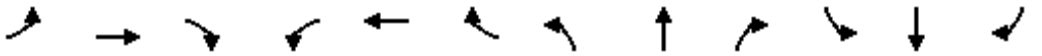
| Intersection | |
|---|---|
| Int Delay, s/veh | 3.9 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 199 | 197 | 151 | 262 | 48 | 77 |
| Future Vol, veh/h | 199 | 197 | 151 | 262 | 48 | 77 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | Stop |
| Storage Length | - | - | 190 | - | 0 | 200 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 7 | 10 | 9 | 12 | 26 | 14 |
| Mvmt Flow | 234 | 232 | 178 | 308 | 56 | 91 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 466 | 0 | 1014 | 350 |
| Stage 1 | - | - | - | - | 350 | - |
| Stage 2 | - | - | - | - | 664 | - |
| Critical Hdwy | - | - | 4.19 | - | 6.66 | 6.34 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.66 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.66 | - |
| Follow-up Hdwy | - | - | 2.281 | - | 3.734 | 3.426 |
| Pot Cap-1 Maneuver | - | - | 1060 | - | 239 | 667 |
| Stage 1 | - | - | - | - | 663 | - |
| Stage 2 | - | - | - | - | 470 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1060 | - | 199 | 667 |
| Mov Cap-2 Maneuver | - | - | - | - | 199 | - |
| Stage 1 | - | - | - | - | 663 | - |
| Stage 2 | - | - | - | - | 391 | - |

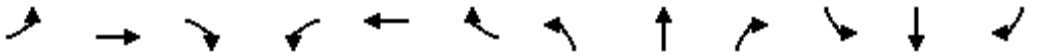
| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 3.3 | 18.5 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 199 | 667 | - | - | 1060 | - |
| HCM Lane V/C Ratio | 0.284 | 0.136 | - | - | 0.168 | - |
| HCM Control Delay (s) | 30.1 | 11.2 | - | - | 9.1 | - |
| HCM Lane LOS | D | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 1.1 | 0.5 | - | - | 0.6 | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 30 | 247 | 0 | 0 | 299 | 85 | 113 | 0 | 110 | 0 | 0 | 0 |
| Future Volume (vph) | 30 | 247 | 0 | 0 | 299 | 85 | 113 | 0 | 110 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 |
| Total Lost time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 | | | |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | | 1.00 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (prot) | 1319 | 1620 | | | 1636 | 1305 | | 1363 | 1417 | | | |
| Flt Permitted | 0.54 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (perm) | 755 | 1620 | | | 1636 | 1305 | | 1363 | 1417 | | | |
| Peak-hour factor, PHF | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Adj. Flow (vph) | 37 | 301 | 0 | 0 | 365 | 104 | 138 | 0 | 134 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 54 | 0 | 0 | 100 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 37 | 301 | 0 | 0 | 365 | 50 | 0 | 138 | 34 | 0 | 0 | 0 |
| Heavy Vehicles (%) | 26% | 8% | 0% | 0% | 7% | 14% | 22% | 0% | 5% | 0% | 0% | 0% |
| Turn Type | Perm | NA | | | NA | Perm | Perm | NA | Perm | | | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | | |
| Permitted Phases | 4 | | | | | 8 | 2 | | 2 | | | |
| Actuated Green, G (s) | 14.4 | 14.4 | | | 14.4 | 14.4 | | 6.2 | 6.2 | | | |
| Effective Green, g (s) | 14.4 | 14.4 | | | 14.4 | 14.4 | | 7.6 | 7.6 | | | |
| Actuated g/C Ratio | 0.48 | 0.48 | | | 0.48 | 0.48 | | 0.25 | 0.25 | | | |
| Clearance Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 5.4 | 5.4 | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 2.5 | 2.5 | | | |
| Lane Grp Cap (vph) | 362 | 777 | | | 785 | 626 | | 345 | 358 | | | |
| v/s Ratio Prot | | 0.19 | | | c0.22 | | | | | | | |
| v/s Ratio Perm | 0.05 | | | | | 0.04 | | 0.10 | 0.02 | | | |
| v/c Ratio | 0.10 | 0.39 | | | 0.46 | 0.08 | | 0.40 | 0.09 | | | |
| Uniform Delay, d1 | 4.3 | 5.0 | | | 5.2 | 4.2 | | 9.3 | 8.6 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 0.2 | 0.4 | | | 0.6 | 0.1 | | 0.6 | 0.1 | | | |
| Delay (s) | 4.4 | 5.4 | | | 5.8 | 4.3 | | 9.9 | 8.7 | | | |
| Level of Service | A | A | | | A | A | | A | A | | | |
| Approach Delay (s) | | 5.3 | | | 5.5 | | | 9.3 | | | 0.0 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 6.4 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.44 | | |
| Actuated Cycle Length (s) | 30.0 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 40.5% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 30 | 247 | 0 | 0 | 299 | 85 | 113 | 0 | 110 | 0 | 0 | 0 |
| Future Volume (veh/h) | 30 | 247 | 0 | 0 | 299 | 85 | 113 | 0 | 110 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1395 | 1641 | 0 | 0 | 1654 | 1559 | 1450 | 1750 | 1682 | | | |
| Adj Flow Rate, veh/h | 37 | 301 | 0 | 0 | 365 | 104 | 138 | 0 | 134 | | | |
| Peak Hour Factor | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | | | |
| Percent Heavy Veh, % | 26 | 8 | 0 | 0 | 7 | 14 | 22 | 0 | 5 | | | |
| Cap, veh/h | 480 | 689 | 0 | 0 | 695 | 555 | 433 | 0 | 370 | | | |
| Arrive On Green | 0.42 | 0.42 | 0.00 | 0.00 | 0.42 | 0.42 | 0.20 | 0.00 | 0.26 | | | |
| Sat Flow, veh/h | 748 | 1641 | 0 | 0 | 1654 | 1321 | 1667 | 0 | 1425 | | | |
| Grp Volume(v), veh/h | 37 | 301 | 0 | 0 | 365 | 104 | 138 | 0 | 134 | | | |
| Grp Sat Flow(s),veh/h/ln | 748 | 1641 | 0 | 0 | 1654 | 1321 | 1667 | 0 | 1425 | | | |
| Q Serve(g_s), s | 1.0 | 3.3 | 0.0 | 0.0 | 4.1 | 1.2 | 1.8 | 0.0 | 1.9 | | | |
| Cycle Q Clear(g_c), s | 5.1 | 3.3 | 0.0 | 0.0 | 4.1 | 1.2 | 1.8 | 0.0 | 1.9 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 480 | 689 | 0 | 0 | 695 | 555 | 433 | 0 | 370 | | | |
| V/C Ratio(X) | 0.08 | 0.44 | 0.00 | 0.00 | 0.53 | 0.19 | 0.32 | 0.00 | 0.36 | | | |
| Avail Cap(c_a), veh/h | 734 | 1248 | 0 | 0 | 1258 | 1005 | 867 | 0 | 741 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 7.3 | 5.1 | 0.0 | 0.0 | 5.4 | 4.6 | 8.1 | 0.0 | 7.6 | | | |
| Incr Delay (d2), s/veh | 0.1 | 0.6 | 0.0 | 0.0 | 0.9 | 0.2 | 0.3 | 0.0 | 0.4 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.5 | 0.0 | 0.0 | 0.7 | 0.2 | 0.3 | 0.0 | 0.3 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 7.4 | 5.8 | 0.0 | 0.0 | 6.3 | 4.8 | 8.4 | 0.0 | 8.0 | | | |
| LnGrp LOS | A | A | A | A | A | A | A | A | A | | | |
| Approach Vol, veh/h | | 338 | | | 469 | | | 272 | | | | |
| Approach Delay, s/veh | | 5.9 | | | 5.9 | | | 8.2 | | | | |
| Approach LOS | | A | | | A | | | A | | | | |
| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 10.5 | | 14.5 | | | | 14.5 | | | | |
| Change Period (Y+Rc), s | | * 5.4 | | 4.0 | | | | 4.0 | | | | |
| Max Green Setting (Gmax), s | | * 12 | | 19.0 | | | | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 3.9 | | 7.1 | | | | 6.1 | | | | |
| Green Ext Time (p_c), s | | 0.7 | | 3.0 | | | | 4.4 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 6.5 |
| HCM 6th LOS | A |

**Notes**

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection | |
|---|---|
| Int Delay, s/veh | 7.6 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 2 | 114 | 14 | 8 | 323 | 24 |
| Future Vol, veh/h | 2 | 114 | 14 | 8 | 323 | 24 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 50 | 18 | 15 | 13 | 10 | 22 |
| Mvmt Flow | 2 | 131 | 16 | 9 | 371 | 28 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 791 | 21 | 0 | 0 | 25 | 0 |
| Stage 1 | 21 | - | - | - | - | - |
| Stage 2 | 770 | - | - | - | - | - |
| Critical Hdwy | 6.9 | 6.38 | - | - | 4.2 | - |
| Critical Hdwy Stg 1 | 5.9 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.9 | - | - | - | - | - |
| Follow-up Hdwy | 3.95 | 3.462 | - | - | 2.29 | - |
| Pot Cap-1 Maneuver | 299 | 1012 | - | - | 1539 | - |
| Stage 1 | 891 | - | - | - | - | - |
| Stage 2 | 382 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 226 | 1012 | - | - | 1539 | - |
| Mov Cap-2 Maneuver | 226 | - | - | - | - | - |
| Stage 1 | 891 | - | - | - | - | - |
| Stage 2 | 288 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.4 | 0 | 7.5 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 955 | 1539 | - |
| HCM Lane V/C Ratio | - | - | 0.14 | 0.241 | - |
| HCM Control Delay (s) | - | - | 9.4 | 8.1 | 0 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.5 | 0.9 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↰ | ↗ | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 6 | 136 | 0 | 12 | 108 | 18 | 0 | 1 | 22 | 43 | 0 | 1 |
| Future Vol, veh/h | 6 | 136 | 0 | 12 | 108 | 18 | 0 | 1 | 22 | 43 | 0 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 135 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 11 | 0 | 0 | 20 | 13 | 0 | 0 | 11 | 0 | 0 | 0 |
| Mvmt Flow | 7 | 153 | 0 | 13 | 121 | 20 | 0 | 1 | 25 | 48 | 0 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 141 | 0 | 0 | 153 | 0 | 0 | 325 | 334 | 153 | 327 | 314 | 121 |
| Stage 1 | - | - | - | - | - | - | 167 | 167 | - | 147 | 147 | - |
| Stage 2 | - | - | - | - | - | - | 158 | 167 | - | 180 | 167 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.31 | 7.1 | 6.5 | 6.2 |
| 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 | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.399 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1455 | - | - | 1440 | - | - | 632 | 589 | 870 | 630 | 605 | 936 |
| Stage 1 | - | - | - | - | - | - | 840 | 764 | - | 860 | 779 | - |
| Stage 2 | - | - | - | - | - | - | 849 | 764 | - | 826 | 764 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1455 | - | - | 1440 | - | - | 624 | 580 | 870 | 604 | 596 | 936 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 624 | 580 | - | 604 | 596 | - |
| Stage 1 | - | - | - | - | - | - | 836 | 760 | - | 856 | 771 | - |
| Stage 2 | - | - | - | - | - | - | 840 | 756 | - | 797 | 760 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.7 | 9.4 | 11.4 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 851 | 1455 | - | - | 1440 | - | - | 609 |
| HCM Lane V/C Ratio | 0.03 | 0.005 | - | - | 0.009 | - | - | 0.081 |
| HCM Control Delay (s) | 9.4 | 7.5 | 0 | - | 7.5 | 0 | - | 11.4 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.3 |

| 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 | 20 | 297 | 0 | 0 | 237 | 64 | 0 | 0 | 0 | 43 | 0 | 15 |
| Future Vol, veh/h | 20 | 297 | 0 | 0 | 237 | 64 | 0 | 0 | 0 | 43 | 0 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | - | - | - | 115 | - | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 0 | 5 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 23 | 338 | 0 | 0 | 269 | 73 | 0 | 0 | 0 | 49 | 0 | 17 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 342 | 0 | 0 | 338 | 0 | 0 | 698 | 726 | 338 | 653 | 653 | 269 |
| Stage 1 | - | - | - | - | - | - | 384 | 384 | - | 269 | 269 | - |
| Stage 2 | - | - | - | - | - | - | 314 | 342 | - | 384 | 384 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| 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 | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1228 | - | - | 1232 | - | - | 358 | 354 | 709 | 383 | 389 | 775 |
| Stage 1 | - | - | - | - | - | - | 643 | 615 | - | 741 | 690 | - |
| Stage 2 | - | - | - | - | - | - | 701 | 642 | - | 643 | 615 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1228 | - | - | 1232 | - | - | 345 | 347 | 709 | 378 | 382 | 775 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 345 | 347 | - | 378 | 382 | - |
| Stage 1 | - | - | - | - | - | - | 631 | 603 | - | 727 | 690 | - |
| Stage 2 | - | - | - | - | - | - | 686 | 642 | - | 631 | 603 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 0 | 14.3 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1228 | - | - | 1232 | - | - | 378 | 775 |
| HCM Lane V/C Ratio | - | 0.019 | - | - | - | - | - | 0.129 | 0.022 |
| HCM Control Delay (s) | 0 | 8 | - | - | 0 | - | - | 15.9 | 9.8 |
| HCM Lane LOS | A | A | - | - | A | - | - | C | A |
| HCM 95th %tile Q(veh) | - | 0.1 | - | - | 0 | - | - | 0.4 | 0.1 |

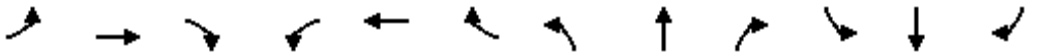
| Intersection | |
|---|---|
| Int Delay, s/veh | 4.5 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 201 | 199 | 170 | 285 | 52 | 88 |
| Future Vol, veh/h | 201 | 199 | 170 | 285 | 52 | 88 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | Stop |
| Storage Length | - | - | 190 | - | 0 | 200 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 7 | 10 | 9 | 12 | 26 | 14 |
| Mvmt Flow | 236 | 234 | 200 | 335 | 61 | 104 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 470 | 0 | 1088 | 353 |
| Stage 1 | - | - | - | - | 353 | - |
| Stage 2 | - | - | - | - | 735 | - |
| Critical Hdwy | - | - | 4.19 | - | 6.66 | 6.34 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.66 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.66 | - |
| Follow-up Hdwy | - | - | 2.281 | - | 3.734 | 3.426 |
| Pot Cap-1 Maneuver | - | - | 1056 | - | 215 | 664 |
| Stage 1 | - | - | - | - | 661 | - |
| Stage 2 | - | - | - | - | 434 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1056 | - | 174 | 664 |
| Mov Cap-2 Maneuver | - | - | - | - | 174 | - |
| Stage 1 | - | - | - | - | 661 | - |
| Stage 2 | - | - | - | - | 352 | - |

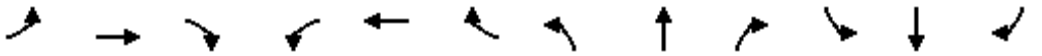
| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 3.4 | 20.7 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 174 | 664 | - | - | 1056 | - |
| HCM Lane V/C Ratio | 0.352 | 0.156 | - | - | 0.189 | - |
| HCM Control Delay (s) | 36.5 | 11.4 | - | - | 9.2 | - |
| HCM Lane LOS | E | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 1.5 | 0.6 | - | - | 0.7 | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 32 | 257 | 0 | 0 | 331 | 97 | 124 | 0 | 124 | 0 | 0 | 0 |
| Future Volume (vph) | 32 | 257 | 0 | 0 | 331 | 97 | 124 | 0 | 124 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 |
| Total Lost time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 | | | |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | | 1.00 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (prot) | 1319 | 1620 | | | 1636 | 1305 | | 1363 | 1417 | | | |
| Flt Permitted | 0.50 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (perm) | 701 | 1620 | | | 1636 | 1305 | | 1363 | 1417 | | | |
| Peak-hour factor, PHF | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Adj. Flow (vph) | 39 | 313 | 0 | 0 | 404 | 118 | 151 | 0 | 151 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 113 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 39 | 313 | 0 | 0 | 404 | 58 | 0 | 151 | 38 | 0 | 0 | 0 |
| Heavy Vehicles (%) | 26% | 8% | 0% | 0% | 7% | 14% | 22% | 0% | 5% | 0% | 0% | 0% |
| Turn Type | Perm | NA | | | NA | Perm | Perm | NA | Perm | | | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | | |
| Permitted Phases | 4 | | | | | 8 | 2 | | 2 | | | |
| Actuated Green, G (s) | 15.1 | 15.1 | | | 15.1 | 15.1 | | 6.4 | 6.4 | | | |
| Effective Green, g (s) | 15.1 | 15.1 | | | 15.1 | 15.1 | | 7.8 | 7.8 | | | |
| Actuated g/C Ratio | 0.49 | 0.49 | | | 0.49 | 0.49 | | 0.25 | 0.25 | | | |
| Clearance Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 5.4 | 5.4 | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 2.5 | 2.5 | | | |
| Lane Grp Cap (vph) | 342 | 791 | | | 799 | 637 | | 344 | 357 | | | |
| v/s Ratio Prot | | 0.19 | | | c0.25 | | | | | | | |
| v/s Ratio Perm | 0.06 | | | | | 0.04 | | 0.11 | 0.03 | | | |
| v/c Ratio | 0.11 | 0.40 | | | 0.51 | 0.09 | | 0.44 | 0.11 | | | |
| Uniform Delay, d1 | 4.3 | 5.0 | | | 5.4 | 4.2 | | 9.7 | 8.9 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 0.2 | 0.4 | | | 0.7 | 0.1 | | 0.7 | 0.1 | | | |
| Delay (s) | 4.5 | 5.5 | | | 6.1 | 4.3 | | 10.4 | 9.0 | | | |
| Level of Service | A | A | | | A | A | | B | A | | | |
| Approach Delay (s) | | 5.3 | | | 5.7 | | | 9.7 | | | 0.0 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 6.6 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.48 | | |
| Actuated Cycle Length (s) | 30.9 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 43.0% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 32 | 257 | 0 | 0 | 331 | 97 | 124 | 0 | 124 | 0 | 0 | 0 |
| Future Volume (veh/h) | 32 | 257 | 0 | 0 | 331 | 97 | 124 | 0 | 124 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1395 | 1641 | 0 | 0 | 1654 | 1559 | 1450 | 1750 | 1682 | | | |
| Adj Flow Rate, veh/h | 39 | 313 | 0 | 0 | 404 | 118 | 151 | 0 | 151 | | | |
| Peak Hour Factor | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | | | |
| Percent Heavy Veh, % | 26 | 8 | 0 | 0 | 7 | 14 | 22 | 0 | 5 | | | |
| Cap, veh/h | 458 | 720 | 0 | 0 | 726 | 579 | 428 | 0 | 366 | | | |
| Arrive On Green | 0.44 | 0.44 | 0.00 | 0.00 | 0.44 | 0.44 | 0.20 | 0.00 | 0.26 | | | |
| Sat Flow, veh/h | 713 | 1641 | 0 | 0 | 1654 | 1321 | 1667 | 0 | 1425 | | | |
| Grp Volume(v), veh/h | 39 | 313 | 0 | 0 | 404 | 118 | 151 | 0 | 151 | | | |
| Grp Sat Flow(s),veh/h/ln | 713 | 1641 | 0 | 0 | 1654 | 1321 | 1667 | 0 | 1425 | | | |
| Q Serve(g_s), s | 1.1 | 3.5 | 0.0 | 0.0 | 4.8 | 1.4 | 2.0 | 0.0 | 2.3 | | | |
| Cycle Q Clear(g_c), s | 5.9 | 3.5 | 0.0 | 0.0 | 4.8 | 1.4 | 2.0 | 0.0 | 2.3 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 458 | 720 | 0 | 0 | 726 | 579 | 428 | 0 | 366 | | | |
| V/C Ratio(X) | 0.09 | 0.44 | 0.00 | 0.00 | 0.56 | 0.20 | 0.35 | 0.00 | 0.41 | | | |
| Avail Cap(c_a), veh/h | 661 | 1188 | 0 | 0 | 1198 | 956 | 826 | 0 | 706 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 7.7 | 5.1 | 0.0 | 0.0 | 5.5 | 4.5 | 8.6 | 0.0 | 8.1 | | | |
| Incr Delay (d2), s/veh | 0.1 | 0.6 | 0.0 | 0.0 | 1.0 | 0.2 | 0.4 | 0.0 | 0.6 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.6 | 0.0 | 0.0 | 0.8 | 0.2 | 0.4 | 0.0 | 0.4 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 7.8 | 5.7 | 0.0 | 0.0 | 6.4 | 4.8 | 9.0 | 0.0 | 8.7 | | | |
| LnGrp LOS | A | A | A | A | A | A | A | A | A | | | |
| Approach Vol, veh/h | | 352 | | | 522 | | | 302 | | | | |
| Approach Delay, s/veh | | 5.9 | | | 6.1 | | | 8.8 | | | | |
| Approach LOS | | A | | | A | | | A | | | | |
| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 10.7 | | 15.5 | | | | 15.5 | | | | |
| Change Period (Y+Rc), s | | * 5.4 | | 4.0 | | | | 4.0 | | | | |
| Max Green Setting (Gmax), s | | * 12 | | 19.0 | | | | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 4.3 | | 7.9 | | | | 6.8 | | | | |
| Green Ext Time (p_c), s | | 0.8 | | 3.0 | | | | 4.7 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 6.7 |
| HCM 6th LOS | A |

**Notes**

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection | |
|---|---|
| Int Delay, s/veh | 7.7 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 2 | 126 | 16 | 10 | 341 | 27 |
| Future Vol, veh/h | 2 | 126 | 16 | 10 | 341 | 27 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 50 | 18 | 15 | 13 | 10 | 22 |
| Mvmt Flow | 2 | 145 | 18 | 11 | 392 | 31 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 839 | 24 | 0 | 0 | 29 | 0 |
| Stage 1 | 24 | - | - | - | - | - |
| Stage 2 | 815 | - | - | - | - | - |
| Critical Hdwy | 6.9 | 6.38 | - | - | 4.2 | - |
| Critical Hdwy Stg 1 | 5.9 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.9 | - | - | - | - | - |
| Follow-up Hdwy | 3.95 | 3.462 | - | - | 2.29 | - |
| Pot Cap-1 Maneuver | 279 | 1008 | - | - | 1534 | - |
| Stage 1 | 888 | - | - | - | - | - |
| Stage 2 | 363 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 206 | 1008 | - | - | 1534 | - |
| Mov Cap-2 Maneuver | 206 | - | - | - | - | - |
| Stage 1 | 888 | - | - | - | - | - |
| Stage 2 | 269 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.5 | 0 | 7.6 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 950 | 1534 | - |
| HCM Lane V/C Ratio | - | - | 0.155 | 0.256 | - |
| HCM Control Delay (s) | - | - | 9.5 | 8.2 | 0 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.5 | 1 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↰ | ↗ | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 7 | 136 | 0 | 12 | 108 | 34 | 0 | 1 | 22 | 93 | 0 | 2 |
| Future Vol, veh/h | 7 | 136 | 0 | 12 | 108 | 34 | 0 | 1 | 22 | 93 | 0 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 135 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 11 | 0 | 0 | 20 | 13 | 0 | 0 | 11 | 0 | 0 | 0 |
| Mvmt Flow | 8 | 153 | 0 | 13 | 121 | 38 | 0 | 1 | 25 | 104 | 0 | 2 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 159 | 0 | 0 | 153 | 0 | 0 | 336 | 354 | 153 | 329 | 316 | 121 |
| Stage 1 | - | - | - | - | - | - | 169 | 169 | - | 147 | 147 | - |
| Stage 2 | - | - | - | - | - | - | 167 | 185 | - | 182 | 169 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.31 | 7.1 | 6.5 | 6.2 |
| 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 | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.399 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1433 | - | - | 1440 | - | - | 622 | 574 | 870 | 628 | 603 | 936 |
| Stage 1 | - | - | - | - | - | - | 838 | 763 | - | 860 | 779 | - |
| Stage 2 | - | - | - | - | - | - | 840 | 751 | - | 824 | 763 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1433 | - | - | 1440 | - | - | 613 | 565 | 870 | 602 | 593 | 936 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 613 | 565 | - | 602 | 593 | - |
| Stage 1 | - | - | - | - | - | - | 833 | 758 | - | 855 | 771 | - |
| Stage 2 | - | - | - | - | - | - | 830 | 743 | - | 795 | 758 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0.6 | 9.4 | 12.2 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 850 | 1433 | - | - | 1440 | - | - | 607 |
| HCM Lane V/C Ratio | 0.03 | 0.005 | - | - | 0.009 | - | - | 0.176 |
| HCM Control Delay (s) | 9.4 | 7.5 | 0 | - | 7.5 | 0 | - | 12.2 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.6 |

| 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 | 25 | 340 | 0 | 0 | 249 | 64 | 0 | 0 | 0 | 43 | 0 | 18 |
| Future Vol, veh/h | 25 | 340 | 0 | 0 | 249 | 64 | 0 | 0 | 0 | 43 | 0 | 18 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | - | - | - | 115 | - | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 0 | 5 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 28 | 386 | 0 | 0 | 283 | 73 | 0 | 0 | 0 | 49 | 0 | 20 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 356 | 0 | 0 | 386 | 0 | 0 | 772 | 798 | 386 | 725 | 725 | 283 |
| Stage 1 | - | - | - | - | - | - | 442 | 442 | - | 283 | 283 | - |
| Stage 2 | - | - | - | - | - | - | 330 | 356 | - | 442 | 442 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| 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 | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1214 | - | - | 1184 | - | - | 319 | 321 | 666 | 343 | 354 | 761 |
| Stage 1 | - | - | - | - | - | - | 598 | 580 | - | 728 | 681 | - |
| Stage 2 | - | - | - | - | - | - | 687 | 633 | - | 598 | 580 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1214 | - | - | 1184 | - | - | 305 | 314 | 666 | 337 | 346 | 761 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 305 | 314 | - | 337 | 346 | - |
| Stage 1 | - | - | - | - | - | - | 584 | 567 | - | 711 | 681 | - |
| Stage 2 | - | - | - | - | - | - | 669 | 633 | - | 584 | 567 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.6 | 0 | 0 | 15.3 |
| HCM LOS | | | A | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1214 | - | - | 1184 | - | - | 337 | 761 |
| HCM Lane V/C Ratio | - | 0.023 | - | - | - | - | - | 0.145 | 0.027 |
| HCM Control Delay (s) | 0 | 8 | - | - | 0 | - | - | 17.5 | 9.9 |
| HCM Lane LOS | A | A | - | - | A | - | - | C | A |
| HCM 95th %tile Q(veh) | - | 0.1 | - | - | 0 | - | - | 0.5 | 0.1 |

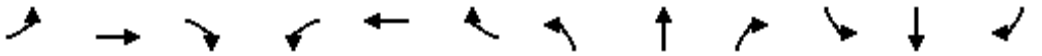
| Intersection | |
|---|---|
| Int Delay, s/veh | 4.7 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 223 | 220 | 170 | 295 | 54 | 88 |
| Future Vol, veh/h | 223 | 220 | 170 | 295 | 54 | 88 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | Stop |
| Storage Length | - | - | 190 | - | 0 | 200 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 7 | 10 | 9 | 12 | 26 | 14 |
| Mvmt Flow | 262 | 259 | 200 | 347 | 64 | 104 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 521 | 0 | 1139 | 392 |
| Stage 1 | - | - | - | - | 392 | - |
| Stage 2 | - | - | - | - | 747 | - |
| Critical Hdwy | - | - | 4.19 | - | 6.66 | 6.34 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.66 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.66 | - |
| Follow-up Hdwy | - | - | 2.281 | - | 3.734 | 3.426 |
| Pot Cap-1 Maneuver | - | - | 1011 | - | 200 | 631 |
| Stage 1 | - | - | - | - | 634 | - |
| Stage 2 | - | - | - | - | 428 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1011 | - | 160 | 631 |
| Mov Cap-2 Maneuver | - | - | - | - | 160 | - |
| Stage 1 | - | - | - | - | 634 | - |
| Stage 2 | - | - | - | - | 343 | - |

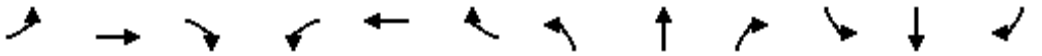
| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 3.5 | 23.1 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 160 | 631 | - | - | 1011 | - |
| HCM Lane V/C Ratio | 0.397 | 0.164 | - | - | 0.198 | - |
| HCM Control Delay (s) | 41.6 | 11.8 | - | - | 9.4 | - |
| HCM Lane LOS | E | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 1.7 | 0.6 | - | - | 0.7 | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 34 | 277 | 0 | 0 | 338 | 97 | 127 | 0 | 124 | 0 | 0 | 0 |
| Future Volume (vph) | 34 | 277 | 0 | 0 | 338 | 97 | 127 | 0 | 124 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 |
| Total Lost time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 | | | |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | | 1.00 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (prot) | 1319 | 1620 | | | 1636 | 1305 | | 1363 | 1417 | | | |
| Flt Permitted | 0.50 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (perm) | 689 | 1620 | | | 1636 | 1305 | | 1363 | 1417 | | | |
| Peak-hour factor, PHF | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Adj. Flow (vph) | 41 | 338 | 0 | 0 | 412 | 118 | 155 | 0 | 151 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 113 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 41 | 338 | 0 | 0 | 412 | 58 | 0 | 155 | 38 | 0 | 0 | 0 |
| Heavy Vehicles (%) | 26% | 8% | 0% | 0% | 7% | 14% | 22% | 0% | 5% | 0% | 0% | 0% |
| Turn Type | Perm | NA | | | NA | Perm | Perm | NA | Perm | | | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | | |
| Permitted Phases | 4 | | | | | 8 | 2 | | 2 | | | |
| Actuated Green, G (s) | 15.3 | 15.3 | | | 15.3 | 15.3 | | 6.5 | 6.5 | | | |
| Effective Green, g (s) | 15.3 | 15.3 | | | 15.3 | 15.3 | | 7.9 | 7.9 | | | |
| Actuated g/C Ratio | 0.49 | 0.49 | | | 0.49 | 0.49 | | 0.25 | 0.25 | | | |
| Clearance Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 5.4 | 5.4 | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 2.5 | 2.5 | | | |
| Lane Grp Cap (vph) | 337 | 794 | | | 802 | 639 | | 345 | 358 | | | |
| v/s Ratio Prot | | 0.21 | | | c0.25 | | | | | | | |
| v/s Ratio Perm | 0.06 | | | | | 0.04 | | 0.11 | 0.03 | | | |
| v/c Ratio | 0.12 | 0.43 | | | 0.51 | 0.09 | | 0.45 | 0.11 | | | |
| Uniform Delay, d1 | 4.3 | 5.1 | | | 5.4 | 4.2 | | 9.8 | 8.9 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 0.2 | 0.5 | | | 0.7 | 0.1 | | 0.7 | 0.1 | | | |
| Delay (s) | 4.5 | 5.6 | | | 6.2 | 4.3 | | 10.5 | 9.0 | | | |
| Level of Service | A | A | | | A | A | | B | A | | | |
| Approach Delay (s) | | 5.5 | | | 5.7 | | | 9.8 | | | 0.0 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 6.7 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.49 | | |
| Actuated Cycle Length (s) | 31.2 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 45.0% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 34 | 277 | 0 | 0 | 338 | 97 | 127 | 0 | 124 | 0 | 0 | 0 |
| Future Volume (veh/h) | 34 | 277 | 0 | 0 | 338 | 97 | 127 | 0 | 124 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1395 | 1641 | 0 | 0 | 1654 | 1559 | 1450 | 1750 | 1682 | | | |
| Adj Flow Rate, veh/h | 41 | 338 | 0 | 0 | 412 | 118 | 155 | 0 | 151 | | | |
| Peak Hour Factor | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | | | |
| Percent Heavy Veh, % | 26 | 8 | 0 | 0 | 7 | 14 | 22 | 0 | 5 | | | |
| Cap, veh/h | 454 | 725 | 0 | 0 | 731 | 584 | 426 | 0 | 365 | | | |
| Arrive On Green | 0.44 | 0.44 | 0.00 | 0.00 | 0.44 | 0.44 | 0.20 | 0.00 | 0.26 | | | |
| Sat Flow, veh/h | 707 | 1641 | 0 | 0 | 1654 | 1321 | 1667 | 0 | 1425 | | | |
| Grp Volume(v), veh/h | 41 | 338 | 0 | 0 | 412 | 118 | 155 | 0 | 151 | | | |
| Grp Sat Flow(s),veh/h/ln | 707 | 1641 | 0 | 0 | 1654 | 1321 | 1667 | 0 | 1425 | | | |
| Q Serve(g_s), s | 1.2 | 3.8 | 0.0 | 0.0 | 4.9 | 1.4 | 2.1 | 0.0 | 2.3 | | | |
| Cycle Q Clear(g_c), s | 6.1 | 3.8 | 0.0 | 0.0 | 4.9 | 1.4 | 2.1 | 0.0 | 2.3 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 454 | 725 | 0 | 0 | 731 | 584 | 426 | 0 | 365 | | | |
| V/C Ratio(X) | 0.09 | 0.47 | 0.00 | 0.00 | 0.56 | 0.20 | 0.36 | 0.00 | 0.41 | | | |
| Avail Cap(c_a), veh/h | 649 | 1178 | 0 | 0 | 1188 | 949 | 819 | 0 | 700 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 7.8 | 5.2 | 0.0 | 0.0 | 5.5 | 4.5 | 8.7 | 0.0 | 8.2 | | | |
| Incr Delay (d2), s/veh | 0.1 | 0.7 | 0.0 | 0.0 | 1.0 | 0.2 | 0.4 | 0.0 | 0.6 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.7 | 0.0 | 0.0 | 0.9 | 0.2 | 0.4 | 0.0 | 0.4 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 7.9 | 5.9 | 0.0 | 0.0 | 6.5 | 4.8 | 9.1 | 0.0 | 8.8 | | | |
| LnGrp LOS | A | A | A | A | A | A | A | A | A | | | |
| Approach Vol, veh/h | | 379 | | | 530 | | | 306 | | | | |
| Approach Delay, s/veh | | 6.1 | | | 6.1 | | | 8.9 | | | | |
| Approach LOS | | A | | | A | | | A | | | | |
| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 10.8 | | 15.7 | | | | 15.7 | | | | |
| Change Period (Y+Rc), s | | * 5.4 | | 4.0 | | | | 4.0 | | | | |
| Max Green Setting (Gmax), s | | * 12 | | 19.0 | | | | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 4.3 | | 8.1 | | | | 6.9 | | | | |
| Green Ext Time (p_c), s | | 0.8 | | 3.2 | | | | 4.8 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 6.8 |
| HCM 6th LOS | A |

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection | |
|---|---|
| Int Delay, s/veh | 7.7 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 2 | 128 | 16 | 10 | 362 | 27 |
| Future Vol, veh/h | 2 | 128 | 16 | 10 | 362 | 27 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 50 | 18 | 15 | 13 | 10 | 22 |
| Mvmt Flow | 2 | 147 | 18 | 11 | 416 | 31 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 887 | 24 | 0 | 0 | 29 | 0 |
| Stage 1 | 24 | - | - | - | - | - |
| Stage 2 | 863 | - | - | - | - | - |
| Critical Hdwy | 6.9 | 6.38 | - | - | 4.2 | - |
| Critical Hdwy Stg 1 | 5.9 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.9 | - | - | - | - | - |
| Follow-up Hdwy | 3.95 | 3.462 | - | - | 2.29 | - |
| Pot Cap-1 Maneuver | 260 | 1008 | - | - | 1534 | - |
| Stage 1 | 888 | - | - | - | - | - |
| Stage 2 | 343 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 188 | 1008 | - | - | 1534 | - |
| Mov Cap-2 Maneuver | 188 | - | - | - | - | - |
| Stage 1 | 888 | - | - | - | - | - |
| Stage 2 | 248 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.5 | 0 | 7.6 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 945 | 1534 | - |
| HCM Lane V/C Ratio | - | - | 0.158 | 0.271 | - |
| HCM Control Delay (s) | - | - | 9.5 | 8.2 | 0 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.6 | 1.1 | - |

| 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 | 205 | 0 | 29 | 261 | 48 | 0 | 1 | 17 | 27 | 2 | 2 |
| Future Vol, veh/h | 4 | 205 | 0 | 29 | 261 | 48 | 0 | 1 | 17 | 27 | 2 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 135 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 15 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 9 | 0 | 0 |
| Mvmt Flow | 4 | 214 | 0 | 30 | 272 | 50 | 0 | 1 | 18 | 28 | 2 | 2 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 322 | 0 | 0 | 214 | 0 | 0 | 581 | 604 | 214 | 564 | 554 | 272 |
| Stage 1 | - | - | - | - | - | - | 222 | 222 | - | 332 | 332 | - |
| Stage 2 | - | - | - | - | - | - | 359 | 382 | - | 232 | 222 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.19 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.19 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.19 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.581 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1249 | - | - | 1368 | - | - | 428 | 415 | 831 | 426 | 443 | 772 |
| Stage 1 | - | - | - | - | - | - | 785 | 723 | - | 667 | 648 | - |
| Stage 2 | - | - | - | - | - | - | 663 | 616 | - | 755 | 723 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1249 | - | - | 1368 | - | - | 415 | 402 | 831 | 406 | 429 | 772 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 415 | 402 | - | 406 | 429 | - |
| Stage 1 | - | - | - | - | - | - | 782 | 720 | - | 664 | 631 | - |
| Stage 2 | - | - | - | - | - | - | 641 | 599 | - | 735 | 720 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0.7 | 9.7 | 14.3 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 784 | 1249 | - | - | 1368 | - | - | 420 |
| HCM Lane V/C Ratio | 0.024 | 0.003 | - | - | 0.022 | - | - | 0.077 |
| HCM Control Delay (s) | 9.7 | 7.9 | 0 | - | 7.7 | 0 | - | 14.3 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0.1 | - | - | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 17 | 315 | 0 | 0 | 400 | 123 | 1 | 0 | 1 | 122 | 0 | 38 |
| Future Vol, veh/h | 17 | 315 | 0 | 0 | 400 | 123 | 1 | 0 | 1 | 122 | 0 | 38 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | - | - | - | 115 | - | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 92 | 92 | 94 | 94 | 92 | 92 | 92 | 94 | 92 | 94 |
| Heavy Vehicles, % | 8 | 5 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 18 | 335 | 0 | 0 | 426 | 131 | 1 | 0 | 1 | 130 | 0 | 40 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 557 | 0 | 0 | 335 | 0 | 0 | 883 | 928 | 335 | 798 | 797 | 426 |
| Stage 1 | - | - | - | - | - | - | 371 | 371 | - | 426 | 426 | - |
| Stage 2 | - | - | - | - | - | - | 512 | 557 | - | 372 | 371 | - |
| Critical Hdwy | 4.18 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.272 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.3 |
| Pot Cap-1 Maneuver | 984 | - | - | 1224 | - | - | 266 | 268 | 707 | 304 | 319 | 633 |
| Stage 1 | - | - | - | - | - | - | 649 | 620 | - | 606 | 586 | - |
| Stage 2 | - | - | - | - | - | - | 545 | 512 | - | 648 | 620 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 984 | - | - | 1224 | - | - | 246 | 263 | 707 | 299 | 313 | 633 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 246 | 263 | - | 299 | 313 | - |
| Stage 1 | - | - | - | - | - | - | 637 | 609 | - | 595 | 586 | - |
| Stage 2 | - | - | - | - | - | - | 510 | 512 | - | 635 | 609 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0 | 14.9 | 22.5 |
| HCM LOS | | | B | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 365 | 984 | - | - | 1224 | - | - | 299 | 633 |
| HCM Lane V/C Ratio | 0.006 | 0.018 | - | - | - | - | - | 0.434 | 0.064 |
| HCM Control Delay (s) | 14.9 | 8.7 | - | - | 0 | - | - | 26 | 11.1 |
| HCM Lane LOS | B | A | - | - | A | - | - | D | B |
| HCM 95th %tile Q(veh) | 0 | 0.1 | - | - | 0 | - | - | 2.1 | 0.2 |

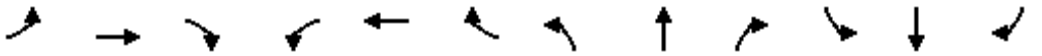
| Intersection | |
|---|---|
| Int Delay, s/veh | 3.6 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 275 | 147 | 191 | 480 | 39 | 98 |
| Future Vol, veh/h | 275 | 147 | 191 | 480 | 39 | 98 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | Stop |
| Storage Length | - | - | 190 | - | 0 | 200 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 3 | 6 | 3 | 3 | 5 | 5 |
| Mvmt Flow | 296 | 158 | 205 | 516 | 42 | 105 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 454 | 0 | 1301 | 375 |
| Stage 1 | - | - | - | - | 375 | - |
| Stage 2 | - | - | - | - | 926 | - |
| Critical Hdwy | - | - | 4.13 | - | 6.45 | 6.25 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.45 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.45 | - |
| Follow-up Hdwy | - | - | 2.227 | - | 3.545 | 3.345 |
| Pot Cap-1 Maneuver | - | - | 1101 | - | 175 | 665 |
| Stage 1 | - | - | - | - | 688 | - |
| Stage 2 | - | - | - | - | 381 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1101 | - | 142 | 665 |
| Mov Cap-2 Maneuver | - | - | - | - | 142 | - |
| Stage 1 | - | - | - | - | 688 | - |
| Stage 2 | - | - | - | - | 310 | - |

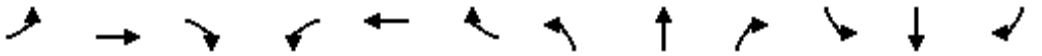
| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 2.6 | 19.7 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 142 | 665 | - | - | 1101 | - |
| HCM Lane V/C Ratio | 0.295 | 0.158 | - | - | 0.187 | - |
| HCM Control Delay (s) | 40.6 | 11.4 | - | - | 9 | - |
| HCM Lane LOS | E | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 1.2 | 0.6 | - | - | 0.7 | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 47 | 326 | 0 | 0 | 433 | 97 | 238 | 0 | 188 | 0 | 0 | 0 |
| Future Volume (vph) | 47 | 326 | 0 | 0 | 433 | 97 | 238 | 0 | 188 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 |
| Total Lost time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 | | | |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | | 1.00 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (prot) | 1599 | 1683 | | | 1699 | 1417 | | 1614 | 1444 | | | |
| Flt Permitted | 0.43 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (perm) | 720 | 1683 | | | 1699 | 1417 | | 1614 | 1444 | | | |
| Peak-hour factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 49 | 343 | 0 | 0 | 456 | 102 | 251 | 0 | 198 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 56 | 0 | 0 | 137 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 49 | 343 | 0 | 0 | 456 | 46 | 0 | 251 | 61 | 0 | 0 | 0 |
| Heavy Vehicles (%) | 4% | 4% | 0% | 0% | 3% | 5% | 3% | 0% | 3% | 0% | 0% | 0% |
| Turn Type | Perm | NA | | | NA | Perm | Perm | NA | Perm | | | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | | |
| Permitted Phases | 4 | | | | | 8 | 2 | | 2 | | | |
| Actuated Green, G (s) | 14.8 | 14.8 | | | 14.8 | 14.8 | | 8.7 | 8.7 | | | |
| Effective Green, g (s) | 14.8 | 14.8 | | | 14.8 | 14.8 | | 10.1 | 10.1 | | | |
| Actuated g/C Ratio | 0.45 | 0.45 | | | 0.45 | 0.45 | | 0.31 | 0.31 | | | |
| Clearance Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 5.4 | 5.4 | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 2.5 | 2.5 | | | |
| Lane Grp Cap (vph) | 323 | 757 | | | 764 | 637 | | 495 | 443 | | | |
| v/s Ratio Prot | | 0.20 | | | c0.27 | | | | | | | |
| v/s Ratio Perm | 0.07 | | | | | 0.03 | | 0.16 | 0.04 | | | |
| v/c Ratio | 0.15 | 0.45 | | | 0.60 | 0.07 | | 0.51 | 0.14 | | | |
| Uniform Delay, d1 | 5.3 | 6.3 | | | 6.8 | 5.1 | | 9.4 | 8.2 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 0.3 | 0.6 | | | 1.5 | 0.1 | | 0.6 | 0.1 | | | |
| Delay (s) | 5.6 | 6.8 | | | 8.3 | 5.2 | | 10.0 | 8.4 | | | |
| Level of Service | A | A | | | A | A | | A | A | | | |
| Approach Delay (s) | | 6.7 | | | 7.7 | | | 9.2 | | | 0.0 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 7.9 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.56 | | |
| Actuated Cycle Length (s) | 32.9 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 57.4% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 47 | 326 | 0 | 0 | 433 | 97 | 238 | 0 | 188 | 0 | 0 | 0 |
| Future Volume (veh/h) | 47 | 326 | 0 | 0 | 433 | 97 | 238 | 0 | 188 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1695 | 1695 | 0 | 0 | 1709 | 1682 | 1709 | 1750 | 1709 | | | |
| Adj Flow Rate, veh/h | 49 | 343 | 0 | 0 | 456 | 102 | 251 | 0 | 198 | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | | |
| Percent Heavy Veh, % | 4 | 4 | 0 | 0 | 3 | 5 | 3 | 0 | 3 | | | |
| Cap, veh/h | 448 | 746 | 0 | 0 | 752 | 627 | 470 | 0 | 408 | | | |
| Arrive On Green | 0.44 | 0.44 | 0.00 | 0.00 | 0.44 | 0.44 | 0.23 | 0.00 | 0.28 | | | |
| Sat Flow, veh/h | 838 | 1695 | 0 | 0 | 1709 | 1425 | 1667 | 0 | 1448 | | | |
| Grp Volume(v), veh/h | 49 | 343 | 0 | 0 | 456 | 102 | 251 | 0 | 198 | | | |
| Grp Sat Flow(s),veh/h/ln | 838 | 1695 | 0 | 0 | 1709 | 1425 | 1667 | 0 | 1448 | | | |
| Q Serve(g_s), s | 1.4 | 4.1 | 0.0 | 0.0 | 5.9 | 1.2 | 3.8 | 0.0 | 3.3 | | | |
| Cycle Q Clear(g_c), s | 7.2 | 4.1 | 0.0 | 0.0 | 5.9 | 1.2 | 3.8 | 0.0 | 3.3 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 448 | 746 | 0 | 0 | 752 | 627 | 470 | 0 | 408 | | | |
| V/C Ratio(X) | 0.11 | 0.46 | 0.00 | 0.00 | 0.61 | 0.16 | 0.53 | 0.00 | 0.49 | | | |
| Avail Cap(c_a), veh/h | 633 | 1120 | 0 | 0 | 1129 | 942 | 753 | 0 | 655 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 8.9 | 5.7 | 0.0 | 0.0 | 6.1 | 4.9 | 9.4 | 0.0 | 8.6 | | | |
| Incr Delay (d2), s/veh | 0.2 | 0.6 | 0.0 | 0.0 | 1.1 | 0.2 | 0.7 | 0.0 | 0.7 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 0.2 | 0.8 | 0.0 | 0.0 | 1.2 | 0.2 | 0.8 | 0.0 | 0.6 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 9.1 | 6.3 | 0.0 | 0.0 | 7.3 | 5.0 | 10.1 | 0.0 | 9.3 | | | |
| LnGrp LOS | A | A | A | A | A | A | B | A | A | | | |
| Approach Vol, veh/h | | 392 | | | 558 | | | 449 | | | | |
| Approach Delay, s/veh | | 6.6 | | | 6.9 | | | 9.7 | | | | |
| Approach LOS | | A | | | A | | | A | | | | |
| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 12.1 | | 16.7 | | | | 16.7 | | | | |
| Change Period (Y+Rc), s | | * 5.4 | | 4.0 | | | | 4.0 | | | | |
| Max Green Setting (Gmax), s | | * 12 | | 19.0 | | | | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 5.8 | | 9.2 | | | | 7.9 | | | | |
| Green Ext Time (p_c), s | | 1.1 | | 3.0 | | | | 4.8 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 7.7 |
| HCM 6th LOS | A |

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.7 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 6 | 109 | 33 | 25 | 291 | 50 |
| Future Vol, veh/h | 6 | 109 | 33 | 25 | 291 | 50 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 17 | 5 | 3 | 4 | 5 | 0 |
| Mvmt Flow | 6 | 115 | 35 | 26 | 306 | 53 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 713 | 48 | 0 | 0 | 61 | 0 |
| Stage 1 | 48 | - | - | - | - | - |
| Stage 2 | 665 | - | - | - | - | - |
| Critical Hdwy | 6.57 | 6.25 | - | - | 4.15 | - |
| Critical Hdwy Stg 1 | 5.57 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.57 | - | - | - | - | - |
| Follow-up Hdwy | 3.653 | 3.345 | - | - | 2.245 | - |
| Pot Cap-1 Maneuver | 377 | 1012 | - | - | 1523 | - |
| Stage 1 | 937 | - | - | - | - | - |
| Stage 2 | 484 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 299 | 1012 | - | - | 1523 | - |
| Mov Cap-2 Maneuver | 299 | - | - | - | - | - |
| Stage 1 | 937 | - | - | - | - | - |
| Stage 2 | 384 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.6 | 0 | 6.8 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 900 | 1523 | - |
| HCM Lane V/C Ratio | - | - | 0.135 | 0.201 | - |
| HCM Control Delay (s) | - | - | 9.6 | 8 | 0 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.5 | 0.8 | - |

| 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 | 216 | 0 | 31 | 275 | 50 | 0 | 1 | 18 | 28 | 3 | 3 |
| Future Vol, veh/h | 4 | 216 | 0 | 31 | 275 | 50 | 0 | 1 | 18 | 28 | 3 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 135 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 15 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 9 | 0 | 0 |
| Mvmt Flow | 4 | 225 | 0 | 32 | 286 | 52 | 0 | 1 | 19 | 29 | 3 | 3 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 338 | 0 | 0 | 225 | 0 | 0 | 612 | 635 | 225 | 593 | 583 | 286 |
| Stage 1 | - | - | - | - | - | - | 233 | 233 | - | 350 | 350 | - |
| Stage 2 | - | - | - | - | - | - | 379 | 402 | - | 243 | 233 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.19 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.19 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.19 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.581 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1232 | - | - | 1356 | - | - | 408 | 399 | 819 | 407 | 427 | 758 |
| Stage 1 | - | - | - | - | - | - | 775 | 716 | - | 652 | 636 | - |
| Stage 2 | - | - | - | - | - | - | 647 | 604 | - | 745 | 716 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1232 | - | - | 1356 | - | - | 394 | 386 | 819 | 387 | 413 | 758 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 394 | 386 | - | 387 | 413 | - |
| Stage 1 | - | - | - | - | - | - | 772 | 713 | - | 649 | 618 | - |
| Stage 2 | - | - | - | - | - | - | 622 | 586 | - | 724 | 713 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0.7 | 9.8 | 14.7 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 773 | 1232 | - | - | 1356 | - | - | 407 |
| HCM Lane V/C Ratio | 0.026 | 0.003 | - | - | 0.024 | - | - | 0.087 |
| HCM Control Delay (s) | 9.8 | 7.9 | 0 | - | 7.7 | 0 | - | 14.7 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0.1 | - | - | 0.3 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 18 | 333 | 0 | 0 | 422 | 130 | 1 | 0 | 1 | 129 | 0 | 40 |
| Future Vol, veh/h | 18 | 333 | 0 | 0 | 422 | 130 | 1 | 0 | 1 | 129 | 0 | 40 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | - | - | - | 115 | - | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 92 | 92 | 94 | 94 | 92 | 92 | 92 | 94 | 92 | 94 |
| Heavy Vehicles, % | 8 | 5 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 19 | 354 | 0 | 0 | 449 | 138 | 1 | 0 | 1 | 137 | 0 | 43 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 587 | 0 | 0 | 354 | 0 | 0 | 932 | 979 | 354 | 842 | 841 | 449 |
| Stage 1 | - | - | - | - | - | - | 392 | 392 | - | 449 | 449 | - |
| Stage 2 | - | - | - | - | - | - | 540 | 587 | - | 393 | 392 | - |
| Critical Hdwy | 4.18 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.272 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.3 |
| Pot Cap-1 Maneuver | 959 | - | - | 1205 | - | - | 247 | 250 | 690 | 284 | 301 | 614 |
| Stage 1 | - | - | - | - | - | - | 633 | 606 | - | 589 | 572 | - |
| Stage 2 | - | - | - | - | - | - | 526 | 497 | - | 632 | 606 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 959 | - | - | 1205 | - | - | 226 | 245 | 690 | 279 | 295 | 614 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 226 | 245 | - | 279 | 295 | - |
| Stage 1 | - | - | - | - | - | - | 620 | 594 | - | 577 | 572 | - |
| Stage 2 | - | - | - | - | - | - | 490 | 497 | - | 619 | 594 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 15.7 | 25.4 |
| HCM LOS | | | C | D |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 340 | 959 | - | - | 1205 | - | - | 279 | 614 |
| HCM Lane V/C Ratio | 0.006 | 0.02 | - | - | - | - | - | 0.492 | 0.069 |
| HCM Control Delay (s) | 15.7 | 8.8 | - | - | 0 | - | - | 29.8 | 11.3 |
| HCM Lane LOS | C | A | - | - | A | - | - | D | B |
| HCM 95th %tile Q(veh) | 0 | 0.1 | - | - | 0 | - | - | 2.5 | 0.2 |

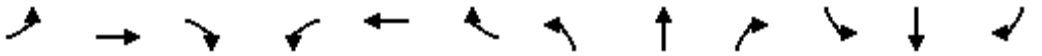
| Intersection | |
|---|---|
| Int Delay, s/veh | 3.9 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 290 | 155 | 202 | 506 | 41 | 103 |
| Future Vol, veh/h | 290 | 155 | 202 | 506 | 41 | 103 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | Stop |
| Storage Length | - | - | 190 | - | 0 | 200 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 3 | 6 | 3 | 3 | 5 | 5 |
| Mvmt Flow | 312 | 167 | 217 | 544 | 44 | 111 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 479 | 0 | 1374 | 396 |
| Stage 1 | - | - | - | - | 396 | - |
| Stage 2 | - | - | - | - | 978 | - |
| Critical Hdwy | - | - | 4.13 | - | 6.45 | 6.25 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.45 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.45 | - |
| Follow-up Hdwy | - | - | 2.227 | - | 3.545 | 3.345 |
| Pot Cap-1 Maneuver | - | - | 1078 | - | 158 | 647 |
| Stage 1 | - | - | - | - | 673 | - |
| Stage 2 | - | - | - | - | 360 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1078 | - | 126 | 647 |
| Mov Cap-2 Maneuver | - | - | - | - | 126 | - |
| Stage 1 | - | - | - | - | 673 | - |
| Stage 2 | - | - | - | - | 288 | - |

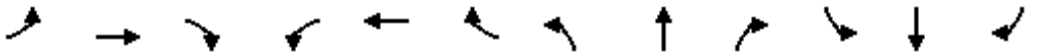
| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 2.6 | 22.1 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 126 | 647 | - | - | 1078 | - |
| HCM Lane V/C Ratio | 0.35 | 0.171 | - | - | 0.201 | - |
| HCM Control Delay (s) | 48.2 | 11.7 | - | - | 9.2 | - |
| HCM Lane LOS | E | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 1.4 | 0.6 | - | - | 0.8 | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 50 | 344 | 0 | 0 | 457 | 102 | 252 | 0 | 198 | 0 | 0 | 0 |
| Future Volume (vph) | 50 | 344 | 0 | 0 | 457 | 102 | 252 | 0 | 198 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 |
| Total Lost time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 | | | |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | | 1.00 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (prot) | 1599 | 1683 | | | 1699 | 1417 | | 1614 | 1444 | | | |
| Flt Permitted | 0.40 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (perm) | 672 | 1683 | | | 1699 | 1417 | | 1614 | 1444 | | | |
| Peak-hour factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 53 | 362 | 0 | 0 | 481 | 107 | 265 | 0 | 208 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 143 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 53 | 362 | 0 | 0 | 481 | 47 | 0 | 265 | 65 | 0 | 0 | 0 |
| Heavy Vehicles (%) | 4% | 4% | 0% | 0% | 3% | 5% | 3% | 0% | 3% | 0% | 0% | 0% |
| Turn Type | Perm | NA | | | NA | Perm | Perm | NA | Perm | | | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | | |
| Permitted Phases | 4 | | | | | 8 | 2 | | 2 | | | |
| Actuated Green, G (s) | 14.4 | 14.4 | | | 14.4 | 14.4 | | 8.8 | 8.8 | | | |
| Effective Green, g (s) | 14.4 | 14.4 | | | 14.4 | 14.4 | | 10.2 | 10.2 | | | |
| Actuated g/C Ratio | 0.44 | 0.44 | | | 0.44 | 0.44 | | 0.31 | 0.31 | | | |
| Clearance Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 5.4 | 5.4 | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 2.5 | 2.5 | | | |
| Lane Grp Cap (vph) | 296 | 743 | | | 750 | 625 | | 504 | 451 | | | |
| v/s Ratio Prot | | 0.22 | | | c0.28 | | | | | | | |
| v/s Ratio Perm | 0.08 | | | | | 0.03 | | 0.16 | 0.05 | | | |
| v/c Ratio | 0.18 | 0.49 | | | 0.64 | 0.08 | | 0.53 | 0.14 | | | |
| Uniform Delay, d1 | 5.5 | 6.5 | | | 7.1 | 5.3 | | 9.2 | 8.1 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 0.4 | 0.7 | | | 2.1 | 0.1 | | 0.8 | 0.1 | | | |
| Delay (s) | 5.9 | 7.2 | | | 9.2 | 5.3 | | 10.0 | 8.2 | | | |
| Level of Service | A | A | | | A | A | | A | A | | | |
| Approach Delay (s) | | 7.0 | | | 8.5 | | | 9.2 | | | 0.0 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 8.3 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.59 | | |
| Actuated Cycle Length (s) | 32.6 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 59.6% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 50 | 344 | 0 | 0 | 457 | 102 | 252 | 0 | 198 | 0 | 0 | 0 |
| Future Volume (veh/h) | 50 | 344 | 0 | 0 | 457 | 102 | 252 | 0 | 198 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1695 | 1695 | 0 | 0 | 1709 | 1682 | 1709 | 1750 | 1709 | | | |
| Adj Flow Rate, veh/h | 53 | 362 | 0 | 0 | 481 | 107 | 265 | 0 | 208 | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | | |
| Percent Heavy Veh, % | 4 | 4 | 0 | 0 | 3 | 5 | 3 | 0 | 3 | | | |
| Cap, veh/h | 428 | 757 | 0 | 0 | 763 | 636 | 476 | 0 | 414 | | | |
| Arrive On Green | 0.45 | 0.45 | 0.00 | 0.00 | 0.45 | 0.45 | 0.24 | 0.00 | 0.29 | | | |
| Sat Flow, veh/h | 815 | 1695 | 0 | 0 | 1709 | 1425 | 1667 | 0 | 1448 | | | |
| Grp Volume(v), veh/h | 53 | 362 | 0 | 0 | 481 | 107 | 265 | 0 | 208 | | | |
| Grp Sat Flow(s),veh/h/ln | 815 | 1695 | 0 | 0 | 1709 | 1425 | 1667 | 0 | 1448 | | | |
| Q Serve(g_s), s | 1.6 | 4.5 | 0.0 | 0.0 | 6.5 | 1.3 | 4.2 | 0.0 | 3.6 | | | |
| Cycle Q Clear(g_c), s | 8.1 | 4.5 | 0.0 | 0.0 | 6.5 | 1.3 | 4.2 | 0.0 | 3.6 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 428 | 757 | 0 | 0 | 763 | 636 | 476 | 0 | 414 | | | |
| V/C Ratio(X) | 0.12 | 0.48 | 0.00 | 0.00 | 0.63 | 0.17 | 0.56 | 0.00 | 0.50 | | | |
| Avail Cap(c_a), veh/h | 583 | 1078 | 0 | 0 | 1087 | 907 | 725 | 0 | 630 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 9.5 | 5.8 | 0.0 | 0.0 | 6.4 | 5.0 | 9.7 | 0.0 | 8.9 | | | |
| Incr Delay (d2), s/veh | 0.2 | 0.7 | 0.0 | 0.0 | 1.2 | 0.2 | 0.8 | 0.0 | 0.7 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 0.2 | 0.9 | 0.0 | 0.0 | 1.4 | 0.2 | 0.9 | 0.0 | 0.7 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 9.7 | 6.5 | 0.0 | 0.0 | 7.6 | 5.1 | 10.5 | 0.0 | 9.6 | | | |
| LnGrp LOS | A | A | A | A | A | A | B | A | A | | | |
| Approach Vol, veh/h | | 415 | | | 588 | | | 473 | | | | |
| Approach Delay, s/veh | | 6.9 | | | 7.2 | | | 10.1 | | | | |
| Approach LOS | | A | | | A | | | B | | | | |
| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 12.5 | | 17.3 | | | | 17.3 | | | | |
| Change Period (Y+Rc), s | | * 5.4 | | 4.0 | | | | 4.0 | | | | |
| Max Green Setting (Gmax), s | | * 12 | | 19.0 | | | | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 6.2 | | 10.1 | | | | 8.5 | | | | |
| Green Ext Time (p_c), s | | 1.1 | | 3.0 | | | | 4.9 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 8.0 |
| HCM 6th LOS | A |

**Notes**

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.7 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 7 | 115 | 35 | 26 | 307 | 53 |
| Future Vol, veh/h | 7 | 115 | 35 | 26 | 307 | 53 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 17 | 5 | 3 | 4 | 5 | 0 |
| Mvmt Flow | 7 | 121 | 37 | 27 | 323 | 56 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 753 | 51 | 0 | 0 | 64 | 0 |
| Stage 1 | 51 | - | - | - | - | - |
| Stage 2 | 702 | - | - | - | - | - |
| Critical Hdwy | 6.57 | 6.25 | - | - | 4.15 | - |
| Critical Hdwy Stg 1 | 5.57 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.57 | - | - | - | - | - |
| Follow-up Hdwy | 3.653 | 3.345 | - | - | 2.245 | - |
| Pot Cap-1 Maneuver | 357 | 1009 | - | - | 1519 | - |
| Stage 1 | 934 | - | - | - | - | - |
| Stage 2 | 465 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 279 | 1009 | - | - | 1519 | - |
| Mov Cap-2 Maneuver | 279 | - | - | - | - | - |
| Stage 1 | 934 | - | - | - | - | - |
| Stage 2 | 363 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.8 | 0 | 6.8 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 877 | 1519 | - |
| HCM Lane V/C Ratio | - | - | 0.146 | 0.213 | - |
| HCM Control Delay (s) | - | - | 9.8 | 8 | 0 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.5 | 0.8 | - |

| 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 | 5 | 216 | 0 | 31 | 275 | 106 | 0 | 1 | 18 | 64 | 3 | 4 |
| Future Vol, veh/h | 5 | 216 | 0 | 31 | 275 | 106 | 0 | 1 | 18 | 64 | 3 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 135 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 15 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 9 | 0 | 0 |
| Mvmt Flow | 5 | 225 | 0 | 32 | 286 | 110 | 0 | 1 | 19 | 67 | 3 | 4 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 396 | 0 | 0 | 225 | 0 | 0 | 644 | 695 | 225 | 595 | 585 | 286 |
| Stage 1 | - | - | - | - | - | - | 235 | 235 | - | 350 | 350 | - |
| Stage 2 | - | - | - | - | - | - | 409 | 460 | - | 245 | 235 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.19 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.19 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.19 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.581 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1174 | - | - | 1356 | - | - | 389 | 368 | 819 | 406 | 426 | 758 |
| Stage 1 | - | - | - | - | - | - | 773 | 714 | - | 652 | 636 | - |
| Stage 2 | - | - | - | - | - | - | 623 | 569 | - | 743 | 714 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1174 | - | - | 1356 | - | - | 374 | 355 | 819 | 385 | 411 | 758 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 374 | 355 | - | 385 | 411 | - |
| Stage 1 | - | - | - | - | - | - | 769 | 710 | - | 649 | 616 | - |
| Stage 2 | - | - | - | - | - | - | 597 | 551 | - | 721 | 710 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0.6 | 9.8 | 16.1 |
| HCM LOS | | | A | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 766 | 1174 | - | - | 1356 | - | - | 397 |
| HCM Lane V/C Ratio | 0.026 | 0.004 | - | - | 0.024 | - | - | 0.186 |
| HCM Control Delay (s) | 9.8 | 8.1 | 0 | - | 7.7 | 0 | - | 16.1 |
| HCM Lane LOS | A | A | A | - | A | A | - | C |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0.1 | - | - | 0.7 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.9 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 23 | 362 | 0 | 0 | 472 | 130 | 1 | 0 | 1 | 129 | 0 | 45 |
| Future Vol, veh/h | 23 | 362 | 0 | 0 | 472 | 130 | 1 | 0 | 1 | 129 | 0 | 45 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | - | - | - | 115 | - | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 92 | 92 | 94 | 94 | 92 | 92 | 92 | 94 | 92 | 94 |
| Heavy Vehicles, % | 8 | 5 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 24 | 385 | 0 | 0 | 502 | 138 | 1 | 0 | 1 | 137 | 0 | 48 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 640 | 0 | 0 | 385 | 0 | 0 | 1028 | 1073 | 385 | 936 | 935 | 502 |
| Stage 1 | - | - | - | - | - | - | 433 | 433 | - | 502 | 502 | - |
| Stage 2 | - | - | - | - | - | - | 595 | 640 | - | 434 | 433 | - |
| Critical Hdwy | 4.18 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.272 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.3 |
| Pot Cap-1 Maneuver | 916 | - | - | 1173 | - | - | 212 | 220 | 663 | 245 | 265 | 573 |
| Stage 1 | - | - | - | - | - | - | 601 | 582 | - | 552 | 542 | - |
| Stage 2 | - | - | - | - | - | - | 491 | 470 | - | 600 | 582 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 916 | - | - | 1173 | - | - | 190 | 214 | 663 | 240 | 258 | 573 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 190 | 214 | - | 240 | 258 | - |
| Stage 1 | - | - | - | - | - | - | 585 | 567 | - | 538 | 542 | - |
| Stage 2 | - | - | - | - | - | - | 450 | 470 | - | 583 | 567 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 17.3 | 31.5 |
| HCM LOS | | | C | D |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 295 | 916 | - | - | 1173 | - | - | 240 | 573 |
| HCM Lane V/C Ratio | 0.007 | 0.027 | - | - | - | - | - | 0.572 | 0.084 |
| HCM Control Delay (s) | 17.3 | 9 | - | - | 0 | - | - | 38.3 | 11.9 |
| HCM Lane LOS | C | A | - | - | A | - | - | E | B |
| HCM 95th %tile Q(veh) | 0 | 0.1 | - | - | 0 | - | - | 3.2 | 0.3 |

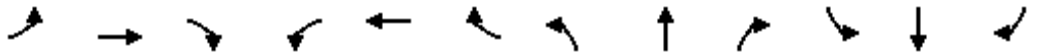
| Intersection | |
|---|---|
| Int Delay, s/veh | 4.2 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 309 | 165 | 202 | 552 | 45 | 103 |
| Future Vol, veh/h | 309 | 165 | 202 | 552 | 45 | 103 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | Stop |
| Storage Length | - | - | 190 | - | 0 | 200 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 3 | 6 | 3 | 3 | 5 | 5 |
| Mvmt Flow | 332 | 177 | 217 | 594 | 48 | 111 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 509 | 0 | 1449 | 421 |
| Stage 1 | - | - | - | - | 421 | - |
| Stage 2 | - | - | - | - | 1028 | - |
| Critical Hdwy | - | - | 4.13 | - | 6.45 | 6.25 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.45 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.45 | - |
| Follow-up Hdwy | - | - | 2.227 | - | 3.545 | 3.345 |
| Pot Cap-1 Maneuver | - | - | 1051 | - | 142 | 626 |
| Stage 1 | - | - | - | - | 656 | - |
| Stage 2 | - | - | - | - | 341 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1051 | - | 113 | 626 |
| Mov Cap-2 Maneuver | - | - | - | - | 113 | - |
| Stage 1 | - | - | - | - | 656 | - |
| Stage 2 | - | - | - | - | 271 | - |

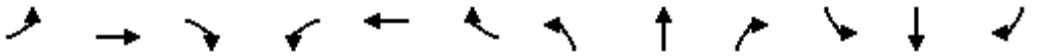
| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 2.5 | 26.2 |
| HCM LOS | | | D |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 113 | 626 | - | - | 1051 | - |
| HCM Lane V/C Ratio | 0.428 | 0.177 | - | - | 0.207 | - |
| HCM Control Delay (s) | 58.8 | 12 | - | - | 9.3 | - |
| HCM Lane LOS | F | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 1.8 | 0.6 | - | - | 0.8 | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 52 | 361 | 0 | 0 | 487 | 102 | 268 | 0 | 198 | 0 | 0 | 0 |
| Future Volume (vph) | 52 | 361 | 0 | 0 | 487 | 102 | 268 | 0 | 198 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 |
| Total Lost time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 | | | |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | | 1.00 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (prot) | 1599 | 1683 | | | 1699 | 1417 | | 1614 | 1444 | | | |
| Flt Permitted | 0.36 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (perm) | 613 | 1683 | | | 1699 | 1417 | | 1614 | 1444 | | | |
| Peak-hour factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 55 | 380 | 0 | 0 | 513 | 107 | 282 | 0 | 208 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 142 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 55 | 380 | 0 | 0 | 513 | 47 | 0 | 282 | 66 | 0 | 0 | 0 |
| Heavy Vehicles (%) | 4% | 4% | 0% | 0% | 3% | 5% | 3% | 0% | 3% | 0% | 0% | 0% |
| Turn Type | Perm | NA | | | NA | Perm | Perm | NA | Perm | | | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | | |
| Permitted Phases | 4 | | | | | 8 | 2 | | 2 | | | |
| Actuated Green, G (s) | 14.4 | 14.4 | | | 14.4 | 14.4 | | 9.0 | 9.0 | | | |
| Effective Green, g (s) | 14.4 | 14.4 | | | 14.4 | 14.4 | | 10.4 | 10.4 | | | |
| Actuated g/C Ratio | 0.44 | 0.44 | | | 0.44 | 0.44 | | 0.32 | 0.32 | | | |
| Clearance Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 5.4 | 5.4 | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 2.5 | 2.5 | | | |
| Lane Grp Cap (vph) | 269 | 738 | | | 745 | 622 | | 511 | 457 | | | |
| v/s Ratio Prot | | 0.23 | | | c0.30 | | | | | | | |
| v/s Ratio Perm | 0.09 | | | | | 0.03 | | 0.17 | 0.05 | | | |
| v/c Ratio | 0.20 | 0.51 | | | 0.69 | 0.08 | | 0.55 | 0.14 | | | |
| Uniform Delay, d1 | 5.7 | 6.7 | | | 7.4 | 5.3 | | 9.3 | 8.0 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 0.5 | 0.8 | | | 2.9 | 0.1 | | 1.0 | 0.1 | | | |
| Delay (s) | 6.2 | 7.5 | | | 10.3 | 5.4 | | 10.3 | 8.1 | | | |
| Level of Service | A | A | | | B | A | | B | A | | | |
| Approach Delay (s) | | 7.3 | | | 9.4 | | | 9.4 | | | 0.0 | |
| Approach LOS | | A | | | A | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 8.8 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.63 | | |
| Actuated Cycle Length (s) | 32.8 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 62.3% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 52 | 361 | 0 | 0 | 487 | 102 | 268 | 0 | 198 | 0 | 0 | 0 |
| Future Volume (veh/h) | 52 | 361 | 0 | 0 | 487 | 102 | 268 | 0 | 198 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1695 | 1695 | 0 | 0 | 1709 | 1682 | 1709 | 1750 | 1709 | | | |
| Adj Flow Rate, veh/h | 55 | 380 | 0 | 0 | 513 | 107 | 282 | 0 | 208 | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | | |
| Percent Heavy Veh, % | 4 | 4 | 0 | 0 | 3 | 5 | 3 | 0 | 3 | | | |
| Cap, veh/h | 405 | 769 | 0 | 0 | 775 | 646 | 482 | 0 | 419 | | | |
| Arrive On Green | 0.45 | 0.45 | 0.00 | 0.00 | 0.45 | 0.45 | 0.24 | 0.00 | 0.29 | | | |
| Sat Flow, veh/h | 791 | 1695 | 0 | 0 | 1709 | 1425 | 1667 | 0 | 1448 | | | |
| Grp Volume(v), veh/h | 55 | 380 | 0 | 0 | 513 | 107 | 282 | 0 | 208 | | | |
| Grp Sat Flow(s),veh/h/ln | 791 | 1695 | 0 | 0 | 1709 | 1425 | 1667 | 0 | 1448 | | | |
| Q Serve(g_s), s | 1.8 | 4.9 | 0.0 | 0.0 | 7.3 | 1.4 | 4.6 | 0.0 | 3.7 | | | |
| Cycle Q Clear(g_c), s | 9.1 | 4.9 | 0.0 | 0.0 | 7.3 | 1.4 | 4.6 | 0.0 | 3.7 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 405 | 769 | 0 | 0 | 775 | 646 | 482 | 0 | 419 | | | |
| V/C Ratio(X) | 0.14 | 0.49 | 0.00 | 0.00 | 0.66 | 0.17 | 0.58 | 0.00 | 0.50 | | | |
| Avail Cap(c_a), veh/h | 529 | 1035 | 0 | 0 | 1043 | 870 | 696 | 0 | 605 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 10.2 | 6.0 | 0.0 | 0.0 | 6.6 | 5.0 | 10.1 | 0.0 | 9.2 | | | |
| Incr Delay (d2), s/veh | 0.2 | 0.7 | 0.0 | 0.0 | 1.4 | 0.2 | 0.8 | 0.0 | 0.7 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 0.3 | 1.1 | 0.0 | 0.0 | 1.7 | 0.2 | 1.1 | 0.0 | 0.7 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 10.4 | 6.7 | 0.0 | 0.0 | 8.0 | 5.2 | 10.9 | 0.0 | 9.9 | | | |
| LnGrp LOS | B | A | A | A | A | A | B | A | A | | | |
| Approach Vol, veh/h | | 435 | | | 620 | | | 490 | | | | |
| Approach Delay, s/veh | | 7.2 | | | 7.5 | | | 10.5 | | | | |
| Approach LOS | | A | | | A | | | B | | | | |
| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 13.0 | | 18.1 | | | | 18.1 | | | | |
| Change Period (Y+Rc), s | | * 5.4 | | 4.0 | | | | 4.0 | | | | |
| Max Green Setting (Gmax), s | | * 12 | | 19.0 | | | | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 6.6 | | 11.1 | | | | 9.3 | | | | |
| Green Ext Time (p_c), s | | 1.1 | | 2.9 | | | | 4.8 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 8.4 |
| HCM 6th LOS | A |

**Notes**

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.8 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 7 | 119 | 35 | 26 | 317 | 53 |
| Future Vol, veh/h | 7 | 119 | 35 | 26 | 317 | 53 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 17 | 5 | 3 | 4 | 5 | 0 |
| Mvmt Flow | 7 | 125 | 37 | 27 | 334 | 56 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 775 | 51 | 0 | 0 | 64 | 0 |
| Stage 1 | 51 | - | - | - | - | - |
| Stage 2 | 724 | - | - | - | - | - |
| Critical Hdwy | 6.57 | 6.25 | - | - | 4.15 | - |
| Critical Hdwy Stg 1 | 5.57 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.57 | - | - | - | - | - |
| Follow-up Hdwy | 3.653 | 3.345 | - | - | 2.245 | - |
| Pot Cap-1 Maneuver | 346 | 1009 | - | - | 1519 | - |
| Stage 1 | 934 | - | - | - | - | - |
| Stage 2 | 454 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 267 | 1009 | - | - | 1519 | - |
| Mov Cap-2 Maneuver | 267 | - | - | - | - | - |
| Stage 1 | 934 | - | - | - | - | - |
| Stage 2 | 351 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.9 | 0 | 6.9 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 874 | 1519 | - |
| HCM Lane V/C Ratio | - | - | 0.152 | 0.22 | - |
| HCM Control Delay (s) | - | - | 9.9 | 8 | 0 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.5 | 0.8 | - |

| 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 | 4 | 245 | 0 | 35 | 311 | 57 | 0 | 1 | 20 | 32 | 3 | 3 |
| Future Vol, veh/h | 4 | 245 | 0 | 35 | 311 | 57 | 0 | 1 | 20 | 32 | 3 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 135 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 15 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 9 | 0 | 0 |
| Mvmt Flow | 4 | 255 | 0 | 36 | 324 | 59 | 0 | 1 | 21 | 33 | 3 | 3 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 383 | 0 | 0 | 255 | 0 | 0 | 692 | 718 | 255 | 670 | 659 | 324 |
| Stage 1 | - | - | - | - | - | - | 263 | 263 | - | 396 | 396 | - |
| Stage 2 | - | - | - | - | - | - | 429 | 455 | - | 274 | 263 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.19 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.19 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.19 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.581 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1187 | - | - | 1322 | - | - | 361 | 357 | 789 | 361 | 386 | 722 |
| Stage 1 | - | - | - | - | - | - | 747 | 694 | - | 616 | 607 | - |
| Stage 2 | - | - | - | - | - | - | 608 | 572 | - | 717 | 694 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1187 | - | - | 1322 | - | - | 347 | 343 | 789 | 340 | 371 | 722 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 347 | 343 | - | 340 | 371 | - |
| Stage 1 | - | - | - | - | - | - | 744 | 691 | - | 614 | 586 | - |
| Stage 2 | - | - | - | - | - | - | 581 | 552 | - | 694 | 691 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0.7 | 10 | 16.3 |
| HCM LOS | | | B | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 743 | 1187 | - | - | 1322 | - | - | 357 |
| HCM Lane V/C Ratio | 0.029 | 0.004 | - | - | 0.028 | - | - | 0.111 |
| HCM Control Delay (s) | 10 | 8 | 0 | - | 7.8 | 0 | - | 16.3 |
| HCM Lane LOS | B | A | A | - | A | A | - | C |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0.1 | - | - | 0.4 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 20 | 376 | 0 | 0 | 477 | 147 | 2 | 0 | 2 | 145 | 0 | 45 |
| Future Vol, veh/h | 20 | 376 | 0 | 0 | 477 | 147 | 2 | 0 | 2 | 145 | 0 | 45 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | - | - | - | 115 | - | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 92 | 92 | 94 | 94 | 92 | 92 | 92 | 94 | 92 | 94 |
| Heavy Vehicles, % | 8 | 5 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 21 | 400 | 0 | 0 | 507 | 156 | 2 | 0 | 2 | 154 | 0 | 48 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 663 | 0 | 0 | 400 | 0 | 0 | 1051 | 1105 | 400 | 950 | 949 | 507 |
| Stage 1 | - | - | - | - | - | - | 442 | 442 | - | 507 | 507 | - |
| Stage 2 | - | - | - | - | - | - | 609 | 663 | - | 443 | 442 | - |
| Critical Hdwy | 4.18 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.272 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.3 |
| Pot Cap-1 Maneuver | 898 | - | - | 1159 | - | - | 205 | 211 | 650 | 240 | 260 | 570 |
| Stage 1 | - | - | - | - | - | - | 594 | 576 | - | 548 | 539 | - |
| Stage 2 | - | - | - | - | - | - | 482 | 459 | - | 594 | 576 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 898 | - | - | 1159 | - | - | 185 | 206 | 650 | 235 | 254 | 570 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 185 | 206 | - | 235 | 254 | - |
| Stage 1 | - | - | - | - | - | - | 580 | 563 | - | 535 | 539 | - |
| Stage 2 | - | - | - | - | - | - | 442 | 459 | - | 578 | 563 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 17.7 | 37.5 |
| HCM LOS | | | C | E |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 288 | 898 | - | - | 1159 | - | - | 235 | 570 |
| HCM Lane V/C Ratio | 0.015 | 0.024 | - | - | - | - | - | 0.656 | 0.084 |
| HCM Control Delay (s) | 17.7 | 9.1 | - | - | 0 | - | - | 45.5 | 11.9 |
| HCM Lane LOS | C | A | - | - | A | - | - | E | B |
| HCM 95th %tile Q(veh) | 0 | 0.1 | - | - | 0 | - | - | 4.1 | 0.3 |

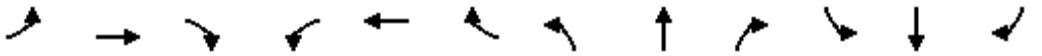
| Intersection | |
|---|---|
| Int Delay, s/veh | 5.2 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 328 | 175 | 228 | 573 | 47 | 116 |
| Future Vol, veh/h | 328 | 175 | 228 | 573 | 47 | 116 |
| Conflicting Peds, #/hr | 0 | 0 | 3 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | Stop |
| Storage Length | - | - | 190 | - | 0 | 200 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 3 | 6 | 3 | 3 | 5 | 5 |
| Mvmt Flow | 353 | 188 | 245 | 616 | 51 | 125 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 544 | 0 | 1556 | 450 |
| Stage 1 | - | - | - | - | 450 | - |
| Stage 2 | - | - | - | - | 1106 | - |
| Critical Hdwy | - | - | 4.13 | - | 6.45 | 6.25 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.45 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.45 | - |
| Follow-up Hdwy | - | - | 2.227 | - | 3.545 | 3.345 |
| Pot Cap-1 Maneuver | - | - | 1020 | - | 122 | 603 |
| Stage 1 | - | - | - | - | 636 | - |
| Stage 2 | - | - | - | - | 312 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1017 | - | 92 | 601 |
| Mov Cap-2 Maneuver | - | - | - | - | 92 | - |
| Stage 1 | - | - | - | - | 634 | - |
| Stage 2 | - | - | - | - | 237 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 2.7 | 33.2 |
| HCM LOS | | | D |

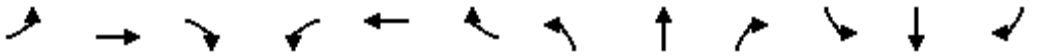
| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 92 | 601 | - | - | 1017 | - |
| HCM Lane V/C Ratio | 0.549 | 0.208 | - | - | 0.241 | - |
| HCM Control Delay (s) | 84 | 12.6 | - | - | 9.7 | - |
| HCM Lane LOS | F | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 2.5 | 0.8 | - | - | 0.9 | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 56 | 389 | 0 | 0 | 517 | 115 | 284 | 1 | 224 | 0 | 0 | 0 |
| Future Volume (vph) | 56 | 389 | 0 | 0 | 517 | 115 | 284 | 1 | 224 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 |
| Total Lost time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 | | | |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Frpb, ped/bikes | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Flpb, ped/bikes | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | | 1.00 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (prot) | 1599 | 1683 | | | 1699 | 1417 | | 1619 | 1444 | | | |
| Flt Permitted | 0.33 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (perm) | 553 | 1683 | | | 1699 | 1417 | | 1619 | 1444 | | | |
| Peak-hour factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 59 | 409 | 0 | 0 | 544 | 121 | 299 | 1 | 236 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 69 | 0 | 0 | 160 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 59 | 409 | 0 | 0 | 544 | 52 | 0 | 300 | 76 | 0 | 0 | 0 |
| Confl. Peds. (#/hr) | | | | 3 | | | | | | | | |
| Heavy Vehicles (%) | 4% | 4% | 0% | 0% | 3% | 5% | 3% | 0% | 3% | 0% | 0% | 0% |
| Turn Type | Perm | NA | | | NA | Perm | Perm | NA | Perm | | | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | | |
| Permitted Phases | 4 | | | | | 8 | 2 | | 2 | | | |
| Actuated Green, G (s) | 14.0 | 14.0 | | | 14.0 | 14.0 | | 9.1 | 9.1 | | | |
| Effective Green, g (s) | 14.0 | 14.0 | | | 14.0 | 14.0 | | 10.5 | 10.5 | | | |
| Actuated g/C Ratio | 0.43 | 0.43 | | | 0.43 | 0.43 | | 0.32 | 0.32 | | | |
| Clearance Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 5.4 | 5.4 | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 2.5 | 2.5 | | | |
| Lane Grp Cap (vph) | 238 | 724 | | | 731 | 610 | | 523 | 466 | | | |
| v/s Ratio Prot | | 0.24 | | | c0.32 | | | | | | | |
| v/s Ratio Perm | 0.11 | | | | | 0.04 | | 0.19 | 0.05 | | | |
| v/c Ratio | 0.25 | 0.56 | | | 0.74 | 0.09 | | 0.57 | 0.16 | | | |
| Uniform Delay, d1 | 5.9 | 7.0 | | | 7.7 | 5.5 | | 9.1 | 7.9 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 0.7 | 1.2 | | | 4.4 | 0.1 | | 1.3 | 0.1 | | | |
| Delay (s) | 6.6 | 8.2 | | | 12.1 | 5.5 | | 10.4 | 8.0 | | | |
| Level of Service | A | A | | | B | A | | B | A | | | |
| Approach Delay (s) | | 8.0 | | | 10.9 | | | 9.3 | | | 0.0 | |
| Approach LOS | | A | | | B | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 9.6 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.67 | | |
| Actuated Cycle Length (s) | 32.5 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 65.0% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |

c Critical Lane Group



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 56 | 389 | 0 | 0 | 517 | 115 | 284 | 1 | 224 | 0 | 0 | 0 |
| Future Volume (veh/h) | 56 | 389 | 0 | 0 | 517 | 115 | 284 | 1 | 224 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1695 | 1695 | 0 | 0 | 1709 | 1682 | 1709 | 1750 | 1709 | | | |
| Adj Flow Rate, veh/h | 59 | 409 | 0 | 0 | 544 | 121 | 299 | 1 | 236 | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | | |
| Percent Heavy Veh, % | 4 | 4 | 0 | 0 | 3 | 5 | 3 | 0 | 3 | | | |
| Cap, veh/h | 379 | 783 | 0 | 0 | 790 | 658 | 489 | 2 | 426 | | | |
| Arrive On Green | 0.46 | 0.46 | 0.00 | 0.00 | 0.46 | 0.46 | 0.25 | 0.29 | 0.29 | | | |
| Sat Flow, veh/h | 759 | 1695 | 0 | 0 | 1709 | 1425 | 1661 | 6 | 1448 | | | |
| Grp Volume(v), veh/h | 59 | 409 | 0 | 0 | 544 | 121 | 300 | 0 | 236 | | | |
| Grp Sat Flow(s),veh/h/ln | 759 | 1695 | 0 | 0 | 1709 | 1425 | 1667 | 0 | 1448 | | | |
| Q Serve(g_s), s | 2.2 | 5.6 | 0.0 | 0.0 | 8.2 | 1.6 | 5.2 | 0.0 | 4.5 | | | |
| Cycle Q Clear(g_c), s | 10.4 | 5.6 | 0.0 | 0.0 | 8.2 | 1.6 | 5.2 | 0.0 | 4.5 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 379 | 783 | 0 | 0 | 790 | 658 | 491 | 0 | 426 | | | |
| V/C Ratio(X) | 0.16 | 0.52 | 0.00 | 0.00 | 0.69 | 0.18 | 0.61 | 0.00 | 0.55 | | | |
| Avail Cap(c_a), veh/h | 468 | 981 | 0 | 0 | 989 | 825 | 660 | 0 | 574 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 11.1 | 6.3 | 0.0 | 0.0 | 7.0 | 5.2 | 10.6 | 0.0 | 9.8 | | | |
| Incr Delay (d2), s/veh | 0.3 | 0.8 | 0.0 | 0.0 | 1.9 | 0.2 | 0.9 | 0.0 | 0.8 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 0.3 | 1.3 | 0.0 | 0.0 | 2.0 | 0.3 | 1.2 | 0.0 | 0.9 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 11.4 | 7.0 | 0.0 | 0.0 | 8.8 | 5.4 | 11.5 | 0.0 | 10.6 | | | |
| LnGrp LOS | B | A | A | A | A | A | B | A | B | | | |
| Approach Vol, veh/h | | 468 | | | 665 | | | 536 | | | | |
| Approach Delay, s/veh | | 7.6 | | | 8.2 | | | 11.1 | | | | |
| Approach LOS | | A | | | A | | | B | | | | |

| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 13.7 | | 19.2 | | | | 19.2 | | | | |
| Change Period (Y+Rc), s | | * 5.4 | | 4.0 | | | | 4.0 | | | | |
| Max Green Setting (Gmax), s | | * 12 | | 19.0 | | | | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.2 | | 12.4 | | | | 10.2 | | | | |
| Green Ext Time (p_c), s | | 1.1 | | 2.7 | | | | 4.7 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 9.0 | | | | | | | | | |
| HCM 6th LOS | | | A | | | | | | | | | |

**Notes**

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.8 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 7 | 130 | 39 | 29 | 347 | 60 |
| Future Vol, veh/h | 7 | 130 | 39 | 29 | 347 | 60 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 17 | 5 | 3 | 4 | 5 | 0 |
| Mvmt Flow | 7 | 137 | 41 | 31 | 365 | 63 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 850 | 57 | 0 | 0 | 72 | 0 |
| Stage 1 | 57 | - | - | - | - | - |
| Stage 2 | 793 | - | - | - | - | - |
| Critical Hdwy | 6.57 | 6.25 | - | - | 4.15 | - |
| Critical Hdwy Stg 1 | 5.57 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.57 | - | - | - | - | - |
| Follow-up Hdwy | 3.653 | 3.345 | - | - | 2.245 | - |
| Pot Cap-1 Maneuver | 312 | 1001 | - | - | 1509 | - |
| Stage 1 | 929 | - | - | - | - | - |
| Stage 2 | 421 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 234 | 1001 | - | - | 1509 | - |
| Mov Cap-2 Maneuver | 234 | - | - | - | - | - |
| Stage 1 | 929 | - | - | - | - | - |
| Stage 2 | 315 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10 | 0 | 6.9 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 857 | 1509 | - |
| HCM Lane V/C Ratio | - | - | 0.168 | 0.242 | - |
| HCM Control Delay (s) | - | - | 10 | 8.1 | 0 |
| HCM Lane LOS | - | - | B | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.6 | 1 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↰ | ↗ | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 245 | 0 | 35 | 311 | 113 | 0 | 1 | 20 | 68 | 3 | 4 |
| Future Vol, veh/h | 5 | 245 | 0 | 35 | 311 | 113 | 0 | 1 | 20 | 68 | 3 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 135 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 15 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 9 | 0 | 0 |
| Mvmt Flow | 5 | 255 | 0 | 36 | 324 | 118 | 0 | 1 | 21 | 71 | 3 | 4 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 442 | 0 | 0 | 255 | 0 | 0 | 724 | 779 | 255 | 672 | 661 | 324 |
| Stage 1 | - | - | - | - | - | - | 265 | 265 | - | 396 | 396 | - |
| Stage 2 | - | - | - | - | - | - | 459 | 514 | - | 276 | 265 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.19 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.19 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.19 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.581 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1129 | - | - | 1322 | - | - | 344 | 330 | 789 | 360 | 385 | 722 |
| Stage 1 | - | - | - | - | - | - | 745 | 693 | - | 616 | 607 | - |
| Stage 2 | - | - | - | - | - | - | 586 | 539 | - | 715 | 693 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1129 | - | - | 1322 | - | - | 329 | 316 | 789 | 338 | 369 | 722 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 329 | 316 | - | 338 | 369 | - |
| Stage 1 | - | - | - | - | - | - | 741 | 690 | - | 613 | 585 | - |
| Stage 2 | - | - | - | - | - | - | 558 | 519 | - | 692 | 690 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0.6 | 10 | 18.3 |
| HCM LOS | | | B | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 737 | 1129 | - | - | 1322 | - | - | 349 |
| HCM Lane V/C Ratio | 0.03 | 0.005 | - | - | 0.028 | - | - | 0.224 |
| HCM Control Delay (s) | 10 | 8.2 | 0 | - | 7.8 | 0 | - | 18.3 |
| HCM Lane LOS | B | A | A | - | A | A | - | C |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0.1 | - | - | 0.8 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 8 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 25 | 405 | 0 | 0 | 527 | 147 | 2 | 0 | 2 | 145 | 0 | 50 |
| Future Vol, veh/h | 25 | 405 | 0 | 0 | 527 | 147 | 2 | 0 | 2 | 145 | 0 | 50 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | - | - | - | 115 | - | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 92 | 92 | 94 | 94 | 92 | 92 | 92 | 94 | 92 | 94 |
| Heavy Vehicles, % | 8 | 5 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 27 | 431 | 0 | 0 | 561 | 156 | 2 | 0 | 2 | 154 | 0 | 53 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 717 | 0 | 0 | 431 | 0 | 0 | 1151 | 1202 | 431 | 1047 | 1046 | 561 |
| Stage 1 | - | - | - | - | - | - | 485 | 485 | - | 561 | 561 | - |
| Stage 2 | - | - | - | - | - | - | 666 | 717 | - | 486 | 485 | - |
| Critical Hdwy | 4.18 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.272 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.3 |
| Pot Cap-1 Maneuver | 857 | - | - | 1129 | - | - | 175 | 185 | 624 | 206 | 228 | 531 |
| Stage 1 | - | - | - | - | - | - | 563 | 552 | - | 512 | 510 | - |
| Stage 2 | - | - | - | - | - | - | 449 | 434 | - | 563 | 552 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 857 | - | - | 1129 | - | - | 154 | 179 | 624 | 200 | 221 | 531 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 154 | 179 | - | 200 | 221 | - |
| Stage 1 | - | - | - | - | - | - | 545 | 534 | - | 496 | 510 | - |
| Stage 2 | - | - | - | - | - | - | 404 | 434 | - | 543 | 534 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 19.8 | 52.2 |
| HCM LOS | | | C | F |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 247 | 857 | - | - | 1129 | - | - | 200 | 531 |
| HCM Lane V/C Ratio | 0.018 | 0.031 | - | - | - | - | - | 0.771 | 0.1 |
| HCM Control Delay (s) | 19.8 | 9.3 | - | - | 0 | - | - | 65.9 | 12.5 |
| HCM Lane LOS | C | A | - | - | A | - | - | F | B |
| HCM 95th %tile Q(veh) | 0.1 | 0.1 | - | - | 0 | - | - | 5.3 | 0.3 |

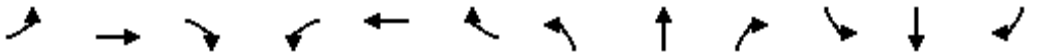
| Intersection | |
|---|---|
| Int Delay, s/veh | 6 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 347 | 185 | 228 | 619 | 51 | 116 |
| Future Vol, veh/h | 347 | 185 | 228 | 619 | 51 | 116 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | Stop |
| Storage Length | - | - | 190 | - | 0 | 200 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 3 | 6 | 3 | 3 | 5 | 5 |
| Mvmt Flow | 373 | 199 | 245 | 666 | 55 | 125 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 572 | 0 | 1629 | 473 |
| Stage 1 | - | - | - | - | 473 | - |
| Stage 2 | - | - | - | - | 1156 | - |
| Critical Hdwy | - | - | 4.13 | - | 6.45 | 6.25 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.45 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.45 | - |
| Follow-up Hdwy | - | - | 2.227 | - | 3.545 | 3.345 |
| Pot Cap-1 Maneuver | - | - | 996 | - | 110 | 585 |
| Stage 1 | - | - | - | - | 621 | - |
| Stage 2 | - | - | - | - | 296 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 996 | - | 83 | 585 |
| Mov Cap-2 Maneuver | - | - | - | - | 83 | - |
| Stage 1 | - | - | - | - | 621 | - |
| Stage 2 | - | - | - | - | 223 | - |

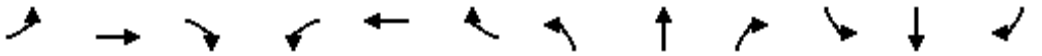
| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 2.6 | 42.1 |
| HCM LOS | | | E |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 83 | 585 | - | - | 996 | - |
| HCM Lane V/C Ratio | 0.661 | 0.213 | - | - | 0.246 | - |
| HCM Control Delay (s) | 108.9 | 12.8 | - | - | 9.8 | - |
| HCM Lane LOS | F | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 3.1 | 0.8 | - | - | 1 | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 58 | 406 | 0 | 0 | 547 | 115 | 300 | 0 | 224 | 0 | 0 | 0 |
| Future Volume (vph) | 58 | 406 | 0 | 0 | 547 | 115 | 300 | 0 | 224 | 0 | 0 | 0 |
| Ideal Flow (vphpl) | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 |
| Total Lost time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 | | | |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Frt | 1.00 | 1.00 | | | 1.00 | 0.85 | | 1.00 | 0.85 | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (prot) | 1599 | 1683 | | | 1699 | 1417 | | 1614 | 1444 | | | |
| Flt Permitted | 0.29 | 1.00 | | | 1.00 | 1.00 | | 0.95 | 1.00 | | | |
| Satd. Flow (perm) | 494 | 1683 | | | 1699 | 1417 | | 1614 | 1444 | | | |
| Peak-hour factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 61 | 427 | 0 | 0 | 576 | 121 | 316 | 0 | 236 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 68 | 0 | 0 | 157 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 61 | 427 | 0 | 0 | 576 | 53 | 0 | 316 | 79 | 0 | 0 | 0 |
| Heavy Vehicles (%) | 4% | 4% | 0% | 0% | 3% | 5% | 3% | 0% | 3% | 0% | 0% | 0% |
| Turn Type | Perm | NA | | | NA | Perm | Perm | NA | Perm | | | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | | |
| Permitted Phases | 4 | | | | | 8 | 2 | | 2 | | | |
| Actuated Green, G (s) | 15.2 | 15.2 | | | 15.2 | 15.2 | | 10.2 | 10.2 | | | |
| Effective Green, g (s) | 15.2 | 15.2 | | | 15.2 | 15.2 | | 11.6 | 11.6 | | | |
| Actuated g/C Ratio | 0.44 | 0.44 | | | 0.44 | 0.44 | | 0.33 | 0.33 | | | |
| Clearance Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 5.4 | 5.4 | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | | 2.5 | 2.5 | | | |
| Lane Grp Cap (vph) | 215 | 735 | | | 742 | 618 | | 538 | 481 | | | |
| v/s Ratio Prot | | 0.25 | | | c0.34 | | | | | | | |
| v/s Ratio Perm | 0.12 | | | | | 0.04 | | 0.20 | 0.05 | | | |
| v/c Ratio | 0.28 | 0.58 | | | 0.78 | 0.09 | | 0.59 | 0.16 | | | |
| Uniform Delay, d1 | 6.3 | 7.4 | | | 8.4 | 5.7 | | 9.6 | 8.2 | | | |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 1.0 | 1.4 | | | 5.4 | 0.1 | | 1.4 | 0.1 | | | |
| Delay (s) | 7.3 | 8.8 | | | 13.8 | 5.8 | | 11.0 | 8.3 | | | |
| Level of Service | A | A | | | B | A | | B | A | | | |
| Approach Delay (s) | | 8.6 | | | 12.4 | | | 9.8 | | | 0.0 | |
| Approach LOS | | A | | | B | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 2000 Control Delay | 10.5 | HCM 2000 Level of Service | B |
| HCM 2000 Volume to Capacity ratio | 0.69 | | |
| Actuated Cycle Length (s) | 34.8 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 67.6% | ICU Level of Service | C |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 58 | 406 | 0 | 0 | 547 | 115 | 300 | 0 | 224 | 0 | 0 | 0 |
| Future Volume (veh/h) | 58 | 406 | 0 | 0 | 547 | 115 | 300 | 0 | 224 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1695 | 1695 | 0 | 0 | 1709 | 1682 | 1709 | 1750 | 1709 | | | |
| Adj Flow Rate, veh/h | 61 | 427 | 0 | 0 | 576 | 121 | 316 | 0 | 236 | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | | |
| Percent Heavy Veh, % | 4 | 4 | 0 | 0 | 3 | 5 | 3 | 0 | 3 | | | |
| Cap, veh/h | 359 | 816 | 0 | 0 | 822 | 686 | 497 | 0 | 432 | | | |
| Arrive On Green | 0.48 | 0.48 | 0.00 | 0.00 | 0.48 | 0.48 | 0.26 | 0.00 | 0.30 | | | |
| Sat Flow, veh/h | 736 | 1695 | 0 | 0 | 1709 | 1425 | 1667 | 0 | 1448 | | | |
| Grp Volume(v), veh/h | 61 | 427 | 0 | 0 | 576 | 121 | 316 | 0 | 236 | | | |
| Grp Sat Flow(s),veh/h/ln | 736 | 1695 | 0 | 0 | 1709 | 1425 | 1667 | 0 | 1448 | | | |
| Q Serve(g_s), s | 2.6 | 6.3 | 0.0 | 0.0 | 9.6 | 1.7 | 6.1 | 0.0 | 5.0 | | | |
| Cycle Q Clear(g_c), s | 12.1 | 6.3 | 0.0 | 0.0 | 9.6 | 1.7 | 6.1 | 0.0 | 5.0 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Lane Grp Cap(c), veh/h | 359 | 816 | 0 | 0 | 822 | 686 | 497 | 0 | 432 | | | |
| V/C Ratio(X) | 0.17 | 0.52 | 0.00 | 0.00 | 0.70 | 0.18 | 0.64 | 0.00 | 0.55 | | | |
| Avail Cap(c_a), veh/h | 452 | 1029 | 0 | 0 | 1038 | 865 | 690 | 0 | 600 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 12.1 | 6.5 | 0.0 | 0.0 | 7.4 | 5.3 | 11.7 | 0.0 | 10.7 | | | |
| Incr Delay (d2), s/veh | 0.3 | 0.7 | 0.0 | 0.0 | 1.9 | 0.2 | 1.0 | 0.0 | 0.8 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 0.4 | 1.5 | 0.0 | 0.0 | 2.5 | 0.3 | 1.6 | 0.0 | 1.1 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 12.4 | 7.3 | 0.0 | 0.0 | 9.3 | 5.5 | 12.7 | 0.0 | 11.5 | | | |
| LnGrp LOS | B | A | A | A | A | A | B | A | B | | | |
| Approach Vol, veh/h | | 488 | | | 697 | | | 552 | | | | |
| Approach Delay, s/veh | | 7.9 | | | 8.6 | | | 12.2 | | | | |
| Approach LOS | | A | | | A | | | B | | | | |
| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 14.8 | | 21.4 | | | | 21.4 | | | | |
| Change Period (Y+Rc), s | | * 5.4 | | 4.0 | | | | 4.0 | | | | |
| Max Green Setting (Gmax), s | | * 14 | | 22.0 | | | | 22.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 8.1 | | 14.1 | | | | 11.6 | | | | |
| Green Ext Time (p_c), s | | 1.3 | | 3.3 | | | | 5.7 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 9.6 |
| HCM 6th LOS | A |

**Notes**

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.8 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 7 | 134 | 39 | 39 | 357 | 60 |
| Future Vol, veh/h | 7 | 134 | 39 | 39 | 357 | 60 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 17 | 5 | 3 | 4 | 5 | 0 |
| Mvmt Flow | 7 | 141 | 41 | 41 | 376 | 63 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 877 | 62 | 0 | 0 | 82 | 0 |
| Stage 1 | 62 | - | - | - | - | - |
| Stage 2 | 815 | - | - | - | - | - |
| Critical Hdwy | 6.57 | 6.25 | - | - | 4.15 | - |
| Critical Hdwy Stg 1 | 5.57 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.57 | - | - | - | - | - |
| Follow-up Hdwy | 3.653 | 3.345 | - | - | 2.245 | - |
| Pot Cap-1 Maneuver | 300 | 995 | - | - | 1497 | - |
| Stage 1 | 924 | - | - | - | - | - |
| Stage 2 | 410 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 222 | 995 | - | - | 1497 | - |
| Mov Cap-2 Maneuver | 222 | - | - | - | - | - |
| Stage 1 | 924 | - | - | - | - | - |
| Stage 2 | 303 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.1 | 0 | 7 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 848 | 1497 | - |
| HCM Lane V/C Ratio | - | - | 0.175 | 0.251 | - |
| HCM Control Delay (s) | - | - | 10.1 | 8.2 | 0 |
| HCM Lane LOS | - | - | B | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.6 | 1 | - |

Central at I-5 NB AM Peak Hour

| 2023 Existing Conditions | | | | | | | | | LOS | A |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase | Adj flow | Sat Flow | | | | | | | | |
| 1 | | | | | 1,2 | 0.076 | | | | |
| 2 NB | 127 | 1667 | 0.076 | | 5,6 | 0.000 | | | | |
| 3 | | | | | | | 0.076 | | Cycle Length | 29 |
| 4 EB | 262 | 1641 | 0.160 | | 3,4 | 0.160 | | | Lost Time/phase | 4 |
| 5 | | | | | 7,8 | 0.204 | 0.204 | | # phases | 2 |
| 6 | | | | | | | | | Total Lost Time | 8 |
| 7 | | | | | | | | | | |
| 8 WB | 338 | 1654 | 0.204 | Critical Pairs | | 0.281 | | Critical | v/c | 0.39 |

| 2025 Background Conditions | | | | | | | | | | A |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | | |
| 1 | | | | | 1,2 | 0.080 | | | | |
| 2 NB | 134 | 1667 | 0.080 | | 5,6 | 0.000 | | | | |
| 3 | | | | | | | 0.080 | | Cycle Length | 30 |
| 4 EB | 277 | 1641 | 0.169 | | 3,4 | 0.169 | | | Lost Time/phase | 4 |
| 5 | | | | | 7,8 | 0.215 | 0.215 | | # phases | 2 |
| 6 | | | | | | | | | Total Lost Time | 8 |
| 7 | | | | | | | | | | |
| 8 WB | 356 | 1654 | 0.215 | Critical Pairs | | 0.296 | | Critical | v/c | 0.40 |

| 2025 Build Conditions | | | | | | | | | | A |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | | |
| 1 | | | | | 1,2 | 0.083 | | | | |
| 2 NB | 138 | 1667 | 0.083 | | 5,6 | 0.000 | | | | |
| 3 | | | | | | | 0.083 | | Cycle Length | 30 |
| 4 EB | 301 | 1641 | 0.183 | | 3,4 | 0.183 | | | Lost Time/phase | 4 |
| 5 | | | | | 7,8 | 0.221 | 0.221 | | # phases | 2 |
| 6 | | | | | | | | | Total Lost Time | 8 |
| 7 | | | | | | | | | | |
| 8 WB | 365 | 1654 | 0.221 | Critical Pairs | | 0.303 | | Critical | v/c | 0.41 |

| 2030 Background Conditions | | | | | | | | | | A |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | | |
| 1 | | | | | 1,2 | 0.091 | | | | |
| 2 NB | 151 | 1667 | 0.091 | | 5,6 | 0.000 | | | | |
| 3 | | | | | | | 0.091 | | Cycle Length | 30 |
| 4 EB | 313 | 1641 | 0.191 | | 3,4 | 0.191 | | | Lost Time/phase | 4 |
| 5 | | | | | 7,8 | 0.244 | 0.244 | | # phases | 2 |
| 6 | | | | | | | | | Total Lost Time | 8 |
| 7 | | | | | | | | | | |
| 8 WB | 404 | 1654 | 0.244 | Critical Pairs | | 0.335 | | Critical | v/c | 0.46 |

| 2030 Build Conditions | | | | | | | | | | A |
|---|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | | |
| 1 | | | | | 1,2 | 0.093 | | | | |
| 2 NB | 155 | 1667 | 0.093 | | 5,6 | 0.000 | | | | |
| 3 | | | | | | | 0.093 | | Cycle Length | 31 |
| 4 EB | 338 | 1641 | 0.206 | | 3,4 | 0.206 | | | Lost Time/phase | 4 |
| 5 | | | | | 7,8 | 0.249 | 0.249 | | # phases | 2 |
| 6 | | | | | | | | | Total Lost Time | 8 |
| 7 | | | | | | | | | | |
| 8 WB | 412 | 1654 | 0.249 | Critical Pairs | | 0.342 | | Critical | v/c | 0.46 |

Central at I-5 NB PM Peak Hour

**2023 Existing Conditions** LOS A

| Phase | | Adj flow | Sat Flow | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 1,2 | 0.151 | | | | |
| 2 | NB | 251 | 1667 | 0.151 | 5,6 | 0.000 | | | | |
| 3 | | | | | | | 0.151 | | Cycle Length | 33 |
| 4 | EB | 343 | 1695 | 0.202 | 3,4 | 0.202 | | | Lost Time/phase | 4 |
| 5 | | | | | 7,8 | 0.267 | 0.267 | | # phases | 2 |
| 6 | | | | | | | | | Total Lost Time | 8 |
| 7 | | | | | | | | | | |
| 8 | WB | 456 | 1709 | 0.267 | Critical Pairs | 0.417 | | Critical | v/c | 0.55 |

**2025 Background Conditions** A

| Phase | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 1,2 | 0.159 | | | | |
| 2 | NB | 265 | 1667 | 0.159 | 5,6 | 0.000 | | | | |
| 3 | | | | | | | 0.159 | | Cycle Length | 33 |
| 4 | EB | 362 | 1695 | 0.214 | 3,4 | 0.214 | | | Lost Time/phase | 4 |
| 5 | | | | | 7,8 | 0.281 | 0.281 | | # phases | 2 |
| 6 | | | | | | | | | Total Lost Time | 8 |
| 7 | | | | | | | | | | |
| 8 | WB | 481 | 1709 | 0.281 | Critical Pairs | 0.440 | | Critical | v/c | 0.58 |

**2025 Build Conditions** A

| Phase | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 1,2 | 0.169 | | | | |
| 2 | NB | 282 | 1667 | 0.169 | 5,6 | 0.000 | | | | |
| 3 | | | | | | | 0.169 | | Cycle Length | 33 |
| 4 | EB | 380 | 1695 | 0.224 | 3,4 | 0.224 | | | Lost Time/phase | 4 |
| 5 | | | | | 7,8 | 0.300 | 0.300 | | # phases | 2 |
| 6 | | | | | | | | | Total Lost Time | 8 |
| 7 | | | | | | | | | | |
| 8 | WB | 513 | 1709 | 0.300 | Critical Pairs | 0.469 | | Critical | v/c | 0.62 |

**2030 Background Conditions** A

| Phase | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 1,2 | 0.180 | | | | |
| 2 | NB | 300 | 1667 | 0.180 | 5,6 | 0.000 | | | | |
| 3 | | | | | | | 0.180 | | Cycle Length | 33 |
| 4 | EB | 409 | 1695 | 0.241 | 3,4 | 0.241 | | | Lost Time/phase | 4 |
| 5 | | | | | 7,8 | 0.318 | 0.318 | | # phases | 2 |
| 6 | | | | | | | | | Total Lost Time | 8 |
| 7 | | | | | | | | | | |
| 8 | WB | 544 | 1709 | 0.318 | Critical Pairs | 0.498 | | Critical | v/c | 0.66 |

**2030 Build Conditions** A

| Phase | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 1,2 | 0.190 | | | | |
| 2 | NB | 316 | 1667 | 0.190 | 5,6 | 0.000 | | | | |
| 3 | | | | | | | 0.190 | | Cycle Length | 35 |
| 4 | EB | 427 | 1695 | 0.252 | 3,4 | 0.252 | | | Lost Time/phase | 4 |
| 5 | | | | | 7,8 | 0.337 | 0.337 | | # phases | 2 |
| 6 | | | | | | | | | Total Lost Time | 8 |
| 7 | | | | | | | | | | |
| 8 | WB | 576 | 1709 | 0.337 | Critical Pairs | 0.527 | | Critical | v/c | 0.68 |

RIDGEVIEW SUBDIVISION

APPENDIX F: QUEUING OUTPUTS

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #1

| Movement | EB | NB | SB |
|---|---|---|---|
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 5 | 46 | 28 |
| Average Queue (ft) | 1 | 21 | 20 |
| 95th Queue (ft) | 7 | 52 | 34 |
| Link Distance (ft) | 751 | 270 | 373 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 20 | 16 | 52 | 29 |
| Average Queue (ft) | 1 | 1 | 16 | 14 |
| 95th Queue (ft) | 9 | 8 | 47 | 34 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 20 | 16 | 56 | 29 |
| Average Queue (ft) | 1 | 1 | 17 | 16 |
| 95th Queue (ft) | 9 | 7 | 48 | 35 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, Interval #1

| Movement | EB | SB | SB |
|---|---|---|---|
| Directions Served | L | L | TR |
| Maximum Queue (ft) | 8 | 34 | 22 |
| Average Queue (ft) | 3 | 21 | 10 |
| 95th Queue (ft) | 13 | 41 | 28 |
| Link Distance (ft) | | | 604 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | 150 | 100 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 8: W Central & Dakota St, Interval #2

| Movement | EB | WB | SB | SB |
|---|---|---|---|---|
| Directions Served | L | R | L | TR |
| Maximum Queue (ft) | 14 | 4 | 42 | 22 |
| Average Queue (ft) | 2 | 0 | 18 | 6 |
| 95th Queue (ft) | 9 | 3 | 40 | 22 |
| Link Distance (ft) | | | | 604 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | 150 | 115 | 100 | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, All Intervals

| Movement | EB | WB | SB | SB |
|---|---|---|---|---|
| Directions Served | L | R | L | TR |
| Maximum Queue (ft) | 14 | 4 | 46 | 22 |
| Average Queue (ft) | 2 | 0 | 19 | 7 |
| 95th Queue (ft) | 10 | 3 | 40 | 24 |
| Link Distance (ft) | | | | 604 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | 150 | 115 | 100 | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 12: Park Hill & W Central , Interval #1

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 12 | 78 | 91 |
| Average Queue (ft) | 3 | 44 | 47 |
| 95th Queue (ft) | 18 | 85 | 98 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , Interval #2

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 15 | 79 | 82 |
| Average Queue (ft) | 1 | 33 | 36 |
| 95th Queue (ft) | 8 | 68 | 77 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , All Intervals

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 21 | 90 | 93 |
| Average Queue (ft) | 1 | 36 | 39 |
| 95th Queue (ft) | 11 | 73 | 83 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #1

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 55 | 86 | 92 | 44 | 83 | 69 |
| Average Queue (ft) | 24 | 52 | 48 | 15 | 43 | 33 |
| 95th Queue (ft) | 59 | 89 | 104 | 42 | 84 | 64 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 1 | 0 | | |
| Queuing Penalty (veh) | | | 1 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #2

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 57 | 93 | 106 | 61 | 89 | 49 |
| Average Queue (ft) | 12 | 33 | 36 | 13 | 43 | 22 |
| 95th Queue (ft) | 43 | 73 | 80 | 41 | 77 | 45 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 0 | 0 | | |
| Queuing Penalty (veh) | | | 0 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , All Intervals

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 61 | 101 | 122 | 61 | 98 | 70 |
| Average Queue (ft) | 15 | 38 | 39 | 13 | 43 | 25 |
| 95th Queue (ft) | 48 | 80 | 87 | 41 | 79 | 51 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 0 | 0 | | |
| Queuing Penalty (veh) | | | 0 | 0 | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #1

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 58 | 24 |
| Average Queue (ft) | 38 | 4 |
| 95th Queue (ft) | 63 | 22 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #2

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 70 | 48 |
| Average Queue (ft) | 36 | 8 |
| 95th Queue (ft) | 63 | 34 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, All Intervals

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 70 | 48 |
| Average Queue (ft) | 37 | 7 |
| 95th Queue (ft) | 63 | 31 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 1
Network wide Queuing Penalty, Interval #2: 0
Network wide Queuing Penalty, All Intervals: 0

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #1

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 10 | 4 | 39 | 29 |
| Average Queue (ft) | 1 | 1 | 18 | 20 |
| 95th Queue (ft) | 11 | 7 | 45 | 37 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 10 | 10 | 54 | 47 |
| Average Queue (ft) | 0 | 0 | 15 | 18 |
| 95th Queue (ft) | 6 | 6 | 44 | 40 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 15 | 14 | 54 | 47 |
| Average Queue (ft) | 1 | 0 | 16 | 18 |
| 95th Queue (ft) | 7 | 6 | 44 | 39 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, Interval #1

| Movement | EB | SB | SB |
|---|---|---|---|
| Directions Served | L | L | TR |
| Maximum Queue (ft) | 9 | 30 | 22 |
| Average Queue (ft) | 2 | 21 | 7 |
| 95th Queue (ft) | 11 | 40 | 25 |
| Link Distance (ft) | | | 604 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | 150 | 100 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 8: W Central & Dakota St, Interval #2

| Movement | EB | WB | SB | SB |
|---|---|---|---|---|
| Directions Served | L | R | L | TR |
| Maximum Queue (ft) | 11 | 4 | 47 | 22 |
| Average Queue (ft) | 2 | 0 | 19 | 7 |
| 95th Queue (ft) | 10 | 3 | 42 | 23 |
| Link Distance (ft) | | | | 604 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | 150 | 115 | 100 | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, All Intervals

| Movement | EB | WB | SB | SB |
|---|---|---|---|---|
| Directions Served | L | R | L | TR |
| Maximum Queue (ft) | 12 | 4 | 47 | 22 |
| Average Queue (ft) | 2 | 0 | 20 | 7 |
| 95th Queue (ft) | 10 | 2 | 41 | 24 |
| Link Distance (ft) | | | | 604 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | 150 | 115 | 100 | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 12: Park Hill & W Central , Interval #1

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 17 | 95 | 72 |
| Average Queue (ft) | 4 | 51 | 38 |
| 95th Queue (ft) | 17 | 93 | 83 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , Interval #2

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 16 | 83 | 71 |
| Average Queue (ft) | 2 | 36 | 29 |
| 95th Queue (ft) | 12 | 72 | 65 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , All Intervals

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 21 | 102 | 88 |
| Average Queue (ft) | 2 | 39 | 31 |
| 95th Queue (ft) | 13 | 79 | 70 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #1

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 57 | 80 | 100 | 45 | 89 | 62 |
| Average Queue (ft) | 20 | 51 | 57 | 18 | 50 | 34 |
| 95th Queue (ft) | 59 | 88 | 113 | 56 | 90 | 63 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 1 | | | |
| Queuing Penalty (veh) | | | 1 | | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #2

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 59 | 114 | 120 | 60 | 99 | 71 |
| Average Queue (ft) | 13 | 42 | 41 | 12 | 44 | 24 |
| 95th Queue (ft) | 47 | 86 | 88 | 39 | 88 | 52 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 0 | 0 | | |
| Queuing Penalty (veh) | | | 0 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , All Intervals

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 68 | 114 | 122 | 81 | 102 | 76 |
| Average Queue (ft) | 15 | 44 | 45 | 13 | 46 | 26 |
| 95th Queue (ft) | 50 | 87 | 96 | 44 | 89 | 55 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 1 | 0 | | |
| Queuing Penalty (veh) | | | 1 | 0 | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #1

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 78 | 44 |
| Average Queue (ft) | 44 | 16 |
| 95th Queue (ft) | 81 | 49 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #2

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 78 | 48 |
| Average Queue (ft) | 34 | 8 |
| 95th Queue (ft) | 62 | 32 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, All Intervals

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 91 | 57 |
| Average Queue (ft) | 36 | 10 |
| 95th Queue (ft) | 68 | 37 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 1
Network wide Queuing Penalty, Interval #2: 0
Network wide Queuing Penalty, All Intervals: 1

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #1

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 5 | 10 | 40 | 38 |
| Average Queue (ft) | 1 | 1 | 20 | 19 |
| 95th Queue (ft) | 7 | 11 | 49 | 39 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 4 | 16 | 61 | 48 |
| Average Queue (ft) | 0 | 1 | 18 | 21 |
| 95th Queue (ft) | 4 | 10 | 48 | 44 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 5 | 21 | 64 | 48 |
| Average Queue (ft) | 0 | 1 | 19 | 21 |
| 95th Queue (ft) | 5 | 10 | 48 | 43 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, Interval #1

| Movement | EB | SB | SB |
|---|---|---|---|
| Directions Served | L | L | TR |
| Maximum Queue (ft) | 12 | 46 | 22 |
| Average Queue (ft) | 4 | 25 | 6 |
| 95th Queue (ft) | 15 | 45 | 23 |
| Link Distance (ft) | | | 604 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | 150 | 100 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 8: W Central & Dakota St, Interval #2

| Movement | EB | SB | SB |
|---|---|---|---|
| Directions Served | L | L | TR |
| Maximum Queue (ft) | 18 | 46 | 27 |
| Average Queue (ft) | 2 | 20 | 6 |
| 95th Queue (ft) | 12 | 41 | 23 |
| Link Distance (ft) | | | 604 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | 150 | 100 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 8: W Central & Dakota St, All Intervals

| Movement | EB | SB | SB |
|---|---|---|---|
| Directions Served | L | L | TR |
| Maximum Queue (ft) | 18 | 50 | 27 |
| Average Queue (ft) | 3 | 21 | 6 |
| 95th Queue (ft) | 13 | 42 | 23 |
| Link Distance (ft) | | | 604 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | 150 | 100 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , Interval #1

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 32 | 119 | 90 |
| Average Queue (ft) | 10 | 66 | 51 |
| 95th Queue (ft) | 36 | 119 | 95 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , Interval #2

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 33 | 100 | 92 |
| Average Queue (ft) | 5 | 40 | 38 |
| 95th Queue (ft) | 22 | 81 | 81 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , All Intervals

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 43 | 122 | 112 |
| Average Queue (ft) | 6 | 46 | 41 |
| 95th Queue (ft) | 26 | 94 | 85 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #1

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 82 | 102 | 110 | 54 | 116 | 67 |
| Average Queue (ft) | 37 | 58 | 57 | 19 | 65 | 38 |
| 95th Queue (ft) | 85 | 103 | 112 | 52 | 114 | 72 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 2 | 0 | | |
| Queuing Penalty (veh) | | | 2 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #2

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 67 | 102 | 126 | 64 | 105 | 59 |
| Average Queue (ft) | 20 | 43 | 45 | 12 | 45 | 26 |
| 95th Queue (ft) | 55 | 85 | 88 | 35 | 84 | 53 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 1 | 0 | | |
| Queuing Penalty (veh) | | | 1 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , All Intervals

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 94 | 113 | 127 | 76 | 126 | 74 |
| Average Queue (ft) | 24 | 47 | 48 | 14 | 50 | 29 |
| 95th Queue (ft) | 65 | 91 | 95 | 40 | 94 | 59 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 1 | 0 | | |
| Queuing Penalty (veh) | | | 1 | 0 | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #1

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 78 | 71 |
| Average Queue (ft) | 48 | 24 |
| 95th Queue (ft) | 80 | 70 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #2

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 74 | 69 |
| Average Queue (ft) | 39 | 10 |
| 95th Queue (ft) | 70 | 42 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, All Intervals

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 88 | 76 |
| Average Queue (ft) | 41 | 13 |
| 95th Queue (ft) | 73 | 51 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 2
Network wide Queuing Penalty, Interval #2: 1
Network wide Queuing Penalty, All Intervals: 1

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #1

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 5 | 10 | 29 | 43 |
| Average Queue (ft) | 1 | 1 | 12 | 28 |
| 95th Queue (ft) | 7 | 11 | 36 | 43 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 9 | 11 | 60 | 56 |
| Average Queue (ft) | 0 | 1 | 16 | 26 |
| 95th Queue (ft) | 6 | 8 | 48 | 46 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 9 | 16 | 60 | 56 |
| Average Queue (ft) | 0 | 1 | 15 | 27 |
| 95th Queue (ft) | 6 | 9 | 45 | 45 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, Interval #1

| Movement | EB | WB | SB | SB |
|---|---|---|---|---|
| Directions Served | L | R | L | TR |
| Maximum Queue (ft) | 12 | 8 | 42 | 22 |
| Average Queue (ft) | 3 | 1 | 25 | 10 |
| 95th Queue (ft) | 12 | 9 | 45 | 28 |
| Link Distance (ft) | | | | 604 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | 150 | 115 | 100 | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, Interval #2

| Movement | EB | WB | SB | SB |
|---|---|---|---|---|
| Directions Served | L | R | L | TR |
| Maximum Queue (ft) | 14 | 4 | 48 | 22 |
| Average Queue (ft) | 3 | 0 | 19 | 9 |
| 95th Queue (ft) | 12 | 3 | 41 | 26 |
| Link Distance (ft) | | | | 604 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | 150 | 115 | 100 | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, All Intervals

| Movement | EB | WB | SB | SB |
|---|---|---|---|---|
| Directions Served | L | R | L | TR |
| Maximum Queue (ft) | 14 | 12 | 48 | 22 |
| Average Queue (ft) | 3 | 0 | 21 | 9 |
| 95th Queue (ft) | 12 | 5 | 43 | 27 |
| Link Distance (ft) | | | | 604 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | 150 | 115 | 100 | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 12: Park Hill & W Central , Interval #1

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 22 | 97 | 75 |
| Average Queue (ft) | 5 | 55 | 40 |
| 95th Queue (ft) | 23 | 109 | 80 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , Interval #2

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 25 | 86 | 79 |
| Average Queue (ft) | 2 | 35 | 37 |
| 95th Queue (ft) | 14 | 72 | 74 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , All Intervals

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 30 | 100 | 93 |
| Average Queue (ft) | 3 | 40 | 38 |
| 95th Queue (ft) | 16 | 84 | 76 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #1

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 83 | 99 | 105 | 81 | 108 | 56 |
| Average Queue (ft) | 27 | 55 | 52 | 19 | 46 | 33 |
| 95th Queue (ft) | 80 | 108 | 104 | 53 | 90 | 59 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 1 | 0 | | |
| Queuing Penalty (veh) | | | 1 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #2

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 71 | 106 | 93 | 61 | 107 | 66 |
| Average Queue (ft) | 17 | 44 | 37 | 14 | 47 | 25 |
| 95th Queue (ft) | 53 | 87 | 76 | 42 | 88 | 50 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 0 | 0 | | |
| Queuing Penalty (veh) | | | 0 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , All Intervals

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 94 | 118 | 116 | 96 | 113 | 66 |
| Average Queue (ft) | 19 | 47 | 40 | 15 | 47 | 27 |
| 95th Queue (ft) | 61 | 93 | 84 | 45 | 88 | 53 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 0 | 0 | | |
| Queuing Penalty (veh) | | | 0 | 0 | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #1

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 70 | 28 |
| Average Queue (ft) | 41 | 5 |
| 95th Queue (ft) | 73 | 27 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #2

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 75 | 60 |
| Average Queue (ft) | 39 | 11 |
| 95th Queue (ft) | 68 | 43 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, All Intervals

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 84 | 60 |
| Average Queue (ft) | 40 | 10 |
| 95th Queue (ft) | 69 | 40 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 1
Network wide Queuing Penalty, Interval #2: 0
Network wide Queuing Penalty, All Intervals: 0

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #1

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 5 | 11 | 46 | 49 |
| Average Queue (ft) | 1 | 2 | 19 | 30 |
| 95th Queue (ft) | 7 | 14 | 50 | 48 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 6 | 21 | 57 | 48 |
| Average Queue (ft) | 0 | 2 | 18 | 26 |
| 95th Queue (ft) | 6 | 13 | 49 | 42 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 10 | 22 | 58 | 52 |
| Average Queue (ft) | 1 | 2 | 18 | 27 |
| 95th Queue (ft) | 6 | 13 | 49 | 44 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, Interval #1

| Movement | EB | SB | SB |
|---|---|---|---|
| Directions Served | L | L | TR |
| Maximum Queue (ft) | 12 | 33 | 22 |
| Average Queue (ft) | 3 | 22 | 11 |
| 95th Queue (ft) | 12 | 42 | 29 |
| Link Distance (ft) | | | 604 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | 150 | 100 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 8: W Central & Dakota St, Interval #2

| Movement | EB | WB | SB | SB |
|---|---|---|---|---|
| Directions Served | L | R | L | TR |
| Maximum Queue (ft) | 15 | 4 | 46 | 31 |
| Average Queue (ft) | 4 | 0 | 21 | 13 |
| 95th Queue (ft) | 14 | 3 | 43 | 32 |
| Link Distance (ft) | | | | 604 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | 150 | 115 | 100 | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, All Intervals

| Movement | EB | WB | SB | SB |
|---|---|---|---|---|
| Directions Served | L | R | L | TR |
| Maximum Queue (ft) | 15 | 4 | 46 | 31 |
| Average Queue (ft) | 4 | 0 | 21 | 12 |
| 95th Queue (ft) | 14 | 3 | 43 | 31 |
| Link Distance (ft) | | | | 604 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | 150 | 115 | 100 | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 12: Park Hill & W Central , Interval #1

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 32 | 88 | 124 |
| Average Queue (ft) | 6 | 55 | 51 |
| 95th Queue (ft) | 36 | 89 | 106 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , Interval #2

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 33 | 89 | 99 |
| Average Queue (ft) | 5 | 40 | 41 |
| 95th Queue (ft) | 21 | 77 | 82 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , All Intervals

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 52 | 96 | 126 |
| Average Queue (ft) | 5 | 44 | 43 |
| 95th Queue (ft) | 26 | 81 | 89 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #1

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 56 | 101 | 129 | 85 | 119 | 81 |
| Average Queue (ft) | 25 | 60 | 70 | 27 | 63 | 43 |
| 95th Queue (ft) | 62 | 102 | 131 | 76 | 114 | 78 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 2 | 0 | | |
| Queuing Penalty (veh) | | | 2 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #2

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 66 | 104 | 118 | 74 | 85 | 64 |
| Average Queue (ft) | 20 | 48 | 47 | 16 | 41 | 30 |
| 95th Queue (ft) | 58 | 90 | 104 | 52 | 75 | 57 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 1 | 0 | | |
| Queuing Penalty (veh) | | | 1 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , All Intervals

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 70 | 115 | 141 | 112 | 119 | 83 |
| Average Queue (ft) | 21 | 51 | 53 | 18 | 47 | 33 |
| 95th Queue (ft) | 59 | 94 | 113 | 59 | 88 | 64 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 1 | 0 | | |
| Queuing Penalty (veh) | | | 1 | 0 | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #1

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 78 | 52 |
| Average Queue (ft) | 44 | 12 |
| 95th Queue (ft) | 70 | 45 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #2

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 65 | 65 |
| Average Queue (ft) | 38 | 10 |
| 95th Queue (ft) | 63 | 42 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, All Intervals

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 78 | 69 |
| Average Queue (ft) | 40 | 10 |
| 95th Queue (ft) | 65 | 43 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 3
Network wide Queuing Penalty, Interval #2: 1
Network wide Queuing Penalty, All Intervals: 1

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #1

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 5 | 26 | 29 | 36 |
| Average Queue (ft) | 1 | 6 | 13 | 16 |
| 95th Queue (ft) | 7 | 23 | 37 | 40 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 10 | 22 | 30 | 49 |
| Average Queue (ft) | 1 | 3 | 14 | 19 |
| 95th Queue (ft) | 8 | 18 | 38 | 41 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 15 | 28 | 30 | 54 |
| Average Queue (ft) | 1 | 4 | 14 | 18 |
| 95th Queue (ft) | 7 | 19 | 38 | 41 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, Interval #1

| Movement | EB | WB | NB | SB | SB |
|---|---|---|---|---|---|
| Directions Served | L | R | LTR | L | TR |
| Maximum Queue (ft) | 14 | 4 | 18 | 68 | 41 |
| Average Queue (ft) | 5 | 0 | 4 | 43 | 21 |
| 95th Queue (ft) | 16 | 5 | 18 | 80 | 42 |
| Link Distance (ft) | | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |
| Storage Bay Dist (ft) | 150 | 115 | | 100 | |
| Storage Blk Time (%) | | | | 0 | |
| Queuing Penalty (veh) | | | | 0 | |

## Intersection: 8: W Central & Dakota St, Interval #2

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 18 | 3 | 4 | 18 | 96 | 32 |
| Average Queue (ft) | 3 | 0 | 0 | 2 | 45 | 18 |
| 95th Queue (ft) | 14 | 3 | 3 | 12 | 82 | 35 |
| Link Distance (ft) | | 1000 | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 150 | | 115 | | 100 | |
| Storage Blk Time (%) | | | | | 0 | |
| Queuing Penalty (veh) | | | | | 0 | |

## Intersection: 8: W Central & Dakota St, All Intervals

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 18 | 3 | 7 | 24 | 99 | 41 |
| Average Queue (ft) | 4 | 0 | 0 | 2 | 44 | 18 |
| 95th Queue (ft) | 14 | 2 | 4 | 14 | 81 | 37 |
| Link Distance (ft) | | 1000 | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 150 | | 115 | | 100 | |
| Storage Blk Time (%) | | | | | 0 | |
| Queuing Penalty (veh) | | | | | 0 | |

## Intersection: 12: Park Hill & W Central , Interval #1

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 13 | 81 | 54 |
| Average Queue (ft) | 2 | 46 | 28 |
| 95th Queue (ft) | 14 | 81 | 58 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , Interval #2

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 34 | 106 | 65 |
| Average Queue (ft) | 3 | 43 | 30 |
| 95th Queue (ft) | 19 | 78 | 60 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , All Intervals

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 34 | 110 | 73 |
| Average Queue (ft) | 3 | 44 | 30 |
| 95th Queue (ft) | 18 | 79 | 59 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #1

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 44 | 89 | 132 | 69 | 116 | 86 |
| Average Queue (ft) | 27 | 62 | 72 | 22 | 68 | 41 |
| 95th Queue (ft) | 55 | 91 | 126 | 58 | 112 | 71 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 2 | 0 | | |
| Queuing Penalty (veh) | | | 2 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #2

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 60 | 116 | 150 | 67 | 122 | 94 |
| Average Queue (ft) | 31 | 57 | 62 | 16 | 63 | 44 |
| 95th Queue (ft) | 58 | 99 | 118 | 51 | 109 | 76 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 2 | 0 | | |
| Queuing Penalty (veh) | | | 1 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , All Intervals

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 60 | 118 | 161 | 83 | 129 | 99 |
| Average Queue (ft) | 30 | 58 | 65 | 17 | 64 | 43 |
| 95th Queue (ft) | 57 | 98 | 120 | 53 | 110 | 75 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 2 | 0 | | |
| Queuing Penalty (veh) | | | 2 | 0 | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #1

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 68 | 14 | 49 |
| Average Queue (ft) | 37 | 2 | 18 |
| 95th Queue (ft) | 68 | 21 | 52 |
| Link Distance (ft) | 750 | 360 | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #2

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 64 | 4 | 64 |
| Average Queue (ft) | 32 | 0 | 17 |
| 95th Queue (ft) | 54 | 4 | 54 |
| Link Distance (ft) | 750 | 360 | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, All Intervals

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 75 | 18 | 69 |
| Average Queue (ft) | 33 | 1 | 18 |
| 95th Queue (ft) | 58 | 11 | 54 |
| Link Distance (ft) | 750 | 360 | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 3
Network wide Queuing Penalty, Interval #2: 2
Network wide Queuing Penalty, All Intervals: 2

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #1

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LT | LTR | LTR |
| Maximum Queue (ft) | 12 | 30 | 45 |
| Average Queue (ft) | 2 | 16 | 18 |
| 95th Queue (ft) | 13 | 40 | 50 |
| Link Distance (ft) | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 14 | 37 | 30 | 49 |
| Average Queue (ft) | 1 | 5 | 16 | 18 |
| 95th Queue (ft) | 9 | 24 | 39 | 44 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 14 | 37 | 30 | 54 |
| Average Queue (ft) | 1 | 4 | 16 | 18 |
| 95th Queue (ft) | 8 | 22 | 39 | 45 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, Interval #1

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 20 | 3 | 4 | 18 | 93 | 27 |
| Average Queue (ft) | 6 | 0 | 1 | 2 | 56 | 16 |
| 95th Queue (ft) | 21 | 4 | 6 | 13 | 100 | 34 |
| Link Distance (ft) | | 1000 | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 150 | | 115 | | 100 | |
| Storage Blk Time (%) | | | | | 2 | |
| Queuing Penalty (veh) | | | | | 1 | |

## Intersection: 8: W Central & Dakota St, Interval #2

| Movement | EB | WB | NB | SB | SB |
|---|---|---|---|---|---|
| Directions Served | L | R | LTR | L | TR |
| Maximum Queue (ft) | 27 | 12 | 30 | 94 | 41 |
| Average Queue (ft) | 4 | 1 | 3 | 45 | 19 |
| 95th Queue (ft) | 17 | 6 | 16 | 75 | 37 |
| Link Distance (ft) | | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |
| Storage Bay Dist (ft) | 150 | 115 | | 100 | |
| Storage Blk Time (%) | | | | 0 | |
| Queuing Penalty (veh) | | | | 0 | |

## Intersection: 8: W Central & Dakota St, All Intervals

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 32 | 3 | 12 | 30 | 100 | 41 |
| Average Queue (ft) | 4 | 0 | 1 | 2 | 47 | 19 |
| 95th Queue (ft) | 18 | 2 | 6 | 16 | 83 | 36 |
| Link Distance (ft) | | 1000 | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 150 | | 115 | | 100 | |
| Storage Blk Time (%) | | | | | 1 | |
| Queuing Penalty (veh) | | | | | 0 | |

## Intersection: 12: Park Hill & W Central , Interval #1

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 27 | 67 | 61 |
| Average Queue (ft) | 5 | 47 | 36 |
| 95th Queue (ft) | 23 | 76 | 64 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , Interval #2

| Movement | EB | WB | NB | NB |
|---|---|---|---|---|
| Directions Served | TR | L | L | R |
| Maximum Queue (ft) | 25 | 86 | 94 | 23 |
| Average Queue (ft) | 2 | 45 | 34 | 1 |
| 95th Queue (ft) | 14 | 74 | 75 | 19 |
| Link Distance (ft) | 1000 | | 573 | |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | 190 | | 200 |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 12: Park Hill & W Central , All Intervals

| Movement | EB | WB | NB | NB |
|---|---|---|---|---|
| Directions Served | TR | L | L | R |
| Maximum Queue (ft) | 30 | 86 | 98 | 23 |
| Average Queue (ft) | 3 | 45 | 35 | 1 |
| 95th Queue (ft) | 16 | 74 | 72 | 17 |
| Link Distance (ft) | 1000 | | 573 | |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | 190 | | 200 |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #1

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 61 | 102 | 138 | 93 | 151 | 88 |
| Average Queue (ft) | 31 | 69 | 78 | 31 | 78 | 49 |
| 95th Queue (ft) | 62 | 106 | 147 | 93 | 150 | 86 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 4 | 0 | 0 | |
| Queuing Penalty (veh) | | | 4 | 0 | 1 | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #2

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 93 | 118 | 158 | 99 | 129 | 91 |
| Average Queue (ft) | 30 | 66 | 70 | 20 | 68 | 45 |
| 95th Queue (ft) | 71 | 101 | 126 | 58 | 116 | 76 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 3 | 0 | | |
| Queuing Penalty (veh) | | | 3 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , All Intervals

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 97 | 121 | 169 | 111 | 161 | 101 |
| Average Queue (ft) | 30 | 67 | 72 | 22 | 71 | 46 |
| 95th Queue (ft) | 69 | 102 | 131 | 68 | 125 | 79 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 3 | 0 | 0 | |
| Queuing Penalty (veh) | | | 3 | 0 | 0 | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #1

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 62 | 44 |
| Average Queue (ft) | 33 | 19 |
| 95th Queue (ft) | 61 | 52 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #2

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 80 | 8 | 74 |
| Average Queue (ft) | 35 | 0 | 22 |
| 95th Queue (ft) | 61 | 5 | 59 |
| Link Distance (ft) | 750 | 360 | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, All Intervals

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 85 | 8 | 74 |
| Average Queue (ft) | 34 | 0 | 21 |
| 95th Queue (ft) | 61 | 4 | 58 |
| Link Distance (ft) | 750 | 360 | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 6
Network wide Queuing Penalty, Interval #2: 3
Network wide Queuing Penalty, All Intervals: 4

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #1

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 10 | 27 | 30 | 40 |
| Average Queue (ft) | 1 | 8 | 14 | 23 |
| 95th Queue (ft) | 11 | 31 | 37 | 52 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 20 | 43 | 30 | 62 |
| Average Queue (ft) | 1 | 7 | 15 | 22 |
| 95th Queue (ft) | 9 | 31 | 39 | 47 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 24 | 48 | 30 | 62 |
| Average Queue (ft) | 1 | 7 | 15 | 22 |
| 95th Queue (ft) | 10 | 31 | 39 | 48 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, Interval #1

| Movement | EB | WB | NB | SB | SB |
|---|---|---|---|---|---|
| Directions Served | L | R | LTR | L | TR |
| Maximum Queue (ft) | 15 | 4 | 24 | 92 | 41 |
| Average Queue (ft) | 4 | 1 | 5 | 58 | 23 |
| 95th Queue (ft) | 14 | 6 | 23 | 100 | 43 |
| Link Distance (ft) | | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |
| Storage Bay Dist (ft) | 150 | 115 | | 100 | |
| Storage Blk Time (%) | | | | 2 | |
| Queuing Penalty (veh) | | | | 1 | |

## Intersection: 8: W Central & Dakota St, Interval #2

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 40 | 9 | 8 | 30 | 111 | 65 |
| Average Queue (ft) | 7 | 0 | 1 | 3 | 55 | 20 |
| 95th Queue (ft) | 27 | 8 | 7 | 19 | 99 | 50 |
| Link Distance (ft) | | 1000 | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 150 | | 115 | | 100 | |
| Storage Blk Time (%) | | | | | 2 | |
| Queuing Penalty (veh) | | | | | 1 | |

## Intersection: 8: W Central & Dakota St, All Intervals

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 40 | 9 | 12 | 30 | 114 | 70 |
| Average Queue (ft) | 6 | 0 | 1 | 4 | 56 | 21 |
| 95th Queue (ft) | 24 | 6 | 7 | 20 | 99 | 49 |
| Link Distance (ft) | | 1000 | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 150 | | 115 | | 100 | |
| Storage Blk Time (%) | | | | | 2 | |
| Queuing Penalty (veh) | | | | | 1 | |

## Intersection: 12: Park Hill & W Central , Interval #1

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 17 | 96 | 70 |
| Average Queue (ft) | 4 | 55 | 41 |
| 95th Queue (ft) | 18 | 92 | 76 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , Interval #2

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 37 | 101 | 87 |
| Average Queue (ft) | 4 | 49 | 34 |
| 95th Queue (ft) | 22 | 87 | 70 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , All Intervals

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 37 | 113 | 93 |
| Average Queue (ft) | 4 | 51 | 35 |
| 95th Queue (ft) | 21 | 88 | 72 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #1

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 65 | 107 | 184 | 89 | 125 | 93 |
| Average Queue (ft) | 36 | 75 | 103 | 35 | 81 | 53 |
| 95th Queue (ft) | 81 | 118 | 189 | 97 | 133 | 93 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 7 | 0 | | |
| Queuing Penalty (veh) | | | 9 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #2

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 74 | 125 | 229 | 104 | 159 | 92 |
| Average Queue (ft) | 30 | 66 | 92 | 25 | 78 | 48 |
| 95th Queue (ft) | 67 | 112 | 182 | 70 | 131 | 84 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 5 | 0 | | |
| Queuing Penalty (veh) | | | 6 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , All Intervals

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 83 | 131 | 247 | 113 | 167 | 110 |
| Average Queue (ft) | 32 | 69 | 95 | 28 | 79 | 49 |
| 95th Queue (ft) | 70 | 114 | 184 | 77 | 131 | 86 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 6 | 0 | | |
| Queuing Penalty (veh) | | | 6 | 0 | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #1

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 64 | 56 |
| Average Queue (ft) | 40 | 32 |
| 95th Queue (ft) | 73 | 65 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #2

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 75 | 4 | 63 |
| Average Queue (ft) | 35 | 0 | 19 |
| 95th Queue (ft) | 62 | 4 | 57 |
| Link Distance (ft) | 750 | 360 | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, All Intervals

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 82 | 4 | 66 |
| Average Queue (ft) | 37 | 0 | 22 |
| 95th Queue (ft) | 65 | 3 | 60 |
| Link Distance (ft) | 750 | 360 | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 10
Network wide Queuing Penalty, Interval #2: 7
Network wide Queuing Penalty, All Intervals: 8

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #1

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 5 | 35 | 30 | 55 |
| Average Queue (ft) | 2 | 9 | 16 | 25 |
| 95th Queue (ft) | 12 | 33 | 39 | 55 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 15 | 42 | 39 | 81 |
| Average Queue (ft) | 1 | 10 | 15 | 32 |
| 95th Queue (ft) | 8 | 34 | 40 | 64 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 15 | 48 | 39 | 86 |
| Average Queue (ft) | 1 | 9 | 15 | 30 |
| 95th Queue (ft) | 9 | 34 | 40 | 62 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, Interval #1

| Movement | EB | WB | NB | SB | SB |
|---|---|---|---|---|---|
| Directions Served | L | R | LTR | L | TR |
| Maximum Queue (ft) | 23 | 4 | 18 | 77 | 31 |
| Average Queue (ft) | 8 | 1 | 4 | 50 | 22 |
| 95th Queue (ft) | 24 | 6 | 21 | 85 | 38 |
| Link Distance (ft) | | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |
| Storage Bay Dist (ft) | 150 | 115 | | 100 | |
| Storage Blk Time (%) | | | | 0 | |
| Queuing Penalty (veh) | | | | 0 | |

## Intersection: 8: W Central & Dakota St, Interval #2

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 41 | 5 | 16 | 24 | 105 | 41 |
| Average Queue (ft) | 9 | 0 | 1 | 2 | 44 | 18 |
| 95th Queue (ft) | 27 | 4 | 9 | 15 | 85 | 39 |
| Link Distance (ft) | | 1000 | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 150 | | 115 | | 100 | |
| Storage Blk Time (%) | | | | | 1 | |
| Queuing Penalty (veh) | | | | | 0 | |

## Intersection: 8: W Central & Dakota St, All Intervals

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 42 | 5 | 16 | 24 | 105 | 41 |
| Average Queue (ft) | 9 | 0 | 1 | 3 | 45 | 19 |
| 95th Queue (ft) | 26 | 3 | 8 | 17 | 85 | 39 |
| Link Distance (ft) | | 1000 | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 150 | | 115 | | 100 | |
| Storage Blk Time (%) | | | | | 1 | |
| Queuing Penalty (veh) | | | | | 0 | |

## Intersection: 12: Park Hill & W Central , Interval #1

| Movement | EB | WB | NB | NB |
|---|---|---|---|---|
| Directions Served | TR | L | L | R |
| Maximum Queue (ft) | 24 | 79 | 87 | 58 |
| Average Queue (ft) | 6 | 52 | 44 | 8 |
| 95th Queue (ft) | 25 | 85 | 94 | 53 |
| Link Distance (ft) | 1000 | | 573 | |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | 190 | | 200 |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 12: Park Hill & W Central , Interval #2

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 36 | 102 | 70 |
| Average Queue (ft) | 5 | 48 | 30 |
| 95th Queue (ft) | 24 | 87 | 60 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , All Intervals

| Movement | EB | WB | NB | NB |
|---|---|---|---|---|
| Directions Served | TR | L | L | R |
| Maximum Queue (ft) | 42 | 108 | 93 | 58 |
| Average Queue (ft) | 5 | 49 | 34 | 2 |
| 95th Queue (ft) | 24 | 87 | 71 | 25 |
| Link Distance (ft) | 1000 | | 573 | |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | 190 | | 200 |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #1

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 70 | 94 | 157 | 84 | 109 | 81 |
| Average Queue (ft) | 32 | 71 | 101 | 23 | 67 | 50 |
| 95th Queue (ft) | 76 | 102 | 190 | 68 | 107 | 91 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 5 | 0 | | |
| Queuing Penalty (veh) | | | 6 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #2

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 70 | 154 | 179 | 60 | 156 | 96 |
| Average Queue (ft) | 30 | 69 | 74 | 16 | 69 | 42 |
| 95th Queue (ft) | 60 | 119 | 139 | 45 | 121 | 75 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | 0 | 3 | 0 | 0 | |
| Queuing Penalty (veh) | | 0 | 3 | 0 | 0 | |

## Intersection: 14: I-5 NB Ramps & W Central , All Intervals

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 87 | 154 | 205 | 98 | 156 | 104 |
| Average Queue (ft) | 30 | 69 | 80 | 17 | 68 | 44 |
| 95th Queue (ft) | 65 | 115 | 155 | 51 | 118 | 79 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | 0 | 3 | 0 | 0 | |
| Queuing Penalty (veh) | | 0 | 3 | 0 | 0 | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #1

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 50 | 4 | 57 |
| Average Queue (ft) | 29 | 1 | 21 |
| 95th Queue (ft) | 45 | 7 | 55 |
| Link Distance (ft) | 750 | 360 | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #2

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 65 | 4 | 68 |
| Average Queue (ft) | 33 | 0 | 20 |
| 95th Queue (ft) | 57 | 4 | 56 |
| Link Distance (ft) | 750 | 360 | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, All Intervals

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 65 | 4 | 76 |
| Average Queue (ft) | 32 | 0 | 20 |
| 95th Queue (ft) | 54 | 5 | 56 |
| Link Distance (ft) | 750 | 360 | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 6
Network wide Queuing Penalty, Interval #2: 3
Network wide Queuing Penalty, All Intervals: 4

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #1

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 9 | 21 | 38 | 50 |
| Average Queue (ft) | 1 | 3 | 16 | 28 |
| 95th Queue (ft) | 10 | 16 | 42 | 49 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 15 | 51 | 39 | 72 |
| Average Queue (ft) | 2 | 7 | 16 | 34 |
| 95th Queue (ft) | 12 | 32 | 41 | 64 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 3: Dovetail & Elkton Sutherlin Hwy, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LT | LTR | LTR |
| Maximum Queue (ft) | 20 | 51 | 43 | 72 |
| Average Queue (ft) | 2 | 6 | 16 | 32 |
| 95th Queue (ft) | 12 | 29 | 41 | 61 |
| Link Distance (ft) | 751 | 567 | 270 | 373 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 8: W Central & Dakota St, Interval #1

| Movement | EB | WB | NB | SB | SB |
|---|---|---|---|---|---|
| Directions Served | L | R | LTR | L | TR |
| Maximum Queue (ft) | 34 | 16 | 24 | 106 | 70 |
| Average Queue (ft) | 13 | 2 | 5 | 56 | 19 |
| 95th Queue (ft) | 36 | 13 | 22 | 99 | 45 |
| Link Distance (ft) | | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |
| Storage Bay Dist (ft) | 150 | 115 | | 100 | |
| Storage Blk Time (%) | | | | 2 | |
| Queuing Penalty (veh) | | | | 1 | |

## Intersection: 8: W Central & Dakota St, Interval #2

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 52 | 12 | 16 | 35 | 115 | 117 |
| Average Queue (ft) | 8 | 1 | 1 | 4 | 54 | 24 |
| 95th Queue (ft) | 30 | 8 | 8 | 21 | 102 | 74 |
| Link Distance (ft) | | 1000 | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 150 | | 115 | | 100 | |
| Storage Blk Time (%) | | | | | 4 | |
| Queuing Penalty (veh) | | | | | 2 | |

## Intersection: 8: W Central & Dakota St, All Intervals

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 53 | 12 | 20 | 35 | 115 | 122 |
| Average Queue (ft) | 9 | 0 | 1 | 4 | 55 | 23 |
| 95th Queue (ft) | 32 | 7 | 9 | 22 | 101 | 68 |
| Link Distance (ft) | | 1000 | | 184 | | 604 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 150 | | 115 | | 100 | |
| Storage Blk Time (%) | | | | | 4 | |
| Queuing Penalty (veh) | | | | | 2 | |

## Intersection: 12: Park Hill & W Central , Interval #1

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | L | L |
| Maximum Queue (ft) | 18 | 96 | 88 |
| Average Queue (ft) | 5 | 62 | 52 |
| 95th Queue (ft) | 20 | 103 | 95 |
| Link Distance (ft) | 1000 | | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | 190 | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: Park Hill & W Central , Interval #2

| Movement | EB | WB | NB | NB |
|---|---|---|---|---|
| Directions Served | TR | L | L | R |
| Maximum Queue (ft) | 54 | 125 | 84 | 22 |
| Average Queue (ft) | 8 | 53 | 37 | 2 |
| 95th Queue (ft) | 35 | 91 | 72 | 24 |
| Link Distance (ft) | 1000 | | 573 | |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | 190 | | 200 |
| Storage Blk Time (%) | | 0 | | |
| Queuing Penalty (veh) | | 0 | | |

## Intersection: 12: Park Hill & W Central , All Intervals

| Movement | EB | WB | NB | NB |
|---|---|---|---|---|
| Directions Served | TR | L | L | R |
| Maximum Queue (ft) | 54 | 125 | 93 | 22 |
| Average Queue (ft) | 7 | 55 | 40 | 1 |
| 95th Queue (ft) | 32 | 94 | 79 | 21 |
| Link Distance (ft) | 1000 | | 573 | |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | 190 | | 200 |
| Storage Blk Time (%) | | 0 | | |
| Queuing Penalty (veh) | | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #1

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 53 | 120 | 215 | 99 | 120 | 94 |
| Average Queue (ft) | 33 | 80 | 129 | 47 | 79 | 48 |
| 95th Queue (ft) | 57 | 126 | 234 | 118 | 125 | 86 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | 0 | | | |
| Queuing Penalty (veh) | | | 0 | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | | 10 | 0 | | |
| Queuing Penalty (veh) | | | 12 | 1 | | |

## Intersection: 14: I-5 NB Ramps & W Central , Interval #2

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 75 | 149 | 173 | 112 | 172 | 117 |
| Average Queue (ft) | 35 | 76 | 95 | 31 | 86 | 53 |
| 95th Queue (ft) | 67 | 129 | 162 | 90 | 147 | 93 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | 0 | 6 | 0 | | |
| Queuing Penalty (veh) | | 0 | 7 | 0 | | |

## Intersection: 14: I-5 NB Ramps & W Central , All Intervals

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | LT | R |
| Maximum Queue (ft) | 80 | 152 | 225 | 115 | 172 | 117 |
| Average Queue (ft) | 35 | 77 | 103 | 35 | 84 | 51 |
| 95th Queue (ft) | 65 | 128 | 185 | 98 | 143 | 91 |
| Link Distance (ft) | | 438 | 371 | | 428 | |
| Upstream Blk Time (%) | | | 0 | | | |
| Queuing Penalty (veh) | | | 0 | | | |
| Storage Bay Dist (ft) | 200 | | | 90 | | 217 |
| Storage Blk Time (%) | | 0 | 7 | 0 | | |
| Queuing Penalty (veh) | | 0 | 8 | 0 | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #1

| Movement | WB | SB |
|---|---|---|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 65 | 55 |
| Average Queue (ft) | 35 | 27 |
| 95th Queue (ft) | 61 | 59 |
| Link Distance (ft) | 750 | 573 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, Interval #2

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 104 | 4 | 66 |
| Average Queue (ft) | 37 | 0 | 28 |
| 95th Queue (ft) | 71 | 4 | 62 |
| Link Distance (ft) | 750 | 360 | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 17: I-5 Sb ramps & Park Hill, All Intervals

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LR | TR | LT |
| Maximum Queue (ft) | 104 | 4 | 67 |
| Average Queue (ft) | 37 | 0 | 28 |
| 95th Queue (ft) | 69 | 3 | 62 |
| Link Distance (ft) | 750 | 360 | 573 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 14
Network wide Queuing Penalty, Interval #2: 9
Network wide Queuing Penalty, All Intervals: 11

# APPENDIX G: SIGNAL WARRANTS

RIDGEVIEW SUBDIVISION

| | |
|---|---|
| **Major Street:** | Highway 138 |
| **Minor Street:** | Park Hill |
| **Project Name:** | Ridgeview |
| **City/County:** | Sutherlin |
| **Analysis Year:** | 2030 |
| **Alternative:** | PM with Development |
| **Meet 70% Warrants?:** | Yes |
| | 70% |

| | |
|---|---|
| **Major** | |
| **Approach Lanes:** | 1 |
| **Minor** | |
| **Approach Lanes:** | 2 or more |
| **Major** | |
| **Approach Volumes (vph):** | 1379 |
| **Minor** | |
| **Approach Volume (vph):** | 167 |
| **Right Turn Volume (vph):** | 116 |
| **Capacity of Shared/Exclusive Right Turn Lane[1]:** | 585 |
| **Right Turn Discount:** | 497 |
| **Right Turn Volume included in Warrant:** | 0 |
| **Minor Approach Volume in Warrant:** | 51 |
| **Major Approach K factor:** | 10 |
| **Minor Approach K factor:** | 10 |

**[1] Capacity obtained from unsignalized intersection analysis**
**For guidance on preliminary signal warrant analysis, refer to the Analysis Procedures Manual.**

**Last Updated: January 2018**

# Oregon Department of Transportation
## Transportation Development Branch
### Transportation Planning Analysis Unit

## Preliminary Traffic Signal Warrant Analysis[1]

| | | | |
|---|---|---|---|
| **Major Street:** | Highway 138 | **Minor Street:** | Park Hill |
| **Project:** | Ridgeview | **City/County:** | Sutherlin |
| **Year:** | 2030 | **Alternative:** | PM with Development |

## Preliminary Signal Warrant Volumes

| Number of Approach lanes | | ADT on major street approaching from both directions | | ADT on minor street, highest approaching volume | |
|---|---|---|---|---|---|
| Major Street | Minor Street | Percent of standard warrants 100 | 70 | Percent of standard warrants 100 | 70 |
| **Case A: Minimum Vehicular Traffic** | | | | | |
| 1 | 1 | 8850 | 6200 | 2650 | 1850 |
| 2 or more | 1 | 10600 | 7400 | 2650 | 1850 |
| 2 or more | 2 or more | 10600 | 7400 | 3550 | 2500 |
| 1 | 2 or more | 8850 | 6200 | 3550 | 2500 |
| **Case B: Interruption of Continuous Traffic** | | | | | |
| 1 | 1 | 13300 | 9300 | 1350 | 950 |
| 2 or more | 1 | 15900 | 11100 | 1350 | 950 |
| 2 or more | 2 or more | 15900 | 11100 | 1750 | 1250 |
| 1 | 2 or more | 13300 | 9300 | 1750 | 1250 |
| | 100 percent of standard warrants | | | | |
| **X** | 70 percent of standard warrants[2] | | | | |

## Preliminary Signal Warrant Calculation

| | Street | Number of Lanes | Warrant Volumes | Approach Volumes | Warrant Met |
|---|---|---|---|---|---|
| Case A | Major | 1 | 6200 | 13790 | N |
| | Minor | 2 or more | 2500 | 510 | |
| Case B | Major | 1 | 9300 | 13790 | N |
| | Minor | 2 or more | 1250 | 510 | |

| | |
|---|---|
| Analyst and Date: | Reviewer and Date: |

[1] Meeting preliminary signal warrants does **not** guarantee that a signal will be installed. When preliminary signal warrants are met, project analysts need to coordinate with Region Traffic to initiate the traffic signal engineering investigation as outlined in the Traffic Manual. Before a signal can be installed, the engineering investigation must be conducted or reviewed by the Region Traffic Manager who will forward signal recommendations to headquarters. Traffic signal warrants must be met and the State Traffic Engineer's approval obtained before a traffic signal can be installed on a state highway.

[2] Used due to 85th percentile speed in excess of 40 mph or isolated community with population of less than 10,000.

| | |
|---|---|
| **Major Street:** | Highway 138 |
| **Minor Street:** | Dakota |
| **Project Name:** | Ridgeview |
| **City/County:** | Sutherlin |
| **Analysis Year:** | 2030 |
| **Alternative:** | PM with Development |
| **Meet 70% Warrants?:** | Yes |
| | 70% |

| | |
|---|---|
| **Major** | |
| **Approach Lanes:** | 1 |
| **Minor** | |
| **Approach Lanes:** | 2 or more |
| **Major** | |
| **Approach Volumes (vph):** | 1104 |
| **Minor** | |
| **Approach Volume (vph):** | 195 |
| **Right Turn Volume (vph):** | 50 |
| **Capacity of Shared/Exclusive Right Turn Lane[1]:** | 531 |
| **Right Turn Discount:** | 451 |
| **Right Turn Volume included in Warrant:** | 0 |
| **Minor Approach Volume in Warrant:** | 145 |
| **Major Approach K factor:** | 10 |
| **Minor Approach K factor:** | 10 |

**[1] Capacity obtained from unsignalized intersection analysis**
**For guidance on preliminary signal warrant analysis, refer to the Analysis Procedures Manual.**

**Last Updated: January 2018**

# Oregon Department of Transportation
## Transportation Development Branch
### Transportation Planning Analysis Unit

## Preliminary Traffic Signal Warrant Analysis[1]

| | | | |
|---|---|---|---|
| **Major Street:** | Highway 138 | **Minor Street:** | Dakota |
| **Project:** | Ridgeview | **City/County:** | Sutherlin |
| **Year:** | 2030 | **Alternative:** | PM with Development |

## Preliminary Signal Warrant Volumes

| Number of Approach lanes | | ADT on major street approaching from both directions | | ADT on minor street, highest approaching volume | |
|---|---|---|---|---|---|
| Major Street | Minor Street | Percent of standard warrants 100 | 70 | Percent of standard warrants 100 | 70 |
| **Case A: Minimum Vehicular Traffic** | | | | | |
| 1 | 1 | 8850 | 6200 | 2650 | 1850 |
| 2 or more | 1 | 10600 | 7400 | 2650 | 1850 |
| 2 or more | 2 or more | 10600 | 7400 | 3550 | 2500 |
| 1 | 2 or more | 8850 | 6200 | 3550 | 2500 |
| **Case B: Interruption of Continuous Traffic** | | | | | |
| 1 | 1 | 13300 | 9300 | 1350 | 950 |
| 2 or more | 1 | 15900 | 11100 | 1350 | 950 |
| 2 or more | 2 or more | 15900 | 11100 | 1750 | 1250 |
| 1 | 2 or more | 13300 | 9300 | 1750 | 1250 |
| | 100 percent of standard warrants | | | | |
| **X** | 70 percent of standard warrants[2] | | | | |

## Preliminary Signal Warrant Calculation

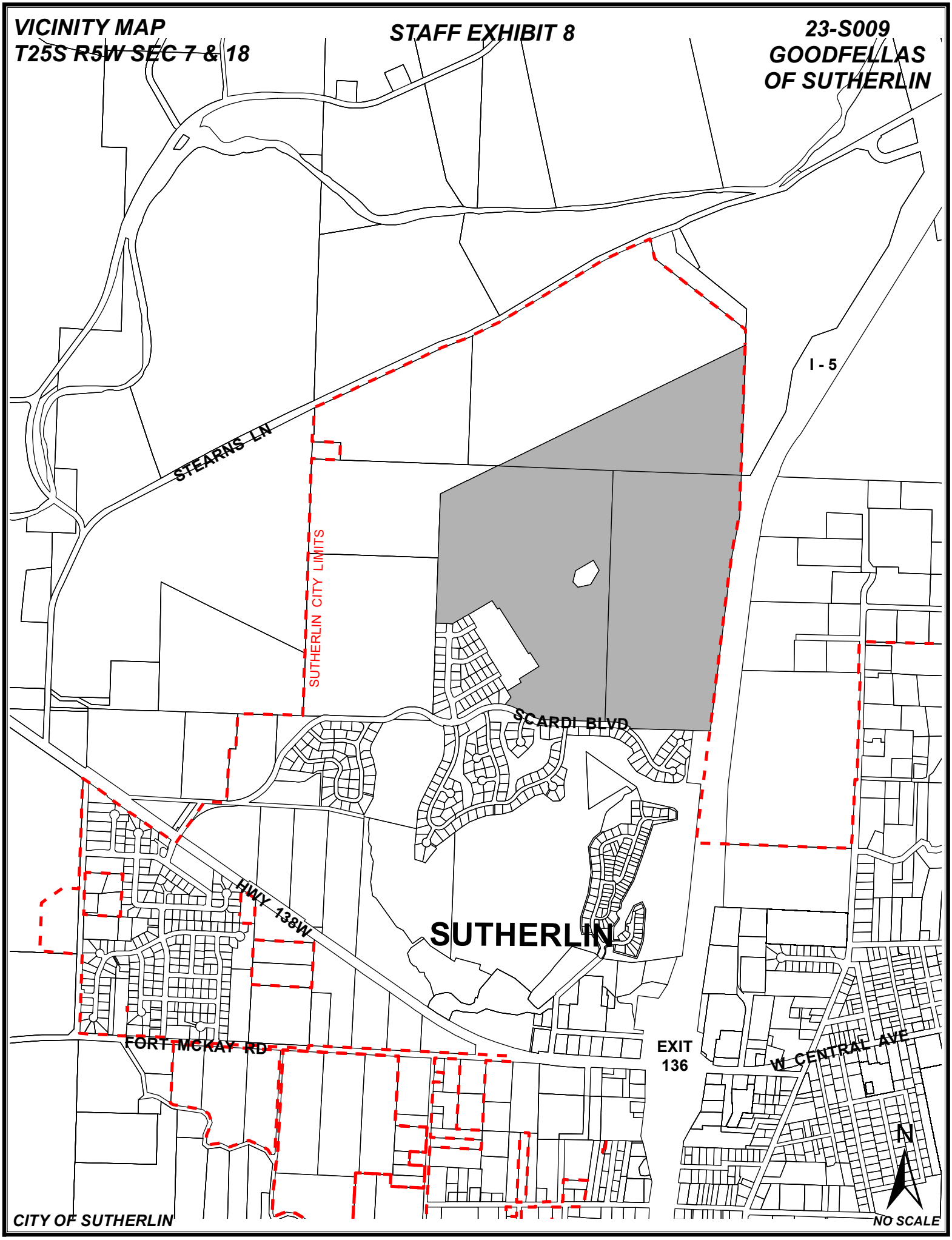
| | Street | Number of Lanes | Warrant Volumes | Approach Volumes | Warrant Met |
|---|---|---|---|---|---|
| Case A | Major | 1 | 6200 | 11040 | N |
| | Minor | 2 or more | 2500 | 1450 | |
| Case B | Major | 1 | 9300 | 11040 | Y |
| | Minor | 2 or more | 1250 | 1450 | |

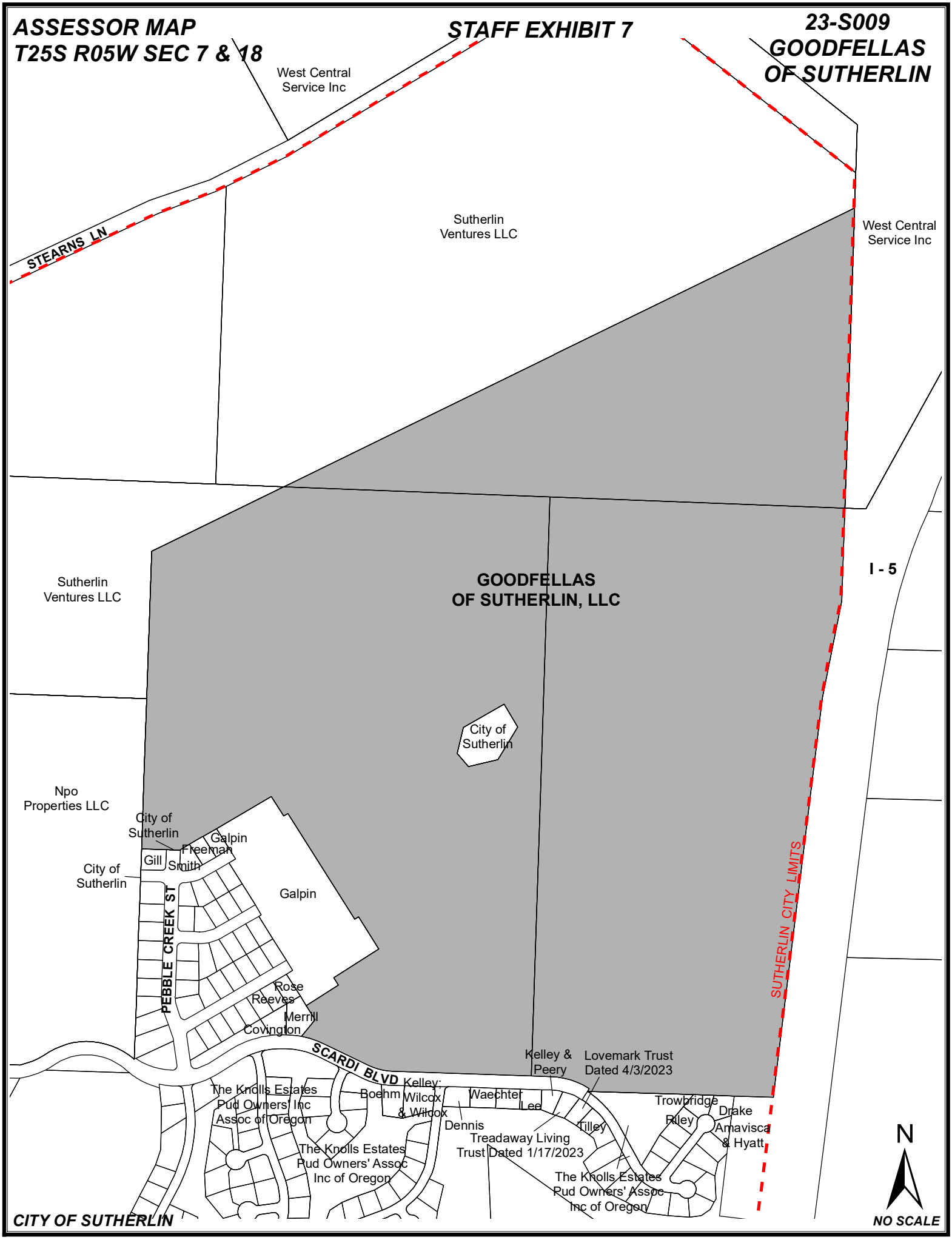
| | |
|---|---|
| Analyst and Date: | Reviewer and Date: |

[1] Meeting preliminary signal warrants does **not** guarantee that a signal will be installed. When preliminary signal warrants are met, project analysts need to coordinate with Region Traffic to initiate the traffic signal engineering investigation as outlined in the Traffic Manual. Before a signal can be installed, the engineering investigation must be conducted or reviewed by the Region Traffic Manager who will forward signal recommendations to headquarters. Traffic signal warrants must be met and the State Traffic Engineer's approval obtained before a traffic signal can be installed on a state highway.

[2] Used due to 85th percentile speed in excess of 40 mph or isolated community with population of less than 10,000.

SANDOW
ENGINEERING
160 Madison Street, Suite A
Eugene, Oregon 97402
541.513.3376
sandowengineering.com


VICINITY MAP
T25S R5W SEC 7 & 18
STAFF EXHIBIT 8
23-S009
GOODFELLAS
OF SUTHERLIN
I - 5
STEARNS LN
SUTHERLIN CITY LIMITS
SCARDI BLVD
HWY 138W
SUTHERLIN
FORT MCKAY RD
EXIT
136
W CENTRAL AVE
N
CITY OF SUTHERLIN
NO SCALE


ASSESSOR MAP
T25S R05W SEC 7 & 18
STAFF EXHIBIT 7
23-S009
GOODFELLAS
OF SUTHERLIN
West Central
Service Inc
STEARNS LN
Sutherlin
Ventures LLC
West Central
Service Inc
I - 5
Sutherlin
Ventures LLC
GOODFELLAS
OF SUTHERLIN, LLC
City of
Sutherlin
Npo
Properties LLC
City of
Sutherlin
Galpin
Freeman
Gill
Smith
City of
Sutherlin
Galpin
PEBBLE CREEK ST
Rose
Reeves
Merrill
Covington
SCARDI BLVD
Kelley &
Peery
Lovemark Trust
Dated 4/3/2023
The Knolls Estates
Pud Owners' Inc
Assoc of Oregon
Kelley
Boehm
Wilcox
& Wilcox
Waechter
Lee
Dennis
Tilley
Trowbridge
Riley
Drake
Amavisca
& Hyatt
Treadaway Living
Trust Dated 1/17/2023
The Knolls Estates
Pud Owners' Assoc
Inc of Oregon
The Knolls Estates
Pud Owners' Assoc
Inc of Oregon
SUTHERLIN CITY LIMITS
N
CITY OF SUTHERLIN
NO SCALE

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY.

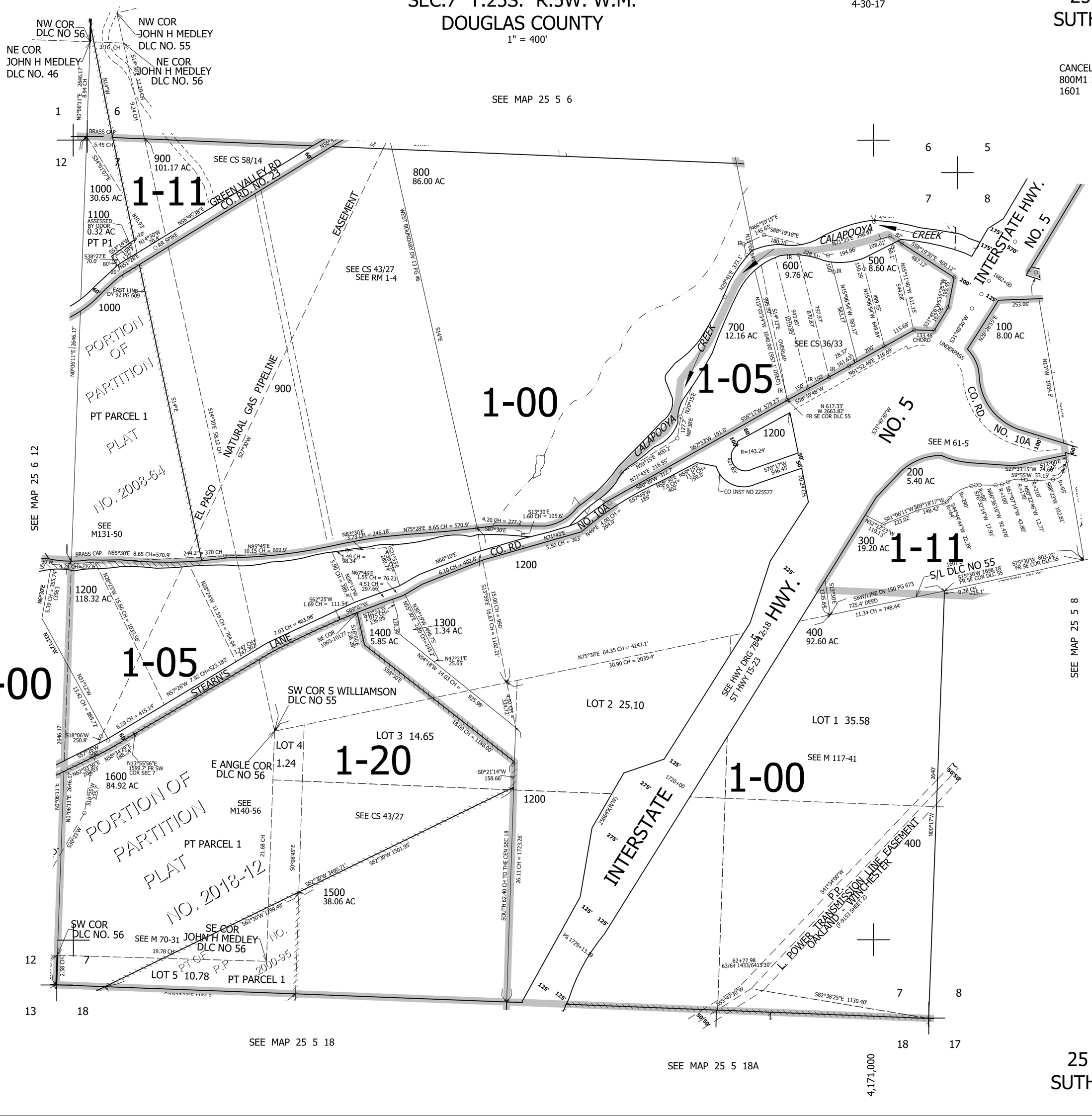
# SEC.7 T.25S. R.5W. W.M.
# DOUGLAS COUNTY
1" = 400'

STAFF EXHIBIT 8

REVISED ON
4-30-17

25 5 7
SUTHERLIN

CANCELLED NOS
800M1 1600M1 1501
1601




25 5 7
SUTHERLIN

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY.

Upper Left:
123°21'7"W 43°24'18"N
4163587E 646438N ft

# SEC.18 T.25S. R.05W. W.M.
# DOUGLAS COUNTY
1" =400'

STAFF EXHIBIT 8

Date Exported: 3/21/2023 8:07 AM

250518 & Sutherlin

CANCELLED NOS:
200M1 202 200
400 500 600
601 602 700
701 800 900

SEE MAP 2505W07

100
74.47 AC

SEE MAP 2506W13

203
80.58 AC

PORTION OF PARTITION PLAT NO. 2000-95

LOT 45.38

PT PARCEL 1

SEE M140-56

201 P2
1.05 AC

SEE M131-50

LOT 6
5.13

SEE MAP

25 5 18BC

130-02

130-00

300
51.33 AC

25 5 18A

SEE MAP

25 5 18DA

SEE MAP

25 5 18CB

SEE MAP

25 5 18CA

SEE MAP

25 5 18C

SEE MAP

25 5 18CD

SEE MAP

25 5 18DC

SEE MAP

25 5 18DD

SEE MAP

SEE MAP 2506W13DA

1/4 COR

NW COR JOSEPH KNOTT DLC NO.54

NE COR NO.54

CEN SEC

1/4 COR

N/L DLC NO.53
NE COR
DLC NO.53

1/4 COR

13 | 18
24 | 19

18 | 19 | 20

EASEMENT

TRANSMISSION LINE
OAKLAND-WINCHESTER

P P & L POWER

25' EASEMENT

BOUNDARY AGREEMENT 79-1691

SEE HWY DRG 78-12-18 ST HWY 15-23

PACIFIC HWY. INTERSTATE HWY. NO. 5

SUMMIT VIEW AVE.

ROGERS CT.

MEDINA AVE

PEBBLE CREEK ST

SAND PINES AVE

SCARDINA BLVD

INNSBROOK CT.

KAPELA CT

DIVISION LOOP

CULVER LOOP

ANNIE CT

WILLAMETTE DR

WILLAMETTE RD

CANYON DR

ESTATES

WILDCAT

ARRIVAL

BENTGRASS CT

SLAVENGER

N. COMSTOCK RD.

ADDISON AVE

ROBINSON ST

KRUSE ST.

GRANT ST.

BRAXTON AVE.

W SECOND AVE

W FIRST AVE

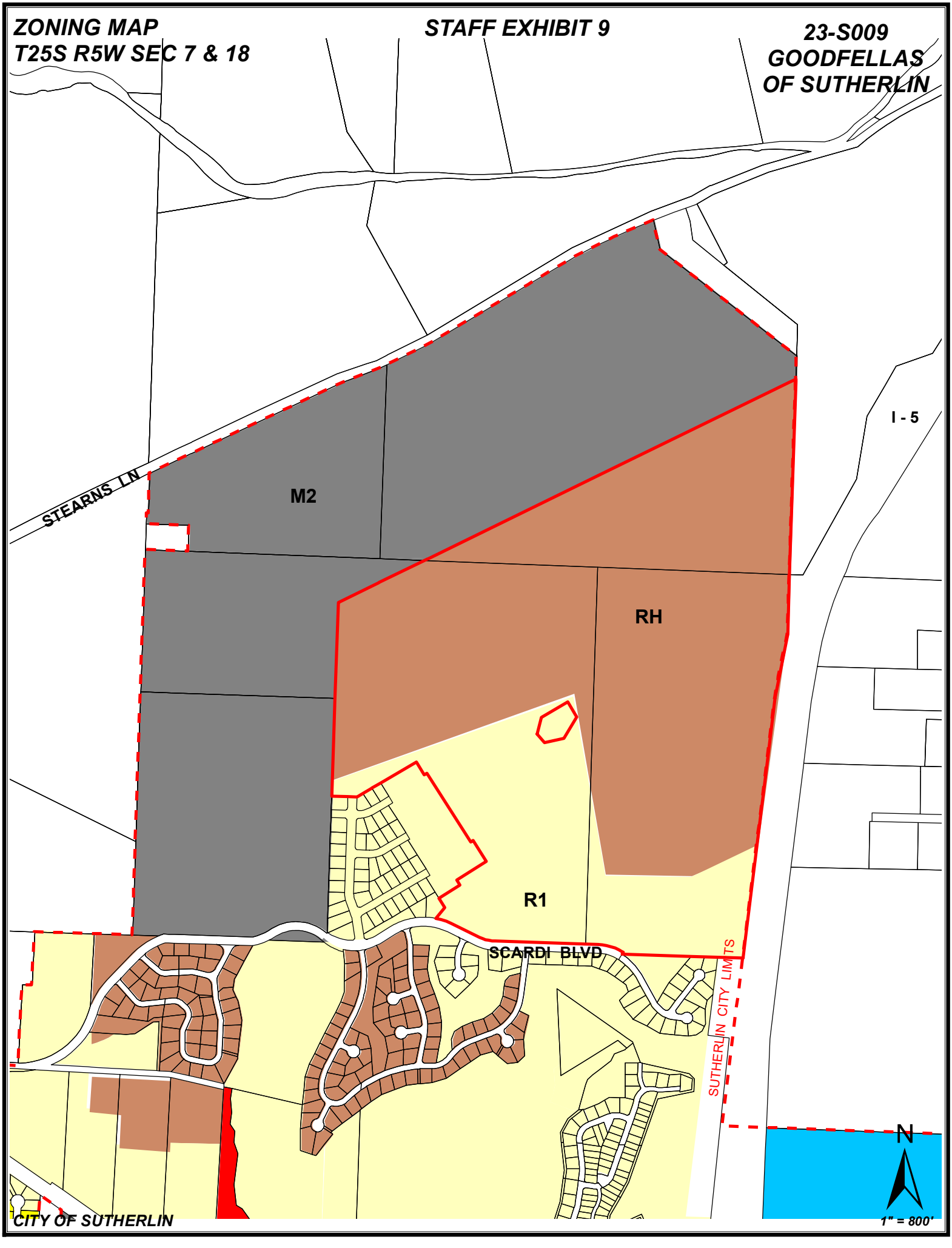
W SIXTH AVE

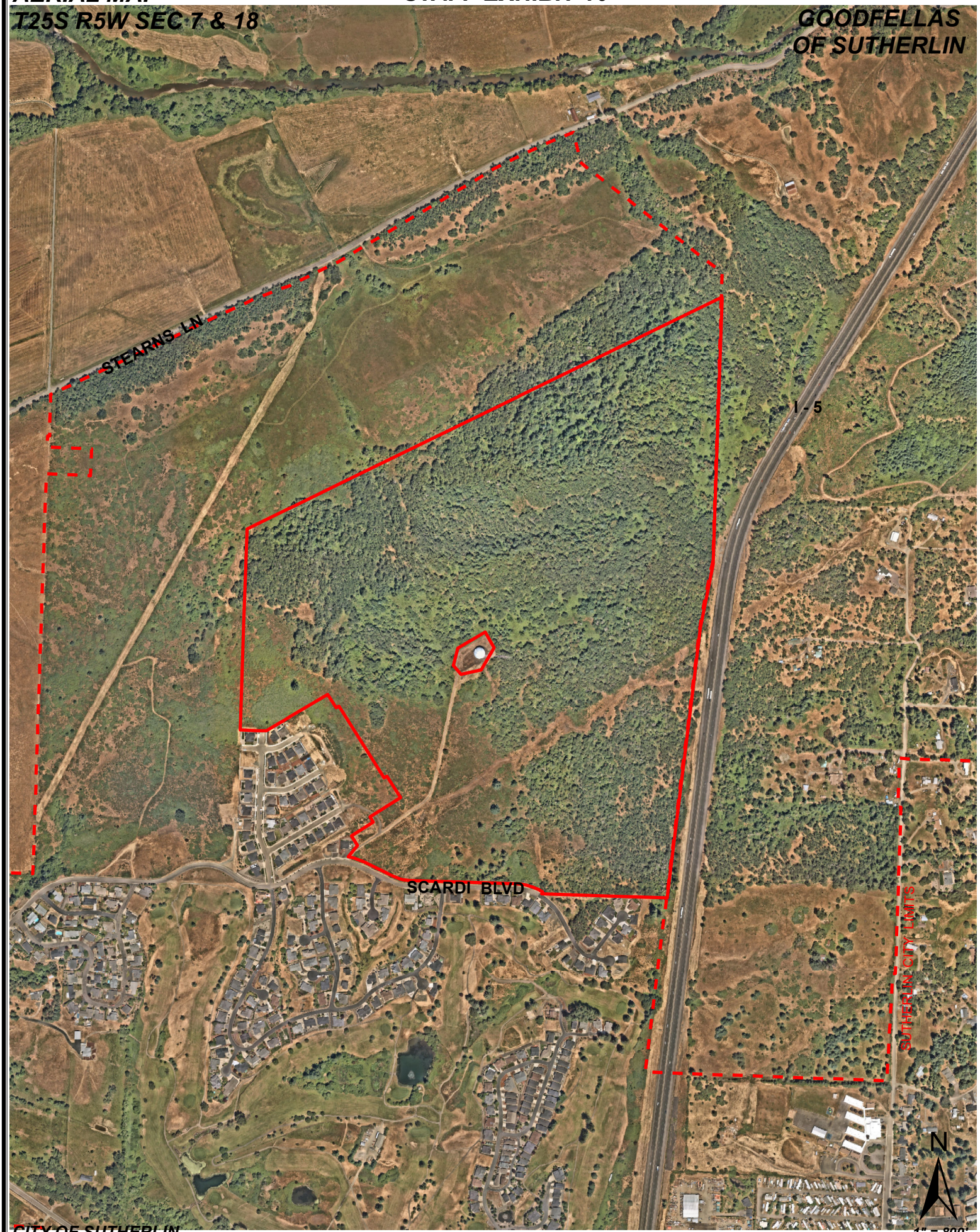
LAUREL AVE.

LAUREL ST

Lower Right:
123°19'18"W 43°23'11"N
4171340E 639417N ft

250518 & Sutherlin


ZONING MAP
T25S R5W SEC 7 & 18
STAFF EXHIBIT 9
23-S009
GOODFELLAS
OF SUTHERLIN
STEARNS LN
M2
RH
I - 5
R1
SCARDI BLVD
SUTHERLIN CITY LIMITS
N
CITY OF SUTHERLIN
1" = 800'


AERIAL MAP
STAFF EXHIBIT 10
23-S009
T25S R5W SEC 7 & 18
GOODFELLAS
OF SUTHERLIN
STEARNS LN
I - 5
SCARDI BLVD
SUTHERLIN CITY LIMITS
N
CITY OF SUTHERLIN
1" = 800'

126 E. Central Avenue
Sutherlin, OR 97479
541-459-2856
Fax: 541-459-9363
www.ci.sutherlin.or.us

# City of Sutherlin

Date: October 10, 2023
To: Planning Commission
From: Community Development
Re: Monthly Activity Report

This report is provided in an effort to keep you apprised of recent land use and other relevant activities.

## COMMUNITY DEVELOPMENT

### Ford's Pond Grant update

At the May 8, 2023, City Council awarded the bid to JRT Construction, LLC in the amount of $1,884,038.16. Construction started on June 5th and is expected to be completed in late Fall of 2023.

### Recreational Vehicle (RV)Survey and Open House

Following public outreach and input, the City Council considered an ordinance to prohibit residing in RV's on private property within the city limits, followed by the first reading of the ordinance at the September 11, 2023, City Council meeting. The second reading of the ordinance was held at the October 9, 2023, City Council meeting. The ordinance becomes effective within 30 days.

### Seismic Rehabilitation of Fire Station #1 and Police Station

In December 2022, the City applied for and received Seismic Rehabilitation Grants ("SRG") for the projects through Business Oregon, Infrastructure Finance Authority, based on the applications prepared by ZCS Engineering & Architecture, Inc. The City was awarded $2,492,700 for the design and construction of Fire Station #1 Seismic Rehabilitation, and $2,479,180 for the design and construction of the Police Station Seismic Rehabilitation.

Advertisement for Request for Proposals (RFP) to provide Engineering, Architectural, and Construction Management Services for the Seismic Rehabilitation of Fire Station #1 and the Police Station were published September 6-8, 2023. The schedule for the Engineering, Architectural, and Construction Management Services is as follows:

~~RFP Advertised Sept. 6 & Sept. 8, 2023~~
~~Site Visits Sept. 14, 2023 @ 10:00 a.m.~~
~~Deadline for Additional Information Sept. 21, 2023 @ 3:00 p.m.~~
~~Response to Additional Information Sept. 27, 2023~~
Proposal Package Due Oct. 11, 2023 @ 3:00 p.m.
Schedule Interview (subject to City's discretion) Oct. 17, 2023
Interviews (subject to City's discretion) Oct. 19, 2023
Notice of Intent to Award Oct. 25, 2023
Contract Negotiation w/ Selected Consultant Oct. 25, 2023
Protest Deadline Nov. 1, 2023
Council Consideration of Contract Nov. 13, 2023
Award of Project Nov. 13, 2023

Start Design Nov. 14, 2023
Complete Design May 31, 2024
Present Final Design to Council Jun. 10, 2024
Bid process July, 2024
Council Consideration of Contract Aug. 12, 2024
Award Contract Notice to Proceed Aug. 13, 2024
Start Construction Aug. 14, 2024
Complete Construction Aug. 31, 2025
Present Final Report to Council Sept. 8, 2025

## TRANSPORTATION

### Downtown Parking Lot

- Design and Construction Estimate
  - Start date: December 12, 2022
  - Completion date: August 31, 2023
  - Bidding TBD 2023/2024
  - Construction is estimated to begin TBD 2023/2024

### Waite Street Improvements

Advertisement for Request for Proposals (RFP) to provide Engineering Design Services and Construction Cost Estimate for Waite Street Improvements went out June 21, 2023. Five proposals were received by the July 20, 2023 deadline. The Notice of Intent of Award to contract to Civil Solutions Engineering, LLC was issued July 27, 2023. A Survey Notification Letter notifying property owners of survey field work was mailed to surrounding property owners August 4, 2023.

The schedule is as follows:

~~Contract Negotiation w/ Selected Consultant August 1, 2023~~
~~Award of Project August 14, 2023~~
~~Start Design August 15, 2023~~
Complete Design November 16, 2023
Present Final Design to Council December 11, 2023 @ 7:00 p.m. PST

## UTILITIES

### Nonpareil Water Treatment Plant Improvement:

The Design Contract was awarded on January 27, 2020, to The Dyer Partnership Engineers & Planners, Inc. for Engineering Services and Construction Management. On February 24, 2021 @ 2:00pm bids were opened, Stettler Supply & Construction submitted the lowest bid in the amount of $4,810,485 and has sufficient experience and qualifications to satisfactorily construct the project. On March 8, 2021, City Council Awarded the Construction Contract to Settler Supply Company in the amount of $4,810,485. Construction started April 2021 and is expected to be completed in 2023.

A walk through for substantial completion was held on September 8, 2023. Project funding close-out activities will begin once the punch list has been created and completed.

## LAND USE ACTIVITY

**Building Worksheets:**

- 2023-61- 2023-66 on previous Activity Report(s)
- 2023-67 – 367 Sunset St – industrial bldg
- 2023-68 – 535 S Calapooia St – interior remodel
- 2023-69 – 1019 W Central Ave – Change in Use (CIU)
- 2023-70 – 401 N. Comstock, Sp 59 – MH
- 2023-71 – 857 Durham Ave – SFD
- 2023-72 – 785 E Central Ave – awning addition to commercial bldg
- 2023-73 – 674 W First Ave – accessory bldg
- 2023-74 – 868 Fir Grove Ln - SFD
- 2023-75 – 472 Arvilla Ct – awning
- 2023-76 – 246 N State St – interior remodel of commercial bldg

**Active Land Use Applications**:

- 23-S010 – 23-S012 – on previous Activity Report(s)
- 23-S013 – Fort McKay Subdivision, LLC – Class A Variance
- 23-S014 – Robinson, et/al – Property Line Adjustment
- 23-S015 – Rogers – Land Partition

**Right of Way Applications:**

- 23-19 – 23-20 – on previous Activity Report(s)
- 23-21 –