PLANNING COMMISSION AGENDA City Commission Chambers - City Hall 625 Center Street, Oregon City, Oregon 97045

July 23, 2012 at 7:00 p.m.

The Planning Commission agendas, including staff reports, memorandums, and minutes are available from the Oregon City Web site home page under meetings.(<u>www.orcity.org</u>)

Page

- 1. CALL TO ORDER
- 2. PUBLIC COMMENT ON ITEMS NOT LISTED ON AGENDA
- 3. PLANNING COMMISSION HEARING
- a. VR 12-01: Sign Variance
- b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density Residential).
- 187-623 c. TP 12-01 / VR 12-02: Crabtree Terrace II 30-lot Subdivision with Variance Request from Alley Requirement
 - 4. COMMUNITY DEVELOPMENT DIRECTOR UPDATE
 - 5. ADJOURN

Video Streaming & Broadcasts: The meeting is streamed live on Internet on the Oregon City's Web site at www.orcity.org and available on demand following the meeting. The meeting can be viewed live on Willamette Falls Television on Channels 23 and 28 for Oregon City and Gladstone residents; Channel 18 for Redland residents; and Channel 30 for West Linn residents. The meetings are also rebroadcast on WFTV. Please contact WFTV at 503-650-0275 for a programming schedule.

City Hall is wheelchair accessible with entry ramps and handicapped parking located on the east side of the building. Hearing devices may be requested from the City Recorder prior to the Commission meeting. Disabled individuals requiring other assistance must make their request known 48 hours preceding the meeting by contacting the Planning Dept. at 503-722-3789.



COMMISSION REPORT: CITY OF OREGON CITY

TO:	Oregon City Planning Commission	
FROM:	Laura Terway, Planner	
PRESENTER:	Laura Terway, Planner	
SUBJECT:	VR 12-01: Sign Variance	
Agenda Type: Public Hearing		
Approved by: Tony	Konkol, Community Development Director	

RECOMMENDED ACTION (Motion):

Staff recommends the Planning Commission deny Planning file VR 12-01.

BACKGROUND:

The applicant is seeking a variance to the following at the Oregon City Shopping Center:

- The number of free standing signs permitted onsite;
- The height of a freestanding sign permitted onsite; and
- The size of a freestanding sign permitted onsite.

BUDGET IMPACT:

FY(s): N/A Funding Source: N/A

ATTACHMENTS:

Staff Report

- 1. Vicinity Map
- 2. Applicant's Narrative and Submittal
- 3. Comments from Oregon Department of Transportation
- 4. Comments from Tom O'Brien



TYPE III DECISION STAFF REPORT July 16, 2012

FILE NO.:	VR 12-01: (Sign) Variance
FILE TYPE:	Quasi-Judicial
HEARING DATE:	July 23, 2012 7:00 p.m., City Hall 625 Center Street Oregon City, OR 97045
APPLICANT'S REPRESENATIVE:	Meyer Sign Company 5105 SW 74th Ave, Tigard, OR 97224
OWNER:	Investment Concepts, Inc., 1667 E. Lincoln Ave., Orange, CA 92865
REQUEST:	The applicant is requesting a variance to the Oregon City Sign Ordinance for a freestanding sign at the Oregon City Shopping Center.
LOCATION:	1900 SE McLoughlin Blvd, Oregon City, Oregon 97045 Clackamas County Map 2-2E-29, Tax Lot 1800 Oregon City Shopping Center
REVIEWER:	Laura Terway, AICP, Planner
RECOMMENDATION:	Staff recommends denial of VR 12-01
VICINITY MAP:	Exhibit 1

PROCESS: Type III decisions involve the greatest amount of discretion and evaluation of subjective approval standards, yet are not required to be heard by the City Commission, except upon appeal. Applications evaluated through this process include conditional use permits and Master Plans for which discretion is provided. In the event that any decision is not classified, it shall be treated as a Type III decision. The process for these decisions is controlled by ORS 197.763. Notice of the application and the planning commission hearing is published and mailed to the applicant, recognized neighborhood association and property owners within three hundred feet. Notice must be issued at least twenty days pre-hearing, and the staff report must be available at least seven days pre-hearing. At the evidentiary hearing held before the planning commission all issues are addressed. The decision of the planning commission is appealable to the city commission, on the record. A city-recognized neighborhood association requesting an appeal fee waiver pursuant to 17.50.290(C) must officially approve the request through a vote of its general membership or board at a duly announced meeting prior to the filing of an appeal. The city commission decision on appeal from the planning commission is the city's final decision.

VR 12-01: Sign Variance for Oregon City Shopping Center

A city-recognized neighborhood association requesting an appeal fee waiver pursuant to 17.50.290(C) must officially approve the request through a vote of its general membership or board at a duly announced meeting prior to the filing of an appeal.

IF YOU HAVE ANY QUESTIONS ABOUT THIS APPLICATION, PLEASE CONTACT THE PLANNING DIVISION OFFICE AT (503) 722-3789.

I. BASIC FACTS:

Zoning/Permitted Use: The subject site is within the "MUD" Mixed Use Downtown District zoning and Comprehensive Plan designation. Land uses are characterized by high-volume establishments constructed at the human scale such as retail, service, office, multi-family and similar uses that encourage pedestrian and transit use. The surrounding properties are also within the "MUD" Mixed Use Downtown District. The property was rezoned to MUD from "C" General Commercial in 2004.

Surrounding Uses/Zoning: Surrounding land uses are as follows:

- West: The properties west of the subject site are zoned "MUD" Mixed Use Downtown, including a McDonald's Restaurant and a Hotel.
- North: The properties north of the subject site are zoned "MUD" Mixed Use Downtown.
- East: The properties east of the subject site are zoned "MUD" Mixed Use Downtown.
- South: The property south of the subject site consists mainly of the I-205 Interchange and the I-205 Freeway.

Municipal Code Standards and Requirements:

The following sections of the Oregon City Municipal Code are applicable to this land use approval: "MUD" Mixed Use Downtown District in Chapter 17.34, Administration and Procedures set forth in Chapter 17.50,

Administration and Procedures set forth in Chap

Signs in Chapter 15.28, and The City Code Book is available on-line at www.orcity.org.

The city code book is available on line at www

II. BACKGROUND:

Proposed Development: The applicant is seeking a variance to the following:

- The number of free standing signs permitted onsite;
- The height of a freestanding sign permitted onsite; and
- The size of a freestanding sign permitted onsite.

Illustrations with dimensions of the proposed development are presented in Exhibit 2.

Existing Conditions: The subject site is currently developed with a mix of retail, restaurant and medical uses known as the Oregon City Shopping Center. The subject site fronts McLoughlin Boulevard (Highway 99E) to the west, an interstate 205 freeway ramp to the south, a tract of land to the north and vacant land approved for development to the east. The primary building within the shopping center is located along the eastern property line and is oriented to the west.

Signage Allowed Onsite: Per OCMC chapter 15.28 the shopping center is allowed to install multiple large wall signs, two freestanding signs, a roof sign, projecting sign for each frontage (provided there is no free-standing or roof sign) and an incidental sign.

VR 12-01: Sign Variance for Oregon City Shopping Center

Existing Signage: The subject site has a variety of wall, projecting and freestanding signs onsite. The applicant submitted an inventory of existing freestanding signage onsite:

Tennant Identified on Sign	Size (Approximate Square Footage for 1 Side of Sign)	Location
Sign with Multiple tenants	471	McLoughlin Boulevard Frontage
Starbucks/AT&T	40	McLoughlin Boulevard Frontage
Shari's	272	McLoughlin Boulevard Frontage
Billboard	696	McLoughlin Boulevard Frontage
Firestone	75	McLoughlin Boulevard Frontage

III. DECISION-MAKING CRITERIA:

Chapter 15.28 Signs

15.28.080.A.3. In the LOC, LO, NC, HC, LC, C, CBD, M-1 and M-2 zoning districts, the following signs are allowed:

Free-standing signs, so long as a permit is first obtained as required by this chapter and the following standards are met:

15.28.080.A.3.a. One freestanding sign shall be permitted for each street frontage of a premise, provided minimum subdivision lot frontage of thirty feet is met. No freestanding sign shall be permitted on the same frontage where there is a projecting or roof sign.

Analysis: The subject site currently contains a frontage adjacent to McLoughlin Boulevard and a second frontage (for the purposes of the sign code) adjacent to interstate 205. As one freestanding sign is permitted for each street frontage, the subject site is allowed 2 freestanding signs. In addition to the signage proposed, the applicant submitted documentation of 5 existing freestanding onsite, exceeding the maximum number of 2 freestanding signs permitted onsite. The proposed application would result in 6 freestanding signs onsite. **The proposed sign does not meet this standard and requires approval of this variance.**

15.28.080.A.3.b. Area. Where the street frontage is less than 50 feet, the maximum display surface area shall not exceed 50 square feet, with 25 square feet maximum area per sign face. Where the street frontage is greater than 50 feet but less than 200 feet, surface display area shall not exceed 100 square feet, with 50 square feet maximum area per sign face. Where the street frontage is 200 feet or greater, the surface display area shall not exceed 300 square feet, with a maximum area of 150 square feet per sign face. Display surface area means the total area (both sides) of a sign that is available for displaying advertising or an informational message. In no case shall any sign have a surface display area in excess of 300 square feet.

Analysis: The frontage of the site adjacent to Interstate 205 is more than 200 feet in length, therefore, the applicant is permitted a maximum of 150 square feet per sign face with a total of 300 square feet combined both sides. The proposed sign is approximately 219 square feet for each sign face with a total of 438 square feet for both sides of the sign. This does not include the square footage of the wood panel cladding or emblem at the top of the sign, which the City includes in the measurement of the sign face for purposes of satisfying this standard. The proposed sign exceeds the total allowed square footage by 138 square feet. **The proposed sign does not meet this standard and requires approval of this variance application.**

15.28.080.A.3.c *Projection. Freestanding signs shall not project over a public right-of-way.* **Analysis:** From the information provided, it does not appear the freestanding sign will project over the public right-of-way. **The proposed sign complies with this standard.**

VR 12-01: Sign Variance for Oregon City Shopping Center

15.28.080.A.3.d Clearance. A minimum clearance of 10 feet from grade shall be maintained over pedestrian or vehicular areas, 14 feet over areas of truck access.

Analysis: The applicant indicated that the proposed sign has a clearance of 35 feet 8 inches from grade. **The proposed sign complies with this standard.**

15.28.080.A.3.e Horizontal Dimension. The greatest horizontal dimension shall not exceed 20 feet for any freestanding sign.

Analysis: The freestanding sign has an approximately 13 foot 11 -inch horizontal dimension. **The proposed sign complies with this standard.**

15.28.080.A.3.f Height. The height of any freestanding sign shall not exceed 25 feet above grade, plus 5 feet for each 200 feet, or portion thereof, frontage in excess of 200 feet frontage. <u>In no event shall any sign exceed 30 feet in height.</u>

Analysis: The sign with proposed changes is 57 feet 0 inches in height, exceeding the maximum height of 30 feet. **The proposed sign does not meet this standard and requires approval of this variance application.**

15.28.090 Nonconforming signs and their removal. *Any (non-conforming) sign which is structurally altered, relocated or replaced shall immediately be brought into compliance with all applicable provisions of this chapter.*

Analysis: The applicant has not requested to alter an existing sign with this application. The current sign code was adopted in 1994. As described in 15.28.090, signs lawfully erected and maintained as of 1994, but which do not meet the requirements of this chapter, shall be regarded as nonconforming signs and may be continued for a period not to exceed ten years (2004) for the purpose of amortization of investment of the sign. **This standard is not applicable.**

Sign Variances

15.28.040.A.1 Exceptional or extraordinary circumstances apply to the property that do not apply generally to other properties in the same area or vicinity. Such conditions may be the result of an unusual location or orientation of the applicant's building, topography, vegetation or other circumstance over which the applicant has no control;

Analysis: The applicant is seeking a variance to the number, height and size of a freestanding sign permitted onsite. The applicant stated that "we are proposing to increase the overall height of the proposed free standing sign to 57 feet above grade. The sign is located on War Veterans Memorial Freeway (205). The frontage in which the sign will be located is controlled by the Oregon Department of Transportation's regulations. The present site condition consists of a severe slope in grade which provides poor visibility for a sign any less tall than the 57 foot tall sign we are proposing." However, according to City topography maps, the identified slope is not located on the subject site and is within the adjacent ODOT right-of-way.

The Oregon City sign code does not provide a guarantee that signage is visible from adjacent freeways. Staff finds that the opportunity for adequate signage is provided by the sign code as the shopping center is allowed to install multiple large wall signs, two freestanding signs, a roof sign, projecting sign for each frontage (provided there is no free-standing or roof sign) and an incidental sign. The topography of the land adjacent to the subject site does not provide an exceptional and/or extraordinary circumstance because the site is still afforded a variety of opportunities for signage. **Staff finds that this standard has not been met.**

15.28.040.A.2 The variance is necessary for the preservation of a right of the applicant substantially the same as is possessed by the owners of other property in the area or vicinity; **Analysis:** The applicant is seeking a variance to the number, height and size of a freestanding sign. The applicant stated that "throughout the process, we have explored other options to effectively

VR 12-01: Sign Variance for Oregon City Shopping Center

advertise on the east frontage facing 205 and believe that the requested variance is necessary for an affective advertising solution to our shopping center and tenants."

The variance would allow the applicant to have more freestanding signs than the property owners in the vicinity, a larger free standing sign than owners in the vicinity and a taller sign than other property owners in the vicinity. This variance does not preserve a right of the applicant, but rather allow more signage than permitted under the Oregon City code. **Staff finds that this standard has not been met**.

15.28.040.A.3 The authorization of the requested variance will not be materially detrimental to, or conflict with, the purposes of this chapter or be injurious to the use and enjoyment of other property in the area or vicinity, or the public way, in which the property is located;

Analysis: The applicant is seeking a variance to the number, height and size of a freestanding sign. The applicant stated that "although the proposed sign exceeds the allowed square footage and height requirements, it is proportionally reasonable and not overbearing. The proposed sign is identical to the other freestanding sign located on 99E but is larger due to site conditions and placement."

As described in OCMC 15.28.010, the purpose of the sign code is to regulate "the erection placement and maintenance of signs to protect and enhance public health, safety, welfare and property," more specifically to "allow those signs compatible with the character and uses allowed in the zoning district in which they are located, maintain the effectiveness of traffic signs" and "maintain and enhance the scenic and other aesthetic qualities of the city." Staff finds that based on the number, height and size of signage proposed this application is in conflict with the purpose of the code. Staff finds that as to the three identified purposes (shown below in italics), the proposed freestanding sign will be materially detrimental to the surrounding area, and conflict with the purposes of the sign code.

- Allow those signs compatible with the character and uses allowed in the zoning district in which they are located- The proposed sign is located within the "MUD" Mixed Use Downtown District and is not compatible with the pedestrian oriented character and uses of the zoning designation as defined in OCMC 17.34.010 because the oversized sign does not enhance the active and attractive pedestrian environment. Rather, the scale of the proposed sign inhibits pedestrian friendly scale because it exceeds the height limit for signs by 27 feet. In addition, there are no other known properties within the zoning designation which have 6 signs onsite, or a sign of the proposed height or square footage as requested in this application.
- *Maintain the effectiveness of traffic signs* A property with 3 times the allowed number of freestanding signage as allowed under the sign code, as well as signage which far exceeds the height and size limitations in the code can be distracting to drivers and makes it more difficult for drivers, bicyclists and pedestrians to locate and distinguish traffic signs.
- *Maintain and enhance the scenic and other aesthetic qualities of the city.* The size, quantity and height of the proposed signage may block or distract the public from the natural beauty of Oregon City as well as the surrounding buildings and signage for surrounding properties. The sign code limitations, particularly as to the number of signs allowed on an MUC zoned property, is intended to protect the aesthetic qualities of Oregon City created through the site design and review process. Granting this variance would adversely affect the aesthetic qualities of Oregon City's mixed-use commercial area.

Staff finds that this criteria has not been met.

15.28.040.A.4 The variance requested is the minimum variance necessary, to alleviate the identified hardship.

Analysis: The applicant is seeking a variance to the number, height and size of a freestanding sign permitted onsite. The applicant stated that "the code allows for the overall height of a sign to be 30 feet above grade. We are requesting an overall height of 57 feet which is a 27 foot increase in height requirement, which we feel is necessary due to the unique circumstances and placement of the proposed sign."

VR 12-01: Sign Variance for Oregon City Shopping Center

The applicant has not shown that the sign proposed is the minimum number, size and height needed to adequately advertise the tenants of the shopping center. Staff finds that adequate signage alternatives are provided by the sign code because the shopping center is allowed to install multiple large wall signs, two freestanding signs, a roof sign, projecting sign for each frontage (provided there is no free-standing or roof sign) and an incidental sign.

In addition, the applicant has not provided the City with any evidence that other alternatives have been pursued to alleviate the situation. Staff finds that the applicant identified no hardship in regards to signage at this location. The applicant has not shown that its request is the minimum to alleviate the situation. **Staff finds that this standard has not been met.**

Chapter17.60 Variance

Finding: Chapter 17.60 of the Oregon City code was inadvertently included in the notice of this application as applicable criteria. However, only the variance standards analyzed above under OCMC 15.28.040.A for sign variances apply to this application. Staff finds the zoning code variance criteria in Chapter 17.60 are not applicable to this sign variance request. **These standards are not applicable**.

Chapter 17.50 Administration and Procedures

This chapter provides the procedures by which Oregon City reviews and decides upon applications for all permits relating to the use of land authorized by ORS Chapters 92, 197 and 227. These permits include all form of land divisions, land use, limited land use and expedited land division and legislative enactments and amendments to the Oregon City comprehensive plan and Titles 16 and 17 of this Code. **Finding:** This application was reviewed pursuant to the relevant procedures required by Chapter 17.50 for a Type III Decision. Any appeal, request for reconsideration, or modification of this application shall be

processed in accordance with the applicable procedures required by Chapter 17.50. Transmittals on the proposal were sent to various City departments, affected agencies, property owners within 300 feet and the Citizen Involvement Council.

Comments were received from ODOT indicating the state standards which the sign is subject to (Exhibit 3).

Comments were received from Tom O'Brien (Exhibit 4).

No additional comments were received prior to release of this recommendation. All comments received while the record is open will be forwarded to the Planning Commission for review. **Staff finds that this criterion has been met.**

Chapter 17.34 "MUD" Mixed Use Downtown District

Finding: The applicant did not propose to construct a new building or alter the use of the subject site. **Staff finds that this criterion not applicable.**

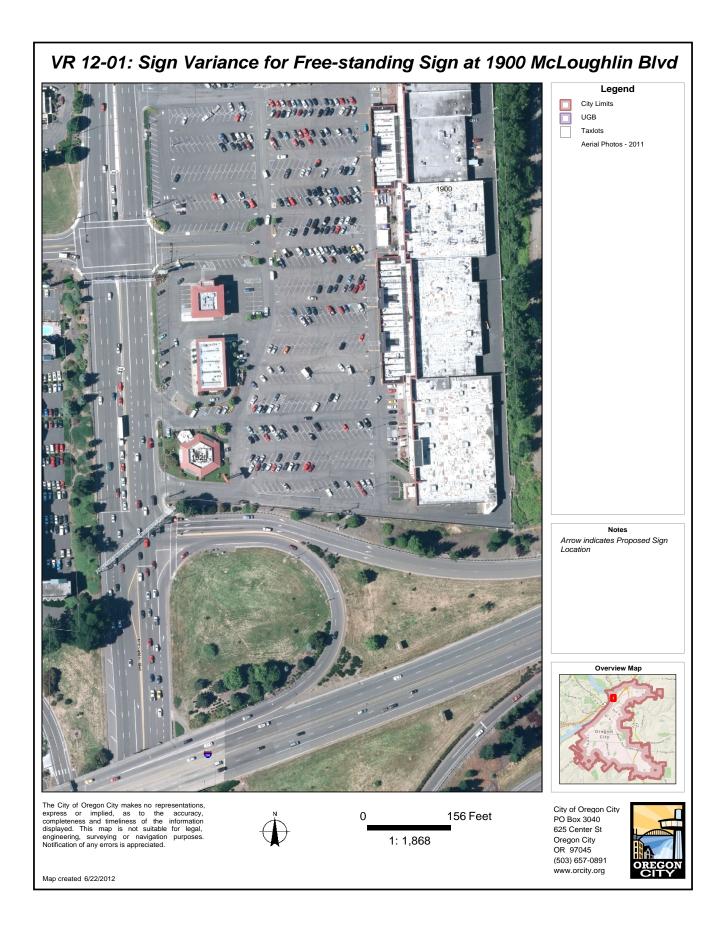
IV. CONCLUSION AND RECOMMENDATION:

Based on the analysis and findings as described above, staff concludes that the proposed sign variance does not meet the standards as stated in OCMC 15.28 and 17.60. Therefore, staff recommends that the Planning Commission upholds staff's findings and deny file# VR 12-01 for the property located at 1900 McLoughlin Blvd in Oregon City.

V. EXHIBITS:

- 1. Vicinity Map
- 2. Applicant's Narrative and Submittal
- 3. Comments from Oregon Department of Transportation
- 4. Comments from Tom O'Brien

VR 12-01: Sign Variance for Oregon City Shopping Center

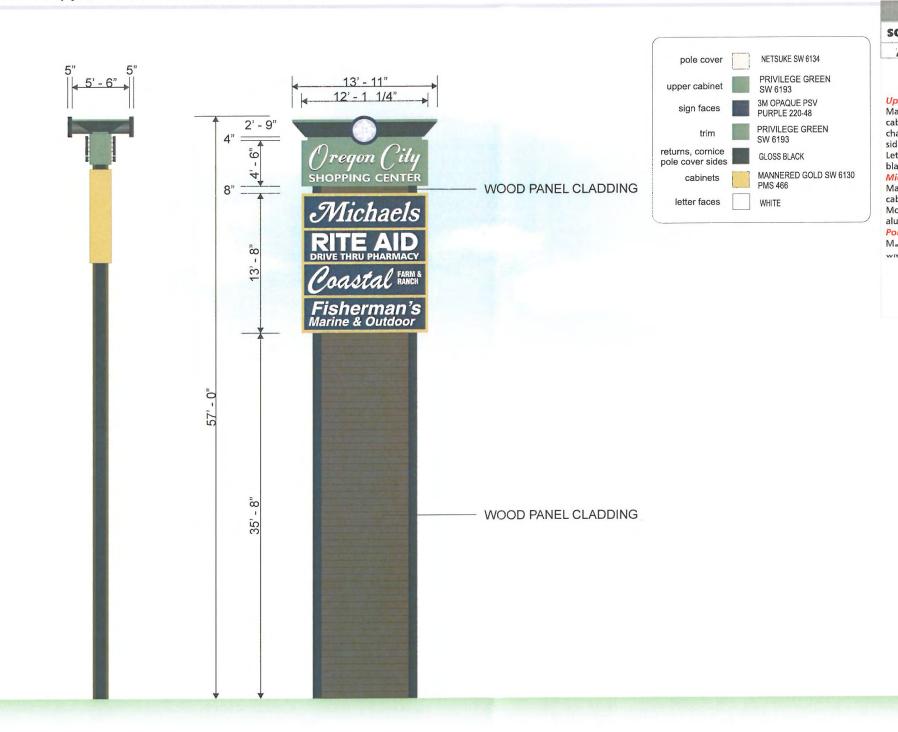


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Applicant(s):	VELANTO						
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www.tacht.art

MANUFACTURE AND INSTALL ONE (1) D/F PYLON SIGN WITH TENANT PANELS





TOT	sales@meyersignco.com	PROJECT: Oregon City Shopping Center	ACCT. MGR: Leslie		DATE:	BY:		DATE:	BY:	CUSTOMER APPROVAL:	LANDLORD APPROVAL:	This is an origi Sign Company
Sign Co. OF OREGON	www.meyersignco.com phone: 503 620 - 8200	ADDRESS: Oregon City DESIGNER: Emma Degener	CLIENT: SCALE: DATE:7/26/10	REVISION #1 REVISION #2			REVISION #1 REVISION #2			 DATE:	DATE:	specific needs are not to be st organization no any way unless
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1	ESCI	RIPTION OF WORK
Q. FT	QTY.	ITEM
2509	I	D/F PYLON

Upper Cabinet: Manufacture and install 2 single face extruded aluminum cabinets with decorative cap and internally illuminated pan channel letters. Mount to either side of cabinet and cover sides with sheet aluminum. See color chart for paint colors. Letters spaced off cabinet 1", faces to be white plex with black trim cap and black 3" returns.

Middle & Lower Cabinets:

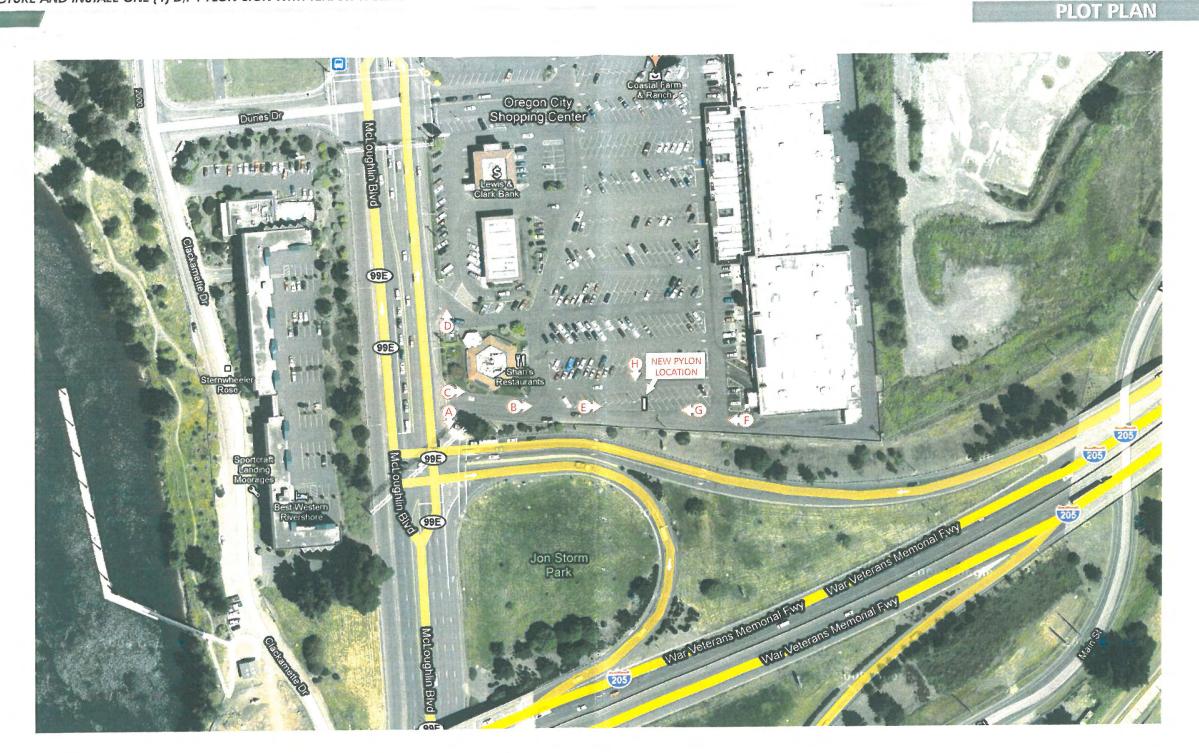
Manufacture and install 2 single face extruded aluminum cabinets with divider bars for individual tenant panels. Mount to either side of cabinet and cover sides with sheet aluminum. See color chart for paint colors.

Pole Cover:

Manufacture and install aluminum pole cover with wool panels

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MANUFACTURE AND INSTALL ONE (1) D/F PYLON SIGN WITH TENANT PANELS



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sales@meyersignco.com PROJECT: Oregon City Shopping Center www.meyersignco.com ADDRESS: Oregon City DESIGNER: Emma Degener phone: 503 620 - 8200 PHONE: fax: 503 620 - 7074

ACCT: MGR: Leslie CLIENT: SCALE: DATE:7/26/10

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DATE:

BY:

CUSTOMER APPROVAL:	LANDLORD APPROVAL:
DATE:	DATE:

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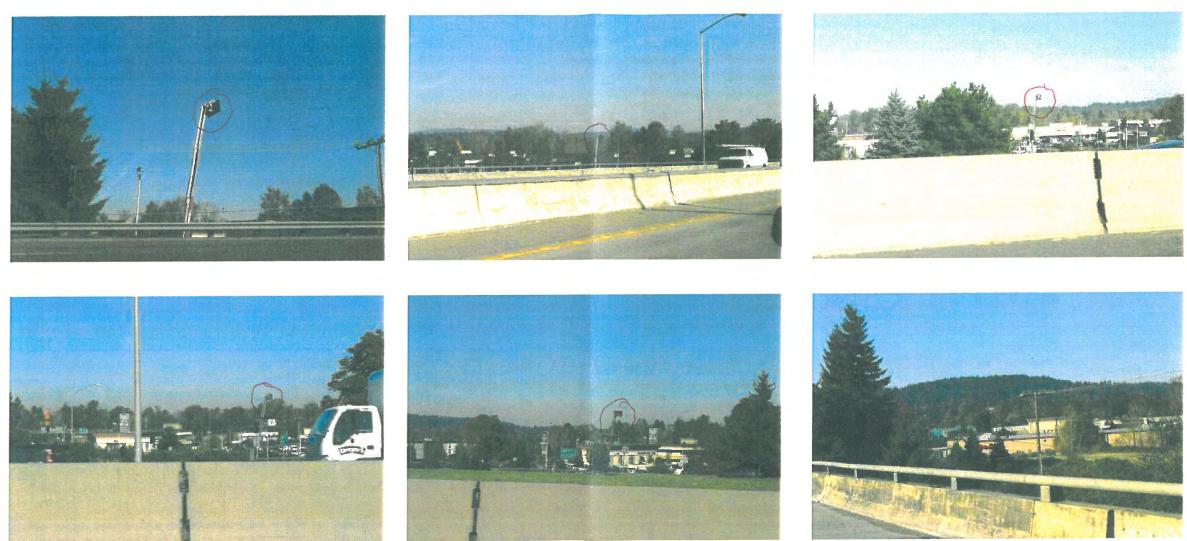


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LOCATION PHOTOS

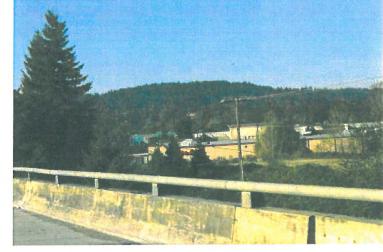
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LOCATION PHOTOS

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Page 15 of 623









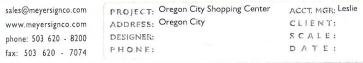




LANDLORD APPROVAL:

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LOCATION PHOTOS



This is an original unpublished drawing created for Meyer Sign Company's customer and the project planned for the specific needs of Meyer Sign Customers. These drawings are not to be shown custide your to be shown outside your organization nor used, copied, reproduced, or exhibited in any way unless authorized in writing by an officer of Meyer Sign Company of Oregon.

15.28.040 - Variances (Signs).

Grounds for Variance. Upon application by an applicant, the planning commission may grant a specific variance from provisions of this chapter provided all of the following circumstances exist:

1. Exceptional or extraordinary circumstances apply to the property that do not apply generally to other properties in the same area or vicinity. Such conditions may be the result of an unusual location or orientation of the applicant's building, topography, vegetation or other circumstance over which the applicant has no control;

We are proposing to increase the overall height of
the proposed free standing sign to 57 feet above
grade. The sign is located on War veterans memorial
FWY (205). The Frontage in which the sign will be
located on is controlled by the Oreaon Department
of Transportations regulations. The present site
condition consists of a severe slope in grade, which
provides poor visibility for a sigh any less tall than the
57 foot tall sign we are proposing.

2. The variance is necessary for the preservation of a right of the applicant substantially the same as is possessed by the owners of other property in the area or vicinity;

Throughout the process, we have explored other
options to effectively advertise on the East frontage.
facing 205 and believe that the requested variance is necessary for an affective advertising solution
is necessary for an affective advertising solution
for our shopping center and tenants.

3. The authorization of the requested variance will not be materially detrimental to, or conflict with, the purposes of this chapter or be injurious to the use and enjoyment of other property in the area or vicinity, or the public way, in which the property is located; and

Although the proposed sign exceeds the allowed square footage and height requirements, it is proportionately reasonable and not overbearing. The proposed sign is identical to the other existing freestanding sign located on 99 E but larger due to site conditions and placement.

4. The variance requested is the minimum variance necessary, to alleviate the identified hardship. The code allows for the overall height of a sigh to be 30 feet above grade. We are requesting an overall height of 57 feet which is a 21 foot increase. In height requirement, which we feel is necessary due to the unique circumstances and placement of the proposed sign.

City of Oregon City Municipal Code 15.28.040

Oregon City SHOPPING CENTER

1900 SE McLoughlin Blvd., Suite 69 • Oregon City, Oregon 97045 • Phone (503) 650-1888 • Fax (503) 650-1889

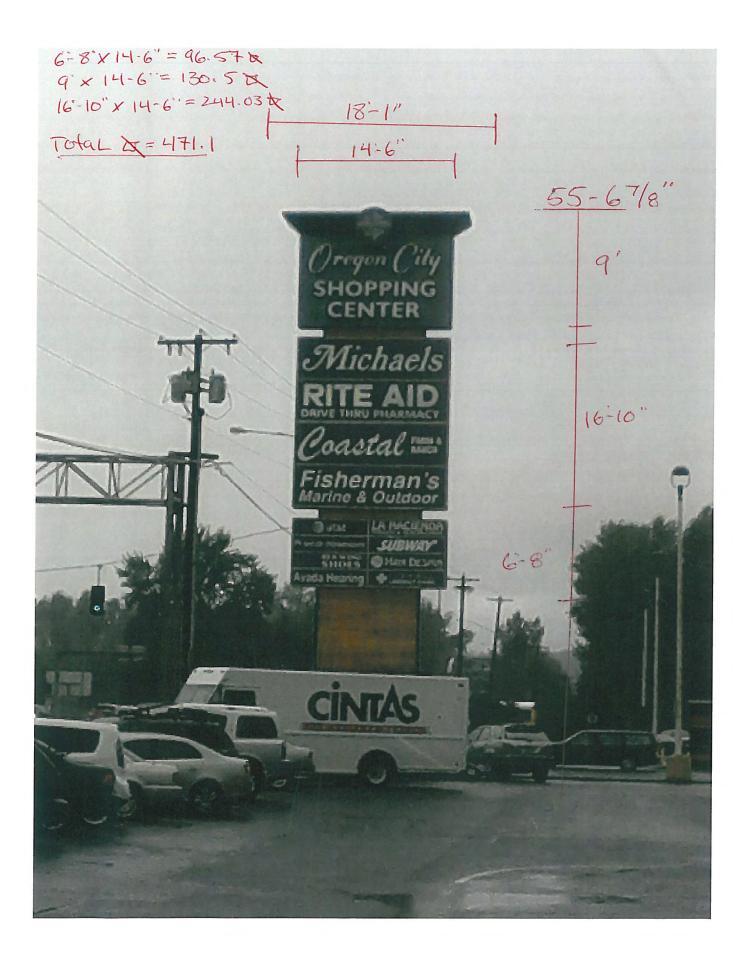
This narrative is in support of the variance that is being requested proposing to install a new 245sq ft sign with an overall height of 57'. The sign is to be installed on the south side of the property approximately 200 feet east of the existing Shari's sign and will be placed in an area that will not require any parking spaces to be vacated.

The south side of this property has no street frontage and is bordered by the veterans' memorial highway off ramp and the highway itself.

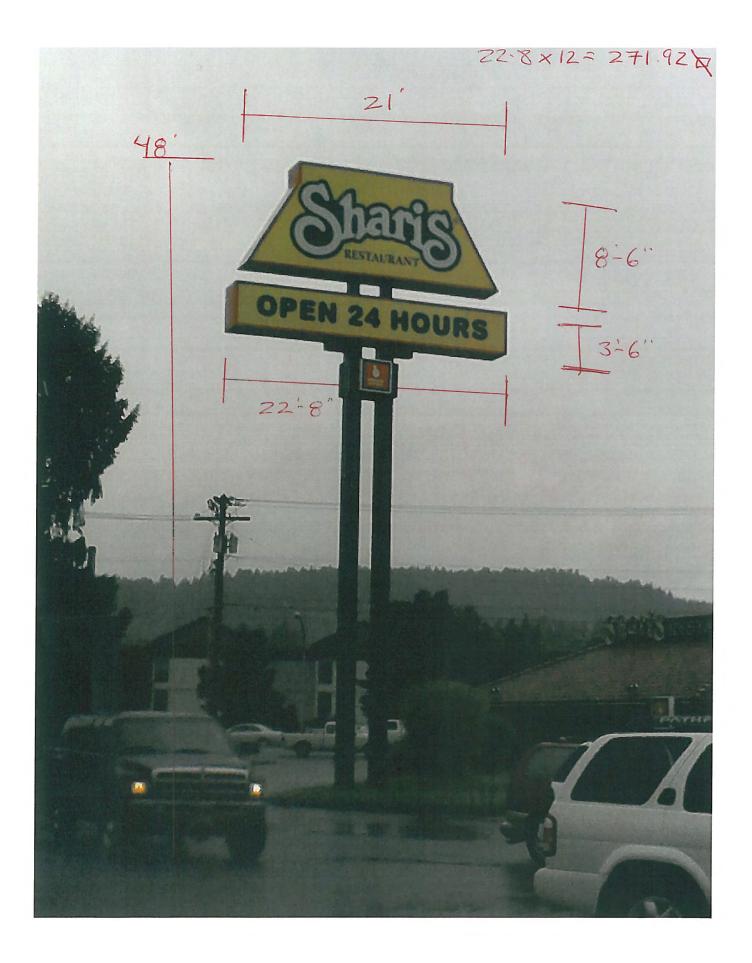
Our reason for asking for this 57 foot high 245 sq ft sign is to be able to provide identification from 205 and ultimately bring in potential customers that otherwise would drive by because the South side of the center currently is not properly identified. Because the highway is elevated approximately 35 feet above the parking lot and about 150 feet south of the Shopping Center, a 30 foot sign would not be visible and a 150sq ft sign would not be readable therefore defeating the purpose of having the sign at all.

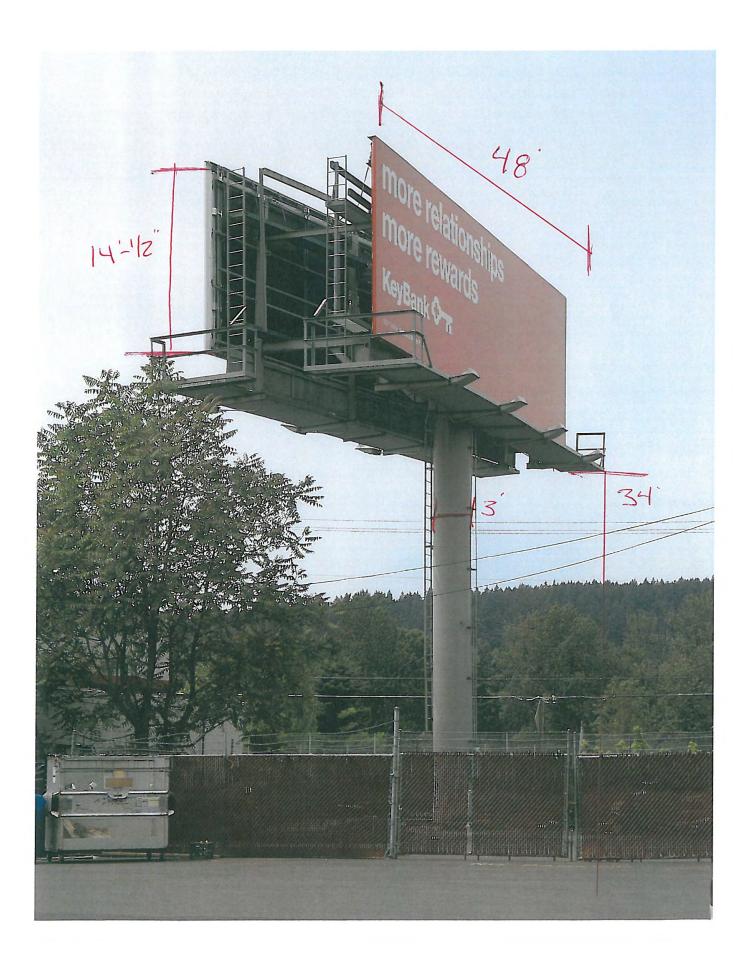
At this time we have no visible signage from the highway and feel we are missing the opportunity to provide additional support for our tenants by not providing the visibility necessary to make the largest impact possible during this difficult economic time.

Thank you for your consideration













Pete Walter

From: Sent:	ELSTUN Wendy S *ODOT [Wendy.S.ELSTUN@odot.state.or.us] Monday, June 25, 2012 1:47 PM
То:	Pete Walter
Subject:	FW: Transmittal for Comment from Oregon City Planning Division: VR 12-01: 1900
-	McLoughlin Blvd
Attachments:	VR 12-01 Land Use Transmittal.pdf; VR 12-01 Public Notice Mail.pdf; 377.715 - Basics & Not in ROW.doc; 377.720 - Prohibited signs.doc

Thank you for the opportunity to provide comment on the proposed land use change at 1900 McLoughlin Blvd. (Oregon City Shopping Center). After reviewing the attachments I find the proposed "Sign" would be visible to a state highway (1-205) at approximate mile point 9 on the west side. The "Sign" would be located at a business open to the public and it does not appear that compensation would be exchanged for either a land lease or for the sale of ad copy. If this is an accurate assessment the sign would not be and Outdoor Advertising Sign and not require a state sign permit and only be subject to the basic basic safety and prohibited regulations. These include lighting that does not project onto the roadway or impair the sight of traveling motorist. No flashing or scrolling lights. It would not subject to state regulation for size or spacing. I have attached the statutes that all sign visible to a state highway must adhere to. ORS 377.715 & 377.720

Thank you

Wendy S Elstun Program Coordinator, ODOT Outdoor Advertising Sign Program 503-986-3650fx 503-986-3625

From: BAUMGARTNER Douglas G Sent: Monday, June 25, 2012 1:08 PM To: ELSTUN Wendy S *ODOT Subject: FW: Transmittal for Comment from Oregon City Planning Division: VR 12-01: 1900 McLoughlin Blvd

1

Good afternoon,

This is a sign proposal in Oregon City that may be of interest to you.

Doug

Douglas Baumgartner, E.I.T. ODOT Region 1 Traffic Analyst 123 NW Flanders Street Portland, OR 97209-4012 503.731.8225 FAX 503.731.8259

From: Pete Walter [mailto:pwalter@ci.oregon-city.or.us] Sent: Friday, June 22, 2012 1:30 PM **377.715** Application of ORS **377.700** to **377.840**; prohibition against erection or maintenance of certain signs not in compliance with law. ORS **377.700** to **377.840**, and the rules adopted pursuant thereto, apply to signs erected or maintained outside the right of way along state highways and visible to the traveling public from a state highway. A person may not erect or maintain a sign visible to the traveling public from a state highway, except where permitted outside the right of way of a state highway, unless the sign complies with the provisions of ORS **377.505** to **377.540** and **377.700** to **377.840**, and the rules adopted pursuant thereto. A person may not erect or maintain a sign on the right of way of a state highway, other than a traffic control sign or device. [1971 c.770 §8; 1973 c.790 §2; 1974 c.33 §2; 1975 c.336 §2; 1983 c.111 §2; 1987 c.336 §3; 1999 c.877 §3; 2007 c.199 §7]

ORS 377.720 Prohibited signs; exceptions. A sign may not be erected or maintained if it:

(1) Interferes with, imitates or resembles any traffic control sign or device, or attempts or appears to attempt to direct the movement of traffic.

(2) Prevents the driver of a motor vehicle from having a clear and unobstructed view of traffic control signs or devices or approaching or merging traffic.

(3) Contains, includes or is illuminated by any flashing, intermittent, revolving, rotating or moving light or moves or has any animated or moving parts. This subsection does not apply to:(a) A traffic control sign or device.

(b) Signs or portions thereof with lights that may be changed at intermittent intervals by electronic process or remote control that are not outdoor advertising signs.

(c) A tri-vision sign, except that a tri-vision sign may not be illuminated by any flashing, intermittent, revolving, rotating or moving lights.

(4) Has any lighting, unless such lighting is so effectively shielded as to prevent beams or rays of light from being directed at any portion of the main traveled way of a state highway, or is of such low intensity or brilliance as not to cause glare or to impair the vision of the driver of a motor vehicle or otherwise to interfere with the operation thereof.

(5) Is located upon a tree, or painted or drawn upon a rock or other natural feature.

(6) Advertises activities that are illegal under any state or federal law applicable at the location of the sign or of the activities.

(7) Is not maintained in a neat, clean and attractive condition and in good repair.

(8) Is not able to withstand a wind pressure of 20 pounds per square foot of exposed surface.

(9) Is on a vehicle or trailer that is located on public or private property. This subsection does not apply to a vehicle or trailer used for transportation by the owner or person in control of the property. [1971 c.770 §15; 1973 c.790 §3; 1977 c.256 §2; 1981 c.392 §1; 1999 c.877 §4; 2007 c.199 §8]

July 5, 2012

Community Development Department - Planning Division 221 Molalla Avenue, Suite 200 Oregon City, Oregon 97045

I would like to submit the following comments regarding the Variance Application File # VR-12-01 VARIANCE - Sign Code

After reviewing the video of the presentation the applicant made to the Citizen Involvement Council on May 7, 2012 I have several concerns regarding this variance request.

The applicant stated they wanted a way to alert the motoring public on I-205 to the presence of the Oregon City Shopping Center at this exit. Does this proposed sign achieve that goal. I'd suggest that signage on I-205 well in advance of both the North and South bound exit ramps would be far more effective in achieving the awareness goal. Signs similar to those that ODOT has placed in the vicinity of Bridgeport Village, Clackamas Town Center, Clackamas Promenade, Eastport Plaza and Mall 205 would be more effective.



A tenant sign in the suggested location would not be visible until a motorist is well beyond either the North or South bound exit ramp entrances and therefore does not meet the objective mentioned.

During the applicants presentation it was stated that this would be the second free-standing sign at the Oregon City Shopping Center. That is not accurate. Our Current sign code section 15.28.080 sub section 3a, allows one free-standing-sign for each street frontage of a premises. Currently there are four free standing signs at the location and our current sign code only allows two, one on each frontage. The current tenant sign is on the West frontage and the Shari's sign is on the South frontage. There are two additional free-standing signs, one each for Firestone and Starbucks/AT&T.





Comparison between the current free-standing and the proposed sign

Oregon City Code	Current Sign	Proposed Sign
Height 30' Maximum	55'	57'
300 sq. ft.	1,050 sq. ft	larger than 1,050 sq. ft



The photo below was taken from near the front door at Shari's restaurant.

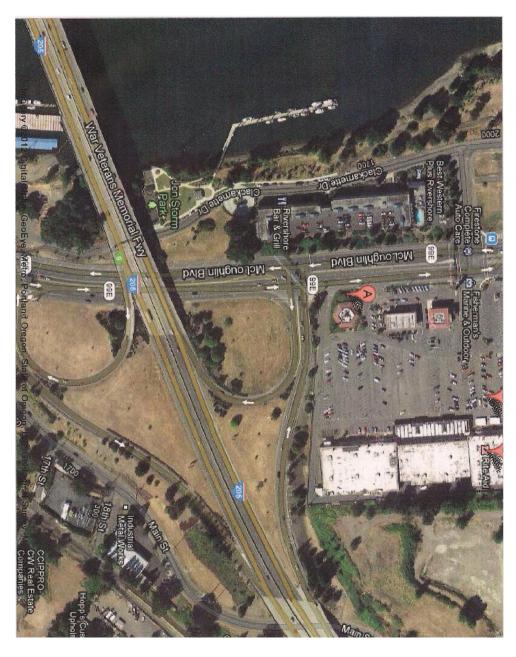
The current sign is adequate for only four of the tenants who have space on it. Michaels, Rite Aid, Coastal and Fisherman's probably get some customers as a result of the sign. It is unlikely that the other eight tenants get many customers as a result of poor visibility.

A prospective customer is not able to see the signs for AT&T, Kaiser Permanente, Red Wing Shoes, Avada Hearing, La Hacienda, Subway, Hair Design and Cornell Urgent Care until they are reasonably close to the sign. Even then the lower line of the sign for La Hacienda is not legible because the letters are too small and spaced very tight together.

The speed limit on this section of Highway 99E is 40 mph and the roadway is eight lanes wide. These conditions plus pedestrians, bicyclists and traffic tend to require drivers to have their attention on something other than a sign set back from the edge of the roadway approximately 25 feet.

With the limited effectiveness of the current tenant sign it is difficult to imagine that one which is only slightly larger as far as the exposed face area of the sign can be effective in attracting new customers to the Oregon City Shopping Center. See the photo on the next page. It gives some indication of the obstacles a motorist viewing such a sign would encounter. Not only would they be a great distance from such a sign but they would be traveling at a higher rate of speed. They would also need to be after to other motorist changing lanes.





community. Signs that are poorly designed or maintained on the other hand are detrimental to a I am usually in favor of signs as they can be very beneficial to the owner of a business and the business and the community.

To illustrate how a sign can be detrimental to ones business I'll ask you to consider the following. A question was asked of me many years ago by someone in the sign industry. They showed me a photo of a sign in the window of a furrier in a major U.S. city. The sign was produced using a scrap marker. The sign read "Furs Cleaned and Stored" piece of corrugated from a corrugated box and the lettering was produced using a black felt tip

or stored at this establishment?" The obvious answer is an emphatic NO The question I was asked and I ask you is, "Would you purchase an expensive fur, or have it cleaned

That same emphatic NO answer is appropriate for this variance request

Sincerely,

Tom O'Brien

Laura Terway

From:	Tom O'Brien [tom.obrien4@comcast.net]
Sent:	Wednesday, July 04, 2012 8:08 AM
To:	David Frasher; Tony Konkol; Pete Walter; Laura Terway; Christina Robertson-Gardiner
Cc:	Doug Neeley; Betty Mumm; Carol Pauli; Kathy Roth; Rocky Smith, Jr.; Nancy Busch
Subject:	United States Sign Council - Standards and Guidelines
Attachments:	USSC Guideline - Standards.pdf

Good morning to each of you. Hope you all had an enjoyable Independence Day.

As you are each aware one of the cities goals for the 2012/2013 fiscal year is to work toward the improving the appearance and value of signage in Oregon City.

David, Tony and I all agree that education is the key element to make sure such an effort is successful.

In that vein I thought it would be helpful for every member of the Planning Department to have a copy of the attached publication. It is produced by the United States Sign Council.

Since its founding in 1972, the United States Sign Council has been dedicated to providing an educational resource for the sign industry, and is currently the largest association of independent sign shops in the world.

The title of the attached publication is *On-Premise Signs Guideline Standards*. It contains information on several studies that have been done and provides an understanding of what is needed for a sign to be effective.

Since the Planning Commission will soon be considering a request for variance to add yet a 5th (our present code allows for 2) free standing sign at the Oregon City Shopping Center, they may find this publication helpful in coming to their decision.

The United States Sign Council also has prepared a selection of 19 educational publications which are available through their website at <u>http://www.ussc.org/</u>

On Monday afternoon I was teasing David and Tony, asking them when we would get started on the education phase and they were both delighted to remind me that it was only July 2nd, and the first day of the new fiscal year had been a Sunday.

1

Have a good day!

Tom O'Brien



On-Premise Signs Guideline Standards

Research Based Approach To: Sign Size Sign Legibility Sign Height

UNITED STATES SIGN COUNCIL

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On Premise Signs

United States Sign Council Best Practices Standards

A Research Based Approach To:

Sign Size

Sign Legibility

Sign Height

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The United States Sign Council gratefully acknowledges the contributions of the following individuals in the development of this Best Practices Standards publication.

Andrew D. Bertucci Author

Richard B. Crawford, Esq. Legal and Technical Review Philip M. Garvey Research Verification and Peer Review Peter J. Tantala, P.E. Development of Algebraic Equations Marilyn Moir Final Editing and Overall Review



UNITED STATES SIGN COUNCIL

Published by the United States Sign Council as part of an on-going effort to provide a verifiable body of knowledge concerning the optimal usage of signs as a vital communicative resource within the built environment.

For further information concerning the research and educational activities of The United States Sign Council and The United States Sign Council Foundation contact The United States Sign Council 211 Radcliffe Street, Bristol, Pennsylvania 19007-5013 215-785-1922 / Fax: 215-788-8395 www.ussc.org

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PREFACE, The Advancement of Scientific Research

In 1996 the United States Sign Council and its research arm, The United States Sign Council Foundation, began research into the legibility and traffic safety implications of roadside on-premise signs. Prior to that time, very little research existed relative to the design and safety characteristics of this type of sign. Traffic engineers, seeking to develop a directional sign system to be used by motorists on local and interstate highways, had promulgated some earlier academic research. However, although useful as a starting point, the data had little relevance to the distinct qualities of private roadside signs. By virtue of their diversity and placement on private property, on-premise signs exist as a totally separate class of motorist-oriented communication, encompassing unique design challenges and traffic safety implications.

Since 1996, the United States Sign Council Foundation, in concert with traffic engineers, human factors researchers, and statistical analysts of the Pennsylvania Transportation Institute of the Pennsylvania State University, has published a series of research studies. The results from this work now provide a distinct and objective scientific basis for understanding the manner in which motorists receive and respond to the information content of the private, roadside sign system. The research and corresponding analyses afford designers and regulators of signs with an insight into the legibility, size, and placement characteristics necessary for effective roadside communication to occur. Coincidental with the work of the Pennsylvania State University research teams, other researchers, including teams studying the impact of sign systems serving the needs of an aging population on traffic safety, have arrived at conclusions essentially confirming the sign legibility and placement parameters discovered by the Pennsylvania State University researchers.

1

3a. VR 12-01: Sign Variance

Four distinct volumes comprise the United States Sign Council / Pennsylvania Transportation Institute collaborative research work:

- 1) SIGN VISIBILITY, Research and Traffic Safety Overview (1996)
- SIGN LEGIBILITY, The Impact of Color and Illumination on Typical On-Premise Sign Font Legibility (1998)
- REAL WORLD ON-PREMISE SIGN VISIBILITY, The Impact of the Driving Task on Sign Detection and Legibility (2002)
- SIGN VISIBILITY, Effects of Traffic Characteristics and Mounting Height (2003)

Together, these volumes, along with the aforementioned corroborating research provided by other teams, comprise the basis for the United States Sign Council Best Practices Standards for the design of roadside on-premise signs in dynamic motorist-oriented environments.

OVERVIEW, Seeing and Reading Roadside On-Premise Signs

The viewing of a roadside sign by a motorist involves a complex series of sequentially occurring events, both mental and physical. They can include message acquisition and processing, intervals of eye movement alternating between the sign and the road environment and, finally, active maneuvering of the vehicle itself as required in response to the stimulus provided by the sign.

Further complicating this process, is the dynamic of the viewing task itself. The subject must look through the constricted view frame of the windshield of a moving vehicle, with the distance between him/herself and the sign quickly diminishing. At 40 miles per hour, for example, the rate at which the viewing distance decreases is 58 feet per second; at 50 miles per hour, it becomes an impressive 88 feet per second. Because of this rapidly decreasing window of viewing opportunity, roadside sign design becomes highly challenging and critical

to traffic safety. In addition, it necessitates the development of scientific standards for on-premise sign legibility, size, placement, and height in order to achieve effective roadside communication and maintain traffic safety.

Research has now been able to quantify the viewing process, such that measurement of the time necessary for a motorist to view and react to a roadside sign, while driving at a specified rate of speed, can be calculated. Using this time frame, or Viewer Reaction Time, and the amount of distance from the sign represented by that time frame, the optimal sign size required to transmit the message and allow sufficient time for detection, comprehension, and maneuvering can be calculated reliably.

The message content of the sign, usually composed of letterforms and/or symbols, sets the initial parameter for determining sign size. Once message content has been established and its length and/or complexity considered, sign size can be ascertained by assigning numerical values to the following:

- 1) Viewer Reaction Time
- 2) Viewer Reaction Distance
- 3) Letter Height
- 4) Copy Area
- 5) Negative Space

Each of these determinants is explained in detail below, along with the methodology for calculating their individual values. The size of the sign, then, can be computed either by summing these five determining values or by inserting them into the algebraic equation developed by USSC for that purpose. The result derived by using either method is the USSC standard for minimum sign size under dynamic roadside conditions.

DETERMINING SIGN SIZE – The Component Determinants

Viewer Reaction Time

The Viewing/Reaction Process

Viewer Reaction Time is a measurement of the total viewing and reaction time available to a driver reading a sign. It consists of four identifiable elements, each of which can be measured in components of elapsed time. They are:

- Detection of the sign, noting it as a separate entity in a field of roadside objects;
- The Message Scan, or fixation of view on the message contained on the sign;
- The Re-Orientation Scan, or refocus of view from the message to the road environment at known intervals;
- 4) Driving Maneuvers as required in response to the message.

Detection

Detection of a specific sign as a recognizable element of the roadside landscape is a direct function of its *conspicuity*, or its ability to stand out from other objects within the field of view. The degree of conspicuity depends on a number of factors, including size, color, design, and placement, but even more specifically, the amount of contrast between the sign and its surrounding environment. Without some degree of conspicuity, a sign may lack detectability and cease to be a source of effective roadside identity or wayfinding communication.

Detection and Complexity of Driver and Sign Environment

Research has shown that detection is inversely related to the complexity of both the driving task and the landscape. Thus, as complexity increases for either or

both the driving task and the visual environment, detection of any specific object within that landscape is likely to decrease. The more complex the landscape (e.g., city centers or multi-lane commercial corridors), the longer the time frame in the viewing cycle necessary and, therefore, the more conspicuous signs need to be for specific detection.

In this context, the effect of illumination can also have a profound effect on detectability, with the research verifying a pronounced increase in detection after dark for internally illuminated signs over similar signs viewed under daylight conditions.

Detection and Sign Orientation

Detectability is also a function of sign orientation, or the relative angle of view between the sign and the viewer. This angle has been shown to be at an optimum level when signs are positioned perpendicular to the viewer, and at initial detection, within a cone of vision extending 10 degrees to either side of the viewer. As confirmed by the research, "head-on", or perpendicular views, are far superior in detectability to parallel or side oriented views.

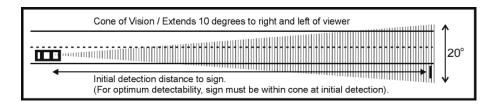


Figure 1. Cone of Vision and Detectability

Lateral Offset or Setback and The Cone of Vision

Lateral Offset, or Setback is the distance in feet at which the sign is offset to the right or left of the driver's eye position. It is critical to detectability because it determines the position of the sign either inside or outside the cone of vision at initial detection.

To assure optimal initial detection within the cone of vision, the sign should be located as close to the roadside as possible, so that the lateral offset is kept to a minimum. This usually means placement of the leading edge of a freestanding sign at the front property line, and signs on the sides of buildings as close to the front of the building as is practical. Arbitrarily imposed setback requirements increasing lateral offset beyond these parameters are generally counter productive to sign detection since they increase the distance of the sign from the driver's eye position, even if it is within the cone of vision.

It is important to note, as well, that roadside geometry affects any lateral offset calculation, which must include the number of road lanes, the width of the shoulder, and, in particular, the width of any utility or future right of way easements before the property line is reached; all of which add considerable lateral distance from the driver's eye position. In some instances in which public easements are large and initial detection distances are short, lateral offset may exceed the cone of vision inclusion even if the sign is placed at the property line. Increasing sign size, and therefore, visual range, is one solution to this detection problem, since as visual range increases, lateral offset is also increased.

Lateral offset from the viewer's eye position can be calculated through the application of the following equation in which:

L equals ten degrees of lateral offset.

D equals distance in feet from the sign at initial detection.

$$L = D$$
 (.176)

Thus, if initial detection distance from the sign is 300 feet, 10 degrees of lateral offset would be 52 feet. Note that this offset is from the driver's eye position, and not from some variable point, such as the edge of the road, road shoulder, or roadside easement.

Vertical Offset or Sign Height

Sign height limits which would enable sign detection without loss of eye contact with the road have variously been recommended by researchers at between five to eight degrees vertically from the driver's eye level. Researchers at the Pennsylvania Transportation Institute have adopted the five degree vertical limit as a conservative estimate of sign height limits, or vertical offset. Since additional research into this aspect of sign detection clearly remains to be done, particularly since sign height is affected not only by the viewer's eye position, but by differences in the topography of the roadside itself, the five degree height limit proposed by the PTI research team is offered here only as a minimum guideline for the vertical placement of roadside signs, and not as a USSC standard at this time.

Nonetheless, it can serve to provide some means for optimizing the relationship between sign height, sign detection over both long and short ranges, and motorist safety. Using five degrees of vertical elevation, plus 3.5 feet representing elevation of the average driver's eye position above the road, a calculation of vertical sign height limits capable of providing comfortable detection over both long and short ranges can be derived from the following equation in which:

7

H equals sign height limit.

D equals distance in feet from the sign at initial detection.

Thus, if initial detection distance from the sign is 400 feet, the sign height would be limited to 38.5 feet.

Table 1 below indicates varied Lateral and Vertical Offsets for selected detection ranges.

Detection Distance To Sign	Lateral Offset (Setback)	Vertical Offset (Height Limit)	Lateral Offset at
200 ft.	35 ft.	21 ft.	10 degrees right
400 ft.	70 ft.	38.5 ft.	or left.
600 ft.	106 ft.	55.5 ft.	Vertical Offset at
800 ft.	141 ft.	73.5 ft.	5 degrees plus 3.5 feet.
1000 ft.	176 ft.	90.5 ft.	

Table 1. Lateral and Vertical Offsets as function of distance.

Detection...Conclusion

The USSC Best Practices Standards for sign legibility and size assumes that conditions of sign orientation and setback afford optimum detectability, as described above. In practice, these conditions would include most freestanding and projecting signs, building signs on walls directly facing the viewer, and roof signs mounted at similar optimum viewing angles within the cone of vision.

Detection as a component of Viewer Reaction Time in the USSC standard is calculated at one-half to one second duration, depending on roadside complexity and traffic volume.

The Message Scan / The Re-Orientation Scan

The message depicted on a sign establishes the time frame for the essential component of the viewing process. Short messages and/or simple typography take less time to read and mentally process than long messages and/or cursive or decorative typography.

In this context, it should be noted that on-premise signs frequently contain a variety of messages, which may be displayed in a number of different sizes and font configurations. The USSC standard for sign size is related principally to Primary Messages, or those messages providing essential information relative to the activities conducted on the site (e.g., the name of the activity, the nature of the activity or product available, principal or major occupants of the site, and other information of similar nature). Secondary Messages are usually designed to provide ancillary information concerning product features or to denote secondary occupants of the site, as seen on site directories. While clearly useful to roadside viewers and to the marketing programs of the sign user, secondary messages are considered less important to the immediate transfer of information demanded of signs placed in a high-speed, dynamic roadside environment in which viewing and reaction time is calculated in seconds.

Current research on average reading times indicates that signs displaying four to eight words in simple typography can be comfortably read and comprehended in approximately four seconds, yielding a reading time, or Message Scan, of onehalf second per word. Since words in this context are each assumed to contain five letters, this time frame can be further refined to one-tenth of a second per letter, which is the USSC computational standard for the Message Scan. (Note: Although it is true that sign copy is read by reference to the words comprising the message, USSC elects to achieve greater precision in the

calculation process by reference to the individual letters making up the words, in order to minimize any potential skewing effect of large or small words.)

Additionally, symbols, such as directional arrows, or universally recognized logos or icons displayed on the sign, are considered equivalent to one word, or five letters, yielding a reading, or scan time, of one-half second per symbol. Although reading time for universally recognized symbols has been shown to be at least equal to the reading time per word, it is not known to what extent reading time would be increased if unfamiliar symbols or icons were used. Understandably, the viewer would require more time for interpretation and processing if the symbols were not familiar. Therefore, the USSC standard for computation is based on the use of universally recognizable symbols only.

In addition to the reading time, research based on eye-movement studies indicates that motorists feel compelled to glance back at the road for at least one-half second for every two and one-half seconds of reading time. Within complex driving environments, the USSC Best Practices Standards increases this reorientation with the road from one-half second to one second to account for the heightened difficulty of the driving task incurred by the additional visual demands of reading a sign.

The Driving Maneuver

When a motorist detects a sign indicating a sought-after location, s/he will respond by executing some form of driving maneuver. Depending on the number of lanes of traffic, traffic volume, and complexity of the driving environment, potential reactions may include signaling, deceleration, braking, changing lanes, and turning either right or left to gain access to the desired location.

The time interval needed to complete the driving maneuver may or may not be included in the computation of Viewer Reaction Time, depending on whether or not such maneuver must be made before (pre-sign) or after (post-sign) the sign location is passed. Generally, since on-premise identity signs are designed to mark the specific location of a given business or institutional entity, driving maneuvers necessary for entry into that location must be executed before passing the sign. The driving maneuver component, then, will be included as part of Viewer Reaction Time.

On the other hand, signs containing directional and/or wayfinding information, or other signs (such as projecting signs in crowded cityscapes) not directing ingress to the location of the sign, do not necessarily require any driving maneuver to be made until after the sign is passed. In these instances, the driving maneuver is not incorporated as part of Viewer Reaction Time.

The USSC standard for the Driving Maneuver varies from four to six seconds depending on roadside complexity and traffic volume.

Table 2	Com	outation	of	Viewer	Reaction	Time
	COULD	Jululion		101001	reaction	11110

Viewer Reaction Time Computation Relative to Primary Message					
	Driving Environment				
Task	Simple	Complex ¹	Multi Lane ²		
Detection	0.5 Second	1 Second	1 Second		
Message Scan	0.1 Sec / Letter 0.5 Sec / Symbol	0.1 Sec / Letter 0.5 Sec / Symbol	0.1 Sec / Letter 0.5 Sec / Symbol		
Re-Orientation Scan	0.02 Sec / Letter 0.1 Sec / Symbol	0.04 Sec / Letter 0.2 Sec / Symbol	0.04 Sec / Letter 0.2 Sec / Symbol		
Maneuver	4 Seconds	5 Seconds	6 Seconds		

1. Developed town or city commercial areas. Single or multi-lane travel under 35 mph

2. Developed urban/suburban commercial areas. Multi-lane travel over 35 mph

The computation table above is designed to provide a reasonably accurate assessment of the minimum Viewer Reaction Time for a motorist, with at least the 20/40 visual acuity necessary to maintain a driving license, to view an individual sign. Because of the significant variations that can exist in individual sign design and placement, motorist response, and the roadside environment in which the sign is placed, the table is intended as a guideline only and not as a substitute for actual field observation.

Viewer Reaction Time – Average Standard

Although the computation chart provides a useful guideline for the Viewer Reaction Time ascribed to a particular sign, it can also be used to approximate a broad average for a variety of signs within a particular landscape. This average Viewer Reaction Time is helpful in preparing sign size limits for a planned development, a community sign system, or a series of highway oriented and/or wayfinding signs, among others. Assuming a message content of six words (30 letters) on a typical sign, the USSC standard Viewer Reaction Time average in simple environments for pre-sign maneuver is 8 seconds; and for post-sign maneuver, 4 seconds. In complex or multi lane environments, the pre-sign maneuver average advances to 10 or 11 seconds, respectively, and the post-sign maneuver average advances to 5 or 6 seconds.

Table 2 below details these average Viewer Reaction Time values through the range of traffic conditions.

Road	Man		
Conditions	Pre Sign	Post Sign	A
Simple	8 Sec.	4 Sec.	Average Viewer
Complex	10 Sec.	5 Sec.	Reaction Time
Multi Lane	11 Sec.	5 Sec.	

Table 3. Average Viewer Reaction Time

Viewer Reaction Distance: Converting Time to Distance

Viewer Reaction Distance represents the distance in lineal feet that a viewer will cover at a given rate of speed during the Viewer Reaction Time interval. Essentially, Viewer Reaction Distance represents the same visual dynamic as Viewer Reaction Time, except it is expressed in lineal feet instead of seconds of elapsed time. Viewer Reaction Distance is essential to the determination of sign legibility and size. The distance between the viewer and the sign at the point of initial detection determines the letter height necessary for the viewer to acquire and understand the message. By converting Viewer Reaction Time to Viewer Reaction Distance, a relatively precise calculation of initial detection distance can be established.

Viewer Reaction Distance, expressed in feet, can be calculated by first converting travel speed in miles per hour (MPH) to feet per second (FPS) by using the multiplier, 1.47.

FPS = (MPH) 1.47 Viewer Reaction Distance (VRD) is then calculated by multiplying feet per second by the Viewer Reaction Time (VRT).

The following is the resultant equation:

VRD = (MPH) (VRT) 1.47

Letter Height / The USSC Standard Legibility Index

The overall legibility of a sign is, essentially, a function of the height, color, and font characteristics of the letters making up its message component. For the publication, *Sign Legibility: The Impact of Color and Illumination*, test track studies of individual signs were conducted, using subjects in all age groups, to determine the effect that different conditions of daylight and darkness have on detecting and reading signs of varying colors. In order to simulate real-world conditions, two letterforms, Helvetica and Clarendon, were chosen for the study, as they best represent the two general letterform families used in the English language: sans-serif Gothic style (Helvetica) and serif Roman style (Clarendon). The research produced a definitive understanding of the legibility of letterforms under many color and illumination conditions, as well as an understanding of the letter heights necessary for legibility over varying distances from the observer.

Helvetica HELVETICA Gothic Clarendon CLARENDON Roman

Figure 2. Helvetica and Clarendon Letterforms

Using this research not only as a benchmark for the specific letterforms studied, but also as a reasonable basis for extrapolation to other similarly configured letterforms, USSC developed a Standard Legibility Index. By means of the Index, the height of letters necessary to provide legibility from a given distance can be calculated.

The USSC Standard Legibility Index is a numerical value representing the distance in feet for every inch of capital letter height at which a sign may be read. The table also reflects the 15 percent increase in letter height required when all upper case letters (all caps) are used instead of upper and lower case letters with initial caps, a difference in recognition distance documented in earlier studies by the researchers at the Pennsylvania Transportation Institute.

To use the table to determine letter height for any given viewing distance, select the combination of illumination, letter style, letter color, and background color that most closely approximates those features on the sign being evaluated. Then, divide the viewing distance (in feet) by the appropriate Legibility Index value. The result is the letter height in inches for the initial capital letter in upper and lower case configurations, or for every letter in an all caps configuration.

Letter Height = $\frac{VRD}{Legibility Index}$

Letter height is expressed in inches, and the Viewer Reaction Distance (VRD) in feet.

	LETTER	LETTER	Background	LEGIBILI	
ILLUMINATION	STYLE	COLOR	COLOR	Upper & Lower Case	ALL CAPS
External	Helvetica	Black	White	29	25
External	Helvetica	Yellow	Green	26	22
External	Helvetica	White	Black	26	22
External	Clarendon	Black	White	28	24
External	Clarendon	Yellow	Green	31	26
External	Clarendon	White	Black	24	20
Internal Translucent	Helvetica	Black	White	29	25
Internal Translucent	Helvetica	Yellow	Green	37	31
Internal Translucent	Clarendon	Black	White	31	26
Internal Translucent	Clarendon	Yellow	Green	37	31
Internal Opaque	Helvetica	White	Black	34	29
Internal Opaque	Helvetica	Yellow	Green	37	31
Internal Opaque	Clarendon	White	Black	36	30
Internal Opaque	Clarendon	Yellow	Green	37	28
Neon	Helvetica	Red	Black	29	25
Neon	Helvetica	White	Black	38	32

Table 4. The USSC Standard Legibility Index

Illumination Variations:

External light source

- Internal light source with fully translucent background
- Internal light source with translucent letters and opaque background Exposed neon tube

Legibility Index – Average Standard

30

In addition to the specific legibility ranges provided by the chart, an average Legibility Index value can be used in some situations. For instance, if a committee wishes to set code limits for average size ranges for a community sign system, or to set letter height and size limits for a highway or community wayfinding system, an average Legibility Index value of 30 may be used. However, it must be understood that this is an average only and, as such, may fall short of meeting the legibility needs of any specific sign or environment.

Legibility Index – Environmental Adjustment

In *Real World On-Premise Sign Visibility, The Impact of the Driving Task on Sign Detection and Legibility* (Pennsylvania Transportation Institute 2002), a marked difference was documented between legibility index results obtained from the relatively distraction free test track environment (as detailed in table 4), and observations taken from real-world driving situations involving increased levels of driver workload in complex and/or congested environments.

Both the research team at PTI, as well as a similar team studying the impact of the driving task on sign legibility (Chrysler, et al. 2001), arrived at the same essential conclusion; notably that the driving task, particularly in environments involving a high degree of visual stimuli, produces a significant reduction in the basic test track legibility index values.

This reduction, or legibility index deterioration, is essentially a manifestation of delayed detection caused by increased driver workload, and is clearly measurable as a percentage decrease in the standard legibility index. In a comparison analysis of the test track values versus values produced from real

world observation, an average decrease of at least thirty-five percent of the standard legibility index values was documented, with extreme values as low as seven feet of distance per inch of letter height in highly complex environments. In general, and across a median range of complexity, this decrease can conservatively result in a reduction in the average legibility index value of 30 feet of distance per inch of letter height to 20 feet of distance per inch of letter height, particularly as the complexity of the driver's visual load is increased.

Accordingly, in both moderate to highly congested zones in which demands on driver attention are high, USSC recommends the application of an adjustment factor designed to bring the standard legibility index values into alignment with the real world driving conditions encountered by drivers in those zones. The adjustment factor is applied by multiplying the standard legibility index value by the adjustment factor. The product is the adjusted legibility index for the zone.

Adjustment Factors:

 For moderately congested strip, in-town, or in-city zones, usually characterized by some of the following environmental conditions:

Moderate pedestrian and/or vehicular activity Traffic signal or traffic sign control at major intersections Intermittent "stop and go" traffic patterns On street Parking Posted speeds below 40 MPH Tightly spaced retail locations

Apply Adjustment Factor of 0.83 Or as an equation; Adjusted Moderate Complexity LI = (Standard LI) 0.83

Thus, in moderately congested zones, the average legibility index value of 30 would be adjusted to 25, and individual index values adjusted accordingly. In highly congested zones, (as characterized in 2 below) the average legibility index value would be adjusted from 30 to 20 feet/inch.

2). For highly congested strip, in-town, or in-city zones usually characterized by some of the following environmental conditions:

High pedestrian and/or vehicular activity Traffic signal or traffic sign control at most intersections Intermittent "stop and go" traffic patterns On street parking Posted speeds below 30 MPH Tightly spaced retail locations

Apply Adjustment Factor of 0.67

Or as an equation; Adjusted High Complexity LI = (Standard LI) 0.67

Copy Area

The copy area of a sign is that portion of the sign face encompassing the lettering and the space between the letters (letterspace), as well as any symbols, illustrations, or other graphic elements. It is a critical component of effective sign design because it establishes the relationship between the message and the negative space necessary to provide the sign with reasonable legibility over distance.

Figure 3. Copy Area

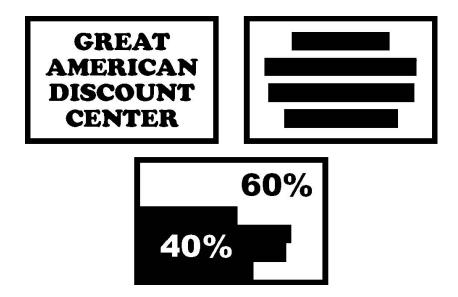


The illustration on the left depicts a typical on-premise sign face; while the one on the right, with black rectangles covering the copy area, affords a visual of the message layout

Negative Space

Negative space is the open space surrounding the copy area of a sign. It is essential to legibility, particularly in signs in which the copy is displayed within a background panel. Negative space ideally should not be less than 60 percent of the sign or background area. This requirement for a 40/60 relationship between the copy area and negative space is the minimum USSC standard. It is intended only to establish a measurable baseline for the negative space component of a sign, such that a reasonable expectation of legibility will exist.

Figure 4. Relationship Between Copy Area And Negative Space



The bottom sign panel illustrates how the aggregate copy area comprises 40 percent of the total sign panel area, with the remaining 60 percent forming the negative space area.

DETERMINING SIGN SIZE – Calculation Methodology

The size of a sign is determined by the size and length of the message and the time required to read and understand it. It can be calculated once the numerical values of the five size determinants –Viewer Reaction Time, Viewer Reaction Distance, Letter Height, Copy Area, and Negative Space – have been established.

The step-by-step process to determine sign size, which is explained below, is useful not only as a calculation method, but also as a means of understanding the elements involved in the calculation.

Area of Sign / Computation Process:

- 1. Determine speed of travel (MPH) in feet per second (FPS): (MPH x 1.47).
- 2. Determine Viewer Reaction Time (VRT).
- 3. Determine Viewer Reaction Distance (VRT x FPS).
- Determine Letter Height in inches by reference to the Legibility Index (LI): (VRD/LI).
- 5. Determine Single Letter Area in square inches (square the letter height to obtain area occupied by single letter and its adjoining letterspace).
- 6. Determine Single Letter Area in square feet: Single Letter Area in square inches/144.
- 7. Determine Copy Area (Single Letter Area in square feet x total number of letters plus area of any symbols in square feet).
- 8. Determine Negative Space Area at 60% of Sign Area (Copy Area x 1.5).
- 9. Add Copy Area to Negative Space Area.
- 10. Result is Area of Sign in square feet.

Computation Process / Calculation Example



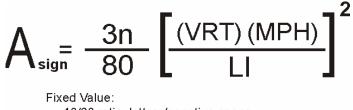
Figure 5. Calculation Example Sign

Location: Complex Driving Environment Posted Traffic Speed of 40 MPH Sign Background: White Sign Copy: 23 Letters, Upper & Lower Case Clarendon Style, Black Internally Illuminated, Translucent Face

 Determine speed of travel in feet per second; 40 MPH x 1.47 = 59 FPS Determine Viewer Reaction Time - Refer to Table 2 Detection (Complex Environment)
Total Viewer Reaction Time (rounded) = 9 seconds VRT
Determine Viewer Reaction Distance; 59 (FPS) x 9 (VRT) = 530 feet
 Determine Letter Height in inches - Refer to Legibility Index, Table 4 Black Clarendon letters on White background = Index of 31 530 (VRD) / 31 (LI) = 17 inch letter height
 Determine Single Letter Area in square inches 17 x 17 = 289 square inches, single letter area
6. Determine Single Letter Area in square feet
289 / 144 = 2 square feet, single letter area
7. Determine Copy Area; single letter area (sq. ft.) x number of letters
2 x 23 = 46 square feet, copy area
8. Determine Negative Space @ 60% of sign area
46 x 1.5 = 69 square feet, negative space
Add Copy Area to Negative Space
46 + 69 = 115 square feet
10. Result is Area of Sign, 115 square feet

Area of Sign – Equation / Specific Usage

In addition to the computation method above, the USSC has developed an algebraic equation to determine the Area (A_{sign}) for signs containing letters only, which will provide the same result but will simplify the process. The equation allows for insertion of all of the size determinants, except for Negative Space, which is fixed at the standard 40/60 ratios. (Note: If numbers are rounded off in the computation process, a very slight difference in result may occur between the computation process and the equation).

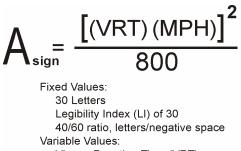


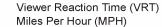
40/60 ratio, letters/negative space Variable Values: Number of Letters (n) Viewer Reaction Time (VRT) Miles Per Hour (MPH) Legibility Index (LI)

Area of Sign – Equation / Broad Usage

The equation above is used to calculate the size of a sign containing letterforms when the motorist is traveling at a specific rate of speed. To allow for a broader scientific evaluation of sign size and satisfy the minimal legibility requirements across a full range of reaction times and speed zones, USSC has developed a second equation. This formula fixes the average sign size determinants, leaving only Viewer Reaction Time (VRT) and the speed of travel (MPH) as the sole variables. It can be used to ascertain the general size of signs necessary to

adequately and safely convey roadside information to motorists traveling at a given rate of speed as well as to establish size parameters for signs across an entire community and/or road system. Table 5 below provides some examples of the use of the equation.





MPH	VRT (Seconds)	Sign Size (Square Feet)	
	4	12.5	
25	5	20	
ZJ	8	50	
	10	78	Sign Size as function of
	4	32	travel speed
	5	50	and
40	8	128	Viewer
	10	200	Reaction
	4	60.5	Time
55	5	95	
JJ	8	242	
	10	378	

Table 5. Sign Size As Function Of Travel Speed And Viewer Reaction Time

Sign Height – Minimum Standards for Vehicular Oriented Environments

For signs providing roadside information in primarily vehicular-oriented environments, the height above grade of the sign and/or sign copy has a pronounced effect on an approaching motorist's ability to detect and read the message displayed. As is now documented in the research publication, *Sign Visibility, Effects of Traffic Characteristics and Mounting Height*, the simple presence of other vehicles on the road (i.e., in front, in an adjacent travel lane, or in travel lanes in the opposite direction) can potentially prevent the motorist from detecting a sign. If a sign is situated at or below five feet above grade, other vehicles may block the motorist's view, and the sign copy will not be legible.

The aforementioned study used analytical algorithms reflecting known patterns of traffic flow and volume, in conjunction with computer generated simulation software. The research resulted in predictions of the percentage of times that other vehicles blocked the view of an approaching motorist, thus preventing him/her from detecting a low mounted sign (5 feet or less above grade). The percent of blockage was computed as a function of the traffic flow rate, the position of the subject motorist in the traffic stream, and the position and setback of the sign. Oversize vehicles (such as trucks, buses, and recreational vehicles) were not included in the calculations even though their normal presence in the vehicular mix would have, undoubtedly, increased the percentages noted in the study.

Eight traffic scenarios were analyzed, based on a four-lane undivided highway and either 35 or 45 miles per hour as the speed of travel. These conditions were chosen to simulate the general characteristics of roadways traversing commercial zones throughout the United States. The signs (assumed to be 10

feet wide) were located at either 10 or 20 feet from the edge of the roadway and on either the right- or left-hand side of the road. The findings clearly establish a quantifiable loss of visibility across the full range of sign placement as traffic flow rates increase. The charts, A through H, document the findings for traffic flow rates ranging from 200 to 1200 vehicles per hour.

Based on the research, the USSC minimum height standard for copy on signs placed on roads with characteristics as detailed in the charts is no less than five feet above grade. However, the USSC strongly recommends a minimum height standard for sign copy of no less than seven feet above grade in order to ensure adequate visibility and a reasonable viewer reaction time, considering the blocking potential of other vehicles on the road. The seven feet above grade recommendation is the same as the Federal Highway Administration's standard, as promulgated in the Manual of Uniform Traffic Control Devices (MUTCD), for the height above grade of official roadside directional and wayfinding signs utilized along urban roadways in the United States.

Minimum Sign Height – Regulatory Issues

As a related issue, the visibility requirement for ground or monument sign copy placement above seven feet above grade may run counter to community sign code regulation which: 1.) sets overall low maximum height limits, or 2.) computes maximum square footage limits on sign size as the simple product of the total height times the total width of the monument structure, regardless of sign copy placement. In either case, a community intent on encouraging the use of monument or monolithic type ground signs may find its sign regulations to be counter productive to its aims, as well as to the effective transfer of roadside information in moderate to high density traffic conditions.

To alleviate this condition, USSC offers the following sign code modification recommendations for use in land use zones in which the data indicate significant blockage of the copy area of low mounted or monument signs.

- Maximum height limits of such signs as well as maximum height limits for other freestanding signs within the zone – should take into account the recommended lower limit of seven feet above grade for copy placement.
- 2.) No maximum square footage assessment of monument or monolithic type ground signs should be imposed below seven feet above grade, provided that no primary copy is placed within that area. See Figure 6 below.

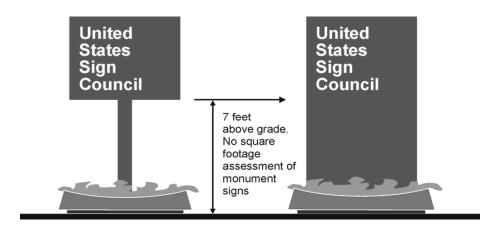
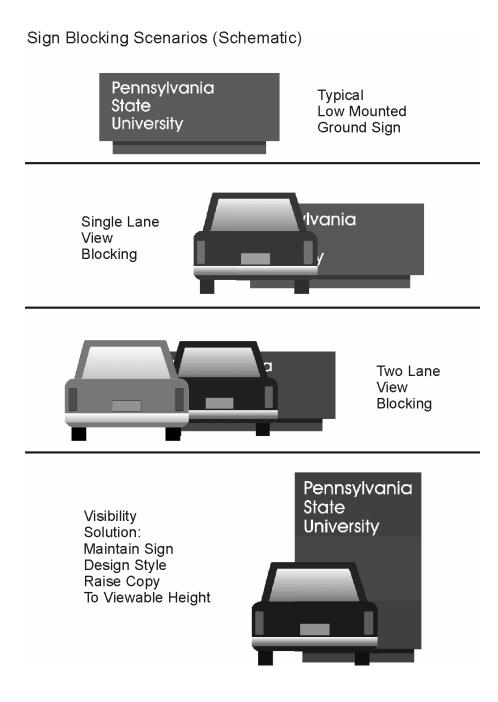
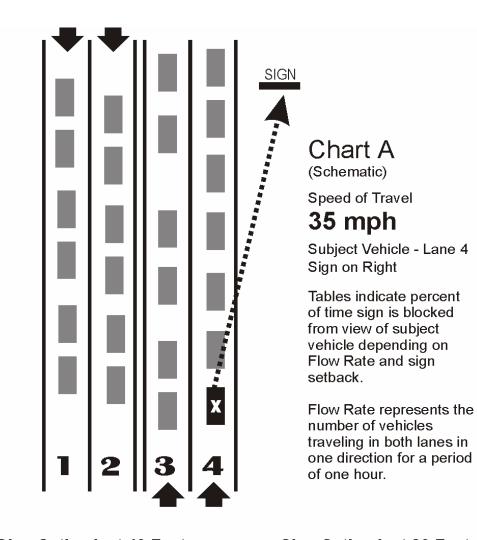


Figure 6. Comparison / Pole and Monument Signs

Sign Blocking Scenarios (Schematic)

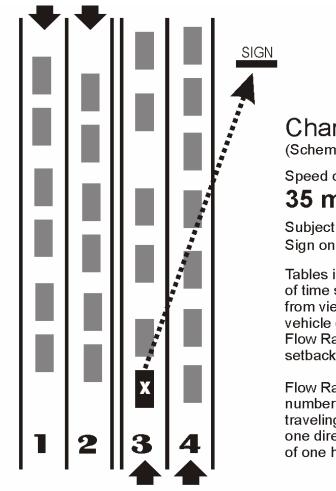
Sign Blocking Charts (Schematic) Blocking Tables





Sign Setback at 10 Feet		
Flow Rate	% Blocking	
200	9	
400	17	
600	25	
800	31	
1000	38	
1200	43	

Sign Setback at 20 Feet		
Flow Rate	% Blocking	
200	6	
400	12	
600	18	
800	23	
1000	28	
1200	33	



Sign Setback at 10 Feet		
Flow Rate	% Blocking	
200	16	
400	29	
600	41	
800	50	
1000	58	
1200	65	

Chart B (Schematic) Speed of Travel

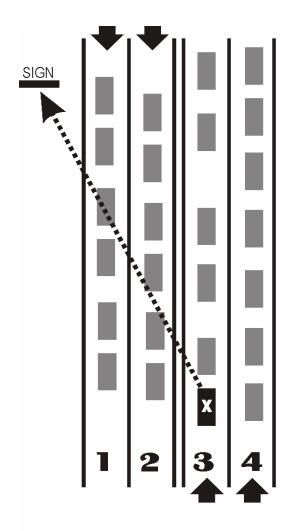
35 mph

Subject Vehicle - Lane 3 Sign on Right

Tables indicate percent of time sign is blocked from view of subject vehicle depending on Flow Rate and sign setback.

Flow Rate represents the number of vehicles traveling in both lanes in one direction for a period of one hour.

Sign Setba	ck at 20 Feet
Flow Rate	% Blocking
200	12
400	24
600	33
800	42
1000	49
1200	56



Sign Setback at 10 Feet Flow Rate % Blocking 200 19 400 35 600 48 800 58 1000 66

1200 72

Chart C (Schematic)

Speed of Travel

35 mph

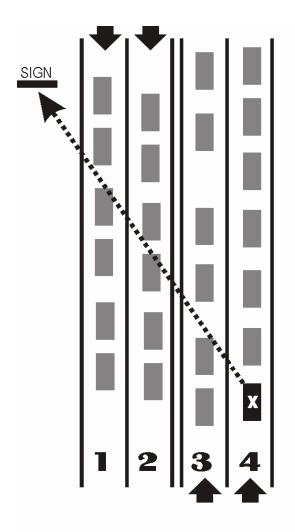
Subject Vehicle - Lane 3 Sign on Left

Tables indicate percent of time sign is blocked from view of subject vehicle depending on Flow Rate and sign setback.

Flow Rate represents the number of vehicles traveling in both lanes in one direction for a period of one hour.

Sign Setback at 20 Feet Flow Rate % Blocking 200 16 400 30 600 41 800 51 1000 59 1200 65

2	2
Э	7



Sign Setback at 10 Feet Flow Rate % Blocking 200 23 400 41 600 54 800 65

000	 	
1000	 	 . 73
1200	 	 . 79

Chart D (Schematic)

(Schematic)

Speed of Travel

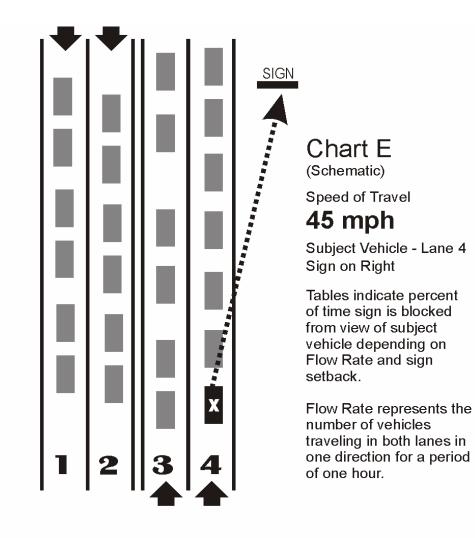
35 mph

Subject Vehicle - Lane 4 Sign on Left

Tables indicate percent of time sign is blocked from view of subject vehicle depending on Flow Rate and sign setback.

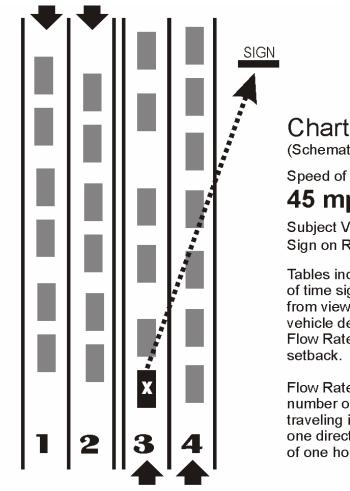
Flow Rate represents the number of vehicles traveling in both lanes in one direction for a period of one hour.

Sign Setback at 20 Feet		
Flow Rate	% Blocking	
200	20	
400	36	
600	49	
800	59	
1000	67	
1200	74	



Sign Setback at 10 Feet		
Flow Rate	% Blocking	
200	9	
400	17	
600	24	
800	31	
1000	37	
1200	42	

Sign Setback at 20 Feet		
Flow Rate	% Blocking	
200	6	
400	12	
600	17	
800	23	
1000	27	
1200	32	



Sign Setba	ck at 10 Feet
Flow Rate	% Blocking
200	16
400	29
600	40
800	49
1000	57



Chart F (Schematic)

Speed of Travel

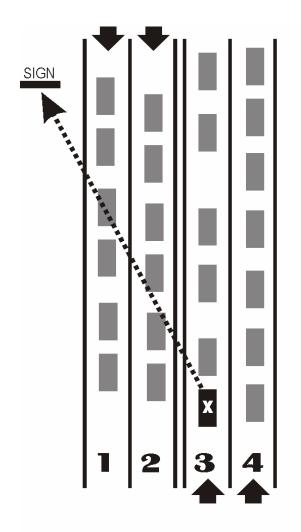
45 mph

Subject Vehicle - Lane 3 Sign on Right

Tables indicate percent of time sign is blocked from view of subject vehicle depending on Flow Rate and sign

Flow Rate represents the number of vehicles traveling in both lanes in one direction for a period of one hour.

Sign Setback at 20 Feet		
Flow Rate	% Blocking	
200	12	
400	23	
600	32	
800	41	
1000	48	
1200	54	



Sign Setback at 10 Feet Flow Rate % Blocking 200 19 400 34 600 46 800 56

1000	 64
1200	 70

Chart G (Schematic)

Speed of Travel

45 mph

Subject Vehicle - Lane 3 Sign on Left

Tables indicate percent of time sign is blocked from view of subject vehicle depending on Flow Rate and sign setback.

Flow Rate represents the number of vehicles traveling in both lanes in one direction for a period of one hour.

 Sign Setback at 20 Feet

 Flow Rate
 % Blocking

 200
 16

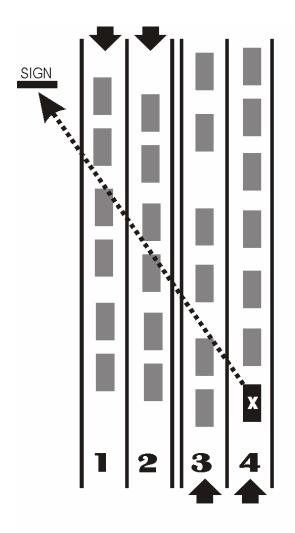
 400
 29

 600
 40

 800
 49

 1000
 57

 1200
 63



Sign Setback at 10 Feet Flow Rate % Blocking 200 22 400 39 600 52 800 63 1000 71 1200 77

Chart H (Schematic)

Speed of Travel

45 mph

Subject Vehicle - Lane 4 Sign on Left

Tables indicate percent of time sign is blocked from view of subject vehicle depending on Flow Rate and sign setback.

Flow Rate represents the number of vehicles traveling in both lanes in one direction for a period of one hour.

Sign Setba	ck at 20 Feet
Flow Rate	% Blocking
200	19
400	34
600	47
800	57
1000	65
1200	71

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COMMISSION REPORT: CITY OF OREGON CITY

TO:	Oregon City Planning Commission	
FROM:	Pete Walter, Planner	
PRESENTER:	Pete Walter, Planner	
SUBJECT:	AN 12-04: Annexation of 0.89 Acres within the Urban Growth Boundary – 14362 Maplelane Ct	
Agenda Type: Hearing		
Approved by: Tony Konkol, Community Development Director		

RECOMMENDED ACTION (Motion):

Staff recommends that the Planning Commission recommend approval of the requested annexation to the City Commission for their consideration at the August 15, 2012 City Commission meeting.

BACKGROUND:

The applicant is seeking to annex one (1) parcel into the City of Oregon City. The parcel is currently located within unincorporated Clackamas County, inside the Portland metropolitan area Urban Growth Boundary (UGB), and within the Urban Growth Management Agreement (UGMA) Area of Oregon City and Clackamas County. The area of the proposed annexation is located east of Highway 213 and north of Beavercreek Road, at the intersection of Maplelane Road and S. Maplelane Court. The area is comprised of one (1) tax lot for a total area of approximately 0.89 acres. The property is part of the original UGB (1979).

BUDGET IMPACT:

FY(s): Funding Source:

ATTACHMENTS:

AN 12-04 Staff Report Exhibit 1. Applicant's Petition Exhibit 2. Review of TPR Analysis - Replinger Exhibit 3. Public Notices Exhibit 4. Transmittal Comment Form Exhibit 5. Signed Affidavit of Notice Posting Exhibit 6. UGMA w/ Clackamas County Exhibit 7. Metro UGB Ord. 79_77 Exhibit 8. Findings Exhibit 9. CRW comments

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Community Development – Planning

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FILE NO.:	AN 12-04
APPLICATION TYPE:	Annexation (0.89 acres)
HEARING DATES:	Planning Commission - July 23, 2012 - 7:00 p.m., City Hall, Commission Chambers 625 Center Street, Oregon City, OR 97045
	City Commission – August 15, 2012 - 7:00 p.m., City Hall, Commission Chambers 625 Center Street, Oregon City, OR 97045
APPLICANT:	Gary Bowles, 14362 S Maplelane Ct, Oregon City, OR 97045
REPRESENTATIVE:	Sisul Engineering, 375 Portland Avenue, Gladstone, OR 97027
REQUEST:	Annexation of approximately 0.89 acres into the City of Oregon City. The site is within the Oregon City Urban Growth Boundary and has a Comprehensive Plan designation of LR – Low Density Residential.
LOCATION:	14362 S Maplelane Ct, Oregon City, OR 97045, located East of Hwy. 213, North of Beavercreek Road, at intersection of Maplelane Rd & Maplelane Ct, and identified as Clackamas County Map 3-2E-04C -01600 (See Maps , Exhibit 1c).
REVIEWER:	Pete Walter, AICP, Associate Planner
COMPREHENSIVE PLAN DESIGNATION:	LR – Low Density Residential
CURRENT ZONING:	Clackamas County Future Urbanizable 10-Acre District (FU-10)
RECOMMENDATION:	Approval, with an Election Date set for November 6, 2012.
	Annavation Detitions are reviewed by the Planning Commission and City Commission at

REVIEW PROCESS: Annexation Petitions are reviewed by the Planning Commission and City Commission at noticed Public Hearings. The city commission shall endeavor to review all proposals prior to the city application deadline for submitting ballot measures to the voters. The city commission shall only set for an election

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annexations consistent with a positive balance of the factors set forth in Section 14.04.060 of the Oregon City Municipal Code. The city commission shall make findings in support of its decision to schedule an annexation for an election.

Proposal

The applicant is seeking to annex one (1) parcel into the City of Oregon City. The parcel is currently located within unincorporated Clackamas County, inside the Portland metropolitan area Urban Growth Boundary (UGB), and within the Urban Growth Management Agreement (UGMA) Area of Oregon City and Clackamas County. The area of the proposed annexation is located east of Highway 213 and north of Beavercreek Road, at the intersection of Maplelane Road and S. Maplelane Court. The area is comprised of one (1) tax lot for a total area of approximately 0.89 acres.

Applicant's Narrative Statement

The applicant has prepared a detailed narrative addressing the required application factors in OCMC 14.040.050(E)(7)(a) through (g). The applicant's narrative is attached as Exhibit 1b.

Surrounding Zoning and Land Use

Currently the .89 acre parcel has a County Zoning designation of FU-10 Future Urban – (10 acre minimum), and is developed with one single family residence (built in 1943) and some outbuildings.

The site and neighboring lots are somewhat rural in character but transitioning to more urban densities. There is an Oregon City School District school bus parking facility located southwest of the site, on S. Maplelane Court. S. Maplelane Court is a dead end street. The site slopes from the northeast to the southwest and has an existing residence, large shed, and other miscellaneous structures. The site has access to S. Maplelane Court by way of two driveways. The following map indicates the surrounding zoning.

The site is not on or near any natural hazards identified by the City (such as wetlands, floodplains, and steep slopes). The site is not on, near, nor will it affect designated open space, scenic, historic, or natural resource areas.

Description of Petition

There is currently one resident who resides on the proposed annexation site. The 2011 assessed valuation for the property is \$104,453. Proposal No AN 12-04 was initiated by the consent petition of the owner of 100% of the acreage, 100% of the property owners, and 100% of the total assessed value of the property. The petition meets the requirement for initiation set forth in ORS 222.170 (2) (triple majority annexation law) and Metro Code 3.09.040 (a) (Metro's minimum requirements for a petition).

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Under the City's Annexation Code Chapter 14.04, the Planning Commission reviews annexation proposals and makes a recommendation to the City Commission. If the City Commission decides the proposed annexation should be approved, the City Commission is required by the City Charter to submit the annexation to the electors of the City. If a necessary party raises concerns prior to or at the City Commission's public hearing, the necessary party may appeal the annexation to the Land Use Board of Appeals within 14 days of the date of the City Commission's decision.

Existing Utility Conditions

The parcel is currently served by Clackamas River Water (CRW) for water service. CRW has no conflicts with the annexation of the subject property (Exhibit 9). The parcel is not currently connected to sanitary sewer or storm water management facilities, although the site would be annexed to Tri-City Service District upon approval of the annexation to the City. City Sanitary sewer is located in S. Maplelane Court, approximately 400 feet southwest of the subject sites' southwestern property corner. A stormwater main is also located in S. Maplelane Court, approximately 350 feet southwest of the subject sites' southwestern property corner. If the subject property is annexed and developed, connections to sanitary and stormwater services are available along the S. Maplelane Court frontage.

Regional Planning Considerations

This parcel is within the original 1979 UGB area, approved by Metro Ord. 79-77 which was adopted by Metro 11/8/1979 (Exhibit 7). In 2002, Metro passed Title 11 to require Concept Plans for urban growth boundary expansions before those lands may be annexed by the City. Since this property was already within the UGB before 2002 it is not subject to the title 11 Concept Planning requirement. However, the property annexation still must show compliance with Metro Code 3.09, as documented in this staff report.

CONSIDERATION OF ANNEXATION FACTORS

Chapter 14.04 - CITY BOUNDARY CHANGES AND EXTENSION OF SERVICES

OCMC 14.04.020 - State and regional regulations regarding annexations, other boundary changes and extensions of services.

The regulations and requirements of ORS Ch. 222, and Metro Code Section 3.09, are concurrent obligations for annexation and are not affected by the provisions of this chapter. Consideration of ORS 222 and Metro Code 3.09 has been included later in this staff report.

14.04.060 - Annexation Factors.

A. When reviewing a proposed annexation, the commission shall consider the following factors, as relevant:

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1. ADEQUACY OF ACCESS TO THE SITE;

The property is ¼ mile from the intersection of Beavercreek Road and OR 213. Direct access to the property is currently provided by way of two existing private driveway approaches from S. Maplelane Court. Maplelane Ct. intersects with Maplelane Road at the corner of the site. With the exception of the road sections directly abutting the subject property, both Maplelane Ct and Maplelane Road are city public rights-of-way. The Urban Growth Management Agreement (UGMA) with Clackamas County (Exhibit 6) requires that the annexation proposal shall include the adjacent road right-of-way of the property proposed for annexation and that the applicant shall provide a corrected map and legal description for the adjacent road-right-of way before the resolution forwarding the annexation to the voters is approved.

Finding: The proposed annexation site has adequate access.

2. CONFORMITY OF THE PROPOSAL WITH THE CITY'S COMPREHENSIVE PLAN:

Section 14 of the Oregon City Comprehensive Plan is entitled "Urbanization". Several policies in this section are pertinent to proposed annexations. Additionally, the following excerpts from the Comprehensive Plan expand on the City's annexation philosophy and requirements.

The City is required to refer all proposed annexations to the voters. Rather than having voter approval of individual property owners' requests to annex, the City should prepare and implement an annexation plan and program. The City could then annex large blocks of properties (with voter approval) at one time, rather than in a piecemeal fashion. Annexation would be tied more directly to the City's ability to provide services efficiently, maintain regular city boundaries, and help the city meet Metro targets for housing and employment. The zoning of the property should be decided at the time the Planning Commission and City Commission review and approve the annexation request.

Applications for annexation, whether initiated by the City or by individuals, are based on specific criteria contained in the City's municipal code. Metro and state regulations promote the timely and orderly provision of urban services, with which inappropriate annexations can conflict. Therefore, an annexation plan that identifies where and when areas might be considered for annexation can control the expansion of the city limits and services to help avoid those conflicts and provide predictability for residents and developers. Other considerations are consistency with the provisions of this comprehensive plan and the City's public facility plans, with any plans and agreements of urban service providers, and with regional annexation criteria.

The City has not prepared an annexation plan and program to facilitate wholesale large block area annexations. Until such a methodology and process is in place, annexation will continue in a piecemeal fashion such as this

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proposal. This annexation is still sufficiently tied directly to the City's ability to provide services efficiently with the logical extension of physical utility lines as it is adjacent to Maplelane Court. This annexation does maintain regular city boundaries since about 760' of the property boundary of the properties touches the city limits.

Although small, development of the annexation site could help the city meet Metro targets for housing.

The following Oregon City Comprehensive Plan annexation goals and policies are factors for approval of annexations.

Urbanization Goal 14.4: Annexation of Lands to the City

Annex lands to the city through a process that considers the effects on public services and the benefits to the city as a whole and ensures that development within the annexed area is consistent with the Oregon City Comprehensive Plan, City ordinances, and the City Charter.

Finding: the proposed annexation is consistent with Goal 14.4. The city annexation process is set out in Chapter 14 of the Municipal Code. By requiring compliance with that code, the Metro code, and the statewide Planning Rules, the city is identifying the effects that build-out of annexed properties will have on public services and any benefits to the city as a whole. Since the property was has been in the UGB since 1979, appropriate City Master Plans, such as the Transportation System Plan, Water and Sewer Master Plans for example, are up to date and address the future impacts of development of the properties.

Policy 14.4.1 In order to promote compact urban form to support efficient delivery of public services, lands to be annexed must be within the City's Urban Growth Boundary, and must be contiguous to the existing City limits. Long linear extensions, such as cherry stems and flag lots, shall not be considered contiguous to City limits. **Finding: the proposed annexation is consistent with Policy 14.4.1.** The proposed property is contiguous to the city limits along a majority of it's perimeter by touching the city boundary. There are no flag lots or long linear extensions involved in this proposed annexation. If the annexation is approved the area would complete a contiguous block of land within the city which upon subsequent zoning and development will promote compact urban form and the efficient delivery of public services.

Policy 14.4.2 Concept Plans and Sub-area Master Plans for unincorporated areas within the Urban Growth Boundary shall include an assessment of the fiscal impacts of providing public services to the area upon annexation, including the costs and benefits to the city as a whole.

Finding: the proposed annexation is consistent with Policy 14.4.2. The parcel was brought into the UGB prior to the Title 11 Concept Planning requirement. The applicant has provided an adequate assessment of the fiscal impacts of providing public services to the site. Annexation alone of the subject property will not fiscally impact the City of Oregon City. There will not be any additional demand of fire services, as the property is currently within and served by Clackamas County Fire District #1. The City will not collect SDC fees until development

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occurs or the existing house is connected to sewer, as the property will not be connecting immediately to City operated utilities.

The property is currently being served by Clackamas County Sheriff's Office, but will be annexed into and served by the Oregon City Police Department upon annexation. The proposal was submitted to the Oregon City Police Department for comment. Oregon City police department has not indicated that there are inadequate police resources to serve the property. Utility (water, sewer and drainage) connections would be paid for though SDC fees. Additional property would also result in additional property tax revenue.

Policy 14.4.3 When an annexation is requested, the Commission may require that parcels adjacent to the proposed annexation be included to:

a) avoid creating unincorporated islands within the city;

b) enable public services to be efficiently and cost-effectively extended to the entire area; or

c) implement a Concept Plan or Sub-area Master Plan that has been approved by the Commission.

Finding: Not applicable. This proposed annexation does not create unincorporated islands within the city. The proposed annexation by itself enables efficient extension of public services without the need to include adjacent parcels.

Policy 14.4.4 The City may, as provided by state law, provide sewer service to adjacent unincorporated properties when a public health hazard is created by a failing septic tank sewage system; the Commission may expedite the annexation of the subject property into the city, subject to any voter approvals of annexations.
Finding: Not applicable. A sewer public health hazard does not exist for the property at this time. Annexation of the subject property will not affect sewer service as the property is currently served by private septic system. The applicant will file the appropriate documents for annexation into the Tri-City Service District if the annexation is successful, but no sewer connection will be made. If the subject property were to divide in the future, the existing sanitary main could be extended east and made available for connection.

The Public Facilities Section of the Comprehensive Plan contains the following pertinent Goals and Policies.

Goal 11.1 Provision of Public Facilities

Serve the health, safety, education, welfare, and recreational needs of all Oregon City residents through the planning and provision of adequate public facilities.

Policy 11.1.1

Ensure adequate public funding for the following public facilities and services, if feasible:

- Transportation infrastructure
- Wastewater collection
- Stormwater management

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- Police protection
- Fire protection
- Parks and recreation
- Water distribution
- Planning, zoning and subdivision regulation
- Library services
- Aquatic Center
- Carnegie Center
- Pioneer Community Center
- City Hall
- Buena Vista House
- Ermatinger House

Finding: the proposed annexation is consistent with Goal 11.1 and Policy 11.1.1. Policy 11.1.1 defines what is encompassed within the term "urban facilities and services" as it pertains to annexation. The City's Plan is more inclusive in its definition of what services are considered an "urban service" than is the Metro Code. The City's Plan adds police services, fire protection and planning, zoning and subdivision regulation to the list of urban services that are to be considered by the Metro Code. The Metro Code also includes mass transit in addition to streets and roads.

If the property was to be divided and developed, the property would be required to connect to the city's water, sewer and stormwater system and would pay the appropriate connection fees, and/or SDCs and on-going user fees, thereby paying their fair share.

The proposal was submitted to the Oregon City Police Department for comment. Oregon City police department has not indicated that there are inadequate police resources to serve the property.

Policy 11.1.3 Confine urban public facilities and services to the city limits except where allowed for safety and health reasons in accordance with state land use planning goals and regulations. Facilities that serve the general public will be centrally located and accessible, preferably by multiple modes of transportation.

Policy 11.1.4 Support development on underdeveloped or vacant buildable land within the City where urban facilities and services are available or can be provided and where land use compatibility can be found relative to the environment, zoning, and comprehensive plan goals.

Policy 11.1.5 Design the extension or improvement of any major urban facility and service to an area to complement other urban facilities and services at uniform levels.

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Finding: The proposed annexation is consistent with Policies 11.1.3 and 11.1.4, which encourage development on sites within the City where urban facilities and services are either already available or can be provided. This policy implies that lands that cannot be provided urban services should not be annexed. The proposed land in this annexation can be provided urban service.

Finding: The proposed annexation is consistent with Policy 11.1.5, which requires that the installation of a major urban facility or service should be coordinated with the provision of other urban facilities or services. No major urban facility or service is required here; rather, it would requires normal extension of water and sanitary sewer from the existing utility stubs in adjacent local streets at the time of re-development.

Read together, these policies suggest that when annexing lands, the City should consider whether a full range of urban facilities or services are available or can be made available to serve the territory to be annexed. Oregon City has implemented these policies with its Code provisions on processing annexations, which requires the City to consider adequacy of access and adequacy and availability of public facilities and services. Overall, it appears that the city can provide urban service capacity to this area.

Goal 11.2: Wastewater

Seek the most efficient and economic means available for constructing, operating, and maintaining the City's wastewater collection system while protecting the environment and meeting state and federal standards for sanitary sewer systems.

Policy 11.2.2 Plan, operate and maintain the wastewater collection system for all current and anticipated city residents within the existing urban growth boundary. Strategically plan for future expansion areas.

Finding: The proposed annexation is consistent with Goal 11.2 and Policy 11.2.2. Since all new development on annexed lands is required to connect to the sanitary sewer system, this policy suggests that a measure of the adequacy of the sanitary system should be whether it could serve the potential level of development provided for by the Comprehensive Plan and Zoning designations. The City operates the sanitary sewer collection system, which connects to the Tri-City Service District interceptor. Sanitary sewer is available to the subject property if it were to divide in the future. The nearest City sanitary sewer mains to the property are an 8-inch line in S. Maplelane Court and an 8-inch line in Walnut Grove Way. If the subject property were to divide in the future, the sanitary main in S. Maplelane Court would be extended east for service lateral connection.

Policy 11.2.3 Work with Tri-City Service District to provide enough capacity in its collection system to meet standards established by the Oregon Department of Environmental Quality (DEQ) to avoid discharging inadequately treated sewage to surface waters.

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Finding: The proposed annexation is consistent with Policy 11.2.3. Before sanitary sewers can be extended to lands annexed to the City, those lands will need to annex to the Tri-City Service District. The property owner has included a petition to initiate annexation to Tri-City Service District after annexation to the City. The City Commission should concur with Tri-City Service District's annexation of the subject property in the enacting ordinance upon voter approval of the annexation.

Goal 11.3 Water Distribution

Seek the most efficient and economic means available for constructing, operating, and maintaining the City's water distribution system while protecting the environment and meeting state and federal standards for potable water systems.

Policy 11.3.1 Plan, operate and maintain the water distribution system for all current and anticipated city residents within its existing urban growth boundary and strategically plan for future expansion areas. **Finding: The proposed annexation is consistent with Goal 11.3 and Policy 11.3.1**. The subject property is currently within and served by the Clackamas River Water (CRW) District service area. The CRW District provides domestic water supply to the City of Oregon City. There is a 12-inch OD (outside diameter) water main in S. Maplelane Court and a 16-inch DI (ductile iron) water main in Maplelane Road. If the property was to developnew water connection would be accessed along the site's frontage on S. Maplelane Court. If the property was to be developed, it would connect to the existing water system and would pay the appropriate connection fees, and/or SDCs and on-going user fees, thereby paying their fair share.

Goal 11.4 Stormwater Management

Seek the most efficient and economical means available for constructing, operating, and maintaining the City's stormwater management system while protecting the environment and meeting regional, state, and federal standards for protection and restoration of water resources and fish and wildlife habitat.

Policy 11.4.1 Plan, operate, and maintain the stormwater management system for all current and anticipated city residents within Oregon City's existing urban growth boundary and strategically plan for future expansion areas.

Finding: The proposed annexation is consistent with Goal 11.4 and Policy 11.4.1. This annexation will not result in any changes to the stormwater drainage. Stormwater collection and connection would not be required with the subject property's annexation, but would most likely be required if the property were to divide and develop in the future. If the property were to develop, the existing 12" stormline in S. Maplelane Court would most likely be extended east for connection. If the property was to divide and developed in the future, the properties would most likely be connected to the City's stormwater system and would pay connection fees, SDCs and on-going user fees, thereby paying their fair share.

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Goal 11.9: Fire Protection

Maintain a high level of fire suppression and emergency medical services capacity.

Policy 11.9.1 Ensure that all areas, including newly annexed areas, receive fire protection and emergency medical services.

Finding: The proposed annexation is consistent with Goal 11.9 and Policy 11.9.1. Clackamas Rural Fire Protection District #1 provides all fire protection for the City since the entire City was annexed into their district in 2007. The subject annexation area is also already in the CRFPD#1 district so there is no action required for fire protection.

Finding: Based on consistency with the goals and policies listed above, the proposed annexation is consistent with the Oregon City Comprehensive Plan.

14.04.060 - Annexation Factors.- Continued:

3. ADEQUACY AND AVAILABILITY OF PUBLIC FACILITIES AND SERVICES TO SERVICE POTENTIAL DEVELOPMENT;

This section of the staff report addresses each urban service to determine whether the services are currently available or can be made available at an adequate level to serve the potential development of the property under the current planning designation and zoning that implements it. The adequacy and availability of existing public facilities and services is also addressed in the Metro Code 3.09 section of this Staff Report (See Page 16).

Sanitary Sewers.

Availability

At this time the subject property is not connected to a sanitary sewer system, nor is it within the service area of a sewer district. The existing residence is served by private septic system. The Tri-City Service District provides wastewater treatment for the City of Oregon City. Per the Pre-Application Conference notes, the applicant will file the appropriate documents for annexation into the Tri-City Service District if the annexation is successful, but no sewer connection will be made.

The City operates the sanitary sewer collection system, which connects to the Tri-City Service District interceptor. Sanitary sewer is available to the subject property if it were to divide in the future. The nearest City sanitary sewer mains to the property are an 8-inch line in S. Maplelane Court and an 8-inch line in Walnut Grove Way. If the subject property were to divide in the future, the sanitary main in S. Maplelane Court would be extended east for service lateral connection.

If the subject property develops it would connect to the City's sewer system and would pay connection fees, SDC's and on-going user fees, thereby paying their fair share.

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Capacity

The Tri-City Service District has adequate capacity to serve the subject property if it were to divide and develop in the future.

Status

As noted above, the applicant will file the appropriate documents for annexation into the Tri-City Service District, following the annexation process if said process is successful. If the subject property were to divide in the future, the sanitary main in S. Maplelane Court would be extended east for service lateral connection and connection fees, SDC's and ongoing user fees would be paid.

The Tri-City Service District plant is along Interstate 205 in Oregon City just east of the junction of the Willamette and the Clackamas Rivers. The plant has an average flow capacity of 11 million gallons per day (mgd) and a design peak flow capacity of 50 mgd. The available average capacity is 4.4 mgd. The plant was designed to serve a population of 66,500 in the year 2001; however, the facility is currently being expanded to increase the available average dry weather capacity to 11.9 mgd. Therefore, Tri-City Service District has capacity to serve this parcel should the annexation occur.

Water.

The subject property is currently within and served by the Clackamas River Water (CRW) District service area. The CRW District provides domestic water supply to this area. There is a 12-inch OD (outside diameter) water main in S. Maplelane Court and a 16-inch DI (ductile iron) water main in Maplelane Road. If the property was to develop new water connection would be accessed along the site's frontage on S. Maplelane Court. CRW has no conflicts with annexation of the subject property (Exhibit 9).

Status

If the property was to develop it would connect to the existing water system and would pay the appropriate connection fees, and/or SDCs and on-going user fees, thereby paying their fair share.

Capacity

The existing 12-inch water main in S. Maplelane Court has adequate capacity to serve any development of the subject property in the future.

Oregon Revised Statute 222.120 (5) allows the City to specify that the territory be automatically withdrawn from the Clackamas River Water District upon approval of the annexation.

CRW has provided comments (Exhibit 9) stating that the application does not conflicts with their interests. CRW requests that the District be provided notice of future annexations to Oregon City and be involved in withdrawal

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discussions where the District's current service boundaries are involved. CRW recommends that the property be served by the City and withdrawn from CRW's service districts if any future water lines are constructed by Oregon City on Maplelane Court or Maplelane Road. CRW's recommendation has been incorporated into the findings, reasons for decision and recommendations attached as Exhibit 8.

Stormwater.

Availability

Currently there is no stormwater management facility for the subject parcel. Stormwater collection and connection would not be required with the subject property's annexation, but would most likely be required if the property were to divide and develop in the future. If the property were to develop, the existing 12" stormline in S. Maplelane Court would most likely be extended east for connection.

If the property was to divide and developed in the future, the properties would most likely be connected to the City's stormwater system and would pay connection fees, SDCs and on-going user fees, thereby paying their fair share.

Capacity

If the property were to divide and develop in the future, the stormwater management facility may have the capacity to serve the properties.

Status

As noted above, if the property were to divide and develop, the existing stormline in S. Maplelane Court would most likely be extended east for connection. As a result, the developed properties would connect to the City's storm main and would pay connection fees, SDCs and on-going user fees, thereby paying their fair share.

Fire Protection.

This territory is currently within Clackamas Fire District # 1 (CCFD#1). Based on the November 2007 fire district annexation approval, staff recommends that the properties remain within CCFD#1.

Police Protection.

The subject property is currently within and served by Clackamas Fire District No.1 and Clackamas County Sheriff's Office. There will not be any additional demand of either service if the annexation is approved, although police services would change from Clackamas County Sheriff's Office to the Oregon City Police Department The proposal was submitted to the Oregon City Police Department for comment. Oregon City police department has not indicated that there are inadequate police resources to serve the property.

Parks, Open Space and Recreation.

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Availability

The property is not adjacent, near, or large enough to affect park availability. The closest park is Hillendale Park, over a mile away to the west.

Capacity

Annexation of the subject property would not affect the capacity of park facilities.

Status

As noted above, the site is not adjacent, near, or large enough to effect park facilities.

Future building permits are required to pay a dedicated park system development charge at the time of issuance, which may be used to fund park capital infrastructure improvements. The current 2011 park SDC for a single-family residence is \$3,643.

Transportation

Availability

Access to the property is currently provided by way of two existing private driveway approaches from S. Maplelane Court. Maplelane Court connects to Maple Lane Road, a minor arterial street. Maplelane Road, in turn, provides access outside the city to the east, and connects directly to Beavercreek Road and the OR 213 approximately ¼ mile south of the property.

Capacity

The annexation, if approved, would not create any impact on the transportation system. No impact would occur unless the property proposed to be annexed was developed in the future.

The applicant has provided a TPR (Transportation Planning Rule) analysis as part of the annexation request based on an R-10 zoning scenario. The applicant hired Lancaster Engineering to complete the TPR analysis. If the property were to develop and divide, page 3 of Lancaster's TPR analysis states, "...The proposed annexation and zone change is projected to result in a maximum of 2 additional peak hour trips and 20 additional daily trips on area roadways and intersections. The proposed zone change will not have a significant effect on the surrounding transportation system as defined under the Transportation Planning Rule. Accordingly, no mitigation is recommended in association with the proposed zone change."

Status

As previously noted, access to the property is currently provided by way of two existing private driveway approaches from S. Maplelane Court. The annexation, if approved, would not create any increase in service demands. If the property were to develop with a new home(s) in the future, the traffic "…impacts of the development are treated as negligible.", as stated from page 3 of the TPR analysis.

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Re-Zoning and the Transportation Planning Rule

Per OCMC 17.68.025(A), annexed properties receive a default City zoning designation as a single process. This procedure has historically served the city well for annexing county land zoned FU-10 and Low Density Residential, since the default zoning has typically been to the comparably low density residential zoning R-10. The applicant has submitted a traffic impact analysis (TIA) study that indicates compliance with the Transportation Planning Rule. The applicant seeks to annex to the City now and receive the default zoning of R-10 for the subject property.

The applicant's Traffic Engineer concluded that the proposed annexation and zone change is projected to result in a maximum of 2 additional peak hour trips and 20 additional daily trips on area roadways and intersections. The proposed zone change will not have a significant effect on the surrounding transportation system as defined under the Transportation Planning Rule. Accordingly, the applicant recommends no mitigation in association with the proposed zone change to R-10.

The property has had a low density residential comprehensive plan designation since the City adopted its Transportation System Plan in 2001. Section 7 of the 2001 TSP documents how the City of Oregon City is in compliance with the provisions of the Transportation Planning Rule, and includes a finding that "the TSP is based on the current, acknowledged comprehensive plan and provides enhancements to the integration of transportation and land use systems". Based on the methodology used in assessing the impact of development for the TSP, it is apparent that the peak hour vehicle trips generated by development of this .89 acre parcel as low density residential land have already been accounted for in the city's existing System Development Charge fee structure. Furthermore, the impacts from future division of the property at R-10 zoning are negligible in comparison to the capacity of the state transportation system.

Additionally, since the previous attempt to annex this property was submitted (AN 11-03) the Transportation Planning Rule was amended. The new TPR regulations in Section 9 provide that under OAR *660-012-0060 Plan and Land Use Regulation Amendments;*

(9) Notwithstanding section (1) of this rule, a local government may find that an amendment to a zoning map does not significantly affect an existing or planned transportation facility if all of the following requirements are met.
(a) The proposed zoning is consistent with the existing comprehensive plan map designation and the amendment does not change the comprehensive plan map;

The existing City of Oregon City comprehensive plan map shows the subject property is designated "LR". The proposed zoning is R-10 and is one of the City's zoning districts that is consistent with the low-density comprehensive plan designation. This criterion is satisfied.

(b) The local government has an acknowledged TSP and the proposed zoning is consistent with the TSP; and

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The City of Oregon City's current TSP is adopted and acknowledged. The TSP was adopted in 2001 (Ordinance No. 01-1009). At the time of adoption, and during the preparation of the TSP, the subject property had the lowdensity comprehensive plan designation. While the TSP does not provide specific zoning designations for all properties in the City, it does consider urban growth and development of properties that are designated in the comprehensive plan. As such, the growth estimates and future traffic volumes derived in the current TSP reflect low density residential development on this site. This criterion is satisfied.

(c) The area subject to the zoning map amendment was not exempted from this rule at the time of an urban growth boundary amendment as permitted in OAR 660-024-0020(1)(d), or the area was exempted from this rule but the local government has a subsequently acknowledged TSP amendment that accounted for urbanization of the area.

There were no special exemptions or other provisions made affecting this property at the time of inclusion within the Urban Growth Boundary. This criterion is satisfied.

TPR Conditions (a), (b), and (c) above are all met for the annexation proposal.

The City's Transportation Engineer, Replinger and Associates, has reviewed the applicant's TPR analysis and concurs with the applicants conclusions (Exhibit 2). Based on this analysis, the property may be automatically rezoned to R-10 upon approval of the annexation by the voters.

Public Facilities and Services – Continued - Other Services.

Planning, building inspection, permits, and other municipal services will be available to the territory from the City upon annexation.

Finding: Based on the above analysis, the public facilities and services necessary to service potential development on the site are adequate and available.

14.04.060 - Annexation Factors.- Continued:

4. COMPLIANCE WITH APPLICABLE SECTIONS OF ORS CH. 222, AND METRO CODE SECTION 3.09;

Compliance with ORS. 222

Finding: The annexation petition has been reviewed consistent with ORS 222. ORS 222 provides the statutory framework, notice requirements and procedures for city boundary changes, voter approval, and special district coordination. ORS 222 requires that annexed lands be contiguous to the City. The proposed property is contiguous to the city limits along a majority of it's perimeter with the city boundary. There are no flag lots or long linear extensions involved in this proposed annexation demonstrating that the properties are contiguous to the city. If the annexation is approved the area would provide a contiguous block of new land, promoting the efficient delivery of public services. Compliance with Metro Code 3.09 is addressed below.

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Metro Boundary Change Criteria – Chapter 3.09

The Legislature has directed Metro to establish criteria that must be used by all cities within the Metro Urban Growth Boundary. The Metro Code states that the City's annexation decision shall be based on substantial evidence in the record of the hearing and that the written decision must include findings of fact and conclusions from those findings. Metro defines annexations as "Minor Boundary Changes" pursuant to Metro Code 3.09.020. Chapter 3.09 contains the standards for annexations that cities must follow. Metro Code 3.09 requires these findings and conclusions to address the following minimum criteria:

Metro Title 3.09.045(D)(1)(a & b)

Consistency with expressly applicable provisions in ORS 195 urban service agreements or annexation plans. **Finding: This criterion is met**. These criteria require that annexations be consistent with applicable provisions of annexation plans or urban service agreements that have been adopted pursuant to ORS 195. ORS 195 requires agreements among providers of urban services. Urban services are defined as: sanitary sewers, water, fire protection, parks, open space, recreation and streets, roads and mass transit, and have been addressed in criterion (d)(1)(C) below. There are no adopted annexation plans applicable to this property.

Metro Title 3.09.045(D)(1)(c)

Consistency with expressly applicable provisions of cooperative planning agreements between the annexing entity and a necessary party.

Metro Title 3.09.045(D)(2)(A)

Whether the proposed boundary change will promote the timely, orderly and economic provision of public facilities and services.

Finding: These criteria are met. The proposed annexation will promote the timely, orderly or economic provision of public facilities and services in the area. As demonstrated above in the Annexation Factors section 14.040.060 and consistency with the Oregon City Comprehensive Plan goals and policies, water, sanitary sewer, storm sewer police services, fire protection, parks and schools are public facilities and services that are immediately available to serve the property.

Metro Title 3.09.045(D)(2)(B)

Whether the proposed boundary change will affect the quality and quantity of urban services.

Finding: This criterion is met. The proposed boundary change will provide adequate levels of city police, fire, water, sanitary sewer and transportation services to serve urbanization of the annexed territory at the time of development as detailed in this report.

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Metro Title 3.09.045(D)(2)(C)

Whether the proposed boundary change would eliminate or avoid unnecessary duplication of facilities or services. **Finding: This criterion is met.** The proposed boundary change was forwarded to all applicable service providers for review and comment with the intent to avoid unnecessary duplication of facilities and services for the annexed territories. Annexation to or withdrawal from the applicable fire, road, water, sewer and sanitary sewer provider district has been addressed in this report and recommendations.

The Metro Code also contains a second set of 10 factors that are to be considered where: 1) no ORS 195 agreements have been adopted, and 2) a necessary party is contesting the boundary change. At this time, those 10 factors are not applicable to this annexation because no necessary party has contested the proposed annexation. This criterion is not applicable.

Clackamas County Comprehensive Plan Compliance

Metro Code 3.09 requires findings for annexation showing compliance with applicable County comprehensive plans (Applicable Oregon City Comprehensive Plan goals and policies are addressed in a separate section above). The Clackamas County Comprehensive Plan states that annexations which convert Future Urbanizable lands to Immediate Urban lands should ensure the "orderly, economic provision of public facilities and urban services". As demonstrated below, public facilities and urban services can be orderly and economically provided to the subject site. Nothing in the County Plan speaks directly to criteria for annexation of property from the County to the City.

The Clackamas County Comprehensive Plan implements the Oregon City Comprehensive Plan for lands within the Urban Growth Boundary. The plan designation for these properties on the County's Oregon City Area Land Use Plan (Map IV-5) identifies the Low-Density Residential designation as Future Urban with a 10-acre minimum lot size. The FU-10 zoning is a holding zone to prevent the creation of small parcels in areas within the UGB to preserve the capacity of land to fully develop once a full range of urban services is available.

Clackamas County Comprehensive Plan Compliance

The Land Use section of the Clackamas County Comprehensive Plan, Chapter 4, identifies the territory proposed for annexation as future urban areas, which are defined as:

"Future urban areas are lands within urban growth boundaries but outside immediate urban areas. Future urban areas are planned to be provided with public facilities, but currently lack providers of those facilities. Future urban areas are substantially underdeveloped and will be retained in their current use to ensure future availability for urban needs. Future urban areas are planned for urban uses but zoned for large-lot, limited development." ([Amended by Board Order 2000-140, 6/29/00; Amended by Board Order 2006-90, 4/13/06])

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Clackamas County Policy 7.0 – Future Urban Policies provides the following applicable policies for Future Urban lands:

Clackamas County Policy 7.1 - Control premature development (before services are available) by: a. Applying a future urban zone with a 10 acre minimum lot size within the Portland Metropolitan UGB except those lands identified in Subsection 7.1.b.

Clackamas County Policy 7.2 - Prohibit subdivisions, as defined in the Zoning and Development Ordinance, until the land qualifies as Immediate Urban. Immediate urban areas are lands that are within urban growth boundaries, are planned and zoned for urban uses, and meet at least one of the following conditions: 1. Served by public facilities, including sanitary sewage treatment, water, storm drainage, and transportation facilities; 2. Included within boundaries of cities or within special districts capable of providing public facilities and planned to be served in the near future; or 3. Substantially developed or surrounded by development at urban densities.

CITY, SPECIAL DISTRICT AND AGENCY COORDINATION

Clackamas County recognizes that many activities and problems spill across political boundaries, making coordination with special districts, cities, and state and federal agencies essential. The "Planning Process" section of the County's Plan (Section 11) provides the following policies relevant to coordination between Oregon City and Clackamas County.

6.0 Adopt Urban Growth Management Agreements with each city and offer to sign such agreements with all special districts.

7.0 Apply the County's Comprehensive Plan to unincorporated dual interest areas, except those areas where the County has adopted city plan designations in accordance with an urban growth management agreement. Such agreements may provide that the County will not plan or zone dual interest areas at urban densities prior to their annexation by a city. After annexation to a city, the County Plan will continue to apply, in accordance with the provisions of ORS 215.130, until the city applies its own land use plan and/or zoning designation. The County will revise Urban Growth Management Agreements to insure that all agreements include provisions consistent with ORS 215.130.

8.0 Notify the parties to Urban Growth Management Agreements of proposed land use actions and Plan amendments and encourage participation in formulating and evaluating the proposals. Request necessary technical assistance in assessing impacts on the area and enter all formal comments into the public record.

9.0 Insure consistency between city and County plans. Any conflicts shall be stated in an Urban Growth Management Agreement, and resolution of these conflicts will occur through the Plan amendment process.

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10.0 Engage the public in development of intergovernmental agreements.

Finding: The proposed annexation is consistent with the applicable provisions of the Clackamas County Comprehensive Plan. The City has a signed Urban Growth Management Agreement with the County which ensures consistency between City and County plans. Further details for the UGMA are addressed below. The City provided notice to the County of the proposed annexation and has not received any notice or comment from the County indicating any conflicts.

14.04.060 - Annexation Factors.- Continued:

5. NATURAL HAZARDS IDENTIFIED BY THE CITY, SUCH AS WETLANDS, FLOODPLAINS AND STEEP SLOPES:

Finding: Not applicable. The site is not on or near any natural hazards identified by the City (such as wetlands, floodplains, and steep slopes). The site is not on, near, nor will it affect designated open space, scenic, historic, or natural resource areas.

6. ANY SIGNIFICANT ADVERSE EFFECTS ON SPECIALLY DESIGNATED OPEN SPACE, SCENIC, HISTORIC OR NATURAL RESOURCE AREAS BY URBANIZATION OF THE SUBJECT PROPERTY AT TIME OF ANNEXATION;

Finding: Not applicable. The property is not within any specially designated open space, scenic, historic or natural resource areas.

7. LACK OF ANY SIGNIFICANT ADVERSE EFFECTS ON THE ECONOMIC, SOCIAL AND PHYSICAL ENVIRONMENT OF THE COMMUNITY BY THE OVERALL IMPACT OF THE ANNEXATION.

Annexation of the vacant property will have virtually no affect on the economic, social, or physical environment of the community. The Commission interprets the "community" as including the City of Oregon and the lands within its urban service area. The City will obtain a small increase in property tax revenues from adding additional assessed value to its tax roll as a result of annexing the territory. The City will also obtain land use jurisdiction over the territory.

The City will have service responsibilities including police and general administration. The City delivers police service to the unincorporated area in the course of patrolling to deliver service to the incorporated area. The increases in service responsibilities to the area that result from the annexation are insignificant. The proposal was submitted to the Oregon City Police Department for comment. Oregon City police department has not indicated that there are inadequate police resources to serve the property.

If approved by City electors for annexation, the property will be automatically rezoned to R-10 Single Gamily Residential. The property has not been subdivided or partitioned and the zoning must be changed before

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development at any density other than FU-10 can be approved. Any impacts on the community that result from approval of development permits are a direct consequence of a zone change, land division or development permit approval, not of the annexation. The applicant has indicated compliance with the State's Transportation Planning Rule for the desired re-zoning to R-10, and the territory must also be annexed to the Tri-City Service District. The City Commission must concur with Tri-City Service District's annexation of the subject property in the enacting ordinance upon voter approval of the city annexation.

Urban Growth Management Agreement (UGMA - 1992)

The City and the County have an Urban Growth Management Agreement (UGMA), which is a part of their Comprehensive Plan (Exhibit 6). The territory to be annexed falls within the Urban Growth Management Boundary (UGMB) identified for Oregon City and is subject to the agreement. Unless rezoning is deferred to a separate application as with this application, the default zoning is R-5 single-family dwelling district. The applicant is not proposing zoning or development of the property at this time. The property will remain County Zone FU-10.

The UGMA presumes that all the urban lands within the UGB will ultimately annex to the City. It specifies that the city is responsible for the public facilities plan required by Oregon Administrative Rule Chapter 660, division 11. The Agreement goes on to say:

4. City and County Notice and Coordination

D. The CITY shall provide notification to the COUNTY, and an opportunity to participate, review and comment, at least 20 days prior to the first public hearing on all proposed annexations . . .

5. City Annexations

A. CITY may undertake annexations in the manner provided for by law within the UGMB. CITY annexation proposals shall include adjacent road right-of-way to properties proposed for annexation. COUNTY shall not oppose such annexations.

In accordance with the UGMA, the City requires that the annexation include the adjacent road right-of-way of Maplelane Court. The applicant will need to provide a corrected survey, map and legal description of the additional right-of-way to be annexed at the time of approval of the resolution to forward the annexation to the voters by the City Commission. This requirement is included in the proposed findings, reasons for decision, and recommendations.

B. Upon annexation, CITY shall assume jurisdiction of COUNTY roads and local access roads that are within the area annexed. As a condition of jurisdiction transfer for roads not built to CITY street standards on the date of the final decision on the annexation, COUNTY agrees to pay to CITY a sum of money equal to the cost of a two inch asphaltic concrete overlay over the width of the then existing pavement; however, if the width of pavement is less

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than 20 feet, the sum shall be calculated for an overlay 20 feet wide. The cost of asphaltic concrete overlay to be used in the calculation shall be the average of the most current asphaltic concrete overlay projects performed by each of CITY and COUNTY. Arterial roads will be considered for transfer on a case by case basis. Terms of transfer for arterial roads will be negotiated and agreed to by both jurisdictions.

C. Public sewer and water shall be provided to lands within the UGMB in the manner provided in the public facility plan.

Finding: The proposed annexation is consistent with the UGMA. The required notice was provided to the County at least 20 days before the Planning Commission hearing. There are existing City water and sanitary sewer on the north side of this annexation. Upon zoning and development approval of the subject site, public sewer and water will be provided through extensions of these public facilities.

Oregon City Municipal Code – Chapter 17 – Zoning upon Annexation

The Land Use section of the Oregon City Comprehensive Plan identifies land use types.

The City/County urban growth management agreement specifies that the County's acknowledged Comprehensive Plan and implementing regulations shall apply until annexation and the City adopts subsequent plan amendments. The Oregon City Code requires the City Planning Department to review the final zoning designation within sixty days of annexation, utilizing the chart below and some guidelines laid out in Section 17.06.030.

CITY LAND USE CLASSIFICATIONS

Residential Plan Classification	<u>City Zone</u>
Low Density Residential	R-10, R-8, R-6

That section goes on to say:

"In cases where only a single city zoning designation corresponds to the comprehensive plan designation . . . Section 17.68.025 shall control."

Section 17.68.025, Zoning changes for land annexed into the city, says:

"Notwithstanding any other section of this chapter, when property is annexed into the city from the city/county dual interest area with any of the following comprehensive plan designations, the property shall be zoned upon annexation to the corresponding city zoning designations as follows:"

<u>Plan Designation</u> Low Density Residential Medium Density Residential Zone R-10 Single Family Dwelling R-5 Single Family Dwelling

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High Density Residential

R-2 Multi-Family Dwelling

Per OCMC 17.68.025(A), annexed properties receive a default City zoning designation as a single process. This procedure has historically served the city well for annexing county land zoned FU-10 and Low Density Residential, since the default zoning has typically been to the comparably low density residential zoning R-10. The applicant has submitted a traffic impact analysis (TIA) study that indicates compliance with the Transportation Planning Rule. The applicant seeks to annex to the City now and receive the default zoning of R-10 for the subject property. Based on the provided TPR analysis and additional findings in the staff report the property may be automatically rezoned to R-10 upon approval of the annexation by the voters.

RECOMMENDATIONS

Oregon City Municipal Code section 14.04.080 states the following:

"The city commission shall endeavor to review all proposals prior to the city application deadline for submitting ballot measures to the voters. The city commission shall only set for an election annexations consistent with a positive balance of the factors set forth in Section 14.04.060 of this chapter. The city commission shall make findings in support of its decision to schedule an annexation for an election."

The proposed annexation demonstrates a positive balance of the factors set forth in Section 14.04.060. Based on the study and the Proposed Findings and Reasons for Decision for this annexation, the Community Development Director recommends that the Planning Commission:

- Determine that the proposed Annexation demonstrates a positive balance of the factors set forth in Section 14.04.060 of the Oregon City Municipal Code as shown in this Staff report.
- 2) Recommend that the City Commission adopt the Staff Report with Exhibits and the attached Proposed Findings, Reasons for Decision, and Recommendations in Exhibit 8.
- 3) Recommend that the City Commission set AN 12-04 for election on the November 6, 2012 ballot at their meeting on August 15, 2012.

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EXHIBITS

- 1. Applicant's Annexation Application
 - a. Application Form
 - b. Narrative
 - c. Site Maps and Attachments
 - d. Caufield Neighborhood Executive Committee Meeting Notes
 - e. Annexation Petition
 - f. Tax Map
 - g. Transportation Planning Rule (TPR) analysis, dated 11/09/2011
- 2. Replinger and Associates Review of TPR Analysis, dated 12/22/2011
- 3. Public Notices.
- 4. Application Transmittal Comment Form
- 5. Signed Affidavit of Posting of Land Use Notice Sign
- 6. Urban Growth Management Agreement (UGMA) with Clackamas County;
- 7. Metro Ordinance 79-77;
- 8. Proposed Findings, Reasons for Decision and Recommendation.
- 9. Comments from Lee E. Moore, Sr., General Manager, Clackamas River Water (CRW), dated July 9, 2012.

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Exhibit 8.

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PROPOSED FINDINGS, REASONS FOR DECISION, AND RECOMMENDATIONS Based on the Findings in this Report, the Commission determines:

- The Metro Code calls for consistency of the annexation with the Regional Framework Plan or any functional plan. The Commission concludes the annexation is not inconsistent with this criterion because there were no directly applicable criteria for boundary changes found in the Regional Framework Plan, the Urban Growth Management Function Plan, or the Regional Transportation Plan.
- Metro Code 3.09.050(d)(1) requires the Commission's findings to address consistency with applicable provisions of urban service agreements or annexation plans adopted pursuant to ORS 195. The Commission finds that there are no inconsistencies between these plans/agreements and this annexation.
- 3. The Metro Code, at 3.09.050(d)(3), requires the City's decision to be consistent with any "directly applicable standards or criteria for boundary changes contained in comprehensive land use plans and public facilities plans." The Clackamas County Comprehensive Plan also says annexation which converts Future Urban lands to Immediate Urban lands should ensure the "orderly, economic provision of public facilities and services." The property owner has demonstrated that the City can provide all necessary urban services. Nothing in the County Plan speaks directly to criteria for annexation. Therefore the Commission finds this proposal is consistent with the applicable plan as required Metro Code 3.09.050 (d)(3).
- 4. The Commission concludes that the annexation is consistent with the Oregon City Comprehensive Plan that calls for a full range of urban services to be available to accommodate new development as noted in the Findings above. The City operates and provides a full range of urban services.
- The Commission notes that the Metro Code also calls for consistency of the annexation with urban planning area agreements. As stated in the Findings, the Oregon City-Clackamas County Urban Growth Management Agreement (UGMA) specifically provides for annexations by the City.
- 6. Metro Code 3.09.050(d)(5) states that another criterion to be addressed is "Whether the proposed change will promote or not interfere with the timely, orderly, and economic provision of public facilities and services." Based on the evidence in the Findings, the Commission concludes that the annexation will not interfere with the timely, orderly, and economic provision of services.
- 7. The Oregon City Code contains provisions on annexation processing. Section 6 of the ordinance requires that the City Commission consider seven factors if they are relevant. These factors are covered in the Staff Report Findings and on balance the Commission believes they are adequately addressed to justify approval of this annexation.

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- 8. The City Commission concurs with Tri-City Service District's annexation of the subject property in the enacting City ordinance upon voter approval of the city annexation. Prior to the City approving a final zoning designation for the property, the applicant shall provide documentation that the property has been annexed into the Tri-City Service District.
- 9. The Commission determines that the property should be withdrawn from the Clackamas County Service District for Enhanced Law Enforcement as allowed by statute since the City will provide police services upon annexation.
- 10. The City Commission recognizes that the applicant has adequately addressed compliance with the Oregon Statewide Transportation Planning Rule OAR 660-012-0060.
- 11. The City Commission recognizes that the Urban Growth Management Agreement with Clackamas County requires that the annexation proposal shall include the adjacent road right-of-way of the property proposed for annexation and that the applicant shall provide a corrected map and legal description for the adjacent road-right-of way before the resolution forwarding the annexation to the voters is approved.
- 12. The City Commission concurs with the Clackamas River Water District (CRW) recommendation that the property be served by the City and withdrawn from CRW's service districts if any future water lines are constructed to serve the property by Oregon City on Maplelane Court or Maplelane Road.
- 13. The City Commission recognizes that the Applicant shall provide all necessary mapping and legal property descriptions for approval by the Oregon Department of Revenue to ensure completion of the annexation.



CITY OF OREGON CITY AND USE APPLICATION



City of Oregon City, Community Development Department, 221 Molalla Ave., Ste. 200, P.O. Box 3040, Oregon City, OR 97045, (503) 722-3789

Type I (OCMC 17.50.030.A)	<u>Type II (OCMC 17.50.030.B)</u>	<u>Туре III / IV (ОСМС 17.50.030.С)</u>
Compatibility Review	D Extension	⊠ Annexation
□ Nonconforming Use review	Detailed Development Review	Code Interpretation / Similar Use
□ Water Resources Exemption	Geotechnical Hazards	Concept Development Plan
말 물건을 가 있는 것을 알 수 있다.	□ Minor Partition	🛛 Conditional Use
	D Minor Site Plan & Design Review	□ Comprehensive Plan Amendment (Text/Map)
내는 다양 한 다 중심했다.	□ Nonconforming Use Review	□ Detailed Development Plan
	□ Site Plan and Design Review	🗖 Historic Review
	□ Subdivision	Oregon City Municipal Code Amendment
사업도 같은 것이 것이 같아요.	Minor Variance	□ Variance
승규는 것이 아파님은 것 같아?	□ Water Resource Review	□ Zone Change

Application Number:

Proposed Land Use or Activity: Annexation request for a single parcel from Clackamas County to the City of Oregon City.
Will change zoning from FU-10 (County) to R-10 (City). Reapplication of AN 11-03
Project Name: Gary Bowles Annexation Number of Lots Proposed (If Applicable): N/A
Physical Address of Site: 14362 Maplelane Court, Oregon City, OR 97045
Clackamas County Map and Tax Lot Number(s): T3S, R2E, Section 4C, TL 1600
Applicant(s): Applicant(s) Signature:
Applicant(s) Name Printed: Gary Bowles Date: Date: C // / 12
Mailing Address: 14362 Maplelane Court, Oregon City, OR 97045
Phone: 503-348-5288 Fax: Email:
Property Owner(s): Property Owner(s) Signature:
Property Owner(s) Name Printed: Gary Bowles Date: 6 / / / 12
Mailing Address: same as above
Phone: Fax: Email: <u>Representative(s):</u> Representative(s) Signature: NOMOS JUN
Representative (s) Name Printed: Tom Sisul, Sisul Engineering Date: 6-1-2012
Mailing Address: 375 Portland Avenue, Gladstone, OR 97027
Phone: 503-657-0188 Fax: 503-657-5779 Email: tomsisul@sisulengineering.com
All signatures represented must have the full legal capacity and hereby authorize the filing of this application and certify that the information and exclibits berewith are correct and indicate the parties willingness to comply with all code reanirements.

www.orcity.org

Annexations to OREGON CITY - Double Majority Method, 100% Owners Method

I. Application Process for Property Owners and Registered Voters

PLEASE READ ALL INSTRUCTIONS BEFORE FILING A PETITION WITH THE CITY

Step 1. Petition

Attached is a *Petition* form for your use. Please fill in the blanks on the first page, sign and fill in the requested information on the second page and insert or attach the legal description to the first two pages.

Who May Sign: An elector registered to vote in the territory to be annexed; a property owner who is the legal owner of record or, where there is a recorded land contract, the purchaser thereunder. If there is multiple ownership each signer is counted in proportion to the size of their ownership. If a corporation owns land, the corporation is considered the individual owner.

After completing the petition, have the County Assessor's Office certify the property owner signatures using the attached *Certification of Property Ownership* form. While you are at the Assessor's Office show them your legal description, buy two 1/4 Section Maps showing the property to be annexed and have them certify the map and legal description using the attached *Certification Of Legal Description And Map* form. Proceed to the County Elections Department and have them certify the signatures of the registered voters by completing the attached *Certification of Registered Voters* form. Do this even if the property is vacant. In that case they certify that there are no registered voters in the affected territory.

Step 2. Legal Description

The legal description noted above must be a metes and bounds legal description of the territory to be annexed. This description should be inserted in or attached to the Petition. In addition, one separate copy of the metes and bounds description should be submitted. (A lot, block and subdivision description may be substituted for the metes and bounds description if the area is platted and no metes and bounds description is available, and if this is acceptable to the County Assessor's Office.) If

the legal description contains any deed or book and page references, legible copies of these must be submitted with the legal description.

Step 3. Map

As noted above you must submit two copies of the 1/4 Section map. This should be the latest County Assessor's quarter section map (or maps) which indicates the territory to be annexed. Outline the area to be annexed on the maps.

Step 4. Notice List

You must submit a list of all property owners and registered voters in the area to be annexed regardless of whether they signed the annexation petition or not. Additionally this list must include the names and addresses of all property owners within 300 feet of the outside edge of the territory to be annexed. Please submit this list on peal-off label sheets.

Step 5. Information Sheet

Complete the attached Boundary Change Information Sheet.

Step 6. Double Majority Work Sheet

A *Double Majority Worksheet* is attached for your convenience. This is to help verify that all double majority requirements are met.

Step 7. Submit Application To City

Submit all materials and the required filing fee (see attached schedule) to the City Manager or his designee at Oregon City City Hall, 320 Warner-Milne Rd., Oregon City, OR 97045.

II. City Review

Below is a summary of the steps which will be taken regarding annexations initiated by these two methods.

Step 1. Compliance Review

3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

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Submitted materials will be checked for compliance with requirements of state statutes, the Metro Code requirements and the City Code requirements.

Step 2. Public Hearing Date Set

The proposal will be set for a hearing by the Planning Commission and the City Commission. The setting of the hearing date for the City Commission must occur within 30 days of the day the proposal is judged to be complete.

Step 3. Public Hearing Notice

Notice of the public hearing by the Planning Commission and notice of the public hearing of the City Commission will be sent to service providers in the area, to the applicant, to adjacent property owners and to appropriate neighborhood or community organizations. Notice of the hearing will be posted in and/or around the territory to be annexed. The hearing will also be advertised twice in a newspaper of general circulation in the area.

Step 5. Staff Study and Report

A staff report will be prepared on each proposed boundary change. This report will cover at a minimum five items specified in the Metro Code including availability of services, compatibility with regional and local plans, etc.. The report will also cover the approval criteria laid out in the Oregon City Municipal Code. This report will be made available to the public 7 days prior to the Planning Commission hearing and 15 days prior to the City Commission hearing.

Step 6. Public Hearings

The Planning Commission will hold its public hearing. After reviewing the proposal in light of the criteria in the City Code and the Metro Code, the Planning Commission will make a recommendation on the boundary change to the City Commission.

The City Commission holds a public hearing. At the hearing the City Commission will consider 7 minimum criteria laid out in the Metro Code including compliance with urban service agreements, consistency with applicable land use plans and service availability. The City Commission

will also consider the 7 Annexation Factors contained in the City Municipal Code. At the conclusion of the public hearing the Commission determines whether the proposed annexation is consistent the Metro Code and with a positive balance of the factors in the City Code and if so schedules an annexation election.

If the Council approves the proposal and schedules it for election it must do so with an order containing findings and reasons. If there are no objections to the approval by another unit of government within 10 days then the issue procedes to election. If the the decision is contested by a necessary party then the matter is transferred to the Metro Boundary Appeals Commission.

Step 7. Election

If the City Commission approves the annexation it will be scheduled for an election at one of the four regular state election dates (March, May, September and November). The applicant will be required to submit a deposit to cover any and all costs of the election. City and State required processes leading up to an election take a significant amout of time and should be allowed for in planning by the applicant.

After the election results are certified an order must be generated to officially change the boundary. The order must be sent to Secretary of State, County Recorder and County Assessor, State Revenue Department, and City Recorder. Other interested parties (such as the utilities) are notified as well. These notifications and official map changes are done by Metro. A separate fee for this operation will be collected at the time the proposed boundary change is first submitted to the City.

PETITION OF OWNERS OF MAJORITY OF LAND AND PETITION OF A MAJORITY OF REGISTERED VOTERS

PETITION FOR ANNEXATION TO THE CITY OF OREGON CITY , OREGON

TO: The City Commission of the City of Oregon City, Oregon:

We, the undersigned property owners of and/or registered voters in the area described below, hereby petition for, and give our consent to, annexation of the area to the City of Oregon City.

The property to be annexed is described as follows:

(Insert Legal Description here OR attach it as Exhibit "A")

PETITION OF OWNERS OF 100 % OF LAND AND PETITION OF A MAJORITY OF REGISTERED VOTERS

PETITION FOR ANNEXATION TO THE CITY OF OREGON CITY , OREGON

TO: The City Commission of the City of Oregon City, Oregon:

We, the undersigned property owners of and/or registered voters in the area described below, hereby petition for, and give our consent to, annexation of the area to the City of Oregon City.

The property to be annexed is described as follows:

(Insert Legal Description here OR attach it as Exhibit "A")

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CITY OF OREGON CITY

CITY OF OREGION CITY ANNEXATION PETITION By signing below I indicate my consent to and support of being annexed into the City of Oregon City, and my ensenting KAMAS having my signature (below) used for any application form required for the annexation, including but not limited to the Sorry CE15026181 City of Oregon City's Land Use Application Form.

NOTE: This petition may be signed by qualified persons even though they may not know their property description or precinct number,

SIGNATURE PRINTED NAME 1 AM A *		ADDRESS	PROPERTY DESCRIPTION			PRECINCT #	DATE				
		PO	RV	OV		LOT #	1/4 SEC	TWNSHP	RANGE		
Japp Boule	GARY BOWLES			X	14362 Maplelane Ct.	1600	40	35	2E		10/18/11
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PO = Property Owner

. *

RV = Registered Voter

OV = Owner and Registered Voter

Page 7

10111273

CERTIFICATION OF PROPERTY OWNERSHIP OF

100% OF LAND AREA

(City 100% Ownership Method)

I hereby certify that the attached petition for a proposed boundary change involving the territory described in the petition contains the names of the owners* of 100% of the land area within the annexation area described in the petition, as shown on the last available complete assessment roll.



ssessment roll.
NAME CRAIC FERRIS CHORE
615 Correspondent Z TITLE-CARTOGRAPHER TTT
DEPARTMENT ASSESSMENT & TAX
COUNTY OF CLACKAMAS
DATE -11-2-2011 5-23-2012

"Owner" means the legal owner of record or, where there is a recorded land contract which is in force, the purchaser thereunder. If there is a multiple ownership in a parcel of land each consenting owner shall be counted as a fraction to the same extent as the interest of the owner in the land bears in relation to the interest of the other owners and the same fraction shall be applied to the parcel's land mass and assessed value for purposes of the consent petition. If a corporation owns land in territory proposed to be annexed, the corporation shall be considered the individual owner of that land.



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CERTIFICATION OF LEGAL DESCRIPTION AND MAP

I hereby certify that the description of the property included within the attached petition (located on Assessor's Map 32EO4C) has been checked by me and it is a true and exact description of the property under consideration, and the description corresponds to the attached map indicating the property under consideration.



DJ Stain
NAME CRAIG FERRIS
NAME CRAIG FERRIS 6'S CARDYALV Z TITLE CARTOGRAPHER III
DEPARTMENT ASSESSMENT & TAX
COUNTY OF CLACKAMAS
DATE



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LEGAL DESCRIPTION for CITY OF OREGON CITY ANNEXATION APPLICATION - AN 11-03

A tract of land being that parcel of land conveyed to Gary Bowles in Clackamas County Deed Records 78-21128 and a portion of Maplelane Court (formerly Maplelane Road), both being within the Southwest 1/4 of Township 3 South, Range 2 East of the Willamette Meridian in the County of Clackamas, Oregon and more particularly described as follows:

Beginning at a point on the south line of said Lot 6, Block B of the vacated plat "Westover Acres" being 132.38 feet East from the southwest corner of said Lot 6 and also being the most southerly corner of the parcel of land conveyed to Gary Bowles in Clackamas County Deed Record #78-21128; thence North along the east line of said Bowles parcel, 97.25 feet more or less to the Southwest corner of Lot 2, Block B of the vacated plat "Westover Acres"; thence continuing North along the westerly boundary of said Lot 2, and a portion of which coincides with the easterly boundary of said Bowles parcel, 312.37 feet to the northwest corner of said Lot 2 and the former southeasterly line of Maplelane Road, but now lies within the Maplelane Court right-of-way; thence northwesterly perpendicular to the right-of-way of the former Maplelane Road, 60 feet to the northwesterly right-of-way line of the former Maplelane Road, now known as Maplelane Court; thence southwesterly along said northwesterly right-of-way line of Maplelane Court, 200 feet more or less to a point being the most southerly corner of that parcel of land conveyed to Theresa M. Madigan and Gloria Gay Giesbrecht, in Clackamas County Deed Record # 73-7366; thence leaving the northwesterly right-ofway line of said Maplelane Court, southeasterly along the southerly extension of the southwest line of said Madigan parcel 60 feet more or less to the southeasterly right-ofway line of Maplelane Court and also being on the northwesterly line of said Bowles parcel; thence southwesterly along said southeasterly right-of-way line of Maplelane Court and the northwesterly line of said Bowles parcel, 52.44 feet more or less to the most westerly corner of said Bowles parcel; thence Southeasterly along the southwesterly boundary of said Bowles parcel 317.07 feet more or less to the point of beginning.

3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

CERTIFICATION OF PROPERTY OWNERSHIP OF AT LEAST ONE-HALF LAND AREA (City Double Majority Method)

I hereby certify that the attached petition for a proposed boundary change involving the territory described in the petition contains the names of the owners* of at least one-half of the land area within the annexation area described in the petition, as shown on the last available complete assessment roll.

NAME	
TITLE	
DEPARTMENT	
COUNTY OF	
DATE	

"Owner" means the legal owner of record or, where there is a recorded land contract which is in force, the purchaser thereunder. If there is a multiple ownership in a parcel of land each consenting owner shall be counted as a fraction to the same extent as the interest of the owner in the land bears in relation to the interest of the other owners and the same fraction shall be applied to the parcel's land mass and assessed value for purposes of the consent petition. If a corporation owns land in territory proposed to be annexed, the corporation shall be considered the individual owner of that land.

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CERTIFICATION OF REGISTERED VOTERS (District Double Majority Method)

I hereby certify that the attached petition for annexation of territory described herein to the <u>Oregon City</u> District contains the names of at least a majority of the electors registered in the territory to be annexed.



NAMEFloyd Thomas
TITLEDeputy Clerk
DEPARTMENT <u>Elections</u>
COUNTY OF CLACKAMAS
DATE 5-23-12
Hoya themes

CLACKAMAS COUNTY ELECTIONS SHERRY HALL, COUNTY CLERK 1710 RED SOILS CT, SUITE 100 OREGON CITY, OR 97045

3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

CERTIFICATION OF REGISTERED VOTERS

I hereby certify that the attached petition for annexation of territory described herein to the City of Oregon City contains the names of at least a majority of the electors registered in the territory to be annexed.

> NAME FLAYD THOMAS TITLE DEPUTY CLERK DEPARTMENT ELECTIONS COUNTY OF CLACKAMAS DATE 10-27-11 Coloyed Thomas



32E04C 01600

CLACKAMAS COUNTY ELECTIONS SHERRY HALL, COUNTY CLERK 1710 RED SOILS CT, SUITE 100 OREGON CITY, OR 97045

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3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

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NOTICE LIST

(This form is NOT the petition)

<u>ALL OWNERS OF PROPERTY AND/OR REGISTERED VOTERS INCLUDED IN BOUNDARY</u> <u>CHANGE PROPOSAL AREA</u>. <u>ALL OWNERS OF PROPERTY WITHIN 300 FEET OF THE</u> <u>OUTSIDE BOUNDARY OF THE AREA TO BE ANNEXED</u>.

	Gavy Bowles 14362 Maplelane Ct. T3S R2E 4C, TL AME OF OWNER/VOTER ADDRESS PROPERTY DESIGNATION (Indicate tax lot, section number, Township and Range)	1600
(1)	(See attached sheet for list of property owners within 300 feet of the area to be annexed.)	
(2)		
(3)		
(4)		
		·
(5)		
(6)		

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3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

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Smooth Feed Sheets[™]

Use template for 5160^w

JORDAN S CAMERON 14297 MAPLELANE RD OREGON CITY OR 97045

THERESA M MADIGAN

14351 S MAPLELANE CT

OREGON CITY OR 97045

JOHN JONES CONSTRUCTION INC 16999 S BRADLEY RD OREGON CITY OR 97045

METRO 600 NE GRAND PORTLAND OR 97232

606 15TH ST

ROBERT LOFGREN

PO BOX 1247

PO BOX 2110

THOMAS R RASCH

PO BOX 777

HISTORIC PROPERTIES LLC

OREGON CITY OR 97045

OREGON CITY OR 97045

OREGON CITY SCH DIST #62

OREGON CITY OR 97045

CLACKAMAS OR 97015-0777

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۰,

GARY R BOWLES 14362 S MAPLELANE CT OREGON CITY OR 97045

RICHARD D BAGGETT 14388 S MAPLELANE RD OREGON CITY OR 97045

DARREN WIEDRICH 14420 S MAPLELANE RD OREGON CITY OR 97045

RICHARD BAGGETT 14449 WALNUT GROVE WAY OREGON CITY OR 97045

JOSEPH DALLAS & CHRI BAILEY 14461 WALNUT GROVE WAY OREGON CITY OR 97045

JOSHUA & KERI E RHODEN 14473 WALNUT GROVE WAY OREGON CITY OR 97045

MOEHNKE FAMILY LTD PRTNRSHP 16086 SE RIVER RD MILWAUKIE OR 97267-3621

STEVEN E ELLISON 16415 SW CINNABAR CT BEAVERTON OR 97007

M ALAEBUAN

Adduaaa labali

3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

Page B

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÷		BOUNDARY CHANGE INFORMATION SHEET
	I. E.	XISTING CONDITIONS IN AREA TO BE ANNEXED
	В.	General location <u>East of HWY 213, north of Beavercreek Kd</u> , at the intersection of Mapielane Rd. and Mapielane Ct. Land Area: Acres0.89or Square Miles
	C.	General description of territory. (Include topographic features such as slopes, vegetation, drainage basins, floodplain areas, which are pertinent to this proposal). Somewhat rural in Chavarter, site on deadend street. Site
		Slopes downward from NE to SW and has existing structures on
	ъ.	site. No natural hazards on site nor near the site.
·.	D.	Describe land uses on surrounding parcels. Use tax lots as reference points.
		North: <u>TL SOD - private residence</u>
	. <u>å</u>	East: TL 1700 + 1800 - private residence and large
		south: Maplelane Rd., vacant lot
		West: The ISOD - private residence (Further west, down Maplelane Ct., is Oveg on City School District-property.)
	. Е.	Existing Land Use:
	·. `	Number of single-family units Number of multi-family units
		Number commercial structuresNumber industrial structures
	•	Public facilities or other uses
		What is the current use of the land proposed to be annexed: Private residence
	F.	Total current year Assessed Valuation \$ 104 453
	G	Fotal existing population
		Page 14

3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

27

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II. REASON FOR BOUNDARY CHANGE

- A. The City Code (Section 6) and the Metro Code (3.09.050 (d) & (e)) spell out criteria for consideration (see copies attached). Please provide a narrative which addresses these criteria. With regard to the City criteria, please provide a narrative statement explaining the conditions surrounding the proposal and addressing the factors in Section 6, as relevant, including:
 - 1. Statement of availability, capacity and status of existing water, sewer, drainage, transportation, park and school facilities;
 - 2. Statement of increased demand for such facilities to be generated by the proposed development, if any, at this time;
 - Statement of additional facilities, if any, required to meet the increased demand and any proposed phasing of such facilities in accordance with projected demand;
 - 4. Statement outlining method and source of financing required to provide additional facilities, if any;
 - 5. Statement of overall development concept and methods by which physical and related social environment of the site, surrounding area and community will be enhanced;
 - Statement of potential physical, aesthetic and related social effects of the proposed or potential development on the community as a whole and on the small subcommunity or neighborhood of which it will become a part; and proposed actions to mitigate such negative effects, if any;
 - 7. Statement indicating the type and nature of any Comprehensive Plan text or map amendments or Zoning text or map amendments that may be required to complete the proposed development.
- Please submit 25 copies of a site plan, drawn to scale (not greater than 1" = 50') indicating:
 - 1. The location of existing structures (if any);
 - The location of streets, sewer, water, electric and other utilities, on or adjacent to the property to be annexed.
 - 3. The location and direction of all water features on and abutting the subject property. Approximate location of areas subject to inundation, stormwater overflow or standing water. Base flooding data showing elevations of all property subject to inundation in the event of one-hundred year flood shall be shown;
- 4. Natural features, such as rock outcroppings, marshes or wetlands (as delineated by the Division of Sate Lands) wooded areas, isolated preservable trees (trees with trunks over 6" in diameter- -as measured 4 feet above the ground) and significant areas of vegetation.
- 5. General land use plan indicating the types and intensities of the proposed or potential development;

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R

III. LAND USE AND PLANNING

A.	What is the applicable County Planning Designation? FU-10 What City Planning Designation is being sought? LR
В.	What is the zoning on the territory to be served? $FU-IO$
	What zoning designation is being sought? $R-10$ (unless the City requests and approves a different zoning ls the subject territory to be developed at this time? No
C.	Is the subject territory to be developed at this time? No
D.	Generally describe the anticipated development (building types, facilities, number of units). <u>No development is anticipated with the proposed</u> <u>annexation</u> .
E.	Can the proposed development be accomplished under current county zoning? Yes \square No \mathcal{N}/\mathcal{A}
	If No,has a zone change been sought from the county either formally or informally.
	□ Yes □ No N/A
F	Please describe outcome of zone change request if answer to previous questions vas Yes.
F. Is fo	the proposed development compatible with the city's comprehensive land use plan or the area? $\mathcal{N} \mathcal{A}$

Has the proposed development been discussed either formally or informally with any of the following? (Please indicate)

- City Planning Commission
- City Council

□ Yes

City Planning Staff City Manager

□ City has no Plan for the area.

Please describe the reaction to the proposed development from the persons or agencies indicated above.

🗆 No

_of development (if annexation approved Dossibility future Was discussed Pre-Application meeting at the

G. Please indicate all permits and/or approvals from a City, County, or Regional Government which will be needed for the proposed development. If already granted, please indicate date of approval and identifying number:

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APPROVAL	PROJECT FILE #	DATE OF APPROVAL	FUTURE REQUIREMENT
Metro UGB Amendment			
City or County Plan Amendment		1	×
Pre-Application Hearing (City or County)		8 24-11	
Preliminary Subdivision Approval		······	
Final Plat Approval			
Land Partition '			
Conditional Use			
Variance			
Sub-Surface Sewage Disposal			
Building Permit			

Please submit copies of proceedings relating to any of the above permits or approvals which are pertinent to the annexation.

H. Does the proposed development comply with applicable regional, county or city comprehensive plans? Please describe.

I. If a city and/or county-sanctioned citizens' group exists in the area of the annexation, please list its name and address of a contact person. Caufield Neighborhood Association (CNA), Contact

. Contact Chris 320 Warner Milne Rd., Orgon City Wadsware @Ovegon City Police

IV. SERVICES AND UTILITIES

Y

- A. Please indicate the following:
 - 1. Location and size of nearest water line which can serve the subject area. <u>There is an existing 12" water line in Maplelane Ct</u>. <u>That runs in front of the site's frontage</u>.
 - 2. Location and size of nearest sewer line which can serve the subject area. <u>Existing 8" Sewer Main in Maplelane Ct.</u>, <u>approximately</u>

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3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

3.	400-ft SW of the sites' Sh) property corner. Proximity of other facilities (storm drains, fire engine companies, etc.) which
	can serve the subject area <u>EXISTING 12" Stormwater main in</u>
	Maplelone Ct., approximately 350-ft SW of the sites
	SW property corner.
4.	The time at which services can be reasonably provided by the city or district. Services not needed with annexation.
5.	The estimated cost of extending such facilities and/or services and what is to be the method of financing. (Attach any supporting documents.) \cdot \mathcal{N}
	· ·
<u> </u>	
6	Availability of the desired service from any other unit of local government. (Please indicate the government.)
	NA
	NA
governm	$\mathcal{N} \mathcal{A}$ erritory described in the proposal is presently included within the boundaries sing served extraterritorially or contractually by, any of the following types of mental units, please so indicate by stating the name or names of the mental units involved.
governm governm	erritory described in the proposal is presently included within the boundaries sing served extraterritorially or contractually by, any of the following types of nental units, please so indicate by stating the name or names of the nental units involved.
governm governm City	erritory described in the proposal is presently included within the boundaries eing served extraterritorially or contractually by, any of the following types of nental units, please so indicate by stating the name or names of the nental units involved. Rural Fire Dist <u>Clackamas Fire Distinct</u> =
Gity County S	erritory described in the proposal is presently included within the boundaries eing served extraterritorially or contractually by, any of the following types of nental units, please so indicate by stating the name or names of the nental units involved. Rural Fire Dist <u>Clackamas Fire District</u> Service Dist Sanitary District
City County S	erritory described in the proposal is presently included within the boundaries eing served extraterritorially or contractually by, any of the following types of nental units, please so indicate by stating the name or names of the nental units involved.
City County S	erritory described in the proposal is presently included within the boundaries eing served extraterritorially or contractually by, any of the following types of nental units, please so indicate by stating the name or names of the nental units involved.
Givernm governm City County S Hwy. Ligh Grade Sch High Scho	erritory described in the proposal is presently included within the boundaries ling served extraterritorially or contractually by, any of the following types of nental units, please so indicate by stating the name or names of the nental units involved.
Grade Sch Library Dis	erritory described in the proposal is presently included within the boundaries sing served extraterritorially or contractually by, any of the following types of nental units, please so indicate by stating the name or names of the nental units involved.

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3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

residents in the	territory	hooked up	to a	public sewer of	or water syste	em), please so
Clack amas	River	Water	is	currently	ovovidina	Water Service
to the exis	ting hon	N.			1	
	J .					

APPLICANT'S NAME	Gany R. Bowles
MAILING ADDRESS	14362 Maplelane Ct.
	Oregon City OR 97045
	<u> </u>
TELEPHONE NUMBER	(Work)
	503-348-5288 (Res.)
REPRESENTING	
DATE:	
	5 a

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DOUBLE MAJORITY WORK SHEET

Please list all properties/registered voters included in the proposal. (If needed, use separate sheet for additional listings).

Property Designation (Tax Lot #s)	Name of Owner	Ac	res	Assesser Value ⊈	d Signed Petition (Y/N)
1600	Gany Bowles	0.8	19	104,453	Y
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1.			-+		
			+		
				······································	
······································					
			+		
	· · ·		+		
			1		
TOTALS	1	0.89	101	4,453	N

PROPERTY OWNERS

• .

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Worksheet (continued)

REGISTERED VOTERS

Name of Registered Voter	Address of Registered Voter	Signed Petition (Y/N)
Gany Bowles	14362 Maplelane Ct.	Y
· · ·		
	·	
·		
	· · · · · · · · · · · · · · · · · · ·	

SUMMARY

TOTAL NUMBER REGISTERED VOTERS IN	<u> </u>	
NUMBER OF REGISTERED VOTERS WHO S	<u> </u>	
PERCENTAGE OF REGISTERED VOTERS W	100%	
TOTAL ACREAGE IN PROPOSAL	0.89 AC.	
ACREAGE SIGNED FOR	0.89 Ac.	
PERCENTAGE OF ACREAGE SIGNED FOR	100'1.	

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City of Oregon City Narrative Statement for Proposed Annexation

Applicant:	Gary R. Bowles 14362 S. Maplelane Court Oregon City, OR 97045 503-348-5288	
Engineer:	Thomas J. Sisul Sisul Engineering 375 Portland Avenue Gladstone, OR 97027 Phone: (503) 657-0188 Fax: (503) 657-5779	
Location:	East of HWY 213, North of Beavercreek Road, at the intersection of Maplelane Road and Maplelane Court	
Address:	14362 S. Maplelane Court, Oregon City, OR 97045	
Legal Description:	T3S R2E Section 4C Tax Lot 1600	
Current Zoning:	Clackamas County Future Urbanizable 10-Acre District (FU- 10)	
Comprehensive Plan:	LR Low Density Residential	
Site Size:	0.89 Acres (per Oregon City Permit Submittal – Property Zoning Report)	
Proposal:	Annexation of the subject property from unincorporated Clackamas County to the City of Oregon City	
Date:	June 2012	

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation —Narrative Statement for Proposed Annexation

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Capacity	
Status	
Sanitary Sewer Facilities	
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Status	
Storm Drainage	
Availability	
Capacity	
Status	
Transportation Facilities	
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Availability	
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creased Demand Generated by Proposed Developn ansportation, Park & School Facilities	nent for Water, Sewer, Drainage, 1
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SGL11-043 — Gary Bowles' S. Maplelane Court Annexation —Narrative Statement for Proposed Annexation

Proposal Background & Overview

The applicant is seeking to annex one (1) parcel into the City of Oregon City, to allow for the potential to split and develop the parcel in the future. The parcel is currently located within unincorporated Clackamas County, inside the Portland metropolitan area Urban Growth Boundary (UGB), and within the Urban Growth Management Agreement (UGMA) Area of Oregon City and Clackamas County. The area of the proposed annexation is located east of Highway 213 and north of Beavercreek Road, at the intersection of Maplelane Road and S. Maplelane Court. The area is comprised of one (1) tax lot for a total area of roughly 0.89 acres.

The site and neighboring lots are somewhat rural in character but transitioning to more urban densities. There is an Oregon City School District school bus parking facility located southwest of the site, on S. Maplelane Court. S. Maplelane Court is a dead end street. The site slopes downward from the northeast to the southwest and has an existing residence, large shed, and other miscellaneous structures. The site has access to S. Maplelane Court by way of two driveways. There is currently one resident who resides on the proposed annexation site. The 2011 assessed valuation for the property is \$104,453.

The site is not on or near any natural hazards identified by the City (such as wetlands, floodplains, and steep slopes). The site is not on, near, nor will it affect designated open space, scenic, historic, or natural resource areas.

The parcel currently exhibits a Clackamas County Zoning Designation of Future Urbanizable (FU-10) and is located adjacent to the City limits. Under the Clackamas County / Oregon City UGMA, the lot exhibits an Oregon City Comprehensive Plan Designation of Low Density Residential (LR). If successfully annexed, the LR-designated lot will be zoned as R-10 Single-Family Dwelling District, unless a different zoning is requested and approved by the City.

The parcel is currently served by Clackamas River Water for water service. The parcel is not currently served for sanitary sewer or storm water management facilities, although the site would be annexed to Tri-City Service District upon approval of annexation to the City. Sanitary sewer is located in S. Maplelane Court, approximately 400 feet southwest of the subject sites' southwestern property corner. A stormwater main is also located in S. Maplelane Court, approximately 350 feet southwest of the subject sites' southwestern property is annexed and developed, connections to sanitary and stormwater services may be available along the site's S. Maplelane Court frontage, if the existing sanitary and storm mains were extended northeasterly.

As this is a re-application of the previously submitted and approved by City Council annexation request AN 11-03, a pre-application meeting was waived by City staff. A meeting with the Caulfield Neighborhood Association officers was held on May 22, 2012 with regards to this new application.

SGL11-043 - Gary Bowles' S. Maplelane Court Annexation -Narrative Statement for Proposed Annexation

Availability, Capacity & Status of Existing Water, Sewer, Drainage, Transportation, Park & School Facilities

Oregon City Municipal Code Subsection 14.04.050(E)(7): Annexation Procedures

The annexation, if approved, would not create an increase in service demands. An increase in service demand would only occur if in the future, the property were to split into two parcels (possibly three depending upon the amount of street dedication required, if any) and develop with an additional home(s). Future development of the property would be subject to review and compliance with City zoning and partitioning codes and standards at that time.

The City has anticipated development throughout the areas of the Portland metropolitan UGB that lie within the Oregon City UGMA area, including the subject annexation area. Basic services are available and adequate to support initial annexation and the impact of a possible future division and development of the site.

The subject property is currently within and served by Clackamas Fire District No.1 and Clackamas County Sheriff's Office. There will not be any additional demand of either service if the annexation is approved, although police services would change from Clackamas County Sheriff's Office to the Oregon City Police Department. If the property were to divide and develop in the future, the additional residence(s) would also be served by Clackamas Fire District No.1 and pay a one-time fee of \$3,500 per new dwelling unit to provide adequate police services though Oregon City's police department.

If the property were to divide and develop in the future, the City has established SDCs to ensure that developments pay their proportionate share for system capacity and capital improvements.

Water Facilities

Availability

The subject property is currently within and served by the Clackamas River Water (CRW) District service area. The CRW District provides domestic water supply to the City of Oregon City. There is a 12-inch OD (outside diameter) water main in S. Maplelane Court and a 16-inch DI (ductile iron) water main in Maplelane Road. If the property was to divide and an additional home(s) built, new water connection would be accessed along the site's frontage on S. Maplelane Court.

If the property was to be divided and developed, the additional home(s) would connect to the existing water system and would pay the appropriate connection fees, and/or SDCs and on-going user fees, thereby paying their fair share.

Capacity

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation —Narrative Statement for Proposed Annexation

The existing 12-inch water main in S. Maplelane Court has adequate capacity to serve an additional home(s) if the subject property were to divide sometime in the future.

Status

The subject property is currently within and served by the Clackamas River Water (CRW) District service area. If the property were to divide in the future, the additional home(s) would obtain water service from the CRW District.

Sanitary Sewer Facilities

Availability

At this time the subject property is not connected to a sanitary sewer system, nor is it within the service area of a sewer district. The existing residence is served by private septic system. The Tri-City Service District provides wastewater treatment for the City of Oregon City. Per the Pre-Application Conference notes, the applicant will file the appropriate documents for annexation into the Tri-City Service District if the annexation is successful, but no sewer connection will be made.

The City operates the sanitary sewer collection system, which connects to the Tri-City Service District interceptor. Sanitary sewer is available to the subject property if it were to divide in the future. The nearest City sanitary sewer mains to the property are an 8-inch line in S. Maplelane Court and an 8-inch line in Walnut Grove Way. If the subject property were to divide in the future, the sanitary main in S. Maplelane Court would be extended east for service lateral connection.

If the subject property divides and develops in the future, the existing home and additional home(s) would connect to the City's sewer system and would pay connection fees, SDC's and on-going user fees, thereby paying their fair share.

Capacity

The Tri-City Service District has adequate capacity to serve the subject property if it were to divide and develop in the future.

Status

As noted above, the applicant will file the appropriate documents for annexation into the Tri-City Service District, following the annexation process if said process is successful. If the subject property were to divide in the future, the sanitary main in S. Maplelane Court would be extended east for service lateral connection and connection fees, SDC's and ongoing user fees would be paid.

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation —Narrative Statement for Proposed Annexation

Storm Drainage

Availability

Currently there is no stormwater management facility for the subject parcel. Stormwater collection and connection would not be required with the subject property's annexation, but would most likely be required if the property were to divide and develop in the future. If the property were to develop, the existing 12" stormline in S. Maplelane Court would most likely be extended east for connection.

If the property was to divide and developed in the future, the properties would most likely be connected to the City's stormwater system and would pay connection fees, SDCs and on-going user fees, thereby paying their fair share.

Capacity

If the property were to divide and develop in the future, the stormwater management facility may have the capacity to serve the properties.

Status

As noted above, if the property were to divide and develop, the existing stormline in S. Maplelane Court would most likely be extended east for connection. As a result, the developed properties would connect to the City's storm main and would pay connection fees, SDCs and on-going user fees, thereby paying their fair share.

Transportation Facilities

Availability

Access to the property is currently provided by way of two existing private driveway approaches from S. Maplelane Court.

Capacity

The annexation, if approved, would not create any increase in service demands. No impact would occur unless the property proposed to be annexed was divided and developed with a new home(s) in the future.

Previously the City recommended having a TPR (Transportation Planning Rule) analysis completed as part of the annexation request. State requirements on that have recently changed and it is no longer a requirement. However, the applicant hired Lancaster Engineering to complete the TPR analysis prior to the rule change. It was found that if the property were to develop and divide, per page 3 of Lancaster's TPR analysis, "...The proposed annexation and zone change is projected to result in a maximum of 2 additional peak hour trips and 20 additional daily trips on area roadways and intersections. The proposed zone change will not have a significant effect on the

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation —Narrative Statement for Proposed Annexation

surrounding transportation system as defined under the Transportation Planning Rule. Accordingly, no mitigation is recommended in association with the proposed zone change."

Status

As previously noted, access to the property is currently provided by way of two existing private driveway approaches from S. Maplelane Court. The annexation, if approved, would not create any increase in service demands. If the property were to divide and develop with a new home(s) in the future, the traffic "…impacts of the development are treated as negligible.", as stated from page 3 of the TPR analysis.

Park Facilities

Availability

The property is not adjacent, near, or large enough to affect park availability. The closest park is Hillendale Park, over a mile away to the west.

Capacity

Annexation of the subject property would not affect the capacity of park facilities.

Status

As noted above, the site is not adjacent, near, or large enough to effect park facilities.

School Facilities

Availability

The existing home on the subject property is currently served by the Oregon City School District, and annexation alone would have no impact on the school district. The site is located within roughly one (1) mile of the Gaffney Lane Elementary School to the southwest; less than two (2) miles from Gardiner Middle School to the west; and approximately one (1) mile from Oregon City High School and Clackamas Community College to the south. If the property were to divide and develop, it may increase the service demands for the local schools, depending on the residents. Oregon City School District has adopted a \$1.00/sq.ft. construction excise tax on residential development as permitted by state law. In addition, if development occurred it would result in additional property tax revenue.

Capacity

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation -Narrative Statement for Proposed Annexation

The applicant is not aware of the current capacity of schools that serve the proposed annexation area, nor is the applicant aware if the capacity would be affected if the property were to ever divide and develop.

Status

As noted above, the existing home on the subject property is currently served by the Oregon City School District, and annexation alone would have no impact on the school district. The details surrounding existing and future capacity are unknown, but if the property were to divide and develop, the construction excise tax and additional property tax revenue may contribute to possible increase in school capacity. The site is located within roughly one (1) mile of the Gaffney Lane Elementary School to the southwest; less than two (2) miles from Gardiner Middle School to the west; and approximately one (1) mile from Oregon City High School and Clackamas Community College to the south.

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation —Narrative Statement for Proposed Annexation

Increased Demand Generated by Proposed Development for Water, Sewer, Drainage, Transportation, Park & School Facilities

Oregon City Municipal Code Subsection 14.04.050(E)(7): Annexation Procedures

Water Facilities

As noted above, the subject property is currently within and served by the Clackamas River Water (CRW) District service area. There will not be any additional demand if the annexation is approved. If the property were to divide and develop in the future, the existing waterline system is available and has the capacity for connection.

Sewer Facilities

As noted above, the subject property is not connected to a sanitary sewer system as it is served by private septic system. There will not be any additional demand if the annexation is approved. The applicant will file the appropriate documents for annexation into the Tri-City Service District if the annexation is successful, but no sewer connection will be made. If the subject property were to divide in the future, the existing sanitary main could be extended east and made available for connection.

Drainage Facilities

As noted above, the subject property is not connected to a stormwater management facility. There will not be any additional demand if the annexation is approved. Stormwater connection would most likely be required if the property were to divide and develop in the future. The existing storm drain system could be extended east and made available for connection.

Transportation Facilities

As previously noted, access to the property is currently provided by way of two existing private driveway approaches from S. Maplelane Court. There will not be any additional demand if the annexation is approved. Transportation may be impacted if the subject property were to divide and develop with a new home(s).

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation —Narrative Statement for Proposed Annexation

Park Facilities

The property is not adjacent, near, or large enough to affect park availability. The closest park is Hillendale Park, over a mile away to the west. There will not be any additional demand if the annexation is approved. If the property were to divide and develop, there would be little to no impact on park facilities.

School Facilities

The existing home on the subject property is currently served by the Oregon City School District, and annexation alone would have no impact on the school district. If the property were to divide and develop, the construction excise tax and additional property tax revenue may contribute to possible increase in school capacity. The site is located within roughly one (1) mile of the Gaffney Lane Elementary School to the southwest; less than two (2) miles from Gardiner Middle School to the west; and approximately one (1) mile from Oregon City High School and Clackamas Community College to the south.

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation --- Narrative Statement for Proposed Annexation

Additional Facilities Required to Meet Increased Demand & Proposed Phasing of Such Facilities

Oregon City Municipal Code Subsection 14.04.050(E)(7): Annexation Procedures

Additional Facilities

The subject property is currently within and served by Clackamas County Fire District No.1. There will not be any additional demand if the annexation is approved. If the property were to divide and develop in the future, the additional residence(s) would be served by Clackamas County Fire District No.1 as well.

The subject property is currently served by Clackamas County's Sheriff's Office. If the annexation is approved, the property will also be annexed into and served by the Oregon City Police Department. The applicant recognizes there are some deficiencies in the availability of Oregon City police protection services. If the property were to divide and develop in the future, a one-time fee of \$3,500 per new dwelling unit would be paid at the time a new building permit is applied for on the annexed property.

Phasing of Facilities

No phasing of additional facilities is necessary or proposed.

SGL11-043 - Gary Bowles' S. Maplelane Court Annexation -Narrative Statement for Proposed Annexation

Method & Source of Financing for Additional Facilities Oregon City Municipal Code Subsection 14.04.050(E)(7): Annexation Procedures

As noted above, if the property were to divide and develop in the future, a fee of \$3,500 per new dwelling unit for police services would be applied when a new building permit was applied for on the annexed property. No other additional facilities — besides water, sanitary sewer, stormwater, transportation, parks and schools that have already been addressed — are necessary to meet increased demand if the property were to divide and develop in the future. Thus, no methods and sources for financing additional facilities are necessary.

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation --- Narrative Statement for Proposed Annexation

Development Concept & Methods of Enhancement of Physical & Social Environment of Site, Surrounding Area & Community

Oregon City Municipal Code Subsection 14.04.050(E)(7): Annexation Procedures

Development Concept & Methods of Physical & Social Enhancement of Environment of Site, Surrounding Area & Community

If the subject property is annexed as proposed, there will not be an impact on the development concept, physical and social enhancement of environment of the site or surrounding area and community.

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation —Narrative Statement for Proposed Annexation

Effects of and Mitigation for Potential Physical, Aesthetic & Related Social Effects of Proposed Development

Oregon City Municipal Code Subsection 14.04.050(E)(7): Annexation Procedures

Effects of Proposed Development & Mitigation for Community, Sub-Community & Neighborhood

If the subject property is annexed as proposed, there will not be effects of mitigation for physical, aesthetic or related social effects of proposed development.

SGL11-043 --- Gary Bowles' S. Maplelane Court Annexation --- Narrative Statement for Proposed Annexation

Type & Nature of Required Comprehensive Plan, or Zoning, Text or Map Amendments

Oregon City Municipal Code Subsection 14.04.050(E)(7): Annexation Procedures

Required Comprehensive Plan and / or Zoning Text or Map Amendments

As noted above, under the Clackamas County / Oregon City UGMA, the parcel already exhibits an Oregon City Comprehensive Plan Designation of Low Density Residential (LR). If successfully annexed, the site would automatically be zoned under the R-10 Single Family Dwelling District, pursuant to Section 17.68.025 of the Oregon City Municipal Code (OMC). Therefore, no Comprehensive Plan amendments will be required, but a Zoning text amendment/map amendment will be required for the proposed annexation.

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation —Narrative Statement for Proposed Annexation

Goal 14.3: Orderly Provision of Services to Growth Areas

Policy 14.3.1 - Annexation of the subject property will not affect current public facilities or services. If the parcel where to divide and develop in the future, utility connections and services would be made.

Policy 14.3.2 - Annexation of the subject property will not affect existing utility services. If the parcel were to divide and develop in the future, the extension of new services would not diminish the delivery of those same services to existing areas and residents in the City.

Policy 14.3.3 - Annexation of the subject property will not create a new service district. If the parcel were to divide and develop in the future, connections would be made to existing facilities and would not create a new service district.

Policy 14.3.4 - Annexation of the subject property will not create any new service connections, so there will be no cost borne by the applicant for connections. The applicant will file the appropriate documents for annexation into the Tri-City Sewer Service District if the annexation is successful, but no sewer connection will be made. If the property were to divide and developed in the future, the utility connection fees, SDCs and on-going user fees, would be paid for by applicants of both properties.

Therefore, this proposal is consistent with Goal 14.3 and its' policies 14.3.1 - 14.3.4 of the City's Comprehensive Plan.

Goal 14.4: Annexation of Lands to the City

Policy 14.4.1 – Annexation of the subject property would support compact urban form and support efficient delivery of public services as the site is within the City's Urban Growth Boundary and contiguous with the city limits.

Policy 14.4.2 – Annexation alone of the subject property will not fiscally impact the City of Oregon City. There will not be any additional demand of fire services, as the property is currently within and served by Clackamas County Fire District #1. The City will not collect SDC fees until development occurs or the existing house is connected to sewer, as the property will not be connecting immediately to City operated utilities.

The property is currently being served by Clackamas County Sheriff's Office, but will be annexed into and served by the Oregon City Police Department upon annexation. Fees for police services will not be collected at the time of annexation. If the subject property were to divide and develop in the future, a fee of \$3,500 per new dwelling unit for police services would be applied when a new building permit was applied for on the annexed property. Utility (water, sewer and drainage) connections would be paid for

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation —Narrative Statement for Proposed Annexation

though SDC fees. Additional property would also result in additional property tax revenue.

Policy 14.4.3 – Annexation of the subject property will not create unincorporated islands within the City, will allow public services to be extended to the area if the parcel were to divide and develop in the future, and does not conflict with the City's master plan.

Policy 14.4.4 – Annexation of the subject property will not affect sewer service as the property is currently served by private septic system. The applicant will file the appropriate documents for annexation into the Tri-City Service District if the annexation is successful, but no sewer connection will be made. If the subject property were to divide in the future, the existing sanitary main could be extended east and made available for connection.

Therefore, this proposal is consistent with Goal 14.4 and its' policies 14.4.1 - 14.4.4 of the City's Comprehensive Plan.

SGL11-043 — Gary Bowles' S. Maplelane Court Annexation —Narrative Statement for Proposed Annexation

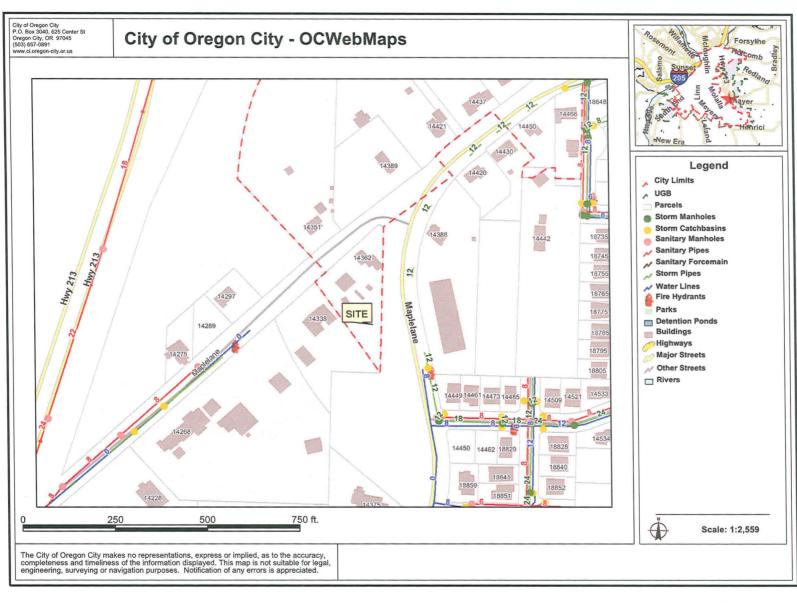
Metro Boundary Change Criteria

By meeting the annexation criteria set forth by the City, the proposed annexation is consistent with the Metro Boundary Change Criteria.

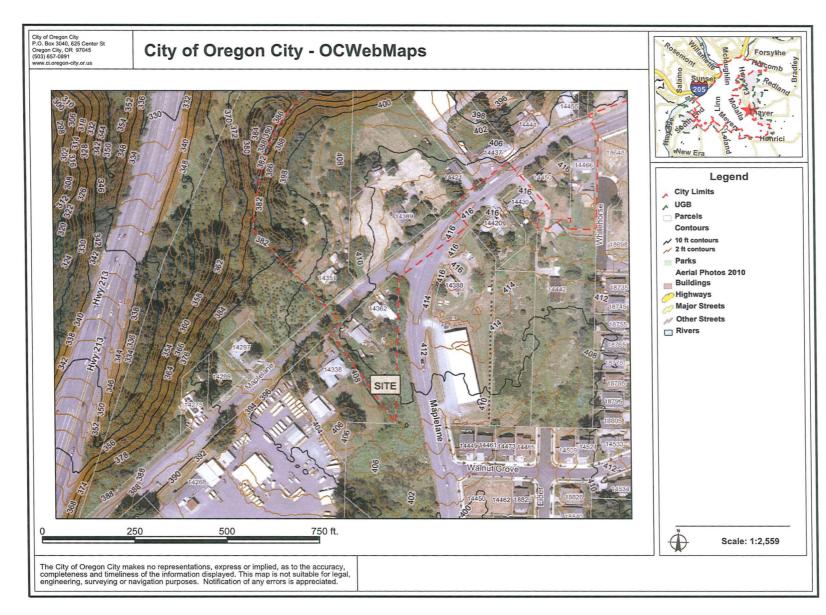
Clackamas County Urban Growth Management Agreement (UGMA)

The proposed annexation area is currently under the jurisdiction of unincorporated Clackamas County and is zoned Future Urbanizable (FU-10), meaning that it is poised to urbanize, but must first connect to urban services. Under the Clackamas County / Oregon City UGMA, urbanization of the proposed annexation area, and possible connections to urban services in the future, requires the subject lot to first be annexed to the City of Oregon City. Per that UGMA, the lot exhibits an Oregon City Comprehensive Plan Designation of Low Density Residential (LR). If successfully annexed, the site would automatically be zoned under the R-10 Single Family Dwelling District, pursuant to Section 17.68.025 of the OMC. Therefore, the proposed annexation area meets the applicable criteria for annexation to the City of Oregon City, pursuant to the Clackamas County / Oregon City UGMA.

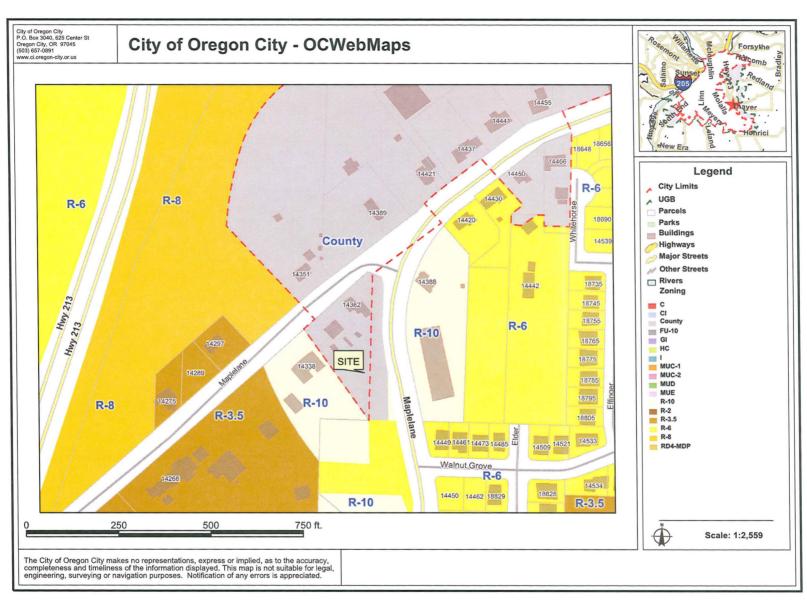
SGL11-043 — Gary Bowles' S. Maplelane Court Annexation —Narrative Statement for Proposed Annexation



Utility



Aerial with Contours



Zoning



Caufield Neighborhood Association

Larry Hanlon, President 503-657-6975

June 2, 2012

City of Oregon City Planning Department 221 Molalla Avenue, Suite 200 Oregon City, OR 97045

ATTENTION: Peter Walter, Associate Planner

Dear Pete,

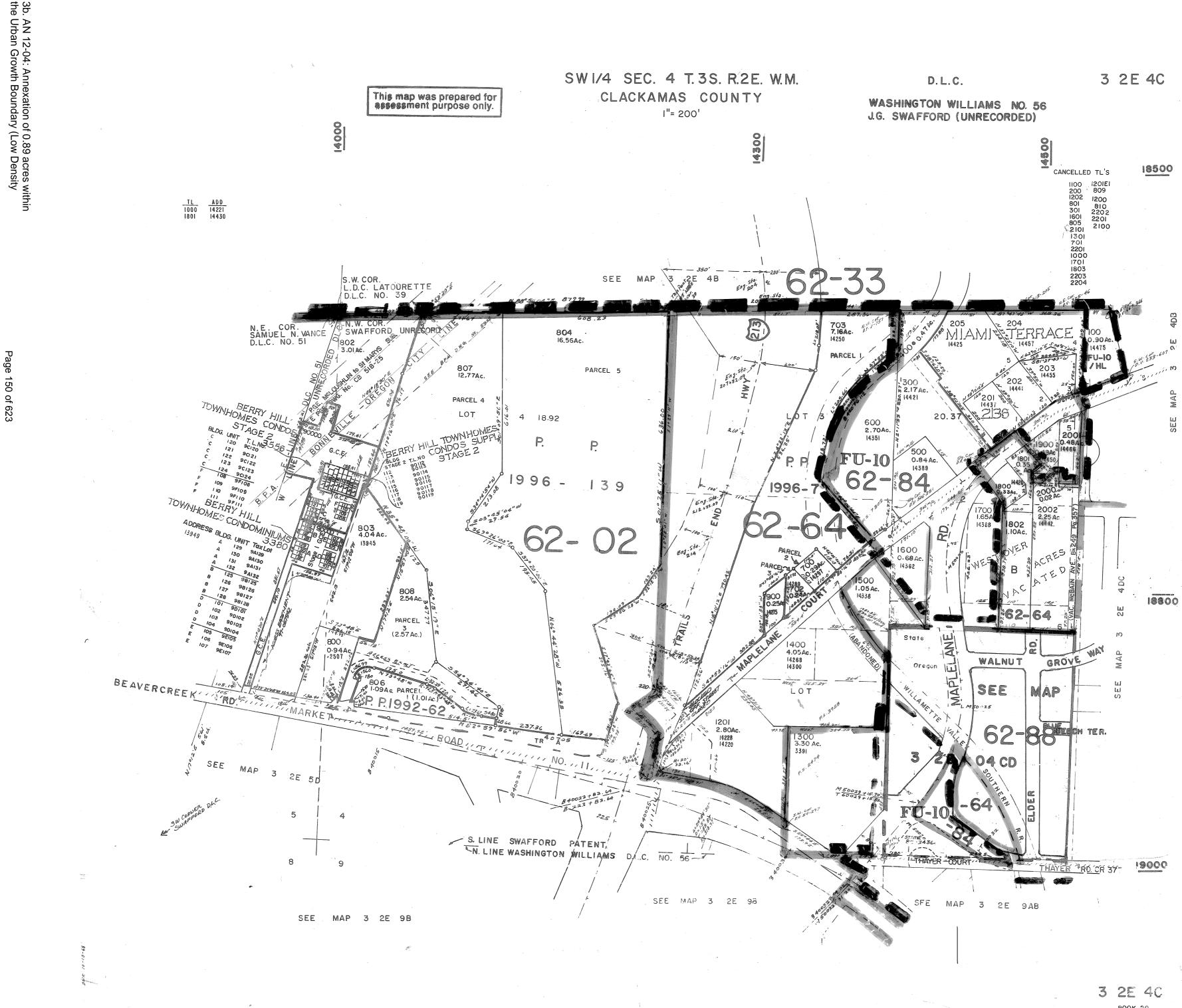
This is to certify that the Caufield Neighborhood Association executive committee met on Tuesday, May 22, 2012, with Robert Price regarding the annexation request for 14362 Maplelane Road. We will inform our association at our next meeting scheduled for June 26, 2012.

At the same executive meeting, Thomas J. Sisul of Sisul Engineering also presented the annexation request for an 11.93 acre parcel at 19314 S Beavercreek Road listed as tax lot 3-2E-09A-00800. Our Land Use Chairman expressed concern regarding the zoning of it and others in the Beavercreek Corridor, wondering if large industrial usage was to be permitted. We will present this annexation request at our general meeting on June 26. Please inform us when hearing dates are set so those having concerns may comment if they wish.

Sincerely,

Hung R Dairs

Gary K. Davis, Secretary Caufield Neighborhood Assocation



BOOK 29



November 9, 2011

Tom Sisul Sisul Engineering 375 Portland Avenue Gladstone, OR 97027 ENGINEERING 321 SW 4th Ave., Suite 400 Portland, OR 97204 phone: 503.248.0313 fax: 503.248.0251 lancasterengineering.com

RE: 14362 S Maplelane Court Zone Change: TPR Analysis

Dear Tom,

This letter is intended to describe the potential traffic impacts of a proposed rezone in Clackamas County, Oregon. The subject property is located at 14362 S Maplelane Court. The property is currently zoned Future Urban 10-Acre District (FU-10) but is proposed for annexation into Oregon City with R-10 Single-Family Dwelling District zoning. The site has an area of approximately 0.89 acres.

This analysis will address the net change in site trips that could be associated with the proposed annexation and zone change. It will also address the Transportation Planning Rule (TPR) as it relates to the proposed zone change.

Trip Generation

The property located at 14362 S Maplelane Court is currently developed with one single-family home. Under the existing FU-10 zoning, the minimum lot size for new lots is 10 acres. Since the subject property is less than 10 acres in size, no additional dwelling units or subdivision of the property is permitted under the existing zoning. It is notable that under the existing FU-10 zoning, it would be possible to develop a bed and breakfast or produce stand within the single existing lot. However, for this analysis it was assumed that no additional development would occur under the existing zoning.

Under the proposed R-10 zoning, the minimum lot size would be 10,000 square feet. It would therefore be possible to subdivide the property to create one to two additional lots. Assuming that two additional lots are developed with single-family homes, a net increase of 2 trips during the morning and evening peak hours would be expected, with one additional trip entering and one additional trip exiting during each of the peak hours. A net increase of 20 daily trips would be expected, with half entering and half exiting the site. The table below summarizes the increase in trip generation associated with the proposed zone change.

ſ	AM Peak Hour		PM Peak Hour			Weekday			
	In	Out	Total	In	Out	Total	In ·	Out	Total
ſ	1	1	2	1	1	2	10	10	20



Tom Sisul November 9, 2011 Page 2 of 3

Transportation Planning Rule

The primary test of the TPR is to determine if an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation will "significantly affect" an existing or planned transportation facility. The definition of significant affect is addressed in the following sections of this letter.

OAR 660-012-0060

(1) Where an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation would significantly affect an existing or planned transportation facility, the local government shall put in place measures as provided in section (2) of this rule to 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. A plan or land use regulation amendment significantly affects a transportation facility if it would:

(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);

The proposed zone change will not change the functional classification of any existing or planned transportation facilities.

(b) Change standards implementing a functional classification system; or

The proposed zone change will not change the standards underlying the City's functional classification system.

(c) As measured at the end of the planning period identified in the adopted transportation system plan:

(A) Allow land uses or levels of development that would result in types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

(B) Reduce the performance of an existing or planned transportation facility below the minimum acceptable performance standard identified in the TSP or comprehensive plan; or

(C) Worsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the TSP or comprehensive plan.

Oregon City requires traffic analysis for intersections experiencing an increase of at least twenty-four site trips per hour or 250 site trips per day upon site development. No intersections will experience increases of this magnitude following the proposed zone change even under the worst-case development assumptions. Full development of the site will have a de minimis impact on operation of area intersections.



Tom Sisul November 9, 2011 Page 3 of 3

Similarly, the Oregon Department of Transportation considers impacts to be acceptable when the addition of site trips from the development results in an increase in intersection volume-to-capacity (v/c) ratios of 0.03 or less. This indicates that if a development will use less than three percent of an intersection's capacity, the impacts of the development are treated as negligible. In this instance, the addition of site trips under the proposed zoning will result in traffic impacts far below this threshold.

Although the proposed zone change will result in additional site trips being generated, the number of additional site trips is sufficiently low to conclude that there will be no significant effect on operation of area intersections based on the applicable design and review standards of both Oregon City and ODOT. The proposed zone change will not worsen or reduce the performance of any existing or planned transportation facilities.

Conclusions

The proposed annexation and zone change is projected to result in a maximum of 2 additional peak hour trips and 20 additional daily trips on area roadways and intersections. The proposed zone change will not have a significant effect on the surrounding transportation system as defined under the Transportation Planning Rule. Accordingly, no mitigation is recommended in association with the proposed zone change.

It is possible to provide access for the additional lots within the subject property meeting the applicable access spacing, driveway width, sight distance and safety standards established by Oregon City code. A detailed analysis of these factors should be conducted upon submittal of a specific site plan for development on the subject property after approval of the annexation and zone change.

If you have any questions regarding this analysis, please do not hesitate to call.

Sincerely,

Michael Ard, PE Senior Transportation Engineer

3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

Page 153 of 623

1e

TRIP GENERATION CALCULATIONS

Land Use: Single-Family Detached Housing Land Use Code: 210 Variable: Dwelling Units Variable Value: 2

AM PEAK HOUR

Trip Rate: 0.75

	Enter	Exit	Total
Directional Distribution	25%	75%	
Trip Ends		1	

PM PEAK HOUR

Trip Rate: 1.01

	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	1	<u> </u>	2

WEEKDAY

Trip Rate: 9.57

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	10	10	20

Trip Rate: 10.08

SATURDAY

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	10	10	20

Source: TRIP GENERATION, Eighth Edition

REPLINGER & ASSOCIATES LLC TRANSPORTATION ENGINEERING

December 22, 2011

Mr. Pete Walter City of Oregon City PO Box 3040 Oregon City, OR 97045

SUBJECT: REVIEW OF TRANSPORTATION PLANNING RULE ANALYSIS – MAPLELANE ANNEXATION – AN11-03

Dear Mr. Walter:

In response to your request, I have reviewed the Transportation Planning Rule Analysis submitted for the annexation of 0.89 acres in the vicinity of Maplelane Road and Maplelane Court. The analysis, dated November 9, 2011, was prepared under the direction of Michael T. Ard, PE of Lancaster Engineering.

The annexation proposal would allow R-10 zoning to apply to the property in place of the current county zoning.

Overall

I find the analysis provides an adequate basis to evaluate impacts of the proposed annexation.

Trip Generation. The applicant's engineer presents information on trip generation from the potential construction of two additional single family dwellings on the parcel. The trip generation rates were taken from the Institute of Transportation Engineers' *Trip Generation.* The net impact from this level of development is predicted to produce 2 AM peak hour trips; 2 PM peak hour trips; and 20 weekday trips.

Impact of Additional Traffic. The engineer provides a discussion of the proposal relative to OAR 660-12-0060. He concludes that the additional traffic does not "significantly affect" the transportation system as defined by the OAR. He furthermore concludes that the annexation would not change standards for implementing the functional classification system; allow inconsistent development; or worsen the performance of the system. I concur with all these conclusions.

Other Issues. Although not raised by the applicant's traffic engineer, the methodology described in the adopted 2001 Transportation System Plan indicates that the land in the vicinity and this parcel were assumed to be developed as low-density residential housing

Mr. Pete Walter December 22, 2011 Page 2

consistent with the comprehensive plan. Thus, the traffic described by the applicant's engineer that could be generated from this annexation was already accounted for in the TSP.

Conclusion and Recommendations

I conclude that the analysis provides an adequate basis upon which impacts can be assessed. The annexation will not "significantly affect" the transportation system and no mitigation is required. There is also evidence suggesting that the impacts were already considered in the TSP.

At such time as the applicant comes forward with a specific development proposal, other issues, such as access, safety, and compliance with the TSP, will need to be addressed by submitting at Traffic Analysis Letter or Transportation Impact Analysis as appropriate.

If you have any questions or need any further information concerning this review, please contact me at <u>replinger-associates@comcast.net</u>.

Sincerely,

ohn Keplinger

John Replinger, PE Principal

Oregon City\2011\Maplelane\AN11-03.docx



Community Development - Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045 Ph (503) 722-3789 | Fax (503) 722-3880

NOTICE OF ANNEXATION APPLICATION

Notice Mailed to all Owners within 300 feet of the Subject Property on: June 22, 2012

COMMENT	On Monday, July 23, 2012, the Planning Commission will conduct a public
DEADLINE:	hearing at 7:00 pm in the Commission Chambers at City Hall, 625 Center Street,
	Oregon City, Oregon 97045, and; On Wednesday, August 15, 2012, the City
	Commission will conduct a public hearing at 7:00 pm in the Commission Chambers
	at City Hall, 625 Center Street, Oregon City, Oregon 97045 on the following annexation
	application. Any interested party may testify at either or both of the public hearings or
	submit written testimony at the Planning Commission or City Commission hearings
	prior to the close hearing.
FILE NUMBER:	AN 12-04: Annexation
APPLICANT/	Gary Bowles
OWNER:	14362 S Maplelane Ct, Oregon City, OR 97045
REPRESENTATIVE:	Sisul Engineering
	375 Portland Avenue, Gladstone, OR 97027
REQUEST:	Annexation of approximately 0.89 acres into the City of Oregon City. The site is within
	the Oregon City Urban Growth Boundary and has a Comprehensive Plan designation of
	LR – Low Density Residential.
LOCATION:	14362 S Maplelane Ct, Oregon City, OR 97045, located East of Hwy. 213, North of
	Beavercreek Road, at intersection of Maplelane Rd and Maplelane Ct.
STAFF CONTACT:	Pete Walter, AICP, Associate Planner, (503) 496-1568.
NEIGHBORHOOD	Caufield
ASSOCIATION:	
CRITERIA:	Metro Code 3.09, Oregon City Municipal Code Title 14 and Subsection 17.68.025, the
	Land Use Chapter of the Clackamas County Comprehensive Plan, the City/County
	Urban Growth Boundary Management Agreement and Sections 11 and 14 of the
	Oregon City Comprehensive Plan.

The applicant and all documents submitted by or on behalf of the applicant are available for inspection at no cost at the Oregon City Planning Division, 221 Molalla Avenue, Oregon City, Oregon 97045, from 8:00am to 5:00pm Monday thru Friday. The staff report, with all the applicable approval criteria, will also be available for inspection 15 days prior to the hearing. Copies of these materials may be obtained for a reasonable cost in advance.

Please be advised that any issue that is intended to provide a basis for appeal must be raised before the close of the Planning Commission hearing, in person or by letter, with sufficient specificity to afford the Planning Commission and the parties an opportunity to respond to the issue. Failure to raise an issue with sufficient specificity will preclude any appeal on that issue. The Planning Commission shall make a recommendation to the City Commission as to whether the application has or has not complied with the factors set forth in section 14.04.060 of the Oregon City Municipal Code. The City Commission shall only set for an election annexations consistent with a positive balance of the annexation factors.

City of Oregon City | PO Box 3040 | 625 Center Street | Oregon City, OR 97045 Ph (503) 657-0891 www.orcity.org



Caufield Neighborhood Association

Larry Hanlon, President 503-657-6975

June 2, 2012

City of Oregon City Planning Department 221 Molalla Avenue, Suite 200 Oregon City, OR 97045

ATTENTION: Peter Walter, Associate Planner

Dear Pete,

This is to certify that the Caufield Neighborhood Association executive committee met on Tuesday, May 22, 2012, with Thomas J. Sisul of Sisul Engineering regarding the annexation request for 14362 Maplelane Road. We will inform our association at our next meeting scheduled for June 26, 2012.

At the same executive meeting, Robert Price also presented the annexation request for an 11.93 acre parcel at 19314 S Beavercreek Road listed as tax lot 3-2E-09A-00800. Our Land Use Chairman expressed concern regarding the zoning of it and others in the Beavercreek Corridor, wondering if large industrial usage was to be permitted. We will present this annexation request at our general meeting on June 26. Please inform us when hearing dates are set so those having concerns may comment if they wish.

Sincerely,

Jun K Davis

Gary K. Davis, Secretary Caufield Neighborhood Assocation

NOTICE OF PUBLIC HEARING

COMMENT DEADLINE: On Monday, July 23, 2012, the Planning Commission will conduct a public hearing at 7:00 pm in the Commission Chambers at City Hall, 625 Center Street, Oregon City, Oregon 97045, and; On Wednesday, August 15, 2012, the City Commission will conduct a public hearing at 7:00 pm in the Commission Chambers at City Hall, 625 Center Street, Oregon City, Oregon 97045 on the following annexation application. Any interested party may testify at either or both of the public hearings or submit written testimony at the Planning Commission or City Commission hearings prior to the close hearing.

FILE NUMBER: AN 12-04: Annexation

APPLICANT/OWNER: Gary Bowles

REPRESENTATIVE: Sisul Engineering, 375 Portland Avenue, Gladstone, OR 97027

REQUEST: Annexation of approximately 0.89 acres into the City of Oregon City. The site is within the Oregon City Urban Growth Boundary and has a Comprehensive Plan designation of LR – Low Density Residential.

LOCATION: 14362 S Maplelane Ct, Oregon City, OR 97045, located East of Hwy. 213, North of Beavercreek Road, at intersection of Maplelane Rd and Maplelane Ct.

STAFF CONTACT: Pete Walter, AICP, Associate Planner, (503) 496-1568.

NEIGHBORHOOD ASSOCIATION: Caufield

CRITERIA: Metro Code 3.09, Oregon City Municipal Code Title 14 and Subsection 17.68.025, the Land Use Chapter of the Clackamas County Comprehensive Plan, the City/County Urban Growth Boundary Management Agreement and Sections 11 and 14 of the Oregon City Comprehensive Plan.

The applicant and all documents submitted by or on behalf of the applicant are available for inspection at no cost at the Oregon City Planning Division, 221 Molalla Avenue, Oregon City, Oregon 97045, from 8:00am to 5:00pm Monday thru Friday. The staff report, with all the applicable approval criteria, will also be available for inspection 15 days prior to the hearing. Copies of these materials may be obtained for a reasonable cost in advance.

Please be advised that any issue that is intended to provide a basis for appeal must be raised before the close of the Planning Commission hearing, in person or by letter, with sufficient specificity to afford the Planning Commission and the parties an opportunity to respond to the issue. Failure to raise an issue with sufficient specificity will preclude any appeal on that issue. The Planning Commission shall make a recommendation to the City Commission as to whether the application has or has not complied with the factors set forth in section 14.04.060 of the Oregon City Municipal Code. The City Commission shall only set for an election annexations consistent with a positive balance of the annexation factors.

FILE

Pete Walter

From: Sent: To: Subject: Attachments: Pete Walter Wednesday, June 20, 2012 3:26 PM 'LFaxon@CommNewspapers.com' Public Hearing Notice AN 12-04 Public Notice Newspaper.docx

Hi Louise,

Please publish the attached public notice at your earliest convenience.

Thanks,

Pete Walter



Pete Walter, AICP, Associate Planner pwalter@orcity.org Community Development Department Planning Division 221 Molalla Avenue, Ste. 200 Oregon City, Oregon 97045 503-496-1568 Direct 503-722-3789 Front Desk 503-722-3789 Front Desk 503-722-3880 Fax Website: www.orcity.org Hours: Counter/Walk-in: 8-5 Mon-Thurs. Friday: Phone, Email and Appointment Only.

Need Zoning and other Tax Lot Information? - Quickly and easily view, print, and save maps and reports of your property. <u>Property Zoning Report</u>

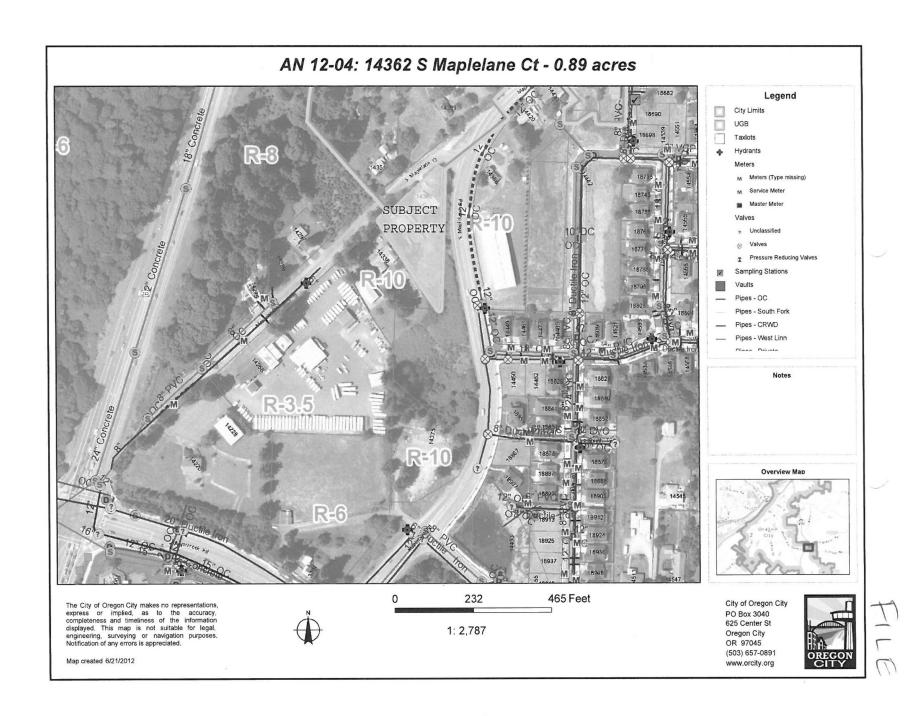
1

Online Mapping is available at OCWebMaps

Please consider the environment before printing

PUBLIC RECORDS LAW DISCLOSURE: This e-mail is subject to the State Retention Schedule and may be made available to the public.

FILE





Community Development – Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045 Ph (503) 722-3789 | Fax (503) 722-3880

File

AFFIDAVIT OF POSTING OF NOTICE FOR LAND USE APPLICATIONS

Applicant: **Gary Bowles**

Location: 14362 Maplelane Ct, Clackamas County Map 3-2E-04C, Tax Lot 01600

File Numbers: AN 12-04: Annexation (0.89 ac)

Your application requires the posting of signs on the subject site that provides a brief description of your proposal and requests comments from the public. The signs shall be mounted on a sturdy backing (such as plywood), and posted within 10 to 15 feet of the street so they are clearly visible. The notices shall not be posted on trees or utility poles. If the weather is wet please cover the signs with clear plastic, or other clear weatherproof material. It is your responsibility to post the signs and failure to do so by the date specified will result in the automatic extension of the public comment period. Please see attached map for sign posting locations.

The signs shall be posted by **June 22, 2012** so that they are clearly visible along the street fronting the property. A map is enclosed distinguishing the location of where the signs should be posted. Please maintain the signs posted until after the City Commission hearings. If you have any questions please contact me at (503) 496-1568.

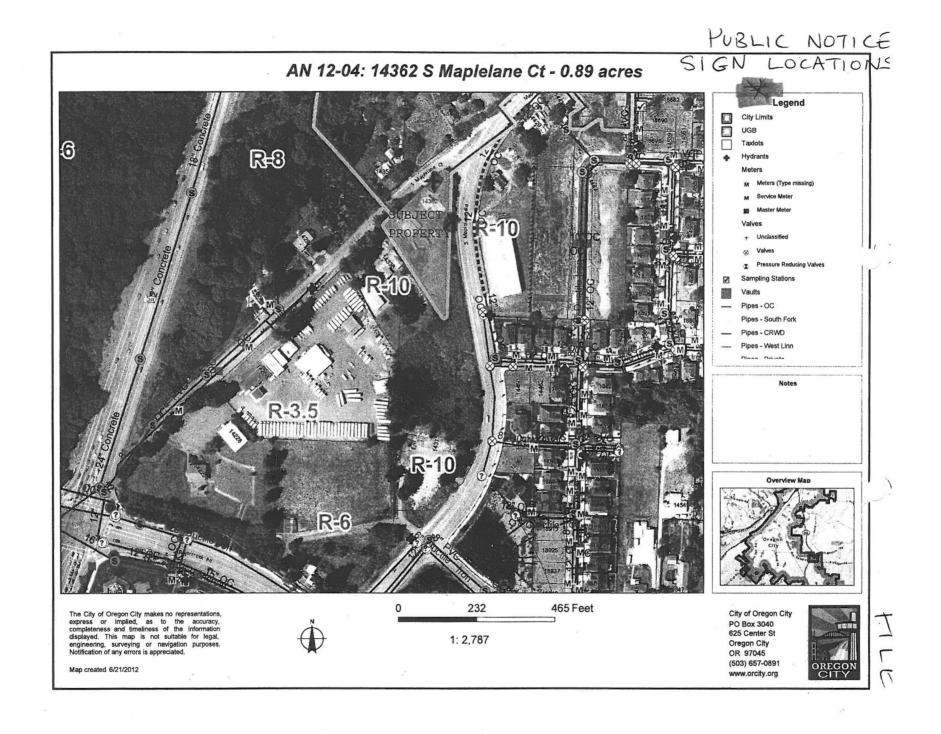
Pete Walter, AICP, Associate Planner City of Oregon City - Planning Division 221 Molalla Avenue, Suite 200 Oregon City, Oregon 97045

PLEASE SIGN AND RETURN THIS NOTICE TO THE PLANNING DIVISION

I hereby certify that on (date) (p-22-12), I posted the required signs on the subject site in accordance with the requirements of the Oregon City Municipal Code. If there is any delay in the city's land use process caused by the applicant's failure to correctly post the subject property for the required period of time and in the correct location, the applicant agrees to extend the one-hundred-twenty-day period in a timely manner.

Adhiana llacaene <u>6/21/12</u> Applicant Date

3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density



Page 163 of 623

CJ CUSTOM HOMES LLC 10121 SE SUNNYSIDE RD STE 115 CLACKAMAS, OR 97015

DARREN WIEDRICH 14420 S MAPLELANE RD OREGON CITY, OR 97045

GARY R BOWLES 14362 S MAPLELANE CT OREGON CITY, OR 97045

HISTORIC PROPERTIES LLC 606 15TH ST OREGON CITY, OR 97045

JORDAN S CAMERON 14297 MAPLELANE RD OREGON CITY, OR 97045

JOSEPH DALLAS & CHRI BAILEY 14461 WALNUT GROVE WAY OREGON CITY, OR 97045

JOSHUA & KERI E RHODEN 14473 WALNUT GROVE WAY OREGON CITY, OR 97045

METRO 600 NE GRAND PORTLAND, OR 97232

MOEHNKE FAMILY LTD PRTNRSHP 16086 SE RIVER RD MILWAUKIE, OR 97267-3621

OREGON CITY SCH DIST #62 PO BOX 2110 OREGON CITY, OR 97045 RICHARD BAGGETT 14449 WALNUT GROVE WAY OREGON CITY, OR 97045

RICHARD D BAGGETT 14388 S MAPLELANE RD OREGON CITY, OR 97045

ROBERT LOFGREN PO BOX 1247 OREGON CITY, OR 97045

STEVEN E ELLISON 16415 SW CINNABAR CT BEAVERTON, OR 97007

THERESA M MADIGAN 14351 S MAPLELANE CT OREGON CITY, OR 97045

THOMAS R RASCH PO BOX 777 CLACKAMAS, OR 97015-0777

) AN 12-04 Mailing Labels 300' Buffer from Tax Lot FILE

Clackamas Co. Board of Commissioners 2051 Kaen Road Oregon City, OR 97045

Tri-City Service District Clackamas WES 150 Beavercreek Rd. Oregon City, OR 97045

Tri-Met Land Development 710 NE Holladay Portland, OR 97232

Clackamas River Water PO Box 2439 Clackamas, OR 97015

Bob Vroman, Assessor Clackamas County 150 Beavercreek Rd Oregon City, OR 97045 Kyle Gorman Clackamas Fire District 11300 SE Fuller Road Milwaukie, OR 97222

Manager Clackamas Vector Control District 1102 Abernethy Road Oregon City, OR 97045

Craig Roberts, Sheriff Clackamas Co. Enhanced Law 2223 S. Kaen Road Oregon City, OR 97045

Development Review Oregon Dept of Transportation 123 NW Flanders Portland, OR 97209

Oregonian Metro South-News 365 Warner-Milne Road, Ste. 110 Oregon City, Oregon 97045 Attn: Steve Mayes AN 12-04 Neccessary Paties

FILE

Paulette Copperstone Metro 600 NE Grand Avenue Portland, OR 97232-2736

Rick McIntire Clackamas Planning & Zoning 150 Beavercreek Rd Oregon City, OR 97045

> Renee Berry CBS, NW Natural Gas 220 NW Second Ave Portland, OR 97209

Office of County Counsel 2051 Kaen Road Oregon City, OR 97045



6605 SE Lake Road, Portland, OR 97222 • PO Box 22109, Portland, OR 97269-2109 Phone: 503-684-0360 Fax: 503-620-3433 E-mail: legals@commnewspapers.com

AFFIDAVIT OF PUBLICATION

State of Oregon, County of Clackamas, SS I, Charlotte Allsop, being the first duly sworn, depose and say that I am Accounting Manager of Clackamas Review/Oregon City News and Estacada News, a newspaper of general circulation, published at Clackamas/Oregon City and Estacada, in the aforesaid county and state, as defined by ORS 193.010 and 193.020, that

City of Oregon City Notice of Public Hearing/AN12-04 CLK12608

a copy of which is hereto annexed, was published in the entire issue of said newspaper for

week in the following issue: June 27, 2012

narlotte

Charlotte Allsop (Accounting Manager)

Subscribed and sworn to before me this June 27, 2012.

NOTARY PUBLIC FOR OREGON

My commission expires Feb 20 20/0

Acct #10048638 Attn: Pete Walter City of Oregon City PO Box 3040 Oregon City, OR 97045-0304

> Size: <u>2 x 5.75</u>" Amount Due: \$136.27* *Please remit to address above.

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LOCATION: 14362 S Maplelane Ct, Oregon City, OR 97045, located East of Hwy. 213, North of Beavercreek Road, at intersection of Maplelane Rd and Maplelane Ct. STAFF CONTACT: Pete Walter, AICP, Associate Planner, (503) 496-

1568

NEIGHBORHOOD ASSOCIATION: Caufield

CRITERIA: Metro Code 3.09, Oregon City Municipal Code Title 14' and Subsection 17.68.025, the Land Use Chapter of the Clackamas County Comprehensive Plan, the City/County Urban Growth Boundary Management Agreement and Sections 11 and 14 of the Oregon City Comprehensive Plan.

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Publish 06/27/2012.

CI_K12608



Pete Walter

From:	Pete Walter
Sent:	Friday, June 29, 2012 8:15 AM
To:	'Caufield'; 'Caufield'; mike1376@aol.com
Subject:	Transmittal for Comment from Oregon City Planning Division: AN 12-04 - 14682 S Maplelane Ct
Attachments:	AN 12-04 Land Use Transmittal.pdf

Subject: Transmittal for Comment from Oregon City Planning Division: AN 12-04 - 14682 S Maplelane Ct

Good Morning,

This is an electronic land use transmittal from Oregon City Planning Division. The attached application is referred to you for your information, study and official comments.

For inclusion in the staff report, please provide written comments to the reviewing planner 2 weeks prior to the planning commission hearing.

If you need additional hard copies mailed to you, please contact the Planning Division.

The complete Application Materials can be downloaded from the Planning Division Website at the following web address:

http://www.orcity.org/planning/landusecase/12-04-089-acre-annexation-14362-maplelane-ct

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Sisul Engineering
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Use Chapter of the Clackamas County Comprehensive Plan, the City/County Urban Growth
Boundary Management Agreement and Sections 11 and 14 of the Oregon City
Comprehensive Plan.

1

Pete Walter

From:	Pete Walter
Sent:	Friday, June 22, 2012 9:45 AM
То:	Bob Cullison; Nancy Kraushaar; John M. Lewis; Fran Shafer; 'John Replinger'; Chris Dunlop; Mike Conrad
Cc:	'Assessor'; Bob George; 'Boll, Heather'; Mike Boumann; 'Clack Sheriff's Office'; 'County Counsel'; 'County Planning'; 'County Transportation'; 'CRW'; 'Metro'; Mike Conrad; 'OC School District': 'ODOT': 'Oregonian'; 'Vector Control'; 'Vector Control'; 'WES'; 'WES Admin'
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NEIGHBORHOOD	Caufield
ASSOCIATION:	
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1



Community Development - Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045 Ph (503) 722-3789 | Fax (503) 722-3880

ANNEXATION APPLICATION TRANSMITTAL June 22, 2012

IN-HOUSE DISTRIBUTION OF APPLICATION

- BUILDING OFFICIAL
- ENGINEERING MANAGER ✓
- □ CITY ENGINEER / PUBLIC WORKS DIRECTOR✓
- □ TECHNICAL SERVICES (GIS) ✓
- □ PARKS MANAGER✓
- □ ADDRESSING ✓
- D POLICE
- □ TRAFFIC ENGINEER✓
- □ CITY ATTORNEY ✓

NOTICE OF THE APPLICATION MAILED TO

- □ All Properties within 300 feet ✓
- □ Hamlet of Beavercreek√

□ Holcomb Outlook CPO√

Central Point / Leland Road / New Era CPO

EMAIL DISTRIBUTION OF APPLICATION

- □ OREGON CITY NEIGHBORHOOD ASSOCIATIONS✓ □ CIC LAND USE CHAIR _____

 - N.A. LAND USE CHAIR : CAUFIELD
 - □ CLACKAMAS COUNTY TRANSPORTATION AND PLANNING ✓
- □ CLACKAMAS FIRE DISTRICT #1√
- □ OREGON CITY SCHOOL DISTRICT✓
- □ TRI-MET✓
- □ METRO√
- □ CLACKAMAS RIVER WATER
- □ ODOT DIVISION REVIEW
- □ OTHER: VECTOR CONTROL, SHERIFF, ASSESSORS OFFICE, COUNTY COUNSEL, WES, TRI-CITY, OREGONIAN ✓

COMMENTS DUE BY: Comments may be submitted at any time until the close of City Commission public hearing. However, for inclusion in the staff report, please provide written comments to the reviewing planner 2 weeks prior to the planning commission hearing.

HEARING DATE(S): PLANNING COMMISSION: JULY 23, 2012 / CITY COMMISSION: AUGUST 15, 2012 HEARING BODY(IES): PLANNING COMMISSION / CITY COMMISSION

FILE # & TYPE: AN 12-04, TYPE IV APPLICATION WEBSITE: http://www.orcity.org/planning/landusecase/12-04-089-acre-annexation-14362-maplelane-ct PLANNER: PETE WALTER, AICP, ASSOCIATE PLANNER, (503) 496-1568 APPLICANT: GARY BOWLES REPRESENTATIVE: SISUL ENGINEERING OWNER: GARY BOWLES REQUEST: ANNEXATION OF 0.89 ACRES WITHIN THE URBAN GROWTH BOUNDARY COMP. PLAN DESIGNATION: LR – Low Density Residential ZONING: County - FU-10 Future Urban LOCATION: 14362 Maplelane Rd, Oregon City, OR 97045 Tax Lot(s): Clackamas County Map 3-2E-04C -01600

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The proposal does not conflict with our interests.

____ The proposal conflicts with our interests for the reasons attached.

The proposal would not conflict our interests if the changed noted below are included.

Samp comments From previous Attempt

PLEASE RETURN YOUR COPY OF THE APPLICATION AND MATERIAL WITH THIS FORM.

Signed



Community Development - Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045 Ph (503) 722-3789 | Fax (503) 722-3880

ANNEXATION APPLICATION TRANSMITTAL

June 22, 2012

IN-HOUSE DISTRIBUTION OF APPLICATION

- BUILDING OFFICIAL
- ENGINEERING MANAGER
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- □ TECHNICAL SERVICES (GIS) ✓
- PARKS MANAGER
- □ ADDRESSING ✓
- □ POLICE ✓
- □ TRAFFIC ENGINEER✓
- □ CITY ATTORNEY ✓

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- □ TRI-MET ✓
- □ METRO√
- □ CLACKAMAS RIVER WATER✓
- ODOT DIVISION REVIEW

OREGONIAN 🗸

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□ Holcomb Outlook CPO✓

□ Central Point / Leland Road / New Era CPO✓

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6605 SE Lake Road, Portland, OR 97222 • PO Box 22109, Portland, OR 97269-2109 Phone: 503-684-0360 Fax: 503-620-3433 E-mail: legals@commnewspapers.com

AFFIDAVIT OF PUBLICATION

State of Oregon, County of Clackamas, SS I, Charlotte Allsop, being the first duly sworn, depose and say that I am Accounting Manager of Clackamas Review/Oregon City News and Estacada News, a newspaper of general circulation, published at Clackamas/Oregon City and Estacada, in the aforesaid county and state, as defined by ORS 193.010 and 193.020, that

City of Oregon City Notice of Public Hearing/AN12-04 CLK12608

a copy of which is hereto annexed, was published in the entire issue of said newspaper for

week in the following issue: June 27, 2012

narlotte

Charlotte Allsop (Accounting Manager)

Subscribed and sworn to before me this June 27, 2012.

NOTARY PUBLIC FOR OREGON

My commission expires Feb 20 20/0

Acct #10048638 Attn: Pete Walter City of Oregon City PO Box 3040 Oregon City, OR 97045-0304

> Size: <u>2 x 5.75</u>" Amount Due: \$136.27* *Please remit to address above.

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Publish 06/27/2012.

CI_K12608



R'fan Te Granner 71. 75-1520

CLACKAMAS COUNTY - CITY OF OREGON CITY URBAN GROWTH MANAGEMENT AGREEMENT

This Agreement, made and entered into this \overrightarrow{AS} day of $\overrightarrow{(CITY)}$, a municipal corporation of the State of Oregon, and CLACKAMAS COUNTY (COUNTY), a political subdivision of the State of Oregon.

WHEREAS, ORS 190.003 to 190.030 allows units of local government to enter into agreements for performance of any or all functions and activities which such units have authority to perform; and

WHEREAS, Statewide Planning Goal 2, Land Use Planning, requires that City, County, State and Federal agency and special district plans and actions shall be consistent with the comprehensive plans of the cities and counties and regional plans adopted under ORS Chapter 197; and

WHEREAS, the Oregon Land Conservation and Development Commission (LCDC) requires each jurisdiction requesting acknowledgment of compliance to submit an agreement setting forth the means by which comprehensive planning coordination within the Regional Urban Growth Boundary will be implemented; and

WHEREAS, OAR 660-11-015 requires the responsibility for the preparation, adoption and amendment of the public facility plan to be specified within an urban growth management agreement; and

WHEREAS, CITY and COUNTY have a mutual interest in coordinated comprehensive plans, compatible land uses and coordinated planning of urban services and facilities; and

WHEREAS, CITY and COUNTY, to ensure coordination and consistent comprehensive plans, consider it mutually advantageous to establish:

- 1. A site-specific Urban Growth Management Boundary (UGMB) within the Regional Urban Growth Boundary (UGB) within which both CITY and COUNTY maintain an interest in comprehensive planning and development; and
- 2. A process for coordinating land use planning and development within the UGMB: and
- 3. Policies regarding comprehensive planning and development proposals within the UGMB; and
- 4. A process for amending the Urban Growth Management Agreement; and

PAGE 1: URBAN GROWTH MANAGEMENT AGREEMENT

3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

1

WHEREAS, it is anticipated that presently unincorporated areas within the UGMB will, in the future, be annexed to CITY, and CITY and COUNTY both desire that such annexations not result in any nonconforming uses or structures.

NOW, THEREFORE, CITY AND COUNTY AGREE AS FOLLOWS:

1. <u>Boundary</u>

A. The Urban Growth Management Boundary (UGMB) shall include unincorporated land within the Urban Growth Boundary (UGB) and adjacent to the CITY as shown on map Attachment "A" to this Agreement. Any amendments to the Metro UGB in the area south of the Clackamas River and east of the Willamette River will automatically be reflected in the UGMB. Any such changes shall be coordinated with existing service providers.

2. <u>Comprehensive Planning, Plan Amendments and Public Facilities</u> <u>Planning</u>

A. The development of a comprehensive plan and comprehensive plan changes for the area within the UGMB shall be a coordinated CITY-COUNTY planning effort. CITY shall be responsible for preparing all legislative comprehensive plan amendments in the UGMB. COUNTY shall adopt CITY land use plan designations for all unincorporated lands within the UGMB. All quasi-judicial comprehensive plan amendments for lands zoned FU-10 within the unincorporated UGMB shall be approved by CITY prior to COUNTY adoption.

B. CITY shall be responsible for the preparation, adoption, and amendment of the public facility plan within the UGMB required by OAR Chapter 660, Division 11, Public Facilities Planning. Preparation and amendment of such public facility plan shall provide for coordination with and participation by COUNTY, County service and other special districts within the UGMB.

3. <u>Development Proposals in Unincorporated Area</u>

A. COUNTY's zoning shall apply to all unincorporated lands within the UGMB. COUNTY shall zone all unincorporated lands within the UGMB as Future Urbanizable (FU-10), except as otherwise provided in the Country Village Addendum attached to and made part of this Agreement. Subject to the terms of this Agreement, COUNTY shall retain responsibility and authority for all implementing regulations and land use actions on all unincorporated lands within the UGMB.

PAGE 2: URBAN GROWTH MANAGEMENT AGREEMENT

B. The provision of public facilities and services shall be consistent with the adopted public facility plan for the unincorporated UGMB. For areas zoned FU-10 within the UGMB, COUNTY shall issue no permits or otherwise authorize extension or connection of public facilities and services in violation of the FU-10 zone. Any proposed amendment to the FU-10 zone within the UGMB shall be approved by CITY prior to COUNTY adoption.

C. COUNTY shall not form any new County service districts or support the annexation of land within the unincorporated UGMB to such districts or to other service districts without CITY approval.

4. <u>City and County Notice and Coordination</u>

A. The COUNTY shall provide notification to the CITY, and an opportunity to participate, review and comment, within 35 days prior to the first scheduled public hearing on all land use actions, quasi-judicial actions, proposed legislative changes to the COUNTY comprehensive plan or its implementing ordinances affecting land within the UGMB.

B. The COUNTY shall provide notification to the CITY, and an opportunity to participate, review and comment, at least 15 days prior to staff decision on applications for administrative actions as provided in the COUNTY's Zoning and Development Ordinance for applications within the UGMB.

C. The COUNTY shall notify and invite CITY staff to participate and comment in pre-application meetings on conditional use proposals or Design Review Committee meetings on development proposals within the unincorporated areas of the UGMB. These meetings shall be scheduled by the COUNTY after consultation with CITY staff. If CITY chooses to attend a pre-application meeting, the meeting shall occur at a mutually agreeable time within 10 working days following notification to CITY. In the event that a mutually agreement time cannot be achieved, or in the event CITY informs COUNTY that it does not wish to attend a pre-application meeting, such meeting shall occur at COUNTY's convenience.

D. The CITY shall provide notification to the COUNTY, and an opportunity to participate, review and comment, at least 20 days prior to the first public hearing on all proposed annexations, capital improvement plans or extraterritorial service extensions into unincorporated areas.

E. The CITY shall provide notification to the COUNTY, and an opportunity to participate, review and comment, at least

PAGE 3: URBAN GROWTH MANAGEMENT AGREEMENT

20 days prior to the first public hearing on all land use actions, proposed legislative changes to the CITY comprehensive plan or quasi-judicial actions adjacent to or in close proximity to unincorporated areas.

F. Any amendments proposed by the COUNTY or CITY to the UGMB as shown on Attachment "A" shall be reviewed by CITY and COUNTY prior to submission to METRO. If and when CITY and COUNTY find it necessary to undertake a change of the UGB, the parties shall follow the procedures and requirements set forth in state statutes and Oregon administrative rules.

G. The COUNTY shall enter all written comments of the CITY into the public record and shall consider the same in the exercise of its planning and plan implementation responsibilities. The CITY shall enter all written comments of the COUNTY in to the public record and shall consider the same in its exercise of its planning and plan implementation responsibilities.

5. <u>City Annexations</u>

A. CITY may undertake annexations in the manner provided for by law within the UGMB. CITY annexation proposals shall include adjacent road right-of-way to properties proposed for annexation. COUNTY shall not oppose such annexations.

Upon annexation, CITY shall assume jurisdiction of COUNTY в. roads and local access roads that are within the area annexed. As a condition of jurisdiction transfer for roads not built to CITY street standards on the date of the final decision on the annexation, COUNTY agrees to pay to CITY a sum of money equal to the cost of a two-inch asphaltic concrete overlay over the width of the then-existing pavement; however, if the width of pavement is less than 20 feet, the sum shall be caluculated for an overlay 20 feet wide. The cost of asphaltic concrete overlay to be used in the calculation shall be the average of the most current asphaltic concrete overlay projects performed by each of CITY and COUNTY. Arterial roads will be considered for transfer on a case-by-case basis. Terms of transfer for arterial roads will be negotiated and agreed to by both jurisdictions.

C. Public sewer and water shall be provided to lands within the UGMB in the manner provided in the public facility plan. In the event the appropriate authority determines a health hazard exists within the unincorporated UGMB, needed services shall be provided to health hazard areas by service districts if determined by the Health Division that annexation to and service by CITY is not feasible.

PAGE 4: URBAN GROWTH MANAGEMENT AGREEMENT

6. Amendments to the Urban Growth Management Agreement

A. The terms of this Agreement may be amended or supplemented by mutual agreement of the parties. Any amendments or supplements shall be in writing, shall refer specifically to this Agreement, and shall be executed by the parties. The parties shall review this Agreement at each periodic review and make any necessary amendments.

7. Concurrent Adoption

A. The adoption of this Agreement shall occur concurrently with the adoption of the public facility plan referred to in Paragraph 2(B) of this Agreement and the amendments to the FU-10 zone agreed to by the parties.

IN WITNESS WHEREOF, the parties have executed this Urban Growth Management Agreement, including the Country Village Addendum attached hereto, on the date set opposite their signatures.

CITY OF OREGON CITY 90 Date Bv 90 Date Attest CLACKAMAS COUNTY BOARD OF COMMISSIONERS 5-90 **B**ív Date Date Bv Commissioner 90 mm l Date Bν Commissioner - 3 · · · · · · APPROVED

Transportation a. L. Development PAGE 5: URBAN GROWTH MANAGEMENT AGREEMENT

CLACKAMAS COUNTY - CITY OF OREGON CITY URBAN GROWTH MANAGEMENT AGREEMENT COUNTRY VILLAGE ADDENDUM

This Addendum, known as the Country Village Addendum, shall be and is hereby made a part of the Clackamas County - City of Oregon City Urban Growth Management Agreement. All provisions of that Agreement that are not inconsistent with the terms of this Addendum shall apply with equal force to the property which is the subject of this Addendum.

WHEREAS, CITY and COUNTY have previously entered into urban growth management agreements and amendments to coordinate land use planning for the unincorporated area adjacent to the CITY and inside the Metropolitan Service District's urban growth boundary; and

WHEREAS, in 1987, COUNTY approved a 600-unit mobile home development on the Country Village property, portions of which have been developed; and

WHEREAS, in 1988, CITY initiated annexation of Country Village, which was approved by the Portland Metropolitan Area Local Government Boundary Commission but overturned following remonstration by the resident electors; and

WHEREAS, in response to the vote against annexation to Oregon City, CITY, in keeping with its responsibilities under CITY's Public Facilities Plan, desires to clarify the provision of public facilities and services to the Country Village property; and

WHEREAS, CITY and COUNTY wish to resolve this issue in a cooperative manner.

NOW, THEREFORE, CITY AND COUNTY AGREE AS FOLLOWS:

1. <u>Comprehensive Planning, Zoning, and Plan and Zoning</u> <u>Amendments</u>.

A. The existing COUNTY zoning designations applied to the Country Village property shall continue. Any legislative or quasi-judicial zone change amendments for the Country Village property shall be approved by CITY prior to COUNTY adoption.

2. Development Proposals for the Country Village Property.

A. Subject to the terms of the COUNTY-CITY Urban Growth Management Agreement and this Addendum, COUNTY shall retain

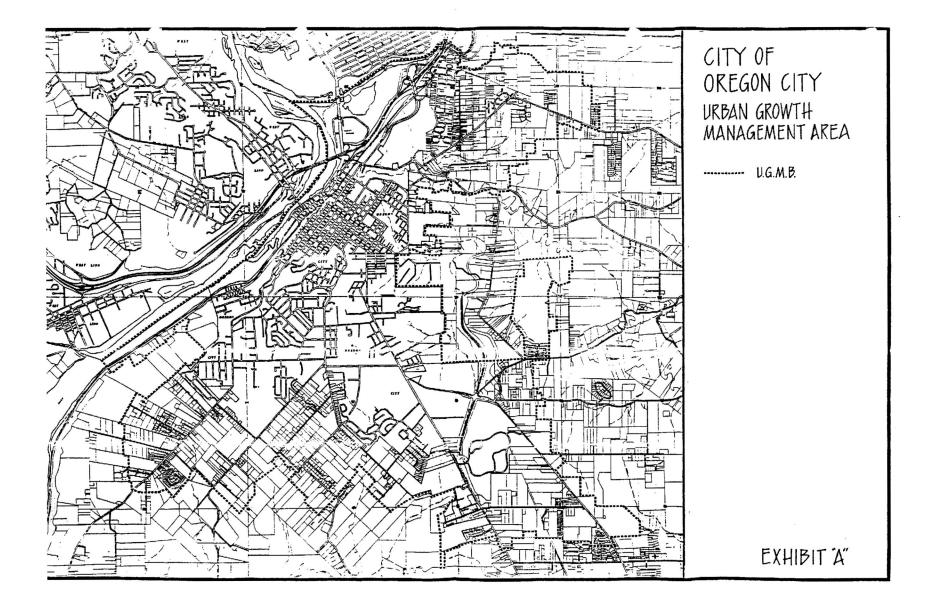
PAGE 1: COUNTRY VILLAGE ADDENDUM TO URBAN GROWTH MANAGEMENT AGREEMENT responsibility and authority for development permitted within the Country Village property prior to its annexation to CITY.

B. Any major modification (as defined by the Clackamas County Zoning and Development Ordinance) of the development approval granted by COUNTY for provision of up to 600 mobile home units on the Country Village property, shall be approved by CITY prior to COUNTY adoption.

3. Annexation and Extraterritorial Extension of Services.

A. COUNTY and CITY agree that CITY shall be the ultimate provider of public facilities and services to the Country Village property. COUNTY shall not oppose annexation or the extraterritorial extension of services by CITY to the Country Village property.

PAGE 2: COUNTRY VILLAGE ADDENDUM TO URBAN GROWTH MANAGEMENT AGREEMENT



I HEREBY CERTIFY THAT THE FOREGOING IS A COMPLETE AND EXACT COPY OF THE ORIGINAL THEREOF.

BEFORE THE COUNCIL OF THE <u>Reserver</u>, Archivist METROPOLITAN SERVICE DISTRICT Clerk of the Metro Council

FOR THE PURPOSE OF ADOPTING AN URBAN GROWTH BOUNDARY FOR THE REGION ORDINANCE NO. 79-77

Introduced by the Planning & Development Committee

Section 1: The Council finds that:

(a) The Metropolitan Service District is required by
 Oregon Laws 1979, chapter 402 to prepare and adopt an urban growth
 boundary for the District consistent with applicable statewide
 planning goals;

(b) The LCDC, upon acknowledgment review pursuant to ORS Chapter 197, has found that additional findings to support the urban growth boundary adopted in December, 1978, by the Columbia Region Association of Governments are required to merit acknowledgment;

(c) Sufficient evidence exists to support the boundary adopted by CRAG; and

(d) It has been determined by LCDC that it is necessary for the District to establish policies for conversion of urbanizable land to urban use beyond the requirements of Statewide Goal No. 14. Section 2:

(a) The Metropolitan Service District Urban Growth Boundary (UGB), as indicated and described on the map attached hereto as Attachment A and by this reference incorporated herein, is adopted.

(b) Attachment A is a reduced copy of the original map of the UGB, dated $\frac{11/8/79}{}$, which original is on file at District offices. Where conflicts may exist between the original and a copy

3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

Page 180 of 623

of the UGB, the original shall control. Section 3:

The document entitled "Urban Growth Boundary Findings," dated November 1979, a copy of which is attached hereto and by this reference incorporated herein, is hereby adopted as the Findings in support of the UGB adopted by Section 2 of this Ordinance. Section 4:

The record of the adoption of this Ordinance and its attachments is declared to include:

(a) All evidence, testimony and other information submitted to or generated by CRAG in connection with its adoption and amendment of the CRAG Regional UGB in December, 1978, (CRAG Order No. 78-35) and supporting Findings in November, 1978, (CRAG Order No. 78-22).

(b) All evidence, testimony and other information submitted to the LCDC by the District during its UGB acknowledgment proceedings of June, 1979.

(c) All evidence, testimony and other information submitted to or generated by the District relating to this proceeding. Section 5:

Pursuant to the 1977 Oregon Laws, chapter 665, Section 25, this ordinance supersedes CRAG Order No. 78-22 (November 16, 1978), CRAG Order No. 78-35 (December 21, 1978), and the documents adopted therein, which orders and documents are no longer of any force or effect. Previous orders of CRAG which were superseded by Order No. 78-22 and Order No. 78-35 are not revived except to the extent that the records and findings supporting such orders have been readopted by Section 3 and Section 4 of this ordinance.

ADOPTED by the Council of the Metropolitan Service

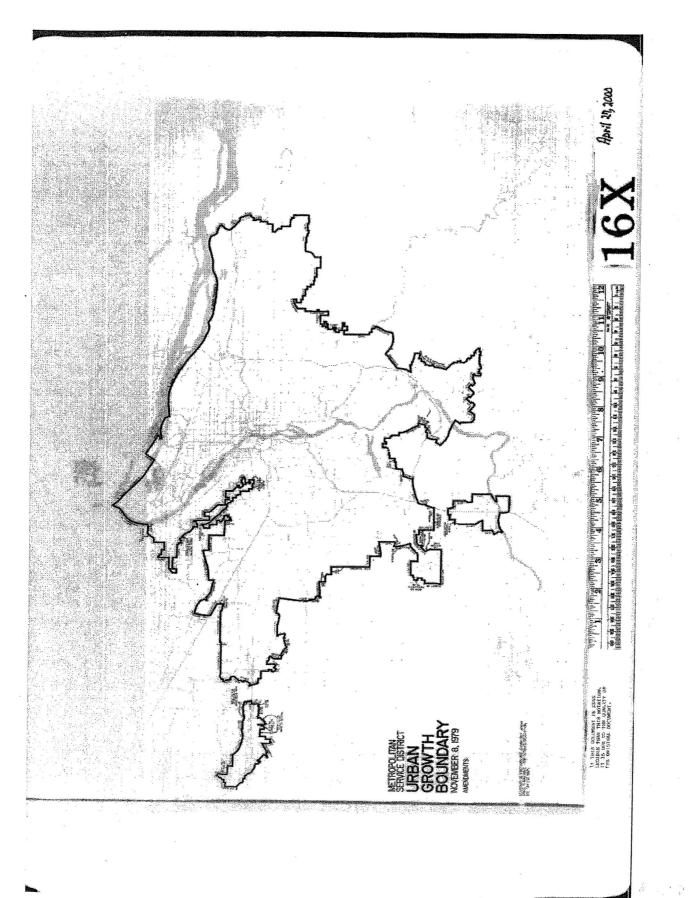
District this <u>8th</u>day of <u>November</u>

, 1979. Presiding Officer

Attest: Council the AJ/gl 5590A

0065A

3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density



3b. AN 12-04: Annexation of 0.89 acres within the Urban Growth Boundary (Low Density

Exhibit 8.

AN 12-04

PROPOSED FINDINGS, REASONS FOR DECISION, AND RECOMMENDATIONS

Based on the Findings in this Report, the Commission determines:

- The Metro Code calls for consistency of the annexation with the Regional Framework Plan or any functional plan. The Commission concludes the annexation is not inconsistent with this criterion because there were no directly applicable criteria for boundary changes found in the Regional Framework Plan, the Urban Growth Management Function Plan, or the Regional Transportation Plan.
- Metro Code 3.09.050(d)(1) requires the Commission's findings to address consistency with applicable provisions of urban service agreements or annexation plans adopted pursuant to ORS 195. The Commission finds that there are no inconsistencies between these plans/agreements and this annexation.
- 3. The Metro Code, at 3.09.050(d)(3), requires the City's decision to be consistent with any "directly applicable standards or criteria for boundary changes contained in comprehensive land use plans and public facilities plans." The Clackamas County Comprehensive Plan also says annexation which converts Future Urban lands to Immediate Urban lands should ensure the "orderly, economic provision of public facilities and services." The property owner has demonstrated that the City can provide all necessary urban services. Nothing in the County Plan speaks directly to criteria for annexation. Therefore the Commission finds this proposal is consistent with the applicable plan as required Metro Code 3.09.050 (d)(3).
- 4. The Commission concludes that the annexation is consistent with the Oregon City Comprehensive Plan that calls for a full range of urban services to be available to accommodate new development as noted in the Findings above. The City operates and provides a full range of urban services.
- The Commission notes that the Metro Code also calls for consistency of the annexation with urban planning area agreements. As stated in the Findings, the Oregon City-Clackamas County Urban Growth Management Agreement (UGMA) specifically provides for annexations by the City.
- 6. Metro Code 3.09.050(d)(5) states that another criterion to be addressed is "Whether the proposed change will promote or not interfere with the timely, orderly, and economic provision of public facilities and services." Based on the evidence in the Findings, the Commission concludes that the annexation will not interfere with the timely, orderly, and economic provision of services.
- 7. The Oregon City Code contains provisions on annexation processing. Section 6 of the ordinance requires that the City Commission consider seven factors if they are relevant. These factors are covered in the

Staff Report Findings and on balance the Commission believes they are adequately addressed to justify approval of this annexation.

- 8. The City Commission concurs with Tri-City Service District's annexation of the subject property in the enacting City ordinance upon voter approval of the city annexation. Prior to the City approving a final zoning designation for the property, the applicant shall provide documentation that the property has been annexed into the Tri-City Service District.
- The Commission determines that the property should be withdrawn from the Clackamas County Service District for Enhanced Law Enforcement as allowed by statute since the City will provide police services upon annexation.
- 10. The City Commission recognizes that the applicant has adequately addressed compliance with the Oregon Statewide Transportation Planning Rule OAR 660-012-0060.
- 11. The City Commission recognizes that the Urban Growth Management Agreement with Clackamas County requires that the annexation proposal shall include the adjacent road right-of-way of the property proposed for annexation and that the applicant shall provide a corrected map and legal description for the adjacent road-right-of way before the resolution forwarding the annexation to the voters is approved.
- 12. The City Commission concurs with the Clackamas River Water District (CRW) recommendation that the property be served by the City and withdrawn from CRW's service districts if any future water lines are constructed to serve the property by Oregon City on Maplelane Court or Maplelane Road.
- 13. The City Commission recognizes that the Applicant shall provide all necessary mapping and legal property descriptions for approval by the Oregon Department of Revenue to ensure completion of the annexation.

AN 12-04 Exhibit 8.

Clackamas River Water

P.O. Box 2439 Clackamas, Oregon 97015-2439 (503) 722-9220 Fax (503) 656-7086 16770 SE 82nd Drive, Clackamas customerservice@crwater.com



SENT VIA MAIL

July 9, 2012

Pete Walter, Associate Planner City of Oregon City 221 Molalla Ave., Suite 200 Oregon City, OR 97045

RE: Notice of Annexation Application:

File No: AN 12-04
 14362 S Maplelane Ct - Map 32E04C 01600

Dear Pete Walter:

This letter contains Clackamas River Water's (CRW) initial comments to the application for the above referenced annexation proposal which does not conflict with CRW's interest. CRW is a domestic water supply district organized under ORS Chapter 264 and is therefore a necessary party to this proceeding.

The proposed single tax lot annexation (AN 12-04, Reapplication of AN 11-03) is located east of HWY 213, north of Beavercreek Rd, at the intersection of Maplelane Rd and Maplelane Ct. The property is identified on the Clackamas County Map as T3S R2E Section 04C, tax lot 01600.

The following is CRW's general concerns and comments

- CRW would request the District be included in future Oregon City (City) annexations and withdrawal discussions where the District's current service boundaries are involved.
- The tax lot in question is currently a CRW water customer. The existing waterline in Maplelane Ct is a CRW 12-inch O.D. steel waterline and currently serves the property. No available Oregon City waterline fronts the property.
- It is recommended that the property be served by the City and withdrawn from CRW's service District if any future waterline extensions are constructed by Oregon City on Maplelane Rd or Maplelane Ct.

The District looks forward to our continued coordinated efforts to supply water to customers within our respective service areas. If the City has any questions or need additional information concerning our comments, please contact me (503-722-9240) our or District Engineer, Bob George (503-722-9228).

Very truly yours,

Lee E. Moore, Sr. General Manager E⁽⁹⁾ Oregon City/Annexation/AN 12-04 - 1463

F:9_Oregon City\Annexation\AN 12-04 - 14632 S Maplelane Ct\Lee's Letter to Oregon City Annexation Letter - 14362 S Maplelane Ct.doc

Providing high quality, safe drinking water to our customers.



COMMISSION REPORT: CITY OF OREGON CITY

TO:	Oregon City Planning Commission
FROM:	Pete Walter, Planner
PRESENTER:	Pete Walter, Planner
SUBJECT:	TP 12-01: Subdivision / VR 12-02: Variance
Agenda Type: Hea	aring
Approved by: Tony	v Konkol, Community Development Director

RECOMMENDED ACTION (Motion):

Approval with Conditions (Exhibit 1).

BACKGROUND:

The applicant is seeking Planning Commission approval of a 30-lot subdivision and a Variance from the Alley requirements of OCMC 12.05.255 to allow direct garage access to local streets in the R-3.5 Dwelling district.

Please see Staff Report for findings and recommendation.

BUDGET IMPACT:

FY(s): Funding Source:

ATTACHMENTS:

- 1. Recommended Conditions of Approval
- 2. Vicinity and Surrounding Zoning Map
- 3. Application Packet
- 4. Grading Permit FP 07-006 (Crabtree II Grading and Fill Permit with Plans)
- 5. Grading Permit FP 07-004 (Crabtree I Grading and Fill Permit with Plans)
- 6. Comments on Traffic Impact Study, Replinger and Associates
- 7. Public Notices
- 8. Public Comments
 - a. Letters of Support submitted by abutting property owners June 12-16th, 2012 (9)
 - b. Comments submitted to Planning Commission by Christine Kosinski June 11, 2012.
 - c. Comments submitted to Planning Commission by Christine Kosinski June 25, 2012
- 9. Crabtree Terrace No. 2 Subdivision Application (City File No. TP 12-01 & VR 12-02) Additional Variance Findings, prepared by AKS Engineering and Forestry, dated June 11, 2012
- 10. Technical Memo from Todd Mobley, P.E., PTOE to Monty Hurley, AKS Engineering, regarding Alley Variance Discussion, dated June 12, 2012.
- 11. Crabtree Terrace Critical Project Milestones, prepared by AKS Engineering and Forestry, dated June 29, 2012
- 12. Letter from Mike Robinson to Planning Commission Chair Kidwell, including responses to the testimony of Christine Kosinski, dated June 29, 2012.
- 13. Oregon City Municipal Code Section <u>12.04.255 Street design—Alleys.</u>
- 14. LL 12-02 Staff Report and Notice of Decision with Approved Lot Line Adjustment.
- 15. Annexation Agreements for subject property (AN 06-04) * to be provided at the Public Hearing on July 23, 2012.

City of Oregon City 625 Center Street Oregon City, OR 97045 Page 1 of 1



221 Molalla Ave. Suite 200 | Oregon City OR 97045 Ph (503) 722-3789 | Fax (503) 722-3880

TYPE III – PLANNING COMMISSION STAFF REPORT AND RECOMMENDED CONDITIONS OF APPROVAL Public Hearing: July 23rd, 2012 (Continued from June 25th, 2012)

FILE NUMBER:	TP 12-01: Subdivision / VR 12-02: Variance
APPLICANT:	AKS Engineering and Forestry, LLC 13910 SW Galbreath Dr, Ste. 100, Sherwood, OR 97140
OWNER:	John Jones Construction, Inc. 16999 S. Bradley Rd, Oregon City, OR 97045
REQUEST:	The applicant is seeking Planning Commission approval of a 30-lot subdivision and a Variance from the Alley requirements of OCMC 12.05.255 to allow direct garage access to local streets in the R-3.5 Dwelling district.
LOCATION:	14616 Maplelane Rd, Oregon City, OR 97045 Clackamas County Map 3-2E-4D, Tax Lot 700
STAFF:	Pete Walter, AICP, Associate Planner Bob Cullison, EIT, Development Services Manager
RECOMMENDATION:	Approval with Conditions (Exhibit 1)

PROCESS: Pursuant to OCMC 17.50.030.C: Type III decisions involve the greatest amount of discretion and evaluation of subjective approval standards, yet are not required to be heard by the city commission, except upon appeal. In the event that any decision is not classified, it shall be treated as a Type III decision. The process for these land use decisions is controlled by ORS 197.763. Notice of the application and the planning commission or the historic review board hearing is published and mailed to the applicant, recognized neighborhood association(s) and property owners within three hundred feet. Notice must be issued at least twenty days pre-hearing, and the staff report must be available at least seven days pre-hearing. At the evidentiary hearing held before the planning commission or the historic review board, all issues are addressed. The decision of the planning commission or historic review board or the city commission, on the record. The city commission decision on appeal from the historic review board or the planning commission is the city's final decision and is appealable to LUBA within twenty-one days of when it becomes final. A city-recognized neighborhood association requesting an appeal fee waiver pursuant to 17.50.290(C) must officially approve the request through a vote of its general membership or board at a duly announced meeting prior to the filing of an appeal.

IF YOU HAVE ANY QUESTIONS ABOUT THIS APPLICATION, PLEASE CONTACT THE PLANNING DIVISION OFFICE AT (503) 722-3789.

I. BACKGROUND:

The subject site is zoned R-3.5 Dwelling District. It is located on the south side of Maplelane Road, north of Thayer Road, and north of the existing Crabtree Terrace subdivision.

The following background is directly from the applicant's narrative - Executive Summary (Exhibit 3a):

"Through this application, the property owner requests approval from the City of Oregon City to subdivide the subject property (described below) into a 30 lot subdivision (Crabtree Terrace No. 2) for the future construction of single-family detached residential homes and a variance to allow direct garage access to local residential streets.

The applicant developed the adjacent 81 lot Crabtree Terrace Subdivision, which is also zoned R-3.5, starting in 2006 (City file TP 07-05 and WR 07-13) and was completed with the final plat recording in 2008. The applicant's goal is to develop the remainder of his property in a similar manner as was the first "phase" of the project, with a grid system of local public streets providing access to +/- 3,500 square foot lots (average) for single-family detached homes. This was his intent when he submitted the Crabtree Place Subdivision application in 2007 and graded the property in 2008. The applicant had hoped to complete development of the entire property (including this portion) in 2009. However, the economic downturn of the past several years, which has especially impacted the residential housing market, has prevented him from meeting this goal.

In addition to the poor economy and housing market, a recent change in the Oregon City Municipal Code has occurred after approval of Crabtree Terrace Subdivision."

Staff Note: The alley requirement (OCMC 12.04.255 - Street design—Alleys.) was adopted in 2010 as part of the development code update (Planning File L 08-01, Ord. No. 10-1003), see Exhibit 12. This code section requires that;

"Public alleys shall be provided in the following districts R-5, R-3.5, R-2, MUC-1, MUC-2 and NC zones unless other permanent provisions for private access to off-street parking and loading facilities are approved by the decision maker. The corners of alley intersections shall have a radius of not less than ten feet."

The intent of this code section is discussed under the findings for the requested variance pursuant to OCMC Section 17.60 of this staff report.

Applicant's Executive Summary, continued:

"The adoption of an alley requirement for R-3.5 properties (as this property is zoned) impacts the applicant's ability to complete this project and achieve the goals for the property as originally conceived and approved. Due to a variety of factors (described in more detail later in this written statement), alleys are not a viable way to complete this project. Therefore, a variance has been requested to this standard.

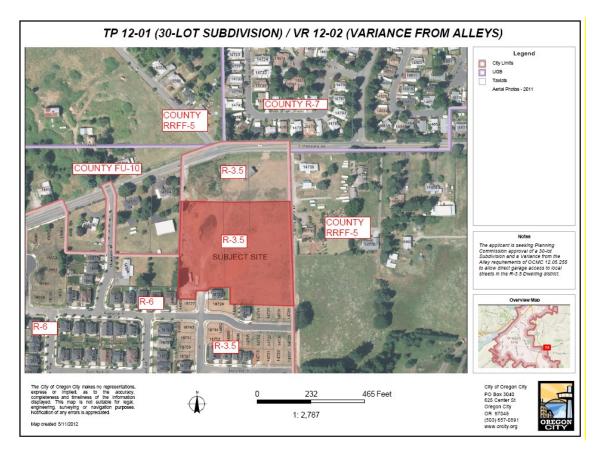
As described in further detail throughout this written statement and as shown in the preliminary plans, the subdivision will include all necessary streets, sidewalks, services, utilities, and other public improvements that are necessary to support the project. Approval of Crabtree Terrace No.2 benefits the City of Oregon City by providing much needed construction jobs and future homes for people to live, as well as permit and impact fees / taxes to support City services and fund future City public works / infrastructure improvement projects for the area.

This written statement includes findings of fact demonstrating that the application complies with all applicable approval criteria. These findings are supported by substantial evidence which includes preliminary plans, a Traffic Impact Study, and other written documentation. This information, which is included in this application package, provides the basis for the City to approve the application."

The applicant provided a detailed application packet, see Exhibit 3. The applicant also provided supplementary information in support of the proposed variance application which required that the public hearings for this application be continued (See next page), as provided in Exhibits 9-12.

II. BASIC FACTS:

Zoning/Permitted Use: The subject site is zoned R-3.5 Single Family Dwelling District on the City's Zoning Map. The properties to the south also carry the R-3.5 zoning designation. The properties to the west consist of zones R-3.5, R-6, and Clackamas County zoned property outside of the city limits. The site's northern boundary is delineated by an approved lot line adjustment application that is currently pending recordation (Planning File LL 12-02, Exhibit 14). The property to the north is also zoned R-3.5. The city limits follow Maplelane Road in the area of the subject site; thus the property to the north of Maplelane Road is outside of the Urban Growth Boundary (UGB). The city limits and the UGB meet near the property's northeast corner and run along the east side of the subject site. The properties to the east are also outside of the UGB. The following graphic indicates the existing zoning and development pattern:



Public Notice and Comments: A notice of the Public Hearing with details of the development proposal and request for comments was mailed to property owners within 300 feet of the subject site on May 11, 2012 and the property was posted with a *Notice of Proposed Land Use Action* sign requesting comments on May 11, 2012. In accordance with OCMC 17.50.090.B, the notice of public hearing was published in the Clackamas Review / Oregon City News for one week in the May 2, 2012 issue, at least 20-days prior to the Public Hearing, as shown by the affidavit of publication in Exhibit 7. Additionally, the application was posted on the Planning Division "Applications Submitted" website at http://www.orcity.org/planning/landuse.

Public Hearing Continuations:

This application was originally scheduled for a public hearing for June 11, 2012, however, at the request of the applicant, the Planning Commission has granted two continuances (first to June 25th, and second to July 23rd, 2012) to allow the applicant and staff additional time to address supplemental information that the applicant prepared in support of the variance request. All of that information, including staff emails, communication and written documentation, has been available

for public review at the Planning Division and is part of the complete record for File TP 12-01 and VR 12-02.

City / Agency Comments

John Replinger, P.E. - City of Oregon City Transportation Consultant

Mr. Replinger reviewed the Transportation Impact Study (TIS) prepared by the applicant for consistency with the City's Transportation System Plan (TSP) and relevant street design and subdivision standards. The TIS was prepared in March 2012 under the direction of Todd E. Mobley, PE of Lancaster Engineering. Mr. Replinger found that the TIA addressed the city's requirements and provides an adequate basis to evaluate impacts of the proposed subdivision. The transportation aspects of the alley variance request were not addressed in the TIS, but were judged by Mr. Replinger to be insignificant from a traffic operations or safety standpoint. The TIS did not provide crash information. Mr. Replinger recommends that this oversight should be corrected by submittal of an addendum to the TIS. Mr. Replinger's findings and recommendation are addressed pursuant to the applicable approval criteria in this staff report.

Comments of the City of Oregon City Development Services Division Manager and Public Works Operations Manager have been incorporated into this Staff Report and Recommended Conditions of Approval.

Public Comments

•

Comments Submitted in Support

Written public comments were received by the Planning Division on June 29, 2012 from the following persons in support of the applicant's proposal (Exhibit 8a).

- Trase Myers (adjacent resident Oregon City)
- Jim and Irene Davis (adjacent resident Oregon City)
- Mark and Tamara Goddard (adjacent resident Oregon City)
 - Richard and Kitty Hughes (adjacent resident Oregon City)
- Phil and Kim Lantz (adjacent resident Oregon City)
- Mike and Judy Montoya (adjacent resident Oregon City)
- Angela Shore (adjacent resident)
- Gary Boom (abutting resident in County within UGB)
- Stacie Fisher (adjacent resident Oregon City

Comments Submitted (Not in Support)

TP 12-01/ VR 12-02: Crabtree No.2 Subdivision and Variance

Christine Kosinski, resident of Holly Lane outside the city's Urban Growth Boundary, submitted written comments to the Planning Commission on June 11, 2012 (Exhibit 8b) and again on June 25, 2012 (Exhibit 8c).

Ms. Kosinski's comments cover a variety of concerns associated with the proposed subdivision and development of this area of Oregon City, including public comment and noticing requirements, safety of Holly Lane, cut-through traffic, traffic, lack of parks, liveability, transportation, landslides, erosion control, police and fire services and other concerns.

Holly Lane is within Clackamas County jurisdiction. It is not within the City's Urban Growth Boundary. The City of Oregon City has neither authority nor obligation to require any party to make off-site improvements to Holly Lane.

The applicant's Traffic Impact Analysis (Exhibit 3iv) was reviewed by the City's Transportation Consultant for conformance with the City's adopted Transportation System Plan and Level-of-Service requirements and found to be adequate. Those findings are presented in this Staff Report and Exhibits.

Staff has reviewed both sets of comments submitted by Ms. Kosinski in detail. None of the comments submitted by Ms. Kosinski specify whether any public notice requirement, subdivision, zoning, transportation, public facilities and services or other adopted approval criterion or criteria has not been met, or cannot be met through application of the recommended Conditions of Approval attached to this staff report.

The applicant has prepared a separate response to Ms. Kosinski's comments, dated June 29, 2012, in Exhibit 12.

DECISION-MAKING CRITERIA:

Municipal Code Standards and Requirements

Title 16, Land Division:

Chapter 16.04 - General Provisions and Administration of Land Divisions Chapter 16.08, Subdivisions-Process and Standards Chapter 16.12, Minimum Improvements and Design Standards for Land Divisions

Title 12, Streets, Sidewalks and Public Places:

Chapter 12.04, Street Design Standards Chapter 12.08, Public and Street Trees

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Title 17, Zoning:

Chapter 17.16, R-3.5 Dwelling District Chapter 17.41, Tree Protection Chapter 17.47, Erosion and Sediment Control Chapter 17.50, Administration and Procedures Chapter 17.60, Variances

III. COMPLIANCE WITH APPROVAL CRITERIA

OREGON CITY MUNICIPAL CODE

CHAPTER 16.04 - GENERAL PROVISIONS AND ADMINISTRATION OF LAND DIVISIONS

16.04.010 - Purpose.

This title is enacted in compliance with ORS 92.010 through 92.160 to establish procedures and standards for partitioning and subdividing land within the city. These regulations, along with requirements of the city's underlying zoning, provide the dimensional requirements for building lots, street locations, street design, rights-of-way, location requirements for houses on residential lots, the provision of adequate open space for recreation and community facilities, and the basic requirements for the installation of public utilities, all with the aim of achieving:

A. A sufficient supply of needed housing with satisfactory living conditions in new subdivisions that comply with Statewide Planning Goal 10 and implementing administrative rules, guidelines and statutes;

B. The protection, conservation and proper use of the land;

C. The timely and efficient extension of public facilities and services without excessive expenditure of public funds in accordance with Statewide Planning Goals 11 and 14 and their implementing administrative rules and guidelines;

D. The simplification and greater accuracy of land descriptions;

E. The protection of property owners from excessive assessment for future utility installations and to provide a means of ensuring that property owners pay only their fair share of the cost of providing public facilities and services;

F. The protection of the health, safety and general welfare of the public;

G. Increased consumer protection by assuring that only those lots which have met city requirements and have been lawfully created through subdivision or partition approval are allowed to be advertised for sale;

H. Increased urban density and a livable design that achieves Metro-mandated requirements, while providing an enjoyable living and working environment; and

I. Safe, direct and convenient pedestrian and bicycle access, where reasonably possible within, from and between residential, commercial, industrial and institutional developments and neighborhood activity centers in accordance with Statewide Planning Goal 12 and the implementing administrative rule.

Finding: Complies as proposed. The proposed project was reviewed by the appropriate agencies. If comments were received from any agency relevant to this decision, the findings necessary to demonstrate compliance with the stated purpose of the Land Division regulations have been included. No comments other than those received from City Departments were received prior to the written comment deadline stated in the land use transmittal and public comment.

16.04.015 - Fees.

A. Filing Fees. The city commission shall establish by resolution a schedule of fees for all land division and engineering plan reviews, inspections, applications and appeals provided for under this title. Fees shall be structured to reflect the city's actual cost of providing the required services and must be paid in full at the time of application, along with all other required information and documents before the application to be deemed complete. Filing fees shall not be refundable or reimbursable except as provided in Section 17.50.290 of this Code.

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B. Technical Plan Check and Inspection Fees. The city commission shall establish by resolution a plan check and inspection fee. This fee shall be paid to cover the city's costs of reviewing plans and inspecting public improvements.
C. Other Fees. The fees required by this chapter are in addition to any fees charged by any other department of the city and any other governmental entity with regulatory jurisdiction.

Finding: Complies as proposed. The applicant has paid all required fees for reviewing this application.

16.04.020 - Conditions of Land Division Approval.

The decision-maker may impose reasonable conditions of approval on any approval granted under this title to ensure that the application meets, or will meet, any application approval standard.

Finding: Staff has prepared recommended conditions of approval for the Planning Commission to attach to their decision if the application is approved (Exhibit 1). The application includes an application for a variance to not include alleys in the subdivision. An analysis of the variance criteria in *OCMC 17.60.030 – Grounds* was prepared by the applicant and is addressed later in this Staff Report (Exhibit 9). If the Planning Commission determines that the variance criteria have been met, the subdivision may be approved with conditions. If the Planning Commission denies the application, the applicant may not submit a substantially similar application for one year following the denial.

CHAPTER 16.08.010 - PURPOSE AND GENERAL PROVISIONS

All subdivisions shall be in compliance with the policies and design standards established by this chapter and with applicable standards in the City's Public Facilities Master Plan and the City Design Standards and Specifications. The evidence contained in this record indicates that the proposed subdivision is in compliance with standards and design specifications listed in this document, subject to the conditions of approval.

Finding: The proposed project was reviewed by the appropriate agencies and the findings necessary to be in compliance with the standards above have been included.

16.08.015 Preapplication conference required.

Finding: Complies as proposed. The applicant applied for and attended the required pre-application conference on December 6, 2011. A written summary of the conference is provided (Exhibit 3v).

16.08.020 - 025 Preliminary subdivision plat application.

The preliminary subdivision plat shall specifically and clearly show the following features and information on the maps, drawings, application form or attachments. All maps and site drawings shall be at a minimum scale of one inch to fifty feet. A. Site Plan. B. Traffic/Transportation Plan.

C. Natural Features Plan and Topography, Preliminary Grading and Drainage Plan.

Finding: Complies as proposed. The application is being submitted within 6 months of the preapplication conference and contains all necessary submittal requirements. The Applicant provided detailed preliminary plans of the proposed development (Exhibits 3 and 4) which include all of the required plan items listed above.

16.08.030 Preliminary subdivision plat--Narrative statement.

A. Subdivision Description. A detailed description of the proposed development;

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Finding: The applicant submitted a detailed narrative description of the proposed development addressing the items (B) through (E) as detailed below.

B. Timely Provision of Public Services and Facilities. The applicant shall explain in detail how and when each of the following public services or facilities is, or will be, adequate to serve the proposed development by the time construction begins:

Water

There is an existing 8-in ductile iron public water main stubbed at the north end of Nutmeg Lane leading into the subject site. As shown on the preliminary plans, the proposed project will extend this public main through the site and provide individual private water services to the lots. Nearby fire hydrants are located at the intersection of Nutmeg Lane and Sugarpine St.

The applicant has proposed constructing new 8-inch public water mains in the proposed streets, and connecting to existing water mains in street stubs. Several new fire hydrants have been proposed throughout the development. The applicant has indicated that water services will be extended to each lot.

The new water system will be designed with minimum 8-inch water mains throughout the site, and will provide stubs for future extension with development of adjacent properties. New fire hydrants will be located and installed per Clackamas County Fire District No. 1's requirements. All new water services will be constructed with individual copper water laterals a minimum of 1-inch diameter in size connecting the water main to the water meter.

The Applicant shall install a minimum 4-inch Ductile Iron (DI) pipe for improving fire flow, circulation, and water quality between the two 8-in water mains at the east end of Oregon Iris Way south to connect to the east end of Purple Ash Way 8-in water main. The remaining system as proposed meets City requirements; 8-in DI mains with 1-in. copper services to each lot.

Finding: Conditionally complies. As proposed, the application will provide for the timely provision of water service to the property. **The applicant can assure this standard is met through compliance with Conditions of Approval 1, 4 and 5**.

Sanitary Sewer

There is an existing public sanitary sewer main at the north end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend the public main strategically through the site and provide individual private sanitary sewer service laterals to the lots from the new mains or from the existing main.

The applicant has proposed constructing new 8-inch public sanitary sewer mains in the proposed streets, and connecting to the existing 8-inch gravity sanitary sewer main in Nutmeg Lane. The applicant has shown that sanitary sewer laterals will be extended to each lot. The proposed sanitary sewer system will drain to the existing sewer mains to the south and west.

The new sanitary sewer system will be designed with minimum 8-inch sanitary sewer mains throughout the site, 4-inch laterals to each lot, and provide stubs at the deepest elevation where needed to provide for future extension with development of adjacent properties.

Finding: Conditionally complies. As proposed, the application will provide for the timely provision of sewer service to the property. **The applicant can meet this standard through Condition of Approval 1 and 6.**

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Storm Sewer and Storm Water Drainage

There is an existing public storm sewer main at the north end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend a public main strategically though the site. Runoff is proposed to be captured with a combination of storm service laterals and curb inlet catch basins. Due to existing elevation and grade constraints, stormwater runoff will be routed in two directions with the majority of the stormwater flowing to an existing offsite sub-regional stormwater facility and the remaining stormwater being routed to the existing ditch on Maplelane Road. For additional information, please refer to the preliminary stormwater report that is included in the application submittal materials. The site is located in the Newell Creek Drainage Basin as designated in the City's Drainage Master Plan. The site generally drains to an existing ditch on the south side of Maplelane Road. Erosion and water quality controls are critical for the development of this site.

The applicant is proposing to utilize the existing sub-regional stormwater detention facility located near the intersection of Maplelane Road and Thayer Road, where water quality and detention for this development is proposed to occur. Applicable reimbursement fees for use of this facility shall be required for each lot.

The applicant has proposed storm sewer improvements throughout the site to pick up on-site drainage and drain it to this stormwater facility located west of the project. Applicant has provided preliminary hydrology/detention or water quality calculations to the City for review.

Storm sewer improvements will be required as part of the proposed development. Storm sewer will be designed, using minimum 12-inch pipe and curb inlets to collect and convey on-site drainage. Each lot shall drain to the street or an alternate approved during construction plan review. The new storm sewer system will have to be designed per the City of Oregon City Public Works Stormwater and Grading Design Standards.

The applicant shall provide written/recorded agreement to bound future home permits to incur prorata share payments for using the stormwater detention/water quality pond at Maplelane/Thayer Roads. Ordinance 09-1003 established the amount per home permit to be a one-time payment of \$2,645.55.

Finding: Conditionally Complies. As proposed, the application will provide for the timely provision of storm drainage and storm sewer services to the property. **The applicant can assure this standard is met through compliance with Conditions of Approval 1, 7 and 8**.

Parks and Recreation

Finding: Complies as proposed. The subject site is not located close to any city parks and the adopted Oregon City Parks Master Plan does not indicate the need for any proposed parks in this area. The site is located approximately ½ mile from Clackamas Community College and ¾ mile from Oregon City High School. Park System Development Charges will be paid at the time building permits are issued for each lot in the subdivision.

Traffic and Transportation

Finding: Conditionally Complies. A Traffic Impact Study (TIS) for this project, prepared by Lancaster Engineering, is included with the application. Appropriate street improvements are

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proposed for the project, as illustrated in the preliminary project plans. Mr. Replinger reviewed the Transportation Impact Study (TIS) prepared by the applicant for consistency with the City's Transportation System Plan (TSP) and relevant street design and subdivision standards. The TIS was prepared in March 2012 under the direction of Todd E. Mobley, PE of Lancaster Engineering. Mr. Replinger found that the TIA addressed the city's requirements and provides an adequate basis to evaluate impacts of the proposed subdivision. The transportation aspects of the alley variance request were not addressed in the TIS, but were judged by Mr. Replinger to be insignificant from a traffic operations or safety standpoint. The TIS did not provide crash information. This oversight should be corrected by submittal of an addendum to the TIS. Mr. Replinger's findings are addressed pursuant to the applicable approval criteria in this staff report. The absence of historical crash data and an analysis of safety issues should be corrected with submittal of an addendum. The applicant will provide an addendum to the TIS to indicate crash data for adjacent intersections for review by the Community Development Director prior to approval of the final subdivision plat for the property. The results are very unlikely to reveal serious deficiencies that could be exacerbated by the development. If the results show the absence of any serious deficiencies this application may be approved. However, should analysis of the crash data by the City's Transportation Consultant provide a basis for determination by the Community Development Director that additional safety mitigation is required in accordance with the adopted standards of OCMC 12.04 and the Oregon City Transportation System Plan, the Planning Commission authorizes the Community Development Director to condition the applicant to provide any such mitigation. The review of the crash data will be subject to a Type II review. The applicant can meet this standard through Condition of Approval 16.

Schools

Finding: Complies as proposed. The Oregon City School District is responsible for providing adequate school facilities, which are funded through property taxes, construction excise taxes and fees that will be assessed at the time of building permit issuance for future homes. A copy of the proposed subdivision application was sent to the School District for comment. The School District did not comment and has not indicated that there is inadequate capacity to serve this development.

Fire and Police Services

Finding: Conditionally complies. No comments were received from Clackamas County Fire District 1 concerning the design of the subdivision. However, if the variance application is approved, the applicant will need to coordinate with Clackamas County Fire District 1 concerning the design of any fire apparatus turn around and any requirements for providing fire protection to the subdivision. The applicant shall provide the City Planning Division with a letter from Clackamas County Fire that shows that their standards have been met. As described in the initial annexation agreement for the subject site (Exhibit 15), a supplemental police services fee of \$3,500 / dwelling unit to assure adequate police emergency response time to this recently annexed property is to be paid at the time

of building permit application to the City. The applicant can satisfy this standard by complying with Condition of Approval 9.

C. Approval Criteria and Justification for Variances. The applicant shall explain how the proposed subdivision is consistent with the standards set forth in Chapter 16.12, 12.04 and any other applicable approval standards identified in the municipal code. For each instance where the applicant proposes a variance from some applicable dimensional or other numeric requirement, the applicant shall address the approval criteria from Chapter 17.60;

Finding: The applicant is requesting a variance to OCMC 12.04.255, Street Design – Alleys, and has provided a detailed response describing their proposed justification for the variance sought. See findings in Section 17.60.

D. Drafts of the proposed covenants, conditions and restrictions (CC&Rs), maintenance agreements, homeowner association agreements, dedications, deeds easements, or reservations of public open spaces not dedicated to the city, and related documents for the subdivision;

Finding: Complies as proposed. Draft CC&Rs are included in the application submittal materials. Easements and dedications are indicated on the preliminary plat.

E. A description of any proposed phasing, including for each phase the time, acreage, number of residential units, amount of area for nonresidential use, open space, development of utilities and public facilities;

Finding: Not applicable. Although the applicant refers to the subdivision as Crabtree phase "II", the Oregon City Land Division code contains no approval standards or procedures for the phasing of subdivisions, and no phasing has been proposed.

The applicant did inquire about the possibility of phasing when the original Crabtree Terrace subdivision was first proposed, with the intention of making the current proposal Crabtree II a second phase.

Phasing of residential subdivisions typically allows for the construction of public infrastructure to serve a larger subdivision in predetermined stages (streets, water, sewer, storm facilities, etc.). This allows the developer to offset the cost of installing public improvements for all phases of a site through the sale of lots on a smaller portion of the site. Phasing has benefits, but also risk, for the developer (e.g. market conditions and housing demand declines), as well as the city, (e.g. the city may be left with approved but un-completed subdivisions and partially built infrastructure that is inadequately maintained while waiting for development to be completed).

The applicant did obtain, in good faith and at their own risk, a grading permit (Exhibit 5) issued on August 10th, 2007, to fill and grade the land north of the Crabtree I subdivision in anticipation of a second phase. In fact, the grading permit for the subject property was granted prior to the final approval of the Crabtree I subdivision, so as to permit the exchange of earth between the properties. Grading and filling operations are regulated under Chapter 15 of the municipal code and the filling and grading of the subject property is not a land use review, and does not relieve the applicant from complying with any other Oregon City code or regulation that may apply or be applied in the future.

The applicant describes this approach and understanding in more detail in their variance application.

F. Overall density of the subdivision and the density by dwelling type for each

Finding: Complies as proposed. The site is zoned R-3.5, which is a medium density zoning designation that requires a minimum lot size of 3,500 square feet. The proposed overall density of the site, which the gross amount of land divided by the number of dwelling units (lots) including all street right-of-ways, alleys and yards, is approximately 6.3 single-family dwelling units per acre. This overall density is slightly more than a typical low density R-6 subdivision at build-out with 6000 square foot lots (about 5.8 dwelling units / acre).

The applicant also provided a calculation of net density of the site under the findings for compliance with the minimum density requirements of OCMC 16.12.045 Building Sites – Minimum Density, which requires that "All subdivision layouts shall achieve at least 80% of the maximum density of the base zone for the net developable area as defined in Section 17.04."

The site is approximately 190,124 square feet (4.36 acres) in size. The average lot area proposed in the project is 4,333 square feet. Due to right-of-way dedications, the net developable area for the project site is 130,031 square feet. Divided by 3,500, the maximum number of lots (density) is 37.15 units. Eighty percent of 37.15 is 29.72, or 30 units. Therefore, the proposed subdivision complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable site. All future homes will be single-family detached dwelling units.

16.08.035 Notice and invitation to comment.

Upon the city's determination that an application for a preliminary subdivision plat is complete, pursuant to Chapter 17.50, the city shall provide notice of the application in accordance with requirements of Chapter 17.50 applicable to Type II decisions.

Finding: Complies as Proposed. The application was deemed complete on May 4, 2012. Notice of this Type II land use application was mailed out to adjacent property owners within 300' of the subject site on May 11, 2012, and the property was posted with a "Notice of Proposed Land Use Action" sign from May 11th, 2012. The public notice was published in the Clackamas Review for one week 20 days prior to the public hearing, since the application includes a variance request which requires that the public notice also be published in the newspaper (See Exhibit 7).

16.08.040 Preliminary subdivision plat--Approval standards and decision.

The minimum approval standards that must be met by all preliminary subdivision plats are set forth in Chapter 16.12, and in the dimensional and use requirements set forth in the chapter of this Code that corresponds to the underlying zone. The community development director shall evaluate the application to determine that the proposal does, or can through the imposition of conditions of approval, meet these approval standards. The community development director's decision shall be issued in accordance with the requirements of Chapter 17.50.

Finding: Compliance with the applicable approval requirements of the proposed preliminary subdivision plat is outlined in this staff report.

The application includes a variance request to not include alleys in the subdivision (as required by OCMC 12.04.255). An analysis of the variance criteria in OCMC 17.60.030 – Grounds was prepared by the applicant and is addressed later in this Staff Report . If the Planning Commission determines that the variance criteria have been met, the subdivision may be approved with conditions. If the Planning Commission denies the application, the applicant may not submit a substantially similar application for one year following the denial. The staff report and recommendation for this Type III application was prepared pursuant to the requirements of Chapter 17.50.

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16.08.045 Building site--Frontage width requirement.

Each lot in a subdivision shall abut upon a cul-de-sac or street other than an alley for a width of at least twenty feet.

Finding: Complies as proposed. As shown in the preliminary plans, each proposed lot has in excess of twenty feet of frontage on a public street.

16.08.050 - Flag Lots in Subdivisions

Finding: Not applicable. The applicant has not proposed flag lots.

16.08.060 Filing and recording of final subdivision plat.

Following approval of the final subdivision plat, the applicant shall file with the county recording officer the confirmed and approved copy of the final subdivision plat together with all pertinent documents approved as to form by the city attorney.

Finding: Complies as proposed. The applicant indicates that a final subdivision plat, that is consistent with the approved preliminary plat, will be submitted to the City prior to recordation.

16.08.065 Post-approval modifications to approved plat.

All modifications to a subdivision that has received final plat approval shall be applied for and processed in the same manner as was the original preliminary subdivision plat and subject to the same approval standards. However, the city is entitled to rely upon the prior decision and findings for those portions of the subdivision that the applicant does not propose to modify.

Finding: Any modifications to the final plat shall be processed in accordance with this section.

CHAPTER 16.12 - MINIMUM IMPROVEMENTS AND DESIGN STANDARDS FOR LAND DIVISIONS

Chapter 16.12.015 - Street Design-Generally

Street design standards for all new development and land divisions shall comply with Chapter 12.04—Street Design Standards.

Finding: Please refer to the written findings provided to Chapter 12.04 - Street Design Standards.

16.12.020 - Blocks - Generally

The length, width and shape of blocks shall take into account the need for adequate building site size, convenient motor vehicle, pedestrian, bicycle and transit access, control of traffic circulation, and limitations imposed by topography and other natural features.

Finding: Complies as proposed. The general block design provides adequate building site size, convenient motor vehicle, pedestrian, bicycle and transit access, and control of traffic circulation.

16.12.025 Blocks-Length

Block lengths for local streets and collectors shall not exceed five hundred feet between through streets, as measured between nearside right-of-way lines.

Finding: Complies as proposed. The block length between local streets does not exceed 500 feet as measured between near side right-of-way lines.

16.12.030 Blocks-Width

The width of blocks shall ordinarily be sufficient to allow for two tiers of lots with depths consistent with the type of land use proposed.

Finding: Complies as proposed. As demonstrated on the preliminary plans, the block design provides adequate building site size, convenient motor vehicle, pedestrian, bicycle and transit access, and control of

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traffic circulation. Block lengths do not exceed 500 feet between through streets and the widths allow for two tiers of lots that are appropriate for the area and are suitable for single-family residential development.

16.12.035 Blocks - Pedestrian and Bicycle Access

Finding: Not applicable. The proposed subdivision includes new public streets that form a logical grid, and would not create blocks exceeding five-hundred feet in length. Sidewalks are proposed on both sides of the streets in accordance with the city's adopted standards. The applicant has not proposed any permanent dead end streets or discontinuous public rights-of-way nor have they proposed excessively long blocks that would promote out-of-direction travel. There are no minor arterial or collector roads directly abutting the development, therefore, additional pedestrian and bicycle access is not required beyond standard sidewalks and street standards.

16.12.040--Building Sites

The size, width, shape and orientation of building sites shall be appropriate for the primary use of the land division, and shall be consistent with the residential lot size provisions of the zoning ordinance.

Finding: Complies as proposed. As proposed, the size, width, shape and orientation of the building sites appear to be appropriate, irrespective of the applicant's variance request from the alley requirement. The applicant has proposed lot sizes that in all cases exceed the minimum lot size of 3,500 square feet. In fact, the smallest lot in the proposed subdivision is 4,000 square feet. The proposed development provides an average lot size of 4,333 square feet, which significantly exceeds the required minimum lot size of 3,500 square feet by 833 square feet. The applicant has not requested any variances from the dimensional standards of the zone.

16.12.045 Building Sites--Minimum Density

All subdivision layouts shall achieve at least 80% of the maximum density of the base zone for the net developable area as defined in Section 17.04.

Finding: Complies as proposed. The site is approximately 190,124 square feet (4.36 acres) in size. The required minimum lot size is 3,500 square feet. The average lot area proposed in the project is 4,333 square feet. Due to right-of-way dedications, the net developable area for the project site is 130,031 square feet. Divided by 3,500, the maximum number of lots (density) is 37.15 units. Eighty percent of 37.15 is 29.72, or 30 units. Therefore, the proposed subdivision complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable site.

16.12.050 Calculations of Lot Area.

A subdivision in the R-10, R-8, R-6, R-5, or R-3.5 dwelling district may include lots that are up to twenty percent less than the required minimum lot area of the applicable zoning designation provided the entire subdivision on average meets the minimum site area requirement of the underlying zone. The average lot area is determined by calculating the total site area devoted to dwelling units and dividing that figure by the proposed number of dwelling lots.

Accessory dwelling units are not included in this determination nor are tracts created for non-dwelling unit purposes such as open space, stormwater tracts, or access ways.

A lot that was created pursuant to this section may not be further divided unless the average lot size requirements are still met for the entire subdivision.

When a lot abuts a public alley, an area equal to the length of the alley frontage along the lot times the width of the alley right-of-way measured from the alley centerline may be added to the area of the abutting lot in order to satisfy the lot area requirement for the abutting lot. It may also be used in calculating the average lot area.

Finding: Not applicable. The applicant did not propose any lots smaller than the minimum lot size.

16.12.055 Building Sites - Through Lots

Finding: Not applicable. No through lots are proposed.

16.12.060 Building site--Lot and parcel side lines.

The lines of lots and parcels, as far as is practicable, shall run at right angles to the street upon which they face, except that on curved streets they shall be radial to the curve.

Finding: Complies as proposed. As far as practicable, the proposed lot lines and parcels run at right angles to the street upon which they face.

16.12.065 Building site--Grading.

Grading of building sites shall conform to the State of Oregon Structural Specialty Code, Chapter 18, any approved grading plan and any approved residential lot grading plan in accordance with the requirements of Chapter 15.48, 16.12 and the Public Works Stormwater and Grading Design Standards, and the erosion control requirements of Chapter 17.47.

Finding: Conditionally complies. The applicant already completed rough grading of the site and a partial erosion control plan. The approved grading permit for the rough site grading was issued in 2007 (Exhibit 5). Grading permit issuance is governed pursuant to the code sections cited above and may be issued outside of the subdivision process. The submitted plan appears to meet City requirements with a few modifications. The applicant shall submit separate erosion control plans and obtain an erosion control permit and field installation approval prior to start of construction. The applicant can satisfy this standard by complying with conditions of approval 1 and 3.

16.12.070 Building site--Setbacks and building location.

This standard ensures that lots are configured in a way that development can be oriented toward streets to provide a safe, convenient and aesthetically pleasing environment for pedestrians and bicyclists. The objective is for lots located on a neighborhood collector, collector or minor arterial street locate the front yard setback on and design the most architecturally significant elevation of the primary structure to face the neighborhood collector, collector or minor arterial street.

A. The front setback of all lots located on a neighborhood collector, collector or minor arterial shall be orientated toward the neighborhood collector, collector or minor arterial street.

B. The most architecturally significant elevation of the house shall face the the neighborhood collector, collector or minor arterial street. *C.* On corner lots located on the corner of two local streets, the main façade of the dwelling may be oriented towards either street.

D. All lots proposed with a driveway and lot orientation on a collector or minor arterial shall combine driveways into one joint access per two or more lots unless the city engineer determines that:

1. No driveway access may be allowed since the driveway(s) would cause a significant traffic safety hazard; or

2. Allowing a single driveway access per lot will not cause a significant traffic safety hazard.

E. The community development director may approve an alternative design, consistent with the intent of this section, where the applicant can show that existing development patterns preclude the ability to practically meet this standard.

Finding: Complies as proposed. Subsections A, B, and D of this standard do not apply since the subject property does not abut any neighborhood, collector, or minor arterials streets. Compliance with subsection C will be reviewed at the time building permits are proposed for houses located at the corner of two local streets.

16.12.075 Building site--Division of lots.

Where a tract of land is to be divided into lots or parcels capable of redivision in accordance with this chapter, the community development director shall require an arrangement of lots, parcels and streets which facilitates future redivision. In such a case, building setback lines may be required in order to preserve future right-of-way or building sites.

Finding: Not applicable. No lots have been proposed which are capable of redivision in accordance with this chapter.

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16.12.080 Protection of trees.

Protection of trees shall comply with the provisions of Chapter 17.41--Tree Protection.

Finding: Compliance with Chapter 17.41 is detailed later in this report.

16.12.085 Easements.

The following shall govern the location, improvement and layout of easements:

A. Utilities. Utility easements shall be required where necessary as determined by the city engineer. Insofar as practicable, easements shall be continuous and aligned from block-to-block within the land division and with adjoining subdivisions or partitions. Specific utility easements for water, sanitary or storm drainage shall be provided based on approved final engineering plans.

Finding: Conditionally complies. Most utility easements are proposed to be provided with the exception of the 15-foot water main easement across lots 88 and 105 for the 4-in water main. **The applicant can satisfy this standard by complying with Conditions of Approval 1, 4, 5 and 11**.

B. Unusual Facilities. Easements for unusual facilities such as high voltage electric transmission lines, drainage channels and stormwater detention facilities shall be adequately sized for their intended purpose, including any necessary maintenance roads. These easements shall be shown to scale on the preliminary and final plats or maps. If the easement is for drainage channels, stormwater detention facilities or related purposes, the easement shall comply with the requirements of the Public Works Stormwater and Grading Design Standards.

Finding: Not applicable. There are no unusual facilities in this project.

C. Watercourses. Where a land division is traversed or bounded by a watercourse, drainageway, channel or stream, a stormwater easement or drainage right-of-way shall be provided which conforms substantially to the line of such watercourse, drainageway, channel or stream and is of a sufficient width to allow construction, maintenance and control for the purpose as required by the responsible agency. For those subdivisions or partitions which are bounded by a stream of established recreational value, setbacks or easements may be required to prevent impacts to the water resource or to accommodate pedestrian or bicycle paths.

Finding: Not applicable. There are no watercourses traversing or bounding the site.

D. Access. When easements are used to provide vehicular access to lots within a land division, the construction standards, but not necessarily width standards, for the easement shall meet city specifications. The minimum width of the easement shall be twenty feet. The easements shall be improved and recorded by the applicant and inspected by the city engineer. Access easements may also provide for utility placement.

Finding: Not applicable. The applicant did not propose access easements and is seeking a variance from the alley requirement; therefore this standard does not apply.

E. Resource Protection. Easements or other protective measures may also be required as the community development director deems necessary to ensure compliance with applicable review criteria protecting any unusual significant natural feature or features of historic significance.

Finding: Not applicable. There are no identified significant natural features that require resource protection pursuant to this section.

16.12.090 Minimum improvements--Procedures.

In addition to other requirements, improvements installed by the applicant either as a requirement of these or other regulations, or at the applicant's option, shall conform to the requirements of this title and be designed to city specifications and standards as set out in the city's facility master plan and Public Works Stormwater and Grading Design Standards. The improvements shall be installed in accordance with the following procedure:

A. Improvement work shall not commence until construction plans have been reviewed and approved by the city engineer and to the extent that improvements are in county or state right-of-way, they shall be approved by the responsible authority. To the extent necessary for evaluation of the proposal, the plans may be required before approval of the preliminary plat of a subdivision or partition. Expenses incurred thereby shall be borne by the applicant and paid for prior to final plan review.

B. Improvements shall be constructed under the inspection and approval of the city engineer. Expenses incurred thereby shall be borne by the applicant and paid prior to final approval. Where required by the city engineer or other city decision-maker, the applicant's project engineer also shall inspect construction.

C. Erosion control or resource protection facilities or measures are required to be installed in accordance with the requirements of Chapter 17.49 and the Public Works Erosion and Sediment Control Standards. Underground utilities, waterlines, sanitary sewers and storm drains installed in streets shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities and sanitary sewers shall be placed beyond the public utility easement behind to the lot lines.

D. As-built construction plans and digital copies of as-built drawings shall be filed with the city engineer upon completion of the improvements.

E. The city engineer may regulate the hours of construction and access routes for construction equipment to minimize impacts on adjoining residences or neighborhoods.

Finding: Conditionally complies. The applicant has indicated that construction plans for all required improvements will be presented to the city for review and approval prior to the commencement of any construction activities on the site. Inspection will be provided for as required by this standards and city policy. Erosion control measures will be provided. As-built plans will be provided as required. Hours of construction and access routes to the site will be regulated so as to minimize impacts on adjoining properties. **The applicant can satisfy this standard by complying with Condition of Approval 1.**

16.12.095 Same--Public facilities and services.

The following minimum improvements shall be required of all applicants for a land division under Title 16, unless the decision-maker determines that any such improvement is not proportional to the impact imposed on the city's public systems and facilities:

A. Transportation System. Applicants and all subsequent lot owners shall be responsible for improving the city's planned level of service on all public streets, including alleys within the land division and those portions of public streets adjacent to but only partially within the land division. All applicants shall execute a binding agreement to not remonstrate against the formation of a local improvement district for street improvements that benefit the applicant's property. Applicants are responsible for designing and providing adequate vehicular, bicycle and pedestrian access to their developments and for accommodating future access to neighboring undeveloped properties that are suitably zoned for future development. Storm drainage facilities shall be installed and connected to off-site natural or man-made drainageways. Upon completion of the street improvement survey, the applicant shall reestablish and protect monuments of the type required by ORS 92.060 in monument boxes with covers at every public street intersection and all points or curvature and points of tangency of their center line, and at such other points as directed by the city engineer.

Finding: Conditionally complies. The applicant has proposed public streets with public sidewalks in the subdivision to provide access to the lots / future homes and provide for neighborhood connectivity / circulation. The preliminary plans show the location and arrangement of these improvements. As shown on the preliminary plans, street improvements are proposed that continue existing stub streets (Nutmeg Lane) through the site and create new streets with future connection possibilities. These improvements accommodate all modes of travel. As required above, monument boxes at street corners and other required locations shall be installed and/or protected.

The applicant submitted a Transportation Impact Study (TIS) for consistency with the City's Transportation System Plan (TSP) and relevant street design and subdivision standards. The TIS was prepared in March 2012 under the direction of Todd E. Mobley, P.E. of Lancaster Engineering. The TIS was reviewed by the City's Transportation Engineer, John Replinger, P.E. Mr. Replinger found that the TIS addressed the city's requirements and provides an adequate basis to evaluate impacts of the proposed subdivision.

The applicant conducted a level of service analysis for four intersections as discussed in the TIS. At each intersection, the level of service and delay calculations were provided in order to assess operations relative to the city's intersection LOS standard. All four intersections were predicted to meet city standards for the AM and PM peak hours.

The transportation aspects of the alley variance request were not addressed in the TIS, but were judged by Mr. Replinger to be insignificant from a traffic operations or safety standpoint. The TIS did not provide crash information. Mr. Replinger recommends that this oversight should be corrected by submittal of an addendum

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to the TIS. Mr. Replinger's findings and recommendation are addressed pursuant to the applicable approval criteria in this staff report.

The applicant shall record a Non-Remonstrance Agreement for local improvement districts for street improvements that benefit the applicant's property.

Applicant can meet this standard through compliance with Conditions of Approval 1, 2, 15, and 16.

B. Stormwater Drainage System. Applicants shall design and install drainage facilities within land divisions and shall connect the development's drainage system to the appropriate downstream storm drainage system as a minimum requirement for providing services to the applicant's development. The applicant shall obtain county or state approval when appropriate. All applicants shall execute a binding agreement to not remonstrate against the formation of a local improvement district for stormwater drainage improvements that benefit the applicant's property. Applicants are responsible for extending the appropriate storm drainage system to the development site and for providing for the connection of upgradient properties to that system. The applicant shall design the drainage facilities in accordance with city drainage master plan requirements, Chapter 13.12 and the Public Works Stormwater and Grading Design Standards.

Finding: Conditionally complies. The applicant submitted a stormwater report (Exhibit 3b(vi)). There is an existing public storm sewer main at the north end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend a public main strategically though the site. Runoff is proposed to be captured with a combination of storm service laterals and curb inlet catch basins. Due to existing elevation and grade constraints, the stormwater will be routed in two directions with the majority of the stormwater flowing to an existing offsite sub-regional stormwater facility and the remaining stormwater being routed to the existing ditch on Maplelane Road. The applicant can meet this standard through compliance with Conditions of Approval 1, 2, 7 and 8.

C. Sanitary Sewer System. The applicant shall design and install a sanitary sewer system to serve all lots or parcels within a land division in accordance with the city's sanitary sewer design standards, and shall connect those lots or parcels to the city's sanitary sewer system, except where connection is required to the county sanitary sewer system as approved by the county. All applicants shall execute a binding agreement to not remonstrate against the formation of a local improvement district for sanitary sewer improvements that benefit the applicant's property. Applicants are responsible for extending the city's sanitary sewer system to the development site and through the applicant's property to allow for the future connection of neighboring undeveloped properties that are suitably zoned for future development. The applicant shall obtain all required permits and approvals from all affected jurisdictions prior to final approval and prior to commencement of construction. Design shall be approved by the city engineer before construction begins.

Finding: Conditionally complies. There is an existing public sanitary sewer main at the north end of Nutmeg Lane adjacent to the subject site. The applicant proposes to extend the public main strategically through the site and provide individual private sanitary sewer service laterals to the lots from the new mains or from the existing mains. **The applicant can meet this standard through compliance with Conditions of Approval 2, 6 and 11.**

D. Water System. The applicant shall design and install a water system to serve all lots or parcels within a land division in accordance with the city public works water system design standards, and shall connect those lots or parcels to the city's water system. All applicants shall execute a binding agreement to not remonstrate against the formation of a local improvement district for water improvements that benefit the applicant's property. Applicants are responsible for extending the city's water system to the development site and through the applicant's property to allow for the future connection of neighboring undeveloped properties that are suitably zoned for future development.

Finding: Conditionally complies. There is an existing public water main stubbed at the north end of Nutmeg Lane adjacent to the subject site. The proposed project will extend this public main through the site and provide individual private water services to the lots. **The applicant can meet this standard through compliance with Conditions of Approval 2, 4 and 5.**

E. Sidewalks. The applicant shall provide for sidewalks on both sides of all public streets, on any private street if so required by the decision-maker, and in any special pedestrian way within the land division. Exceptions to this requirement may be allowed in order to accommodate topography, trees or some similar site constraint. In the case of major or minor arterials, the decision-maker may

approve a land division without sidewalks where sidewalks are found to be dangerous or otherwise impractical to construct or are not reasonably related to the applicant's development. The decision-maker may require the applicant to provide sidewalks concurrent with the issuance of the initial building permit within the area that is the subject of the land division application. Applicants for partitions may be allowed to meet this requirement by executing a binding agreement to not remonstrate against the formation of a local improvement district for sidewalk improvements that benefit the applicant's property.

Finding: Conditionally complies. The applicant has proposed sidewalks on both sides of all streets. This provides for pedestrian and bicycle access and connectivity for existing and future residents in the area. The applicant can meet this standard through compliance with Conditions of Approval 11-15.

F. Bicycle Routes. If appropriate to the extension of a system of bicycle routes, existing or planned, the decision-maker may require the installation of separate bicycle lanes within streets and separate bicycle paths.

Finding: Not applicable. There are no bicycle lanes planned or required for the local streets within this subdivision.

G. Street Name Signs and Traffic Control Devices. The applicant shall pay the city and the city installs street name signs at all street intersections. The applicant shall install traffic control devices as directed by the city engineer. Street name signs and traffic control devices shall be in conformance with all applicable city regulations and standards.

Finding: Conditionally complies. Street name signs and stop signs will be installed for the proposed streets. The applicant can meet this standard through compliance with Conditions of Approval 11-15.

H. Street Lights. The applicant shall install street lights which shall be served from an underground source of supply. Street lights shall be in conformance with all city regulations.

Finding: Conditionally complies. Street lights will be installed for the proposed streets. All utilities shall be placed underground. **The applicant can meet this standard through compliance with Condition of Approval 1.**

I. Street Trees.

Finding: Refer to Chapter 12.08, Public and Street Trees.

J. Bench Marks. At least one bench mark shall be located within the subdivision boundaries using datum plane specified by the city engineer.

K. Other. The applicant shall make all necessary arrangements with utility companies or other affected parties for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting and cable television, shall be placed underground.

L. Oversizing of Facilities. All facilities and improvements shall be designed to city standards as set out in the city's facility master plan, public works design standards, or other city ordinances or regulations. Compliance with facility design standards shall be addressed during final engineering. The city may require oversizing of facilities to meet standards in the city's facility master plan or to allow for orderly and efficient development. Where oversizing is required, the applicant may request reimbursement from the city for oversizing based on the city's reimbursement policy and funds available, or provide for recovery of costs from intervening properties as they develop.

M. Erosion Control Plan--Mitigation. The applicant shall be responsible for complying with all applicable provisions of Chapter 17.47 with regard to erosion control.

Finding: Conditionally complies. The applicant can meet this standard through compliance with Conditions of Approval 1 and 3.

16.12.100 Same--Road standards and requirements.

A. The creation of a public street and the resultant separate land parcels shall be in conformance with requirements for subdivisions or partitions and the applicable street design standards of Chapter 12.04.

Finding: See findings of compliance with Chapter 12.04 later in this report.

16.12.105 Same--Timing requirements.

A. Prior to applying for final plat approval, the applicant shall either complete construction of all public improvements required as part of the preliminary plat approval or guarantee the construction of those improvements. Whichever option the applicant elects shall be in accordance with this section.

B. Construction. The applicant shall construct the public improvements according to approved final engineering plans and all applicable requirements of this Code, and under the supervision of the city engineer. Under this option, the improvement must be complete and accepted by the city engineer prior to final plat approval.

C. Financial Guarantee. The applicant shall provide the city with a financial guarantee in a form acceptable to the city attorney and equal to one hundred ten percent of the cost of constructing the public improvements in accordance with Oregon City Municipal Code Chapter 17.50. Possible forms of guarantee include an irrevocable or standby letter of credit, guaranteed construction loan set-aside, reserve account, or performance guarantee, but the form of guarantee shall be specified by the city engineer and, prior to execution and acceptance by the city, must be reviewed and approved by the city attorney. The amount of the guarantee shall be based upon approved final engineering plans, equal to at least one hundred ten percent of the estimated cost of construction, and shall be supported by a verified engineering estimate and approved by the city engineer.

Finding: Conditionally complies. The applicant has proposed to construct the required public improvements prior to final plat approval in accordance with this section. **The applicant can meet this standard through compliance with Condition of Approval 1 and 2**.

16.12.110 - Minimum improvements—Financial guarantee.

When conditions of permit approval require a permittee to construct certain improvements, the city may, in its discretion, allow the permitee to submit a performance guarantee in lieu of actual construction of the improvement. Performance guarantees shall be governed by this section.

A. Form of Guarantee. Performance guarantees shall be in a form approved by the city attorney Approvable methods of performance guarantee include irrevocable standby letters of credit to the benefit of the city issued by a recognized lending institution, certified checks, dedicated bank accounts or allocations of construction loans held in reserve by the lending institution for the benefit of the city. The form of guarantee shall be specified by the city engineer and, prior to execution and acceptance by the city shall be reviewed and approved by the city attorney. The guarantee shall be filed with the city engineer.

B. Timing of Guarantee. A permittee shall be required to provide a performance guarantee as follows:

1. After Final Approved Design by the City: A permittee may request the option of submitting a performance guarantee when prepared for temporary/final occupancy. The guarantee shall be one hundred twenty percent of the estimated cost of constructing the remaining public improvements as submitted by the permittee's engineer. The engineer's estimated costs shall be supported by a verified engineering estimate and approved by the city engineer.

2. Before Complete Design Approval and Established Engineered Cost Estimate: A permittee may request the option of submitting a performance guarantee before public improvements are designed and completed. The guarantee shall be one hundred fifty percent of the estimated cost of constructing the public improvements as submitted by the permittee's engineer and approved by the city engineer. The engineer's estimated costs shall be supported by a verified engineering estimate and approved by the city engineer. This scenario applies for a fee-in-lieu situation to ensure adequate funds for the future work involved in design, bid, contracting, and construction management and contract closeout. In this case, the fee-in-lieu must be submitted as cash, certified check, or other negotiable instrument as approved to form by the city attorney.

C. Duration of the Guarantee. The guarantee shall remain in effect until the improvement is actually constructed and accepted by the city. Once the city has inspected and accepted the improvement, the city shall release the guarantee to the permittee. If the improvement is not completed to the city's satisfaction within the time limits specified in the permit approval, the city engineer may, at their discretion, draw upon the guarantee and use the proceeds to construct or complete construction of the improvement and for any related administrative and legal costs incurred by the city in completing the construction, including any costs incurred in attempting to have the permittee complete the improvement. Once constructed and approved by the city, any remaining funds shall be refunded to the permittee garees to construct those improvements upon written notification by the city, or at some other mutually agreed-to time. If the permittee fails to commence construction of the improvements and draw upon the city may, without further notice, undertake the construction of the improvements and draw upon the permittee's performance guarantee to pay those costs.

Finding: Conditionally complies. The applicant has proposed to construct the required public improvements prior to final plat approval in accordance with this section. **The applicant can meet this standard through compliance with Condition of Approval 1 and 2**.

CHAPTER 12.04 - STREETS, SIDEWALKS AND PUBLIC PLACES

The location, width and grade of the street shall be considered in relation to existing and planned streets, topographical conditions, public convenience and safety for all modes of travel, existing and identified future transit routes, pedestrian/bicycle access-ways, and the proposed use of the land to be served by the streets.

Finding: See findings below.

12.04.175 - Street design—Generally.

The location, width and grade of street shall be considered in relation to: existing and planned streets, topographical conditions, public convenience and safety for all modes of travel, existing and identified future transit routes and pedestrian/bicycle accessways, and the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. To the extent possible, proposed streets shall connect to all existing or approved stub streets that abut the development site. Where location is not shown in the development plan, the arrangement of streets shall either:

A. Provide for the continuation or appropriate projection of existing principal streets in the surrounding area and on adjacent parcels or conform to a plan for the area approved or adopted by the city to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical;

B. Where necessary to give access to or permit a satisfactory future development of adjoining land, streets shall be extended to the boundary of the development and the resulting dead-end street (stub) may be approved with a temporary turnaround as approved by the city engineer. Access control in accordance with Section 12.04.200 shall be required to preserve the objectives of street extensions.

Applicant's Response: Public streets are proposed in the subdivision to provide access to the lots / future homes and provide for future neighborhood connectivity / circulation. The preliminary plans show the location and arrangement of these improvements. As shown on the preliminary plans, street improvements are proposed to extend the sole existing abutting local street (Nutmeg Lane) and

provide for a future connection to Maplelane Road. Oregon Iris Way and Purple Ash Way are laid out in

a grid manner (preferred by the city) that is suitable for future connection as illustrated on the

preliminary plans.

Finding: Conditionally complies. As proposed, the preliminary layout of the subdivision provides for the future continuation of existing public streets and the development of abutting land. There is an existing local street stub Nutmeg Lane that is proposed to continue through the property. The applicant provided a non-binding preliminary connectivity analysis and transportation/circulation plan indicating how adjacent land might conceptually develop under existing development standards (Exhibit 9). **The applicant can assure this standard is met through Conditions of Approval 1, 2 and 10-15.**

12.04.180 Street design--Minimum right-of-way.

All development shall provide adequate right-of-way and pavement width. Adequate right-of-way and pavement width shall be provided by:

A. Complying with the street design standards contained in the table provided in Chapter 12.04. The street design standards are based on the classification of streets that occurred in the Oregon City Transportation System Plan (TSP), in particular, the following TSP figures provide the appropriate classification for each street in Oregon City: Figure 5-1: Functional Classification System and New Roadway Connections; Figure 5-3: Pedestrian System Plan; Figure 5.6: Bicycle System Plan; and Figure 5.7: Public Transit System Plan. These TSP figures from the Oregon City Transportation System Plan are incorporated herein by reference in order to determine the classification of particular streets.

Table 12.04.020 STREET DESIGN STANDARDS				
Type of Street	Maximum Right-of-Way Width	Pavement Width		
Major arterial	124 feet	98 feet		
Minor arterial	114 feet	88 feet		
Collector street	86 feet	62 feet		

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Neighborhood Collector street	81 feet	59 feet
Local street	54 feet	32 feet
Alley	20 feet	16 feet

B. The applicant may submit an alternative street design plan that varies from the street design standards identified above. An alternative street design plan may be approved by the city engineer if it is found the alternative allows for adequate and safe traffic, pedestrian and bicycle flows and transportation alternatives and protects and provides adequate multi-modal transportation services for the development as well as the surrounding community.

Applicant's Response: As shown on the preliminary plans, adequate right-of-way and paved widths are proposed for the streets within the project. Consistent with abutting existing streets and street stubs, these streets are proposed to be improved with 32 foot wide paved sections within right-of-ways that will not exceed 54 feet. (They are 53 feet wide.) Therefore, the application complies with the above listed requirements, and an alternate street design is unnecessary.

Finding: Conditionally complies. With the exception of alleys, for which the applicant seeks a variance not to construct, the proposed local streets comply with the standards listed above.

The proposed interior streets will be classified as Local Streets in the Oregon City Transportation System Plan, which requires a ROW width of 42 to 54 feet. Applicant has proposed a ROW dedication of 53 feet for Nutmeg Lane, Oregon Iris Way, and Purple Ash Way. This meets the City requirements.

The proposed Nutmeg Lane, Oregon Iris Way, and Purple Ash Way will be classified as Local Streets, which require a pavement width of 20 to 32 feet. The applicant has proposed full-street improvements forNutmeg Lane, Oregon Iris Way, and Purple Ash Way, which includes 32 feet of pavement (2-8-foot travel lanes, and 2-8-foot parking lanes), curbs and gutters, 5-foot planter strips including curb width, and 5-foot concrete sidewalks behind the planter strips, city utilities (water, sanitary and storm drainage facilities), curb return radii, curb (handicap) ramps, centerline monumentation in monument boxes, traffic control devices, street trees, and street lights.

The applicant can satisfy this standard by complying with conditions of approval 1, 2, and 10-15.

12.04.185 Street design--Access control.

A. A street which is dedicated to end at the boundary of the development or in the case of half-streets dedicated along a boundary shall have an access control granted to the city as a city controlled plat restriction for the purposes of controlling ingress and egress to the property adjacent to the end of the dedicated street. The access control restriction shall exist until such time as a public street is created, by dedication and accepted, extending the street to the adjacent property.

B. The city may grant a permit for the adjoining owner to access through the access control.

C. The plat shall contain the following access control language or similar on the face of the map at the end of each street for which access control is required: "Access Control (See plat restrictions)."

D. Said plats shall also contain the following plat restriction note(s): "Access to (name of street or tract) from adjoining tracts (name of deed document number[s]) shall be controlled by the City of Oregon City by the recording of this plat, as shown. These access controls

shall be automatically terminated upon the acceptance of a public road dedication or the recording of a plat extending the street to adjacent property that would access through those Access Controls."

Finding: Conditionally complies. As shown on the preliminary plans, all streets will end at the project boundary. The plat will grant access control to the city. The standard will be met when the final subdivision plat is filed and accepted. **The applicant can satisfy this standard by complying with conditions of approval 1, 2, and 10-15.**

12.04.190 Street design--Alignment.

The centerline of streets shall be:

A. Aligned with existing streets by continuation of the centerlines; or

B. Offset from the centerline by no more than ten feet, provided appropriate mitigation, in the judgment of the city engineer, is provided to ensure that the offset intersection will not pose a safety hazard.

Finding: Complies as proposed. The alignment of the centerlines of all proposed streets complies with this standard.

12.040.195 Street design—Minimum Street Intersection Spacing.

A. All new development and redevelopment shall meet the following public street intersection spacing standards:

	Distance in Feet between Streets of Various Classifications								
	Between Arterial & Arterial	Between Arterial & Collector	Between Arterial & Nbhd Collector	Between Arterial & Local Street	Between Collector Street and Collector Street	Between Collector Street and Nbhd Collector	Between Collector & Local Street	Between Nbhd Collector & Local Street	Between two adjacent Local Streets
Measured along an Arterial Street	1320	800	600	300	600	300	150	150	150
Measured along a Collector Street	800	800	600	300	600	300	150	150	150
Measured along a Nbhd Collector Street	800	600	300	300	300	150	150	150	150
Measured along a Local Street	600	600	300	300	300	150	150	150	150

Table 12.04.040—Public Street Intersection Spacing Standards

or

B. A lesser distance between intersections may be allowed, provided appropriate mitigation, in the judgment of the city engineer, is provided to ensure that the reduction in intersection spacing will not pose a safety hazard.

Finding: Complies as proposed. The property takes access from a local public street stub, Nutmeg Lane. The proposed streets within the subdivision are all local streets and are all spaced in excess of 150 feet from one another.

12.04.200 Street Design-Constrained Local Streets and/or Right-of-Way

Any accessway with a pavement width of less than thirty-two feet shall require the approval of the city engineer, community development director and fire chief and shall meet minimum life safety requirements, which may include fire suppression devices as determined by the fire marshal to assure an adequate level of fire and life safety. The standard width for constrained streets is twenty feet of paving with no on-street parking and twenty-eight feet with on street parking on one side only. Constrained local streets shall maintain a twenty-foot wide unobstructed accessway. Constrained local streets and/or right-of-way shall comply with necessary slope easements, sidewalk easements and altered curve radius, as approved by the city engineer and community development director.

Finding: Not applicable. The applicant has not proposed constrained streets.

12.04.205 Intersection Level of Service Standards.

When approving land use actions, the City of Oregon City requires all relevant intersections to be maintained at the minimum acceptable Level Of Service (LOS) upon full build-out of the proposed land use action.

Finding: Complies as proposed. Findings demonstrating that all Level of Service (LOS) requirements are satisfied and are included in the Traffic Impact Study (TIS) prepared by Lancaster Engineering, which is included in the submittal materials. The applicant conducted a level of service analysis for four intersections as discussed in the TIS. At each intersection, the level of service and delay calculations were provided in order to assess operations relative to the city's intersection LOS standard. All four intersections were predicted to meet city standards for the AM and PM peak hours.

12.04.210 Street Design--Intersection Angles

Except where topography requires a lesser angle, streets shall be laid out to intersect at angles as near as possible to right angles. In no case shall the acute angles be less than eighty degrees unless there is a special intersection design. An arterial or collector street intersecting with another street shall have at least one hundred feet of tangent adjacent to the intersection unless topography requires a lesser distance. Other streets, except alleys, shall have at least fifty feet of tangent adjacent to the intersection unless topography requires a lesser distance. All street intersections shall be provided with a minimum curb return radius of twenty-five feet for local streets. Larger radii shall be required for higher street classifications as determined by the city engineer. Additional right-of-way shall be required to accommodate curb returns and sidewalks at intersections. Ordinarily, intersections should not have more than two streets at any one point.

Finding: Complies as proposed. All proposed intersection angles are laid out at right angles, and include at least fifty feet of tangent adjacent to the intersection, and curb return radii of 25 feet. Necessary right-of-ways are proposed to accommodate these street improvements.

12.04.215 - Street design—Off-site street improvements.

During consideration of the preliminary plan for a development, the decision maker shall determine whether existing streets impacted by, adjacent to, or abutting the development meet the city's applicable planned minimum design or dimensional requirements. Where such streets fail to meet these requirements, the decision-maker shall require the applicant to make proportional improvements sufficient to achieve conformance with minimum applicable design standards required to serve the proposed development.

Finding: Not applicable. The applicant has proposed to connect to existing City streets that provide access to the site which meet City requirements. Off-site improvements are not warranted.

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12.04.220 Street Design--Half Street

Half streets, while generally not acceptable, may be approved where essential to the development, when in conformance with all other applicable requirements, and where it will not create a safety hazard. When approving half streets, the decision maker must first determine that it will be practical to require the dedication of the other half of the street when the adjoining property is divided or developed. Where the decision maker approves a half street, the applicant must construct an additional ten feet of pavement width so as to make the half street safe and usable until such time as the other half is constructed. Whenever a half street is adjacent to property capable of being divided or developed, the other half of the street shall be provided and improved when that adjacent property divides or develops. Access control as described in [Section] 12.04.200 may be required to preserve the objectives of half streets.

Finding: Not applicable. The applicant does not propose half streets.

12.04.225 Street Design—Cul-de-sacs and Dead-End Streets

The city discourages the use of cul-de-sacs and permanent dead-end streets except where construction of a through street is found by the decision maker to be impracticable due to topography or some significant physical constraint such as unstable soils, wetland, natural or historic resource areas, dedicated open space, existing development patterns, or arterial access restrictions. When permitted, cul-de-sacs and permanent dead-end streets shall have a maximum length of three hundred fifty feet, as measured from the right-of-way line of the nearest intersecting street to the back of the cul-de-sac curb face, and include pedestrian/bicycle accessways as provided in Section 17.90.220 of this Code and Chapter 12.24. This section is not intended to preclude the use of curvilinear eyebrow widening of a street where needed to provide adequate lot coverage.

Where approved, cul-de-sacs shall have sufficient radius to provide adequate turn-around for emergency vehicles in accordance with Fire District and city adopted street standards. Permanent dead-end streets other than cul-de-sacs shall provide public street right-of-way/easements sufficient to provide turn-around space with appropriate no-parking signs or markings for waste disposal, sweepers, and other long vehicles in the form of a hammerhead or other design to be approved by the decision maker. Driveways shall be encouraged off the turnaround to provide for additional on-street parking space. (Prior code §9-2-2)

Finding: Conditionally complies. The applicant has not proposed any permanent cul-de-sacs or dead-end streets. Future extension of Nutmeg Lane to the north of the proposed subdivision will allow additional access to Maplelane Road, however the existing and proposed local street connections will provide adequate and safe access until that connection can be made. Temporary turnarounds for fire access at the end of Oregon Iris Way and Purple Ash Way may be required by Clackamas Fire District No. 1 unless adequate mitigation is accepted. The applicant shall coordinate the location of any temporary turnarounds with the city engineer and Clackamas Fire District No. 1 prior to approval of construction plans. **The applicant can comply with this standard through Condition of Approval 10**.

12.04.230 Street Design - Street Names

Except for extensions of existing streets, no street name shall be used which will duplicate or be confused with the name of an existing street. Street names shall conform to the established standards in the city and shall be subject to the approval of the city.

Finding: Complies as proposed. The final names of all streets will be reviewed and approved by the city building division prior recordation of the final plat.

12.04.235 - Street Design - Grades and Curves

Grades and center line radii shall conform to the standards in the city's street design standards and specifications. (Prior code §9-4-1)

Finding: Complies as proposed. As proposed all grade lines and center line radii appear to comply with the City's street design standards and specifications.

12.04.240 - Street Design—Development Abutting Arterial or Collector Street

Where development abuts or contains an existing or proposed arterial or collector street, the decision maker may require: access control; screen planting or wall contained in an easement or otherwise protected by a restrictive covenant in a form acceptable to the decision maker along the rear or side property line; or such other treatment it deems necessary to adequately protect residential properties or afford separation of through and local traffic. Reverse frontage lots with suitable depth may also be considered an option for residential

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property that has arterial frontage. Where access for development abuts and connects for vehicular access to another jurisdiction's facility then authorization by that jurisdiction may be required.

Finding: Not applicable. The development does not abut any arterial or collectors streets.

12.04.245 - Street design—Pedestrian and bicycle safety.

Where deemed necessary to ensure public safety, reduce traffic hazards and promote the welfare of pedestrians, bicyclists and residents of the subject area, the decision maker may require that local streets be so designed as to discourage their use by nonlocal automobile traffic.

All crosswalks shall include a large vegetative or sidewalk area which extends into the street pavement as far as practicable to provide safer pedestrian crossing opportunities. These curb extensions can increase the visibility of pedestrians and provide a shorter crosswalk distance as well as encourage motorists to drive slower. The decision maker may approve an alternative design that achieves the same standard for constrained sites or where deemed unnecessary by the city engineer.

Finding: Complies as proposed. As proposed, all streets appear to comply with City standards. In general, the overall street pattern is designed to discourage non-local through traffic. Curb extensions are not appropriate for local streets. There are no bicycle lanes proposed for the project as all proposed streets are classified as local streets, which are not striped for bicycle lanes.

12.04.255 Street Design--Alleys

Public alleys shall be provided in the following districts R-5, R-3.5, R-2, MUC-1, MUC-2 and NC zones unless other permanent provisions for private access to off-street parking and loading facilities are approved by the decision maker. The corners of alley intersections shall have a radius of not less than ten feet. (Prior code §9-4-3)

Alleys shall be provided in commercial and industrial districts, unless other permanent provisions for access to off-street parking and loading facilities are approved by the decision-maker.

Finding: The applicant has requested a variance to this standard. The purpose of this standard is to provide primary access to residential garages in the zone districts listed above. Although not stated in this standard, the intent of this requirement was to promote a more attractive, less automobile dominated streetscape, to provide adequate space for on-street parking, to facilitate street tree planting requirements, to assure pedestrian and vehicular safety by limiting vehicular access points, and to assure that adequate sight distance requirements are met.

The alley requirement was also intended to promote a more attractive streetscape to accommodate the smaller minimum setbacks and smaller front yards in those zone districts where the requirement applies. The goal is a more pleasant and safer environment for pedestrian and bicyclists, as well as to provide adequate guest and visitor parking in the front of homes. Sidewalks and planter strips in such developments will not be interrupted by driveway cuts on every lot.

The applicant has prepared a detailed variance request that addresses the intent of the requirement and design points discussed above, and which responds to the variance approval criteria in section 17.60 (Exhibits 9 and 10).

12.04.260 - Street design—Transit.

Streets shall be designed and laid out in a manner that promotes pedestrian and bicycle circulation. The applicant shall coordinate with Tri-Met where the application impacts transit streets as identified on Figure 5.7: Public Transit System Plan of the Oregon City Transportation System Plan. Pedestrian/bicycle access ways shall be provided as necessary in conformance with the requirements in Section 17.90.220 of this code and Chapter 12.24 to minimize the travel distance to transit streets and stops and neighborhood activity

centers. The decision maker may require provisions, including easements, for transit facilities along transit streets where a need for bus stops, bus pullouts or other transit facilities within or adjacent to the development has been identified.

Finding: Not applicable. Transit facilities are not identified for this property in the Transportation System Plan, and none of the streets abutting the development is designated as a transit street.

12.04.265 - Street design—Planter strips.

All development shall include vegetative planter strips that are five feet in width or larger and located adjacent to the curb. This requirement may be waived or modified if the decision maker finds it is not practicable. The decision maker may permit constrained sites to place street trees on the abutting private property within 10 feet of the public right-of-way if a covenant is recorded on the title of the property identifying the tree as a city street tree which is maintained by the property owner. Development proposed along a collector, minor arterial, or major arterial street may use tree wells with root barriers located near the curb within a wider sidewalk in lieu of a planter strip, in which case each tree shall have a protected area to ensure proper root growth and reduce potential damage to sidewalks, curbs and gutters.

To promote and maintain the community tree canopy adjacent to public streets, trees shall be selected and planted in planter strips in accordance with Chapter 12.08, Street Trees. Individual abutting lot owners shall be legally responsible for maintaining healthy and attractive trees and vegetation in the planter strip. If a homeowners' association is created as part of the development, the association may assume the maintenance obligation through a legally binding mechanism, e.g., deed restrictions, maintenance agreement, etc., which shall be reviewed and approved by the city attorney. Failure to properly maintain trees and vegetation in a planter strip shall be a violation of this code and enforceable as a civil infraction.

Finding: Complies as proposed. As proposed, planter strips appear to meet City standards. These areas will be improved and planted with street trees when new homes are built and occupied.

12.04.270 - Standard construction specifications.

The workmanship and materials for any work performed under permits issued per this chapter shall be in accordance with the edition of the "Standard Specifications for Public Works Construction," as prepared by the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the city, in effect at the time of application. The exception to this requirement is where this chapter and the Public Works Street Design Drawings provide other design details, in which case the requirements of this chapter and the Public Works Street Design Drawings shall be complied with. In the case of work within ODOT or Clackamas County rights-of-way, work shall be in conformance with their respective construction standards.

Finding: Conditionally complies. All public improvements shall be designed by a professional engineer, licensed in the State of Oregon. The plans for these improvements will be submitted to the City and reviewed for consistency with all City requirements. After the appropriate City construction permits are obtained, the improvements will be constructed by a licensed general contractor in accordance with the approved plans. Finally, the improvements will be inspected for consistency with the approved final plans prior to City acceptance. **The applicant can meet this standard through Condition of Approval 1, 2 and 10-15**.

Chapter 12.08 - PUBLIC AND STREET TREES

12.08.015 Street tree planting and maintenance requirements.

All new construction or major redevelopment shall provide street trees adjacent to all street frontages. Species of trees shall be selected based upon vision clearance requirements, but shall in all cases be selected from the Oregon City Street Tree List or be approved by a certified arborist. If a setback sidewalk has already been constructed or the Development Services determines that the forthcoming street design shall include a setback sidewalk, then all street trees shall be installed with a planting strip. If existing street design includes a curb-tight sidewalk, then all street trees shall be placed within the front yard setback, exclusive of any utility easement. A. One street tree shall be plated for every thirty-five feet of property frontage. The tree spacing shall be evenly distributed throughout the total development frontage. The community development director may approve an alternative street tree plan if site or other constraints prevent meeting the placement of one street tree per thirty-five feet of property frontage.

- B. The following clearance distances shall be maintained when planting trees:
- 1. Fifteen feet from streetlights;

2. Five feet from fire hydrants;

3. Twenty feet from intersections;

4. A minimum of five feet (at mature height) below power lines.

C. All trees shall be a minimum of two inches in caliper at six inches above the root crown and installed to city specifications.

D. All established trees shall be pruned tight to the trunk to a height that provides adequate clearance for street cleaning equipment and ensures ADA complaint clearance for pedestrians.

Finding: Conditionally complies. The applicant indicated that this requirement will be met and has submitted a preliminary street tree planting plan indicating the locations, species and spacing of street trees in accordance with this section. The plan indicates 48 street trees and tree species selected from the city's street tree list and which are appropriate for the planter width proposed. The applicant shall prepare a final street tree planting plan in compliance with this section for review prior to final plat recordation. The plan will be reviewed by Staff during review of the public improvement construction plans for compliance with this code section. **The applicant can assure this standard is met through Condition of Approval 17.**

12.08.020 Street tree species selection.

The community development director may specify the species of street trees required to be planted if there is an established planting scheme adjacent to a lot frontage, if there are obstructions in the planting strip, or if overhead power lines are present.

Finding: Not applicable. There is no established planting plan nor are there any obstructions in the planter strip, and all power lines will be underground.

CHAPTER 17.16 - R-3.5 DWELLING DISTRICT

17.16.010 - Designated.

This residential district is designed for single-family attached and detached residential units and two-family dwellings on lot sizes of approximately three thousand five hundred square feet per dwelling.

Finding: Complies as proposed. The applicant has proposed lots for single-family detached residential units that are at least 3,500 square feet in size.

17.16.020 - Permitted uses.

Uses permitted in the R-3.5 district are:

- A. Two-family dwellings (duplex);
- B. Single-family detached residential units;
- C. Single-family attached residential units (Row houses with no more than six dwelling units may be attached in a row);

D. Parks, playgrounds, playfields and community or neighborhood centers;

E. Home occupations;

F. Farms, commercial or truck gardening and horticultural nurseries on a lot not less than twenty thousand square feet in area (retail sales of materials grown on-site is permitted);

G. Temporary real estate offices in model homes located on and limited to sales of real estate on a single piece of platted property upon which new residential buildings are being constructed;

H. Accessory uses, buildings and dwellings;

I. Family day care provider, subject to the provisions of Section 17.54.050;

J. Residential home per ORS 443.400.

Finding: Complies as proposed. The applicant has proposed lots for single family residential units, a permitted use.

17.16.030 Conditional uses.

Finding: Not applicable. The applicant has not proposed a Conditional Use.

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17.16.040 Dimensional standards.

Dimensional standards in the R-3.5 district are:

A. Minimum Lot Areas.

- 1. Residential uses, three thousand five hundred square feet per unit.
- 2. Non-residential uses, zero minimum;
- B. Minimum lot width, twenty-five feet;
- C. Minimum lot depth, seventy feet;
- D. Maximum building height, two and one-half stories, not to exceed thirty-five feet;
- E. Minimum Required Setbacks:
- 1. Front yard, five feet minimum setback,
- 2. Front porch, zero feet minimum setback,
- 3. Interior side yard,

Detached unit, five feet minimum setback

Attached unit, seven feet minimum setback on the side that does not abut a common property line.

4. Corner side yard, ten-foot minimum setback,

5. Rear yard, fifteen-foot minimum setback,

6. Rear porch, ten-foot minimum setback.

7. Attached and detached garage, twenty feet minimum setback from the public right-of-way where access is taken, except for alleys. Detached garages on an alley shall be setback a minimum of five feet.

F. Garage standards: See Chapter 17.21—Residential Design Standards.

G. Maximum lot coverage: The footprint of all structures two hundred square feet or greater shall cover a maximum of fifty-five percent of the lot area.

Finding: Complies as proposed. The minimum lot sizes, depths, and widths as proposed on the preliminary plat (Exhibit 3b(iii)) all appear to meet and in fact in all cases exceed the minimum dimensional standards of this section. The required setbacks can be accommodated based on the lot dimensions proposed and will be further reviewed for conformance when building permit applications are submitted for construction.

Chapter 17.41 TREE PROTECTION STANDARDS

Finding: Not applicable. The applicant does not propose any tree removal on the property. There are currently no trees on the property > 6" in diameter as indicated on the applicant's plans.

Chapter 17.47 EROSION AND SEDIMENT CONTROL

17.47.070 Erosion and sediment control plans.

A. An application for an erosion and sediment control permit shall include an erosion and sediment control plan, which contains methods and interim measures to be used during and following construction to prevent or control erosion prepared in compliance with City of Oregon City public works standards for erosion and sediment control. These standards are incorporated herein and made a part of this title and are on file in the office of the city recorder.

Finding: Conditionally complies. A preliminary erosion and sedimentation control plan was submitted in the preliminary plans. The plan includes measures that will ensure that sediment laden waters will not leave the site. A final erosion and sedimentation control plan shall be submitted and approved before any construction activities commence. **The applicant can assure this standard is met through Condition of Approval 3**.

CHAPTER 17.50 - ADMINISTRATION AND PROCEDURES

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This chapter provides the procedures by which Oregon City reviews and decides upon applications for all permits relating to the use of land authorized by ORS Chapters 92, 197 and 227. These permits include all form of land divisions, land use, limited land use and expedited land division and legislative enactments and amendments to the Oregon City comprehensive plan and Titles 16 and 17 of this Code.

Finding: This application was reviewed pursuant to the relevant procedures required by Chapter 17.50 for a Type III land use decision, including review of the zoning, street design and subdivision requirements, variance criteria, public notice and comment, conditions of approval and issuance of the decision. Any appeal, request for reconsideration, or modification of this application shall be processed in accordance with the applicable procedures required by Chapter 17.50.

CHAPTER 17.60 - VARIANCES

Background

The application represents the second phase of a subdivision (the adjacent 81 lot Crabtree Terrace Subdivision) that was first submitted to the City in 2006 (City file TP 07-05 and WR 07-13) and was completed with the final plat recording in 2008.

Since the first subdivision was approved, the city adopted new development regulations, which included the following requirement in OCMC 12.04.255:

12.04.255 - Street design—Alleys.

Public alleys shall be provided in the following districts R-5, R-3.5, R-2, MUC-1, MUC-2 and NC zones unless other permanent provisions for private access to off-street parking and loading facilities are approved by the decision maker. The corners of alley intersections shall have a radius of not less than ten feet.

(Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010)

The applicant asserts that the adoption of an alley requirement for R-3.5 properties (as this property is zoned) impacts the owner's ability to complete this project and achieve the goals for the property as originally conceived and approved in 2006.

The property owner's goal with the variance and subdivision application is to develop the proposed subdivision in a similar manner as was the first "phase" of the project, with a grid system of local public streets providing direct front loaded access to 4,000 – 5,000 square foot lots for single-family detached homes, without alleys. This was the applicant's intent when he submitted the Crabtree Terrace No. 1 Subdivision application in 2006 (as shown in the attached approved shadow plat) and graded the property in 2007 and 2008 in accordance with a City approved grading permit. The owner had hoped to complete development of the entire property (including this portion) in 2009. However, the economic downturn of the past several years, which has especially impacted the residential housing market, prevented him from meeting this goal.

The applicant submitted a chronology of the project in Exhibit 11 (named "Crabtree Terrace Critical Project Milestones"), that documents important stages in the approval of the Crabtree I subdivision and the grading permit application and approval for Crabtree Terrace No. 2, the property subject to this application .

Additionally, the applicant's written justification for the variance request is based on the following points which the applicant states preclude the ability to provide alleys within the proposed subdivision:

• Prior approval of a fill and grading permit on the subject property;

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- Site Dimensions / Geometry;
- Unintended / Undesirable Results, specifically additional increases in impervious surfaces, the loss of rear yards which would impact privacy and safety for families with pets and children; and
- Difficulty of preparing flat buildable lots;

Please refer to the applicant's variance narrative in Exhibits 3a (iii) and 9 for a detailed explanation of the above points.

17.60.010 - Authority.

According to procedures set forth in Section 17.60.030, the planning commission or the community development director may authorize variances from the requirements of this title. In granting a variance, the planning commission or community development director may attach conditions to protect the best interests of the surrounding property or neighborhood and otherwise achieve the purposes of this title. No variances shall be granted to allow the use of property for a purpose not authorized within the zone in which the proposed use would be located.

Finding: Complies as proposed. This variance and subdivision application was submitted to the planning commission. The planning commission may approve, approve with conditions or deny the application. The application is for a permitted land use, residential development in the R-3.5 zone. No variance has been requested to allow a land use that is not permitted in the zone district.

17.60.020 - Variances—Procedures.

A. A request for a variance shall be initiated by a property owner or authorized agent by filing an application with the city recorder. The application shall be accompanied by a site plan, drawn to scale, showing the dimensions and arrangement of the proposed development. When relevant to the request, building plans may also be required. The application shall note the zoning requirement and the extent of the variance requested. Procedures shall thereafter be held under Chapter 17.50. In addition, the procedures set forth in subsection D. of this section shall apply when applicable.

Finding: Complies as proposed. The application was initiated by the owner's representative, AKS Engineering and Forestry, on behalf of the property owner. The application includes all necessary site plans which are drawn to scale in the subdivision application. The applicant has not provided any building plans.

The applicant provided a detailed narrative and written responses to the code requirements which describe the zoning requirement for alleys and the extent of the variance requested. The variance request cannot be approved administratively by the Community Development Director so it has been processed pursuant to a Type III discretionary land use process as set forth in OCMC 17.50.030.(C);

Type III decisions involve the greatest amount of discretion and evaluation of subjective approval standards, yet are not required to be heard by the city commission, except upon appeal. In the event that any decision is not classified, it shall be treated as a Type III decision. The process for these land use decisions is controlled by ORS 197.763. Notice of the application and the planning commission or the historic review board hearing is published and mailed to the applicant, recognized neighborhood association(s) and property owners within three hundred feet. Notice must be issued at least twenty days prehearing, and the staff report must be available at least seven days pre-hearing. At the evidentiary hearing held before the planning commission or the historic review board, all issues are addressed. The decision of the planning commission or historic review board and the record. The city commission decision on appeal from the historic review board or the planning commission is the city's final decision and is appealable to LUBA within twenty-one days of when it becomes final.

The applicant asserts that the previously performed site work to grade the property established the type of development that would occur on the site. The applicant applied for and received two separate grading permits, FP 07-004 (Exhibit 5, with plans), and FP 07-006 (Exhibit 4, with plans). According to the applicant grading for Crabtree Terrace No. 2 was done in conjunction with grading for Crabtree Terrace in anticipation of planning approval for the next phase of the development. In fact, the grading permit for Crabtree Terrace

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No. 2 was actually issued prior to the one for Crabtree Terrace. However, for a variety of reasons, including the economic downturn, the Crabtree Terrace No. 2 land use application was not submitted until recently.

The applicant's prior grading of the site to accommodate the applicant's future preferred lot pattern, size and building design is a self-imposed burden that is not binding on the city. Both the applicant and the city are aware that the prior approval of a grading permit for the site does not create a basis for approval of a variance from the alley requirement, nor does it relieve the applicant of compliance with the code. Any person may apply for a grading permit on residential property provided that it complies with the applicable criteria in OCMC Chapter 15.28.

The variance approval criteria are addressed below.

17.60.030 - Variance—Grounds.

A variance may be granted only in the event that all of the following conditions exist:

A. That the variance from the requirements is not likely to cause substantial damage to adjacent properties by reducing light, air, safe access or other desirable or necessary qualities otherwise protected by this title;

Finding: Complies as proposed. The applicant provided a detailed analysis responding to this standard. The City zoning code allows for attached homes on 3,500 square foot lots in the R-3.5 zone with 5 foot rear yard setbacks to alleys. The R-3.5 zoning district allows for single-family attached and detached homes, duplexes and row-house residential units at density of 1 unit 3,500 square feet. As illustrated on the preliminary plans, the proposed project involves single-family detached homes on +/- 4,300 square foot lots with 15 foot rear yard setbacks that will provide for greater separation between individual homes. The requested variance would not cause damage to adjacent properties through the reduction of light, air, safe access or other desirable or necessary qualities otherwise protected by the zoning code because:

- shadows will be reduced by facilitating the development of single-level homes;
- greater setbacks than would be allowed under an alley design will enhance air circulation, and reduced paving and grading construction work will reduce air pollution;
- the development proposes pedestrian safety design for circulation, including combined driveways;
- other desirable qualities including additional pervious surface to reduce stormwater runoff and rear yards will be included in the design

Staff concurs with the applicant's response.

B. That the request is the minimum variance that would alleviate the hardship;

Analysis

In response to this criterion, the applicant states that application of OCMC 12.04.255 in such a manner as to require alleys for this specific property creates a hardship for John Jones.

This is not a situation where a dimensional standard is to be varied. This standard implies that the applicant should explore other options before requesting the variance, including partial compliance with the specified standard.

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The applicant prepared both a graphic illustration as well as a detailed narrative explanation why the alley requirement should not be applied to this particular development (See Exhibit 9-11). Various subdivision layouts with alleys have been superimposed over the current topography of the site, and call-out text boxes with arrows to illustrate and identify locations where the alleys would be problematic.

Additionally, in their response to this criterion, the applicant cites the timeline of the proposed project from the date the property was acquired in 2006 up until the time the final plat for Crabtree I was recorded (Exhibit 11). The applicant describes in detail how Mr. Jones pursued the necessary permits to prepare the site for development of the current proposal, but that due to economic conditions, and the lack of any phasing options in the current city code, the second phase of Crabtree could not be completed.

The applicant asserts that subsequent to obtaining necessary City approvals and completing the Crabtree Terrace Subdivision and grading for this portion of the site, two significant changes have occurred. First, the economic downturn of the past several years, which especially impacted the residential housing market, delayed submittal of an application for this phase (Crabtree Terrace No. 2). Second, the City has adopted an alley requirement for R-3.5 properties. Due to the factors described above, the second condition places a hardship on the applicant.

Next, the applicant asserts that previously performed site work to grade the property established the type of development that would occur on the site. This site work was performed and completed in accordance with an approved 2007 Grading Permit [Note see Exhibit 5]. This grading permit was issued based on the City's approval of the Crabtree Terrace Subdivision (City file TP 07-05 and WR 07-13). This work was completed in good faith prior to the code change regarding alleys.

While the prior approval of the grading permit does not relieve the applicant from compliance with the other adopted city codes and regulations, staff concurs with the applicant that compliance with the alley requirement when the applicant had both 1) discussed and explored the possibility of phasing with staff prior to submittal of a subdivision application for Crabtree Terrace, but due to code limitations, could not pursue such phasing; and 2) fully complied with all other city requirements in the development of a cohesive subdivision, does in this case constitute a hardship.

Next, the applicant states that due to existing site dimensions and geometry, the variance is the minimum necessary to alleviate the hardship. The applicant states that the configuration of the site does not lend itself to providing alleys. The overall site dimensions and the existing street stub set up a logical "lot pattern" as shown in the preliminary plans. Nutmeg Lane runs in a north-south direction, and Purple Ash Way and Oregon Iris Way run in an east-west direction. **Staff concurs**.

The applicant provided the specific italicized information related to the standard of requesting a variance that is the minimum necessary to alleviate the hardship and staff's analysis follows each point:

"• There is no opportunity for an alley along the south boundary of the site (along the back of Lots 83-87) because it is the site boundary, there are existing developed lots with built homes, and there is a significant grade change along this line. This is demonstrated on Exhibits 'A' and 'E'."

Staff concurs. Significant engineering revisions would be needed to support an alley in this location.

"• There is no opportunity for an alley along the east boundary of the site (lots 87, 88, 105, and 106) because the "lot pattern" is not set up for it, it is a site boundary, it is the City Limits and Urban Growth Boundary, and there is an existing easement along the line. This is demonstrated on Exhibits 'A' and 'E'."

Staff concurs. Significant engineering revisions would be needed to support an alley in this location.

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"• There is no opportunity for an alley along the north boundary of the site (along the back of lots 106-111) because it is a site boundary, the adjacent property is not being developed at this time, and there is a significant grade change along this line. This is demonstrated on Exhibits 'A' and 'E''."

Staff concurs. Significant engineering revisions would be needed to support an alley in this location.

"• There is no opportunity for an alley along the west boundary of the site (lots 82 and 95-98) because it is a site boundary, a portion of it is the City Limits, and there is a significant grade change. This is demonstrated on Exhibits 'A' and 'E'."

"• The geometry of the site is such that the lots are not deep enough to have alleys and maintain reasonable building envelopes. This is demonstrated on Exhibits 'A' and 'E'."

Staff concurs. As graded today, significant engineering revisions would be needed to support the construction of alleys and allow the building envelopes preferred by the applicant.

"• Site boundaries prohibit the ability to develop and construct an alley, have a shared alley, and have the alley in a reciprocal access easement. This is demonstrated on Exhibits 'A' and 'E'.

Staff concurs. While the code does not require that alleys be shared on both sides, the intent of the code is to provide alleys with rear access to properties on either side, whether the alley is publicly dedicated or whether the alley is in an easement. The city has not, however, required alleys be located in every situation, for example when there is a previously approved subdivision without alleys and when the rear yards of the existing subdivision would back up to a new alley. This is true with the previously approved subdivisions Meriwether (TP 10-01) and Walnut Glen (TP 11-01).

Next, in support of their rationale that the variance requested is the minimum that would alleviate the hardship, the applicant details a number of what are termed "unintended/ undesirable results" due to the alley requirement. These include the inability to construct flat buildable lots, loss of outdoor yards, and additional impervious surfaces. These reasons are compelling in light of the fact that the applicant expected to build a similar single-family quality housing product that is clearly popular and attractive in today's housing market in Oregon City, and has, regardless of the presence of alleys being required, proved to be pedestrian friendly and affordable for a variety of homeowners.

Finding: Complies as proposed. Upon review of all of the applicant responses to this particular criterion, it is clear that a number of circumstances and decisions have come into play over time to lead the applicant to request a variance to the alley requirement. Staff considers the variance request both reasonable, given these circumstances, and the minimum which would alleviate the identified hardship.

C. Granting the variance will equal or exceed the purpose of the regulation to be modified.

Finding: Complies as proposed. The purpose of the alley standard is to provide primary access in the zone districts listed in OCMC 12.04.255. In the R-3.5 zone district this would provide primary access to residences through the provision of alley-oriented garages, which may be either detached (in which case they may be 5' from the alley right-of-way), or attached (in which case a 20' setback applies). The OCMC does not contain a statement that clearly states the purpose of requiring alleys in the R-3.5 District. However, the intent of the requirement is as follows.

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The purpose of this standard is to provide primary access to residential garages in the zone districts listed above. Although not stated in this standard, the intent of this requirement was to promote a more attractive, less automobile dominated streetscape, to provide adequate space for on-street parking, to facilitate street tree planting requirements, to assure pedestrian and vehicular safety by limiting vehicular access points, and to assure that adequate sight distance requirements are met.

The alley requirement was also intended to promote a more attractive streetscape to accommodate the smaller minimum setbacks and smaller front yards in those zone districts where the requirement applies. The goal is a more pleasant and safer environment for pedestrian and bicyclists, as well as to provide adequate guest and visitor parking in the front of homes. Sidewalks and planter strips in such developments will not be interrupted by driveway cuts on every lot.

Bearing all of this in mind, the applicant prepared two sets of responses in order to show how the intent of the requirement is being met. The first set of code responses was provided in the applicant's initial application (Exhibit 3a(iii)). :

"• Assure sufficient parking

It is anticipated that each lot will have a two car garage with a driveway that will provide for off-street parking. Four off-street parking spaces per dwelling unit exceeds the minimum City requirement by three spaces. In addition, as shown on the preliminary plans, driveways are proposed to be combined where possible to maximize the availability of on-street parking. Therefore, the proposal will equal or exceed the amount of parking that would be provided in an alleyway scenario given the same lot sizes. This criteria is met. "

"• Provide a safe pedestrian environment.

As described above, the proposal will provide a safe pedestrian environment. Curbs and landscape planter strips (with street trees) are proposed to separate pedestrian travel from the street. Safe pedestrian environments with front entry loaded garages on 50 foot wide lots accessing local public streets are found in many areas throughout this country, including Oregon City. Combining driveways, as is proposed, provides an additional method of enhancing pedestrian safety because it maximizes the amount of curb exposure and minimizes the number of driveways. Nothing unusual is being proposed that would in any way be unsafe for pedestrians. Therefore, the proposal provides a safe pedestrian environment that an equals or exceeds that which would be provided if alleys were provided. This criteria is met. "

"• Provide an attractive pedestrian environment.

Based on conversations with City staff, it is understood that at the time this requirement was adopted, there was an aesthetic concern with attached townhomes and homes on very small/narrow lots being dominated by garages. This concern has been remedied with the adoption of the Residential Design Standards (garage standards) found in Chapter 17.21 which minimize effects of garages in the pedestrian environment and enhances the appearance of residential structures. The future homes in this project will be subject to these standards. Furthermore, the proposed lot widths in the project mitigate for any perceived garage widths because the lots equal or exceed 50 feet, surpassing the 25 foot minimum lot width requirement for the R-3.5 District by 25 feet (or 50%). Fifty-foot wide lots, as are proposed, satisfies the minimum lot width requirement for the R-6 zone, which does not require alleyways. Therefore, the view from the street (pedestrian environment) will be similar to an R-6 subdivision. These factors, combined with the fact that all future homes will be detached (as opposed to attached homes) ensures that this purpose will be met. This criteria is met. "

The applicant provided a supplemental response to further support the variance request (Exhibit 9-11): *"Considering the purpose of alleys (to "improve mobility and reduce obstacles to on-street parking"):*

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A preliminary circulation plan is included in the application materials showing that extensive connections are proposed within the project to connect to surrounding development that is supported by an extensive and efficient circulation system that provides for all forms of mobility including public streets for cars and bicyclists and sidewalks with curb extensions (exceeds City requirements) for pedestrians."

"The photographs from Google Earth "streetview" shown (Exhibit provided) below depict a public street with attached dwelling units and rear-loaded garages accessed by alleys (left) and the street next to it with detached dwelling units that are front loaded (right). As shown below, the street shown on the left accessed by alleys (attached units) is dominated by cars parked on both sides of the street while the adjacent street with detached homes (and garages in the front) is relatively unoccupied by street parking."

"The above photos illustrate a typical situation: that the need for on-street parking is driven by the development type rather than a property's zoning district. Considering that Crabtree No. 2 subdivision proposes wide lots for detached homes, the need for on-street parking correspondingly decreases, which in turn improves mobility within the subdivision compared to the alleyway scenario shown above."

"A preliminary parking plan is attached (Exhibit 'D') showing that the project will include 40 on-street parking spaces. This is more than one on-street parking space per home. In addition, the plan shows that 120 off-street parking spaces are also provided in the project. Considered in aggregate, there are more than 5 parking spaces per home. This exceeds any City requirement for parking. In addition, as shown on the preliminary plans, driveways are proposed to be combined where possible to maximize the availability of on-street parking."

"Considering the fact that the proposed lots are 50 foot wide (double the R-3.5 standard) and driveways are proposed to be combined (proposed to reduce obstacles to on-street parking), the proposal exceeds the purpose of the regulation to be varied because it provides parking amounts that equal or exceed City requirements while proposing a housing/development type that reduces the need for on-street parking."

Finding: Complies as proposed. The purpose of the regulation is to improve mobility and reduce obstacles to on-street parking. As discussed above, the applicant's circulation plan has shown that these purposes will be met by the alternative plan submitted by the applicant. Staff concurs that the intent of the code is met.

D. Any impacts resulting from the adjustment are mitigated;

Finding: Complies as proposed. The applicant's initial response (Exhibit 3a(iii)) states that mitigation for this variance request is proposed in the form of wider lots than is required (50 feet), detached homes (breaking up visual mass of structures), combined driveway approaches (maximizing curb exposure and minimizing access points), and compliance with the Residential Design Standards (garage standards).

The applicant states that mitigation has been provided through the combination of driveways and wider driveway throats (OCMC 12.04.095) and compliance with the residential design standards of OCMC 17.20.

Additionally, the applicant prepared the following responses (Exhibit 9):

"• The proposed application provides sufficient on-street and off-street parking

It is anticipated that each lot will have a two car garage with a driveway that will provide for off-street parking. Four off-street parking spaces per dwelling unit exceeds the minimum City requirement by three spaces. In addition, as shown on the preliminary plans, driveways are proposed to be combined where possible to maximize the availability of on-street parking. These efforts result in excess of one on-street parking space per home. Therefore, the proposal will equal or exceed the amount of parking that would be provided in an alleyway scenario given the same lot sizes. • The proposed application provides a safe pedestrian environment.

As described above, the proposal will provide a safe pedestrian environment. Curbs and landscape planter strips (with street trees) are proposed to separate pedestrian travel from the street. Safe pedestrian environments with front entry loaded garages on 50 foot wide lots accessing local public streets are found in many areas throughout this country, including Oregon City. Combining driveways, as is proposed, provides an additional method of enhancing pedestrian safety because it maximizes the amount of curb exposure and minimizes the number of driveways. Finally, curb extensions are proposed at street intersections to provide further improve pedestrian circulation. Nothing unusual is being proposed that would in any way be unsafe for pedestrians. Therefore, the proposal provides a safe pedestrian environment that equals or exceeds that which would be provided if alleys were provided.

• The proposed application provides an attractive pedestrian environment.

Based on conversations with City staff, it is understood that at the time this requirement was adopted, there was an aesthetic concern with attached townhomes and homes on very small/narrow lots being dominated by garages. This concern has been remedied with the adoption of the Residential Design Standards (garage standards) found in Chapter 17.21 which minimize effects of garages in the pedestrian environment and enhances the appearance of residential structures. The future homes in this project will be subject to these standards. Furthermore, the proposed lot widths in the project mitigate for any perceived garage widths because the lots equal or exceed 50 feet, surpassing the 25 foot minimum lot width requirement for the R-3.5 District by 25 feet. Fifty-foot wide lots, as are proposed, satisfies the minimum lot width requirement for the R-6 zone, which does not require alleyways. Therefore, the view from the street (pedestrian environment) will be similar to an R-6 subdivision."

Finding: Complies as proposed. The adjustment requested, although significant, does not have significant impacts. As discussed above, those impacts will be mitigated by the driveways and circulation plan.

E. No practical alternatives have been identified which would accomplish the same purpose and not require a variance; and

Finding: Complies as proposed. The applicant asserts that there is no practical alternative that would accomplish the same purpose and not require a variance. The applicant provided both graphic and narrative analyses indicating how the provision of alleys in this particular situation is impractical and could not accomplish the objective of street accessed single-family homes for the subdivision without a variance (**Exhibit 3a(iii) and 9**). **Staff concurs**.

F. The variance conforms to the comprehensive plan and the intent of the ordinance being varied.

Finding: Complies as proposed. The subject property is designated MR (Medium Density Residential) by the City Comprehensive Plan which is implemented by a City Zoning designation of R-3.5. The Municipal Code includes requirements for Streets, Subdivisions and Zoning as they relate to citizen involvement, land use, housing, public facilities, and transportation. As demonstrated in this written narrative, preliminary plans, and other documentation included in the application materials, these requirements are satisfied. Because these portions of the Municipal Code implement the comprehensive plan, approval of the variance conforms to the comprehensive plan. As described above under Section C above, the proposed variance conforms to the intent of the ordinance being varied.

Specific Goals and Policies in the 2004 Comprehensive Plan that are relevant to the variance request are provided below:

Goal 2.1 Efficient Use of Land

TP 12-01/ VR 12-02: Crabtree No.2 Subdivision and Variance

Ensure that property planned for residential, commercial, office, and industrial use is used efficiently and that land is developed following principles of sustainable development.

Goal 10.1 Diverse Housing Opportunities

Provide for the planning, development and preservation of a variety of housing types and lot sizes.

Policy 10.1.3

Designate residential land for a balanced variety of densities and types of housing, such as single-family attached and detached, and a range of multi-family densities and types, including mixed-use development.

Policy 10.1.7

Use a combination of incentives and development standards to promote and encourage well-designed single-family subdivisions and multi-family developments that result in neighborhood livability and stability.

Goal 12.1 Land Use-Tranportation Connection

Ensure that the mutually supportive nature of land use and transportation is recognized us planning for the future of Oregon City.

Policy 12.1.4

Provide walkable neighborhoods. They are desirable places to live, work, learn and play, and therefore a key component of smart growth.

Policy 12.3.1

Provide an interconnected and accessible street system that minimizes vehicle miles traveled and inappropriate neighborhood cut-through traffic.

The proposed subdivision and variance request is not inconsistent with the comprehensive plan policies cited above.

IV. CONCLUSION AND RECOMMENDATION:

The applicant applied for a variance from the alley requirement in order to construct a residential subdivision of 30-lots with direct garage access to local public streets.

Based on the application and exhibits attached to this report, staff has prepared findings and appropriate conditions of approval to assure that the proposed subdivision will comply with all applicable approval criteria of the Oregon City Municipal Cpde upon approval of the final plat by the Community Development Director. The draft recommended Conditions of Approval are attached as Exhibit 1.

The Planning Commission may approve, approve with conditions or deny the proposed application. The Planning Commission may also modify or add to the staff recommended conditions of approval if they feel additional conditions are necessary to meet the intent of the alley requirement from which the applicant is requesting a variance. Such modifications and / or additions to the staff recommended Conditions of Approval should be stated clearly in the Planning Commission's motion.

Therefore the Community Development Director recommends Approval with Conditions of Planning File TP 12-01 / VR 12-02, a 30-lot subdivision and variance request for the property located at Clackamas County Map 3-2E-4D, Tax Lot 700.

TP 12-01/ VR 12-02: Crabtree No.2 Subdivision and Variance

V. EXHIBITS

The following exhibits are attached to this staff report.*

- 1. Recommended Conditions of Approval
- 2. Vicinity and Surrounding Zoning Map
- 3. Application Packet
 - a. Written Materials:
 - i. City Land Use Application Form
 - ii. City Subdivision Checklist
 - iii. Written Narrative
 - iv. Traffic Impact Study
 - v. Pre-Application Conference Summary Sheet
 - vi. Neighborhood Meeting Documentation
 - vii. Draft CC & R's
 - viii. Current Preliminary Title Report
 - ix. County Assessor's Map
 - b. Included Separately With Application:
 - i. City of Oregon City Land Use Application Fee 1 Check with Original Application
 - ii. Mailing Labels 2 Sets of Labels
 - iii. Full Size Preliminary Plans 12 Sets 22" x 34"
 - iv. Reduced Preliminary Development Plans 12 Sets 11" x 17"
 - v. Shadow Plat (Preliminary future Transportation / Circulation Plan dated 4-19-2007) 12 Sets 11" x 17"
 - vi. Preliminary Stormwater Report- 2 Copies
 - vii. Electronic Copy of Application Packet 1 Compact Disc (With Original Application)
- 4. Grading Permit FP 07-006 (Crabtree II Grading and Fill Permit with Plans)
- 5. Grading Permit FP 07-004 (Crabtree I Grading and Fill Permit with Plans)
- 6. Comments on Traffic Impact Study, Replinger and Associates
- 7. Public Notices
- 8. Public Comments
 - a. Letters of Support submitted by abutting property owners June 12-16th, 2012 (9)
 - b. Comments submitted to Planning Commission by Christine Kosinski June 11, 2012.
 - c. Comments submitted to Planning Commission by Christine Kosinski June 25, 2012
- 9. Crabtree Terrace No. 2 Subdivision Application (City File No. TP 12-01 & VR 12-02) Additional Variance Findings, prepared by AKS Engineering and Forestry, dated June 11, 2012
- 10. Technical Memo from Todd Mobley, P.E., PTOE to Monty Hurley, AKS Engineering, regarding Alley Variance Discussion, dated June 12, 2012.
- 11. Crabtree Terrace Critical Project Milestones, prepared by AKS Engineering and Forestry, dated June 29, 2012
- 12. Letter from Mike Robinson to Planning Commission Chair Kidwell, including responses to the testimony of Christine Kosinski, dated June 29, 2012.
- 13. Oregon City Municipal Code Section 12.04.255 Street design—Alleys.
- 14. LL 12-02 Staff Report and Notice of Decision with Approved Lot Line Adjustment.
- 15. Annexation Agreements for subject property (AN 06-04) * *to be provided at the Public Hearing on July 23, 2012*.

TP 12-01/ VR 12-02: Crabtree No.2 Subdivision and Variance

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EXHIBIT 1. RECOMMENDED CONDITIONS OF APPROVAL TP 12-01 / VR 12-02

- 1. The Applicant is responsible for this project's compliance with Engineering Policy 00-01 found at http://www.orcity.org. The policy pertains to any land use decision requiring the Applicant to provide any public improvements.
- 2. The Applicant shall sign a Non-Remonstrance Agreement for the purpose of making sanitary sewer, storm sewer, water or street improvements in the future that benefit the Property and assessing the cost to benefited properties pursuant to the City's capital improvement regulations in effect at the time of such improvement.
- 3. The Applicant shall provide a separate Erosion Prevention and Sedimentation Control Plan to the City's Erosion Control Officer (John Burrell) for approval and obtain an erosion control permit and field installation approval prior to start of construction. The Applicant shall provide a Preliminary Residential Lot Grading Plan to the City for review prior to the approval of construction plans. A final site Residential Lot Grading Plan shall be required as part of the final construction plans per the City's Residential Lot Grading Criteria and the International Building Code. If significant grading is required for the lots due to its location or the nature of the site, rough grading shall be required of the developer prior to the acceptance of the public improvements. There shall not be more than a maximum grade differential of two (2) feet at all subdivision boundaries. Grading shall in no way create any water traps, or create other ponding situations. The plan shall show the existing and proposed swales.
- 4. The new water system will be designed with minimum 8-inch water mains throughout the site, and will provide stubs for future extension with development of adjacent properties. New fire hydrants will be located and installed per Clackamas County Fire District No. 1's requirements. All new water services will be constructed with individual copper water laterals a minimum of 1-inch diameter in size connecting the water main to the water meter.
- 5. The Applicant shall install a minimum 4-inch Ductile Iron (DI) pipe for improving fire flow, circulation, and water quality between the two 8-in water mains at the east end of Oregon Iris Way south to connect to the east end of Purple Ash Way 8-in water main. The remaining system as proposed meets City requirements; 8-in DI mains with 1-in. copper services to each lot.
- 6. The new sanitary sewer system will be designed with minimum 8-inch sanitary sewer mains throughout the site, 4-inch laterals to each lot, and provide stubs at the deepest elevation where needed to provide for future extension with development of adjacent properties.
- 7. Storm sewer improvements will be required as part of the proposed development. Storm sewer will be designed, using minimum 12-inch pipe and curb inlets to collect and convey on-site drainage. Each lot shall drain to the street or an alternate approved during construction plan review. The new storm sewer system will have to be designed per the City of Oregon City Public Works Stormwater and Grading Design Standards.
- 8. The applicant shall provide written/recorded agreement to bound future home permits to incur prorata share payments for using the stormwater detention/water quality pond at Maplelane/Thayer Roads. Ordinance 09-1003 established the amount per home permit to be a one-time payment of \$2,645.55.

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TP 12-01/ VR 12-02: Crabtree No.2 Subdivision and Variance

- 9. Police fee. In accordance with the Annexation Agreement (File #, Recordation #) that applies to the subject property, a supplemental fee of \$3,500 per dwelling unit shall be paid at the time of building permit application for each lot in the subdivision to assure adequate police and emergency response times.
- 10. The applicant will need to coordinate with Clackamas County Fire District 1 concerning the design of any fire apparatus turn around and any requirements for providing fire protection to subdivision. The applicant shall provide the City Planning Division with a letter from Clackamas County Fire that shows that their standards have been met.
- 11. The Applicant shall provide a 10-foot public utility easement on all street frontages as proposed. In addition, the Applicant shall provide the proposed City storm and sanitary sewer easements and a 15-foot water main easement across lots 88 and 105 for the 4-in water main.
- 12. As shown on the preliminary plans, all streets will end at the project boundary. The plat will grant access control to the city. The standard will be met when the final subdivision plat is filed and accepted.
- 13. The applicant shall coordinate the location of any temporary turnarounds on Oregon Iris Way and Purple Ash Way with the City Engineer and Clackamas Fire District No. 1 prior to approval of construction plans.
- 14. The Applicant shall dedicate ROW sufficient to achieve 53 feet of ROW for Nutmeg Lane, Oregon Iris Way and Purple Ash Way.
- 15. The Applicant shall provide full-street improvements for Nutmeg Lane, Oregon Iris Way and Purple Ash Way. The improvements include, but is not to be limited to, base rock, a total paved street width of 32 feet (16-foot shared travel lane and 8-foot parking lane on each side), curb and gutter, 5-foot planter strip (includes 6-in curb), 5-foot concrete sidewalk behind the planter strip as proposed, city utilities (water, sanitary and storm drainage facilities), curb return radii, curb (handicap) ramps, centerline monumentation in monument boxes, traffic control devices, street trees, and street lights.
- 16. Crash Data, Analysis and Mitigation. The absence of historical crash data and an analysis of safety issues should be corrected with submittal of an addendum. The applicant will provide an addendum to the TIS to indicate crash data for adjacent intersections for review by the Community Development Director prior to approval of the final subdivision plat for the property. The results are very unlikely to reveal serious deficiencies that could be exacerbated by the development. If the results show the absence of any serious deficiencies this application may be approved. However, should analysis of the crash data by the City's Transportation Consultant provide a basis for determination by the Community Development Director that additional safety mitigation is required in accordance with the adopted standards of OCMC 12.04 and the Oregon City Transportation System Plan, the Planning Commission authorizes the Community Development Director to condition the applicant to provide any such mitigation. The review of the crash data will be subject to a Type II review.
- 17. Street Tree Plan. The applicant shall prepare a final street tree planting plan in compliance with OCMC 12.08 for review prior to final plat recordation. The plan will be reviewed by Staff during review of the public improvement construction plans for compliance with OCMC 12.08.

TP 12-01/ VR 12-02: Crabtree No.2 Subdivision and Variance

EXHIBIT 1.

RECOMMENDED CONDITIONS OF APPROVAL

TP 12-01 / VR 12-02

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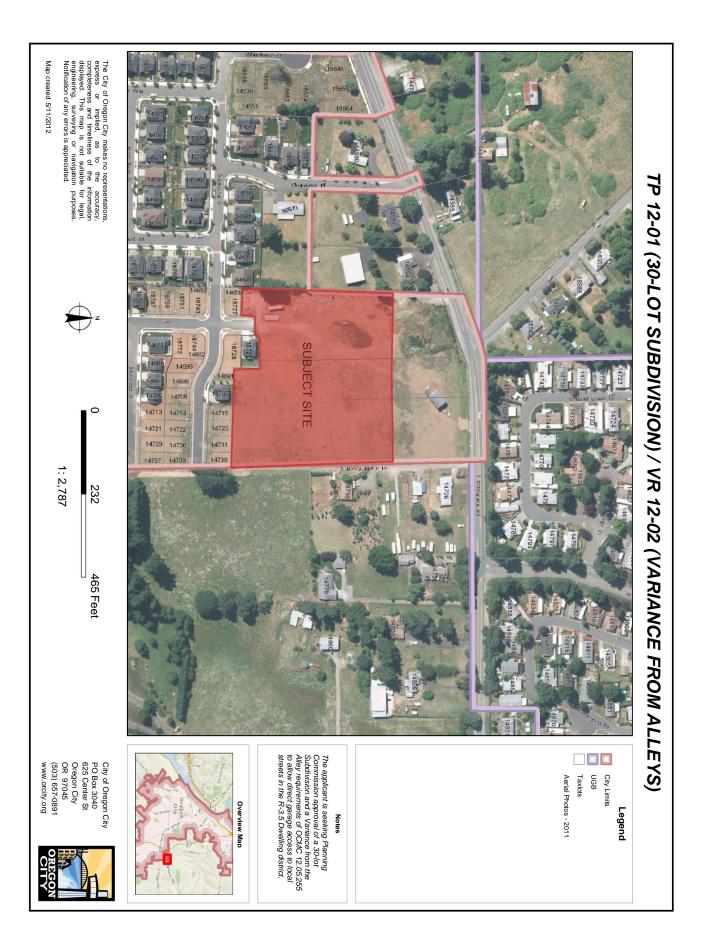
the east end of Purple Ash Way 8-in water main. The remaining system as proposed meets City requirements; 8-in DI mains with 1-in. copper services to each lot.

- 6. The new sanitary sewer system will be designed with minimum 8-inch sanitary sewer mains throughout the site, 4-inch laterals to each lot, and provide stubs at the deepest elevation where needed to provide for future extension with development of adjacent properties.
- 7. Storm sewer improvements will be required as part of the proposed development. Storm sewer will be designed, using minimum 12-inch pipe and curb inlets to collect and convey on-site drainage. Each lot shall drain to the street or an alternate approved during construction plan review. The new storm sewer system will have to be designed per the City of Oregon City Public Works Stormwater and Grading Design Standards.
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TP 12-01/ VR 12-02: Crabtree No.2 Subdivision and Variance

Page 2

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- 17. Street Tree Plan. The applicant shall prepare a final street tree planting plan in compliance with OCMC 12.08 for review prior to final plat recordation. The plan will be reviewed by Staff during review of the public improvement construction plans for compliance with OCMC 12.08.



3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

A LAND USE APPLICATION FOR CRABTREE TERRACE NO. 2 SUBDIVISION

DATE:

SUBMITTED TO:

March 2012

CITY OF OREGON CITY PLANNING DEPARTMENT 221 MOLALLA AVENUE, SUITE 200 OREGON CITY, OR 97045

OWNER / APPLICANT:

PREPARED BY:

John Jones Construction, INC. 16999 South Bradley Road Oregon City, OR 97045

AKS Engineering & Forestry, LLC 13910 SW Galbreath Drive, Suite 100 Sherwood, OR 97140



13910 SW Galbreath Drive, Suite 100 Sherwood, OR 97140 Phone: (503) 925-8799 Fax: (503) 925-8969 Web: www.aks-eng.com

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from



A LAND USE APPLICATION FOR: CRABTREE TERRACE NO. 2 SUBDIVISION

TABLE OF CONTENTS

WRITTEN MATERIALS:

(12 COPIES PROVIDED)

- CITY LAND USE APPLICATION FORM
- CITY SUBDIVISION CHECKLIST
- WRITTEN NARRATIVE
- TRAFFIC IMPACT STUDY
- PRE-APPLICATION CONFERENCE SUMMARY SHEET
- NEIGHBORHOOD MEETING DOCUMENTATION
- DRAFT CC & R'S
- CURRENT PRELIMINARY TITLE REPORT
- COUNTY ASSESSOR'S MAP

INCLUDED SEPARATELY WITH APPLICATION:

- CITY OF OREGON CITY LAND USE APPLICATION FEE 1 CHECK WITH ORIGINAL APPLICATION
- MAILING LABELS 2 SETS OF LABELS
- FULL SIZE PRELIMINARY PLANS 12 SETS 22" x 34"
- REDUCED PRELIMINARY DEVELOPMENT PLANS 12 SETS 11" x 17"
- SHADOW PLAT (PRELIMINARY FUTURE TRANSPORTATION / CIRCULATION PLAN DATED 4-19-2007) – 12 SETS – 11" x 17"
- PRELIMINARY STORMWATER REPORT- 2 COPIES
- ELECTRONIC COPY OF APPLICATION PACKET 1 COMPACT DISC (WITH ORIGINAL APPLICATION)

CRABTREE TERRACE NO. 2 – SUBDIVISION APPLICATION CITY OF OREGON CITY March 2012



CITY LAND USE APPLICATION FORM

CRABTREE TERRACE NO. 2 – SUBDIVISION APPLICATION CITY OF OREGON CITY

March 2012

		0000010012	p.1
	CITY OF OREGON	CATION	ð
City of Oregon City, Community	Development Department, 221 Molaila Ave., Ste. 200, P	.O. Box 3040, Oregon City, OR 97045, (503) 722-3789
Type I (OCMC 17.50.030.A) Compatibility Review Nonconforming Use review Water Resources Exemption	Type II (OCMC 17.50.030.B) Extension Detailed Development Review Geotechnical Hazards Minor Partition Minor Site Plan & Design Review Nonconforming Use Review Subdivision Minor Variance Water Resource Review	Type III / IV (OCMC 17.50 Annexation Code Interpretation / Sin Concept Development P Conditional Use Comprehensive Plan An Detailed Development P Historic Review Oregon City Municipal 0 Variance Zone Change	nilar Use lan nendment (Text/Mar lan
Application Numbe	r: A 30-lot subdivision (2nd phase) fo	or single-family detached r	esidential homes
	garage access to local residential sti		
Project Name: Crabtree Terra	· · · · · · · · · · · · · · · · · · ·	of Lots Proposed (If Applie	cable): 30
Physical Address of Site:146	16 Maplelane Road		
Clackamas County Map and Tax	T	Tap 3 2E 4D (Post Property	/ Line Adjustment
Applicant(s): Applicant(s) Signature: Applicant(s) Name Printed:Iol	In Jones Construction, Inc.	esDate:Ma	arch 14, 2012
	Bradley Road, Oregon City, Oregon	97045	
Phone: Contact Representation	/e Fax:	Email:	
<u>Property Owner(s):</u> Property Owner(s) Signature:	April Gonnes Pr	دم.	
Property Owner(s) Name Printed	i: John Jones Construction, Inc.	Date: Mar	ch 14, 2012
Intaming Huddeess.	h Bradley Road, Oregon City, Oregor	97045	
Phone: Contact Representativ	'e Fax:	Email:	
<u>Representative(s):</u> Representative(s) Signature: Representative (s) Name Printed:	MANULAL DE DIC	Dote: Ma	rch 14, 2012
	Galbreath Drive, Suite 100, Sherwoo		h
Phone:503-925-8799	Fax: 503-925-8969	Email: monty@aks-e	eng.com
All signatures repress	FAX:	the filing of this application and certify that	

. .



CITY SUBDIVISION CHECKLIST

CRABTREE TERRACE NO. 2 – SUBDIVISION APPLICATION CITY OF OREGON CITY

March 2012



The application will not be deemed complete without all of the requirements proceeding. City of Oregon City, Community Development Department, 320 Warner Milne Road, P.O. Box 3040, Oregon City, OR 97045, (503) 657-0891

www.orcity.org

1. ___ Complete Application Form

2. ____ A List of All Permit Approvals Sought by the Applicant

3. ____ Narrative

A complete and detailed narrative description of the proposed development describing:

- □ The proposed development that describes existing site conditions, existing buildings, public facilities and services, presence of wetlands, steep slopes and other natural features
- □ A detailed description of the proposed development, including a description of any phasing (including the time, acreage, number of residential units, amount of area for nonresidential use, open space, and development of utilities and public facilities for each phase), proposed uses, number and type of residential units, allocation and ownership of all lots, tracts, streets, and public improvements and the structure of any homeowner's association.
- □ Timely Provision of Public Services and Facilities. The applicant shall explain in detail how and when each of the following public services or facilities is, or will be, adequate to serve the proposed development by the time construction begins:
 - □ Water
 - □ Sanitary sewer
 - □ Storm sewer and stormwater drainage
 - Parks and recreation
 - □ Traffic and transportation
 - □ Schools
 - □ Fire and police services

Where adequate capacity for any of these public facilities and services is not demonstrated to be currently available, the applicant shall describe how adequate capacity in these services and facilities will be financed and constructed before recording of the plat

• Overall density of the subdivision and the density by dwelling type for each

4. ____ Review Criteria

A response addressing each section of Chapters 16.08, 16.12 and any other applicable chapter identified in the Oregon City Municipal Code.

5. ____ Site Plan

A detailed site development plan showing:

- □ The location and dimensions of lots, streets, pedestrian ways, transit stops, common areas, building envelopes and setbacks
- □ All existing and proposed utilities and improvements including sanitary sewer, stormwater and water facilities
- □ Total impervious surface created (including streets, sidewalks, etc.)
- □ An indication of existing and proposed land uses for the site

6. ____ A Subdivision Connectivity Analysis

Prepared by a transportation engineer, licensed by the State of Oregon, that describes the existing and future vehicular; bicycle and pedestrian connections between the proposed subdivision and existing or planned land uses on adjacent properties. The subdivision connectivity analysis shall include shadow plats of adjacent properties demonstrating how lot and street patterns within the proposed subdivision will extend to and/or from such adjacent properties and can be developed meeting the existing Oregon City Municipal Code design standards.

Subdivision Application Submittal Checklist

7. ____ Traffic/Transportation Plan

The applicant's traffic/transportation information shall include two elements:

- □ A detailed site circulation plan showing proposed vehicular, bicycle, transit and pedestrian access points and connections to the existing system, circulation patterns and connectivity to existing rights-of-way or adjacent tracts, parking and loading areas and any other transportation facilities in relation to the features illustrated on the site plan.
- □ A traffic impact study prepared by a qualified professional transportation engineer, licensed in the state of Oregon, that assesses the traffic impacts of the proposed development on the existing transportation system and analyzes the adequacy of the proposed internal transportation network to handle the anticipated traffic and the adequacy of the existing system to accommodate the traffic from the proposed development. The city engineer may waive any of the foregoing requirements if the city engineer determines that the requirement is unnecessary in the particular case.

8. ____ Natural Features Plan, Topography and Preliminary Grading and Drainage Plan

The applicant shall submit a map illustrating all of the natural features and hazards on the subject property and, where practicable, within two hundred fifty feet of the property's boundary. The map shall also illustrate the approximate grade of the site before and after development. Illustrated features must include all proposed streets and cul-de-sacs, the location and estimated volume of all cuts and fills, and all stormwater management features. This plan shall identify the location of drainage patterns and courses on the site and within two hundred fifty feet of the property boundaries where practicable. Features that must be illustrated shall include the following:

- □ Proposed and existing street rights-of-way and all other transportation facilities
- □ All proposed lots and tracts
- □ All trees with a diameter six inches or greater measured four feet from the ground
- □ All water quality resource areas pursuant to Chapter 17.49, including all jurisdictional wetlands shown in a delineation according to the Corps of Engineers Wetlands Delineation Manual, January, 1987 edition, and approved by the Division of State Lands and wetlands identified in the City of Oregon Local Wetlands inventory, adopted by reference in the City of Oregon City comprehensive plan
- □ All known geologic and flood hazards, landslides or faults, areas with a water table within one foot of the surface and all flood management areas pursuant to Chapter 17.42
- □ The location of any known state or federal threatened or endangered species
- □ All historic areas or cultural features acknowledged as such on any federal, state or city inventory
- □ All wildlife habitat or other natural features listed on any of the city's official inventories

9. <u>Additional Information or Reports (If Required in Pre-Application Conference)</u>

The principal planner may require additional information to ensure that the proposed development does not adversely affect the surrounding community, identified natural resource areas or create hazardous conditions for persons or improvements on the site.

- □ Geologic Hazards. For property subject to Chapter 17.44, the applicant shall submit a report prepared by a qualified professional engineer, certified in geology or geotechnical engineering, describing how construction of the proposed subdivision is feasible and meets the applicable requirements of Chapter 17.44.
- □ Water Resources. For property subject to Chapter 17.49, the applicant shall submit a report prepared by a qualified professional describing the location and quality of any water quality resource area subject to regulation under Chapter 17.49. This report shall also explain how the proposed subdivision is feasible and meets the applicable requirements of Chapter 17.49.

Subdivision Application Submittal Checklist

- 10. ____ Tree Removal and Mitigation Plan (In Accordinance with OCMC Chapter 16.12.310)
- 11. ____ Pre-Application Conference Summary Sheet
- 12. ____ Summary of the Meeting with the Applicable Neighborhood Association
- 13. ___ Preliminary Storm Calculations (If Water Quality Detention is Required)

14. ____ Erosion and Sediment Control Permit

The applicant shall submit an application for an erosion and sediment control permit pursuant to Chapter 17.47 concurrently with the preliminary subdivision plat application, including the measures that will be implemented throughout construction of the subdivision to control erosion and sedimentation, unless waived by the city engineer. This plan must be consistent with all applicable erosion control requirements in Chapter 17.47.

15. ____ CC & R's

Drafts of the proposed covenants, conditions and restrictions (CC&Rs), maintenance agreements, homeowner association agreements, dedications, deeds easements, or reservations of public open spaces not dedicated to the city, and related documents for the subdivision.

16. ____ A Current Preliminary Title Report for the Subject Property(ies)

17. ____ Mailing Labels for Owners Within 300 Feet of the Subject Site

The names and addresses of property owners within 300 feet of the site indicated on the most recent property tax rolls.

18. ___ Copies

Twelve (12) copies of all information, reports, and drawings (full-sized and 8.5" by 11") pertaining to this application.

19. ____ Electronic Version of All Application Materials

20. ____ All Required Application Fees

Incomplete Applications will be Rejected

Subdivision Application Submittal Checklist



WRITTEN NARRATIVE

 $\begin{array}{l} \mbox{Crabtree Terrace No. 2-Subdivision Application}\\ \mbox{City of Oregon City} \end{array}$

March 2012

A LAND USE APPLICATION FOR CRABTREE TERRACE NO. 2 SUBDIVISION

PROPOSAL:

SUBMITTED TO:

OWNER / APPLICANT:

CITY OF OREGON CITY

PLANNING DEPARTMENT 221 MOLALLA AVENUE, SUITE 200 OREGON CITY, OR 97045

30 LOT SUBDIVISION / VARIANCE

JOHN JONES CONSTRUCTION, INC. 16999 SOUTH BRADLEY ROAD OREGON CITY, OR 97045

AKS Engineering & Forestry, LLC Monty Hurley / Chris Goodell 13910 SW Galbreath Drive, Suite 100 Sherwood, OR 97140 Phone: (503) 925-8799

SITE ADDRESS:

APPLICANT'S

REPRESENTATIVE:

SITE SIZE:

Assessor's Information:

ZONING:

+/-4.36 ACRES

14616 MAPLELANE ROAD OREGON CITY, OR 97045

CLACKAMAS COUNTY 32E4D 700 (PER FILE NO. LL 12-02)

R-3.5 SINGLE-FAMILY DWELLING DISTRICT

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 1 OF 33

I. EXECUTIVE SUMMARY

Through this application, the property owner requests approval from the City of Oregon City to subdivide the subject property (described below) into a 30 lot subdivision (Crabtree Terrace No. 2) for the future construction of single-family detached residential homes and a variance to allow direct garage access to local residential streets.

The applicant developed the adjacent 81 lot Crabtree Terrace Subdivision, which is also zoned R-3.5, starting in 2006 (City file TP 07-05 and WR 07-13) and was completed with the final plat recording in 2008. The applicant's goal is to develop the remainder of his property in a similar manner as was the first "phase" of the project, with a grid system of local public streets providing access to +/- 3,500 square foot lots (average) for single-family detached homes. This was his intent when he submitted the Crabtree Place Subdivision application in 2007 and graded the property in 2008. The applicant had hoped to complete development of the entire property (including this portion) in 2009. However, the economic downturn of the past several years, which has especially impacted the residential housing market, has prevented him from meeting this goal.

In addition to the poor economy and housing market, a recent change in the Oregon City Municipal Code has occurred after approval of Crabtree Terrace Subdivision. The adoption of an alley requirement for R-3.5 properties (as this property is zoned) impacts the applicant's ability to complete this project and achieve the goals for the property as originally conceived and approved. Due to a variety of factors (described in more detail later in this written statement), alleys are not a viable way to complete this project. Therefore, a variance has been requested to this standard.

As described in further detail throughout this written statement and as shown in the preliminary plans, the subdivision will include all necessary streets, sidewalks, services, utilities, and other public improvements that are necessary to support the project. Approval of Crabtree Terrace No.2 benefits the City of Oregon City by providing much needed construction jobs and future homes for people to live, as well as permit and impact fees / taxes to support City services and fund future City public works / infrastructure improvement projects for the area.

This written statement includes findings of fact demonstrating that the application complies with all applicable approval criteria. These findings are supported by substantial evidence which includes preliminary plans, a Traffic Impact Study, and other written documentation. This information, which is included in this application package, provides the basis for the City to approve the application.

II. BASIC FACTS

1. **Zoning/Permitted Use:** The subject site is zoned R-3.5 Single Family Dwelling District on the City's Zoning Map. The properties to the south also carry the R-3.5 designation. The properties to the west consist of zones R-3.5, R-6, and Clackamas County zoned property

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 2 OF 33 residing outside of the city limits. The site's northern boundary will be per a lot line adjustment application that is currently pending. The property to the north is also zoned R-3.5. The city limits follow Maplelane Road in the area of the subject site; therefore the property to the north of Maplelane Road is outside of the Urban Growth Boundary (UGB). The city limits and the UGB meet near the property's northeast corner and run along the east side of the subject site. The properties to the east are also outside of the UGB.

2. Site Description / Setting: A Property Line Adjustment (PLA) application has been approved by the City of Oregon City (File No. LL 12-02). This PLA adjusted the common property line between Tax Lots 601 and 700, Tax Map 3 2E 4D, in such a way as to make the entirety of the proposed 30 lot subdivision reside on Tax Lot 700. Therefore, for the purposes of this application, the project involves Tax Lot 700, Tax Map 3 2E 4D, as depicted on the preliminary plans.

The subject property is approximately 4.36 acres in size and is generally located south of Maplelane Road and north Sugarpine Street. The areas to the south and some to the west have been developed with streets, sidewalks, and single family residential homes. Existing site topography slopes in a northerly direction (+/- 4%-8% slope), with +/- 23 feet of elevation drop from the southerly side of the property to the northerly side of the property, a linear distance of approximately 425 feet. The majority of the property is cleared of vegetation, with a few scattered trees located near the southwest corner of Tax Lot 700. There are no designated or identified wetlands, geologic hazards, water resources, natural resources, wildlife habitat, or other significant natural features on the property.

3. **Project Description:** The proposal involves the creation of 30 lots to accommodate the future construction of single-family residences. To effectively develop the property to its permitted urban residential density, access (streets), and services are proposed to be provided to all portions of the property. Each of the lots are proposed to be provided with individual sanitary sewer and, water services, as well as utilities such as electrical, gas, phone, cable, etc. Each lot will also receive either a storm lateral or curb weep hole. Additional details concerning the proposal can be gleaned from the preliminary plans, which are included in the application materials along with this project narrative and other written materials.

4. **Dimensional Standards:**

The "R-3.5" Dwelling District requires the following:

Minimum Lot Area	3,500 Square feet
Minimum Lot Width:	25 feet
Minimum Lot Depth:	70 feet
Maximum Building Height:	2.5 stories (not to exceed 35 feet)
Front Yard Setback:	5 feet
Front Porch Setback	0 feet
Interior Side Yard:	5 feet (detached)
Corner Side Yard:	10 feet
Rear Yard Setback:	15 feet
Rear Porch Setback	10 feet

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 3 OF 33

Garage Setback:	20 feet
Garage Setback on Alley	5 feet

This project meets all the dimensional requirements listed above (as applicable).

- 5. Citizen Participation: The applicant contacted the Caulfield Neighborhood Association Chairperson and met with the Neighborhood Association on February 28, 2012 at the regularly scheduled meeting. A summary of the topics discussed at the neighborhood meeting and all other meeting related information is included in the application package. The City will send notice of this proposal to property owners within three hundred feet of the subject property, as well as various City departments, and other agencies to solicit public input.
- 6. Residential Density Calculations: The site is approximately 190,124 square feet (4.36 acres) in size. The average lot area proposed in the project is 4,333 square feet. Due to right-of-way dedications, the net developable area for the project site is 130,031 square feet. Divided by 3,500, the maximum number of lots (density) is 37.15 units. Eighty percent of 37.15 is 29.72, or 30 units. Therefore, the proposed subdivision complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable site.

III. APPROVAL CRITERIA

OREGON CITY MUNICIPAL CODE

Title 12 - Streets, Sidewalks, and Public Places: Title 16 - Subdivisions: Title 17 - Zoning:

TITLE 12 – STREETS, SIDEWALKS, AND PUBLIC PLACES

12.04.175 - Street design-Generally.

The location, width and grade of street shall be considered in relation to: existing and planned streets, topographical conditions, public convenience and safety for all modes of travel, existing and identified future transit routes and pedestrian/bicycle accessways, and the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. To the extent possible, proposed streets shall connect to all existing or approved stub streets that abut the development site. Where location is not shown in the development plan, the arrangement of streets shall either:

- A. Provide for the continuation or appropriate projection of existing principal streets in the surrounding area and on adjacent parcels or conform to a plan for the area approved or adopted by the city to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical;
- B. Where necessary to give access to or permit a satisfactory future development of adjoining land, streets shall be extended to the boundary of the development and the resulting dead-end street (stub) may be approved with a

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 4 OF 33 temporary turnaround as approved by the city engineer. Access control in accordance with section 12.04.200 shall be required to preserve the objectives of street extensions.

RESPONSE: Public streets are proposed in the subdivision to provide access to the lots / future homes and provide for future neighborhood connectivity / circulation. The preliminary plans show the location and arrangement of these improvements. As shown on the preliminary plans, street improvements are proposed to extend the sole existing abutting local street (Nutmeg Lane) and provide for a future connection to Maplelane Road. Oregon Iris Way and Purple Ash Way are laid out in a grid manner (preferred by the city) that is suitable for future connection as illustrated on the preliminary plans.

12.04.180 - Street design-Minimum right-of-way.

All development shall provide adequate right-of-way and pavement width. Adequate right-of-way and pavement width shall be provided by:

A. Complying with the street design standards contained in the table provided in Chapter 12.04. The street design standards are based on the classification of streets that occurred in the Oregon City Transportation System Plan (TSP), in particular, the following TSP figures provide the appropriate classification for each street in Oregon City: Figure 5-1: Functional Classification System and New Roadway Connections; Figure 5-3: Pedestrian System Plan; Figure 5.6: Bicycle System Plan; and Figure 5.7: Public Transit System Plan. These TSP figures from the Oregon City Transportation System Plan are incorporated herein by reference in order to determine the classification of particular streets.

Table <u>12.04.020</u> STREET DESIGN STANDARDS						
Type of Street	Maximum Right-of-Way Width	Pavement Width				
Major arterial	124 feet	98 feet				
Minor arterial	114 feet	88 feet				
Collector street	86 feet	62 feet				
Neighborhood Collector street	81 feet	59 feet				
Local street	54 feet	32 feet				
Alley	20 feet	16 feet				

B. The applicant may submit an alternative street design plan that varies from the street design standards identified above. An alternative street design plan may be approved by the city engineer if it is found the alternative allows for adequate and safe traffic, pedestrian and bicycle flows and transportation alternatives and protects and provides adequate multi-modal transportation services for the development as well as the surrounding community.

RESPONSE: As shown on the preliminary plans, adequate right-of-way and paved widths are proposed for the streets within the project. Consistent with abutting existing streets and street stubs, these streets are proposed to be improved with 32 foot wide paved sections within right-of-ways that will not exceed 54 feet. (They are 53 feet wide.) Therefore, the application complies with the above listed requirements, and an alternate street design is unnecessary.

12.04.185 - Street design-Access Control

A. A street which is dedicated to end at the boundary of the development or in the case of half-streets dedicated along a boundary shall have an access control granted to the city as a city controlled plat

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 5 OF 33 restriction for the purposes of controlling ingress and egress to the property adjacent to the end of the dedicated street. The access control restriction shall exist until such time as a public street is created, by dedication and accepted, extending the street to the adjacent property.

- B. The city may grant a permit for the adjoining owner to access through the access control.
- C. The plat shall contain the following access control language or similar on the face of the map at the end of each street for which access control is required: "Access Control (See plat restrictions)."
- D. Said plats shall also contain the following plat restriction note(s): "Access to (name of street or tract) from adjoining tracts (name of deed document number[s]) shall be controlled by the City of Oregon City by the recording of this plat, as shown. These access controls shall be automatically terminated upon the acceptance of a public road dedication or the recording of a plat extending the street to adjacent property that would access through those Access Controls."

<u>RESPONSE</u>: As shown on the preliminary plans, all streets will end at the project boundary. The plat will grant access control to the city. The standard will be met when the final subdivision plat is filed and accepted.

12.04.190 - Street design—Alignment.

The centerline of streets shall be:

- A. Aligned with existing streets by continuation of the centerlines; or
- B. Offset from the centerline by no more than ten feet, provided appropriate mitigation, in the judgment of the city engineer, is provided to ensure that the offset intersection will not pose a safety hazard.

<u>RESPONSE</u>: As shown on the preliminary plans, all street centerlines are proposed to be aligned with existing streets by continuation of the centerlines.

12.04.195 - Minimum street intersection spacing standards.

A. All new development and redevelopment shall meet the following Public Street Intersection Spacing Standards:

	Distance in Feet between Streets of Various Classifications								
	Between Arterial and Arterial	Between Arterial and Collector	Between Arterial and Neighborhood Collector	Arterial and	Between Collector Street and Collector Street		Collector and Local	Between Neighborhood Collector and Local Street	Between two adjacent Local Streets
Measured along an Arterial Street	1320	800	600	300	600	300	150	150	150
Measured along a Collector Street	800	800	600	300	600	300	150	150	150

Table 12.04.040—Public Street Intersection Spacing Standards

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 6 OF 33

Measured along a Neighborh ood Collector Street	800	600	300	300	300	150	150	150	150
Measured along a Local Street	600	600	300	300	300	150	150	150	150
Note: With	0 1		ection spacing s erm "arterial" a			11.2		,	mino

<u>RESPONSE</u>: The property takes access from a local public street stub. The proposed streets within the subdivision are all local streets and are all spaced in excess of 150 feet from one another. Therefore, these standards are met.

12.04.205 - Intersection level of service standards.

When reviewing new developments, the City of Oregon City requires all relevant intersections to be maintained at the minimum acceptable Level Of Service (LOS) upon full build-out of the proposed development. The minimum acceptable LOS standards are as follows:

- A. For signalized intersection areas of the city that are located outside the Regional Center boundaries a LOS of "D" or better for the intersection as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0 for the sum of critical movements.
- B. For signalized intersections within the Regional Center boundaries a LOS "D" can be exceeded during the peak hour; however, during the second peak hour, LOS "D" or better will be required as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0.
- C. For unsignalized intersection throughout the city a LOS "E" or better for the poorest approach and with no movement serving more than twenty peak hour vehicles operating at worse than LOS "F" will be tolerated for minor movements during a peak hour.

<u>RESPONSE</u>: Findings demonstrating that all Level of Service (LOS) requirements are satisfied and are included in the Traffic Impact Study (TIS) prepared by Lancaster Engineering, which is included in the submittal materials. Please refer to the TIS for further information regarding LOS. These standards are met.

12.04.210 - Street design-Intersection angles.

Except where topography requires a lesser angle, streets shall be laid out to intersect at angles as near as possible to right angles. In no case shall the acute angles be less than eighty degrees unless there is a special intersection design. An arterial or collector street intersecting with another street shall have at least one hundred feet of tangent adjacent to the intersection unless topography requires a lesser distance. Other streets, except alleys, shall have at least fifty feet of tangent adjacent to the intersection unless topography requires a lesser distance. All street intersections shall be provided with a minimum curb return radius of twenty-five feet for local streets. Larger radii shall be required for higher street classifications as determined by the city engineer. Additional right-of-way shall be required to accommodate curb returns and sidewalks at intersections. Ordinarily, intersections should not have more than two streets at any one point.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 7 OF 33 **RESPONSE:** As shown on the preliminary plans, all intersection angles are laid out at right angles, include at least fifty feet of tangent adjacent to the intersection, and curb return radii of 25 feet. Necessary right-of-ways are proposed to accommodate these street improvements. Therefore, the application complies with the above listed requirements.

12.04.215 - Street design-Off-site street improvements.

During consideration of the preliminary plan for a development, the decision maker shall determine whether existing streets impacted by, adjacent to, or abutting the development meet the city's applicable planned minimum design or dimensional requirements. Where such streets fail to meet these requirements, the decision-maker shall require the applicant to make proportional improvements sufficient to achieve conformance with minimum applicable design standards required to serve the proposed development.

<u>RESPONSE</u>: Existing City streets that provide access to the site meet City requirements as demonstrated in the TIS. Therefore, off-site improvements are not warranted and this requirement does not apply.

12.04.220 - Street design-Half street.

Half streets, while generally not acceptable, may be approved where essential to the development, when in conformance with all other applicable requirements, and where it will not create a safety hazard. When approving half streets, the decision maker must first determine that it will be practical to require the dedication of the other half of the street when the adjoining property is divided or developed. Where the decision maker approves a half street, the applicant must construct an additional ten feet of pavement width so as to make the half street safe and usable until such time as the other half is constructed. Whenever a half street is adjacent to property capable of being divided or developed, the other half of the street shall be provided and improved when that adjacent property divides or develops. Access control as described in [Section] 12.04.200 may be required to preserve the objectives of half streets.

<u>RESPONSE</u>: As shown on the preliminary plans, the site does not front on any public streets. Therefore, half-street improvements are not relevant to this application and this section does not apply.

12.04.225 - Street design-Cul-de-sacs and dead-end streets.

The city discourages the use of cul-de-sacs and permanent dead-end streets except where construction of a through street is found by the decision maker to be impracticable due to topography or some significant physical constraint such as unstable soils, wetland, natural or historic resource areas, dedicated open space, existing development patterns, or arterial access restrictions. When permitted, cul-de-sacs and permanent dead-end streets shall have a maximum length of three hundred fifty feet, as measured from the right-of-way line of the nearest intersecting street to the back of the cul-de-sac curb face, and include pedestrian/bicycle accessways as provided in Section 17.90.220 of this code and Chapter 12.24. This section is not intended to preclude the use of curvilinear eyebrow widening of a street where needed to provide adequate lot coverage.

Where approved, cul-de-sacs shall have sufficient radius to provide adequate turn-around for emergency vehicles in accordance with Fire District and City adopted street standards. Permanent dead-end streets other than cul-de-sacs shall provide public street right-of-way/easements sufficient to provide turn-around space with appropriate no-parking signs or markings for waste disposal, sweepers, and other long vehicles in the form of a hammerhead or other design to be approved by the decision maker. Driveways shall be encouraged off the turnaround to provide for additional on-street parking space.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 8 OF 33 **<u>RESPONSE</u>**: As shown on the preliminary plans, cul-de-sacs or other permanent dead end streets are not proposed. Therefore, this section does not apply.

12.04.230 - Street design—Street names.

Except for extensions of existing streets, no street name shall be used which will duplicate or be confused with the name of an existing street. Street names shall conform to the established standards in the city and shall be subject to the approval of the city.

<u>RESPONSE</u>: There is one existing street that abuts the site, Nutmeg Lane. Its name will be continued through the project. New street names have already been approved by City staff. This standard is met.

12.04.235 - Street design-Grades and curves.

Grades and center line radii shall conform to the standards in the city's street design standards and specifications.

<u>RESPONSE</u>: As shown on the preliminary plans, all grade lines and center line radii comply with the City's street design standards and specifications. Therefore, the application complies with the above listed requirements.

12.04.240 - Street design—Development abutting arterial or collector street.

Where development abuts or contains an existing or proposed arterial or collector street, the decision maker may require: access control; screen planting or wall contained in an easement or otherwise protected by a restrictive covenant in a form acceptable to the decision maker along the rear or side property line; or such other treatment it deems necessary to adequately protect residential properties or afford separation of through and local traffic. Reverse frontage lots with suitable depth may also be considered an option for residential property that has arterial frontage. Where access for development abuts and connects for vehicular access to another jurisdiction's facility then authorization by that jurisdiction may be required.

RESPONSE: There are no arterial or collector streets abutting the site. This standard does not apply.

12.04.245 - Street design—Pedestrian and bicycle safety.

Where deemed necessary to ensure public safety, reduce traffic hazards and promote the welfare of pedestrians, bicyclists and residents of the subject area, the decision maker may require that local streets be so designed as to discourage their use by nonlocal automobile traffic.

All crosswalks shall include a large vegetative or sidewalk area which extends into the street pavement as far as practicable to provide safer pedestrian crossing opportunities. These curb extensions can increase the visibility of pedestrians and provide a shorter crosswalk distance as well as encourage motorists to drive slower. The decision maker may approve an alternative design that achieves the same standard for constrained sites or where deemed unnecessary by the city engineer.

RESPONSE: As shown on the preliminary plans, the proposed public streets are designed to City standards. In general, the overall street pattern is designed to discourage non-local through traffic. Therefore, designs such as curb extensions are unnecessary. However, if required, curb extensions will be provided. There are no bicycle lanes proposed for the project as all proposed streets are classified as local streets, which are not striped for bicycle lanes.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 9 OF 33 12.04.255 - Street design-Alleys.

Public alleys shall be provided in the following districts R-5, R-3.5, R-2, MUC-1, MUC-2 and NC zones unless other permanent provisions for private access to off-street parking and loading facilities are approved by the decision maker. The corners of alley intersections shall have a radius of not less than ten feet.

<u>RESPONSE</u>: For a variety of reasons, alleys are not proposed in this application and the applicant is seeking a variance to the standard. Please see information provided in response to Chapter 17.60 Variances.

12.04.260 - Street design-Transit.

Streets shall be designed and laid out in a manner that promotes pedestrian and bicycle circulation. The applicant shall coordinate with Tri-Met where the application impacts transit streets as identified on Figure 5.7: Public Transit System Plan of the Oregon City Transportation System Plan. Pedestrian/bicycle access ways shall be provided as necessary in conformance with the requirements in Section 17.90.220 of this code and Chapter 12.24 to minimize the travel distance to transit streets and stops and neighborhood activity centers. The decision maker may require provisions, including easements, for transit facilities along transit streets where a need for bus stops, bus pullouts or other transit facilities within or adjacent to the development has been identified.

RESPONSE: Public streets and sidewalks are proposed in the subdivision to provide access to the future homes and provide for neighborhood connectivity / circulation. The preliminary plans show the location and arrangement of these improvements, which are designed and laid out in a manner that promotes pedestrian and bicycle circulation. These improvements include the connection and extension of Nutmeg Lane and the stubbing of streets for future extension and connectivity. These streets and sidewalks, once built out, minimize the travel distance to transit streets and other off-site destinations. The need for additional transit facilities and bus stops has not been identified and therefore is not warranted within this subdivision. This standard is met.

12.04.265 - Street design-Planter strips.

All development shall include vegetative planter strips that are five feet in width or larger and located adjacent to the curb. This requirement may be waived or modified if the decision maker finds it is not practicable. The decision maker may permit constrained sites to place street trees on the abutting private property within 10 feet of the public right-of-way if a covenant is recorded on the title of the property identifying the tree as a city street tree which is maintained by the property owner. Development proposed along a collector, minor arterial, or major arterial street may use tree wells with root barriers located near the curb within a wider sidewalk in lieu of a planter strip, in which case each tree shall have a protected area to ensure proper root growth and reduce potential damage to sidewalks, curbs and gutters.

To promote and maintain the community tree canopy adjacent to public streets, trees shall be selected and planted in planter strips in accordance with Chapter 12.08, Street Trees. Individual abutting lot owners shall be legally responsible for maintaining healthy and attractive trees and vegetation in the planter strip. If a homeowners' association is created as part of the development, the association may assume the maintenance obligation through a legally binding mechanism, e.g., deed restrictions, maintenance agreement, etc., which shall be reviewed and approved by the city attorney. Failure to properly maintain trees and vegetation in a planter strip shall be a violation of this code and enforceable as a civil infraction.

<u>RESPONSE</u>: As shown on the preliminary plans, planter strips meeting City standards are proposed along all public streets. These areas will be improved and planted with street trees when new homes are built and occupied. This standard is met.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 10 OF 33 12.04.270 - Standard construction specifications.

The workmanship and materials for any work performed under permits issued per this chapter shall be in accordance with the edition of the "Standard Specifications for Public Works Construction," as prepared by the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the city, in effect at the time of application. The exception to this requirement is where this chapter and the Public Works Street Design Drawings provide other design details, in which case the requirements of this chapter and the Public Works Street Design Drawings shall be complied with. In the case of work within ODOT or Clackamas County rights-of-way, work shall be in conformance with their respective construction standards.

RESPONSE: All public improvements will be designed by a professional engineer, licensed in the State of Oregon. The plans for these improvements will be submitted to the City and reviewed for consistency with all City requirements. After the appropriate City construction permits are obtained, the improvements will be constructed by a licensed general contractor in accordance with the approved plans. Finally, the improvements will be inspected for consistency with the approved final plans prior to City acceptance. This standard is met.

TITLE 16 – LAND DIVISIONS

Chapter 16.08 Subdivisions – Process and Standards

<u>RESPONSE</u>: The proposed thirty lot subdivision complies with all applicable approval criteria and is being processed through a Type III procedure in accordance with the OCMC.

16.08.015 - Preapplication conference required.

Before the city will accept a subdivision application, the applicant must schedule and attend a preapplication conference in accordance with Section 17.50.050. At a minimum, an applicant should bring to the preapplication conference a tax map of the subject tax lot(s) and surrounding tax lots, scale drawings of the proposed subdivision lotting pattern, streets, utilities and important site features and improvements, and a topographic map of the property.

<u>RESPONSE</u>: A pre-application conference was held on December 6, 2011. This requirement is met.

16.08.020 - Preliminary subdivision plat application.

Within six months of the preapplication conference, an applicant may apply for preliminary subdivision plat approval. The applicant's submittal must provide a complete description of existing conditions, the proposed subdivision and an explanation of how the application meets all applicable approval standards. The following sections describe the specific submittal requirements for a preliminary subdivision plat, which include plan drawings, a narrative statement and certain tabular information. Once the application is deemed to be complete, the community development director shall provide notice of the application and an invitation to comment for a minimum of fourteen days to surrounding property owners in accordance with Section 17.50.090(A). At the conclusion of the comment period, the community development director will evaluate the application, taking into consideration all relevant, timely filed comments, and render a written decision in accordance with Chapter 17.50. The community development director's decision may be appealed to the city commission with notification to the planning commission.

<u>RESPONSE</u>: This application is being submitted within 6 months of the pre-application conference and contains all necessary submittal requirements. This requirement is met.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 11 OF 33 16.08.025 - Preliminary subdivision plat-Required plans.

The preliminary subdivision plat shall specifically and clearly show the following features and information on the maps, drawings, application form or attachments. All maps and site drawings shall be at a minimum scale of one inch to fifty feet.

A. Site Plan. A detailed site development plan showing the location and dimensions of lots, streets, pedestrian ways, transit stops, common areas, building envelopes and setbacks, all existing and proposed utilities and improvements including sanitary sewer, stormwater and water facilities, total impervious surface created (including streets, sidewalks, etc.) and an indication of existing and proposed land uses for the site. If required by staff at the pre-application conference, a subdivision connectivity analysis shall be prepared by a transportation engineer licensed by the State of Oregon that describes the existing and future vehicular, bicycle and pedestrian connections between the proposed subdivision and existing or planned land uses on adjacent properties. The subdivision connectivity analysis shall include shadow plats of adjacent properties demonstrating how lot and street patterns within the proposed subdivision will extend to and/or from such adjacent properties and can be developed meeting the existing Oregon City Municipal Code design standards.

<u>RESPONSE</u>: The preliminary plans include a preliminary site plan. The above listed information, as applicable, is included on the preliminary site plan or other plan in the plan set. This submittal requirement is met.

B. Traffic/Transportation Plan. The applicant's traffic/transportation information shall include two elements: (1) A detailed site circulation plan showing proposed vehicular, bicycle, transit and pedestrian access points and connections to the existing system, circulation patterns and connectivity to existing rights-of-way or adjacent tracts, parking and loading areas and any other transportation facilities in relation to the features illustrated on the site plan; and (2) a traffic impact study prepared by a qualified professional transportation engineer, licensed in the state of Oregon, that assesses the traffic impacts of the proposed development on the existing transportation network to handle the anticipated traffic and the adequacy of the existing system to accommodate the traffic from the proposed development. The City Engineer may waive any of the foregoing requirements if determined that the requirement is unnecessary in the particular case.

<u>RESPONSE</u>: The preliminary plans include a detailed site preliminary site circulation plan containing the above listed information. In addition, a Traffic Impact Study (TIS), prepared in accordance with City requirements is also included in the submittal materials. This submittal requirement is met.

C. Natural Features Plan and Topography, Preliminary Grading and Drainage Plan. The applicant shall submit a map illustrating all of the natural features and hazards on the subject property and, where practicable, within two hundred fifty feet of the property's boundary. The map shall also illustrate the approximate grade of the site before and after development. Illustrated features must include all proposed streets and cul-de-sacs, the location and estimated volume of all cuts and fills, and all stormwater management features. This plan shall identify the location of drainage patterns and courses on the site and within two hundred fifty feet of the property boundaries where practicable. Features that must be illustrated shall include the following:

<u>RESPONSE</u>: The preliminary plans include an existing condition plan and a preliminary grading and drainage plan. Also, a preliminary stormwater report containing the above listed information is included, as applicable. This submittal requirement is met.

- 1. Proposed and existing street rights-of-way and all other transportation facilities;
- 2. All proposed lots and tracts;

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 12 OF 33

- 3. All trees proposed to be removed prior to final plat with a diameter six inches or greater diameter at breast height (d.b.h);
- 4. All natural resource areas pursuant to Chapter 17.49, including all jurisdictional wetlands shown in a delineation according to the Corps of Engineers Wetlands Delineation Manual, January, 1987 edition, and approved by the Division of State Lands and wetlands identified in the City of Oregon Local Wetlands inventory, adopted by reference in the City of Oregon City comprehensive plan;
- 5. All known geologic and flood hazards, landslides or faults, areas with a water table within one foot of the surface and all flood management areas pursuant to Chapter 17.42
- 6. The location of any known state or federal threatened or endangered species;
- 7. All historic areas or cultural features acknowledged as such on any federal, state or city inventory;
- 8. All wildlife habitat or other natural features listed on any of the city's official inventories.

<u>RESPONSE</u>: The preliminary plans and/or other materials in the application package contain the above listed information, as applicable. This submittal requirement is met.

- D. Archeological Monitoring Recommendation. For all projects that will involve ground disturbance, the applicant shall provide,
- 1. A letter or email from the Oregon State Historic Preservation Office Archaeological Division indicating the level of recommended archeological monitoring on-site, or demonstrate that the applicant had notified the Oregon State Historic Preservation Office and that the Oregon State Historic Preservation Office had not commented within forty-five days of notification by the applicant; and
- 2. A letter or email from the applicable tribal cultural resource representative of the Confederated Tribes of the Grand Ronde, Confederated Tribes of the Siletz, Confederated Tribes of the Umatilla, Confederated Tribes of the Warm Springs and the Confederated Tribes of the Yakama Nation indicating the level of recommended archeological monitoring on-site, or demonstrate that the applicant had notified the applicable tribal cultural resource representative had not commented within forty-five days of notification by the applicant.

If, after forty-five days notice from the applicant, the Oregon State Historic Preservation Office or the applicable tribal cultural resource representative fails to provide comment, the city will not require the letter or email as part of the completeness review. For the purpose of this section, ground disturbance is defined as the movement of native soils. The community development director may waive any of the foregoing requirements if the community development director determines that the requirement is unnecessary in the particular case and that the intent of this chapter has been met.

<u>RESPONSE</u>: Based upon feedback provided to the applicant at the pre-application conference, this submittal requirement is not applicable.

Chapter 16.08.030 – Preliminary Subdivision Plat – Narrative Statement

In addition to the plans required in the previous section, the applicant shall also prepare and submit a narrative statement that addresses the following issues:

A. Subdivision Description. A detailed description of the proposed development, including a description of proposed uses, number and type of residential units, allocation and ownership of all lots, tracts, streets, and public improvements, the structure of any homeowner's association, and each instance where the proposed

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 13 OF 33 subdivision will vary from some dimensional or other requirement of the underlying zoning district. For each such variance, a separate application will be required pursuant to Chapter 17.60, Variances;

<u>RESPONSE</u>: A detailed description of the proposed subdivision including the above listed information, as applicable, is included in Sections I and II of this written statement. Please refer to chapter 17.60 for a discussion of the variance that is being requested. This submittal requirement is met.

B. Timely Provision of Public Services and Facilities. The applicant shall explain in detail how and when each of the following public services or facilities is, or will be, adequate to serve the proposed development by the time construction begins:

1. Water

<u>RESPONSE</u>: There is an existing public water main stubbed at the end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend this public main through the site and provide individual private water services to the lots. This standard is met.

2. Sanitary Sewer

<u>RESPONSE</u>: There is an existing public sanitary sewer main at the end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend the public main strategically through the site and provide individual private sanitary sewer service laterals to the lots from the new mains or from the existing main. This standard is met.

3. Storm Sewer and Storm Water Drainage

RESPONSE: There is an existing public storm sewer main at the end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend a public main strategically though the site. Runoff is proposed to be captured with a combination of storm service laterals and curb inlet catch basins. Due to existing elevation and grade constraints, stormwater runoff will be routed in two directions with the majority of the stormwater flowing to an existing offsite sub-regional stormwater facility and the remaining stormwater being routed to the existing ditch on Maplelane Road. For additional information, please refer to the preliminary stormwater report that is included in the application submittal materials. This standard is met.

4. Parks and Recreation

<u>RESPONSE</u>: Park System Development Charges will be assessed and paid at the time building permits are issued for future park development in the area. This assures required funding for parks.

5. Traffic and Transportation

<u>RESPONSE</u>: A Traffic Impact Study (TIS) for this project, prepared by Lancaster Engineering, is included with the application. Appropriate street improvements are proposed for the project, as illustrated in the preliminary project plans. The TIS found that the existing streets, along with those proposed public streets, are adequate to accommodate the small amount of additional

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY March 2012 Page 14 of 33 traffic created by this project. In addition, Transportation System Development Charges will be paid for each new home prior to issuance of a building permit. These fees fund future City and County public works road improvement projects. Please refer to the TIS for additional information. This standard is met.

6. Schools

<u>RESPONSE</u>: The Oregon City School District will provide school services for the children of future residents. School funding is provided through a variety of sources including property taxes and surcharges (construction excise tax) that will be assessed with future building permits for the homes. This standard is met.

7. Fire and Police Services

<u>RESPONSE</u>: Clackamas Fire District No. 1 will provide fire services. There are no noted concerns. Property taxes will be paid by future property owners to fund fire protection services, thereby ensuring funding for fire protection services.

The City of Oregon City Police Department will provide police services. Property taxes will be paid by future property owners to fund police protection services, thereby ensuring funding for police protection services. This standard is met.

Where adequate capacity for any of these public facilities and services is not demonstrated to be currently available, the applicant shall describe how adequate capacity in these services and facilities will be financed and constructed before recording of the plat;

<u>RESPONSE</u>: As described above, all public facilities and services are available. Therefore, this standard does not apply to this application.

C. Approval Criteria and Justification for Variances. The applicant shall explain how the proposed subdivision is consistent with the standards set forth in Chapter 16.12, 12.04 and any other applicable approval standards identified in the municipal code. For each instance where the applicant proposes a variance from some applicable dimensional or other numeric requirement, the applicant shall address the approval criteria from Chapter 17.60

<u>RESPONSE</u>: Please refer to the findings provided in response to the variance that has been requested.

D. Drafts of the proposed covenants, conditions and restrictions (CC&Rs), maintenance agreements, homeowner association agreements, dedications, deeds easements, or reservations of public open spaces not dedicated to the city, and related documents for the subdivision;

<u>RESPONSE</u>: Draft CC&R's are included in the application submittal materials. This standard is met.

E. A description of any proposed phasing, including for each phase the time, acreage, number of residential units, amount of area for nonresidential use, open space, development of utilities and public facilities;

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 15 OF 33 **<u>RESPONSE</u>**: Although Crabtree Terrace No. 2 is the second phase of a project, it is being proposed to be completed in one single phase. Therefore, this standard does not apply to this application.

F. Overall density of the subdivision and the density by dwelling type for each.

RESPONSE: The site is approximately 190,124 square feet (4.36 acres) in size. The required minimum lot size is 3,500 square feet. The average lot area proposed in the project is 4,333 square feet. Due to right-of-way dedications, the net developable area for the project site is 130,031 square feet. Divided by 3,500, the maximum number of lots (density) is 37.15 units. Eighty percent of 37.15 is 29.72, or 30 units. Therefore, the proposed subdivision complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable site. All future homes will be single family detached dwelling units.

16.08.035 - Notice and invitation to comment.

Upon the city's determination that an application for a preliminary subdivision plat is complete, pursuant to Section 17.50, the city shall provide notice of the application in accordance with requirements of Section 17.50 applicable to Type II decisions.

<u>RESPONSE</u>: Upon the City's review and completeness determination for this application, the City shall provide notice in accordance with Section 17.50 of the OCMC.

16.08.040 - Preliminary subdivision plat—Approval standards and decision.

The minimum approval standards that must be met by all preliminary subdivision plats are set forth in Chapter 16.12, and in the dimensional and use requirements set forth in the chapter of this code that corresponds to the underlying zone. The community development director shall evaluate the application to determine that the proposal does, or can through the imposition of conditions of approval, meet these approval standards. The community development director's decision shall be issued in accordance with the requirements of Section 17.50.

RESPONSE: This written statement includes findings of fact demonstrating that the application complies with all applicable approval criteria. These findings are supported by substantial evidence which includes preliminary plans, a Traffic Impact Study (TIS), and other written documentation. This information, which is included in this application package, provides the basis for the City to approve the application.

16.08.045 - Building site—Frontage width requirement.

Each lot in a subdivision shall abut upon a cul-de-sac or street other than an alley for a width of at least twenty feet.

<u>RESPONSE</u>: As shown in the preliminary plans, each proposed lot has in excess of twenty feet of frontage on a street. This standard is met.

16.08.050 - Flag lots in subdivisions.

Flag lots shall not be permitted within subdivisions except as approved by the community development director and in compliance with the following standards.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 16 OF 33 **<u>RESPONSE</u>**: Flag lots are not proposed and are not relevant to this application. Therefore, these standards have been omitted from this written response and findings are not provided.

16.08.055 - Final subdivision plat—Application requirements and approval standards.

The applicant shall apply for final subdivision plat approval within twenty-four months following approval of a preliminary subdivision plat. The applicant shall apply for final plat approval to the city and shall pay the applicable fees as set forth on the city's adopted fee schedule. The final subdivision plat is processed as an administrative decision by the city so long as the final subdivision plat is consistent with the approved preliminary subdivision plat as conditioned by the decision-maker.

- A. If the community development director determines that the final subdivision plat submitted by the applicant is not consistent with the approved preliminary subdivision plat, the modified subdivision shall be subject to the same Type II process and review standards as were applicable to the preliminary subdivision plat. However, if such a review is necessary, the review shall be limited only to those aspects of the final subdivision plat that deviate from the approved preliminary subdivision plat. The decision-maker's original approval of all other aspects of the subdivision may be relied upon as a conclusive determination of compliance with the applicable standards.
- B. The community development director shall approve a final subdivision plat that is consistent with the approved preliminary subdivision plat, including any conditions attached thereto and required permits for access to facilities owned by another jurisdiction.

<u>RESPONSE</u>: A final subdivision plat, that is consistent with the approved preliminary plat, will be submitted to the City prior to recordation.

Chapter 16.12 Minimum Improvements and Design Standards for Land Divisions

Chapter 16.12.015 - Street Design-Generally

Street design standards for all new development and land divisions shall comply with Chapter 12.04—Street Design Standards.

<u>RESPONSE</u>: Please refer to the written response provided to Chapter 12.04 for appropriate findings demonstrating compliance with the Street Design Standards. These standards are met.

16.12.020 Blocks - Generally.

The length, width and shape of blocks shall take into account the need for adequate building site size, convenient motor vehicle, pedestrian, bicycle and transit access, control of traffic circulation, and limitations imposed by topography and other natural features.

16.12.025 Blocks - Length.

Block lengths for local streets and collectors shall not exceed five hundred feet between through streets, as measured between nearside right-of-way lines.

16.12.030 Blocks - Width.

The width of blocks shall ordinarily be sufficient to allow for two tiers of lots with depths consistent with the type of land use proposed.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 17 OF 33 **<u>RESPONSE</u>**: As demonstrated on the preliminary plans, the block lengths do not exceed 500 feet between through streets and the widths allow for two tiers of lots that are appropriate for the area and are suitable for single-family residential development. These standards are met.

16.12.035 Blocks--Pedestrian and Bicycle Access.

To facilitate the most practicable and direct pedestrian and bicycle connections to adjoining or nearby neighborhood activity centers, public rights-of-way, and pedestrian/bicycle accessways which minimize out-of-direction travel, subdivisions shall include pedestrian/bicycle access-ways between discontinuous street right-of-way where the following applies:

- 1. Where a new street is not practicable;
- 2. Through excessively long blocks at intervals not exceeding five hundred feet of frontage as measured between nearside right-of-way lines; or
- 3. Where the lack of street continuity creates inconvenient or out of direction travel patterns for local pedestrian or bicycle trips.

RESPONSE: As demonstrated on the preliminary plans, the proposed street system, which includes public sidewalks, provides for exceptionally convenient pedestrian and bicycle access and connectivity. There are no locations where a pedestrian connection should be provided where a street (with sidewalks) is not already proposed. Therefore, pedestrian / bicycle specific connections, other than the proposed public sidewalk system, are not necessary and are not proposed. These standards are met.

16.12.040 Building Sites.

The size, width, shape and orientation of building sites shall be appropriate for the primary use of the land division, and shall be consistent with the residential lot size provisions of the zoning ordinance with the following exceptions:

<u>RESPONSE</u>: The size, width, depth, shape and orientation of the proposed lots are consistent with the requirements for the R-3.5 Zone, and the resulting building sites are illustrated in the preliminary plat.

16.12.045 Building Sites – Minimum Density

All subdivision layouts shall achieve at least 80% of the maximum density of the base zone for the net developable area as defined in Section 17.04.

RESPONSE: The site is approximately 190,124 square feet (4.36 acres) in size. The required minimum lot size is 3,500 square feet. The average lot area proposed in the project is 4,333 square feet. Due to right-of-way dedications, the net developable area for the project site is 130,031 square feet. Divided by 3,500, the maximum number of lots (density) is 37.15 units. Eighty percent of 37.15 is 29.72, or 30 units. Therefore, the proposed subdivision complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable site.

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16.12.050 Calculations of Lot Area.

A subdivision in the R-10, R-8, R-6, R-5, or R-3.5 Dwelling District may include lots that are up to 20% less than the required minimum lot area of the applicable zoning designation provided the entire subdivision on average meets the minimum site area requirement of the underlying zone. The average lot area is determined by calculating the total site area devoted to dwelling units and dividing that figure by the proposed number of dwelling lots.

Accessory dwelling units are not included in this determination nor are tracts created for non-dwelling unit purposes such as open space, storm water tracts, or access ways.

A lot that was created pursuant to this section may not be further divided unless the average lot size requirements are still met for the entire subdivision.

When a lot abuts a public alley, an area equal to the length of the alley frontage along the lot times the width of the alley right-of-way measured from the alley centerline may be added to the area of the abutting lot in order to satisfy the lot area requirement for the abutting lot. It may also be used in calculating the average lot area.

RESPONSE: The proposed subdivision includes 30 lots for the future construction of singlefamily detached home residential units in the R-3.5 zone. None of the lots are smaller than the 3,500 square feet this is required. The smallest lot is proposed to be 4,000 square feet in area. The average lot area, as calculated above is 4,333 square feet, which exceeds 3,500 square feet. This standard is met.

16.12.055 Building Site--Through Lots.

Through lots and parcels shall be avoided except where they are essential to provide separation of residential development from major arterials or to overcome specific disadvantages of topography of existing development patterns. A reserve strip may be required. A planting screen restrictive covenant may be required to separate residential development from major arterial streets, adjacent nonresidential development, or other incompatible use, where practicable. Where practicable, alleys or shared driveways shall be used for access for lots that have frontage on a collector or minor arterial street, eliminating through lots.

<u>RESPONSE</u>: No through lots are included in the proposed subdivision layout. The standard does not apply.

16.12.060 Building Site--Lot and Parcel Side Lines.

The lines of lots and parcels, as far as is practicable, shall run at right angles to the street upon which they face, except that on curved streets they shall be radial to the curve.

<u>RESPONSE</u>: The proposed lot lines, as far as is practicable, run at right angles to the street upon which they face. Please see the preliminary subdivision plat for further information. This standard is met.

16.12.065 Building Site--Grading.

Grading of building sites shall conform to the state of Oregon Structural Specialty Code, Chapter 18, any approved grading plan and any approved residential lot grading plan in accordance with the requirements of Chapter 15.48, 16.12 and the Public Works Stormwater and Grading Design Standards, and the erosion control requirements of Chapter 17.47.

CRABTREE TERRACE NO. 2– SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 19 OF 33 **RESPONSE:** Proposed grading, including building site grading (where appropriate), is shown on the preliminary plans. The plans demonstrate that Chapter 18, Chapter 15.48, Chapter 16.12, the Public Works Stormwater and Grading Design Standards, and the erosion control requirements of Chapter 17.47 are met. Please refer to the preliminary plans for further information.

16.12.070 Building Site--Setbacks and Building Location.

This standard ensures that lots are configured in a way that development can be orientated toward streets to provide a safe, convenient and aesthetically pleasing environment for pedestrians and bicyclists. The objective is for lots located on a neighborhood collector, collector or minor arterial street locate the front yard setback on and design the most architecturally significant elevation of the primary structure to face the neighborhood collector, collector or minor arterial street.

- A. The front setback of all lots located on a neighborhood collector, collector or minor arterial shall be orientated toward the neighborhood collector, collector or minor arterial street.
- B. The most architecturally significant elevation of the house shall face the neighborhood collector, collector or minor arterial street.
- C. On corner lots located on the corner of two local streets, the main facade of the dwelling may be oriented towards either street.
- D. All lots proposed with a driveway and lot orientation on a collector or minor arterial shall combine driveways into one joint access per two or more lots unless the City Engineer determines that:
 - 1. No driveway access may be allowed since the driveway(s) would cause a significant traffic safety hazard; or
 - 2. Allowing a single driveway access per lot will not cause a significant traffic safety hazard.
- E. The Community Development Director may approve an alternative design, consistent with the intent of this section, where the applicant can show that existing development patterns preclude the ability to practically meet this standard.

RESPONSE: No lots have frontage on an arterial or collector street. In order to comply with transportation planning requirements, all lots are oriented towards the local street. As shown on the preliminary site plan, all lots are proposed to be oriented towards local public streets, and no driveways or lot orientation is provided towards a collector or arterial road. Therefore, these standards are met.

16.12.075 Building Site--Division of Lots.

Where a tract of land is to be divided into lots or parcels capable of redivision in accordance with this chapter, the Community Development Director shall require an arrangement of lots, parcels and streets which facilitates future redivision. In such a case, building setback lines may be required in order to preserve future right-of-way or building sites.

<u>RESPONSE</u>: No proposed lots are capable of redivision in accordance with this Chapter. Therefore, this standard does not apply.

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16.12.080 Protection of Trees.

Protection of trees shall comply with the provisions of Chapter 17.41 – Tree Protection.

<u>RESPONSE</u>: Proposed tree protection, as shown on the preliminary plans, complies with the provisions of Chapter 17.41. Please refer to findings provided in that chapter later in this narrative document.

16.12.085 Easements.

The following shall govern the location, improvement and layout of easements:

- A. Utilities. Utility easements shall be required where necessary as determined by the city engineer. Insofar as practicable, easements shall be continuous and aligned from block-to-block within the land division and with adjoining subdivisions or partitions. Specific utility easements for water, sanitary or storm drainage shall be provided based on approved final engineering plans.
- B. Unusual Facilities. Easements for unusual facilities such as high voltage electric transmission lines, drainage channels and stormwater detention facilities shall be adequately sized for their intended purpose, including any necessary maintenance roads. These easements shall be shown to scale on the preliminary and final plats or maps. If the easement is for drainage channels, stormwater detention facilities or related purposes, the easement shall comply with the requirements of the Public Works Stormwater and Grading Design Standards.
- C. Watercourses. Where a land division is traversed or bounded by a watercourse, drainageway, channel or stream, a stormwater easement or drainage right-of-way shall be provided which conforms substantially to the line of such watercourse, drainageway, channel or stream and is of a sufficient width to allow construction, maintenance and control for the purpose as required by the responsible agency. For those subdivisions or partitions which are bounded by a stream of established recreational value, setbacks or easements may be required to prevent impacts to the water resource or to accommodate pedestrian or bicycle paths.
- D. Access. When easements are used to provide vehicular access to lots within a land division, the construction standards, but not necessarily width standards, for the easement shall meet city specifications. The minimum width of the easement shall be twenty feet. The easements shall be improved and recorded by the applicant and inspected by the city engineer. Access easements may also provide for utility placement.
- E. Resource Protection. Easements or other protective measures may also be required as the Community Development Director deems necessary to ensure compliance with applicable review criteria protecting any unusual significant natural feature or features of historic significance.

RESPONSE: All appropriate utility easements are proposed to be provided. As shown on the preliminary plans, there are no unusual facilities, watercourses, or resource protection areas located on the subject site. Please refer to the preliminary plat and accompanying plans for further information. This standard is met.

16.12.090 Minimum Improvements--Procedures.

In addition to other requirements, improvements installed by the applicant either as a requirement of these or other regulations, or at the applicant's option, shall conform to the requirements of this title and be designed to city specifications and standards as set out in the City's facility master plan and Public Works Stormwater and Grading Design Standards. The improvements shall be installed in accordance with the following procedure:

A. Improvement work shall not commence until construction plans have been reviewed and approved by the city engineer and to the extent that improvements are in county or state right-of-way, they shall be approved by the responsible authority. To the extent necessary for evaluation of the proposal, the plans may be required before

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 21 OF 33 approval of the preliminary plat of a subdivision or partition. Expenses incurred thereby shall be borne by the applicant and paid for prior to final plan review.

- B. Improvements shall be constructed under the inspection and approval of the city engineer. Expenses incurred thereby shall be borne by the applicant and paid prior to final approval. Where required by the city engineer or other city decision-maker, the applicant's project engineer also shall inspect construction.
- C. Erosion control or resource protection facilities or measures are required to be installed in accordance with the requirements of Chapter 17.49 and the Public Works Erosion and Sediment Control Standards. Underground utilities, waterlines, sanitary sewers and storm drains installed in streets shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities and sanitary sewers shall be placed beyond the public utility easement behind to the lot lines.
- D. As-built construction plans and digital copies of as-built drawings shall be filed with the city engineer upon completion of the improvements.
- E. The City Engineer may regulate the hours of construction and access routes for construction equipment to minimize impacts on adjoining residences or neighborhoods.

RESPONSE: Proposed public improvements are illustrated in the preliminary plans. Work will commence when construction plans have been reviewed and approved by the City Engineer. Inspections of the improvements will be made, including erosion control measures. Upon completion of the improvements, as-built drawings will be filed with the City Engineer.

16.12.095 Minimum Improvements--Public Facilities and Services.

The following minimum improvements shall be required of all applicants for a land division under Title 16, unless the decision-maker determines that any such improvement is not proportional to the impact imposed on the City's public systems and facilities:

A. Transportation System. Applicants and all subsequent lot owners shall be responsible for improving the city's planned level of service on all public streets, including alleys within the land division and those portions of public streets adjacent to but only partially within the land division. All applicants shall execute a binding agreement to not remonstrate against the formation of a local improvement district for street improvements that benefit the applicant's property. Applicants are responsible for designing and providing adequate vehicular, bicycle and pedestrian access to their developments and for accommodating future access to neighboring undeveloped properties that are suitably zoned for future development. Storm drainage facilities shall be installed and connected to off-site natural or man-made drainageways. Upon completion of the street improvement survey, the applicant shall reestablish and protect monuments of the type required by ORS 92.060 in monument boxes with covers at every public street intersection and all points or curvature and points of tangency of their center line, and at such other points as directed by the city engineer.

RESPONSE: Public streets with public sidewalks are proposed in the subdivision to provide access to the lots / future homes and provide for neighborhood connectivity / circulation. The preliminary plans show the location and arrangement of these improvements. As shown on the preliminary plans, street improvements are proposed that continue existing stub streets (Nutmeg Lane) through the site and create new streets with future connection possibilities. These improvements accommodate all modes of travel. As required above, monument boxes at street corners and other required locations shall be installed and/or protected.

B. Stormwater Drainage System. Applicants shall design and install drainage facilities within land divisions and shall connect the development's drainage system to the appropriate downstream storm drainage system as a minimum requirement for providing services to the applicant's development. The applicant shall obtain county

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 22 OF 33 or state approval when appropriate. All applicants shall execute a binding agreement to not remonstrate against the formation of a local improvement district for stormwater drainage improvements that benefit the applicant's property. Applicants are responsible for extending the appropriate storm drainage system to the development site and for providing for the connection of upgradient properties to that system. The applicant shall design the drainage facilities in accordance with city drainage master plan requirements, Chapter 13.12 and the Public Works Stormwater and Grading Design Standards.

RESPONSE: There is an existing public storm sewer main at the end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend a public main strategically though the site. Runoff is proposed to be captured with a combination of storm service laterals and curb inlet catch basins. Due to existing elevation and grade constraints, the stormwater will be routed in two directions with the majority of the stormwater flowing to an existing offsite sub-regional stormwater facility and the remaining stormwater being routed to the existing ditch on Maplelane Road. For additional information, please refer to the preliminary stormwater report that is included in the application submittal materials. This standard is met.

C. Sanitary Sewer System. The applicant shall design and install a sanitary sewer system to serve all lots or parcels within a land division in accordance with the city's sanitary sewer design standards, and shall connect those lots or parcels to the city's sanitary sewer system, except where connection is required to the county sanitary sewer system as approved by the county. All applicants shall execute a binding agreement to not remonstrate against the formation of a local improvement district for sanitary sewer improvements that benefit the applicant's property. Applicants are responsible for extending the city's sanitary sewer system to the development site and through the applicant's property to allow for the future connection of neighboring undeveloped properties that are suitably zoned for future development. The applicant shall obtain all required permits and approvals from all affected jurisdictions prior to final approval and prior to commencement of construction. Design shall be approved by the city engineer before construction begins.

<u>RESPONSE</u>: There is an existing public sanitary sewer main at the end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend the public main strategically through the site and provide individual private sanitary sewer service laterals to the lots from the new mains or from the existing mains. This standard is met.

D. Water System. The applicant shall design and install a water system to serve all lots or parcels within a land division in accordance with the city public works water system design standards, and shall connect those lots or parcels to the city's water system. All applicants shall execute a binding agreement to not remonstrate against the formation of a local improvement district for water improvements that benefit the applicant's property. Applicants are responsible for extending the city's water system to the development site and through the applicant's property to allow for the future connection of neighboring undeveloped properties that are suitably zoned for future development.

RESPONSE: There is an existing public water main stubbed at the end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend this public main through the site and provide individual private water services to the lots. This standard is met.

E. Sidewalks. The applicant shall provide for sidewalks on both sides of all public streets, on any private street if so required by the decision-maker, and in any special pedestrian way within the land division. Exceptions to this requirement may be allowed in order to accommodate topography, trees or some similar site constraint. In the case of major or minor arterials, the decision-maker may approve a land division without sidewalks where sidewalks are found to be dangerous or otherwise impractical to construct or are not reasonably related to the applicant's development. The decision-maker may require the applicant to provide sidewalks concurrent with the issuance of the initial building permit within the area that is the subject of the land division application.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 23 OF 33 Applicants for partitions may be allowed to meet this requirement by executing a binding agreement to not remonstrate against the formation of a local improvement district for sidewalk improvements that benefit the applicant's property.

<u>RESPONSE</u>: As demonstrated on the preliminary plans, the proposed street system includes public sidewalks on both sides of all interior streets. This provides for exceptionally convenient pedestrian and bicycle access and connectivity for existing and future residents in the area. These standards are met.

F. Bicycle Routes. If appropriate to the extension of a system of bicycle routes, existing or planned, the decisionmaker may require the installation of separate bicycle lanes within streets and separate bicycle paths.

<u>RESPONSE</u>: As demonstrated on the preliminary plans, the proposed local street system includes public sidewalks and paved surfaces for bicycle travel. This provides for exceptionally convenient pedestrian and bicycle access and connectivity. Bicycle lane striping is not required by City standard for local streets. This standard is met.

G. Street Name Signs and Traffic Control Devices. The applicant shall pay the city and the city installs street name signs at all street intersections. The applicant shall install traffic control devices as directed by the city engineer. Street name signs and traffic control de-vices shall be in conformance with all applicable city regulations and standards.

<u>RESPONSE</u>: Street name signs and stop signs will be installed for the proposed streets, as required by the City Engineering staff. This standard is met.

H. Street Lights. The applicant shall install street lights which shall be served from an underground source of supply. Street lights shall be in conformance with all city regulations.

<u>RESPONSE</u>: Street lighting will be installed for the proposed streets, as required by the City Engineering staff. This standard is met.

I. Street Trees. Refer to Chapter 12.08, Street Trees.

<u>RESPONSE</u>: As discussed previously, street trees will be planted along all streets in the subdivision at such time as a building permit is issued and a home is approved for final inspection and occupancy. This standard is met.

J. Bench Marks. At least one bench mark shall be located within the subdivision boundaries using datum plane specified by the city engineer.

<u>RESPONSE</u>: The final subdivision plat will reference a bench mark utilizing the datum plane specified by the city engineer, as required. This standard is met.

K. Other. The applicant shall make all necessary arrangements with utility companies or other affected parties for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting and cable television, shall be placed underground.

<u>RESPONSE</u>: All appropriate easements shall be provided for public and private utility providers. Arrangements will be made with utility providers for the installation of these facilities.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 24 OF 33 L. Oversizing of Facilities. All facilities and improvements shall be designed to city standards as set out in the city's facility master plan, public works design standards, or other city ordinances or regulations. Compliance with facility design standards shall be addressed during final engineering. The city may require oversizing of facilities to meet standards in the city's facility master plan or to allow for orderly and efficient development. Where oversizing is required, the applicant may request reimbursement from the city for oversizing based on the city's reimbursement policy and funds available, or provide for recovery of costs from intervening properties as they develop.

<u>RESPONSE</u>: Properly sized public facilities will be provided throughout the project to serve the future homes. All public improvements will be designed by a registered professional engineer and reviewed and approved by City Engineering staff.

M. Erosion Control Plan--Mitigation. The applicant shall be responsible for complying with all applicable provisions of Chapter 17.47 with regard to erosion control.

<u>RESPONSE</u>: All proper erosion control measures shall be undertaken. A preliminary erosion control plan is included in the preliminary plans. Please refer to Chapter 17.47 for findings regarding erosion control.

TITLE 17 - ZONING

Chapter 17.16 R-3.5 Dwelling District

Chapter 17.16.020 – Permitted Uses

Permitted uses in the R-3.5 district are:

B. Single-family detached residential units;

<u>RESPONSE</u>: The proposed subdivision will allow for detached single family homes to be built. These are permitted as listed above in the R-3.5 District.

17.16.040 Dimensional Standards.

Dimensional standards in the R-3.5 District are:

- A. Minimum residential lot areas, three thousand five hundred square feet;
- B. Minimum lot width, twenty feet;
- C. Minimum lot depth, seventy feet;

<u>RESPONSE</u>: As demonstrated in the preliminary plat, each lot exceeds 3,500 square feet and is greater than 20 feet wide and 70 feet deep. These standards are met.

- D. Maximum building height, two and one-half stories, not to exceed thirty-five feet;
- E. Minimum required setbacks:
 - 1. Front yard five feet minimum setback,
 - 2. Front porch, zero feet minimum setback,
 - *3. Interior side yard, Detached unit five feet minimum*
 - 4. Corner side yard, ten-foot minimum setback,
 - 5. Rear yard, fifteen-foot minimum setback,
 - 6. Rear porch, ten-foot minimum setback.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 25 OF 33

- 7. Attached and detached garage, twenty feet minimum setback from the public right-of-way where access is taken, except for alleys. Detached garages on an alley shall be setback a minimum of five feet.
- F. Garage Standards: See Chapter 17.21 Residential Design Standards.
- G. Maximum Lot Coverage: The footprint of all structures 200 square feet or greater shall cover a maximum of fifty-five percent of the lot area.

<u>RESPONSE</u>: Future homes will comply with the above listed height restrictions and required setbacks. Setbacks for future dwellings in the subdivision are shown on the preliminary plans. These standards will be met.

17.20.015 Street Trees.

All new single or two-family dwellings or additions of 25 percent or more of the existing square footage of the home (including the living space and garage(s)) shall install a street tree along the frontage of the site, within the abutting developed right-of-way. Existing trees may be used to meet this requirement. A picture of the planted tree shall be submitted to the Planning Division prior to issuance of an occupancy. Upon approval by the Community Development Director, when a planter strip is not present, a tree may be placed within an easement on the abutting private property within 10 feet of the public right-of-way if a covenant is recorded for the property with the Clackamas County Recorders Office identifying the tree as a city street tree, subject to the standards in Chapter 12.08 of the Oregon City Municipal Code. The street tree shall be a minimum of 2-inchs in caliper and either selected from the Oregon City Street Tree List or approved by a certified arborist for the planting location.

<u>RESPONSE</u>: As discussed previously, street trees will be planted along all streets in the subdivision at such time as a building permit is issued and a home is approved for final inspection and occupancy. This standard is met.

17.21.010 - Purpose.

The intent of this chapter is to ensure new development is compatible with the goals and policies of the Park Place Concept Plan area and the historic architectural styles of Oregon City. Appropriate architectural styles include: Western Farmhouse/Vernacular, Bungalow, Queen Anne Vernacular and Foursquare. The 2006 Historic Review Board's Design Guidelines for New Construction include additional architectural descriptions of historic singlefamily structures in Oregon City.

<u>RESPONSE</u>: The homes are proposed to have front loaded garages; therefore they will comply with the requirement of this section.

Chapter 17.41 Tree Protection Standards

17.41.010 Tree Protection – Intent.

The intent of this chapter is to ensure that new development is designed in a manner that preserves trees to the maximum extent practicable. As a requirement of any Type II land use application, the siting of structures, roadways and utility easements, shall provide for the protection of tree resources to the maximum extent practicable. This chapter applies to all subdivision, partition and site plan and design review applications.

<u>RESPONSE</u>: The proposal involves no tree removal. Please refer to the preliminary plans for details related to tree protection. The standard is met.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 26 OF 33

Chapter 17.47 Erosion and Sediment Control

17.47.070 Erosion and sediment control plans.

- A. An application for an erosion and sediment control permit shall include an erosion and sediment control plan, which contains methods and interim measures to be used during and following construction to prevent or control erosion prepared in compliance with city of Oregon City public works standards for erosion and sediment control. These standards are incorporated herein and made a part of this title and are on file in the office of the city recorder.
- B. Approval Standards. An erosion and sediment control plan shall be approved only upon making the following findings:
 - 1. The erosion and sediment control plan meets the requirements of the city of Oregon City public works standards for erosion and sediment control incorporated by reference as part of this chapter;
 - 2. The erosion and sediment control plan indicates that erosion and sediment control measures will be managed and maintained during and following development. The erosion and sediment control plan indicates that erosion and sediment control measures will remain in place until disturbed soil areas are permanently stabilized by landscaping, grass, approved mulch or other permanent soil stabilizing measures.
- *C.* The erosion and sediment control plan shall be reviewed in conjunction with the requested development approval. If the development does not require additional review, the manager may approve or deny the permit with notice of the decision to the applicant.
- D. The city may inspect the development site to determine compliance with the erosion and sediment control plan and permit.
- *E.* Erosion that occurs on a development site that does not have an erosion and sediment control permit, or that results from a failure to comply with the terms of such a permit, constitutes a violation of this chapter.
- F. If the manager finds that the facilities and techniques approved in an erosion and sediment control plan and permit are not sufficient to prevent erosion, the manager shall notify the owner or his/her designated representative. Upon receiving notice, the owner or his/her designated representative shall immediately install interim erosion and sediment control measures as specified in the city of Oregon City public works standards for erosion and sediment control. Within three days from the date of notice, the owner or his/her designated representative shall submit a revised erosion and sediment control plan to the city. Upon approval of the revised plan and issuance of an amended permit, the owner or his/her designated representative shall immediately implement the revised plan.
- *G.* Approval of an erosion and sediment control plan does not constitute an approval of permanent road or drainage design (e.g., size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.)

RESPONSE: A preliminary erosion and sedimentation control plan is included in the preliminary plans. The plan includes measures that will ensure that sediment laden waters will not leave the site. A final erosion and sedimentation control plan will be submitted and approved before any construction activities commence. Please refer to the preliminary plans for further information.

Chapter 17.60 - VARIANCES

17.60.010 - Authority.

According to procedures set forth in Section 17.60.030, the planning commission or the community development director may authorize variances from the requirements of this title. In granting a variance, the planning commission or community development director may attach conditions to protect the best interests of the surrounding property or neighborhood and otherwise achieve the purposes of this title. No variances shall be granted to allow the use of property for a purpose not authorized within the zone in which the proposed use would be located.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 27 OF 33 17.60.020 - Variances-Procedures.

A. A request for a variance shall be initiated by a property owner or authorized agent by filing an application with the city recorder. The application shall be accompanied by a site plan, drawn to scale, showing the dimensions and arrangement of the proposed development. When relevant to the request, building plans may also be required. The application shall note the zoning requirement and the extent of the variance requested. Procedures shall thereafter be held under Chapter 17.50. In addition, the procedures set forth in subsection D. of this section shall apply when applicable.

<u>RESPONSE</u>: This application represents the second phase of a subdivision (the adjacent 81 lot Crabtree Terrace Subdivision) that was first submitted to the City in 2006 (City file TP 07-05 and WR 07-13) and was completed with the final plat recording in 2008.

The property owner's goal with this application is to develop this portion of his property in a similar manner as was the first "phase" of the project, with a grid system of local public streets providing direct front loaded access to 4,000 – 5,000 square foot lots for single-family detached homes. This was his intent when he submitted the Crabtree Terrace No. 1 Subdivision application in 2006 (as shown in the attached approved shadow plat) and graded the property in 2007 and 2008 in accordance with a City approved grading permit. The owner had hoped to complete development of the entire property (including this portion) in 2009. However, the economic downturn of the past several years, which has especially impacted the residential housing market, has prevented him from meeting this goal.

In addition to the poor economy and housing market, a recent change in the Oregon City Municipal Code has occurred after approval of Crabtree Terrace Subdivision. The adoption of an alley requirement for R-3.5 properties (as this property is zoned) impacts the owner's ability to complete this project and achieve the goals for the property as originally conceived and approved. This standard is listed below.

OCMC 12.04.255 - Street design-Alleys.

Public alleys shall be provided in the following districts R-5, R-3.5, R-2, MUC-1, MUC-2 and NC zones unless other permanent provisions for private access to off-street parking and loading facilities are approved by the decision maker. The corners of alley intersections shall have a radius of not less than ten feet.

Since the property is zoned R-3.5, it is understood that the project needs to include alleys. As shown on the preliminary plans, and as described below, in lieu of providing alleys, the project includes off-street parking and loading facilities that are equal to or better than what would be provided with alleys. Due to a variety of factors including those listed below, alleys are not a viable way to complete this project.

• Previous Site Grading

Previously performed site work set up how remainder of site would be graded / developed. This site work was performed and completed in accordance with an approved 2007 Grading Permit. This grading permit issued based on the City's approval of the Crabtree Terrace Subdivision (City file TP 07-05 and WR 07-13). This work was completed in good faith prior to Code change regarding alleys.

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• Site Dimensions / Geometry

The configuration of the site does not lend itself to providing alleys. The overall site dimensions and the existing street stub set up a logical "lot pattern" as shown in the preliminary plans. Nutmeg Lane runs in a north-south direction, and Purple Ash Way and Oregon Iris Way run in an east-west direction.

- There is no opportunity for an alley along the south boundary of the site (along the back of Lots 83-87) because it is the site boundary, there are existing developed lots with built homes, and there is a significant grade change along this line.
- There is no opportunity for an alley along the east boundary of the site (lots 87, 88, 105, and 106) because the "lot pattern" is not set up for it, it is a site boundary, it is the City Limits and Urban Growth Boundary, and there is an existing easement along the line.
- There is no opportunity for an alley along the north boundary of the site (along the back of lots 106-111) because it is a site boundary, the adjacent property is not being developed at this time, and there is a significant grade change along this line.
- There is no opportunity for an alley along the west boundary of the site (lots 82 and 95-98) because it is a site boundary, a portion of it is the City Limits, and there is a significant grade change.

Site boundaries prohibit the ability to develop and construct an alley, have a shared alley, and have the alley in a reciprocal access easement.

• Unintended / Undesirable Results

➢ Flat buildable lots − not possible

If alleys were introduced into the project they would eliminate the possibility of creating flat buildable lots. To deal with grade changes on alley loaded lots (where grade cannot be accommodated in rear yards), garages would need to be located underneath homes. This would necessitate taller homes with stairs. In addition to stairs within the homes, grading the site for alleys and alley loaded homes will require stairs to be built in the front yards to accommodate several feet of elevation gain because it cannot be accommodated in the rear yards.

It is widely understood, that due to mobility factors, homes with stairs typically do not appeal to older residents, who are a desirable and stable demographic. By not including alleys and the resulting homes with stairs, the property owner can include single level and master on the main homes which encourage, not discourage senior citizens in the proposed subdivision. In addition, stairways in front yards make pedestrian access more cumbersome for pedestrian access. By not including alleys and the front yards with stairs, the subdivision encourages, not discourage pedestrian access to the homes.

Loss of outdoor yards

The center area (lots 88-105) does not have adequate depth for a shared alley. With a depth of 80 foot for each lot, a 20-foot shared alley would effectively take away 10-feet from the lot. In addition to the 10 feet, there would need to be 20 feet for parking / maneuvering. The average

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 29 OF 33 home depth would be 40 feet, and the front yard (along the public street) contains a 10 foot public utility easement (PUE); therefore, the lots would not have any front or rear yards. There would be no areas to enjoy either a front or rear yard. Folks who live in Oregon City desire these areas.

Additional Impervious Surfaces

An alley loaded project will significantly increase the amount of paving required for the subdivision because in addition to the alleyways, frontage streets also need to be provided. This increase in impervious surfaces requires more downstream storage capacity to accommodate runoff volumes as well as additional treatment area than the proposed subdivision design.

Based upon the above, and after extensive conversations and meetings with the City, City staff determined that a variance application was the appropriate avenue to not include alleys within this project. Therefore, the property owner is initiating this application for a variance, concurrently with the request for the subdivision approval.

B. A nonrefundable filing fee, as listed in Section 17.50.[0]80, shall accompany the application for a variance to defray the costs.

RESPONSE: The appropriate application fees are included in the submittal materials.

C. Before the planning commission may act on a variance, it shall hold a public hearing thereon following procedures as established in Chapter 17.50. A Variance shall address the criteria identified in Section 17.60.030, Variances — Grounds.

<u>RESPONSE</u>: Upon review of the application, City staff shall schedule and provide appropriate notice for the required public hearing before the planning commission.

17.60.030 - Variance-Grounds.

A variance may be granted only in the event that all of the following conditions exist:

A. That the variance from the requirements is not likely to cause substantial damage to adjacent properties by reducing light, air, safe access or other desirable or necessary qualities otherwise protected by this title;

RESPONSE: The City zoning code allows for attached homes on 3,500 square foot lots in the R-3.5 zone with 5 foot rear yard setbacks to alleys. As illustrated on the preliminary plans, the proposed project involves single family detached homes on +/-4,300 square foot lots with 15 foot rear yard setbacks that will provide for separation between individual homes.

• Light

Approval of the variance does not in any way reduce or negatively affect sunlight exposure for any other property or within the project site because it does not allow any buildings to be built any taller or closer to any property lines. In fact, approval of the variance facilitates the building of single-level homes. Both single and two story detached single-family homes which in turn reduces shadows and further increases exposure to natural sunlight than other development that

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 30 OF 33 is permitted in the R-3.5 District such as zero-lot line attached townhomes with five foot rear alley setbacks.

• Air

Due to the increased setbacks provided in the proposal, compared with what is allowed in the R-3.5 District (zero lot line – 5 foot alley setbacks), approval of the variance also provides for enhanced air circulation. Approval of the variance improves air quality not only due to this but also because not including alleys reduces the amount of paving and grading that is required, thus reducing air pollution (dust and fumes) created by heavy construction equipment.

Safe Access

The proposal does not reduce or negatively affect pedestrian and/or vehicular access because curbs and landscape planter strips (with street trees) are proposed to separate pedestrian travel from vehicular travel. Combining driveways, as is proposed, provides an additional method of enhancing pedestrian safety because it maximizes the amount of curb exposure and minimizes the number of pedestrian / automobile conflicts in the project (driveways crossing sidewalks). In fact, streets without driveways can result in increased vehicle speeds due to drivers that would not be accounting for this potential conflict. Therefore, the proposal provides safe access in a manner that is consistent with that which would be provided in a similar project with alleys.

• Other Desirable or Necessary Qualities

In addition to the above, as a result of not creating alleys, less pavement surface is necessary, thereby allowing for additional pervious surfaces within the project. Reduction in pavement quantities is a well-established technique that reduces stormwater runoff and enhances downstream stormwater quality.

Without alleys, each home will have a rear yard. Rear yards provide homeowners, families, etc. the opportunity to quietly enjoy their property in an outdoor environment. Rear yards are utilized for outdoor gatherings with friends, relatives, and neighbors, cooking and dining, planting and tending to gardens, planting of trees and other vegetated screening, and provide areas for children to play sports. Many perspective home buyers, especially those with young children and/or pets will not consider a home without a rear yard. Alleys substantially impair and/or eliminate the opportunity for rear yards.

Based on the above, approval of the requested variance to not include alleys in the proposed subdivision will not cause substantial damage to adjacent properties by reducing light, air, safe access, or other desirable or necessary qualities protected by this title. This criteria is met.

B. That the request is the minimum variance that would alleviate the hardship;

<u>RESPONSE</u>: This is not a situation where a dimensional standard is to be varied. The request to not include alleyways is the minimum variance that will alleviate this hardship. This criteria is met.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 31 OF 33

C. Granting the variance will equal or exceed the purpose of the regulation to be modified.

<u>RESPONSE</u>: Based on meetings with City Planning Staff, the applicant understands that the intent and purpose of the alley requirement relates primarily to three goals.

• Assure sufficient parking

It is anticipated that each lot will have a two car garage with a driveway that will provide for offstreet parking. Four off-street parking spaces per dwelling unit exceeds the minimum City requirement by three spaces. In addition, as shown on the preliminary plans, driveways are proposed to be combined where possible to maximize the availability of on-street parking. Therefore, the proposal will equal or exceed the amount of parking that would be provided in an alleyway scenario given the same lot sizes. This criteria is met.

• Provide a safe pedestrian environment.

As described above, the proposal will provide a safe pedestrian environment. Curbs and landscape planter strips (with street trees) are proposed to separate pedestrian travel from the street. Safe pedestrian environments with front entry loaded garages on 50 foot wide lots accessing local public streets are found in many areas throughout this country, including Oregon City. Combining driveways, as is proposed, provides an additional method of enhancing pedestrian safety because it maximizes the amount of curb exposure and minimizes the number of driveways. Nothing unusual is being proposed that would in any way be unsafe for pedestrians. Therefore, the proposal provides a safe pedestrian environment that an equals or exceeds that which would be provided if alleys were provided. This criteria is met.

• Provide an attractive pedestrian environment.

Based on conversations with City staff, it is understood that at the time this requirement was adopted, there was an aesthetic concern with attached townhomes and homes on very small/narrow lots being dominated by garages. This concern has been remedied with the adoption of the Residential Design Standards (garage standards) found in Chapter 17.21 which minimize effects of garages in the pedestrian environment and enhances the appearance of residential structures. The future homes in this project will be subject to these standards. Furthermore, the proposed lot widths in the project mitigate for any perceived garage widths because the lots equal or exceed 50 feet, surpassing the 25 foot minimum lot width requirement for the R-3.5 District by 25 feet (or 50%). Fifty-foot wide lots, as are proposed, satisfies the minimum lot width requirement for the R-6 zone, which does not require alleyways. Therefore, the view from the street (pedestrian environment) will be similar to an R-6 subdivision. These factors, combined with the fact that all future homes will be detached (as opposed to attached homes) ensures that this purpose will be met. This criteria is met.

D. Any impacts resulting from the adjustment are mitigated;

<u>RESPONSE</u>: Mitigation for not including alleys is proposed in the form of wider lots than is required (50 feet), detached homes (breaking up visual mass of structures), combined driveway

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 32 OF 33 approaches (maximizing curb exposure and minimizing access points), and compliance with the Residential Design Standards (garage standards). This criteria is met.

E. No practical alternatives have been identified which would accomplish the same purpose and not require a variance; and

<u>RESPONSE</u>: Based upon conversations with City staff, the variance is the only avenue to address this need, and there is no practical alternative that would accomplish the same purpose and not require a variance. This criteria is met.

F. The variance conforms to the comprehensive plan and the intent of the ordinance being varied.

RESPONSE: The subject property is designated MR (Medium Density Residential) by the City Comprehensive Plan complemented by a City Zoning designation of R-3.5. The City has an adopted Municipal Code that implements requirements for Streets, Subdivisions and Zoning as they relate to citizen involvement, land use, housing, public facilities, and transportation. As demonstrated in this written narrative, preliminary plans, and other documentation included in the application materials, these requirements are satisfied. Because these portion of the Municipal Code implement the comprehensive plan, approval of the variance conforms to the comprehensive plan. As described above under Section C above, the proposed variance conforms to the intent of the ordinance being varied. This criteria is met.

IV. CONCLUSION

The submittal requirements have been met and the required findings have been made for all applicable approval criteria. These findings serve as the basis for the City of Oregon City to approve the application and are supported by substantial evidence in the application materials. Therefore, the applicant respectfully requests approval of the proposed 30-lot subdivision and the variance request to allow residential local street access (Crabtree Terrace No. 2) instead of alleys.

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TRAFFIC IMPACT STUDY

 $\begin{array}{l} \mbox{Crabtree Terrace No. 2-Subdivision Application}\\ \mbox{City of Oregon City} \end{array}$

March 2012

CRABTREE TERRACE NO. 2 TRAFFIC IMPACT STUDY

OREGON CITY, OREGON

DATE: March 14, 2012

PREPARED FOR: Monty Hurley AKS Engineering & Forestry LLC 13910 SW Galbreath Drive, #100 Sherwood, OR 97140

PREPARED BY: Justin Cole Todd E. Mobley, PE, PTOE



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3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from



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EXECUTIVE SUMMARY

- 1. A property in Oregon City located south of S Maple Lane Road is being proposed for a residential subdivision. Access to the proposed subdivision will be provided via the extension of Nutmeg Lane, an existing residential street stubbed to the site from the existing Crabtree Terrace subdivision, located south of the subject property. The proposed subdivision consists of a total of 30 single-family homes and an internal public roadway system which connects to the existing local street system.
- 2. Upon completion of the proposed subdivision, it is expected to generate approximately 23 trips during the morning peak hour and 30 trips during the evening peak hour. The estimated daily traffic volume for the site is 288 trips with half entering and half exiting.
- **3.** The study intersections currently operate acceptably during the morning and evening peak hours. In the future, the intersections will continue to operate acceptably with or without the proposed subdivision in place.
- **4.** None of the existing residential streets serving the site will be overburdened by the proposed subdivision. The existing streets and intersections surrounding the site are capable of supporting the proposed subdivision, and no mitigation is recommended.



INTRODUCTION

A property in Oregon City south of S Maple Lane Road has been proposed for a residential subdivision. The subdivision will connect to the existing local street system south of the site, taking access via an extension of Nutmeg Lane into the property. The proposed subdivision includes 30 new single-family residences.

The purpose of this study is to assess the traffic impact of the proposed development on the nearby street system and to recommend any required mitigative measures. The analysis will include level of service calculations and detailed trip generation estimates.

Detailed information on traffic counts, trip generation calculations, and level of service calculations is included in the appendix to this report.

Crabtree Terrace No. 2 - Traffic Impact Study

4

4

LOCATION DESCRIPTION

The City of Oregon City requires a study of the following intersections:

- Beavercreek Road at Maple Lane Road
- Thayer Road at Maple Lane Road
- Walnut Grove Way at Maple Lane Road
- Holly Lane at Maple Lane Road

A vicinity map showing the existing lane configurations at the study intersections is shown on page seven.

Beavercreek Road east of Highway 213 is under the jurisdiction of and maintained by Clackamas County. It is classified as a Minor Arterial by Clackamas County and as a Major Arterial by the City of Oregon City. It is generally a four-lane road east of Highway 213 with two southbound travel lanes, one northbound travel lane and a center turn lane. Curb and sidewalk are in place on both the north and south sides of Beavercreek Road in the vicinity of Maple Lane Road.

Maple Lane Road is under the jurisdiction of and maintained by Clackamas County, although jurisdiction will eventually be transferred to the City. It is classified by both Oregon City and the County as a Minor Arterial. It is also classified as a Proposed Bikeway by the County. It is generally a two-lane facility with an approximate 24-foot pavement width widening to three lanes at Thayer Road and to four lanes at the Beavercreek Road intersection. The posted speed is 45 mph. Curb and sidewalk are in place intermittently along the roadway.

Thayer Road is under the jurisdiction of and maintained by Clackamas County and jurisdiction will also be transferred to the City in the future. It is classified as a Collector by both Oregon City and Clackamas County. It is also classified as a Proposed Bikeway by the County. Curb and sidewalk are in place only adjacent to recent development. The pavement width is approximately 22 feet and the posted speed is 25 mph.

Walnut Grove Way is a residential local street providing access to existing and proposed residences. Curbs and sidewalks are in place along both sides of the street. Walnut Grove way will provides one option for local street access between the proposed subdivision and Maple Lane Road to the west.

Holly Lane is under the jurisdiction of and maintained by Clackamas County. It is classified as a Local Street by both Oregon City and Clackamas County. It is generally a two-lane facility in the vicinity of the study area with a posted speed of 45 mph. Curb and sidewalk are in place intermittently along the street.

The intersection of Beavercreek Road at Maple Lane Road is a four-legged intersection that is controlled by an actuated traffic signal with a southbound right-turn overlap phase. The eastbound and westbound Beavercreek Road approaches have a left-turn lane, a through lane, and a shared through and right-turn lane. The southbound approach has a left-turn lane, a through lane, and a right-turn lane. The northbound approach has a left-turn lane and a shared through/right-turn lane.

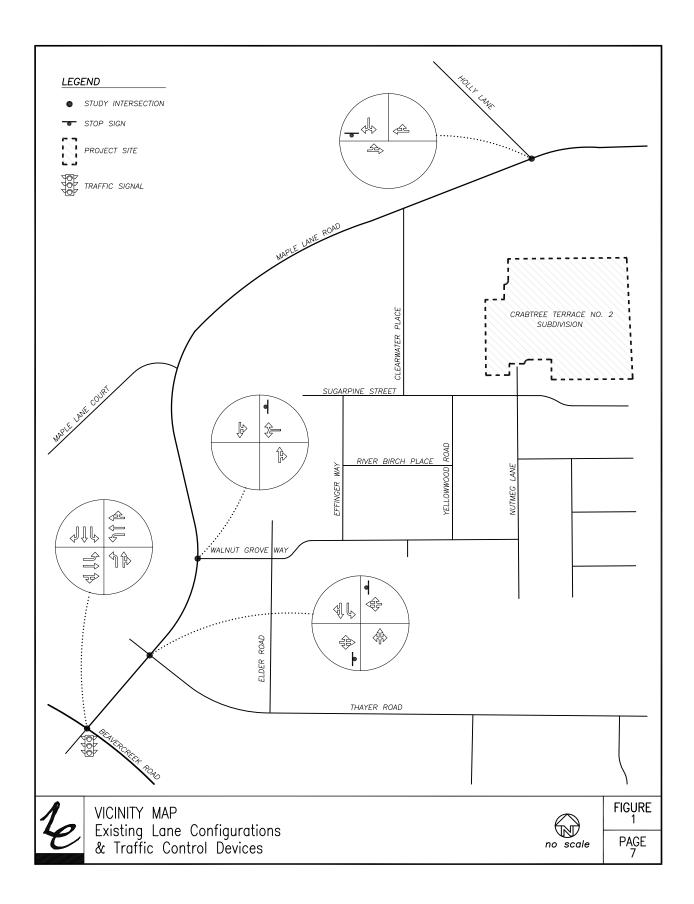
4

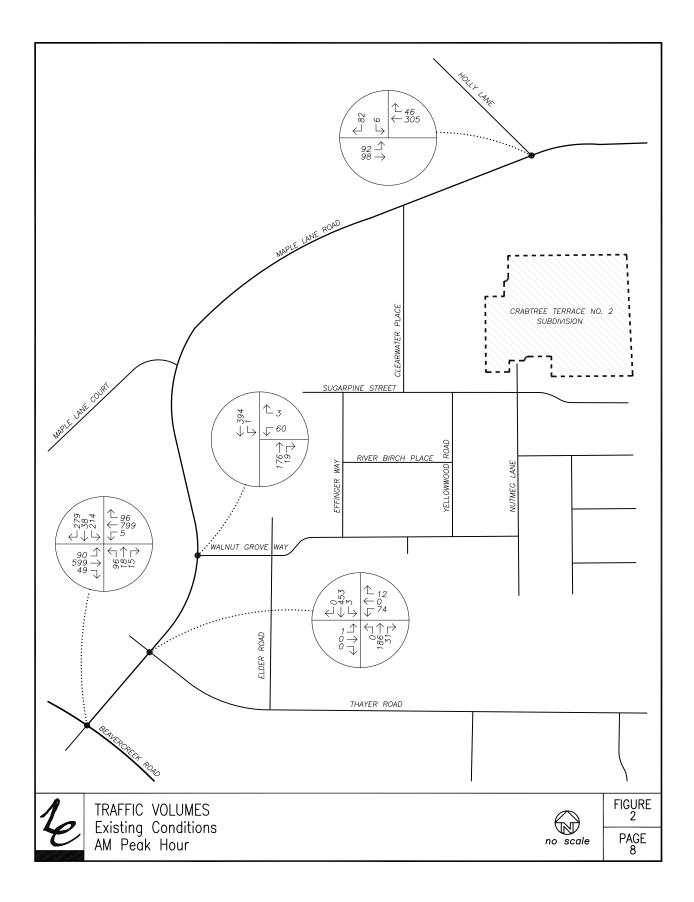
The intersection of Thayer Road at Maple Lane Road is a four-legged intersection that is controlled by stop signs on the Thayer Road approaches. The southbound Maple Lane Road approach has a left-turn lane and a shared through and right-turn lane. All of the other approaches have a single lane.

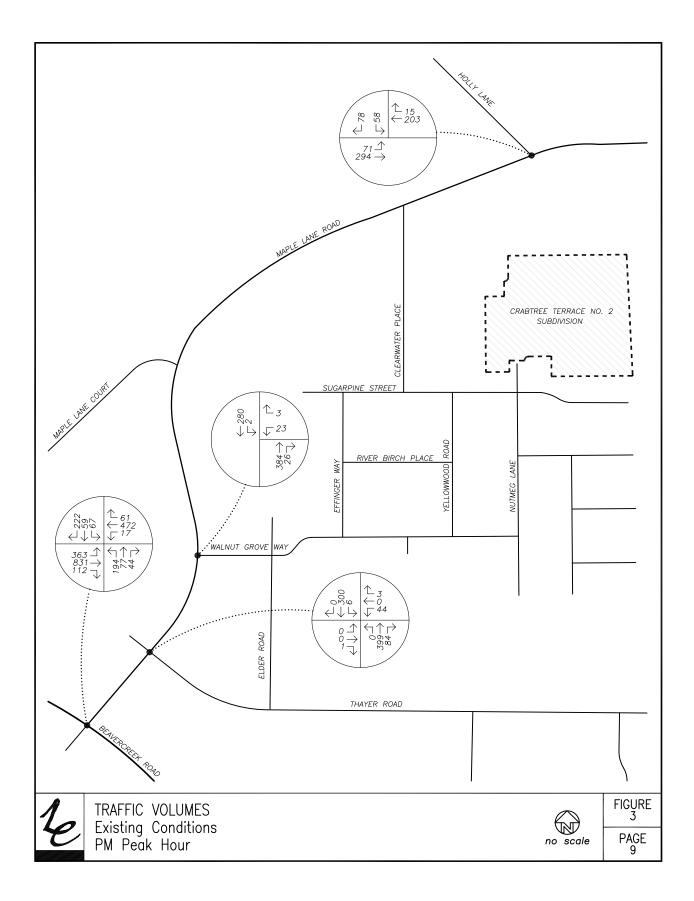
Walnut Grove Way intersects Maple Lane Road from the east, forming a "T" shaped intersection. Traffic on Walnut Grove Way is controlled by a stop sign and traffic on Maple Lane Road is free flowing. All of the approaches are single lane.

The intersection of Holly Lane at Maple Lane Road is a three-legged intersection that is controlled by a stop sign on the Holly Lane approach. All of the approaches are single lane.

Manual turning movement counts were made at the study intersections in February of 2012 from 7:00 to 9:00 AM and 4:00 to 6:00 PM. The peak hours occur during different intervals for several of the study intersections during both the morning and evening peaks. For the sake of continuity, both the morning and evening peak hours are adjusted in the analysis to reflect a common system peak hour. The naturally occurring peak hours at the intersection of Maple Lane Road at Beavercreek Road have been selected for use as the common system peak hour. The volumes for the morning and evening and evening peak hours are shown in the traffic flow diagrams on pages eight and nine.









TRIP GENERATION

To estimate the trips generated by eventual construction of 30 single family homes associated with the proposed subdivision, trip rates from the manual *TRIP GENERATION*, Eighth Edition, published by the Institute of Transportation Engineers (ITE) were used. Specifically, trip rates from land-use code 210, *Single-Family Detached Housing*, were examined. The rates are based on the number of dwelling units.

For Crabtree Terrace No. 2, the trip generation calculations indicate that there will be 23 trips generated during the morning peak hour. Of these, 6 will be entering and 17 will be exiting the site. During the evening peak hour, there are 30 trips expected, with 19 entering and 11 exiting the site. A total of 288 weekday trips are expected with half entering and half exiting.

Because a residential development is typically an origin or destination for trips, no reduction was taken for pass-by trips. Also, because the closest transit services are greater than one-mile from the site, no reduction was made for transit use.

A summary of the trip generation calculations for the proposed development is shown in the following table. Detailed trip generation calculations are included in the appendix to this report.

Trip Generation Summary

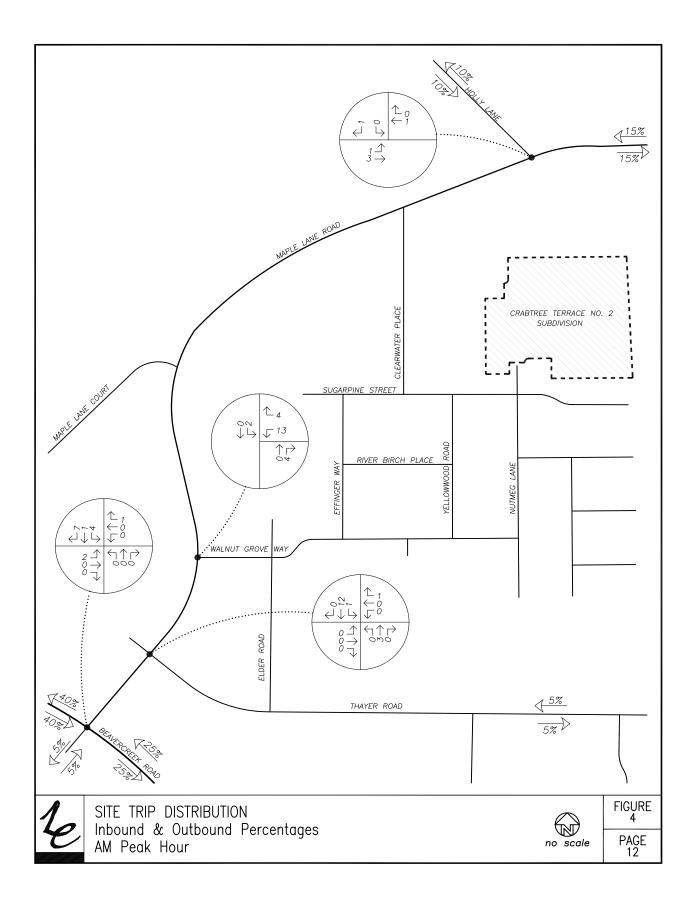
30 Single-Family Homes	Entering	Exiting	Total
AM Peak Hour	6	17	23
PM Peak Hour	19	11	30
Weekday	144	144	288

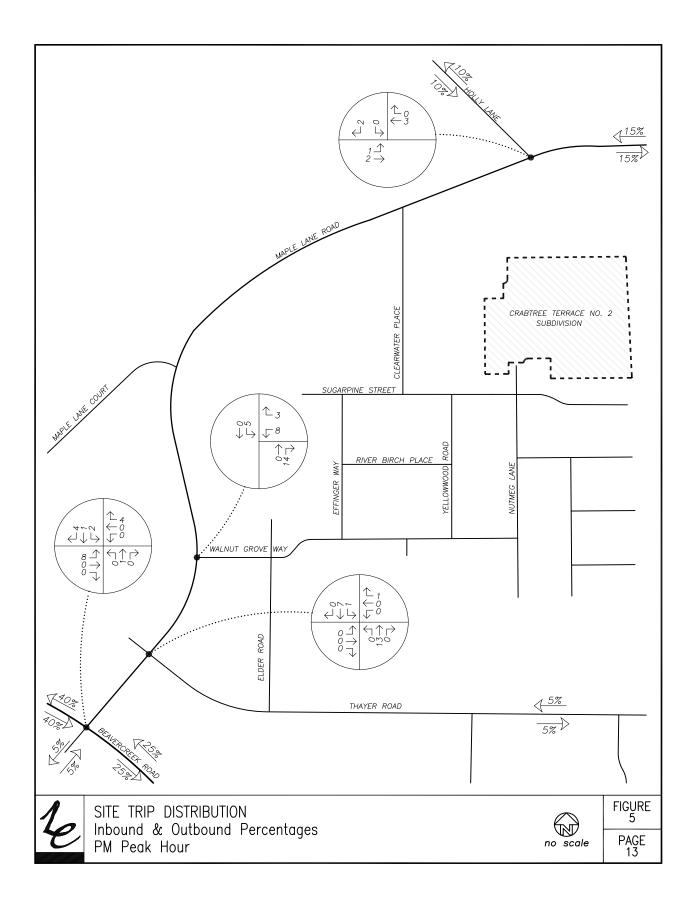


TRIP DISTRIBUTION

Since the proposed land use is residential and is located amongst other residential land uses, it is expected that the trip distribution patterns will be similar to the existing patterns. For this reason, the existing traffic volumes at the study intersections were used to determine the distributional patterns of the proposed subdivision.

The traffic flow diagrams on pages 12 and 13 show the assignment of trips to the roadway network during the morning and evening peak hours for Crabtree Terrace No. 2.





4

OPERATIONAL ANALYSIS

BACKGROUND TRAFFIC

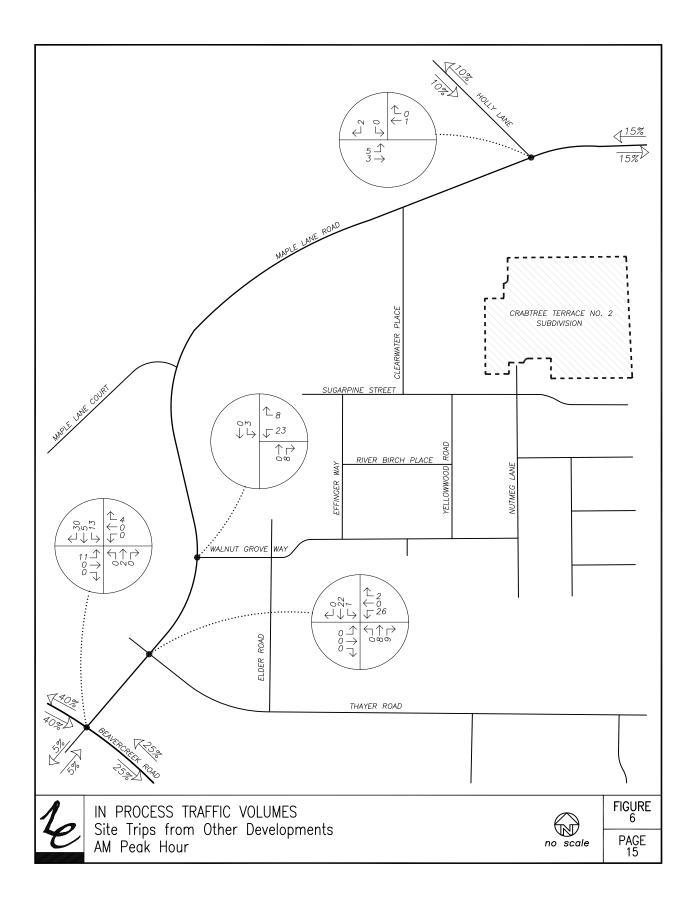
There are subdivisions to the south and west of the subject site that were approved previously and are partially constructed with homes. It is estimated that approximately 41 homes still remain to be constructed. Trips from these homes were estimated using the same trip rates and distribution pattern as the proposed Crabtree Terrace No. 2 subdivision. In addition, traffic from the subdivision north of Thayer Road and south of Walnut Grove Way was also accounted for. These trips were added to the surrounding streets and intersections and are referred to as "in-process" traffic.

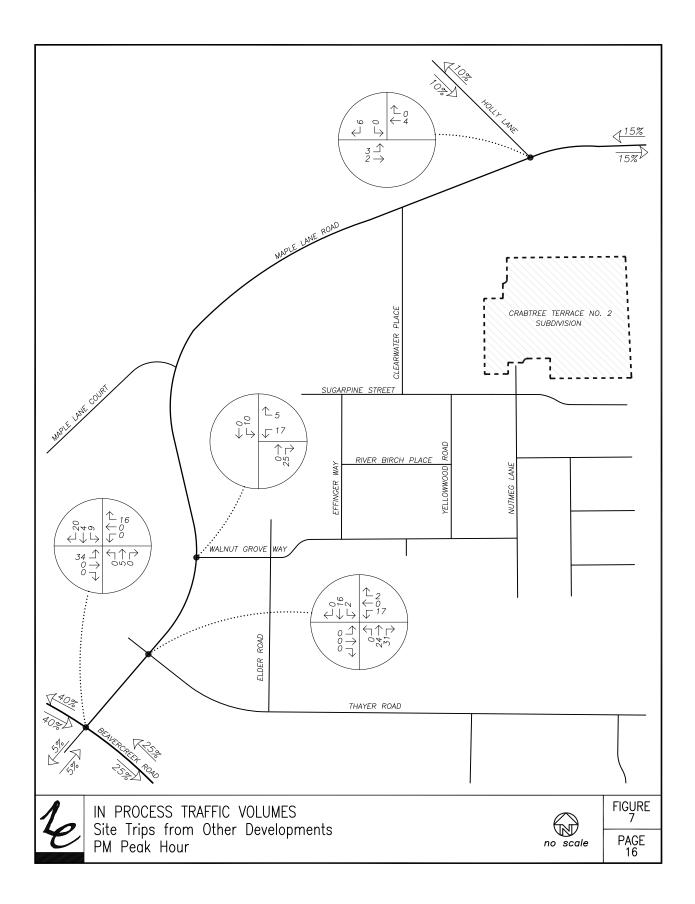
In addition to previously approved development, a growth rate of two percent per year for two years has been applied to the traffic counts at the study intersections to account for area-wide growth that is not attributable to specific developments in the immediate vicinity of the site. It is expected that the proposed subdivision will be completed in approximately two years.

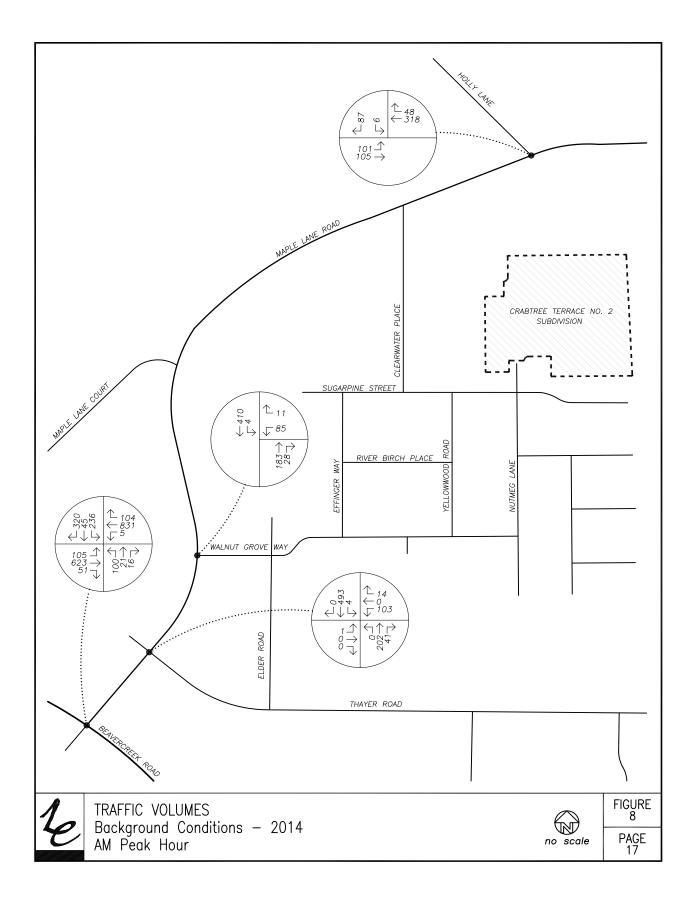
Existing traffic volumes with the growth rate applied and the in-process traffic added are described as "background traffic". The sum of background traffic and site trips from the proposed Crabtree Terrace No. 2 is described as "total traffic".

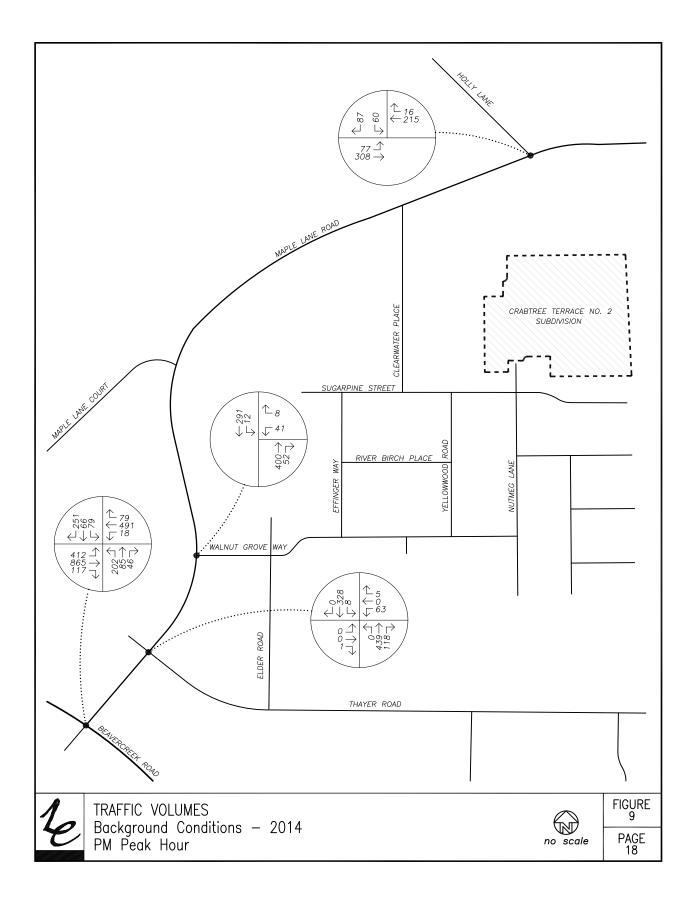
Traffic flow diagrams showing the in-process traffic during the morning and evening peak hours are shown on pages 15 and 16, respectively. Background traffic volumes are shown on pages 17 and 18, and total traffic volumes are shown on pages 19 and 20.

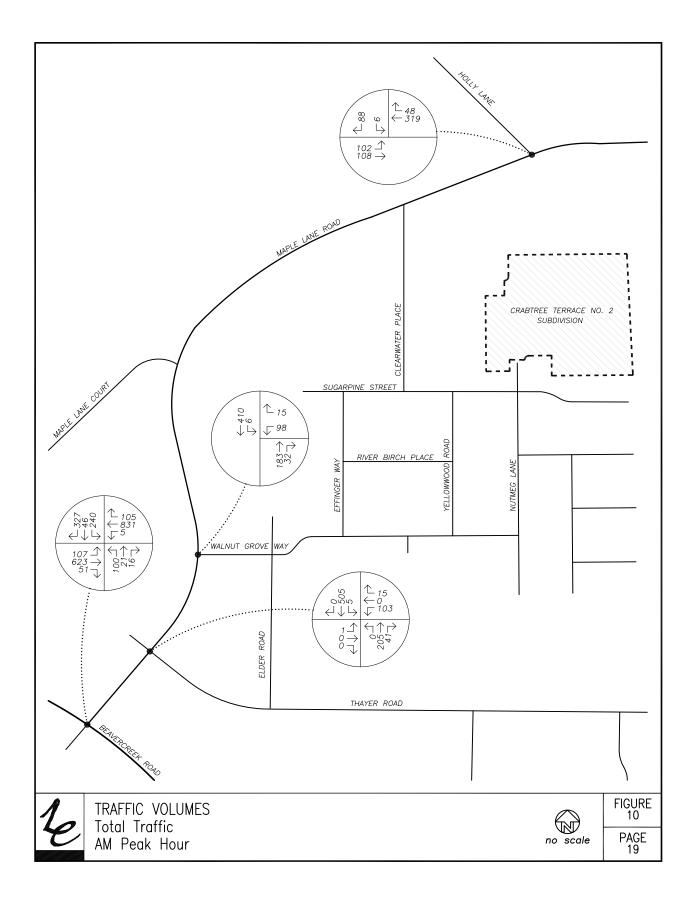
Crabtree Terrace No. 2 - Traffic Impact Study

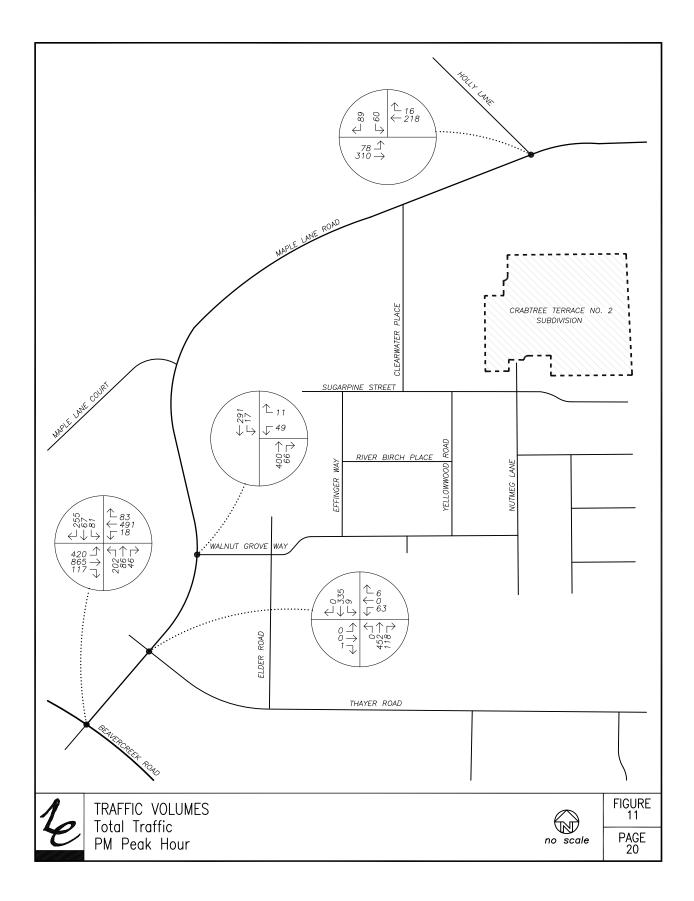














CAPACITY ANALYSIS

To determine the level of service at the study intersections, a capacity analysis was conducted. The level of service can range from A, which indicates very little or no delay, to level F, which indicates a high degree of congestion and delay. The City of Oregon City accepts level of service E or better at unsignalized intersections and D or better at signalized intersections.

The study intersections were analyzed using the signalized and unsignalized intersection analysis method in the 2000 HIGHWAY CAPACITY MANUAL (HCM2000), published by the Transportation Research Board. The analysis was made for the existing, background, and total traffic conditions during the morning and evening peak hours.

The study intersections currently operate acceptably during the morning and evening peak hours. In the future, the study intersections will continue to operate acceptably either with or without the proposed subdivision in place. Therefore, no mitigations are recommended.

The results of the capacity analysis, along with the levels of service (LOS) and delay are shown in the following table. Tables showing the relationships between delay and level of service are included in the appendix to this report.

Crabtree Terrace No. 2 - Traffic Impact Study

1e

Level of Service Summary

	1	AM Peak H	lour	P_{i}	M Peak Ho	ur
	LOS	Delay	v/c	LOS	Delay	v/c
Beavercreek Rd at Maple Lane Rd						
Existing	С	27	0.70	С	28	0.65
Background	С	28	0.76	С	29	0.67
Total Traffic	С	28	0.77	С	29	0.68
Thayer Rd at Maple Lane Rd						
Existing	С	19	0.27	С	20	0.18
Background	С	24	0.42	D	25	0.30
Total Traffic	D	25	0.43	D	26	0.31
Walnut Grove Wy at Maple Lane Rd						
Existing	С	15	0.17	В	15	0.07
Background	С	17	0.26	С	16	0.14
Total Traffic	С	17	0.31	С	17	0.18
Holly Ln at Maple Lane Rd						
Existing	В	12	0.16	В	14	0.29
Background	В	12	0.18	С	15	0.32
Total Traffic	В	12	0.18	С	15	0.32

LOS = level of service

Delay = average delay per vehicle in seconds

v/c = volume-to-capacity ratio



LOCAL STREET VOLUMES

Walnut Grove Way, Sugarpine Street, Nutmeg Lane, and other nearby streets that will serve the proposed subdivision are all classified as local streets. As such, their intended function is to provide local access to individual homes. Local residential streets are generally expected to carry up to about 1,500 vehicles per day. If volumes become excessive, safety and livability can be compromised. Residential streets that are expected to carry higher volumes are generally considered Neighborhood Collectors.

In this case, traffic volumes in the neighborhood are highest on Walnut Grove Way immediately east of Maple Lane Road, since this street connection serves the majority of the neighborhood. This oneblock street segment was examined since it will carry the highest volume of traffic. It is important to note that farther east into the neighborhood, traffic volumes will decrease quickly and will be lower than what is reported here.

As additional properties develop, more street connections will be made, and traffic volumes will naturally distribute accordingly. For example, construction of the subdivision north of Thayer Road and south of Walnut Grove Way will provide additional connections to the south. The future completion of the remaining phase of Crabtree Terrace to the north will offer another significant street connection. All of these new connections will serve to distribute traffic and decrease reliance on Walnut Grove Way.

Based on the existing traffic volumes, there are approximately 540 vehicles per day on Walnut Grove Way east of Maple Lane Road. The approved but un-built homes in the neighborhood are expected to add approximately 330 vehicles per day to this roadway segment, and the proposed subdivision will add about 240 vehicles per day. These volumes are summarized in the table below.

Local Street Volumes

Walnut Grove Way Immediately East of Maple Lane	e Road	
(One-Block Segment)	_	ADT
Existing		540
In-Process		330
Crabtree Terrace No. 2	_	240
	TOTAL	1110
ADT = average daily traffic		

SUMMARY & CONCLUSIONS

None of the existing residential streets serving the site will be overburdened by the proposed development. The existing streets and intersections surrounding the site are capable of supporting the proposed subdivision, and no mitigation is recommended.

Crabtree Terrace No. 2 - Traffic Impact Study



APPENDIX

Crabtree Terrace No. 2 - Traffic Impact Study



LEVEL OF SERVICE

Level of service is used to describe the quality of traffic flow. Levels of service A to C are considered good, and rural roads are usually designed for level of service C. Urban streets and signalized intersections are typically designed for level of service D. Level of service E is considered to be the limit of acceptable delay. For unsignalized intersections, level of service E is generally considered acceptable. Here is a more complete description of levels of service:

Level of service A: Very low delay at intersections, with all traffic signal cycles clearing and no vehicles waiting through more than one signal cycle. On highways, low volume and high speeds, with speeds not restricted by other vehicles.

Level of service B: Operating speeds beginning to be affected by other traffic; short traffic delays at intersections. Higher average intersection delay than for level of service A resulting from more vehicles stopping.

Level of service C: Operating speeds and maneuverability closely controlled by other traffic; higher delays at intersections than for level of service B due to a significant number of vehicles stopping. Not all signal cycles clear the waiting vehicles. This is the recommended design standard for rural highways.

Level of service D: Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.

Level of service E: Restricted speeds, very long traffic delays at traffic signals, and traffic volumes near capacity. Flow is unstable so that any interruption, no matter how minor, will cause queues to form and service to deteriorate to level of service F. Traffic signal cycle failures are frequent occurrences. For unsignalized intersections, level of service E or better is generally considered acceptable.

Level of service F: Extreme delays, resulting in long queues which may interfere with other traffic movements. There may be stoppages of long duration, and speeds may drop to zero. There may be frequent signal cycle failures. Level of service F will typically result when vehicle arrival rates are greater than capacity. It is considered unacceptable by most drivers.



LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

LEVEL	CONTROL DELAY
OF	PER VEHICLE
SERVICE	(Seconds)
А	<10
В	10-20
С	20-35
D	35-55
Е	55-80
F	>80

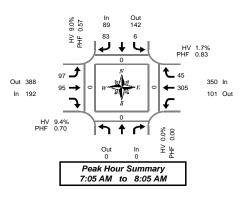
LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

LEVEL	CONTROL DELAY
OF	PER VEHICLE
SERVICE	(Seconds)
А	<10
В	10-15
С	15-25
D	25-35
Е	35-50
F	>50



S Holly Ln & S Maple Lane Rd

Wednesday, February 15, 2012 7:00 AM to 9:00 AM



5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval	North			Southb					oound			West						strians	
Start	S Ho			S Holl				5 Maple	Lane Ro		S	Maple			Interval			swalk	
Time		Bikes	L		R	Bikes	L	T		Bikes		Т	R	Bikes	Total	North	South	East	West
7:00 AM		0	1		6	0	3	6		0		16	4	0	36	0	0	0	0
7:05 AM		0	1		4	0	10	6		0		30	2	0	53	0	0	0	0
7:10 AM		0	0		3	0	9	7		0		24	5	0	48	0	0	0	0
7:15 AM		0	1		11	0	3	7		0		21	5	0	48	0	0	0	0
7:20 AM		0	0		17	0	8	8		0		40	8	0	81	0	0	0	0
7:25 AM		0	0		10	0	4	6		0		28	4	0	52	0	0	0	0
7:30 AM		0	0		5	0	11	5		0		13	4	0	38	0	0	0	0
7:35 AM		0	2		4	0	11	17		0		30	4	0	68	0	0	0	0
7:40 AM		0	0		10	0	11	8		0		27	1	0	57	0	0	0	0
7:45 AM		0	0		3	0	9	13		0		26	4	0	55	0	0	0	0
7:50 AM		0	0		5	0	7	7		0		32	2	0	53	0	0	0	0
7:55 AM		0	1		4	0	6	8		0		18	3	0	40	0	0	0	0
8:00 AM		0	1		7	0	8	3		0		16	3	0	38	0	0	0	0
8:05 AM		0	1		7	0	8	6		0		19	4	0	45	0	0	0	0
8:10 AM	1 1	0	2		7	0	9	9		0		17	0	0	44	0	0	0	0
8:15 AM		0	1		4	0	9	7		0		13	5	0	39	0	0	0	0
8:20 AM		0	2		4	0	14	4		0		12	4	0	40	0	0	0	0
8:25 AM		0	2		12	0	18	7		0		12	6	0	57	0	0	0	0
8:30 AM		0	0		19	0	4	6		0		18	2	0	49	0	0	0	0
8:35 AM		0	1		15	0	11	6		0		21	2	0	56	0	0	0	0
8:40 AM		0	0		13	0	8	7		0		21	1	0	50	0	0	0	0
8:45 AM		0	1		9	0	3	4		0		15	3	0	35	0	0	0	0
8:50 AM		0	0		5	0	3	6		0		12	3	0	29	0	0	0	0
8:55 AM		0	1		8	0	2	14		0		9	1	0	35	0	0	0	0
Total			40		400	0	400	477		0	1	400		0	4.4.40	_		0	
Survey	1 1	0	18		192	0	189	177		0		490	80	0	1,146	0	0	0	0

15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start	Northbou S Holly			South S Ho					bound Lane Re	4	5	Westa Maple		d	Interval		Pedes Cross		
Time		Bikes	L		R	Bikes	L	T		Bikes		Т	R	Bikes	Total	North	South	East	West
7:00 AM		0	2	1	13	0	22	19		0		70	11	0	137	0	0	0	0
7:15 AM		0	1		38	0	15	21		0		89	17	0	181	0	0	0	0
7:30 AM		0	2		19	0	33	30		0		70	9	0	163	0	0	0	0
7:45 AM		0	1	1	12	0	22	28		0		76	9	0	148	0	0	0	0
8:00 AM		0	4		21	0	25	18		0		52	7	0	127	0	0	0	0
8:15 AM		0	5		20	0	41	18		0		37	15	0	136	0	0	0	0
8:30 AM		0	1		47	0	23	19		0		60	5	0	155	0	0	0	0
8:45 AM		0	2		22	0	8	24		0		36	7	0	99	0	0	0	0
Total Survey		0	18		192	0	189	177		0		490	80	0	1,146	0	0	0	0

Peak Hour Summary 7:05 AM to 8:05 AM

Ву			bound Ily Ln				bound Ily Ln			Eastb S Maple		d		Westa 3 Maple	bound Lane R	d	Total			s trians swalk	
Approach	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	0	0	0	0	89	142	231	0	192	388	580	0	350	101	451	0	631	0	0	0	0
%HV		0.0	0%			9.0)%			9.4	1%			1.7	7%		5.1%				
PHF		0.	00			0.	57			0.1	70			0.	83		0.87				

Bv		North	bound			South	bound			Easth	bound			West	bound		
		S Ho	lly Ln			S Ho	lly Ln		5	6 Maple	Lane R	d	5	S Maple	Lane R	d	Total
wovernerit				Total	L		R	Total	L	Т		Total		Т	R	Total	
Volume				0	6		83	89	97	95		192		305	45	350	631
%HV	NA	NA	NA	0.0%	16.7%	NA	8.4%	9.0%	13.4%	5.3%	NA	9.4%	NA	1.3%	4.4%	1.7%	5.1%
PHF				0.00	0.75		0.55	0.57	0.73	0.63		0.70		0.86	0.63	0.83	0.87

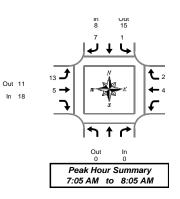
Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start	nbound olly Ln			bound llv Ln				bound Lane Ro	1	5	Westb Maple		d	Interval		Pedes Cross		
Time		Bikes	L	R	Bikes	L	T		Bikes		Т	R	Bikes	Total	North	South	East	West
7:00 AM	1 1	0	6	82	0	92	98	1	0		305	46	0	629	0	0	0	0
7:15 AM		0	8	90	0	95	97		0		287	42	0	619	0	0	0	0
7:30 AM		0	12	72	0	121	94		0		235	40	0	574	0	0	0	0
7:45 AM	1 1	0	11	100	0	111	83		0		225	36	0	566	0	0	0	0
8:00 AM		0	12	110	0	97	79		0		185	34	0	517	0	0	0	0



S Holly Ln & S Maple Lane Rd

Wednesday, February 15, 2012 7:00 AM to 9:00 AM



Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start	Northb S Holl			 bound Ily Ln		:		bound Lane Rd		5	Westb S Maple		d	Interva
Time		Total	L	R	Total	L	Т		Total		Т	R	Total	Total
7:00 AM		0	0	1	1	0	2		2		0	0	0	3
7:05 AM		0	0	0	0	3	0		3		1	0	1	4
7:10 AM		0	0	1	1	5	2		7		0	1	1	9
7:15 AM		0	0	0	0	0	0		0		0	0	0	0
7:20 AM		0	0	2	2	1	1		2		0	1	1	5
7:25 AM		0	0	0	0	0	1		1		0	0	0	1
7:30 AM		0	0	0	0	0	0		0		0	0	0	0
7:35 AM		0	0	0	0	1	0		1		0	0	0	1
7:40 AM		0	0	0	0	0	0		0		0	0	0	0
7:45 AM		0	0	0	0	2	0		2		1	0	1	3
7:50 AM		0	0	0	0	0	0		0		1	0	1	1
7:55 AM		0	1	1	2	1	1		2		0	0	0	4
8:00 AM		0	0	3	3	0	0		0		1	0	1	4
8:05 AM		0	0	3	3	1	1		2		2	1	3	8
8:10 AM		0	0	0	0	1	1		2		1	0	1	3
8:15 AM		0	0	1	1	2	1		3		0	0	0	4
8:20 AM		0	0	0	0	1	0		1		0	1	1	2
8:25 AM		0	0	4	4	2	0		2		2	2	4	10
8:30 AM		0	0	7	7	0	0		0		0	0	0	7
8:35 AM		0	0	7	7	1	0		1		0	0	0	8
8:40 AM		0	0	1	1	0	0		0		0	1	1	2
8:45 AM		0	0	0	0	1	0		1		0	0	0	1
8:50 AM		0	0	1	1	0	0		0		0	0	0	1
8:55 AM		0	1	3	4	0	0		0		0	0	0	4
Total		0	2	35	37	22	10		32		9	7	16	85
Survey		1 0	2	- 35	37	22	10		32		3	· /	10	65

Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval	North	bound		South	bound			Eastl	bound			West	bound		
Start	S Ho	lly Ln		S Ho	lly Ln			S Maple	Lane R	d	5	6 Maple	Lane R	d	Interval
Time		Total	L		R	Total	L	Т		Total		Т	R	Total	Total
7:00 AM		0	0		2	2	8	4		12		1	1	2	16
7:15 AM		0	0		2	2	1	2		3		0	1	1	6
7:30 AM		0	0		0	0	1	0		1		0	0	0	1
7:45 AM		0	1	1	1	2	3	1		4		2	0	2	8
8:00 AM		0	0		6	6	2	2		4		4	1	5	15
8:15 AM		0	0		5	5	5	1		6		2	3	5	16
8:30 AM		0	0		15	15	1	0		1		0	1	1	17
8:45 AM		0	1		4	5	1	0		1		0	0	0	6
Total Survey		0	2		35	37	22	10		32		9	7	16	85

Heavy Vehicle Peak Hour Summary 7:05 AM to 8:05 AM

Bv		North	bound		South	bound		Eastl	oound		West	bound	
		S Ho	lly Ln		S Ho	illy Ln		S Maple	Lane Rd		S Maple	Lane Rd	Total
Approach	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	8	15	23	18	11	29	6	6	12	32
PHF	0.00			0.40			0.45			0.75			0.57

Bv	North	bound			South	bound			Easth	bound			West	bound		
	S Ho	lly Ln			S Ho	lly Ln		:	S Maple	Lane Ro	t b	5	6 Maple	Lane R	d	Total
wovernern			Total	L		R	Total	L	Т		Total		т	R	Total	
Volume			0	1		7	8	13	5		18		4	2	6	32
PHF			0.00	0.25		0.44	0.40	0.41	0.42		0.45		0.50	0.25	0.75	0.57

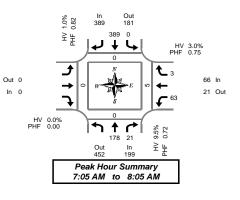
Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start	bound lly Ln		Southbound S Holly Ln		:		bound Lane Rd	5	Westb S Maple		d	Interval
Time	Total	L	R	Total	L	T	Total		Т	R	Total	Total
7:00 AM	0	1	5	6	13	7	20		3	2	5	31
7:15 AM	0	1	9	10	7	5	12		6	2	8	30
7:30 AM	0	1	12	13	11	4	15		8	4	12	40
7:45 AM	0	1	27	28	11	4	15		8	5	13	56
8:00 AM	0	1	30	31	9	3	12		6	5	11	54



S Maple Lane Rd & S Walnut Grove Way

Wednesday, February 15, 2012 7:00 AM to 9:00 AM



5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start	North S Maple	bound	2d			bound Lane Rd	s	East Walnut	bound Grove W	av	S	Westbe Walnut G		/av	Interval			strians swalk	
Time		R	Bikes	, , , , , , , , , , , , , , , , , , ,	T	Bike		vvainat		Bikes			R	Bikes	Total	North	South		West
7:00 AM	9	0	0	1	26	0				0	1		0	0	37	0	0	0	0
7:05 AM	13	0	0	0	27	0				0	5		0	0	45	0	0	0	0
7:10 AM	13	0	0	0	36	0				0	4	-	0	0	53	0	0	5	0
7:15 AM	11	0	0	0	32	0				0	7	-	0	0	50	0	0	0	0
7:20 AM	15	2	0	0	51	0				0	5		0	0	73	0	0	0	0
7:25 AM	9	7	0	0	36	0				0	10		0	0	62	0	0	0	0
7:30 AM	15	2	0	0	29	0				0	4		1	0	51	0	0	0	0
7:35 AM	21	0	0	0	33	0				0	3		0	0	57	0	0	0	0
7:40 AM	23	1	0	0	23	0				0	9		1	0	57	0	0	0	0
7:45 AM	21	3	0	0	45	0				0	4		0	0	73	0	0	0	0
7:50 AM	8	2	0	0	34	0				0	4		1	0	49	0	0	0	0
7:55 AM	18	2	0	0	22	0				0	4		0	0	46	0	0	0	0
8:00 AM	11	2	0	0	21	0				0	4		0	0	38	0	0	0	0
8:05 AM	15	0	0	0	24	0				0	3		0	0	42	0	0	0	0
8:10 AM	19	3	0	0	32	0				0	2		0	0	56	0	0	0	0
8:15 AM	12	1	0	0	22	0				0	2		0	0	37	0	0	0	0
8:20 AM	24	1	0	0	9	0				0	1		0	0	35	0	0	0	0
8:25 AM	22	2	0	0	23	0				0	1		1	0	49	0	0	0	0
8:30 AM	15	0	0	0	24	0				0	1		0	0	40	0	0	0	0
8:35 AM	20	2	0	0	31	0				0	4		0	0	57	0	0	0	0
8:40 AM	18	2	0	0	40	0				0	1		0	0	61	0	0	0	0
8:45 AM	8	1	0	0	35	0				0	1		0	0	45	0	0	0	0
8:50 AM	7	1	0	0	23	0				0	2		0	0	33	0	0	0	0
8:55 AM	18	2	0	0	19	0				0	1		0	0	40	0	0	0	0
Total Survey	365	36	0	1	697	0				0	83		4	0	1,186	0	0	5	0

15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start	North S Maple	bound	d		South S Maple	bound	ч	51	Easth Walnut	ound	lav	5	Westa Walnut (lav	Interval		Pedes Cross		
Time	 T	R	Bikes	L	T	Lancin	Bikes	0	VVaniat		Bikes	1		R	Bikes	Total	North	South	East	West
7:00 AM	35	0	0	1	89		0				0	10		0	0	135	0	0	5	0
7:15 AM	35	9	0	0	119		0				0	22		0	0	185	0	0	0	0
7:30 AM	59	3	0	0	85		0				0	16		2	0	165	0	0	0	0
7:45 AM	47	7	0	0	101		0				0	12		1	0	168	0	0	0	0
8:00 AM	45	5	0	0	77		0				0	9		0	0	136	0	0	0	0
8:15 AM	58	4	0	0	54		0				0	4		1	0	121	0	0	0	0
8:30 AM	53	4	0	0	95		0				0	6		0	0	158	0	0	0	0
8:45 AM	33	4	0	0	77		0				0	4		0	0	118	0	0	0	0
Total Survey	365	36	0	1	697		0				0	83		4	0	1,186	0	0	5	0

Peak Hour Summary 7:05 AM to 8:05 AM

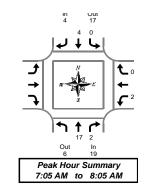
Bv		North	bound			South	bound			Easth	bound			West	oound				Pedes	trians	
,	5	S Maple	Lane R	d	5	6 Maple	Lane R	d	S	Walnut	Grove W	/ay	S	Walnut	Grove W	/ay	Total		Cross	swalk	
Approach	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	199	452	651	0	389	181	570	0	0	0	0	0	66	21	87	0	654	0	0	5	0
%HV		9.5	5%			1.0	0%			0.0	0%			3.	0%		3.8%				
PHF		0.	72			0.	82			0.	00			0.	75		0.87	1			

By Movement	:	North S Maple	bound Lane R	d	5	South Maple	bound Lane R		S		oound Grove V	/ay	SI	Westi Nalnut (oound Grove V	Vay	Total
wovernern		Т	R	Total	L	Т		Total				Total	L		R	Total	
Volume		178	21	199	0	389		389				0	63		3	66	654
%HV	NA	9.6%	9.5%	9.5%	0.0%	1.0%	NA	1.0%	NA	NA	NA	0.0%	3.2%	NA	0.0%	3.0%	3.8%
PHF		0.68	0.48	0.72	0.00	0.82		0.82				0.00	0.72		0.38	0.75	0.87

Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start	Northb Maple		d	:		bound Lane Rd	astbound nut Grove V	∕ay	S	Westb Walnut G		Vay	Interval			strians swalk	
Time	T	R	Bikes	L	T	Bikes		Bikes	L		R	Bikes	Total	North	South	East	West
7:00 AM	176	19	0	1	394	0		0	60		3	0	653	0	0	5	0
7:15 AM	186	24	0	0	382	0		0	59		3	0	654	0	0	0	0
7:30 AM	209	19	0	0	317	0		0	41		4	0	590	0	0	0	0
7:45 AM	203	20	0	0	327	0		0	31		2	0	583	0	0	0	0
8:00 AM	189	17	0	0	303	0		0	23		1	0	533	0	0	0	0





Out 0

In 0

S Maple Lane Rd & S Walnut Grove Way

Wednesday, February 15, 2012 7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start	North S Maple	bound Lane R	d	;		bound Lane Rd	 tbound t Grove Wav	SI	Westbou Nalnut Grov		,	Interva
Time	T	R	Total	L	Т	Total	Total	L		R 1	otal	Total
7:00 AM	2	0	2	1	5	6	0	0		0	0	8
7:05 AM	1	0	1	0	2	2	0	0		0	0	3
7:10 AM	6	0	6	0	0	0	0	0		0	0	6
7:15 AM	1	0	1	0	0	0	0	0		0	0	1
7:20 AM	2	0	2	0	2	2	0	0		0	0	4
7:25 AM	1	1	2	0	0	0	0	1		0	1	3
7:30 AM	0	0	0	0	0	0	0	1		0	1	1
7:35 AM	1	0	1	0	0	0	0	0		0	0	1
7:40 AM	0	0	0	0	0	0	0	0		0	0	0
7:45 AM	1	1	2	0	0	0	0	0		0	0	2
7:50 AM	1	0	1	0	0	0	0	0		0	0	1
7:55 AM	3	0	3	0	0	0	0	0		0	0	3
8:00 AM	0	0	0	0	0	0	0	0		0	0	0
8:05 AM	2	0	2	0	3	3	0	0		0	0	5
8:10 AM	3	1	4	0	4	4	0	0		0	0	8
8:15 AM	2	0	2	0	0	0	0	0		0	0	2
8:20 AM	3	0	3	0	1	1	0	0		0	0	4
8:25 AM	2	1	3	0	2	2	0	0		0	0	5
8:30 AM	1	0	1	0	0	0	0	0		0	0	1
8:35 AM	5	0	5	0	2	2	0	2		0	2	9
8:40 AM	4	0	4	0	1	1	0	0		0	0	5
8:45 AM	1	0	1	0	0	0	0	0		0	0	1
8:50 AM	0	0	0	0	0	0	0	0		0	0	0
8:55 AM	1	0	1	0	1	1	0	0		0	0	2
Total	43	4	47	1	23	24	0	4		0	4	75
Survey	40	-			- 20	24	Ů			~	•	15

Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval		North	bound			South	bound			Easth	bound			West	bound		
Start	S	Maple	Lane R	d	5	S Maple	Lane R	d	SI	Nalnut (Grove W	/ay	SI	Valnut 0	Grove W	/ay	Interval
Time		Т	R	Total	L	Т		Total				Total	L		R	Total	Total
7:00 AM		9	0	9	1	7		8				0	0		0	0	17
7:15 AM		4	1	5	0	2		2				0	1		0	1	8
7:30 AM		1	0	1	0	0		0				0	1		0	1	2
7:45 AM		5	1	6	0	0		0				0	0		0	0	6
8:00 AM		5	1	6	0	7		7				0	0		0	0	13
8:15 AM		7	1	8	0	3		3				0	0		0	0	11
8:30 AM		10	0	10	0	3		3				0	2		0	2	15
8:45 AM		2	0	2	0	1		1				0	0		0	0	3
Total Survey		43	4	47	1	23		24				0	4		0	4	75

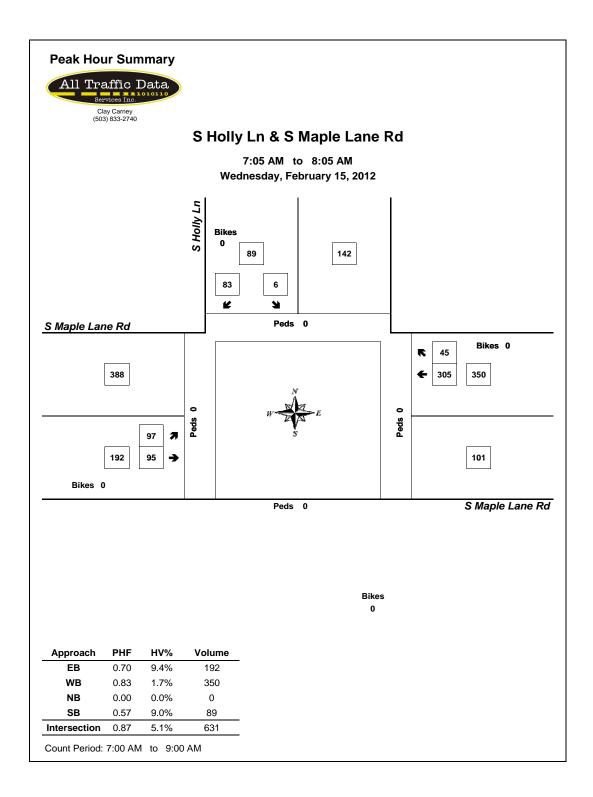
Heavy Vehicle Peak Hour Summary 7:05 AM to 8:05 AM

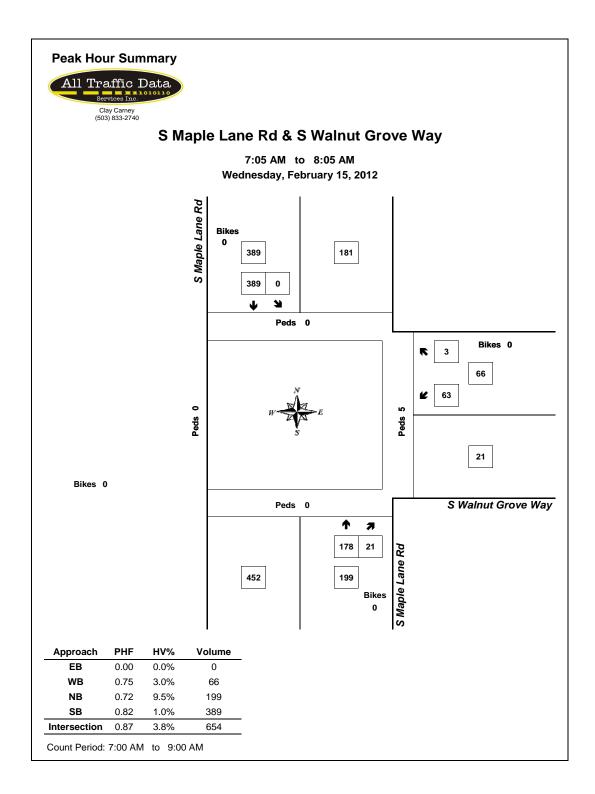
By			bound Lane Rd			bound Lane Rd	S		oound Grove Way	SI		bound Grove Way	Total
Approach	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	1
Volume	19	6	25	4	17	21	0	0	0	2	2	4	25
PHF	0.53			0.50			0.00			0.25			0.57

By Movement	5	Northi S Maple	bound Lane R	d	5		bound Lane Re	d	S	 oound Grove W	'ay	S١	Westb Nalnut (/ay	Total
wovernern		Т	R	Total	L	Т		Total			Total	L		R	Total	
Volume		17	2	19	0	4		4			0	2		0	2	25
PHF		0.47	0.50	0.53	0.00	0.50		0.50			0.00	0.25		0.00	0.25	0.57

Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start		nbound e Lane R				bound Lane Rd		oound Grove Wav		Westi Walnut (oound		In terms of
Time	5 Maple	R	Total			Total	5 Wainut	Total		ivainut (Brove v	Total	Interval Total
7:00 AM	19	2	21	1	9	10		0	2		0	2	33
7:15 AM	15	3	18	0	9	9		0	2		0	2	29
7:30 AM	18	3	21	0	10	10		0	1		0	1	32
7:45 AM	27	3	30	0	13	13		0	2		0	2	45
8:00 AM	24	2	26	0	14	14		0	2		0	2	42

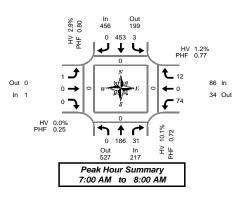






S Maple Lane Rd & S Thayer Rd

Wednesday, February 15, 2012 7:00 AM to 9:00 AM



5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start		North S Maple		d	;	South S Maple		d			yer Rd				bound yer Rd		Interval			strians swalk	
Time	L	Т	R	Bikes	L	Т	R	Bikes	L	T	R	Bikes	L	Т	R	Bikes	Total	North	South	East	West
7:00 AM	0	9	1	0	0	29	0	0	0	0	0	0	6	0	0	0	45	0	0	0	0
7:05 AM	0	15	1	0	0	34	0	0	0	0	0	0	9	0	0	0	59	0	0	0	0
7:10 AM	0	10	0	0	0	37	0	0	0	0	0	0	7	0	2	0	56	0	0	0	0
7:15 AM	0	11	2	0	0	39	0	0	0	0	0	0	7	0	0	0	59	0	0	0	0
7:20 AM	0	19	0	0	0	55	0	0	0	0	0	0	4	0	0	0	78	0	0	0	0
7:25 AM	0	16	4	0	0	49	0	0	0	0	0	0	9	0	2	0	80	0	0	0	0
7:30 AM	0	14	2	0	2	29	0	0	0	0	0	0	7	0	2	0	56	0	0	0	0
7:35 AM	0	19	2	0	0	35	0	0	1	0	0	0	6	0	2	0	65	0	0	0	0
7:40 AM	0	18	6	0	0	38	0	0	0	0	0	0	1	0	2	0	65	0	0	0	0
7:45 AM	0	24	6	0	1	46	0	0	0	0	0	0	6	0	2	0	85	0	0	0	0
7:50 AM	0	11	3	0	0	36	0	0	0	0	0	0	7	0	0	0	57	0	0	0	0
7:55 AM	0	20	4	0	0	26	0	0	0	0	0	0	5	0	0	0	55	0	0	0	0
8:00 AM	0	11	2	0	0	26	0	0	0	0	0	0	5	0	0	0	44	0	0	0	0
8:05 AM	0	15	2	0	2	26	0	0	0	0	0	0	5	0	2	0	52	0	0	0	0
8:10 AM	0	18	2	0	0	31	0	0	0	0	0	0	8	0	2	0	61	0	0	0	0
8:15 AM	0	20	4	0	1	24	0	0	0	0	0	0	7	0	1	0	57	0	0	0	0
8:20 AM	0	20	1	0	0	12	0	0	0	0	0	0	2	0	1	0	36	0	0	0	0
8:25 AM	0	24	4	0	1	20	0	0	0	0	0	0	4	0	1	0	54	0	0	0	0
8:30 AM	0	12	2	0	0	27	0	0	0	0	0	0	5	0	0	0	46	0	0	0	0
8:35 AM	0	21	1	0	0	33	0	0	0	0	0	0	6	0	1	0	62	0	0	0	0
8:40 AM	0	20	4	0	0	42	0	0	0	0	0	0	10	0	2	0	78	0	0	0	0
8:45 AM	0	7	2	0	0	37	0	0	0	0	0	0	5	0	0	0	51	0	0	0	0
8:50 AM	0	9	3	0	0	23	0	0	0	0	0	0	8	0	0	0	43	0	0	0	0
8:55 AM	0	19	1	0	0	21	0	0	0	0	0	0	3	0	1	0	45	0	0	0	0
Total Survey	0	382	59	0	7	775	0	0	1	0	0	0	142	0	23	0	1,389	0	0	0	0

15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval		North	bound			South	bound			Eastb	ound			Westb	ound				Pedes	trians	
Start	;	S Maple	Lane R	d	:	S Maple	Lane R	d		S Tha	yer Rd			S Thay	/er Rd		Interval		Cross	swalk	
Time	L	Т	R	Bikes	L	Т	R	Bikes	L	Т	R	Bikes	L	Т	R	Bikes	Total	North	South	East	West
7:00 AM	0	34	2	0	0	100	0	0	0	0	0	0	22	0	2	0	160	0	0	0	0
7:15 AM	0	46	6	0	0	143	0	0	0	0	0	0	20	0	2	0	217	0	0	0	0
7:30 AM	0	51	10	0	2	102	0	0	1	0	0	0	14	0	6	0	186	0	0	0	0
7:45 AM	0	55	13	0	1	108	0	0	0	0	0	0	18	0	2	0	197	0	0	0	0
8:00 AM	0	44	6	0	2	83	0	0	0	0	0	0	18	0	4	0	157	0	0	0	0
8:15 AM	0	64	9	0	2	56	0	0	0	0	0	0	13	0	3	0	147	0	0	0	0
8:30 AM	0	53	7	0	0	102	0	0	0	0	0	0	21	0	3	0	186	0	0	0	0
8:45 AM	0	35	6	0	0	81	0	0	0	0	0	0	16	0	1	0	139	0	0	0	0
Total Survev	0	382	59	0	7	775	0	0	1	0	0	0	142	0	23	0	1,389	0	0	0	0

Peak Hour Summary 7:00 AM to 8:00 AM

By	ş	Northi 6 Maple		d	S	South Maple		d		Eastb S Tha				West S Tha	yer Rd		Total		Pedes Cross	s trians Swalk	
Approach	In	Out	Total	Bikes	In					Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	217	527	744	0	456	199	655	0	1	0	1	0	86	34	120	0	760	0	0	0	0
%HV		10.	1%			456 199 655 0 2.9%				0.0)%			1.2	2%		4.7%				
PHF		0.	72							0.3	25			0.	77		0.88				

Bv		Northi	bound			South	bound			Easth	ound			West	ound		
Movement		S Maple	Lane R	d	5	6 Maple	Lane R	d		S Tha	yer Rd			S Tha	yer Rd		Total
wovement	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	L	т	R	Total	
Volume	0	186	31	217	3	453	0	456	1	0	0	1	74	0	12	86	760
%HV	0.0%	11.3%		10.1%	0.0%	2.9%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	1.2%	4.7%

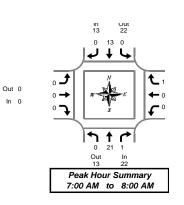
Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start		Northi S Maple	bound Lane R	d	;	Southl S Maple		d		Eastb S Tha	ound yer Rd			West S Tha			Interval		Pedes Cross		
Time	L	Т	R	Bikes	L	T	R	Bikes	L	Т	R	Bikes	L	Т	R	Bikes	Total	North	South	East	West
7:00 AM	0	186	31	0	3	453	0	0	1	0	0	0	74	0	12	0	760	0	0	0	0
7:15 AM	0	196	35	0	5	436	0	0	1	0	0	0	70	0	14	0	757	0	0	0	0
7:30 AM	0	214	38	0	7	349	0	0	1	0	0	0	63	0	15	0	687	0	0	0	0
7:45 AM	0	216	35	0	5	349	0	0	0	0	0	0	70	0	12	0	687	0	0	0	0
8:00 AM	0	196	28	0	4	322	0	0	0	0	0	0	68	0	11	0	629	0	0	0	0



S Maple Lane Rd & S Thayer Rd

Wednesday, February 15, 2012 7:00 AM to 9:00 AM



Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start		North S Maple	bound Lane R	d	9	South S Maple	bound Lane R	Ч			ver Rd			S Tha	yer Rd		Interval
Time	L	T	R	Total	`	T	R	Total	L	Т	R	Total	L	Гт	R	Total	Total
7:00 AM	0	2	1	3	0	5	0	5	0	0	0	0	0	0	0	0	8
7:05 AM	0	3	0	3	0	2	0	2	0	0	0	0	0	0	0	0	5
7:10 AM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	1	1	4
7:15 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:20 AM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
7:25 AM	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:35 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:50 AM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
7:55 AM	0	4	0	4	0	1	0	1	0	0	0	0	0	0	0	0	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:05 AM	0	2	1	3	1	1	0	2	0	0	0	0	0	0	0	0	5
8:10 AM	0	4	0	4	0	5	0	5	0	0	0	0	0	0	0	0	9
8:15 AM	0	3	0	3	0	1	0	1	0	0	0	0	0	0	1	1	5
8:20 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:25 AM	0	3	1	4	0	2	0	2	0	0	0	0	0	0	0	0	6
8:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
8:35 AM	0	4	0	4	0	3	0	3	0	0	0	0	0	0	1	1	8
8:40 AM	0	4	0	4	0	1	0	1	0	0	0	0	0	0	0	0	5
8:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:55 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
Total Survey	0	45	3	48	1	28	0	29	0	0	0	0	0	0	3	3	80

Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval		North	bound			South	bound			Easth	bound			West	oound		
Start	;	S Maple	Lane R	d	:	S Maple	Lane R	d		S Tha	yer Rd			S Tha	yer Rd		Interval
Time	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	Total
7:00 AM	0	8	1	9	0	7	0	7	0	0	0	0	0	0	1	1	17
7:15 AM	0	5	0	5	0	3	0	3	0	0	0	0	0	0	0	0	8
7:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	7	0	7	0	3	0	3	0	0	0	0	0	0	0	0	10
8:00 AM	0	6	1	7	1	6	0	7	0	0	0	0	0	0	0	0	14
8:15 AM	0	8	1	9	0	3	0	3	0	0	0	0	0	0	1	1	13
8:30 AM	0	8	0	8	0	5	0	5	0	0	0	0	0	0	1	1	14
8:45 AM	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
Total Survey	0	45	3	48	1	28	0	29	0	0	0	0	0	0	3	3	80

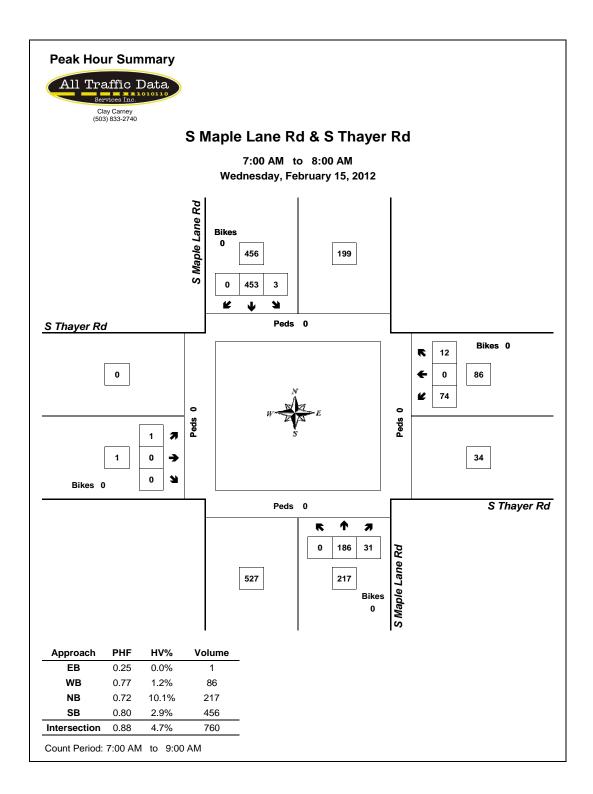
Heavy Vehicle Peak Hour Summary 7:00 AM to 8:00 AM

By			bound Lane Rd	:		bound Lane Rd			oound yer Rd			oound yer Rd	Total
Approach	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	22	13	35	13	22	35	0	0	0	1	1	2	36
PHF	0.61			0.46			0.00			0.25			0.53

By		North		a			bound	a			ound			West			T-1-1
Movement		5 Maple T	Lane R	d Total		5 Maple T	Lane R	d Total	L	SINA	yer Rd R	Total	L	Sina	yer Rd R	Total	Total
Volume	0	21	1	22	0	13	0	13	0	0	0	0	0	0	1	1	36
PHF	0.00	0.66	0.25	0.61	0.00	0.46	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25	0.53

Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

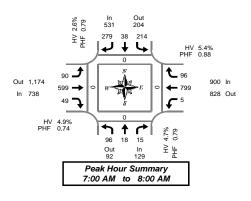
Interval Start	:	North S Maple	bound Lane R	d	ş	South S Maple	bound Lane R	d			ound yer Rd			West S Tha	yer Rd		Interval
Time	L	T	R	Total	L	T	R	Total	L	Т	R	Total	L	Т	R	Total	Total
7:00 AM	0	21	1	22	0	13	0	13	0	0	0	0	0	0	1	1	36
7:15 AM	0	19	1	20	1	12	0	13	0	0	0	0	0	0	0	0	33
7:30 AM	0	22	2	24	1	12	0	13	0	0	0	0	0	0	1	1	38
7:45 AM	0	29	2	31	1	17	0	18	0	0	0	0	0	0	2	2	51
8:00 AM	0	24	2	26	1	15	0	16	0	0	0	0	0	0	2	2	44





S Maple Lane Rd & S Beavercreek Rd

Wednesday, February 15, 2012 7:00 AM to 9:00 AM



5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start	5	North Maple	bound Lane R	d	5	South Maple		d	5		oound rcreek F	d	ş	Westl Beaver		٤d	Interval			strians swalk	
Time	L	Ť	R	Bikes	L	T	R	Bikes	L	Т	R	Bikes	L	T	R	Bikes	Total	North	South	East	West
7:00 AM	5	1	1	0	10	3	21	0	7	42	2	0	0	63	2	0	157	0	0	0	0
7:05 AM	10	0	2	0	17	6	15	0	5	33	3	0	1	59	5	0	156	0	0	0	0
7:10 AM	8	1	2	0	14	6	21	0	3	54	2	0	1	59	9	0	180	0	0	0	0
7:15 AM	10	3	1	0	17	2	18	0	5	56	3	0	0	78	7	0	200	0	0	0	0
7:20 AM	9	1	3	0	25	5	25	0	6	40	5	0	1	74	5	0	199	0	0	0	0
7:25 AM	11	1	2	0	29	2	22	0	9	83	5	0	0	71	12	0	247	0	0	0	0
7:30 AM	6	2	1	0	33	3	24	0	7	59	4	0	0	68	8	1	215	0	0	0	0
7:35 AM	11	1	0	0	12	1	28	0	8	69	5	0	0	80	10	0	225	0	0	0	0
7:40 AM	6	1	0	0	15	1	20	0	7	41	5	0	0	76	13	0	185	0	0	0	0
7:45 AM	8	2	3	0	18	3	29	0	14	39	4	0	0	61	10	0	191	0	0	0	0
7:50 AM	6	4	0	0	14	2	26	0	11	48	5	0	1	71	9	0	197	0	0	0	0
7:55 AM	6	1	0	0	10	4	30	0	8	35	6	0	1	39	6	0	146	0	0	0	0
8:00 AM	8	2	0	0	8	3	21	0	16	44	0	0	0	43	7	0	152	0	0	0	0
8:05 AM	5	2	1	0	3	1	21	0	7	28	1	1	3	55	7	0	134	0	0	0	0
8:10 AM	5	0	1	0	5	7	28	0	9	27	2	0	0	50	7	0	141	0	0	0	0
8:15 AM	11	0	3	0	7	1	23	0	16	23	3	0	0	47	5	0	139	0	0	0	0
8:20 AM	7	0	1	0	6	5	21	0	18	21	1	0	1	44	6	0	131	0	0	0	0
8:25 AM	2	2	1	0	2	1	12	0	15	30	7	0	0	33	11	0	116	0	2	0	0
8:30 AM	6	1	2	0	4	0	19	0	7	36	3	0	0	43	13	0	134	0	0	0	0
8:35 AM	5	2	1	0	9	7	27	0	8	24	5	0	0	38	3	0	129	0	0	0	0
8:40 AM	4	2	0	0	7	2	18	0	11	40	8	0	1	59	9	0	161	0	0	0	0
8:45 AM	14	2	1	0	17	6	34	0	14	32	8	0	1	53	4	0	186	0	0	0	0
8:50 AM	8	1	1	0	14	2	24	0	9	56	10	0	1	51	1	0	178	0	1	0	0
8:55 AM	9	5	3	0	4	2	23	0	9	21	4	0	0	46	2	0	128	0	1	0	1
Total Survey	180	37	30	0	300	75	550	0	229	981	101	1	12	1,361	171	1	4,027	0	4	0	1

15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval		North	bound			South	bound			Eastb	ound			Westb	ound				Pedes	strians	
Start	5	6 Maple	Lane R	d	5	6 Maple	Lane R	d	S	Beaver	creek R	d	5	Beaver	creek R	ld	Interval		Cross	swalk	
Time	L	Т	R	Bikes	L	Т	R	Bikes	L	Т	R	Bikes	L	Т	R	Bikes	Total	North	South	East	West
7:00 AM	23	2	5	0	41	15	57	0	15	129	7	0	2	181	16	0	493	0	0	0	0
7:15 AM	30	5	6	0	71	9	65	0	20	179	13	0	1	223	24	0	646	0	0	0	0
7:30 AM	23	4	1	0	60	5	72	0	22	169	14	0	0	224	31	1	625	0	0	0	0
7:45 AM	20	7	3	0	42	9	85	0	33	122	15	0	2	171	25	0	534	0	0	0	0
8:00 AM	18	4	2	0	16	11	70	0	32	99	3	1	3	148	21	0	427	0	0	0	0
8:15 AM	20	2	5	0	15	7	56	0	49	74	11	0	1	124	22	0	386	0	2	0	0
8:30 AM	15	5	3	0	20	9	64	0	26	100	16	0	1	140	25	0	424	0	0	0	0
8:45 AM	31	8	5	0	35	10	81	0	32	109	22	0	2	150	7	0	492	0	2	0	1
Total Survey	180	37	30	0	300	75	550	0	229	981	101	1	12	1,361	171	1	4,027	0	4	0	1

Peak Hour Summary 7:00 AM to 8:00 AM

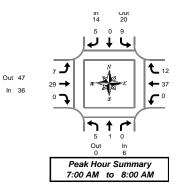
By		North S Maple		d	5	South Maple		d	s	Eastb Beaver	ound creek R	d	S	Westa Beaver	oound creek R	d	Total		Pedes Cross	s trians Swalk	
Approach	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	129	92	221	0	531	204	735	0	738	1,174	1,912	0	900	828	1,728	1	2,298	0	0	0	0
%HV		4.1	7%			2.6	5%			4.9	9%			5.4	1%		4.6%				
PHF		0.	79			0.	79			0.	74			0.	88		0.84				

By Movement	5	North Maple	bound Lane R	d	5	South Maple	bound Lane R	d	S	Eastb Beaver	ound creek R	d	s	West: Beaver	oound rcreek R	td	Total
wovernern	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	
Volume	96	18	15	129	214	38	279	531	90	599	49	738	5	799	96	900	2,298
%HV	5.2%	5.6%	0.0%	4.7%	4.2%	0.0%	1.8%	2.6%	7.8%	4.8%	0.0%	4.9%	0.0%	4.6%	12.5%	5.4%	4.6%
PHF	0.80	0.64	0.63	0.79	0.61	0.63	0.82	0.79	0.68	0.71	0.82	0.74	0.63	0.89	0.73	0.88	0.84

Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start	:	North S Maple	bound Lane R	d	ç		bound Lane R	d	5	Eastb Beaver	ound creek F	d	S	Westa Beaver		۲d	Interval		Pedes Cross		
Time	L	T	R	Bikes	L	Т	R	Bikes	L	T	R	Bikes	L	Т	R	Bikes	Total	North	South	East	West
7:00 AM	96	18	15	0	214	38	279	0	90	599	49	0	5	799	96	1	2,298	0	0	0	0
7:15 AM	91	20	12	0	189	34	292	0	107	569	45	1	6	766	101	1	2,232	0	0	0	0
7:30 AM	81	17	11	0	133	32	283	0	136	464	43	1	6	667	99	1	1,972	0	2	0	0
7:45 AM	73	18	13	0	93	36	275	0	140	395	45	1	7	583	93	0	1,771	0	2	0	0
8:00 AM	84	19	15	0	86	37	271	0	139	382	52	1	7	562	75	0	1,729	0	4	0	1





S Maple Lane Rd & S Beavercreek Rd

Wednesday, February 15, 2012 7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval		North					bound		_		bound				bound		
Start		S Maple				S Maple					rcreek R		2	Beave			Interval
Time	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	Total
7:00 AM	0	0	0	0	3	0	0	3	0	4	0	4	0	4	0	4	11
7:05 AM	0	0	0	0	4	0	0	4	0	5	0	5	0	2	3	5	14
7:10 AM	1	0	0	1	1	0	1	2	1	7	0	8	0	2	3	5	16
7:15 AM	1	0	0	1	0	0	0	0	0	1	0	1	0	3	3	6	8
7:20 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	6	0	6	7
7:25 AM	0	0	0	0	1	0	1	2	2	4	0	6	0	4	0	4	12
7:30 AM	1	1	0	2	0	0	2	2	0	0	0	0	0	3	0	3	7
7:35 AM	1	0	0	1	0	0	0	0	1	2	0	3	0	2	0	2	6
7:40 AM	1	0	0	1	0	0	0	0	0	1	0	1	0	5	1	6	8
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
7:50 AM	0	0	0	0	0	0	0	0	1	5	0	6	0	0	1	1	7
7:55 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	5	1	6	7
8:00 AM	0	0	0	0	1	0	0	1	2	0	0	2	0	0	0	0	3
8:05 AM	0	0	0	0	0	0	1	1	1	2	0	3	0	2	1	3	7
8:10 AM	0	0	0	0	1	0	3	4	3	0	0	3	0	1	1	2	9
8:15 AM	0	0	0	0	1	0	0	1	1	1	0	2	0	1	1	2	5
8:20 AM	0	0	0	0	1	0	0	1	2	0	0	2	0	2	1	3	6
8:25 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3	3	4
8:30 AM	0	0	0	0	0	0	2	2	1	0	0	1	0	1	0	1	4
8:35 AM	0	0	0	0	0	0	1	1	1	2	0	3	0	0	0	0	4
8:40 AM	0	0	0	0	0	0	3	3	4	1	0	5	0	2	0	2	10
8:45 AM	0	0	0	0	1	0	0	1	3	1	0	4	0	4	0	4	9
8:50 AM	0	0	0	0	0	0	0	0	1	0	1	2	0	1	0	1	3
8:55 AM	1	0	0	1	0	0	0	0	0	1	0	1	0	2	0	2	4
Total Survev	6	1	0	7	14	0	15	29	27	37	1	65	0	53	19	72	173

Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval		North	bound			South	bound			Easth	ound			Westh	oound		
Start	;	S Maple	Lane R	d	5	S Maple	Lane R	d	S	Beave	rcreek R	d	5	Beaver	rcreek R	d	Interval
Time	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	Total
7:00 AM	1	0	0	1	8	0	1	9	1	16	0	17	0	8	6	14	41
7:15 AM	1	0	0	1	1	0	1	2	3	5	0	8	0	13	3	16	27
7:30 AM	3	1	0	4	0	0	2	2	1	3	0	4	0	10	1	11	21
7:45 AM	0	0	0	0	0	0	1	1	2	5	0	7	0	6	2	8	16
8:00 AM	0	0	0	0	2	0	4	6	6	2	0	8	0	3	2	5	19
8:15 AM	0	0	0	0	2	0	0	2	4	1	0	5	0	3	5	8	15
8:30 AM	0	0	0	0	0	0	6	6	6	3	0	9	0	3	0	3	18
8:45 AM	1	0	0	1	1	0	0	1	4	2	1	7	0	7	0	7	16
Total Survey	6	1	0	7	14	0	15	29	27	37	1	65	0	53	19	72	173

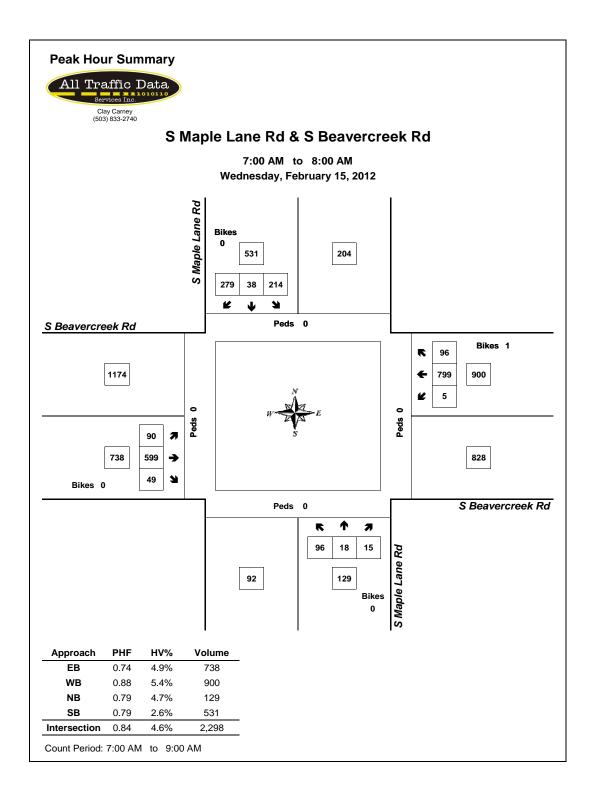
Heavy Vehicle Peak Hour Summary 7:00 AM to 8:00 AM

By	5		bound Lane Rd	5		bound Lane Rd	s		rcreek Rd	5		bound rcreek Rd	Total
Approach	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	6	0	6	14	20	34	36	47	83	49	38	87	105
PHF	0.38			0.39			0.53			0.72			0.64

Bv		North	bound			South	bound			Eastb	ound			West	oound		
	S Maple Lane Rd					S Maple	Lane R	d	S	Beaver	creek R	d	S	Beaver	rcreek R	d	Total
wovernern	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	
Volume	5	1	0	6	9	0	5	14	7	29	0	36	0	37	12	49	105
PHF	0.42	0.25	0.00	0.38	0.28	0.00	0.42	0.39	0.58	0.45	0.00	0.53	0.00	0.71	0.33	0.72	0.64

Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

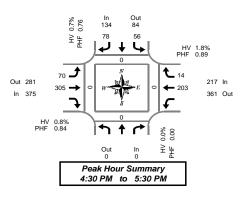
Interval Start	:	North S Maple	bound Lane R	d	ş	South S Maple	bound Lane R	d	S	Easth Beave	oound rcreek F	łd	s	Westa Beaver	oound creek R	td	Interval
Time	L	T	R	Total	L	T	R	Total	L	Т	R	Total	L	Т	R	Total	
7:00 AM	5	1	0	6	9	0	5	14	7	29	0	36	0	37	12	49	105
7:15 AM	4	1	0	5	3	0	8	11	12	15	0	27	0	32	8	40	83
7:30 AM	3	1	0	4	4	0	7	11	13	11	0	24	0	22	10	32	71
7:45 AM	0	0	0	0	4	0	11	15	18	11	0	29	0	15	9	24	68
8:00 AM	1	0	0	1	5	0	10	15	20	8	1	29	0	16	7	23	68





S Holly Ln & S Maple Lane Rd

Wednesday, February 15, 2012 4:00 PM to 6:00 PM



5-Minute Interval Summary 4:00 PM to 6:00 PM

Interval		hbound			South					bound Lane Ro		_	West			late and			strians	
Start	SH	olly Ln			S Hol				s Maple	Lane Ro			S Maple			Interval			swalk	
Time			Bikes	L		R	Bikes	L	T		Bikes			R	Bikes	Total	North	South	East	Wes
4:00 PM			0	2		6	0	4	16		0		24	2	0	54	0	0	0	0
4:05 PM			0	7		2	0	5	39		0		6	0	0	59	0	0	0	0
4:10 PM			0	5		6	0	5	16		0		13	1	0	46	0	0	0	0
4:15 PM			0	0		4	0	8	22		0		16	0	0	50	0	0	0	0
4:20 PM			0	4		2	0	4	18		0		12	1	0	41	0	0	0	0
4:25 PM			0	3		5	0	5	21		0		12	2	0	48	0	0	0	0
4:30 PM			0	2			0	5	34		0		18	1	0	68	0	0	0	0
4:35 PM			0	4		10	0	4	33		0		24	1	0	76	0	0	0	0
4:40 PM			0	4		3	0	6	29		0		16	1	0	59	0	0	0	0
4:45 PM			0	9		7	0	7	23		0		17	0	0	63	0	0	0	0
4:50 PM			0	2		4	0	6	19		0		15	0	0	46	0	0	0	0
4:55 PM			0	6		7	0	7	17		0		6	2	0	45	0	0	0	0
5:00 PM			0	6		3	0	6	22		0		18	1	0	56	0	0	0	0
5:05 PM		1 1	0	4		2	0	5	30		0		23	1	0	65	0	0	0	0
5:10 PM			0	3		8	0	3	30		0		12	0	0	56	0	0	0	0
5:15 PM			0	3		9	0	8	27		0		15	1	0	63	0	0	0	0
5:20 PM			0	8		13	0	4	18		0		20	3	0	66	0	0	0	0
5:25 PM			0	5		4	0	9	23		0		19	3	0	63	0	0	0	0
5:30 PM			0	4		8	0	6	23		0		18	2	0	61	0	0	0	0
5:35 PM			0	6		4	0	6	24		0		11	1	0	52	0	0	0	0
5:40 PM			0	4		9	0	9	22		0		11	2	0	57	1	0	0	0
5:45 PM		1 1	0	3		5	0	9	27		0		20	0	0	64	0	0	0	0
5:50 PM			0	4		9	0	9	22		0		20	2	0	66	0	0	0	0
5:55 PM			0	5		5	0	4	16		0		15	1	0	46	0	0	0	0
Total	Î			100									0.04			1.070				
Survey	1	1 1	0	103		143	0	144	571	1	0		381	28	0	1,370	1	0	0	0

15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval		bound			South					ound			Westb						trians	
Start	S Ho	olly Ln			S Ho	lly Ln			S Maple	Lane Ro	ł	5	5 Maple	Lane R	d	Interval		Cross	swalk	
Time			Bikes	L		R	Bikes	L	Т		Bikes		Т	R	Bikes	Total	North	South	East	West
4:00 PM			0	14		14	0	14	71		0		43	3	0	159	0	0	0	0
4:15 PM			0	7		11	0	17	61		0		40	3	0	139	0	0	0	0
4:30 PM			0	10		21	0	15	96		0		58	3	0	203	0	0	0	0
4:45 PM			0	17		18	0	20	59		0		38	2	0	154	0	0	0	0
5:00 PM			0	13		13	0	14	82		0		53	2	0	177	0	0	0	0
5:15 PM			0	16		26	0	21	68		0		54	7	0	192	0	0	0	0
5:30 PM			0	14		21	0	21	69		0		40	5	0	170	1	0	0	0
5:45 PM			0	12		19	0	22	65		0		55	3	0	176	0	0	0	0
Total Survey			0	103		143	0	144	571		0		381	28	0	1,370	1	0	0	0

Peak Hour Summary 4:30 PM to 5:30 PM

By		North S Ho	bound lly Ln			South S Ho			:	Eastb S Maple		ł	5	Westb S Maple		b	Total		Pedes Cross	s trians Swalk	
Approach	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	0	0	0	0	134	84	218	0	375	281	656	0	217	361	578	0	726	0	0	0	0
%HV		0.0	0%			0.7	%			0.8	3%			1.8	3%		1.1%				
PHF		0.	00			0.	76			0.0	34			0.8	39		0.89				

By Movement			bound lly Ln				bound Ily Ln			Eastb S Maple	ound Lane R	d	5	Westb S Maple		d	Total
wovernern				Total	L		R	Total	L	Т		Total		Т	R	Total	
Volume				0	56		78	134	70	305		375		203	14	217	726
%HV	NA	NA	NA	0.0%	0.0%	NA	1.3%	0.7%	1.4%	0.7%	NA	0.8%	NA	2.0%	0.0%	1.8%	1.1%
PHF				0.00	0.82		0.65	0.76	0.83	0.79		0.84		0.88	0.50	0.89	0.89

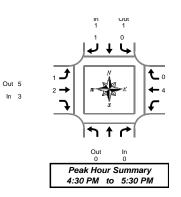
Rolling Hour Summary 4:00 PM to 6:00 PM

Interval		thbound				bound				ound			Westh					Pedes		
Start	5	Holly Ln			S HO	lly Ln			S Maple	Lane Ro	1	2	5 Maple	Lane R	a	Interval		Cros	swalk	
Time			Bikes	L	1	R	Bikes	L	T		Bikes		Т	R	Bikes	Total	North	South	East	West
4:00 PM			0	48		64	0	66	287		0		179	11	0	655	0	0	0	0
4:15 PM			0	47		63	0	66	298		0		189	10	0	673	0	0	0	0
4:30 PM			0	56		78	0	70	305		0		203	14	0	726	0	0	0	0
4:45 PM			0	60		78	0	76	278		0		185	16	0	693	1	0	0	0
5:00 PM			0	55		79	0	78	284		0		202	17	0	715	1	0	0	0



S Holly Ln & S Maple Lane Rd

Wednesday, February 15, 2012 4:00 PM to 6:00 PM



Heavy Vehicle 5-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start	Northboun S Holly Lr			bound Ily Ln				bound Lane R	t	Westa 3 Maple		d	Interva
Time		Total	L	R	Total	L	Т		Total	Т	R	Total	Total
4:00 PM		0	0	0	0	0	0		0	0	0	0	0
4:05 PM		0	0	0	0	1	2		3	 0	0	0	3
4:10 PM		0	0	0	0	0	0		0	0	0	0	0
4:15 PM		0	0	1	1	0	0		0	0	0	0	1
4:20 PM		0	0	1	1	0	1		1	0	0	0	2
4:25 PM		0	0	0	0	1	0		1	0	0	0	1
4:30 PM		0	0	0	0	0	0		0	0	0	0	0
4:35 PM		0	0	0	0	0	0		0	1	0	1	1
4:40 PM		0	0	0	0	1	0		1	1	0	1	2
4:45 PM		0	0	1	1	0	1		1	0	0	0	2
4:50 PM		0	0	0	0	0	0		0	0	0	0	0
4:55 PM		0	0	0	0	0	0		0	0	0	0	0
5:00 PM		0	0	0	0	0	0		0	1	0	1	1
5:05 PM		0	0	0	0	0	0		0	 0	0	0	0
5:10 PM		0	0	0	0	0	1		1	0	0	0	1
5:15 PM		0	0	0	0	0	0		0	0	0	0	0
5:20 PM		0	0	0	0	0	0		0	1	0	1	1
5:25 PM		0	0	0	0	0	0		0	0	0	0	0
5:30 PM		0	0	0	0	0	1		1	1	0	1	2
5:35 PM		0	0	0	0	0	0		0	1	0	1	1
5:40 PM		0	0	0	0	0	0		0	0	0	0	0
5:45 PM		0	0	0	0	0	0		0	0	0	0	0
5:50 PM		0	0	0	0	0	0		0	0	0	0	0
5:55 PM		0	0	0	0	0	0		0	0	0	0	0
Total			0	0	0	3	0		•	0	0	0	18
Survey		0	0	3	3	3	6		9	6	0	6	18

Heavy Vehicle 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval	North	bound		South	bound			Eastl	bound			West	bound		
Start	S Ho	lly Ln		S Ho	lly Ln			S Maple	Lane R	d	5	6 Maple	Lane R	d	Interval
Time		Total	L		R	Total	L	Т		Total		Т	R	Total	Total
4:00 PM		0	0		0	0	1	2		3		0	0	0	3
4:15 PM		0	0		2	2	1	1		2		0	0	0	4
4:30 PM		0	0		0	0	1	0		1		2	0	2	3
4:45 PM		0	0	1	1	1	0	1		1		0	0	0	2
5:00 PM		0	0		0	0	0	1		1		1	0	1	2
5:15 PM		0	0		0	0	0	0		0		1	0	1	1
5:30 PM		0	0		0	0	0	1		1		2	0	2	3
5:45 PM		0	0		0	0	0	0		0		0	0	0	0
Total Survey		0	0		3	3	3	6		9		6	0	6	18

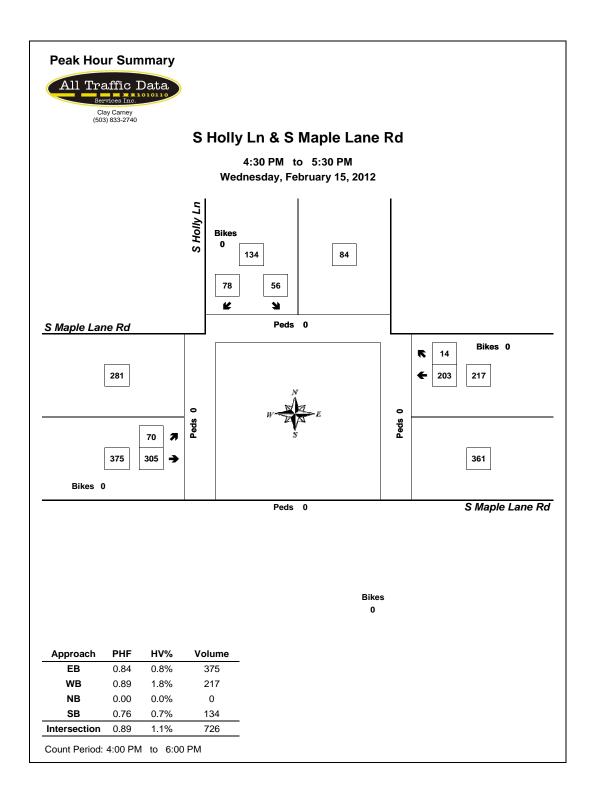
Heavy Vehicle Peak Hour Summary 4:30 PM to 5:30 PM

Ву			bound Ilv Ln			bound Ilv Ln			oound Lane Rd			bound Lane Rd	Total
Approach	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	1	1	2	3	5	8	4	2	6	8
PHF	0.00			0.25			0.38			0.50			0.40

Ву		bound Ily Ln			 bound Ily Ln				bound Lane Re	d	5	Westa Maple		d	Total
Movement		ŕ	Total	L	R	Total	L	T		Total		T	R	Total	
Volume			0	0	1	1	1	2		3		4	0	4	8
PHF			0.00	0.00	0.25	0.25	0.25	0.50		0.38		0.50	0.00	0.50	0.40

Heavy Vehicle Rolling Hour Summary 4:00 PM to 6:00 PM

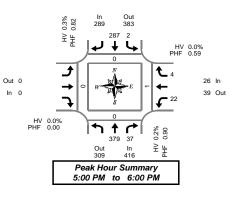
Interval Start	bound lly Ln		South S Hol			:		bound Lane Rd		s	Westb Maple		d	Interval
Time	Total	L		R	Total	L	Т		Total		Т	R	Total	Total
4:00 PM	0	0		3	3	3	4		7		2	0	2	12
4:15 PM	0	0		3	3	2	3		5		3	0	3	11
4:30 PM	0	0		1	1	1	2		3		4	0	4	8
4:45 PM	0	0		1	1	0	3		3		4	0	4	8
5:00 PM	0	0		0	0	0	2		2		4	0	4	6





S Maple Lane Rd & S Walnut Grove Way

Wednesday, February 15, 2012 4:00 PM to 6:00 PM



5-Minute Interval Summary 4:00 PM to 6:00 PM

Interval	North	bound			South	bound		Easth	oound			Westb	ound				Pedes	strians	
Start	S Maple	Lane R	d		S Maple	Lane Rd	S	Walnut	Grove W	/ay	SI	Walnut G	Grove V	Vay	Interval		Cros	swalk	
Time	T	R	Bikes	L	Т	Bike	6			Bikes	L		R	Bikes	Total	North	South	East	West
4:00 PM	20	1	0	0	25	0		1		0	1		0	0	47	0	0	0	0
4:05 PM	41	9	0	0	18	0				0	1		1	0	70	0	0	0	0
4:10 PM	29	5	0	1	16	0				0	2		0	0	53	0	0	0	0
4:15 PM	27	1	0	0	14	0				0	0		0	0	42	0	0	0	0
4:20 PM	25	2	0	0	24	0				0	0		0	0	51	0	0	0	0
4:25 PM	29	4	0	0	14	0				0	2		0	0	49	0	0	0	0
4:30 PM	32	2	0	0	30	0				0	0		0	0	64	0	0	0	0
4:35 PM	45	3	0	0	25	0				0	1		0	0	74	0	0	0	0
4:40 PM	29	2	0	0	26	0				0	3		0	0	60	0	0	1	0
4:45 PM	34	3	0	0	24	0				0	2		0	0	63	0	0	0	0
4:50 PM	24	1	0	0	19	0				0	2		0	0	46	0	0	0	0
4:55 PM	34	2	0	0	19	0				0	1		0	0	56	0	0	0	0
5:00 PM	22	1	0	0	16	0				0	1		1	0	41	0	0	0	0
5:05 PM	40	1	0	0	24	0				0	0		0	0	65	0	0	0	0
5:10 PM	32	2	0	1	22	0				0	3		0	0	60	0	0	0	0
5:15 PM	39	2	0	0	18	0				0	1		0	0	60	0	0	0	0
5:20 PM	25	3	0	0	26	0				0	1		0	0	55	0	0	0	0
5:25 PM	31	3	0	1	34	0				0	3		1	0	73	0	0	0	0
5:30 PM	29	3	0	0	27	0				0	5		1	0	65	0	0	0	0
5:35 PM	34	6	0	0	20	0				0	1		0	0	61	0	0	0	0
5:40 PM	 27	2	0	0	25	0				0	0		0	0	54	0	0	0	0
5:45 PM	 39	6	0	0	19	0				0	4		1	0	69	0	0	0	0
5:50 PM	 32	4	0	0	29	0				0	1		0	0	66	0	0	0	0
5:55 PM	29	4	0	0	27	0				0	2		0	0	62	0	0	1	0
Total Survey	748	72	0	3	541	0				0	37		5	0	1,406	0	0	2	0

15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval	North					bound				oound				bound				Pedes		
Start	S Maple	Lane R	d		S Maple	Lane Ro	d	S	Walnut	Grove W	/ay	S	Walnut (Grove W	/ay	Interval		Cross	swalk	
Time	Т	R	Bikes	L	Т		Bikes				Bikes	L		R	Bikes	Total	North	South	East	West
4:00 PM	90	15	0	1	59		0				0	4		1	0	170	0	0	0	0
4:15 PM	81	7	0	0	52		0				0	2		0	0	142	0	0	0	0
4:30 PM	106	7	0	0	81		0				0	4		0	0	198	0	0	1	0
4:45 PM	92	6	0	0	62		0				0	5		0	0	165	0	0	0	0
5:00 PM	94	4	0	1	62		0				0	4		1	0	166	0	0	0	0
5:15 PM	95	8	0	1	78		0				0	5		1	0	188	0	0	0	0
5:30 PM	90	11	0	0	72		0				0	6		1	0	180	0	0	0	0
5:45 PM	100	14	0	0	75		0				0	7		1	0	197	0	0	1	0
Total Survey	748	72	0	3	541		0				0	37		5	0	1,406	0	0	2	0

Peak Hour Summary 5:00 PM to 6:00 PM

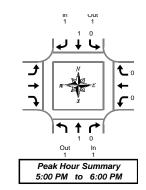
Bv		North	bound			South	bound			Easth	ound			West	oound				Pedes	trians	
	5	6 Maple	Lane R	d	S	6 Maple	Lane R	d	S	Walnut (Grove W	/ay	SI	Nalnut (Grove W	'ay	Total		Cross	swalk	
Approach	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	416	309	725	0	289	383	672	0	0	0	0	0	26	39	65	0	731	0	0	1	0
%HV		0.2	2%			0.3	3%			0.0	0%			0.0	0%		0.3%				
PHF		0.	90			0.	82			0.	00			0.	59		0.92				

By Movement		North S Maple	bound Lane R	d	S	South Maple		d	S	Eastt Nalnut	oound Grove V	/ay	S١	Westb Nalnut (Vay	Total
wovernern		Т	R	Total	L	Т		Total				Total	L		R	Total	
Volume		379	37	416	2	287		289				0	22		4	26	731
%HV	NA	0.3%	0.0%	0.2%	0.0%	0.3%	NA	0.3%	NA	NA	NA	0.0%	0.0%	NA	0.0%	0.0%	0.3%
PHF		0.85	0.66	0.90	0.50	0.82		0.82				0.00	0.61		0.50	0.59	0.92

Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start		t hboun le Lane			5		bound Lane Rd	tbound Grove Wav		SI	Westb Nainut C		/av	Interval		Pedes Cros	strians	
Time	T	R	Bi	kes	L	Т	Bikes	Bi	kes	L		R	Bikes	Total	North	South	East	West
4:00 PM	369	35		0	1	254	0		0	15		1	0	675	0	0	1	0
4:15 PM	373	24		0	1	257	0		0	15		1	0	671	0	0	1	0
4:30 PM	387	25		0	2	283	0		0	18		2	0	717	0	0	1	0
4:45 PM	371	29		0	2	274	0		0	20		3	0	699	0	0	0	0
5:00 PM	379	37		0	2	287	0		0	22		4	0	731	0	0	1	0





Out 0

In 0

S Maple Lane Rd & S Walnut Grove Way

Wednesday, February 15, 2012 4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary 4:00 PM to 6:00 PM

Interval		bound				bound		ound		Westbound		
Start	S Maple	Lane R			S Maple	Lane Rd	S Walnut (S١	Walnut Grove	Way	Interva
Time	T	R	Total	L	T	Total		Total	L	R	Total	Total
4:00 PM	0	0	0	0	0	0		0	0	0	0	0
4:05 PM	2	0	2	0	0	0		0	0	0	0	2
4:10 PM	1	0	1	0	0	0		0	0	0	0	1
4:15 PM	0	0	0	0	0	0		0	0	0	0	0
4:20 PM	2	0	2	0	0	0		0	0	0	0	2
4:25 PM	1	0	1	0	0	0		0	0	0	0	1
4:30 PM	0	0	0	0	0	0		0	0	0	0	0
4:35 PM	0	0	0	0	1	1		0	0	0	0	1
4:40 PM	1	0	1	0	0	0		0	0	0	0	1
4:45 PM	0	0	0	0	1	1		0	0	0	0	1
4:50 PM	0	0	0	0	0	0		0	0	0	0	0
4:55 PM	0	0	0	0	0	0		0	0	0	0	0
5:00 PM	0	0	0	0	0	0		0	0	0	0	0
5:05 PM	0	0	0	0	1	1		0	0	0	0	1
5:10 PM	0	0	0	0	0	0		0	0	0	0	0
5:15 PM	0	0	0	0	0	0		0	0	0	0	0
5:20 PM	0	0	0	0	0	0		0	0	0	0	0
5:25 PM	0	0	0	0	0	0		0	0	0	0	0
5:30 PM	1	0	1	0	0	0		0	0	0	0	1
5:35 PM	0	0	0	0	0	0		0	0	0	0	0
5:40 PM	0	0	0	0	0	0		0	0	0	0	0
5:45 PM	0	0	0	0	0	0		0	0	0	0	0
5:50 PM	0	0	0	0	0	0		0	0	0	0	0
5:55 PM	0	0	0	0	0	0		0	0	0	0	0
Total	8	0	8	0	3	3		0	0	0	0	11
Survey	°	0	l °	0	3	3		0	0	0	0	

Heavy Vehicle 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval	Nor	hbound			South	bound			Eastb	ound			Westh	oound		
Start	S Map	le Lane	Rd	:	S Maple	Lane Ro	d l	SI	Nalnut (Grove W	/ay	SI	Valnut 0	Grove W	/ay	Interval
Time	Т	R	Total	L	Т		Total				Total	L		R	Total	Total
4:00 PM	3	0	3	0	0		0				0	0		0	0	3
4:15 PM	3	0	3	0	0		0				0	0		0	0	3
4:30 PM	1	0	1	0	1		1				0	0		0	0	2
4:45 PM	0	0	0	0	1		1				0	0		0	0	1
5:00 PM	0	0	0	0	1		1				0	0		0	0	1
5:15 PM	0	0	0	0	0		0				0	0		0	0	0
5:30 PM	1	0	1	0	0		0				0	0		0	0	1
5:45 PM	0	0	0	0	0		0				0	0		0	0	0
Total Survey	8	0	8	0	3		3				0	0		0	0	11

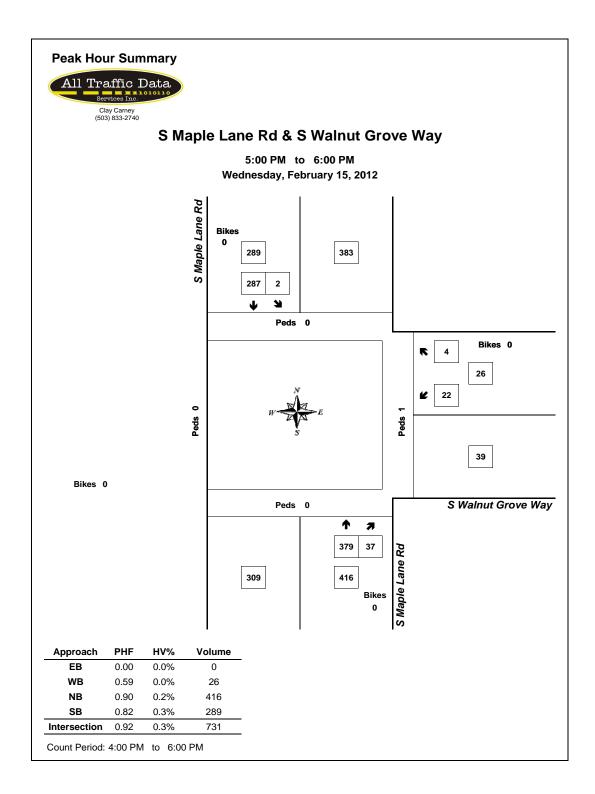
Heavy Vehicle Peak Hour Summary 5:00 PM to 6:00 PM

Ву		North Maple	bound Lane Rd			bound Lane Rd	S		oound Grove Way	S١	Westi Valnut (oound Grove Way	Total
Approach	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	1
Volume	1	1	2	1	1	2	0	0	0	0	0	0	2
PHF	0.25			0.25			0.00			0.00			0.50

Ву	5	North S Maple	bound Lane Re	d	ş		bound Lane Ro	ł	SI	 oound Grove W	'ay	SI	Westi Valnut (/ay	Total
Movement		Т	R	Total	L	Т		Total			Total	L		R	Total	
Volume		1	0	1	0	1		1			0	0		0	0	2
PHF		0.25	0.00	0.25	0.00	0.25		0.25			0.00	0.00		0.00	0.00	0.50

Heavy Vehicle Rolling Hour Summary 4:00 PM to 6:00 PM

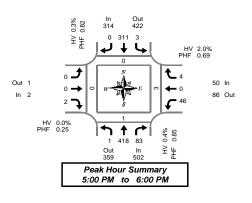
Interval Start	9		bound Lane R	d			bound Lane Rd	S M	Eastb	ound Grove W	lav	51	Westa Walnut (/av	Interval
Time		T	R	Total	L T Total 0 2 2					Siove w	Total	L		R	Total	Total
4:00 PM		7	0	7	0	2	2				0	0		0	0	9
4:15 PM		4	0	4	0	3	3				0	0		0	0	7
4:30 PM		1	0	1	0	3	3				0	0		0	0	4
4:45 PM		1	0	1	0	2	2				0	0		0	0	3
5:00 PM		1	0	1	0	1	1				0	0		0	0	2





S Maple Lane Rd & S Thayer Rd

Wednesday, February 15, 2012 4:00 PM to 6:00 PM



5-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start			bound			South		4			bound			West			laster and			strians	
		S Maple			;	S Maple				Sina	yer Rd			S Tha			Interval			swalk	
Time	L	T	R	Bikes	L	Т	R	Bikes	L	Т	R	Bikes	L	T	R	Bikes	Total	North	South	East	West
4:00 PM	0	17	6	0	1	28	0	0	0	0	0	0	7	0	0	0	59	0	0	0	0
4:05 PM	0	54	2	0	0	15	0	0	0	0	0	0	1	0	0	0	72	0	0	0	0
4:10 PM	0	29	8	0	0	16	0	0	0	0	0	0	4	0	1	0	58	0	0	0	0
4:15 PM	0	31	11	0	1	15	0	0	0	0	0	0	5	0	1	0	64	0	0	0	0
4:20 PM	0	27	7	0	0	25	0	0	0	0	0	0	2	0	0	0	61	0	0	1	0
4:25 PM	0	34	10	0	1	18	0	0	0	0	0	0	2	0	0	0	65	0	0	0	0
4:30 PM	0	45	8	0	1	28	0	0	0	0	0	0	7	0	0	0	89	0	0	1	0
4:35 PM	0	39	9	0	1	24	0	0	0	0	0	0	2	0	0	0	75	0	0	0	0
4:40 PM	0	39	9	0	2	26	0	0	0	0	0	0	6	0	0	0	82	0	0	1	0
4:45 PM	0	34	5	0	0	28	0	0	0	0	0	0	7	0	0	0	74	0	0	0	0
4:50 PM	0	27	7	0	0	22	0	0	0	0	0	0	6	0	1	0	63	0	0	0	0
4:55 PM	0	27	1	0	1	16	0	0	0	0	0	0	0	0	0	0	45	0	0	0	0
5:00 PM	0	22	7	0	0	20	0	0	0	0	0	0	5	0	0	0	54	0	0	0	0
5:05 PM	0	41	14	0	1	23	0	0	0	0	0	0	2	0	0	0	81	0	0	0	0
5:10 PM	0	35	5	0	0	23	0	0	0	0	0	0	3	0	0	0	66	0	1	0	0
5:15 PM	0	43	9	0	0	23	0	0	0	0	0	0	2	0	1	0	78	0	0	0	0
5:20 PM	0	25	10	0	0	26	0	0	0	0	0	0	5	0	0	0	66	0	0	0	0
5:25 PM	0	34	6	0	1	36	0	0	0	0	0	0	3	0	1	0	81	0	0	0	0
5:30 PM	1	33	2	0	0	33	0	0	0	0	1	0	3	0	0	0	73	0	0	2	0
5:35 PM	0	38	4	0	0	19	0	0	0	0	0	0	1	0	0	0	62	0	0	0	0
5:40 PM	0	35	7	0	0	28	0	0	0	0	1	0	5	0	1	0	77	0	0	0	0
5:45 PM	0	44	5	0	0	23	0	0	0	0	0	0	5	0	0	0	77	0	0	0	0
5:50 PM	0	41	11	0	1	31	0	0	0	0	0	0	3	0	1	0	88	0	0	1	0
5:55 PM	0	27	3	0	0	26	0	0	0	0	0	0	9	0	0	0	65	0	0	0	0
Total Survey	1	821	166	0	11	572	0	0	0	0	2	0	95	0	7	0	1,675	0	1	6	0

15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval		North	bound			South	bound			Eastb	ound			Westh	ound				Pedes	trians	
Start		S Maple	Lane R	d	5	S Maple	Lane R	d		S Tha	yer Rd			S Thay	/er Rd		Interval		Cross	swalk	
Time	L	Т	R	Bikes	L	Т	R	Bikes	L	Т	R	Bikes	L	Т	R	Bikes	Total	North	South	East	West
4:00 PM	0	100	16	0	1	59	0	0	0	0	0	0	12	0	1	0	189	0	0	0	0
4:15 PM	0	92	28	0	2	58	0	0	0	0	0	0	9	0	1	0	190	0	0	1	0
4:30 PM	0	123	26	0	4	78	0	0	0	0	0	0	15	0	0	0	246	0	0	2	0
4:45 PM	0	88	13	0	1	66	0	0	0	0	0	0	13	0	1	0	182	0	0	0	0
5:00 PM	0	98	26	0	1	66	0	0	0	0	0	0	10	0	0	0	201	0	1	0	0
5:15 PM	0	102	25	0	1	85	0	0	0	0	0	0	10	0	2	0	225	0	0	0	0
5:30 PM	1	106	13	0	0	80	0	0	0	0	2	0	9	0	1	0	212	0	0	2	0
5:45 PM	0	112	19	0	1	80	0	0	0	0	0	0	17	0	1	0	230	0	0	1	0
Total Survey	1	821	166	0	11	572	0	0	0	0	2	0	95	0	7	0	1,675	0	1	6	0

Peak Hour Summary 5:00 PM to 6:00 PM

By		North S Maple	bound Lane R	d	ş	South Maple		d			oound yer Rd			West S Tha			Total			s trians Swalk	
Approach	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	502	359	861	0	314	422	736	0	2	1	3	0	50	86	136	0	868	0	1	3	0
%HV		0.4	4%			0.3	3%			0.0	0%			2.0)%		0.5%				
PHF		0.	85			0.	82			0.	25			0.0	69		0.90				
		North	bound		Southbound				Eacth	bound			Woeth	bound							

By Movement	5	S Maple		d	5	5 Maple		d		S Tha	yer Rd			S Tha	yer Rd		Total
wovernerit	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	
Volume	1	418	83	502	3	311	0	314	0	0	2	2	46	0	4	50	868
%HV	0.0%	0.2%	1.2%	0.4%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	2.0%	0.5%
PHF	0.25	0.87	0.74	0.85	0.75	0.82	0.00	0.82	0.00	0.00	0.25	0.25	0.68	0.00	0.50	0.69	0.90

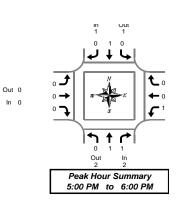
Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start		North S Maple	bound Lane R	d	;	South S Maple	bound Lane R	d		Eastb S Tha				Westb S Thay			Interval		Pedes Cross		
Time	L	T	R	Bikes	L	Т	R	Bikes	L	Т	R	Bikes	L	Т	R	Bikes	Total	North	South	East	West
4:00 PM	0	403	83	0	8	261	0	0	0	0	0	0	49	0	3	0	807	0	0	3	0
4:15 PM	0	401	93	0	8	268	0	0	0	0	0	0	47	0	2	0	819	0	1	3	0
4:30 PM	0	411	90	0	7	295	0	0	0	0	0	0	48	0	3	0	854	0	1	2	0
4:45 PM	1	394	77	0	3	297	0	0	0	0	2	0	42	0	4	0	820	0	1	2	0
5:00 PM	1	418	83	0	3	311	0	0	0	0	2	0	46	0	4	0	868	0	1	3	0



S Maple Lane Rd & S Thayer Rd

Wednesday, February 15, 2012 4:00 PM to 6:00 PM



Heavy Vehicle 5-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start	:	North S Maple	bound Lane R	d	:	South S Maple	bound Lane R	d			yer Rd				yer Rd		Interval
Time	L	T	R	Total	L	T	R	Total	L	Т	R	Total	L	T	R	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:05 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:10 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:25 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:35 PM	0	1	1	2	0	1	0	1	0	0	0	0	0	0	0	0	3
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:10 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survev	0	8	2	10	0	3	0	3	0	0	0	0	1	0	0	1	14

Heavy Vehicle 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval		North	bound			South	bound			Easth	oound			West	bound		
Start	;	S Maple	Lane R	d	5	5 Maple	Lane R	d		S Tha	yer Rd			S Tha	yer Rd		Interval
Time	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	Total
4:00 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	1	1	2	0	1	0	1	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	8	2	10	0	3	0	3	0	0	0	0	1	0	0	1	14

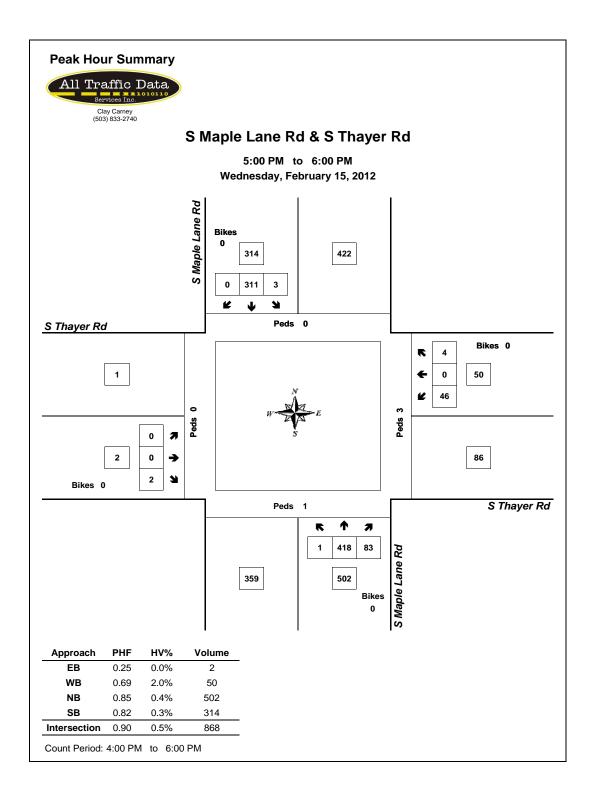
Heavy Vehicle Peak Hour Summary 5:00 PM to 6:00 PM

By	5		bound Lane Rd	:		bound Lane Rd			oound yerRd			bound yer Rd	Total
Approach	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	1
Volume	2	2	4	1	1	2	0	0	0	1	1	2	4
PHF	0.50		0.25			0.00			0.25			0.50	

By Movement	Northbound S Maple Lane Rd				Southbound S Maple Lane Rd				Eastbound S Thayer Rd				Westbound S Thayer Rd				Total
	L	T	R	Total	L	T	R	Total	L	Т	R	Total	L	T	R	Total	
Volume	0	1	1	2	0	1	0	1	0	0	0	0	1	0	0	1	4
PHF	0.00	0.25	0.25	0.50	0.00	0.25	0.00	0.25	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.25	0.50

Heavy Vehicle Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start	Northbound S Maple Lane Rd				Southbound S Maple Lane Rd				Eastbound S Thayer Rd				Westbound S Thayer Rd				Interval
Time	L	T	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	Total
4:00 PM	0	7	1	8	0	2	0	2	0	0	0	0	0	0	0	0	10
4:15 PM	0	4	2	6	0	3	0	3	0	0	0	0	0	0	0	0	9
4:30 PM	0	1	2	3	0	3	0	3	0	0	0	0	0	0	0	0	6
4:45 PM	0	1	1	2	0	2	0	2	0	0	0	0	1	0	0	1	5
5:00 PM	0	1	1	2	0	1	0	1	0	0	0	0	1	0	0	1	4

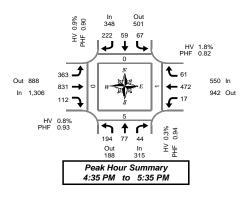


Total Vehicle Summary



S Maple Lane Rd & S Beavercreek Rd

Wednesday, February 15, 2012 4:00 PM to 6:00 PM



5-Minute Interval Summary 4:00 PM to 6:00 PM

Interval		North					bound			Easth				Westh						strians	
Start	5	6 Maple	Lane R	d	S	6 Maple	Lane R	d	5	S Beave	creek F	d	5	Beaver	rcreek F	ld	Interval			swalk	
Time	L	Т	R	Bikes	L	Т	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	Total	North	South	East	West
4:00 PM	22	5	5	0	3	6	20	0	28	55	9	0	0	41	7	0	201	0	0	0	0
4:05 PM	5	4	7	0	7	2	25	0	24	52	9	0	2	40	4	0	181	0	0	0	0
4:10 PM	27	13	1	0	2	4	11	0	22	60	9	0	0	35	7	0	191	0	0	0	0
4:15 PM	9	4	2	0	4	1	13	0	47	60	9	0	1	36	2	0	188	0	0	0	0
4:20 PM	12	11	3	0	2	2	18	0	20	43	7	0	1	40	7	0	166	0	0	1	0
4:25 PM	12	6	3	0	13	1	13	0	25	66	6	0	2	32	4	0	183	0	0	0	1
4:30 PM	26	4	3	0	4	5	12	0	29	60	6	0	1	45	9	1	204	0	0	1	0
4:35 PM	19	6	5	0	8	5	23	0	44	83	10	0	0	31	6	0	240	0	3	0	0
4:40 PM	10	5	6	0	6	6	13	0	38	63	8	0	0	46	10	0	211	0	0	0	0
4:45 PM	14	9	3	0	5	10	21	0	21	66	6	0	0	40	6	0	201	0	0	1	0
4:50 PM	15	8	4	0	8	2	20	0	28	84	14	0	0	39	3	0	225	0	1	0	0
4:55 PM	15	7	8	0	6	5	16	0	27	70	7	0	4	40	3	0	208	0	0	0	0
5:00 PM	13	3	2	0	4	3	8	0	22	59	4	0	2	49	2	0	171	0	0	0	0
5:05 PM	22	5	2	0	4	2	19	0	26	58	11	0	3	57	8	0	217	0	0	0	0
5:10 PM	23	9	2	0	3	4	18	0	34	66	8	0	2	25	6	0	200	0	1	0	0
5:15 PM	16	3	2	0	7	4	21	0	35	55	8	0	1	41	4	0	197	0	0	0	0
5:20 PM	11	5	3	0	1	3	19	0	34	80	11	0	2	31	9	0	209	0	0	0	0
5:25 PM	22	10	3	0	7	9	20	0	24	58	11	0	2	28	4	1	198	0	0	0	0
5:30 PM	14	7	4	0	8	6	24	0	30	89	14	0	1	45	0	0	242	0	0	0	0
5:35 PM	15	9	2	0	6	2	25	0	26	56	7	0	1	41	7	0	197	0	0	1	0
5:40 PM	14	5	5	0	3	1	12	0	19	77	6	0	2	46	6	0	196	0	1	0	0
5:45 PM	17	7	5	0	6	8	18	0	36	90	10	0	4	44	3	0	248	1	0	0	0
5:50 PM	16	10	2	0	7	1	23	0	34	64	10	0	0	43	7	0	217	0	0	0	0
5:55 PM	24	7	6	0	11	6	24	0	28	63	10	0	1	31	8	0	219	0	0	1	0
Total Survey	393	162	88	0	135	98	436	0	701	1,577	210	0	32	946	132	2	4,910	1	6	5	1

15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start		North S Maple		d		South Maple	bound	۲		Eastb Beaver		ž	0	Westb Beaver		d	Interval		Pedes Cross		
Time	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	Total	North	South	East	West
4:00 PM	54	22	13	0	12	12	56	0	74	167	27	0	2	116	18	0	573	0	0	0	0
4:15 PM	33	21	8	0	19	4	44	0	92	169	22	0	4	108	13	0	537	0	0	1	1
4:30 PM	55	15	14	0	18	16	48	0	111	206	24	0	1	122	25	1	655	0	3	1	0
4:45 PM	44	24	15	0	19	17	57	0	76	220	27	0	4	119	12	0	634	0	1	1	0
5:00 PM	58	17	6	0	11	9	45	0	82	183	23	0	7	131	16	0	588	0	1	0	0
5:15 PM	49	18	8	0	15	16	60	0	93	193	30	0	5	100	17	1	604	0	0	0	0
5:30 PM	43	21	11	0	17	9	61	0	75	222	27	0	4	132	13	0	635	0	1	1	0
5:45 PM	57	24	13	0	24	15	65	0	98	217	30	0	5	118	18	0	684	1	0	1	0
Total Survey	393	162	88	0	135	98	436	0	701	1,577	210	0	32	946	132	2	4,910	1	6	5	1

Peak Hour Summary 4:35 PM to 5:35 PM

	North	bound			South	bound			East	bound			West	bound				Pedes	trians	
5	6 Maple	Lane R	d	:	5 Maple	Lane R	d	S	Beave	rcreek R	d	S	Beave	rcreek R	ld	Total		Cross	swalk	
In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
315	188	503	0	348	501	849	0	1,306	888	2,194	0	550	942	1,492	1	2,519	0	5	1	0
	0.3	3%			0.9	9%			0.	8%			1.	8%		1.0%				
	0.9	94			0.	90			0.	.93			0.	82		0.97				
-	In	S Maple In Out 315 188 0.3	In Out Total	S Maple Lane Rd In Out Total Bikes 315 188 503 0 0.3% 0 0.3%	S Maple Lane Rd S In Out Total Bikes In 315 188 503 0 348 0.3%	S Maple Lane Rd S Maple In Out Total Bikes In Out 315 188 503 0 348 501 0.3% 0.5 0.5 0.5 0.5	S Maple Lane Rd S Maple Lane R In Out Total Bikes In Out Total 315 188 503 0 348 501 849 0.3% 0.9% 0.9% 0.9% 0.9% 0.9%	S Maple Lane Rd S Maple Lane Rd In Out Total Bikes In Out Total Bikes 315 188 503 0 348 501 849 0 0.3% 0.9% 0.9% 0.9% 0.9% 0.9%	S Maple Lane Rd S Maple Lane Rd S In Out Total Bikes In Out Total Bikes In 315 188 503 0 348 501 849 0 1,306 0.3% 0.9% 0.9% 0.9% 0.9% 0.9% 0.9% 0.9%	S Maple Lane Rd S Maple Lane Rd S Baple S Baple S Baple In Out Total Bikes In Out Total Bikes In Out 315 188 503 0 348 501 849 0 1,306 888 0.3% 0.9% 0.9% 0.1 0.0 88	S Maple Lane Rd S Maple Lane Rd S Beavercreek R In Out Total Bikes In Out Total Dikue	S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd In Out Total Bikes In Out Total Bikes 115 188 503 0 348 501 849 0 1,306 888 2,194 0 0.3% 0.9% 0.9% 0.8% 0.8% 0.8% 0.8% 0.8%	S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S In Out Total Bikes In Out Total Bikes In 315 188 503 0 348 501 849 0 1,306 888 2,194 0 550 0.3% 0.9% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8%	S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd <td>S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd S Beavercreek Rd S Beavercreek Rd In Out Total Bikes In Out Total Site Out Total Site <</td> <td>S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd In Out Total Bikes In Out Total In Out Total Di</td> <td>S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd Total Bikes In Out Total Dikes In Out Dikes In Out <t< td=""><td>S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd Total North In Out Total Bikes In Out Total Bikes In Out Total Bikes In North North North North North North 0.3% 0.3% 0.8% 0.8% 0.8% 1.8% 1.8% 1.0% 1.8% 1.0%</td><td>S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd Total Total Cross In Out Total Bikes In Out In</td><td>S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd Total Total Total Total Total North South East In Out Total Bikes In Out Total Dut Total Dut</td></t<></td>	S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd S Beavercreek Rd S Beavercreek Rd In Out Total Bikes In Out Total Site Out Total Site <	S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd In Out Total Bikes In Out Total In Out Total Di	S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd Total Bikes In Out Total Dikes In Out Dikes In Out <t< td=""><td>S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd Total North In Out Total Bikes In Out Total Bikes In Out Total Bikes In North North North North North North 0.3% 0.3% 0.8% 0.8% 0.8% 1.8% 1.8% 1.0% 1.8% 1.0%</td><td>S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd Total Total Cross In Out Total Bikes In Out In</td><td>S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd Total Total Total Total Total North South East In Out Total Bikes In Out Total Dut Total Dut</td></t<>	S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd Total North In Out Total Bikes In Out Total Bikes In Out Total Bikes In North North North North North North 0.3% 0.3% 0.8% 0.8% 0.8% 1.8% 1.8% 1.0% 1.8% 1.0%	S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd Total Total Cross In Out Total Bikes In Out In	S Maple Lane Rd S Maple Lane Rd S Beavercreek Rd S Beavercreek Rd Total Total Total Total Total North South East In Out Total Bikes In Out Total Dut Total Dut

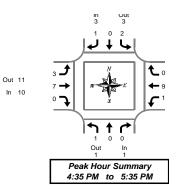
Bv		North	bound			South	bound			Easth	ound			West	oound		
Movement		S Maple	Lane R	d	5	6 Maple	Lane R	d	S	Beave	rcreek F	d	S	Beave	rcreek F	۲d	Total
wovernern	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	
Volume	194	77	44	315	67	59	222	348	363	831	112	1,306	17	472	61	550	2,519
%HV	0.5%	0.0%	0.0%	0.3%	3.0%	0.0%	0.5%	0.9%	0.8%	0.8%	0.0%	0.8%	5.9%	1.9%	0.0%	1.8%	1.0%
PHF	0.80	0.80	0.73	0.94	0.88	0.70	0.88	0.90	0.88	0.92	0.78	0.93	0.47	0.81	0.69	0.82	0.97

Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start	5	North S Maple	bound Lane R	d	5	South S Maple	bound Lane R	d	S	Eastb Beave	oound rcreek R	d	s	Westb Beaver		٤d	Interval		Pedes Cross	strians swalk	
Time	L	T	R	Bikes	L	Т	R	Bikes	L	Т	R	Bikes	L	Т	R	Bikes	Total	North	South	East	West
4:00 PM	186	82	50	0	68	49	205	0	353	762	100	0	11	465	68	1	2,399	0	4	3	1
4:15 PM	190	77	43	0	67	46	194	0	361	778	96	0	16	480	66	1	2,414	0	5	3	1
4:30 PM	206	74	43	0	63	58	210	0	362	802	104	0	17	472	70	2	2,481	0	5	2	0
4:45 PM	194	80	40	0	62	51	223	0	326	818	107	0	20	482	58	1	2,461	0	3	2	0
5:00 PM	207	80	38	0	67	49	231	0	348	815	110	0	21	481	64	1	2,511	1	2	2	0

Heavy Vehicle Summary





S Maple Lane Rd & S Beavercreek Rd

Wednesday, February 15, 2012 4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start	:	North S Maple			;	South S Maple	bound Lane R		s		oound rcreek F		5	Westi Beaver	bound rcreek F	۲d	Interva
Time	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
4:05 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
4:10 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	1	3
4:20 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
4:25 PM	0	0	0	0	0	0	0	0	2	1	0	3	0	1	0	1	4
4:30 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2
4:35 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
4:40 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	1	0	0	1	0	1	0	1	0	1	0	1	3
4:50 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
5:10 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	1	0	0	1	0	0	0	0	1	1	0	2	0	2	0	2	5
5:20 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:55 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	1	3
Total Survev	1	0	0	1	3	0	1	4	11	18	0	29	2	12	0	14	48

Heavy Vehicle 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval		North	bound			South	bound			Easth	bound			West	bound		
Start	;	S Maple	Lane R	d	5	S Maple	Lane R	d	S	Beave	rcreek R	d	5	Beaver	creek F	۲d	Interval
Time	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	2	4	0	6	0	0	0	0	6
4:15 PM	0	0	0	0	0	0	0	0	4	3	0	7	1	1	0	2	9
4:30 PM	0	0	0	0	0	0	1	1	2	2	0	4	0	0	0	0	5
4:45 PM	0	0	0	0	1	0	0	1	0	2	0	2	0	4	0	4	7
5:00 PM	0	0	0	0	1	0	0	1	0	1	0	1	1	2	0	3	5
5:15 PM	1	0	0	1	0	0	0	0	1	3	0	4	0	3	0	3	8
5:30 PM	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	1	3	0	4	0	2	0	2	6
Total Survey	1	0	0	1	3	0	1	4	11	18	0	29	2	12	0	14	48

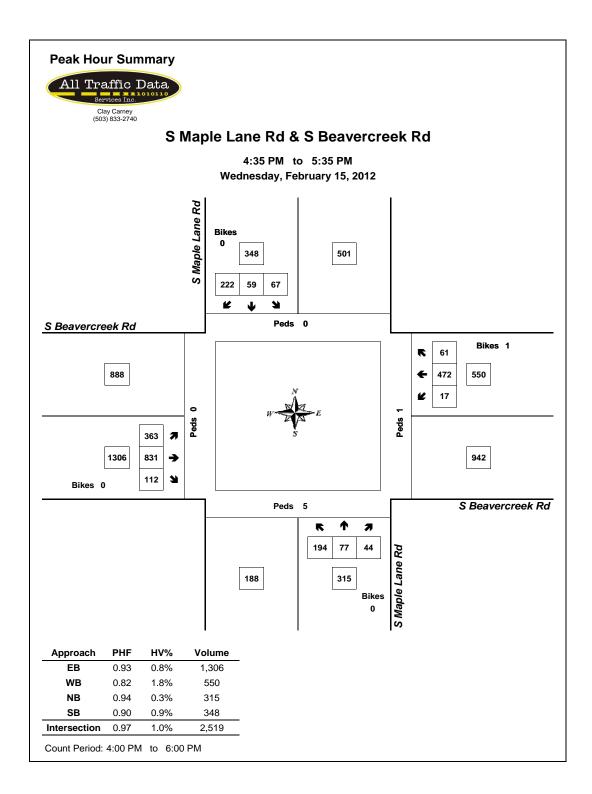
Heavy Vehicle Peak Hour Summary 4:35 PM to 5:35 PM

By			bound Lane Rd			bound Lane Rd	5		roreek Rd	s	Westa Beaver	oound creek Rd	Total
Approach	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	1
Volume	1	1	2	3	3	6	10	11	21	10	9	19	24
PHF	0.25			0.38			0.63			0.63			0.75

Bv		North	bound			South	bound			Eastb	ound			West	oound		
	5	S Maple	Lane R	d	5	S Maple	Lane R	d	S	Beaver	creek R	d	S	Beaver	rcreek R	d	Total
wovernern	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	
Volume	1	0	0	1	2	0	1	3	3	7	0	10	1	9	0	10	24
PHF	0.25	0.00	0.00	0.25	0.50	0.00	0.25	0.38	0.75	0.58	0.00	0.63	0.25	0.56	0.00	0.63	0.75

Heavy Vehicle Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start	:	North S Maple	bound Lane R	d	ş		bound Lane R	d	S	Eastb Beave	oound rcreek R	łd	s	Westa Beaver		۲d	Interval
Time	L	T	R	Total	L	Т	R	Total	L	Т	R	Total	L	Т	R	Total	Total
4:00 PM	0	0	0	0	1	0	1	2	8	11	0	19	1	5	0	6	27
4:15 PM	0	0	0	0	2	0	1	3	6	8	0	14	2	7	0	9	26
4:30 PM	1	0	0	1	2	0	1	3	3	8	0	11	1	9	0	10	25
4:45 PM	1	0	0	1	3	0	0	3	2	6	0	8	1	9	0	10	22
5:00 PM	1	0	0	1	2	0	0	2	3	7	0	10	1	7	0	8	21



4

TRIP GENERATION CALCULATIONS

Land Use: Single-Family Detached Housing Land Use Code: 210 Variable: Dwelling Units Variable Value: 30

AM PEAK HOUR

Trip Rate: 0.75

	Enter	Exit	Total
Directional Distribution	25%	75%	
Trip Ends	6	17	23

PM PEAK HOUR

Trip Rate: 1.01

	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	19	11	30

WEEKDAY

Trip Rate: 9.57

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	144	144	288

SATURDAY

Trip Rate: 10.08

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	151	151	302

Source: TRIP GENERATION, Eighth Edition

4

TRIP GENERATION CALCULATIONS

Land Use: Single-Family Detached Housing Land Use Code: 210 Variable: Dwelling Units Variable Value: 41

AM PEAK HOUR

Trip Rate: 0.75

	Enter	Exit	Total
Directional Distribution	25%	75%	
Trip Ends	8	23	31

Trip Rate: 1.01

	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	26	15	41

WEEKDAY

Trip Rate: 9.57

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	196	196	392

Source: TRIP GENERATION, Eighth Edition

SATURDAY

Trip Rate: 10.08

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	207	207	414

HCM Unsignalized Intersection Capacity Analysis 1: Maplelane Road & Holly Lane

Existing Conditions AM Peak Hour 3/14/2012

	٦	-	-	•	1	1		
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
ane Configurations		र्भ	4Î		Y			
gn Control		Free	Free		Stop			
rade		0%	0%		0%			
lume (veh/h)	92	98	305	46	6	82		
ak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87		
urly flow rate (vph)	106	113	351	53	7	94		
destrians								
ne Width (ft)								
alking Speed (ft/s)								
ercent Blockage								
ght turn flare (veh)								
edian type					None			
edian storage veh)								
ostream signal (ft)								
X, platoon unblocked								
C, conflicting volume	403				701	377		
C1, stage 1 conf vol								
2, stage 2 conf vol								
Cu, unblocked vol	403				701	377		
, single (s)	4.2				6.5	6.3		
, 2 stage (s)								
(s)	2.3				3.6	3.4		
queue free %	91				98	86		
I capacity (veh/h)	1118				357	654		
,								
rection, Lane #	EB 1	WB 1	SB 1					
olume Total	218	403	101					
lume Left	106	0	7					
olume Right	0	53	94					
SH	1118	1700	619					
blume to Capacity	0.09	0.24	0.16					
ueue Length (ft)	8	0	15					
ontrol Delay (s)	4.6	0.0	11.9					
ane LOS	A	0.0	B					
pproach Delay (s)	4.6	0.0	11.9					
pproach LOS			В					
tersection Summary								
erage Delay			3.1					
tersection Capacity U	tilization		44.5%	10	CU Leve	el of Service	Э	А
nalysis Period (min)			15					

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HCM Unsignalized Intersection Capacity Analysis 2: Walnut Grove Way & Maplelane Road Existing Conditions AM Peak Hour 3/14/2012

	4	*	1	1	1	Ŧ	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	Υ		4			र्भ	
Sign Control	Stop		Free			Free	
Grade	0%		0%			0%	
Volume (veh/h)	60	3	176	19	1	394	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	
Hourly flow rate (vph)	69	3	202	22	1	453	
Pedestrians	5						
Lane Width (ft)	12.0						
Walking Speed (ft/s)	4.0						
Percent Blockage	0						
Right turn flare (veh)							
Median type	None						
Median storage veh)							
Upstream signal (ft)			923				
pX, platoon unblocked							
vC, conflicting volume	673	218			229		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	673	218			229		
tC, single (s)	6.4	6.2			4.1		
tC, 2 stage (s)							
tF (s)	3.5	3.3			2.2		
p0 queue free %	83	100			100		
cM capacity (veh/h)	417	816			1339		
Direction, Lane #	WB 1	NB 1	SB 1				
Volume Total	72	224	454				
Volume Left	69	0	1				
Volume Right	3	22	0				
cSH	427	1700	1339				
Volume to Capacity	0.17	0.13	0.00				
Queue Length (ft)	15	0	0.00				
Control Delay (s)	15.2	0.0	0.0				
Lane LOS	C		A				
Approach Delay (s)	15.2	0.0	0.0				
Approach LOS	С						
Intersection Summary							
Average Delay			1.5				
Intersection Capacity U	tilization		31.7%	IC	CU Leve	el of Servic	2
Analysis Period (min)			15				

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HCM Unsignalized Intersection Capacity Analysis 3: Thayer Road & Maplelane Road

Existing Conditions AM Peak Hour 3/14/2012

	≯	-	\mathbf{F}	¥	+	•	•	1	1	1	ŧ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ф —			- 4 >			ф —		- ሽ	ef 👘	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	0	0	74	0	12	0	186	31	3	453	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	1	0	0	84	0	14	0	211	35	3	515	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								378				
pX, platoon unblocked												
vC, conflicting volume	764	768	515	751	751	229	515			247		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	764	768	515	751	751	229	515			247		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	100	100	100	74	100	98	100			100		
cM capacity (veh/h)	317	333	564	328	340	813	1011			1313		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total	1	98	247	3	515							
Volume Left	1	84	0	3	0							
Volume Right	0	14	35	0	0							
cSH	317	358	1011	1313	1700							
Volume to Capacity	0.00	0.27	0.00	0.00	0.30							
Queue Length (ft)	0	27	0	0	0							
Control Delay (s)	16.4	18.8	0.0	7.7	0.0							
Lane LOS	С	С		A								
Approach Delay (s)	16.4	18.8	0.0	0.1								
Approach LOS	С	С										
Intersection Summary												
Average Delay			2.2									_
Intersection Capacity Uti	ilization		35.0%](CU Leve	el of Ser	vice		А			
Analysis Period (min)			15									

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HCM Signalized Intersection Capacity Analysis
4: Beavercreek Road & Maplelane Road

Existing Conditions AM Peak Hour 3/14/2012

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	≜ ⊅		ሻ	∱ ⊅		ሻ	4Î		ሻ	↑	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1719	3399		1719	3383		1719	1684		1752	1845	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1719	3399		1719	3383		1719	1684		1752	1845	1568
Volume (vph)	90	599	49	5	799	96	96	18	15	214	38	279
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	107	713	58	6	951	114	114	21	18	255	45	332
RTOR Reduction (vph)	0	5	0	0	10	0	0	16	0	0	0	81
Lane Group Flow (vph)	107	766	0	6	1055	0	114	23	0	255	45	251
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	3%	3%	3%
Turn Type	Prot			Prot			Prot			Prot		om+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	11.6	46.2		1.4	36.0		8.9	10.2		16.2	17.5	29.1
Effective Green, g (s)	11.6	46.2		1.4	36.0		8.9	10.2		16.2	17.5	29.1
Actuated g/C Ratio	0.13	0.51		0.02	0.40		0.10	0.11		0.18	0.19	0.32
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	222	1745		27	1353		170	191		315	359	577
v/s Ratio Prot	0.06	0.23		0.00	c0.31		0.07	0.02		c0.15	0.02	c0.07
v/s Ratio Perm												0.14
v/c Ratio	0.48	0.44		0.22	0.78		0.67	0.12		0.81	0.13	0.43
Uniform Delay, d1	36.4	13.8		43.8	23.5		39.1	35.9		35.4	29.9	24.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.6	0.2		4.1	3.0		9.9	1.3		14.2	0.7	0.5
Delay (s)	38.1	13.9		47.9	26.5		49.1	37.2		49.6	30.6	24.5
Level of Service	D	В		D	С		D	D		D	С	С
Approach Delay (s)		16.9			26.7			46.0			35.1	
Approach LOS		В			С			D			D	
Intersection Summary												
HCM Average Control D	elay		26.5	H	ICM Lev	vel of Se	ervice		С			
HCM Volume to Capacit			0.70									
Actuated Cycle Length (s)		90.0	S	Sum of l	ost time	(s)		8.0			
Intersection Capacity Ut	ilization		58.7%	10	CU Leve	el of Ser	vice		В			
Analysis Period (min)			15									
c Critical Lane Group												

c Critical Lane Group

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HCM Unsignalized Intersection Capacity Analysis 1: Maplelane Road & Holly Lane

Existing Conditions PM Peak Hour 3/14/2012

	٦	-	+	•	1	1			
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations		र्स	4Î		Y				
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Volume (veh/h)	71	294	203	15	58	78			
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89			
Hourly flow rate (vph)	80	330	228	17	65	88			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type					None				
Median storage veh)									
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	245				726	237			
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	245				726	237			
tC, single (s)	4.1				6.4	6.2			
tC, 2 stage (s)									
tF (s)	2.2				3.5	3.3			
p0 queue free %	94				82	89			
cM capacity (veh/h)	1327				369	805			
Direction, Lane #	EB 1	WB 1	SB 1						
Volume Total	410	245	153						
Volume Left	80	0	65						
Volume Right	0	17	88						
cSH	1327	1700	535						
Volume to Capacity	0.06	0.14	0.29						
Queue Length (ft)	5	0	29						
Control Delay (s)	2.0	0.0	14.4						
Lane LOS	Α		В						
Approach Delay (s)	2.0	0.0	14.4						
Approach LOS			В						
Intersection Summary									
Average Delay			3.7						
Intersection Capacity U	tilization		49.0%	IC	CU Leve	el of Service)	А	
Analysis Period (min)			15						

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HCM Unsignalized Intersection Capacity Analysis 2: Walnut Grove Way & Maplelane Road Existing Conditions PM Peak Hour 3/14/2012

	4	*	Ť	۲	1	Ļ
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		4			र्भ
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	23	3	384	26	2	280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	3	417	28	2	304
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			923			
pX, platoon unblocked						
vC, conflicting volume	741	433			447	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	741	433			447	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	99			100	
cM capacity (veh/h)	385	627			1123	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	28	446	307			
Volume Left	25	0	2			
Volume Right	3	28	0			
cSH	403	1700	1123			
Volume to Capacity	0.07	0.26	0.00			
Queue Length (ft)	6	0	0			
Control Delay (s)	14.6	0.0	0.1			
Lane LOS	В		А			
Approach Delay (s)	14.6	0.0	0.1			
Approach LOS	В					
Intersection Summary						
Average Delay			0.6			
Intersection Capacity U	tilization		31.8%	10	CU Leve	el of Servi
Analysis Period (min)			15			

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HCM Unsignalized Intersection Capacity Analysis 3: Thayer Road & Maplelane Road

Existing Conditions PM Peak Hour 3/14/2012

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4		ሻ	eî 👘	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	1	44	0	3	0	399	84	6	300	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	1	49	0	3	0	443	93	7	333	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								378				
pX, platoon unblocked												
vC, conflicting volume	840	883	333	838	837	490	333			537		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	840	883	333	838	837	490	333			537		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	83	100	99	100			99		
cM capacity (veh/h)	284	285	713	284	301	578	1237			1042		
,												
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total	1	52	537	7	333							
Volume Left	0	49	0	7	0							
Volume Right	1	3	93	0	0							
cSH	713	294	1237	1042	1700							
Volume to Capacity	0.00	0.18	0.00	0.01	0.20							
Queue Length (ft)	0	16	0	0	0							
Control Delay (s)	10.1	19.9	0.0	8.5	0.0							
Lane LOS	В	С		A								
Approach Delay (s)	10.1	19.9	0.0	0.2								
Approach LOS	В	С										
Intersection Summary												
Average Delay			1.2									_
Intersection Capacity Ut	tilization		42.1%](CU Leve	el of Ser	vice		А			
Analysis Period (min)			15									

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HCM Signalized Intersection Capacity Analysis 4: Beavercreek Road & Maplelane Road Existing Conditions PM Peak Hour 3/14/2012

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦	↑ Ъ		٦	∱ î⊮		1	el el		ľ	↑	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		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		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	3497		1770	3470		1805	1788		1787	1881	1599
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1787	3497		1770	3470		1805	1788		1787	1881	1599
Volume (vph)	363	831	112	17	472	61	194	77	44	67	59	222
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	374	857	115	18	487	63	200	79	45	69	61	229
RTOR Reduction (vph)	0	11	0	0	11	0	0	22	0	0	0	55
Lane Group Flow (vph)	374	961	0	18	539	0	200	102	0	69	61	174
Confl. Peds. (#/hr)			5	5					1	1		
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	0%	0%	0%	1%	1%	1%
Turn Type	Prot			Prot			Prot			Prot		p <mark>m+ov</mark>
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	24.1	41.5		3.0	20.4		13.4	22.7		6.8	16.1	40.2
Effective Green, g (s)	24.1	41.5		3.0	20.4		13.4	22.7		6.8	16.1	40.2
Actuated g/C Ratio	0.27	0.46		0.03	0.23		0.15	0.25		0.08	0.18	0.45
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	479	1613		59	787		269	451		135	336	785
v/s Ratio Prot	c0.21	0.28		0.01	c0.16		c0.11	0.07		0.04	0.03	c0.08
v/s Ratio Perm												0.07
v/c Ratio	0.78	0.60		0.31	0.69		0.74	0.23		0.51	0.18	0.22
Uniform Delay, d1	30.5	18.0		42.5	31.9		36.7	26.7		40.0	31.4	15.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.1	0.6		2.9	2.5		10.6	1.2		3.2	1.2	0.1
Delay (s)	38.6	18.6		45.4	34.3		47.2	27.8		43.2	32.5	15.4
Level of Service	D	В		D	С		D	С		D	С	В
Approach Delay (s)		24.2			34.7			39.8			23.7	
Approach LOS		С			С			D			С	
Intersection Summary												
HCM Average Control D			28.4	F	ICM Le	vel of Se	ervice		С			
HCM Volume to Capacit			0.65									
Actuated Cycle Length (90.0	S	Sum of I	ost time	(s)		16.0			
Intersection Capacity Ut	tilization		65.5%	I	CU Leve	el of Sei	rvice		С			
Analysis Period (min)			15									
c Critical Lane Group												

c Critical Lane Group

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HCM Unsignalized Intersection Capacity Analysis 1: Maplelane Road & Holly Lane Background Conditions AM Peak Hour 3/14/2012

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		र्च	4Î		Υ		
Sign Control		Free	Free		Stop		
Grade		0%	0%		0%		
Volume (veh/h)	101	105	318	48	6	87	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	
Hourly flow rate (vph)	116	121	366	55	7	100	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	421				746	393	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	421				746	393	
tC, single (s)	4.2				6.5	6.3	
tC, 2 stage (s)							
tF (s)	2.3				3.6	3.4	
p0 queue free %	89				98	84	
cM capacity (veh/h)	1102				332	641	
Direction, Lane #	EB 1	WB 1	SB 1				
Volume Total	237	421	107				
Volume Left	116	0	7				
Volume Right	0	55	100				
cSH	1102	1700	604				
Volume to Capacity	0.11	0.25	0.18				
Queue Length (ft)	9	0	16				
Control Delay (s)	4.7	0.0	12.2				
Lane LOS	А		В				
Approach Delay (s)	4.7	0.0	12.2				
Approach LOS			В				
Intersection Summary							
Average Delay			3.2				
Intersection Capacity Ut	ilization		46.5%	10	CU Leve	el of Servic	е
Analysis Period (min)			15				
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HCM Unsignalized Intersection Capacity Analysis 2: Walnut Grove Way & Maplelane Road Background Conditions AM Peak Hour 3/14/2012

	4	*	1	1	1	ţ	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	Y		4Î			र्स	
Sign Control	Stop		Free			Free	
Grade	0%		0%			0%	
Volume (veh/h)	85	11	183	28	4	410	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	
Hourly flow rate (vph)	98	13	210	32	5	471	
Pedestrians	5						
Lane Width (ft)	12.0						
Walking Speed (ft/s)	4.0						
Percent Blockage	0						
Right turn flare (veh)							
Median type	None						
Median storage veh)							
Upstream signal (ft)			923				
pX, platoon unblocked							
vC, conflicting volume	712	231			248		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	712	231			248		
tC, single (s)	6.4	6.2			4.1		
tC, 2 stage (s)							
tF (s)	3.5	3.3			2.2		
p0 queue free %	75	98			100		
cM capacity (veh/h)	394	802			1319		
Direction, Lane #	WB 1	NB 1	SB 1				
Volume Total	110	243	476				
Volume Left	98	0	5				
Volume Right	13	32	0				
cSH	419	1700	1319				
Volume to Capacity	0.26	0.14	0.00				
Queue Length (ft)	26	0	0				
Control Delay (s)	16.6	0.0	0.1				
Lane LOS	С		А				
Approach Delay (s)	16.6	0.0	0.1				
Approach LOS	С						
Intersection Summary							
Average Delay			2.3				
Intersection Capacity Ut	tilization		36.8%	IC	CU Leve	l of Servic	се
Analysis Period (min)			15				

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HCM Unsignalized Intersection Capacity Analysis 3: Thayer Road & Maplelane Road

Background Conditions AM Peak Hour 3/14/2012

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4		ሻ	4Î	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	0	0	103	0	14	0	202	41	4	493	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	1	0	0	117	0	16	0	230	47	5	560	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								378				
pX, platoon unblocked												
vC, conflicting volume	838	845	560	822	822	253	560			276		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	838	845	560	822	822	253	560			276		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	100	100	100	60	100	98	100			100		
cM capacity (veh/h)	281	301	532	293	309	788	972			1281		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total	1	133	276	5	560							
Volume Left	1	117	0	5	0							
Volume Right	0	16	47	0	0							
cSH	281	317	972	1281	1700							
Volume to Capacity	0.00	0.42	0.00	0.00	0.33							
Queue Length (ft)	0	50	0	0	0							
Control Delay (s)	17.8	24.3	0.0	7.8	0.0							
Lane LOS	С	С		А								
Approach Delay (s)	17.8	24.3	0.0	0.1								
Approach LOS	С	С										
Intersection Summary												
Average Delay			3.4									
Intersection Capacity Ut	tilization		38.7%	l	CU Leve	el of Ser	vice		А			
Analysis Period (min)			15									

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HCM Signalized Intersection Capacity Analysis 4: Beavercreek Road & Maplelane Road Background Conditions AM Peak Hour 3/14/2012

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦	∱ ⊅		ሻ	∱ ⊅		ሻ	eî 👘		ሻ	↑	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1719	3399		1719	3381		1719	1692		1752	1845	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1719	3399		1719	3381		1719	1692		1752	1845	1568
Volume (vph)	105	623	51	5	831	104	100	21	16	236	45	320
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	125	742	61	6	989	124	119	25	19	281	54	381
RTOR Reduction (vph)	0	5	0	0	10	0	0	17	0	0	0	76
Lane Group Flow (vph)	125	798	0	6	1103	0	119	27	0	281	54	305
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	3%	3%	3%
Turn Type	Prot			Prot			Prot			Prot		om+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	12.8	47.8		1.4	36.4		9.0	8.1		16.7	15.8	28.6
Effective Green, g (s)	12.8	47.8		1.4	36.4		9.0	8.1		16.7	15.8	28.6
Actuated g/C Ratio	0.14	0.53		0.02	0.40		0.10	0.09		0.19	0.18	0.32
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	244	1805		27	1367		172	152		325	324	568
v/s Ratio Prot	0.07	0.24		0.00	c0.33		0.07	0.03		c0.16	0.03	c0.10
v/s Ratio Perm												0.15
v/c Ratio	0.51	0.44		0.22	0.81		0.69	0.18		0.86	0.17	0.54
Uniform Delay, d1	35.7	12.9		43.8	23.7		39.2	37.9		35.6	31.5	25.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.8	0.2		4.1	3.6		11.4	2.5		20.5	1.1	1.0
Delay (s)	37.5	13.1		47.9	27.3		50.5	40.4		56.1	32.6	26.2
Level of Service	D	В		D	С		D	D		E	С	С
Approach Delay (s)		16.4			27.4			47.8			38.4	
Approach LOS		В			С			D			D	
Intersection Summary												
HCM Average Control D			27.7	F	ICM Lev	vel of Se	ervice		С			
HCM Volume to Capacit	y ratio		0.76									
Actuated Cycle Length (s)		90.0	S	Sum of le	ost time	(s)		8.0			
Intersection Capacity Ut			61.8%			el of Ser			В			
Analysis Period (min)			15									
c Critical Lane Group												

c Critical Lane Group

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HCM Unsignalized Intersection Capacity Analysis 1: Maplelane Road & Holly Lane Background Conditions PM Peak Hour 3/14/2012

	۶	-	+	•	1	∢	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		र्भ	¢Î		Y		
Sign Control		Free	Free		Stop		
Grade		0%	0%		0%		
Volume (veh/h)	77	308	215	16	60	87	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	
Hourly flow rate (vph)	87	346	242	18	67	98	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	260				770	251	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	260				770	251	
tC, single (s)	4.1				6.4	6.2	
tC, 2 stage (s)							
tF (s)	2.2				3.5	3.3	
p0 queue free %	93				81	88	
cM capacity (veh/h)	1311				346	791	
Direction, Lane #	EB 1	WB 1	SB 1				
Volume Total	433	260	165				
Volume Left	87	0	67				
Volume Right	0	18	98				
cSH	1311	1700	519				
Volume to Capacity	0.07	0.15	0.32				
Queue Length (ft)	5	0	34				
Control Delay (s)	2.1	0.0	15.2				
Lane LOS	A	0.0	C				
Approach Delay (s)	2.1	0.0	15.2				
Approach LOS			С				
Intersection Summary							
			4.0				
Average Delay Intersection Capacity Ut	ilization		4.0	1		el of Servic	<u> </u>
	inzation		51.4% 15	1	CO Leve		,e
Analysis Period (min)			10				

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HCM Unsignalized Intersection Capacity Analysis 2: Walnut Grove Way & Maplelane Road Background Conditions PM Peak Hour 3/14/2012

	4	*	1	1	1	Ļ	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	Y		4			र्भ	
Sign Control	Stop		Free			Free	
Grade	0%		0%			0%	
Volume (veh/h)	41	8	400	52	12	291	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	45	9	435	57	13	316	
Pedestrians	1						
Lane Width (ft)	12.0						
Walking Speed (ft/s)	4.0						
Percent Blockage	0						
Right turn flare (veh)							
Median type	None						
Median storage veh)							
Upstream signal (ft)			923				
pX, platoon unblocked							
vC, conflicting volume	806	464			492		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	806	464			492		
tC, single (s)	6.4	6.2			4.1		
tC, 2 stage (s)							
tF (s)	3.5	3.3			2.2		
p0 queue free %	87	99			99		
cM capacity (veh/h)	349	602			1081		
Direction, Lane #	WB 1	NB 1	SB 1				
Volume Total	53	491	329				
Volume Left	45	0	13				
Volume Right	9	57	0				
cSH	375	1700	1081				
Volume to Capacity	0.14	0.29	0.01				
Queue Length (ft)	12	0	1				
Control Delay (s)	16.2	0.0	0.5				
Lane LOS	С		A				
Approach Delay (s)	16.2	0.0	0.5				
Approach LOS	С						
Intersection Summary							
Average Delay			1.2				
Intersection Capacity U	tilization		35.0%	IC	CU Leve	el of Servi	Ce
Analysis Period (min)			15				

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HCM Unsignalized Intersection Capacity Analysis 3: Thayer Road & Maplelane Road

Background Conditions PM Peak Hour 3/14/2012

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4		ሻ	4Î	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	1	63	0	5	0	439	118	8	328	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	1	70	0	6	0	488	131	9	364	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								378				
pX, platoon unblocked												
vC, conflicting volume	941	1001	364	937	936	553	364			619		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	941	1001	364	937	936	553	364			619		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	71	100	99	100			99		
cM capacity (veh/h)	241	242	685	243	263	532	1205			971		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total	1	76	619	9	364							
Volume Left	0	70	019	9	0							
Volume Right	1	6	131	0	0							
cSH	685	253	1205	971	1700							
Volume to Capacity	0.00	0.30	0.00	0.01	0.21							
Queue Length (ft)	0.00	30	0.00	0.01	0.21							
Control Delay (s)	10.3	25.2	0.0	8.7	0.0							
Lane LOS	10.3 B	20.2 D	0.0	0.7 A	0.0							
	10.3	25.2	0.0									
Approach Delay (s) Approach LOS	10.3 B	25.2 D	0.0	0.2								
· ·	Б	U										
Intersection Summary												
Average Delay			1.9									
Intersection Capacity Ut	tilization		47.4%	10	CU Leve	el of Ser	vice		А			
Analysis Period (min)			15									

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HCM Signalized Intersection Capacity Analysis 4: Beavercreek Road & Maplelane Road Background Conditions PM Peak Hour 3/14/2012

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	∱ ⊅		۲	↑ ⊅		۲	eî 👘		۲	•	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		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		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	3496		1770	3456		1805	1792		1787	1881	1599
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1787	3496		1770	3456		1805	1792		1787	1881	1599
Volume (vph)	412	865	117	18	491	79	202	85	46	79	66	251
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	425	892	121	19	506	81	208	88	47	81	68	259
RTOR Reduction (vph)	0	11	0	0	14	0	0	22	0	0	0	51
Lane Group Flow (vph)	425	1002	0	19	573	0	208	113	0	81	68	208
Confl. Peds. (#/hr)			5	5					1	1		
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	0%	0%	0%	1%	1%	1%
Turn Type	Prot			Prot			Prot			Prot		om+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	26.6	44.0		3.1	20.5		13.6	19.8		7.1	13.3	39.9
Effective Green, g (s)	26.6	44.0		3.1	20.5		13.6	19.8		7.1	13.3	39.9
Actuated g/C Ratio	0.30	0.49		0.03	0.23		0.15	0.22		0.08	0.15	0.44
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	528	1709		61	787		273	394		141	278	780
v/s Ratio Prot	c0.24	0.29		0.01	c0.17		c0.12	c0.08		0.05	0.04	0.10
v/s Ratio Perm												0.06
v/c Ratio	0.80	0.59		0.31	0.73		0.76	0.29		0.57	0.24	0.27
Uniform Delay, d1	29.3	16.5		42.4	32.2		36.6	29.2		40.0	33.9	15.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.7	0.5		2.9	3.4		11.9	1.8		5.6	2.1	0.2
Delay (s)	38.0	17.0		45.3	35.6		48.5	31.1		45.6	36.0	16.0
Level of Service	D	В		D	D		D	С		D	D	В
Approach Delay (s)		23.2			35.9			41.6			25.2	
Approach LOS		С			D			D			С	
Intersection Summary												
HCM Average Control D			28.5	F	ICM Lev	vel of Se	ervice		С			
HCM Volume to Capacit			0.67									
Actuated Cycle Length (90.0			ost time	· · /		12.0			
Intersection Capacity Ut	ilization		70.0%	10	CU Leve	el of Sei	vice		С			
Analysis Period (min)			15									
 Critical Lana Group 												

c Critical Lane Group

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HCM Unsignalized Intersection Capacity Analysis 1: Maplelane Road & Holly Lane Site + BG Conditions AM Peak Hour 3/14/2012

	٦	-	-	•	1	∢	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		र्च	eî 👘		Y		
Sign Control		Free	Free		Stop		
Grade		0%	0%		0%		
Volume (veh/h)	102	108	319	48	6	88	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	
Hourly flow rate (vph)	117	124	367	55	7	101	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	422				753	394	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	422				753	394	
tC, single (s)	4.2				6.5	6.3	
tC, 2 stage (s)							
tF (s)	2.3				3.6	3.4	
p0 queue free %	89				98	84	
cM capacity (veh/h)	1101				328	640	
Direction, Lane #	EB 1	WB 1	SB 1				
Volume Total	241	422	108				
Volume Left	117	0	7				
Volume Right	0	55	101				
cSH	1101	1700	603				
Volume to Capacity	0.11	0.25	0.18				
Queue Length (ft)	9	0	16				
Control Delay (s)	4.7	0.0	12.3				
Lane LOS	А		В				
Approach Delay (s)	4.7	0.0	12.3				
Approach LOS			В				
Intersection Summary							
Average Delay			3.2				
Intersection Capacity Ut	tilization		46.8%	10	CU Leve	el of Service	
Analysis Period (min)			15				

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HCM Unsignalized Intersection Capacity Analysis 2: Walnut Grove Way & Maplelane Road Site + BG Conditions AM Peak Hour 3/14/2012

	4	*	Ť	1	1	ţ	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	Y		4Î			र्भ	
Sign Control	Stop		Free			Free	
Grade	0%		0%			0%	
Volume (veh/h)	98	15	183	32	6	410	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	
Hourly flow rate (vph)	113	17	210	37	7	471	
Pedestrians	5						
Lane Width (ft)	12.0						
Walking Speed (ft/s)	4.0						
Percent Blockage	0						
Right turn flare (veh)							
Median type	None						
Median storage veh)							
Upstream signal (ft)			923				
pX, platoon unblocked							
vC, conflicting volume	719	234			252		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	719	234			252		
tC, single (s)	6.4	6.2			4.1		
tC, 2 stage (s)							
tF (s)	3.5	3.3			2.2		
p0 queue free %	71	98			99		
cM capacity (veh/h)	390	800			1314		
Direction, Lane #	WB 1	NB 1	SB 1				
Volume Total	130	247	478				
Volume Left	113	247	478				
Volume Right	17	37	0				
cSH	419	1700	1314				
Volume to Capacity	0.31	0.15	0.01				
Queue Length (ft)	33	0.15	0.01				
Control Delay (s)	17.4	0.0	0.2				
Lane LOS	C	0.0	0.2 A				
Approach Delay (s)	17.4	0.0	0.2				
Approach LOS	C	0.0	0.2				
	U						
Intersection Summary							
Average Delay			2.7				
Intersection Capacity Ut	tilization		39.4%	IC	CU Leve	el of Servio	ce
Analysis Period (min)			15				

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HCM Unsignalized Intersection Capacity Analysis 3: Thayer Road & Maplelane Road

Site + BG Conditions AM Peak Hour 3/14/2012

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4		ሻ	4Î	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	0	0	103	0	15	0	205	41	5	505	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	1	0	0	117	0	17	0	233	47	6	574	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								378				
pX, platoon unblocked												
vC, conflicting volume	859	865	574	841	841	256	574			280		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	859	865	574	841	841	256	574			280		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	100	100	100	59	100	98	100			100		
cM capacity (veh/h)	272	293	522	284	301	785	961			1277		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total	1	134	280	6	574							
Volume Left	1	117	0	6	0							
Volume Right	0	17	47	0	0							
cSH	272	309	961	1277	1700							
Volume to Capacity	0.00	0.43	0.00	0.00	0.34							
Queue Length (ft)	0	52	0	0	0							
Control Delay (s)	18.3	25.2	0.0	7.8	0.0							
Lane LOS	С	D		А								
Approach Delay (s)	18.3	25.2	0.0	0.1								
Approach LOS	С	D										
Intersection Summary												
Average Delay			3.5									_
Intersection Capacity Ut	tilization		39.4%	10	CU Leve	el of Ser	vice		А			
Analysis Period (min)			15									

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HCM Signalized Intersection Capacity Analysis 4: Beavercreek Road & Maplelane Road Site + BG Conditions AM Peak Hour 3/14/2012

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦	∱ }		ሻ	∱ ⊅		ሻ	eî 👘		ሻ	↑	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1719	3399		1719	3380		1719	1692		1752	1845	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1719	3399		1719	3380		1719	1692		1752	1845	1568
Volume (vph)	107	623	51	5	831	105	100	21	16	240	46	327
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	127	742	61	6	989	125	119	25	19	286	55	389
RTOR Reduction (vph)	0	5	0	0	10	0	0	17	0	0	0	76
Lane Group Flow (vph)	127	798	0	6	1104	0	119	27	0	286	55	313
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	3%	3%	3%
Turn Type	Prot			Prot			Prot			Prot		pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	12.9	47.9		1.4	36.4		9.0	7.8		16.9	15.7	28.6
Effective Green, g (s)	12.9	47.9		1.4	36.4		9.0	7.8		16.9	15.7	28.6
Actuated g/C Ratio	0.14	0.53		0.02	0.40		0.10	0.09		0.19	0.17	0.32
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	246	1809		27	1367		172	147		329	322	568
v/s Ratio Prot	0.07	0.24		0.00	c0.33		0.07	0.03		c0.16	0.03	c0.10
v/s Ratio Perm												0.15
v/c Ratio	0.52	0.44		0.22	0.81		0.69	0.18		0.87	0.17	0.55
Uniform Delay, d1	35.7	12.9		43.8	23.7		39.2	38.1		35.5	31.6	25.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.8	0.2		4.1	3.6		11.4	2.7		20.8	1.1	1.2
Delay (s)	37.5	13.0		47.9	27.3		50.5	40.8		56.3	32.8	26.5
Level of Service	D	В		D	С		D	D		E	С	С
Approach Delay (s)		16.4			27.4			47.9			38.7	
Approach LOS		В			С			D			D	
Intersection Summary												
HCM Average Control D	elay		27.9	H	ICM Lev	vel of Se	ervice		С			
HCM Volume to Capacit			0.77									
Actuated Cycle Length (90.0	S	Sum of l	ost time	(s)		8.0			
Intersection Capacity Ut			62.2%			el of Sei			В			
Analysis Period (min)			15									
c Critical Lane Group												

c Critical Lane Group

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HCM Unsignalized Intersection Capacity Analysis 1: Maplelane Road & Holly Lane Site + BG Conditions PM Peak Hour 3/14/2012

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		र्च	ef 👘		Y		
Sign Control		Free	Free		Stop		
Grade		0%	0%		0%		
Volume (veh/h)	78	310	218	16	60	89	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	
Hourly flow rate (vph)	88	348	245	18	67	100	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	263				778	254	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	263				778	254	
tC, single (s)	4.1				6.4	6.2	
tC, 2 stage (s)							
tF (s)	2.2				3.5	3.3	
p0 queue free %	93				80	87	
cM capacity (veh/h)	1307				342	787	
Direction, Lane #	EB 1	WB 1	SB 1				
Volume Total	436	263	167				
Volume Left	88	0	67				
Volume Right	0	18	100				
cSH	1307	1700	516				
Volume to Capacity	0.07	0.15	0.32				
Queue Length (ft)	5	0	35				
Control Delay (s)	2.1	0.0	15.3				
Lane LOS	A		С				
Approach Delay (s)	2.1	0.0	15.3				
Approach LOS			С				
Intersection Summary							
Average Delay			4.0				
Intersection Capacity Ut	ilization		51.9%	10	CU Leve	el of Service	Э
Analysis Period (min)			15				

Lancaster Engineering

HCM Unsignalized Intersection Capacity Analysis 2: Walnut Grove Way & Maplelane Road Site + BG Conditions PM Peak Hour 3/14/2012

	1	*	1	1	1	Ļ	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	Y		4			र्भ	-
Sign Control	Stop		Free			Free	
Grade	0%		0%			0%	
Volume (veh/h)	49	11	400	66	17	291	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	53	12	435	72	18	316	
Pedestrians	1						
Lane Width (ft)	12.0						
Walking Speed (ft/s)	4.0						
Percent Blockage	0						
Right turn flare (veh)							
Median type	None						
Median storage veh)							
Upstream signal (ft)			923				
pX, platoon unblocked							
vC, conflicting volume	825	472			508		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	825	472			508		
tC, single (s)	6.4	6.2			4.1		
tC, 2 stage (s)							
tF (s)	3.5	3.3			2.2		
p0 queue free %	84	98			98		
cM capacity (veh/h)	339	596			1067		
Direction, Lane #	WB 1	NB 1	SB 1				
Volume Total	65	507	335				
Volume Left	53	0	18				
Volume Right	12	72	0				
cSH	368	1700	1067				
Volume to Capacity	0.18	0.30	0.02				
Queue Length (ft)	16	0.00	1				
Control Delay (s)	16.9	0.0	0.6				
Lane LOS	C	0.0	0.0 A				
Approach Delay (s)	16.9	0.0	0.6				
Approach LOS	C	0.0	0.0				
Intersection Summary							
Average Delay			1.4				
Intersection Capacity Ut	tilization		39.3%	IC	CU Leve	l of Servic	ce
Analysis Period (min)			15				

Lancaster Engineering

HCM Unsignalized Intersection Capacity Analysis 3: Thayer Road & Maplelane Road

Site + BG Conditions PM Peak Hour 3/14/2012

		•	•)	1	1	-	•	*
EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	4			4			4		٦	eî 👘	
	Stop			Stop			Free			Free	
	0%			0%			0%			0%	
0	0	1	63	0	6	0	452	118	9	335	0
0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
0	0	1	70	0	7	0	502	131	10	372	0
	None			None							
							378				
967	1026	372	961	960	568	372			633		
967	1026	372	961	960	568	372			633		
7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
100	100	100	70	100	99	100			99		
231	234	678	234	254	522	1197			959		
B 1	WB 1	NB 1	SB 1	SB 2							
1	77	633	10	372							
0	70	0	10	0							
1	7	131	0	0							
678	245	1197	959	1700							
0.00	0.31	0.00	0.01	0.22							
0	32	0	1	0							
0.3	26.2	0.0	8.8	0.0							
В	D		А								
0.3	26.2	0.0	0.2								
В	D										
		1.9									
ation		48.2%	10	CU Leve	el of Ser	vice		А			
		15									
	0 .90 0 967 7.1 3.5 100 231 B 1 1 0 1 578 .00 0 0 .3 B .00 0 .3 B	Stop 0% 0 1 0 1 0 1 7 678 245 0.00 0 <t< td=""><td>Stop 0 0 0 0 0 0.90 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 967 1026 372 967 1026 372 967 1026 372 967 1026 372 967 1026 372 967 1026 372 967 1026 372 372 967 1026 372 35 4.0 3.5 4.0 3.5 4.0 3.5 4.0 3.5 4.0 3.5 4.0 3.5 4.0 1</td><td>Stop 0% 0 0 0,90 0.90 0.90 0 0 1 63 0.90 0.90 0.90 0.90 0 0 1 70 967 1026 372 961 7.1 6.5 6.2 7.1 3.5 4.0 3.3 3.5 100 100 70 234 231 234 678 234 B 1 WB 1 NB 1 SB 1 1 77 633 10 0 70 0 10 1 77 633 10 0 70 0 11 0 70 0 10 1 77 633 10 0 32 0 1 0.3 26.2 0.0 8.8 B D A 0.3</td><td>Image: stop Image: stop 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 70 0 967 1026 372 961 960 7.1 6.5 6.2 7.1 6.5 6.2 3.5 4.0 100 100 100 100 231 234 678 234 254 1197 959 1700 0.00 0.31 0.3 26.2 0.0 32 0</td><td>$\begin{tabular}{ c c c c } \hline \begin{tabular}{ c c } \hline \hline \begin{tabular}{ c c c } \hline \belex \\ \hline \begin{tabular}{ c c } \hline \hline \begin{tabular}{$</td><td>h h Stop 0% 0% 0 0 1 63 0 6 0 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0 0 1 70 0 7 0 90 0 1 70 0 7 0 967 1026 372 961 960 568 372 967 1026 372 961 960 568 372 967 1026 372 961 960 568 372 967 1026 372 961 960 568 372 967 1026 372 7.1 6.5 6.2 4.1 3.5 4.0 3.3 3.5 4.0 3.3 2.2 100 100 70 100 99 100 231 234 678 234 <</td><td>$\begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c } \hline \hline \belex \\ \hline \begin{tabular}{ c c } \hline \hline \belex \\ c c c \hline \hline$</td><td>$\begin{array}{c c c c c c c c c c c c c c c c c c c$</td><td>4 4 4 7 Stop Stop Free 0%</td><td>4 4 7 7 7 Stop 0% 0% 0% 0% 0% 0 0 1 63 0 6 0 452 118 9 335 0.90 1.91 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1</td></t<>	Stop 0 0 0 0 0 0.90 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 967 1026 372 967 1026 372 967 1026 372 967 1026 372 967 1026 372 967 1026 372 967 1026 372 372 967 1026 372 35 4.0 3.5 4.0 3.5 4.0 3.5 4.0 3.5 4.0 3.5 4.0 3.5 4.0 1	Stop 0% 0 0 0,90 0.90 0.90 0 0 1 63 0.90 0.90 0.90 0.90 0 0 1 70 967 1026 372 961 7.1 6.5 6.2 7.1 3.5 4.0 3.3 3.5 100 100 70 234 231 234 678 234 B 1 WB 1 NB 1 SB 1 1 77 633 10 0 70 0 10 1 77 633 10 0 70 0 11 0 70 0 10 1 77 633 10 0 32 0 1 0.3 26.2 0.0 8.8 B D A 0.3	Image: stop Image: stop 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 70 0 967 1026 372 961 960 7.1 6.5 6.2 7.1 6.5 6.2 3.5 4.0 100 100 100 100 231 234 678 234 254 1197 959 1700 0.00 0.31 0.3 26.2 0.0 32 0	$\begin{tabular}{ c c c c } \hline \begin{tabular}{ c c } \hline \hline \begin{tabular}{ c c c } \hline \belex \\ \hline \begin{tabular}{ c c } \hline \hline \begin{tabular}{ $	h h Stop 0% 0% 0 0 1 63 0 6 0 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0 0 1 70 0 7 0 90 0 1 70 0 7 0 967 1026 372 961 960 568 372 967 1026 372 961 960 568 372 967 1026 372 961 960 568 372 967 1026 372 961 960 568 372 967 1026 372 7.1 6.5 6.2 4.1 3.5 4.0 3.3 3.5 4.0 3.3 2.2 100 100 70 100 99 100 231 234 678 234 <	$\begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c } \hline \hline \belex \\ \hline \begin{tabular}{ c c } \hline \hline \belex \\ c c c \hline \hline $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	4 4 4 7 Stop Stop Free 0%	4 4 7 7 7 Stop 0% 0% 0% 0% 0% 0 0 1 63 0 6 0 452 118 9 335 0.90 1.91 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1

Lancaster Engineering

HCM Signalized Intersection Capacity Analysis 4: Beavercreek Road & Maplelane Road Site + BG Conditions PM Peak Hour 3/14/2012

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ľ	∱1 ≱		۲	∱1 ≱		۲	eî 👘		۲	•	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		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		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	3496		1770	3451		1805	1793		1787	1881	1599
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1787	3496		1770	3451		1805	1793		1787	1881	1599
Volume (vph)	420	865	117	18	491	83	202	86	46	81	67	255
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	433	892	121	19	506	86	208	89	47	84	69	263
RTOR Reduction (vph)	0	11	0	0	15	0	0	22	0	0	0	51
Lane Group Flow (vph)	433	1002	0	19	577	0	208	114	0	84	69	212
Confl. Peds. (#/hr)			5	5					1	1		
Confl. Bikes (#/hr)	1.0.1		1.0.1			1						1.0.1
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	0%	0%	0%	1%	1%	1%
Turn Type	Prot			Prot			Prot			Prot		om+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	27.0	44.5		3.1	20.6		13.4	19.3		7.1	13.0	40.0
Effective Green, g (s)	27.0	44.5		3.1	20.6		13.4	19.3		7.1	13.0	40.0
Actuated g/C Ratio	0.30	0.49		0.03	0.23		0.15	0.21		0.08	0.14	0.44
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	536	1729		61	790		269	384		141	272	782
v/s Ratio Prot	c0.24	0.29		0.01	c0.17		c0.12	c0.08		0.05	0.04	0.10
v/s Ratio Perm												0.06
v/c Ratio	0.81	0.58		0.31	0.73		0.77	0.30		0.60	0.25	0.27
Uniform Delay, d1	29.1	16.1		42.4	32.1		36.8	29.7		40.1	34.2	15.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.7	0.5		2.9	3.5		12.9	2.0		6.6	2.2	0.2
Delay (s)	37.8	16.6		45.3	35.6		49.8	31.6		46.7	36.4	16.0
Level of Service	D	B		D	D		D	C		D	D	В
Approach Delay (s)		23.0			35.9			42.6			25.6	
Approach LOS		С			D			D			С	
Intersection Summary												
HCM Average Control E			28.6	F	ICM Lev	vel of Se	ervice		С			
HCM Volume to Capaci	•		0.68				()		10.0			
Actuated Cycle Length			90.0		Sum of le		· · /		12.0			
Intersection Capacity Ut	lization		70.6%	10	CU Leve	el of Sei	vice		С			
Analysis Period (min)			15									

c Critical Lane Group

Lancaster Engineering



PRE-APPLICATION CONFERENCE SUMMARY SHEET

 $\label{eq:crabbinstress} \begin{array}{l} \mbox{Crabbinson Application} \\ \mbox{City of Oregon City} \end{array}$

MARCH 2012



Community Development – Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045 Ph (503) 722-3789 | Fax (503) 722-3880

Pre-application conferences are required by Section 17.50.030 of the City Code, as follows:

- (A) PURPOSE: The pre-application conference is to provide the applicant the necessary information to make an informed decision regarding their land use proposal.
- (B) A pre-application conference is required for all land use permits.
- (C) Time Limit: A pre-application conference is valid for a period of six (6) months.
- (D) An omission or failure by the Planning Division to provide an applicant with relevant information during a preapplication discussion shall not constitute a waiver of any standard, criterion, or requirement of the City of Oregon City. Information given in the conference is subject available information and may be without notice. *NOTE: The subsequent application may be submitted to any member of the Planning Staff.*

PRE-APP # $11 - 17$ / DATE: $12/6/2011$
APPLICANT: JOHN JONES /AKS
SITE ADDRESS:
PROPERTY DESCRIPTION: 3-2E-4D TL 700/602
STAFF: WALTER/CULUSON/KONKOL ZONING: 12-3-5
PROPOSED USE/ACTIVITY:
INFORMATION NECESSARY TO BEGIN DEVELOPMENT: This listing of information does not preclude the Community
Development Department or hearings body from requesting additional data necessary to make a recommendation and/or decision regarding the proposed activity.
proposed activity.
1. PLANNING Zoning/ Setbacks <u>R-3.5</u> Dwelling District Is the Site in a Water Resource Overlay District? (Yes or No) <u>NO</u> Is the Site in a Historic Overlay District? (Yes or No) <u>NO</u>
List of Minimum Required Planning Processes:
1. Variance Process – Type III – Planning Commission Review
OCMC 17.50 – Administrative Processes WRITTEN RESPONCES TO
• OCMC 17.60 - Variance ALL VARIANCE CRITERIA
ARE REQUIRED.
2. Subdivision
OCMC 17.50 – Administrative Processes

- □ OCMC 16.04 General Provisions Land Divisions
- □ OCMC 16.08 Subdivision Process and Standards
- □ OCMC 16.12 Minimum Improvements and Design Standards for Land Divisions
- □ OCMC 17.41 *Tree Protection*

3. Public Streets

- OCMC 12.04 *Street Design Standards*
- □ OCMC 12.08 Public and Street Trees

Other:		See Attached Notes			
	NEIGHBORHO	OD ASSOCIAT	ION MEETING	REQUIRED	
	TRAFFIC	IMPACT	ANALYSIS	REQUIRED	

*****Note: Existing addresses are subject to change with the creation of new parcels*****



Community Development – Planning

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Á.	2. ENGINEERING Assumption is that Crabturee #2 will be Only at upper end and will Grading: for OCULE 15.48 Not involve Maplehane Drainage: Par OCULE 13.12
B.	
C.	Sanitary Sewer: Grandwith to Crabtings #1
D.	Water: Courset to Chapteree #1
E.	Right-of-Way Dedication/Easements: 53' Local Row 10' FUE
F.	Street Improvements (including continuation of existing streets within subdivisions):
	see atch For engineered full
G.	Special Analysis (traffic study, geotechnical study)EIS): (+ more There 20 lots
H.	Development Impact Statement required with Subdivision applications.
I.	TSP compliance (Connectivity, Street Widths, etc.):

Other:

System Development Charges (SDC's): Sanitary Sewer	Determined by year of submittal
Water	
Water Meter Set	
Storm Drainage	
Transportation	
Parks	
Bike/ Pedestrian	

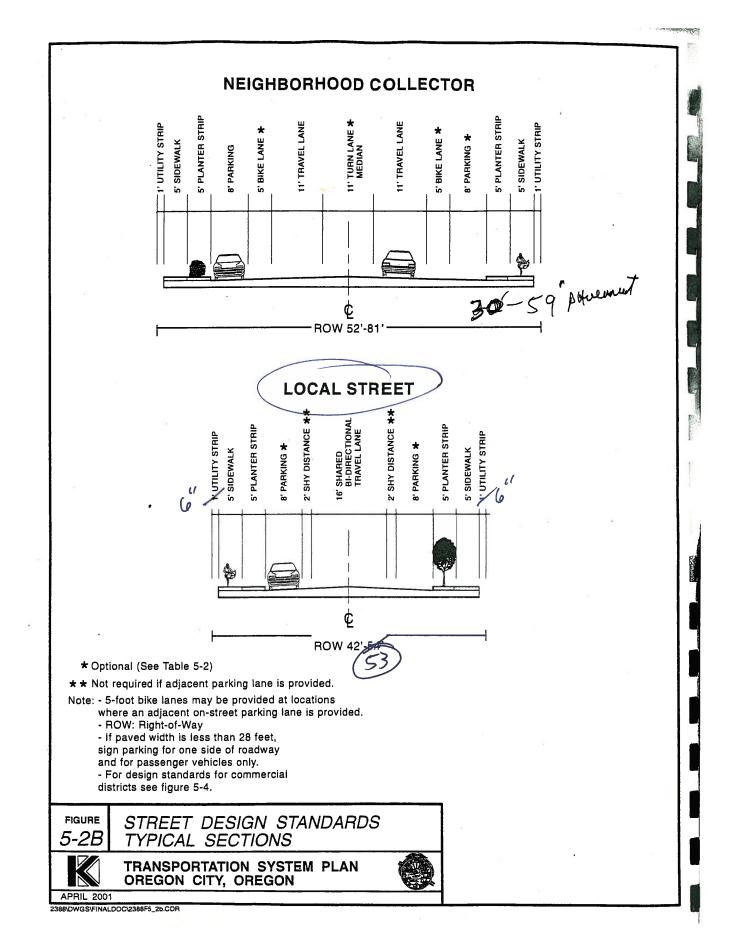
3. BUILDING

A.	Proposed Construction Type:		
B.	Number of Stories:		
C.	Square Footage:		
D.	Number of Buildings:		
E.	Type of Occupancy:		
F.	Fire Sprinklers:		
G.	Valuation (estimate): \$		
H.	Fire/Life Safety Required:	Yes	No

4. FIRE

Contact: Mike Boumann, Lt. Deputy Fire Marshall Clackamas Fire District #1 2930 S.E. Oak Grove Boulevard Milwaukie, Oregon 97267 (503) 742-2660

OTHER COMMENTS:





Community Development – Planning

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NOTICE TO APPLICANT: A property owner may apply for any permit they wish for their property. HOWEVER, THERE ARE NO GUARANTEES THAT ANY APPLICATION WILL BE APPROVED. No decisions are made until all reports and testimony have been submitted. This form will be kept by the Community Development Department . A copy will be given to the applicant. IF the applicant does not submit an application within six (6) months from the Preapplication Conference meeting date, a NEW Pre-Application Conference will be required.



NEIGHBORHOOD MEETING DOCUMENTATION

 $\label{eq:crabbinstress} \begin{array}{l} \mbox{Crabbinson Application} \\ \mbox{City of Oregon City} \end{array}$

MARCH 2012



From: Chris Goodell, AKS Engineering & Forestry LLC **To:** City of Oregon City Planning Staff

Neighborhood Meeting Summary: Crabtree Terrace No. 2 – Oregon City, Oregon

Date: February 28, 2012Time: 7:00 PMLocation: Oregon City Police Department-320 Warner Milne Road Oregon City, Oregon 97045

The following serves as a summary of the primary subjects covered at the Neighborhood Meeting.

Attendance: See attached attendance sheet

- General discussion of proposed project:
 - 30 Lot Subdivision Second Phase
 - R-3.5 Zoning 3,500 square foot minimum
 - Proposed average lot size is 4,333 square feet ±
 - o Surrounding lot sizes smaller
 - o Detached homes
 - Land use application to be submitted to the City of Oregon City
 - o Process
- The project discussion was followed by a question and answer session and included the following topics of conversation:
 - Street connection to Maplelane Road Planned for future phase.
 - Traffic Study Currently underway It will discuss local street impacts.
 - Project is very near minimum density.
 - Mailbox locations.



Caufield Neighborhood Association

320 Warner Milne Road | PO Box 3040 | Oregon City OR 97045 Ph (503) 496-1681 | Fax (503) 655-0530 | ctaylor@orcity.org

PHONE # EMAIL ADDRESS NAME ADDRESS (503) DOUG EKANEN 14429 ANDREA 518-2742 Ptfacks 1938@ad. Com LYNNTER SIVESIHD 14842 SGLEN OFIC Larry +Joyce 503-656-9870 Jarry . Long 58 Oychod. Com Ed Long 1/0NNE Couse 20231 MERCWETHED 503-632-3129 MIKEVONC@comiast. not 14320 Talawa DR 971-563-3225 Kav2339@quail.com Keithe Julia Richmond 20265 Homester 503-632 achiders @ com thoreat Carol cast, net 2255 Dr. Canales ATA 11 11 AN CPP ... 20102 Kinibery Rose sime as by Ganasseannine ame bol Davis 503 Margaret GRANT GEORGEZ 14946 Loquille CT 557.8407 Valerie Brody 15085 Spy glass to 632-7878 503 577-423; HUNT 14421 CAMBRIA TE. 888-406 Tough Kittie @ hotmarlcon 53 Qualting tool 583-5 hang Mada Aldrid DAALGNE SANGTER 70138 HIMBARLY NOSE 503-656 2228 RUWO NO EREN TACH DUONNUT 20138 KULBIRLYRESSER 503-6502228 @ YA 160 E Com 13910 SW GALOREATH DR. 503925 ED49 (1000) HRIS GOODELL #100 SHERWOLD, OR 97140 Chrisg@gks-enge Kerm Hanton 19895 Suphia OC



Caufield Neighborhood Association

320 Warner Milne Road | PO Box 3040 | Oregon City OR 97045 Ph (503) 496-1681 | Fax (503) 655-0530 | ctaylor@orcity.org

NAME	ADDRESS	PHONE #	EMAIL ADDRESS
Anne Rooney	2004 Torrey Pines Dr	503 922-2	421 Comcast, net
Anne Rooney Roselle Potts	20212 Coguille	5035187788	pottse betela.con
LyNDA Orzen	14943 QuiNALT	518-3073	
to Cole	Librorgh 20023 Quine		
Kurt Jane Raddte	= 20023 Quins		
Wayne + Labere	19921 S- Comie O.C. Ct.	655-7361	
Kurt Jane Rædette Barrer Wayne & Labare Robser MALCHOW	20153 S WOODGEN W	AV	R.MALCHOW COMCAST. NET



Caufield Neighborhood Association

320 Warner Milne Road | Oregon City OR 97045 Ph (503) 496-1681

CAUFIELD NEIGHBORHOOD

Oregon City Police Department

02-28-12

AGENDA

Call to Order:

Welcome & Introductions: Mike Mermelstein, Vice Chair Approval of Minutes: October 25, 2011 Guest Speakers:

- Maureen Cole, Director Oregon City Library 15 minute Presentation / 10 Q&A
 - Chris Goodell, AKS Engineering & Forestry 15 minute Presentation / 10 Q&A
 - o Second phase of Crabtree Terrace subdivision
 - o Location of property is on the south side of Maple Lane Road across from Holly Lane
- Pete Walter, City of Oregon City
 - o Sequoia Landing

Old Business:

New Business:

Brainstorming on future meetings of interest – Gary Davis

Committee Reports:

- Land Use: Mike Mermelstein
- Parks Committee: Mark Perino, Mike Mermelstein, Steve Hawkins
- Detention Pond on Caufield Creek Steve Hawkins
- OCPD & Code Enforcement Update Chris Wadsworth
- CIC Update Larry Hanlon

Community Events

Public Announcements

Next Meeting Date - April 24, 2012

Those having items for our meetings are to submit for agenda to Larry Hanlon at larryhanlon@hotmail.com along with requested time. Items will be reviewed by executive committee and assigned a time limit

Page 363 of 623

October 25, 2011

- Arch Bridge
 - Project is ahead of schedule

J.T. Smith Companies - Sequoia Landing

- Retain the name
- Pre Ap Meeting scheduled for November 1, 2011
- 2 story units (studios to 2 bedroom units)
- Recreation Center, Pool
 - Professional Management Company Riverstone
 - Background checks
 - o One year lease
 - o \$1365 \$1499 Rental Townhomes
 - o 117 Units
 - o 234 cars for the development
 - Cars park in the garage
- Speeding cars in the area
 - o J.T. Smith said they will install speed bumps if approved by the city.
 - o Kick out curbs help to slow traffic

Sisul Engineering – 14362 Maple Lane

- Single Family residential
- R-10 when brought in, divide into two parcels or possibly three.
- Application in the next couple weeks
- May 2012 ballot
- Zoning does not happen until after the vote.
- Old Business

New Business Election of Officers

Nominations for Chair

- Larry Hanlon
- Nominations for Vice Chair
 - Mike Mermelstein

Nominations for Secretary/Treasurer

Gary Davis

All nominees accepted. Voted on and passed.

Committee Reports Land Use

Nothing to report

Concerns about new bus barn

Referred to Larry Didway at the District Office
Parks Committee

Meeting for Metro Grant due in April

Meeting adjourned at 8:29 PM

Page 2

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from



DRAFT CC & R'S

 $\begin{array}{l} \mbox{Crabtree Terrace No. 2-Subdivision Application}\\ \mbox{City of Oregon City} \end{array}$

March 2012

AFTER RECORDING, RETURN TO:

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS AFFECTING ANASTYN ESTATES

This Declaration of Protective Covenants, Conditions and Restrictions ("Declaration") is made and effective the _____, day of ______, 2012. This Declaration affects that certain real property (the "Property") located in the City of Oregon City, Clackamas County, Oregon and more particularly described as Lots 82 through 111, inclusive, as shown on Subdivision Plat No. ______ (the "Plat) recorded in the official records of Clackamas County on ______, and all improvements now existing or to be constructed on the Property, which Property and improvements are collectively known and referred to as CRABTREE TERRACE NO.2.

RECITALS, INTENT AND PURPOSE

A. John Jones Construction, Inc., is the owner in fee simple of the Property and the Declarant herein.

NOW, THEREFORE, for such purposes, Declarant makes this Declaration for governance of the Property:

DECLARATION

Declarant hereby declares on behalf of itself, its successors, grantees and assigns, as well as any and all persons having, acquiring or seeking to have or acquire any interest of any nature whatsoever in and to any part of the Property, as follows:

1. <u>Definitions.</u> Except as otherwise provided or modified by this Section 1, the terms contained herein shall have the meaning set forth in the Oregon Planned Community Act, ORS 94.550 et seq. As used in this Declaration, the following terms shall have the following meanings:

1.1 <u>Mortgage</u>. Mortgage means a recorded first mortgage, first trust deed or first contract of sale that creates a first lien against a Lot, and "Mortgagee" means the holder,

DECLARATION OF CC&Rs

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beneficiary or vendor of such a mortgage, trust deed or contract of sale, but only when such holder, beneficiary or vendor notifies the Association in writing of the existence of such mortgage and gives the Association a current name and mailing address.

1.2 <u>Owner</u>. Owner means the sole, or all joint, owners of one or more Lots.

1.3 <u>Plat</u>. Plat has the meaning provided in the initial paragraph of this Declaration.

2. <u>Name Description</u>

2.1. <u>Name</u>. The name by which the Property shall be known is.

2.2. <u>Lot Designation</u>. The Property is comprised of four (4) Lots, each suitable for construction of one residential building, and easements as described in the Plat. The boundaries, designation, location and dimensions of each Lot are shown on the Plat.

3. <u>Easements</u>. Easements are reserved as shown on the Plat. Within these easements no structure, planting or other materials shall be placed or permitted to remain which may damage or interfere with the purpose of the easement.

4. <u>Building Materials and Size Limitations</u>. All building materials to be incorporated into and visible as a part of the external structure of any building or other structure in the Property conform to the following criteria:

4.1. <u>Roofing material</u>. In particular, all roofing material for any building or structure shall be of wood (shake or shingle), tile, or a 25-year or better composition architectural shake with ridge caps.

4.2. <u>Siding material</u>. All siding materials shall be natural wood, or man-made lap siding materials provided.

4.3. <u>Minimum House Size</u>. Each single family residence constructed on a Lot shall have a minimum floor area of 1,000 square feet, exclusive of garages.

5. <u>Landscape, Hedges and Fences</u>. All front and side yards must be completely landscaped within six (6) months of initial occupancy. All grounds and related structures shall be maintained in harmony with surrounding landscaping. No weeds, noxious plants, or unsightly vegetation shall be planted or allowed to grow. Fences shall comply with applicable City regulations but shall not exceed six(6) feet in height. Fences shall be well constructed of suitable materials and shall not detract from the appearance of the adjacent structures or buildings. No high output exterior lighting, including but not limited to mercury vapor and halide lights, shall be installed. No tree shall be removed except in accordance with City of Oregon City permit standards.

6. <u>No Rezoning or Redivision</u>. No property within the Property may be rezoned or

DECLARATION OF CC&Rs

Page 2 of 5

redivided, nor may a Lot line or boundary line of a Lot be altered, without the written consent of the City of Oregon City and a majority of Owners.

7. <u>Restrictions on Animals</u>. No animals of any kind shall be raised, bred or kept in the Property, except that dogs, cats and other commonly maintained household pets may be kept so long as they are not bred, maintained or kept for commercial purposes. No animal of any kind, including dogs and cats, shall be allowed to interfere with the quiet enjoyment of the other residents in the Property, or permitted untended upon the streets, or upon premises of other occupants of the Property.

8. <u>No Commercial Use</u>. No portion of property in the Property shall be used for business or commercial purposes. No occupant of property within the Property shall park, nor permit to be parked, any commercial vehicle such as log trucks, dump trucks, tractor trailer rigs, or any other vehicles except passenger automobiles (including pickups) upon property, including streets, in the Property. No owner or occupant shall permit, initiate, or carry on activities in the Property that are obnoxious or offensive, nor allow conditions on any Lot of the Property to become a nuisance or annoyance to the neighborhood. No commercial signs shall be erected on the property, except real estate sales signs of not more than five (5) square feet advertising property within the Property for sale or rent.

9. <u>Screening</u>. Trash, garbage and other waste shall not be kept except in sanitary containers, screened from public view. No Lot or Tract shall be used as a dumpling ground for trash, garbage, waste or debris. All heat pumps and condenser Lots (or other utilities and devices commonly placed out of doors) shall receive special consideration to provide visual screening and noise attenuation. All boats, trailers, recreational vehicles, equipment, campers and the like must be parked off the streets of the Property in a garage or on a concrete pad beside a garage built specifically for the purpose.

10. <u>No Interference</u>. Owners or occupants within the Property shall not engage in nor continue uses which unreasonably interfere with use of other property within the Property. The following activities shall conclusively be deemed to unreasonably interfere with other property in the Property: (1) construction and maintenance of communications transmission and reception towers and antenna; and (2) construction and maintenance of exterior radio and television antennae and other receptors except for satellite dish type antennae not larger than 36 inches in diameter.

11. <u>Completion of Improvements</u>. All structures (including flat work and landscaping) constructed within the Property shall be erected and completed within one year after the commencement of construction. All remodeling, reconstruction, or enhancement of structures shall be completed within one year of the commencement of construction. Commencement of construction shall be deemed to be the date upon which a building permit was first issued for the construction, or, if no building permit was obtained, the date on which Lot clearing, demolition or remodeling commenced.

DECLARATION OF CC&Rs

Page 3 of 5

12. <u>No Further Subdivision</u>. No Lot may be subdivided or partitioned into divisions of any nature.

13. <u>Mandatory Mediation Prior to Litigation</u>. All Lot owners agree that all claims,

controversies or disputes, whether they be statutory, contract and/or tort claims between or among the parties hereto which arise out of or are related to this Agreement, or which relate to the formation, interpretation, breach or invalidity of this Agreement, whether arising before, during or after termination (hereinafter collectively referred to as "Claims"), shall be resolved in accordance with the mediation and litigation procedures specified herein.

13.1 <u>Mediation</u>. All "Claims" defined in the foregoing paragraph shall be submitted to mediation. The parties shall agree to a mediator. If the parties cannot agree as to the selection of a mediator, then either party may request appointment of a mediator from the American Arbitration Association or the Arbitration Service of Portland, Inc., whichever organization is selected by the party which first initiates mediation by filing a claim in accordance with the filing rules of the organization selected. The parties shall share equally the cost of the mediation process.

13.2 <u>Litigation and Attorney's Fees</u>. Any "Claims" that have not been resolved by mediation may be the subject of litigation in which the parties shall have all rights and remedies available at law and in equity, and the prevailing party in such litigation shall be entitled to an award of attorneys' fees and costs of action at trial and on appeal and review.

13.3 <u>Judgment</u>. Judgment upon the award rendered pursuant to such arbitration may be entered in any court having jurisdiction thereof. The parties shall share equally the fees and costs charged by the arbitration entity. The parties knowingly and voluntarily waive their rights to have their dispute tried and adjudicated by a judge or jury. In the event a party fails to proceed with arbitration, unsuccessfully challenges the arbitrator's award, or fails to comply with the arbitrator's award, the other party is entitled to costs, including reasonable attorney's fees, for having to compel arbitration or defend or enforce the award.

13.4 <u>Venue</u>. The venue for any litigation to interpret or enforce the provisions hereof shall be Oregon City, Oregon. The parties expressly consent to the jurisdiction of such court.

14. <u>Section and Paragraph Captions</u>. Section and paragraph captions shall not be deemed to be a part of this Declaration unless the context otherwise requires. In construing this Declaration, if the context so requires, the singular shall be taken to mean and to include the plural, the masculine shall be taken to mean and to include the feminine and the neuter and, generally, all grammatical changes shall be made, assumed and implied to make the provisions hereof apply equally to individuals, trgus

usts, estates, personal representative, trustees and corporations.

The undersigned Owner of the subject property has caused this Declaration to be executed this

DECLARATION OF CC&Rs

Page 4 of 5

_____ day of ______, 2012.

DECLARANT:

DECLARATION OF CC&Rs

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CURRENT PRELIMINARY TITLE REPORT

 $\label{eq:crabbinstress} \begin{array}{l} \mbox{Crabbree Terrace No. } 2-\mbox{Subdivision Application} \\ \mbox{City of Oregon City} \end{array}$

March 2012



First American Title Insurance Company of Oregon 121 SW Morrison St, FL 3 Portland, OR 97204 Phn - (503)222-3651 (800)929-3651 Fax - (877)242-3513

PUBLIC RECORD REPORT FOR NEW SUBDIVISION OR LAND PARTITION

THIS REPORT IS ISSUED BY THE ABOVE-NAMED COMPANY ("THE COMPANY") FOR THE EXCLUSIVE USE OF:

John Jones Construction, Inc. 16999 S Bradley Rd Oregon City, OR 97045-8725 Phone: (503)631-8012 Fax:

Date Prepared: February 15, 2012Effective Date: 8:00 A.M on February 06, 2012Order No.: 7019-1835948Reference:

The information contained in this report is furnished by First American Title Insurance Company of Oregon (the "Company") as an information service based on the records and indices maintained by the Company for the county identified below. This report is not title insurance, is not a preliminary title report for title insurance, and is not a commitment for title insurance. No examination has been made of the Company's records, other than as specifically set forth in this report. Liability for any loss arising from errors and/or omissions is limited to the lesser of the fee paid or the actual loss to the Customer, and the Company will have no greater liability by reason of this report. This report is subject to the Definitions, Conditions and Stipulations contained in it.

REPORT

A. The Land referred to in this report is located in the County of Clackamas, State of Oregon, and is described as follows:

As fully set forth on Exhibit "A" attached hereto and by this reference made a part hereof.

B. As of the Effective Date, the tax account and map references pertinent to the Land are as follows:

As fully set forth on Exhibit "A" attached hereto and by this reference made a part hereof.

C. As of the Effective Date and according to the Public Records, we find title to the land apparently vested in:

As fully set forth on Exhibit "B" attached hereto and by this reference made a part hereof.

D. As of the Effective Date and according to the Public Records, the Land is subject to the following liens and encumbrances, which are not necessarily shown in the order of priority:

As fully set forth on Exhibit "C" attached hereto and by this reference made a part hereof.

Public Record Report for New Subdivision or Partition Page 1 of 7 (Ver. 20080422)

EXHIBIT "A" (Land Description Map Tax and Account)

PARCEL I:

A TRACT OF LAND LOCATED IN THE SOUTHEAST ONE-QUARTER OF SECTION 4, TOWNSHIP 3 SOUTH, RANGE 2 EAST, WILLAMETTE MERIDIAN, CITY OF OREGON CITY, CLACKAMAS COUNTY, OREGON BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR." AT THE NORTHWEST CORNER OF LOT 81 OF THE PLAT "CRABTREE TERRACE"; THENCE ALONG THE WEST LINE OF DOCUMENT NUMBER 2007-038885 NORTH 00°35'27" WEST 566.33 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE ALONG THE SOUTH RIGHT-OF-WAY LINE OF MAPLELANE ROAD (30.00 FEET FROM CENTER LINE) NORTH 67°22'10" EAST 200.31 FEET TO A POINT; THENCE LEAVING SAID RIGHT-OF-WAY LINE ALONG THE EAST LINE OF SAID DOCUMENT NUMBER 2007-038885 SOUTH 02°42'22" EAST 388.17 FEET TO A POINT; THENCE ALONG THE SOUTH LINE OF PARCEL III OF DOCUMENT NUMBER 2007-010577 NORTH 87°17'22" EAST 112.09 FEET TO A POINT; THENCE ALONG THE EAST LINE OF SAID PARCEL III NORTH 02°42'01" WEST 390.00 FEET TO A POINT ON THE SAID SOUTH RIGHT-OF-WAY LINE; THENCE ALONG SAID SOUTH RIGHT-OF-WAY LINE NORTH 87°17'22" EAST 182.00 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE ALONG THE EAST LINE OF DOCUMENT NUMBER 2007-042810 SOUTH 02°42'01" EAST 671.16 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE ALONG THE NORTH LINES OF LOTS 75, 76, 77, 78, AND 79 OF THE PLAT "CRABTREE TERRACE" SOUTH 89°24'33" WEST 278.83 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE CONTINUING ALONG THE NORTH LINE OF SAID PLAT NORTH 00°35'27" WEST 70.00 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE CONTINUING ALONG SAID NORTH LINE SOUTH 89°24'33" WEST 77.91 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE CONTINUING ALONG SAID NORTH LINE ALONG A CURVE TO THE LEFT WITH A RADIUS OF 14.50 FEET, A DELTA OF 90°00'00", A LENGTH OF 22.78 FEET, AND A CHORD OF SOUTH 44°24'33" WEST 20.51 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE CONTINUING ALONG SAID NORTH LINE NORTH 89°30'36" WEST 53.01 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE CONTINUING ALONG SAID NORTH LINE SOUTH 00°35'27" EAST 40.00 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE CONTINUING ALONG SAID NORTH LINE SOUTH 89°24'33" WEST 80.00 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM:

A TRACT OF LAND LOCATED IN THE SOUTHEAST ONE-QUARTER OF SECTION 4, TOWNSHIP 3 SOUTH, RANGE 2 EAST, WILLAMETTE MERIDIAN, CITY OF OREGON CITY, CLACKAMAS COUNTY, OREGON BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR." AT THE NORTHWEST CORNER OF LOT 81 OF THE PLAT "CRABTREE TERRACE"; THENCE ALONG THE WEST LINE OF DOCUMENT NUMBER 2007-038885 NORTH 00°35'27" WEST 566.33 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE ALONG THE SOUTH RIGHT-OF-WAY LINE OF MAPLELANE ROAD (30.00 FEET FROM CENTER LINE) NORTH 67°22'10" EAST 200.31 FEET TO A POINT; THENCE LEAVING SAID RIGHT-OF-WAY LINE ALONG THE EAST LINE OF SAID DOCUMENT NUMBER 2007-038885 SOUTH 02°42'22" EAST 388.17 FEET TO A POINT; THENCE ALONG THE SOUTH LINE OF PARCEL III OF DOCUMENT NUMBER 2007-010577 NORTH 87°17'22" EAST 112.09 FEET TO A POINT; THENCE ALONG THE EAST LINE OF SAID PARCEL III NORTH 02°42'01" WEST 390.00 FEET TO A POINT ON THE SAID SOUTH RIGHT-OF-WAY LINE; THENCE ALONG SAID SOUTH RIGHT-OF-WAY LINE NORTH 87°17'22" EAST 182.00 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP

Public Record Report for New Subdivision or Partition Page 2 of 7 (Ver. 20080422)

INSCRIBED "AKS ENGR."; THENCE ALONG THE EAST LINE OF DOCUMENT NUMBER 2007-042810 SOUTH 02°42'01" EAST 671.16 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE ALONG THE NORTH LINES OF LOTS 75, 76, 77, 78, AND 79 OF THE PLAT "CRABTREE TERRACE" SOUTH 89°24'33" WEST 278.83 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE CONTINUING ALONG THE NORTH LINE OF SAID PLAT NORTH 00°35'27" WEST 70.00 FEET TO A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP INSCRIBED "AKS ENGR."; THENCE CONTINUING ALONG SAID NORTH LINE SOUTH 89 DEGREES 24' 33' WEST 18.02 FEET TO A 5/8 INCH IRON ROD WITH A YELLO PLASTIC CAP INSCRIBED "AKA ENGR."; THENCE ALONG THE EAST LINE OF SAID DOCUMENT NUMBER 2007-038885 NORTH 02 DEGREES 42' 22" WEST 200.23 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL II:

A PORTION OF THAT CERTAIN TRACT OF LAND DESCRIBED IN DEED TO W.E. FOUCH, ET UX, RECORDED MARCH 3, 1966 IN BOOK 670, PAGE 109, DEED RECORDS, SITUATED IN THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 3 SOUTH, RANGE 2 EAST OF THE WILLAMETTE MERIDIAN, IN THE COUNTY OF CLACKAMAS AND STATE OF OREGON, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTH RIGHT-OF-WAY OF MAPLE LANE ROAD NO. 398, 70 FEET WEST OF THE EAST LINE OF SAID FOUCH TRACT; THENCE SOUTH 88°00' WEST, ALONG SAID SOUTH RIGHT-OF-WAY 112 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT; THENCE SOUTH 2°00' EAST PARALLEL WITH THE SAID EAST LINE 390 FEET; THENCE SOUTH 88°00' WEST PARALLEL WITH SAID SOUTH RIGHT-OF-WAY 112 FEET TO THE WEST LINE OF SAID FOUCH TRACT; THENCE NORTH 2°00' WEST ALONG SAID WEST LINE 390 FEET, MORE OR LESS, TO SAID SOUTH RIGHT-OF-WAY; THENCE NORTH 70°00' EAST ALONG SAID SOUTH RIGHT-OF-WAY 28.39 FEET; THENCE CONTINUING ALONG SAID RIGHT-OF-WAY NORTH 88°00' EAST 85 FEET TO THE TRUE POINT OF BEGINNING.

NOTE: This legal description was created prior to January 1, 2008.

Map No.: 32E04D00700 and 32E04D00601 Tax Account No.: 14616 Maple Lane Road

Public Record Report for New Subdivision or Partition Page 3 of 7 (Ver. 20080422)

EXHIBIT "B" (Vesting)

John Jones Construction, Inc., an Oregon corporation

Public Record Report for New Subdivision or Partition Page 4 of 7 (Ver. 20080422)

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

EXHIBIT "C" (Liens and Encumbrances)

1.	Taxes for the year 2011-2012		
	Tax Amount	\$	2,119.23
	Unpaid Balance:	\$	1,412.82, plus interest and penalties, if any
	Code No.:	062-064	
	Map & Tax Lot No.:	32E04D0	00700
	Property ID No.:	0084266	3
	(Affects Parcel I)		
2.	Taxes for the year 2011-2012		
	Tax Amount	\$	1,956.33
	Unpaid Balance:	\$	1,304.22, plus interest and penalties, if any.
	Code No.:	062-064	

32E04D00601

00842645

A Potential Additional Tax liability amount is due in the amount of \$4,280.82 for the tax year 2011-2012.

3. City liens, if any, of the City of Oregon City.

Map & Tax Lot No.:

Property ID No.:

(Affects Parcel II)

- 4. These premises are within the boundaries of the Clackamas River Water District and are subject to the levies and assessments thereof.
- 5. The rights of the public in and to that portion of the premises herein described lying within the limits of streets, roads and highways.

6.	Easement, including terms and provisions contained therein:					
	Recording Information:	February 13, 1973 as Fee No. 73004208				
	In Favor of:	Baird B. Langworthy and Karen M. Langworthy, husband and wife				
	For:	Road				
	Affects:	The West 50 feet of Parcel I				

- Conditions and Restrictions, if any, contained in Minor Partition No. 23-179-B, as disclosed by deeds recorded October 08, 1979 as Fee Nos. 79-044451 and 79-044452. (Affects Parcel II)
- 8. Annexation Agreement including the terms and provisions thereof:
 Dated: July 26, 2006
 Recorded: February 06, 2007 as Fee No. 2007-010437
 Executed by: John & Kay Jones
- 9. Covenant of Waiver of Rights and Remedies, including terms and provisions thereof. Recorded: February 06, 2007 as Fee No. 2007-010453

Public Record Report for New Subdivision or Partition Page 5 of 7 (Ver. 20080422)

10. Line of Credit Trust Deed, including the terms and provisions thereof, given to secure an indebtedness of up to \$3,021,000.00 John Jones Construction, Inc., an Oregon Incorporation Grantor: Columbia Community Bank Beneficiary: Trustee: First American Title February 01, 2007 Dated: Recorded: February 06, 2007 Recording Information: 2007 010578 (Affects said land and other property)

Modification and/or amendment by instrument:Recording Information:February 14, 2011 as Fee No. 2011 010118

11. Line of Credit Trust Deed, including the terms and provisions thereof, given to secure an indebtedness of up to \$4,266,950.00

Grantor:	John Jones Construction, Inc., an Oregon Corporation
Beneficiary:	Columbia Community Bank
Trustee:	First American
Dated:	May 02, 2007
Recorded:	May 04, 2007
Recording Information:	2007 038542
(Affects said land and other pro	perty)

Modification and/or amendment by instrument: Recording Information: March 25, 2009 as Fee No. 2009 019454

Modification and/or amendment by instrument:Recording Information:February 14, 2011 as Fee No. 2011 010117

Public Record Report for New Subdivision or Partition Page 6 of 7 (Ver. 20080422)

DEFINITIONS, CONDITIONS AND STIPULATIONS

1. **Definitions.** The following terms have the stated meaning when used in this report:

- "Customer": The person or persons named or shown as the addressee of this report. (a)
- (b)
- "Effective Date": The effective date stated in this report. "Land": The land specifically described in this report and improvements affixed thereto which by law constitute (c) real property.
- "Public Records": Those records which by the laws of the state of Oregon impart constructive notice of matters (d) relating to the Land.

2. Liability of the Company.

- This is not a commitment to issue title insurance and does not constitute a policy of title insurance. (a) (b) The liability of the Company for errors or omissions in this public record report is limited to the amount of the charge paid by the Customer, provided, however, that the Company has no liability in the event of no actual loss to the Customer.
- No costs (including, without limitation attorney fees and other expenses) of defense, or prosecution of any (c) action, is afforded to the Customer.
- In any event, the Company assumes no liability for loss or damage by reason of the following: (d)
 - (1)Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records.
 - (2) Any facts, rights, interests or claims which are not shown by the Public Records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
 - Easements, liens or encumbrances, or claims thereof, which are not shown by the Public Records. (3) Discrepancies, encroachments, shortage in area, conflicts in boundary lines or any other facts which (4) a survey would disclose.
 - (i) Unpatented mining claims; (ii) reservations or exceptions in patents or in Acts authorizing the (5) issuance thereof, (iii) water rights or claims or title to water.
 - Any right, title, interest, estate or easement in land beyond the lines of the area specifically described (6) or referred to in this report, or in abutting streets, roads, avenues, alleys, lanes, ways or waterways.
 - (7)Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use or enjoyment on the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the Public Records at the effective date hereof.
 - Any governmental police power not excluded by 2(d)(7) above, except to the extent that notice of (8) the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the Public Records at the effective date hereof.
 - (9) Defects, liens, encumbrances, adverse claims or other matters created, suffered, assumed, agreed to or actually known by the Customer.
- 3. Report Entire Contract. Any right or action or right of action that the Customer may have or may bring against the Company arising out of the subject matter of this report must be based on the provisions of this report. No provision or condition of this report can be waived or changed except by a writing signed by an authorized officer of the Company. By accepting this form report, the Customer acknowledges and agrees that the Customer has elected to utilize this form of public record report and accepts the limitation of liability of the Company as set forth herein.
- 4. Charge. The charge for this report does not include supplemental reports, updates or other additional services of the Company.

Public Record Report for New Subdivision or Partition Page 7 of 7 (Ver. 20080422)

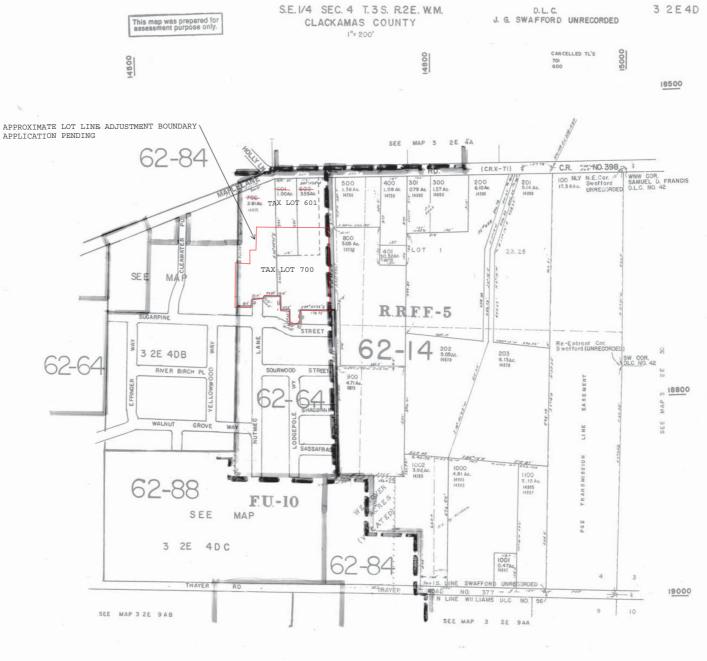


COUNTY ASSESSOR'S MAP

CRABTREE TERRACE NO. 2 – SUBDIVISION APPLICATION CITY OF OREGON CITY

March 2012





3 2E 4D

BOOK 29

A LAND USE APPLICATION FOR CRABTREE TERRACE NO. 2 SUBDIVISION

PROPOSAL:

SUBMITTED TO:

OWNER / APPLICANT:

APPLICANT'S REPRESENTATIVE:

SITE ADDRESS:

SITE SIZE:

Assessor's Information:

ZONING:

30 LOT SUBDIVISION / VARIANCE

CITY OF OREGON CITY PLANNING DEPARTMENT 221 MOLALLA AVENUE, SUITE 200 OREGON CITY, OR 97045

JOHN JONES CONSTRUCTION, INC. 16999 SOUTH BRADLEY ROAD OREGON CITY, OR 97045

AKS Engineering & Forestry, LLC Monty Hurley / Chris Goodell 13910 SW Galbreath Drive, Suite 100 Sherwood, OR 97140 Phone: (503) 925-8799

14616 MAPLELANE ROAD OREGON CITY, OR 97045

+/-4.36 ACRES

CLACKAMAS COUNTY 32E4D 700 (Per File No. LL 12-02)

R-3.5 SINGLE-FAMILY DWELLING DISTRICT

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 1 OF 33

I. EXECUTIVE SUMMARY

Through this application, the property owner requests approval from the City of Oregon City to subdivide the subject property (described below) into a 30 lot subdivision (Crabtree Terrace No. 2) for the future construction of single-family detached residential homes and a variance to allow direct garage access to local residential streets.

The applicant developed the adjacent 81 lot Crabtree Terrace Subdivision, which is also zoned R-3.5, starting in 2006 (City file TP 07-05 and WR 07-13) and was completed with the final plat recording in 2008. The applicant's goal is to develop the remainder of his property in a similar manner as was the first "phase" of the project, with a grid system of local public streets providing access to +/- 3,500 square foot lots (average) for single-family detached homes. This was his intent when he submitted the Crabtree Place Subdivision application in 2007 and graded the property in 2008. The applicant had hoped to complete development of the entire property (including this portion) in 2009. However, the economic downturn of the past several years, which has especially impacted the residential housing market, has prevented him from meeting this goal.

In addition to the poor economy and housing market, a recent change in the Oregon City Municipal Code has occurred after approval of Crabtree Terrace Subdivision. The adoption of an alley requirement for R-3.5 properties (as this property is zoned) impacts the applicant's ability to complete this project and achieve the goals for the property as originally conceived and approved. Due to a variety of factors (described in more detail later in this written statement), alleys are not a viable way to complete this project. Therefore, a variance has been requested to this standard.

As described in further detail throughout this written statement and as shown in the preliminary plans, the subdivision will include all necessary streets, sidewalks, services, utilities, and other public improvements that are necessary to support the project. Approval of Crabtree Terrace No.2 benefits the City of Oregon City by providing much needed construction jobs and future homes for people to live, as well as permit and impact fees / taxes to support City services and fund future City public works / infrastructure improvement projects for the area.

This written statement includes findings of fact demonstrating that the application complies with all applicable approval criteria. These findings are supported by substantial evidence which includes preliminary plans, a Traffic Impact Study, and other written documentation. This information, which is included in this application package, provides the basis for the City to approve the application.

II. BASIC FACTS

1. **Zoning/Permitted Use:** The subject site is zoned R-3.5 Single Family Dwelling District on the City's Zoning Map. The properties to the south also carry the R-3.5 designation. The properties to the west consist of zones R-3.5, R-6, and Clackamas County zoned property

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 2 OF 33 residing outside of the city limits. The site's northern boundary will be per a lot line adjustment application that is currently pending. The property to the north is also zoned R-3.5. The city limits follow Maplelane Road in the area of the subject site; therefore the property to the north of Maplelane Road is outside of the Urban Growth Boundary (UGB). The city limits and the UGB meet near the property's northeast corner and run along the east side of the subject site. The properties to the east are also outside of the UGB.

2. Site Description / Setting: A Property Line Adjustment (PLA) application has been approved by the City of Oregon City (File No. LL 12-02). This PLA adjusted the common property line between Tax Lots 601 and 700, Tax Map 3 2E 4D, in such a way as to make the entirety of the proposed 30 lot subdivision reside on Tax Lot 700. Therefore, for the purposes of this application, the project involves Tax Lot 700, Tax Map 3 2E 4D, as depicted on the preliminary plans.

The subject property is approximately 4.36 acres in size and is generally located south of Maplelane Road and north Sugarpine Street. The areas to the south and some to the west have been developed with streets, sidewalks, and single family residential homes. Existing site topography slopes in a northerly direction (+/- 4%-8% slope), with +/- 23 feet of elevation drop from the southerly side of the property to the northerly side of the property, a linear distance of approximately 425 feet. The majority of the property is cleared of vegetation, with a few scattered trees located near the southwest corner of Tax Lot 700. There are no designated or identified wetlands, geologic hazards, water resources, natural resources, wildlife habitat, or other significant natural features on the property.

3. **Project Description:** The proposal involves the creation of 30 lots to accommodate the future construction of single-family residences. To effectively develop the property to its permitted urban residential density, access (streets), and services are proposed to be provided to all portions of the property. Each of the lots are proposed to be provided with individual sanitary sewer and, water services, as well as utilities such as electrical, gas, phone, cable, etc. Each lot will also receive either a storm lateral or curb weep hole. Additional details concerning the proposal can be gleaned from the preliminary plans, which are included in the application materials along with this project narrative and other written materials.

4. **Dimensional Standards:**

The "R-3.5" Dwelling District requires the following:

Minimum Lot Area	3,500 Square feet
Minimum Lot Width:	25 feet
Minimum Lot Depth:	70 feet
Maximum Building Height:	2.5 stories (not to exceed 35 feet)
Front Yard Setback:	5 feet
Front Porch Setback	0 feet
Interior Side Yard:	5 feet (detached)
Corner Side Yard:	10 feet
Rear Yard Setback:	15 feet
Rear Porch Setback	10 feet

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Garage Setback:	20 feet
Garage Setback on Alley	5 feet

This project meets all the dimensional requirements listed above (as applicable).

- 5. Citizen Participation: The applicant contacted the Caulfield Neighborhood Association Chairperson and met with the Neighborhood Association on February 28, 2012 at the regularly scheduled meeting. A summary of the topics discussed at the neighborhood meeting and all other meeting related information is included in the application package. The City will send notice of this proposal to property owners within three hundred feet of the subject property, as well as various City departments, and other agencies to solicit public input.
- 6. Residential Density Calculations: The site is approximately 190,124 square feet (4.36 acres) in size. The average lot area proposed in the project is 4,333 square feet. Due to right-of-way dedications, the net developable area for the project site is 130,031 square feet. Divided by 3,500, the maximum number of lots (density) is 37.15 units. Eighty percent of 37.15 is 29.72, or 30 units. Therefore, the proposed subdivision complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable site.

III. APPROVAL CRITERIA

OREGON CITY MUNICIPAL CODE

Title 12 - Streets, Sidewalks, and Public Places: Title 16 - Subdivisions: Title 17 - Zoning:

TITLE 12 – STREETS, SIDEWALKS, AND PUBLIC PLACES

12.04.175 - Street design—Generally.

The location, width and grade of street shall be considered in relation to: existing and planned streets, topographical conditions, public convenience and safety for all modes of travel, existing and identified future transit routes and pedestrian/bicycle accessways, and the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. To the extent possible, proposed streets shall connect to all existing or approved stub streets that abut the development site. Where location is not shown in the development plan, the arrangement of streets shall either:

- A. Provide for the continuation or appropriate projection of existing principal streets in the surrounding area and on adjacent parcels or conform to a plan for the area approved or adopted by the city to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical;
- B. Where necessary to give access to or permit a satisfactory future development of adjoining land, streets shall be extended to the boundary of the development and the resulting dead-end street (stub) may be approved with a

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 4 OF 33 temporary turnaround as approved by the city engineer. Access control in accordance with section 12.04.200 shall be required to preserve the objectives of street extensions.

RESPONSE: Public streets are proposed in the subdivision to provide access to the lots / future homes and provide for future neighborhood connectivity / circulation. The preliminary plans show the location and arrangement of these improvements. As shown on the preliminary plans, street improvements are proposed to extend the sole existing abutting local street (Nutmeg Lane) and provide for a future connection to Maplelane Road. Oregon Iris Way and Purple Ash Way are laid out in a grid manner (preferred by the city) that is suitable for future connection as illustrated on the preliminary plans.

12.04.180 - Street design-Minimum right-of-way.

All development shall provide adequate right-of-way and pavement width. Adequate right-of-way and pavement width shall be provided by:

A. Complying with the street design standards contained in the table provided in Chapter 12.04. The street design standards are based on the classification of streets that occurred in the Oregon City Transportation System Plan (TSP), in particular, the following TSP figures provide the appropriate classification for each street in Oregon City: Figure 5-1: Functional Classification System and New Roadway Connections; Figure 5-3: Pedestrian System Plan; Figure 5.6: Bicycle System Plan; and Figure 5.7: Public Transit System Plan. These TSP figures from the Oregon City Transportation System Plan are incorporated herein by reference in order to determine the classification of particular streets.

Table <u>12.04.020</u> STREET DESIGN STANDARDS						
Type of Street Maximum Right-of-Way Width Pavement Width						
Major arterial	124 feet	98 feet				
Minor arterial	114 feet	88 feet				
Collector street	86 feet	62 feet				
Neighborhood Collector street	81 feet	59 feet				
Local street	54 feet	32 feet				
Alley	20 feet	16 feet				

B. The applicant may submit an alternative street design plan that varies from the street design standards identified above. An alternative street design plan may be approved by the city engineer if it is found the alternative allows for adequate and safe traffic, pedestrian and bicycle flows and transportation alternatives and protects and provides adequate multi-modal transportation services for the development as well as the surrounding community.

RESPONSE: As shown on the preliminary plans, adequate right-of-way and paved widths are proposed for the streets within the project. Consistent with abutting existing streets and street stubs, these streets are proposed to be improved with 32 foot wide paved sections within right-of-ways that will not exceed 54 feet. (They are 53 feet wide.) Therefore, the application complies with the above listed requirements, and an alternate street design is unnecessary.

12.04.185 - Street design-Access Control

A. A street which is dedicated to end at the boundary of the development or in the case of half-streets dedicated along a boundary shall have an access control granted to the city as a city controlled plat

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 5 OF 33 restriction for the purposes of controlling ingress and egress to the property adjacent to the end of the dedicated street. The access control restriction shall exist until such time as a public street is created, by dedication and accepted, extending the street to the adjacent property.

- *B.* The city may grant a permit for the adjoining owner to access through the access control.
- *C.* The plat shall contain the following access control language or similar on the face of the map at the end of each street for which access control is required: "Access Control (See plat restrictions)."
- D. Said plats shall also contain the following plat restriction note(s): "Access to (name of street or tract) from adjoining tracts (name of deed document number[s]) shall be controlled by the City of Oregon City by the recording of this plat, as shown. These access controls shall be automatically terminated upon the acceptance of a public road dedication or the recording of a plat extending the street to adjacent property that would access through those Access Controls."

<u>RESPONSE</u>: As shown on the preliminary plans, all streets will end at the project boundary. The plat will grant access control to the city. The standard will be met when the final subdivision plat is filed and accepted.

12.04.190 - Street design—Alignment.

The centerline of streets shall be:

- A. Aligned with existing streets by continuation of the centerlines; or
- B. Offset from the centerline by no more than ten feet, provided appropriate mitigation, in the judgment of the city engineer, is provided to ensure that the offset intersection will not pose a safety hazard.

<u>RESPONSE</u>: As shown on the preliminary plans, all street centerlines are proposed to be aligned with existing streets by continuation of the centerlines.

12.04.195 - Minimum street intersection spacing standards.

A. All new development and redevelopment shall meet the following Public Street Intersection Spacing Standards:

	Distance in Feet between Streets of Various Classifications								
	Between Arterial and Arterial	Between Arterial and Collector	Between Arterial and Neighborhood Collector	Arterial and	Collector Street and Collector		Collector and Local	Between Neighborhood Collector and Local Street	Between two adjacent Local Streets
Measured along an Arterial Street	1320	800	600	300	600	300	150	150	150
Measured along a Collector Street	800	800	600	300	600	300	150	150	150

Table 12.04.040—Public Street Intersection Spacing Standards

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Measured along a Neighborh ood Collector Street	800	600	300	300	300	150	150	150	150
Measured along a Local Street	600	600	300	300	300	150	150	150	150
	Note: With regard to public intersection spacing standards, the same distances apply to both major arterial and minor arterial streets. In this table, the term "arterial" applies to both major arterial and minor arterial streets.								

<u>RESPONSE</u>: The property takes access from a local public street stub. The proposed streets within the subdivision are all local streets and are all spaced in excess of 150 feet from one another. Therefore, these standards are met.

12.04.205 - Intersection level of service standards.

When reviewing new developments, the City of Oregon City requires all relevant intersections to be maintained at the minimum acceptable Level Of Service (LOS) upon full build-out of the proposed development. The minimum acceptable LOS standards are as follows:

- A. For signalized intersection areas of the city that are located outside the Regional Center boundaries a LOS of "D" or better for the intersection as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0 for the sum of critical movements.
- B. For signalized intersections within the Regional Center boundaries a LOS "D" can be exceeded during the peak hour; however, during the second peak hour, LOS "D" or better will be required as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0.
- C. For unsignalized intersection throughout the city a LOS "E" or better for the poorest approach and with no movement serving more than twenty peak hour vehicles operating at worse than LOS "F" will be tolerated for minor movements during a peak hour.

RESPONSE: Findings demonstrating that all Level of Service (LOS) requirements are satisfied and are included in the Traffic Impact Study (TIS) prepared by Lancaster Engineering, which is included in the submittal materials. Please refer to the TIS for further information regarding LOS. These standards are met.

12.04.210 - Street design—Intersection angles.

Except where topography requires a lesser angle, streets shall be laid out to intersect at angles as near as possible to right angles. In no case shall the acute angles be less than eighty degrees unless there is a special intersection design. An arterial or collector street intersecting with another street shall have at least one hundred feet of tangent adjacent to the intersection unless topography requires a lesser distance. Other streets, except alleys, shall have at least fifty feet of tangent adjacent to the intersection unless topography requires a lesser distance. All street intersections shall be provided with a minimum curb return radius of twenty-five feet for local streets. Larger radii shall be required for higher street classifications as determined by the city engineer. Additional right-of-way shall be required to accommodate curb returns and sidewalks at intersections. Ordinarily, intersections should not have more than two streets at any one point.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 7 OF 33 **<u>RESPONSE</u>**: As shown on the preliminary plans, all intersection angles are laid out at right angles, include at least fifty feet of tangent adjacent to the intersection, and curb return radii of 25 feet. Necessary right-of-ways are proposed to accommodate these street improvements. Therefore, the application complies with the above listed requirements.

12.04.215 - Street design-Off-site street improvements.

During consideration of the preliminary plan for a development, the decision maker shall determine whether existing streets impacted by, adjacent to, or abutting the development meet the city's applicable planned minimum design or dimensional requirements. Where such streets fail to meet these requirements, the decision-maker shall require the applicant to make proportional improvements sufficient to achieve conformance with minimum applicable design standards required to serve the proposed development.

<u>RESPONSE</u>: Existing City streets that provide access to the site meet City requirements as demonstrated in the TIS. Therefore, off-site improvements are not warranted and this requirement does not apply.

12.04.220 - Street design—Half street.

Half streets, while generally not acceptable, may be approved where essential to the development, when in conformance with all other applicable requirements, and where it will not create a safety hazard. When approving half streets, the decision maker must first determine that it will be practical to require the dedication of the other half of the street when the adjoining property is divided or developed. Where the decision maker approves a half street, the applicant must construct an additional ten feet of pavement width so as to make the half street safe and usable until such time as the other half is constructed. Whenever a half street is adjacent to property capable of being divided or developed, the other half of the street shall be provided and improved when that adjacent property divides or develops. Access control as described in [Section] 12.04.200 may be required to preserve the objectives of half streets.

<u>RESPONSE</u>: As shown on the preliminary plans, the site does not front on any public streets. Therefore, half-street improvements are not relevant to this application and this section does not apply.

12.04.225 - Street design—Cul-de-sacs and dead-end streets.

The city discourages the use of cul-de-sacs and permanent dead-end streets except where construction of a through street is found by the decision maker to be impracticable due to topography or some significant physical constraint such as unstable soils, wetland, natural or historic resource areas, dedicated open space, existing development patterns, or arterial access restrictions. When permitted, cul-de-sacs and permanent dead-end streets shall have a maximum length of three hundred fifty feet, as measured from the right-of-way line of the nearest intersecting street to the back of the cul-de-sac curb face, and include pedestrian/bicycle accessways as provided in Section 17.90.220 of this code and Chapter 12.24. This section is not intended to preclude the use of curvilinear eyebrow widening of a street where needed to provide adequate lot coverage.

Where approved, cul-de-sacs shall have sufficient radius to provide adequate turn-around for emergency vehicles in accordance with Fire District and City adopted street standards. Permanent dead-end streets other than cul-de-sacs shall provide public street right-of-way/easements sufficient to provide turn-around space with appropriate no-parking signs or markings for waste disposal, sweepers, and other long vehicles in the form of a hammerhead or other design to be approved by the decision maker. Driveways shall be encouraged off the turnaround to provide for additional on-street parking space.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 8 OF 33 **<u>RESPONSE</u>**: As shown on the preliminary plans, cul-de-sacs or other permanent dead end streets are not proposed. Therefore, this section does not apply.

12.04.230 - Street design—Street names.

Except for extensions of existing streets, no street name shall be used which will duplicate or be confused with the name of an existing street. Street names shall conform to the established standards in the city and shall be subject to the approval of the city.

<u>RESPONSE</u>: There is one existing street that abuts the site, Nutmeg Lane. Its name will be continued through the project. New street names have already been approved by City staff. This standard is met.

12.04.235 - Street design—Grades and curves.

Grades and center line radii shall conform to the standards in the city's street design standards and specifications.

<u>RESPONSE</u>: As shown on the preliminary plans, all grade lines and center line radii comply with the City's street design standards and specifications. Therefore, the application complies with the above listed requirements.

12.04.240 - Street design—Development abutting arterial or collector street.

Where development abuts or contains an existing or proposed arterial or collector street, the decision maker may require: access control; screen planting or wall contained in an easement or otherwise protected by a restrictive covenant in a form acceptable to the decision maker along the rear or side property line; or such other treatment it deems necessary to adequately protect residential properties or afford separation of through and local traffic. Reverse frontage lots with suitable depth may also be considered an option for residential property that has arterial frontage. Where access for development abuts and connects for vehicular access to another jurisdiction's facility then authorization by that jurisdiction may be required.

RESPONSE: There are no arterial or collector streets abutting the site. This standard does not apply.

12.04.245 - Street design—Pedestrian and bicycle safety.

Where deemed necessary to ensure public safety, reduce traffic hazards and promote the welfare of pedestrians, bicyclists and residents of the subject area, the decision maker may require that local streets be so designed as to discourage their use by nonlocal automobile traffic.

All crosswalks shall include a large vegetative or sidewalk area which extends into the street pavement as far as practicable to provide safer pedestrian crossing opportunities. These curb extensions can increase the visibility of pedestrians and provide a shorter crosswalk distance as well as encourage motorists to drive slower. The decision maker may approve an alternative design that achieves the same standard for constrained sites or where deemed unnecessary by the city engineer.

RESPONSE: As shown on the preliminary plans, the proposed public streets are designed to City standards. In general, the overall street pattern is designed to discourage non-local through traffic. Therefore, designs such as curb extensions are unnecessary. However, if required, curb extensions will be provided. There are no bicycle lanes proposed for the project as all proposed streets are classified as local streets, which are not striped for bicycle lanes.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 9 OF 33 12.04.255 - Street design-Alleys.

Public alleys shall be provided in the following districts R-5, R-3.5, R-2, MUC-1, MUC-2 and NC zones unless other permanent provisions for private access to off-street parking and loading facilities are approved by the decision maker. The corners of alley intersections shall have a radius of not less than ten feet.

<u>RESPONSE</u>: For a variety of reasons, alleys are not proposed in this application and the applicant is seeking a variance to the standard. Please see information provided in response to Chapter 17.60 Variances.

12.04.260 - Street design-Transit.

Streets shall be designed and laid out in a manner that promotes pedestrian and bicycle circulation. The applicant shall coordinate with Tri-Met where the application impacts transit streets as identified on Figure 5.7: Public Transit System Plan of the Oregon City Transportation System Plan. Pedestrian/bicycle access ways shall be provided as necessary in conformance with the requirements in Section 17.90.220 of this code and Chapter 12.24 to minimize the travel distance to transit streets and stops and neighborhood activity centers. The decision maker may require provisions, including easements, for transit facilities along transit streets where a need for bus stops, bus pullouts or other transit facilities within or adjacent to the development has been identified.

RESPONSE: Public streets and sidewalks are proposed in the subdivision to provide access to the future homes and provide for neighborhood connectivity / circulation. The preliminary plans show the location and arrangement of these improvements, which are designed and laid out in a manner that promotes pedestrian and bicycle circulation. These improvements include the connection and extension of Nutmeg Lane and the stubbing of streets for future extension and connectivity. These streets and sidewalks, once built out, minimize the travel distance to transit streets and other off-site destinations. The need for additional transit facilities and bus stops has not been identified and therefore is not warranted within this subdivision. This standard is met.

12.04.265 - Street design-Planter strips.

All development shall include vegetative planter strips that are five feet in width or larger and located adjacent to the curb. This requirement may be waived or modified if the decision maker finds it is not practicable. The decision maker may permit constrained sites to place street trees on the abutting private property within 10 feet of the public right-of-way if a covenant is recorded on the title of the property identifying the tree as a city street tree which is maintained by the property owner. Development proposed along a collector, minor arterial, or major arterial street may use tree wells with root barriers located near the curb within a wider sidewalk in lieu of a planter strip, in which case each tree shall have a protected area to ensure proper root growth and reduce potential damage to sidewalks, curbs and gutters.

To promote and maintain the community tree canopy adjacent to public streets, trees shall be selected and planted in planter strips in accordance with Chapter 12.08, Street Trees. Individual abutting lot owners shall be legally responsible for maintaining healthy and attractive trees and vegetation in the planter strip. If a homeowners' association is created as part of the development, the association may assume the maintenance obligation through a legally binding mechanism, e.g., deed restrictions, maintenance agreement, etc., which shall be reviewed and approved by the city attorney. Failure to properly maintain trees and vegetation in a planter strip shall be a violation of this code and enforceable as a civil infraction.

<u>RESPONSE</u>: As shown on the preliminary plans, planter strips meeting City standards are proposed along all public streets. These areas will be improved and planted with street trees when new homes are built and occupied. This standard is met.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 10 OF 33 12.04.270 - Standard construction specifications.

The workmanship and materials for any work performed under permits issued per this chapter shall be in accordance with the edition of the "Standard Specifications for Public Works Construction," as prepared by the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the city, in effect at the time of application. The exception to this requirement is where this chapter and the Public Works Street Design Drawings provide other design details, in which case the requirements of this chapter and the Public Works Street Design Drawings shall be complied with. In the case of work within ODOT or Clackamas County rights-of-way, work shall be in conformance with their respective construction standards.

RESPONSE: All public improvements will be designed by a professional engineer, licensed in the State of Oregon. The plans for these improvements will be submitted to the City and reviewed for consistency with all City requirements. After the appropriate City construction permits are obtained, the improvements will be constructed by a licensed general contractor in accordance with the approved plans. Finally, the improvements will be inspected for consistency with the approved final plans prior to City acceptance. This standard is met.

TITLE 16 – LAND DIVISIONS

Chapter 16.08 Subdivisions – Process and Standards

<u>RESPONSE</u>: The proposed thirty lot subdivision complies with all applicable approval criteria and is being processed through a Type III procedure in accordance with the OCMC.

16.08.015 - Preapplication conference required.

Before the city will accept a subdivision application, the applicant must schedule and attend a preapplication conference in accordance with Section 17.50.050. At a minimum, an applicant should bring to the preapplication conference a tax map of the subject tax lot(s) and surrounding tax lots, scale drawings of the proposed subdivision lotting pattern, streets, utilities and important site features and improvements, and a topographic map of the property.

<u>RESPONSE</u>: A pre-application conference was held on December 6, 2011. This requirement is met.

16.08.020 - Preliminary subdivision plat application.

Within six months of the preapplication conference, an applicant may apply for preliminary subdivision plat approval. The applicant's submittal must provide a complete description of existing conditions, the proposed subdivision and an explanation of how the application meets all applicable approval standards. The following sections describe the specific submittal requirements for a preliminary subdivision plat, which include plan drawings, a narrative statement and certain tabular information. Once the application is deemed to be complete, the community development director shall provide notice of the application and an invitation to comment for a minimum of fourteen days to surrounding property owners in accordance with Section 17.50.090(A). At the conclusion of the comment period, the community development director will evaluate the application, taking into consideration all relevant, timely filed comments, and render a written decision in accordance with Chapter 17.50. The community development director's decision may be appealed to the city commission with notification to the planning commission.

<u>RESPONSE</u>: This application is being submitted within 6 months of the pre-application conference and contains all necessary submittal requirements. This requirement is met.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 11 OF 33 16.08.025 - Preliminary subdivision plat-Required plans.

The preliminary subdivision plat shall specifically and clearly show the following features and information on the maps, drawings, application form or attachments. All maps and site drawings shall be at a minimum scale of one inch to fifty feet.

A. Site Plan. A detailed site development plan showing the location and dimensions of lots, streets, pedestrian ways, transit stops, common areas, building envelopes and setbacks, all existing and proposed utilities and improvements including sanitary sewer, stormwater and water facilities, total impervious surface created (including streets, sidewalks, etc.) and an indication of existing and proposed land uses for the site. If required by staff at the pre-application conference, a subdivision connectivity analysis shall be prepared by a transportation engineer licensed by the State of Oregon that describes the existing and future vehicular, bicycle and pedestrian connectivity analysis shall include shadow plats of adjacent properties demonstrating how lot and street patterns within the proposed subdivision will extend to and/or from such adjacent properties and can be developed meeting the existing Oregon City Municipal Code design standards.

<u>RESPONSE</u>: The preliminary plans include a preliminary site plan. The above listed information, as applicable, is included on the preliminary site plan or other plan in the plan set. This submittal requirement is met.

B. Traffic/Transportation Plan. The applicant's traffic/transportation information shall include two elements: (1) A detailed site circulation plan showing proposed vehicular, bicycle, transit and pedestrian access points and connections to the existing system, circulation patterns and connectivity to existing rights-of-way or adjacent tracts, parking and loading areas and any other transportation facilities in relation to the features illustrated on the site plan; and (2) a traffic impact study prepared by a qualified professional transportation engineer, licensed in the state of Oregon, that assesses the traffic impacts of the proposed development on the existing transportation system and analyzes the adequacy of the proposed internal transportation network to handle the anticipated traffic and the adequacy of the existing system to accommodate the traffic from the proposed development. The City Engineer may waive any of the foregoing requirements if determined that the requirement is unnecessary in the particular case.

<u>RESPONSE</u>: The preliminary plans include a detailed site preliminary site circulation plan containing the above listed information. In addition, a Traffic Impact Study (TIS), prepared in accordance with City requirements is also included in the submittal materials. This submittal requirement is met.

C. Natural Features Plan and Topography, Preliminary Grading and Drainage Plan. The applicant shall submit a map illustrating all of the natural features and hazards on the subject property and, where practicable, within two hundred fifty feet of the property's boundary. The map shall also illustrate the approximate grade of the site before and after development. Illustrated features must include all proposed streets and cul-de-sacs, the location and estimated volume of all cuts and fills, and all stormwater management features. This plan shall identify the location of drainage patterns and courses on the site and within two hundred fifty feet of the property boundaries where practicable. Features that must be illustrated shall include the following:

<u>RESPONSE</u>: The preliminary plans include an existing condition plan and a preliminary grading and drainage plan. Also, a preliminary stormwater report containing the above listed information is included, as applicable. This submittal requirement is met.

- 1. Proposed and existing street rights-of-way and all other transportation facilities;
- 2. All proposed lots and tracts;

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- 3. All trees proposed to be removed prior to final plat with a diameter six inches or greater diameter at breast height (d.b.h);
- 4. All natural resource areas pursuant to Chapter 17.49, including all jurisdictional wetlands shown in a delineation according to the Corps of Engineers Wetlands Delineation Manual, January, 1987 edition, and approved by the Division of State Lands and wetlands identified in the City of Oregon Local Wetlands inventory, adopted by reference in the City of Oregon City comprehensive plan;
- 5. All known geologic and flood hazards, landslides or faults, areas with a water table within one foot of the surface and all flood management areas pursuant to Chapter 17.42
- 6. The location of any known state or federal threatened or endangered species;
- 7. All historic areas or cultural features acknowledged as such on any federal, state or city inventory;
- 8. All wildlife habitat or other natural features listed on any of the city's official inventories.

<u>RESPONSE</u>: The preliminary plans and/or other materials in the application package contain the above listed information, as applicable. This submittal requirement is met.

- D. Archeological Monitoring Recommendation. For all projects that will involve ground disturbance, the applicant shall provide,
- 1. A letter or email from the Oregon State Historic Preservation Office Archaeological Division indicating the level of recommended archeological monitoring on-site, or demonstrate that the applicant had notified the Oregon State Historic Preservation Office and that the Oregon State Historic Preservation Office had not commented within forty-five days of notification by the applicant; and
- 2. A letter or email from the applicable tribal cultural resource representative of the Confederated Tribes of the Grand Ronde, Confederated Tribes of the Siletz, Confederated Tribes of the Umatilla, Confederated Tribes of the Warm Springs and the Confederated Tribes of the Yakama Nation indicating the level of recommended archeological monitoring on-site, or demonstrate that the applicant had notified the applicable tribal cultural resource representative had not commented within forty-five days of notification by the applicant.

If, after forty-five days notice from the applicant, the Oregon State Historic Preservation Office or the applicable tribal cultural resource representative fails to provide comment, the city will not require the letter or email as part of the completeness review. For the purpose of this section, ground disturbance is defined as the movement of native soils. The community development director may waive any of the foregoing requirements if the community development director determines that the requirement is unnecessary in the particular case and that the intent of this chapter has been met.

<u>RESPONSE</u>: Based upon feedback provided to the applicant at the pre-application conference, this submittal requirement is not applicable.

Chapter 16.08.030 – Preliminary Subdivision Plat – Narrative Statement

In addition to the plans required in the previous section, the applicant shall also prepare and submit a narrative statement that addresses the following issues:

A. Subdivision Description. A detailed description of the proposed development, including a description of proposed uses, number and type of residential units, allocation and ownership of all lots, tracts, streets, and public improvements, the structure of any homeowner's association, and each instance where the proposed

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 13 OF 33 subdivision will vary from some dimensional or other requirement of the underlying zoning district. For each such variance, a separate application will be required pursuant to Chapter 17.60, Variances;

<u>RESPONSE</u>: A detailed description of the proposed subdivision including the above listed information, as applicable, is included in Sections I and II of this written statement. Please refer to chapter 17.60 for a discussion of the variance that is being requested. This submittal requirement is met.

B. Timely Provision of Public Services and Facilities. The applicant shall explain in detail how and when each of the following public services or facilities is, or will be, adequate to serve the proposed development by the time construction begins:

1. Water

<u>RESPONSE</u>: There is an existing public water main stubbed at the end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend this public main through the site and provide individual private water services to the lots. This standard is met.

2. Sanitary Sewer

<u>RESPONSE</u>: There is an existing public sanitary sewer main at the end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend the public main strategically through the site and provide individual private sanitary sewer service laterals to the lots from the new mains or from the existing main. This standard is met.

3. Storm Sewer and Storm Water Drainage

RESPONSE: There is an existing public storm sewer main at the end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend a public main strategically though the site. Runoff is proposed to be captured with a combination of storm service laterals and curb inlet catch basins. Due to existing elevation and grade constraints, stormwater runoff will be routed in two directions with the majority of the stormwater flowing to an existing offsite sub-regional stormwater facility and the remaining stormwater being routed to the existing ditch on Maplelane Road. For additional information, please refer to the preliminary stormwater report that is included in the application submittal materials. This standard is met.

4. Parks and Recreation

<u>RESPONSE</u>: Park System Development Charges will be assessed and paid at the time building permits are issued for future park development in the area. This assures required funding for parks.

5. Traffic and Transportation

RESPONSE: A Traffic Impact Study (TIS) for this project, prepared by Lancaster Engineering, is included with the application. Appropriate street improvements are proposed for the project, as illustrated in the preliminary project plans. The TIS found that the existing streets, along with those proposed public streets, are adequate to accommodate the small amount of additional

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 14 OF 33 traffic created by this project. In addition, Transportation System Development Charges will be paid for each new home prior to issuance of a building permit. These fees fund future City and County public works road improvement projects. Please refer to the TIS for additional information. This standard is met.

6. Schools

<u>RESPONSE</u>: The Oregon City School District will provide school services for the children of future residents. School funding is provided through a variety of sources including property taxes and surcharges (construction excise tax) that will be assessed with future building permits for the homes. This standard is met.

7. Fire and Police Services

<u>RESPONSE</u>: Clackamas Fire District No. 1 will provide fire services. There are no noted concerns. Property taxes will be paid by future property owners to fund fire protection services, thereby ensuring funding for fire protection services.

The City of Oregon City Police Department will provide police services. Property taxes will be paid by future property owners to fund police protection services, thereby ensuring funding for police protection services. This standard is met.

Where adequate capacity for any of these public facilities and services is not demonstrated to be currently available, the applicant shall describe how adequate capacity in these services and facilities will be financed and constructed before recording of the plat;

<u>RESPONSE</u>: As described above, all public facilities and services are available. Therefore, this standard does not apply to this application.

C. Approval Criteria and Justification for Variances. The applicant shall explain how the proposed subdivision is consistent with the standards set forth in Chapter 16.12, 12.04 and any other applicable approval standards identified in the municipal code. For each instance where the applicant proposes a variance from some applicable dimensional or other numeric requirement, the applicant shall address the approval criteria from Chapter 17.60

<u>RESPONSE</u>: Please refer to the findings provided in response to the variance that has been requested.

D. Drafts of the proposed covenants, conditions and restrictions (CC&Rs), maintenance agreements, homeowner association agreements, dedications, deeds easements, or reservations of public open spaces not dedicated to the city, and related documents for the subdivision;

RESPONSE: Draft CC&R's are included in the application submittal materials. This standard is met.

E. A description of any proposed phasing, including for each phase the time, acreage, number of residential units, amount of area for nonresidential use, open space, development of utilities and public facilities;

CRABTREE TERRACE NO. 2– SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 15 OF 33 **<u>RESPONSE</u>**: Although Crabtree Terrace No. 2 is the second phase of a project, it is being proposed to be completed in one single phase. Therefore, this standard does not apply to this application.

F. Overall density of the subdivision and the density by dwelling type for each.

RESPONSE: The site is approximately 190,124 square feet (4.36 acres) in size. The required minimum lot size is 3,500 square feet. The average lot area proposed in the project is 4,333 square feet. Due to right-of-way dedications, the net developable area for the project site is 130,031 square feet. Divided by 3,500, the maximum number of lots (density) is 37.15 units. Eighty percent of 37.15 is 29.72, or 30 units. Therefore, the proposed subdivision complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable site. All future homes will be single family detached dwelling units.

16.08.035 - Notice and invitation to comment.

Upon the city's determination that an application for a preliminary subdivision plat is complete, pursuant to Section 17.50, the city shall provide notice of the application in accordance with requirements of Section 17.50 applicable to Type II decisions.

<u>RESPONSE</u>: Upon the City's review and completeness determination for this application, the City shall provide notice in accordance with Section 17.50 of the OCMC.

16.08.040 - Preliminary subdivision plat—Approval standards and decision.

The minimum approval standards that must be met by all preliminary subdivision plats are set forth in Chapter 16.12, and in the dimensional and use requirements set forth in the chapter of this code that corresponds to the underlying zone. The community development director shall evaluate the application to determine that the proposal does, or can through the imposition of conditions of approval, meet these approval standards. The community development director's decision shall be issued in accordance with the requirements of Section 17.50.

RESPONSE: This written statement includes findings of fact demonstrating that the application complies with all applicable approval criteria. These findings are supported by substantial evidence which includes preliminary plans, a Traffic Impact Study (TIS), and other written documentation. This information, which is included in this application package, provides the basis for the City to approve the application.

16.08.045 - Building site—Frontage width requirement.

Each lot in a subdivision shall abut upon a cul-de-sac or street other than an alley for a width of at least twenty feet.

<u>RESPONSE</u>: As shown in the preliminary plans, each proposed lot has in excess of twenty feet of frontage on a street. This standard is met.

16.08.050 - Flag lots in subdivisions.

Flag lots shall not be permitted within subdivisions except as approved by the community development director and in compliance with the following standards.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY March 2012 Page 16 of 33 **<u>RESPONSE</u>**: Flag lots are not proposed and are not relevant to this application. Therefore, these standards have been omitted from this written response and findings are not provided.

16.08.055 - Final subdivision plat—Application requirements and approval standards.

The applicant shall apply for final subdivision plat approval within twenty-four months following approval of a preliminary subdivision plat. The applicant shall apply for final plat approval to the city and shall pay the applicable fees as set forth on the city's adopted fee schedule. The final subdivision plat is processed as an administrative decision by the city so long as the final subdivision plat is consistent with the approved preliminary subdivision plat as conditioned by the decision-maker.

- A. If the community development director determines that the final subdivision plat submitted by the applicant is not consistent with the approved preliminary subdivision plat, the modified subdivision shall be subject to the same Type II process and review standards as were applicable to the preliminary subdivision plat. However, if such a review is necessary, the review shall be limited only to those aspects of the final subdivision plat that deviate from the approved preliminary subdivision plat. The decision-maker's original approval of all other aspects of the subdivision may be relied upon as a conclusive determination of compliance with the applicable standards.
- B. The community development director shall approve a final subdivision plat that is consistent with the approved preliminary subdivision plat, including any conditions attached thereto and required permits for access to facilities owned by another jurisdiction.

<u>RESPONSE</u>: A final subdivision plat, that is consistent with the approved preliminary plat, will be submitted to the City prior to recordation.

Chapter 16.12 Minimum Improvements and Design Standards for Land Divisions

Chapter 16.12.015 - Street Design-Generally

Street design standards for all new development and land divisions shall comply with Chapter 12.04—Street Design Standards.

<u>RESPONSE</u>: Please refer to the written response provided to Chapter 12.04 for appropriate findings demonstrating compliance with the Street Design Standards. These standards are met.

16.12.020 Blocks - Generally.

The length, width and shape of blocks shall take into account the need for adequate building site size, convenient motor vehicle, pedestrian, bicycle and transit access, control of traffic circulation, and limitations imposed by topography and other natural features.

16.12.025 Blocks - Length.

Block lengths for local streets and collectors shall not exceed five hundred feet between through streets, as measured between nearside right-of-way lines.

16.12.030 Blocks - Width.

The width of blocks shall ordinarily be sufficient to allow for two tiers of lots with depths consistent with the type of land use proposed.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY March 2012 Page 17 of 33 **<u>RESPONSE</u>**: As demonstrated on the preliminary plans, the block lengths do not exceed 500 feet between through streets and the widths allow for two tiers of lots that are appropriate for the area and are suitable for single-family residential development. These standards are met.

16.12.035 Blocks--Pedestrian and Bicycle Access.

To facilitate the most practicable and direct pedestrian and bicycle connections to adjoining or nearby neighborhood activity centers, public rights-of-way, and pedestrian/bicycle accessways which minimize out-of-direction travel, subdivisions shall include pedestrian/bicycle access-ways between discontinuous street right-of-way where the following applies:

- 1. Where a new street is not practicable;
- 2. Through excessively long blocks at intervals not exceeding five hundred feet of frontage as measured between nearside right-of-way lines; or
- 3. Where the lack of street continuity creates inconvenient or out of direction travel patterns for local pedestrian or bicycle trips.

RESPONSE: As demonstrated on the preliminary plans, the proposed street system, which includes public sidewalks, provides for exceptionally convenient pedestrian and bicycle access and connectivity. There are no locations where a pedestrian connection should be provided where a street (with sidewalks) is not already proposed. Therefore, pedestrian / bicycle specific connections, other than the proposed public sidewalk system, are not necessary and are not proposed. These standards are met.

16.12.040 Building Sites.

The size, width, shape and orientation of building sites shall be appropriate for the primary use of the land division, and shall be consistent with the residential lot size provisions of the zoning ordinance with the following exceptions:

<u>RESPONSE</u>: The size, width, depth, shape and orientation of the proposed lots are consistent with the requirements for the R-3.5 Zone, and the resulting building sites are illustrated in the preliminary plat.

16.12.045 Building Sites – Minimum Density

All subdivision layouts shall achieve at least 80% of the maximum density of the base zone for the net developable area as defined in Section 17.04.

RESPONSE: The site is approximately 190,124 square feet (4.36 acres) in size. The required minimum lot size is 3,500 square feet. The average lot area proposed in the project is 4,333 square feet. Due to right-of-way dedications, the net developable area for the project site is 130,031 square feet. Divided by 3,500, the maximum number of lots (density) is 37.15 units. Eighty percent of 37.15 is 29.72, or 30 units. Therefore, the proposed subdivision complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable site.

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16.12.050 Calculations of Lot Area.

A subdivision in the R-10, R-8, R-6, R-5, or R-3.5 Dwelling District may include lots that are up to 20% less than the required minimum lot area of the applicable zoning designation provided the entire subdivision on average meets the minimum site area requirement of the underlying zone. The average lot area is determined by calculating the total site area devoted to dwelling units and dividing that figure by the proposed number of dwelling lots.

Accessory dwelling units are not included in this determination nor are tracts created for non-dwelling unit purposes such as open space, storm water tracts, or access ways.

A lot that was created pursuant to this section may not be further divided unless the average lot size requirements are still met for the entire subdivision.

When a lot abuts a public alley, an area equal to the length of the alley frontage along the lot times the width of the alley right-of-way measured from the alley centerline may be added to the area of the abutting lot in order to satisfy the lot area requirement for the abutting lot. It may also be used in calculating the average lot area.

RESPONSE: The proposed subdivision includes 30 lots for the future construction of singlefamily detached home residential units in the R-3.5 zone. None of the lots are smaller than the 3,500 square feet this is required. The smallest lot is proposed to be 4,000 square feet in area. The average lot area, as calculated above is 4,333 square feet, which exceeds 3,500 square feet. This standard is met.

16.12.055 Building Site--Through Lots.

Through lots and parcels shall be avoided except where they are essential to provide separation of residential development from major arterials or to overcome specific disadvantages of topography of existing development patterns. A reserve strip may be required. A planting screen restrictive covenant may be required to separate residential development from major arterial streets, adjacent nonresidential development, or other incompatible use, where practicable. Where practicable, alleys or shared driveways shall be used for access for lots that have frontage on a collector or minor arterial street, eliminating through lots.

<u>RESPONSE</u>: No through lots are included in the proposed subdivision layout. The standard does not apply.

16.12.060 Building Site--Lot and Parcel Side Lines.

The lines of lots and parcels, as far as is practicable, shall run at right angles to the street upon which they face, except that on curved streets they shall be radial to the curve.

<u>RESPONSE</u>: The proposed lot lines, as far as is practicable, run at right angles to the street upon which they face. Please see the preliminary subdivision plat for further information. This standard is met.

16.12.065 Building Site--Grading.

Grading of building sites shall conform to the state of Oregon Structural Specialty Code, Chapter 18, any approved grading plan and any approved residential lot grading plan in accordance with the requirements of Chapter 15.48, 16.12 and the Public Works Stormwater and Grading Design Standards, and the erosion control requirements of Chapter 17.47.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY March 2012 Page 19 of 33 **RESPONSE:** Proposed grading, including building site grading (where appropriate), is shown on the preliminary plans. The plans demonstrate that Chapter 18, Chapter 15.48, Chapter 16.12, the Public Works Stormwater and Grading Design Standards, and the erosion control requirements of Chapter 17.47 are met. Please refer to the preliminary plans for further information.

16.12.070 Building Site--Setbacks and Building Location.

This standard ensures that lots are configured in a way that development can be orientated toward streets to provide a safe, convenient and aesthetically pleasing environment for pedestrians and bicyclists. The objective is for lots located on a neighborhood collector, collector or minor arterial street locate the front yard setback on and design the most architecturally significant elevation of the primary structure to face the neighborhood collector, collector or minor arterial street.

- *A.* The front setback of all lots located on a neighborhood collector, collector or minor arterial shall be orientated toward the neighborhood collector, collector or minor arterial street.
- B. The most architecturally significant elevation of the house shall face the neighborhood collector, collector or minor arterial street.
- C. On corner lots located on the corner of two local streets, the main facade of the dwelling may be oriented towards either street.
- D. All lots proposed with a driveway and lot orientation on a collector or minor arterial shall combine driveways into one joint access per two or more lots unless the City Engineer determines that:
 - 1. No driveway access may be allowed since the driveway(s) would cause a significant traffic safety hazard; or
 - 2. Allowing a single driveway access per lot will not cause a significant traffic safety hazard.
- E. The Community Development Director may approve an alternative design, consistent with the intent of this section, where the applicant can show that existing development patterns preclude the ability to practically meet this standard.

RESPONSE: No lots have frontage on an arterial or collector street. In order to comply with transportation planning requirements, all lots are oriented towards the local street. As shown on the preliminary site plan, all lots are proposed to be oriented towards local public streets, and no driveways or lot orientation is provided towards a collector or arterial road. Therefore, these standards are met.

16.12.075 Building Site--Division of Lots.

Where a tract of land is to be divided into lots or parcels capable of redivision in accordance with this chapter, the Community Development Director shall require an arrangement of lots, parcels and streets which facilitates future redivision. In such a case, building setback lines may be required in order to preserve future right-of-way or building sites.

<u>RESPONSE</u>: No proposed lots are capable of redivision in accordance with this Chapter. Therefore, this standard does not apply.

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16.12.080 Protection of Trees.

Protection of trees shall comply with the provisions of Chapter 17.41 – Tree Protection.

<u>RESPONSE</u>: Proposed tree protection, as shown on the preliminary plans, complies with the provisions of Chapter 17.41. Please refer to findings provided in that chapter later in this narrative document.

16.12.085 Easements.

The following shall govern the location, improvement and layout of easements:

- A. Utilities. Utility easements shall be required where necessary as determined by the city engineer. Insofar as practicable, easements shall be continuous and aligned from block-to-block within the land division and with adjoining subdivisions or partitions. Specific utility easements for water, sanitary or storm drainage shall be provided based on approved final engineering plans.
- B. Unusual Facilities. Easements for unusual facilities such as high voltage electric transmission lines, drainage channels and stormwater detention facilities shall be adequately sized for their intended purpose, including any necessary maintenance roads. These easements shall be shown to scale on the preliminary and final plats or maps. If the easement is for drainage channels, stormwater detention facilities or related purposes, the easement shall comply with the requirements of the Public Works Stormwater and Grading Design Standards.
- C. Watercourses. Where a land division is traversed or bounded by a watercourse, drainageway, channel or stream, a stormwater easement or drainage right-of-way shall be provided which conforms substantially to the line of such watercourse, drainageway, channel or stream and is of a sufficient width to allow construction, maintenance and control for the purpose as required by the responsible agency. For those subdivisions or partitions which are bounded by a stream of established recreational value, setbacks or easements may be required to prevent impacts to the water resource or to accommodate pedestrian or bicycle paths.
- D. Access. When easements are used to provide vehicular access to lots within a land division, the construction standards, but not necessarily width standards, for the easement shall meet city specifications. The minimum width of the easement shall be twenty feet. The easements shall be improved and recorded by the applicant and inspected by the city engineer. Access easements may also provide for utility placement.
- E. Resource Protection. Easements or other protective measures may also be required as the Community Development Director deems necessary to ensure compliance with applicable review criteria protecting any unusual significant natural feature or features of historic significance.

RESPONSE: All appropriate utility easements are proposed to be provided. As shown on the preliminary plans, there are no unusual facilities, watercourses, or resource protection areas located on the subject site. Please refer to the preliminary plat and accompanying plans for further information. This standard is met.

16.12.090 Minimum Improvements--Procedures.

In addition to other requirements, improvements installed by the applicant either as a requirement of these or other regulations, or at the applicant's option, shall conform to the requirements of this title and be designed to city specifications and standards as set out in the City's facility master plan and Public Works Stormwater and Grading Design Standards. The improvements shall be installed in accordance with the following procedure:

A. Improvement work shall not commence until construction plans have been reviewed and approved by the city engineer and to the extent that improvements are in county or state right-of-way, they shall be approved by the responsible authority. To the extent necessary for evaluation of the proposal, the plans may be required before

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 21 OF 33 approval of the preliminary plat of a subdivision or partition. Expenses incurred thereby shall be borne by the applicant and paid for prior to final plan review.

- B. Improvements shall be constructed under the inspection and approval of the city engineer. Expenses incurred thereby shall be borne by the applicant and paid prior to final approval. Where required by the city engineer or other city decision-maker, the applicant's project engineer also shall inspect construction.
- C. Erosion control or resource protection facilities or measures are required to be installed in accordance with the requirements of Chapter 17.49 and the Public Works Erosion and Sediment Control Standards. Underground utilities, waterlines, sanitary sewers and storm drains installed in streets shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities and sanitary sewers shall be placed beyond the public utility easement behind to the lot lines.
- D. As-built construction plans and digital copies of as-built drawings shall be filed with the city engineer upon completion of the improvements.
- E. The City Engineer may regulate the hours of construction and access routes for construction equipment to minimize impacts on adjoining residences or neighborhoods.

RESPONSE: Proposed public improvements are illustrated in the preliminary plans. Work will commence when construction plans have been reviewed and approved by the City Engineer. Inspections of the improvements will be made, including erosion control measures. Upon completion of the improvements, as-built drawings will be filed with the City Engineer.

16.12.095 Minimum Improvements--Public Facilities and Services.

The following minimum improvements shall be required of all applicants for a land division under Title 16, unless the decision-maker determines that any such improvement is not proportional to the impact imposed on the City's public systems and facilities:

A. Transportation System. Applicants and all subsequent lot owners shall be responsible for improving the city's planned level of service on all public streets, including alleys within the land division and those portions of public streets adjacent to but only partially within the land division. All applicants shall execute a binding agreement to not remonstrate against the formation of a local improvement district for street improvements that benefit the applicant's property. Applicants are responsible for designing and providing adequate vehicular, bicycle and pedestrian access to their developments and for accommodating future access to neighboring undeveloped properties that are suitably zoned for future development. Storm drainage facilities shall be installed and connected to off-site natural or man-made drainageways. Upon completion of the street improvement survey, the applicant shall reestablish and protect monuments of the type required by ORS 92.060 in monument boxes with covers at every public street intersection and all points or curvature and points of tangency of their center line, and at such other points as directed by the city engineer.

RESPONSE: Public streets with public sidewalks are proposed in the subdivision to provide access to the lots / future homes and provide for neighborhood connectivity / circulation. The preliminary plans show the location and arrangement of these improvements. As shown on the preliminary plans, street improvements are proposed that continue existing stub streets (Nutmeg Lane) through the site and create new streets with future connection possibilities. These improvements accommodate all modes of travel. As required above, monument boxes at street corners and other required locations shall be installed and/or protected.

B. Stormwater Drainage System. Applicants shall design and install drainage facilities within land divisions and shall connect the development's drainage system to the appropriate downstream storm drainage system as a minimum requirement for providing services to the applicant's development. The applicant shall obtain county

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 22 OF 33 or state approval when appropriate. All applicants shall execute a binding agreement to not remonstrate against the formation of a local improvement district for stormwater drainage improvements that benefit the applicant's property. Applicants are responsible for extending the appropriate storm drainage system to the development site and for providing for the connection of upgradient properties to that system. The applicant shall design the drainage facilities in accordance with city drainage master plan requirements, Chapter 13.12 and the Public Works Stormwater and Grading Design Standards.

RESPONSE: There is an existing public storm sewer main at the end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend a public main strategically though the site. Runoff is proposed to be captured with a combination of storm service laterals and curb inlet catch basins. Due to existing elevation and grade constraints, the stormwater will be routed in two directions with the majority of the stormwater flowing to an existing offsite sub-regional stormwater facility and the remaining stormwater being routed to the existing ditch on Maplelane Road. For additional information, please refer to the preliminary stormwater report that is included in the application submittal materials. This standard is met.

C. Sanitary Sewer System. The applicant shall design and install a sanitary sewer system to serve all lots or parcels within a land division in accordance with the city's sanitary sewer design standards, and shall connect those lots or parcels to the city's sanitary sewer system, except where connection is required to the county sanitary sewer system as approved by the county. All applicants shall execute a binding agreement to not remonstrate against the formation of a local improvement district for sanitary sewer improvements that benefit the applicant's property. Applicants are responsible for extending the city's sanitary sewer system to the development site and through the applicant's property to allow for the future connection of neighboring undeveloped properties that are suitably zoned for future development. The applicant shall obtain all required permits and approvals from all affected jurisdictions prior to final approval and prior to commencement of construction. Design shall be approved by the city engineer before construction begins.

<u>RESPONSE</u>: There is an existing public sanitary sewer main at the end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend the public main strategically through the site and provide individual private sanitary sewer service laterals to the lots from the new mains or from the existing mains. This standard is met.

D. Water System. The applicant shall design and install a water system to serve all lots or parcels within a land division in accordance with the city public works water system design standards, and shall connect those lots or parcels to the city's water system. All applicants shall execute a binding agreement to not remonstrate against the formation of a local improvement district for water improvements that benefit the applicant's property. Applicants are responsible for extending the city's water system to the development site and through the applicant's property to allow for the future connection of neighboring undeveloped properties that are suitably zoned for future development.

<u>RESPONSE</u>: There is an existing public water main stubbed at the end of Nutmeg Lane adjacent to the subject site. As shown on the preliminary plans, the proposed project will extend this public main through the site and provide individual private water services to the lots. This standard is met.

E. Sidewalks. The applicant shall provide for sidewalks on both sides of all public streets, on any private street if so required by the decision-maker, and in any special pedestrian way within the land division. Exceptions to this requirement may be allowed in order to accommodate topography, trees or some similar site constraint. In the case of major or minor arterials, the decision-maker may approve a land division without sidewalks where sidewalks are found to be dangerous or otherwise impractical to construct or are not reasonably related to the applicant's development. The decision-maker may require the applicant to provide sidewalks concurrent with the issuance of the initial building permit within the area that is the subject of the land division application.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 23 OF 33 Applicants for partitions may be allowed to meet this requirement by executing a binding agreement to not remonstrate against the formation of a local improvement district for sidewalk improvements that benefit the applicant's property.

<u>RESPONSE</u>: As demonstrated on the preliminary plans, the proposed street system includes public sidewalks on both sides of all interior streets. This provides for exceptionally convenient pedestrian and bicycle access and connectivity for existing and future residents in the area. These standards are met.

F. Bicycle Routes. If appropriate to the extension of a system of bicycle routes, existing or planned, the decisionmaker may require the installation of separate bicycle lanes within streets and separate bicycle paths.

<u>RESPONSE</u>: As demonstrated on the preliminary plans, the proposed local street system includes public sidewalks and paved surfaces for bicycle travel. This provides for exceptionally convenient pedestrian and bicycle access and connectivity. Bicycle lane striping is not required by City standard for local streets. This standard is met.

G. Street Name Signs and Traffic Control Devices. The applicant shall pay the city and the city installs street name signs at all street intersections. The applicant shall install traffic control devices as directed by the city engineer. Street name signs and traffic control de-vices shall be in conformance with all applicable city regulations and standards.

<u>RESPONSE</u>: Street name signs and stop signs will be installed for the proposed streets, as required by the City Engineering staff. This standard is met.

H. Street Lights. The applicant shall install street lights which shall be served from an underground source of supply. Street lights shall be in conformance with all city regulations.

<u>RESPONSE</u>: Street lighting will be installed for the proposed streets, as required by the City Engineering staff. This standard is met.

I. Street Trees. Refer to Chapter 12.08, Street Trees.

<u>RESPONSE</u>: As discussed previously, street trees will be planted along all streets in the subdivision at such time as a building permit is issued and a home is approved for final inspection and occupancy. This standard is met.

J. Bench Marks. At least one bench mark shall be located within the subdivision boundaries using datum plane specified by the city engineer.

<u>RESPONSE</u>: The final subdivision plat will reference a bench mark utilizing the datum plane specified by the city engineer, as required. This standard is met.

K. Other. The applicant shall make all necessary arrangements with utility companies or other affected parties for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting and cable television, shall be placed underground.

<u>RESPONSE</u>: All appropriate easements shall be provided for public and private utility providers. Arrangements will be made with utility providers for the installation of these facilities.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 24 OF 33 L. Oversizing of Facilities. All facilities and improvements shall be designed to city standards as set out in the city's facility master plan, public works design standards, or other city ordinances or regulations. Compliance with facility design standards shall be addressed during final engineering. The city may require oversizing of facilities to meet standards in the city's facility master plan or to allow for orderly and efficient development. Where oversizing is required, the applicant may request reimbursement from the city for oversizing based on the city's reimbursement policy and funds available, or provide for recovery of costs from intervening properties as they develop.

<u>RESPONSE</u>: Properly sized public facilities will be provided throughout the project to serve the future homes. All public improvements will be designed by a registered professional engineer and reviewed and approved by City Engineering staff.

M. Erosion Control Plan--Mitigation. The applicant shall be responsible for complying with all applicable provisions of Chapter 17.47 with regard to erosion control.

<u>RESPONSE</u>: All proper erosion control measures shall be undertaken. A preliminary erosion control plan is included in the preliminary plans. Please refer to Chapter 17.47 for findings regarding erosion control.

TITLE 17 - ZONING

Chapter 17.16 R-3.5 Dwelling District

Chapter 17.16.020 – Permitted Uses

Permitted uses in the R-3.5 district are:

B. Single-family detached residential units;

<u>RESPONSE</u>: The proposed subdivision will allow for detached single family homes to be built. These are permitted as listed above in the R-3.5 District.

17.16.040 Dimensional Standards.

Dimensional standards in the R-3.5 District are:

- A. Minimum residential lot areas, three thousand five hundred square feet;
- B. Minimum lot width, twenty feet;
- C. Minimum lot depth, seventy feet;

<u>RESPONSE</u>: As demonstrated in the preliminary plat, each lot exceeds 3,500 square feet and is greater than 20 feet wide and 70 feet deep. These standards are met.

- D. Maximum building height, two and one-half stories, not to exceed thirty-five feet;
- E. Minimum required setbacks:
 - 1. Front yard five feet minimum setback,
 - 2. Front porch, zero feet minimum setback,
 - *3. Interior side yard, Detached unit five feet minimum*
 - 4. Corner side yard, ten-foot minimum setback,
 - 5. Rear yard, fifteen-foot minimum setback,
 - 6. Rear porch, ten-foot minimum setback.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 25 OF 33

- 7. Attached and detached garage, twenty feet minimum setback from the public right-of-way where access is taken, except for alleys. Detached garages on an alley shall be setback a minimum of five feet.
- F. Garage Standards: See Chapter 17.21 Residential Design Standards.
- G. Maximum Lot Coverage: The footprint of all structures 200 square feet or greater shall cover a maximum of fifty-five percent of the lot area.

<u>RESPONSE</u>: Future homes will comply with the above listed height restrictions and required setbacks. Setbacks for future dwellings in the subdivision are shown on the preliminary plans. These standards will be met.

17.20.015 Street Trees.

All new single or two-family dwellings or additions of 25 percent or more of the existing square footage of the home (including the living space and garage(s)) shall install a street tree along the frontage of the site, within the abutting developed right-of-way. Existing trees may be used to meet this requirement. A picture of the planted tree shall be submitted to the Planning Division prior to issuance of an occupancy. Upon approval by the Community Development Director, when a planter strip is not present, a tree may be placed within an easement on the abutting private property within 10 feet of the public right-of-way if a covenant is recorded for the property with the Clackamas County Recorders Office identifying the tree as a city street tree, subject to the standards in Chapter 12.08 of the Oregon City Municipal Code. The street tree shall be a minimum of 2-inchs in caliper and either selected from the Oregon City Street Tree List or approved by a certified arborist for the planting location.

<u>RESPONSE</u>: As discussed previously, street trees will be planted along all streets in the subdivision at such time as a building permit is issued and a home is approved for final inspection and occupancy. This standard is met.

17.21.010 - Purpose.

The intent of this chapter is to ensure new development is compatible with the goals and policies of the Park Place Concept Plan area and the historic architectural styles of Oregon City. Appropriate architectural styles include: Western Farmhouse/Vernacular, Bungalow, Queen Anne Vernacular and Foursquare. The 2006 Historic Review Board's Design Guidelines for New Construction include additional architectural descriptions of historic singlefamily structures in Oregon City.

<u>RESPONSE</u>: The homes are proposed to have front loaded garages; therefore they will comply with the requirement of this section.

Chapter 17.41 Tree Protection Standards

17.41.010 Tree Protection – Intent.

The intent of this chapter is to ensure that new development is designed in a manner that preserves trees to the maximum extent practicable. As a requirement of any Type II land use application, the siting of structures, roadways and utility easements, shall provide for the protection of tree resources to the maximum extent practicable. This chapter applies to all subdivision, partition and site plan and design review applications.

<u>RESPONSE</u>: The proposal involves no tree removal. Please refer to the preliminary plans for details related to tree protection. The standard is met.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 26 OF 33

Chapter 17.47 Erosion and Sediment Control

17.47.070 Erosion and sediment control plans.

- A. An application for an erosion and sediment control permit shall include an erosion and sediment control plan, which contains methods and interim measures to be used during and following construction to prevent or control erosion prepared in compliance with city of Oregon City public works standards for erosion and sediment control. These standards are incorporated herein and made a part of this title and are on file in the office of the city recorder.
- *B.* Approval Standards. An erosion and sediment control plan shall be approved only upon making the following findings:
 - 1. The erosion and sediment control plan meets the requirements of the city of Oregon City public works standards for erosion and sediment control incorporated by reference as part of this chapter;
 - 2. The erosion and sediment control plan indicates that erosion and sediment control measures will be managed and maintained during and following development. The erosion and sediment control plan indicates that erosion and sediment control measures will remain in place until disturbed soil areas are permanently stabilized by landscaping, grass, approved mulch or other permanent soil stabilizing measures.
- *C.* The erosion and sediment control plan shall be reviewed in conjunction with the requested development approval. If the development does not require additional review, the manager may approve or deny the permit with notice of the decision to the applicant.
- D. The city may inspect the development site to determine compliance with the erosion and sediment control plan and permit.
- *E.* Erosion that occurs on a development site that does not have an erosion and sediment control permit, or that results from a failure to comply with the terms of such a permit, constitutes a violation of this chapter.
- F. If the manager finds that the facilities and techniques approved in an erosion and sediment control plan and permit are not sufficient to prevent erosion, the manager shall notify the owner or his/her designated representative. Upon receiving notice, the owner or his/her designated representative shall immediately install interim erosion and sediment control measures as specified in the city of Oregon City public works standards for erosion and sediment control. Within three days from the date of notice, the owner or his/her designated representative shall submit a revised erosion and sediment control plan to the city. Upon approval of the revised plan and issuance of an amended permit, the owner or his/her designated representative shall immediately implement the revised plan.
- *G.* Approval of an erosion and sediment control plan does not constitute an approval of permanent road or drainage design (e.g., size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.)

RESPONSE: A preliminary erosion and sedimentation control plan is included in the preliminary plans. The plan includes measures that will ensure that sediment laden waters will not leave the site. A final erosion and sedimentation control plan will be submitted and approved before any construction activities commence. Please refer to the preliminary plans for further information.

Chapter 17.60 - VARIANCES

17.60.010 - Authority.

According to procedures set forth in Section 17.60.030, the planning commission or the community development director may authorize variances from the requirements of this title. In granting a variance, the planning commission or community development director may attach conditions to protect the best interests of the surrounding property or neighborhood and otherwise achieve the purposes of this title. No variances shall be granted to allow the use of property for a purpose not authorized within the zone in which the proposed use would be located.

CRABTREE TERRACE NO. 2– SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 27 OF 33 17.60.020 - Variances—Procedures.

A. A request for a variance shall be initiated by a property owner or authorized agent by filing an application with the city recorder. The application shall be accompanied by a site plan, drawn to scale, showing the dimensions and arrangement of the proposed development. When relevant to the request, building plans may also be required. The application shall note the zoning requirement and the extent of the variance requested. Procedures shall thereafter be held under Chapter 17.50. In addition, the procedures set forth in subsection D. of this section shall apply when applicable.

<u>RESPONSE</u>: This application represents the second phase of a subdivision (the adjacent 81 lot Crabtree Terrace Subdivision) that was first submitted to the City in 2006 (City file TP 07-05 and WR 07-13) and was completed with the final plat recording in 2008.

The property owner's goal with this application is to develop this portion of his property in a similar manner as was the first "phase" of the project, with a grid system of local public streets providing direct front loaded access to 4,000 - 5,000 square foot lots for single-family detached homes. This was his intent when he submitted the Crabtree Terrace No. 1 Subdivision application in 2006 (as shown in the attached approved shadow plat) and graded the property in 2007 and 2008 in accordance with a City approved grading permit. The owner had hoped to complete development of the entire property (including this portion) in 2009. However, the economic downturn of the past several years, which has especially impacted the residential housing market, has prevented him from meeting this goal.

In addition to the poor economy and housing market, a recent change in the Oregon City Municipal Code has occurred after approval of Crabtree Terrace Subdivision. The adoption of an alley requirement for R-3.5 properties (as this property is zoned) impacts the owner's ability to complete this project and achieve the goals for the property as originally conceived and approved. This standard is listed below.

OCMC 12.04.255 - Street design-Alleys.

Public alleys shall be provided in the following districts R-5, R-3.5, R-2, MUC-1, MUC-2 and NC zones unless other permanent provisions for private access to off-street parking and loading facilities are approved by the decision maker. The corners of alley intersections shall have a radius of not less than ten feet.

Since the property is zoned R-3.5, it is understood that the project needs to include alleys. As shown on the preliminary plans, and as described below, in lieu of providing alleys, the project includes off-street parking and loading facilities that are equal to or better than what would be provided with alleys. Due to a variety of factors including those listed below, alleys are not a viable way to complete this project.

• Previous Site Grading

Previously performed site work set up how remainder of site would be graded / developed. This site work was performed and completed in accordance with an approved 2007 Grading Permit. This grading permit issued based on the City's approval of the Crabtree Terrace Subdivision (City file TP 07-05 and WR 07-13). This work was completed in good faith prior to Code change regarding alleys.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 28 OF 33

• Site Dimensions / Geometry

The configuration of the site does not lend itself to providing alleys. The overall site dimensions and the existing street stub set up a logical "lot pattern" as shown in the preliminary plans. Nutmeg Lane runs in a north-south direction, and Purple Ash Way and Oregon Iris Way run in an east-west direction.

- There is no opportunity for an alley along the south boundary of the site (along the back of Lots 83-87) because it is the site boundary, there are existing developed lots with built homes, and there is a significant grade change along this line.
- There is no opportunity for an alley along the east boundary of the site (lots 87, 88, 105, and 106) because the "lot pattern" is not set up for it, it is a site boundary, it is the City Limits and Urban Growth Boundary, and there is an existing easement along the line.
- There is no opportunity for an alley along the north boundary of the site (along the back of lots 106-111) because it is a site boundary, the adjacent property is not being developed at this time, and there is a significant grade change along this line.
- There is no opportunity for an alley along the west boundary of the site (lots 82 and 95-98) because it is a site boundary, a portion of it is the City Limits, and there is a significant grade change.

Site boundaries prohibit the ability to develop and construct an alley, have a shared alley, and have the alley in a reciprocal access easement.

• Unintended / Undesirable Results

➢ Flat buildable lots − not possible

If alleys were introduced into the project they would eliminate the possibility of creating flat buildable lots. To deal with grade changes on alley loaded lots (where grade cannot be accommodated in rear yards), garages would need to be located underneath homes. This would necessitate taller homes with stairs. In addition to stairs within the homes, grading the site for alleys and alley loaded homes will require stairs to be built in the front yards to accommodate several feet of elevation gain because it cannot be accommodated in the rear yards.

It is widely understood, that due to mobility factors, homes with stairs typically do not appeal to older residents, who are a desirable and stable demographic. By not including alleys and the resulting homes with stairs, the property owner can include single level and master on the main homes which encourage, not discourage senior citizens in the proposed subdivision. In addition, stairways in front yards make pedestrian access more cumbersome for pedestrian access. By not including alleys and the front yards with stairs, the subdivision encourages, not discourage pedestrian access to the homes.

Loss of outdoor yards

The center area (lots 88-105) does not have adequate depth for a shared alley. With a depth of 80 foot for each lot, a 20-foot shared alley would effectively take away 10-feet from the lot. In addition to the 10 feet, there would need to be 20 feet for parking / maneuvering. The average

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 29 OF 33 home depth would be 40 feet, and the front yard (along the public street) contains a 10 foot public utility easement (PUE); therefore, the lots would not have any front or rear yards. There would be no areas to enjoy either a front or rear yard. Folks who live in Oregon City desire these areas.

Additional Impervious Surfaces

An alley loaded project will significantly increase the amount of paving required for the subdivision because in addition to the alleyways, frontage streets also need to be provided. This increase in impervious surfaces requires more downstream storage capacity to accommodate runoff volumes as well as additional treatment area than the proposed subdivision design.

Based upon the above, and after extensive conversations and meetings with the City, City staff determined that a variance application was the appropriate avenue to not include alleys within this project. Therefore, the property owner is initiating this application for a variance, concurrently with the request for the subdivision approval.

B. A nonrefundable filing fee, as listed in Section 17.50.[0]80, shall accompany the application for a variance to defray the costs.

RESPONSE: The appropriate application fees are included in the submittal materials.

C. Before the planning commission may act on a variance, it shall hold a public hearing thereon following procedures as established in Chapter 17.50. A Variance shall address the criteria identified in Section 17.60.030, Variances — Grounds.

<u>RESPONSE</u>: Upon review of the application, City staff shall schedule and provide appropriate notice for the required public hearing before the planning commission.

17.60.030 - Variance-Grounds.

A variance may be granted only in the event that all of the following conditions exist:

A. That the variance from the requirements is not likely to cause substantial damage to adjacent properties by reducing light, air, safe access or other desirable or necessary qualities otherwise protected by this title;

RESPONSE: The City zoning code allows for attached homes on 3,500 square foot lots in the R-3.5 zone with 5 foot rear yard setbacks to alleys. As illustrated on the preliminary plans, the proposed project involves single family detached homes on +/-4,300 square foot lots with 15 foot rear yard setbacks that will provide for separation between individual homes.

Light

Approval of the variance does not in any way reduce or negatively affect sunlight exposure for any other property or within the project site because it does not allow any buildings to be built any taller or closer to any property lines. In fact, approval of the variance facilitates the building of single-level homes. Both single and two story detached single-family homes which in turn reduces shadows and further increases exposure to natural sunlight than other development that

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 30 OF 33 is permitted in the R-3.5 District such as zero-lot line attached townhomes with five foot rear alley setbacks.

• Air

Due to the increased setbacks provided in the proposal, compared with what is allowed in the R-3.5 District (zero lot line – 5 foot alley setbacks), approval of the variance also provides for enhanced air circulation. Approval of the variance improves air quality not only due to this but also because not including alleys reduces the amount of paving and grading that is required, thus reducing air pollution (dust and fumes) created by heavy construction equipment.

• Safe Access

The proposal does not reduce or negatively affect pedestrian and/or vehicular access because curbs and landscape planter strips (with street trees) are proposed to separate pedestrian travel from vehicular travel. Combining driveways, as is proposed, provides an additional method of enhancing pedestrian safety because it maximizes the amount of curb exposure and minimizes the number of pedestrian / automobile conflicts in the project (driveways crossing sidewalks). In fact, streets without driveways can result in increased vehicle speeds due to drivers that would not be accounting for this potential conflict. Therefore, the proposal provides safe access in a manner that is consistent with that which would be provided in a similar project with alleys.

• Other Desirable or Necessary Qualities

In addition to the above, as a result of not creating alleys, less pavement surface is necessary, thereby allowing for additional pervious surfaces within the project. Reduction in pavement quantities is a well-established technique that reduces stormwater runoff and enhances downstream stormwater quality.

Without alleys, each home will have a rear yard. Rear yards provide homeowners, families, etc. the opportunity to quietly enjoy their property in an outdoor environment. Rear yards are utilized for outdoor gatherings with friends, relatives, and neighbors, cooking and dining, planting and tending to gardens, planting of trees and other vegetated screening, and provide areas for children to play sports. Many perspective home buyers, especially those with young children and/or pets will not consider a home without a rear yard. Alleys substantially impair and/or eliminate the opportunity for rear yards.

Based on the above, approval of the requested variance to not include alleys in the proposed subdivision will not cause substantial damage to adjacent properties by reducing light, air, safe access, or other desirable or necessary qualities protected by this title. This criteria is met.

B. That the request is the minimum variance that would alleviate the hardship;

<u>RESPONSE</u>: This is not a situation where a dimensional standard is to be varied. The request to not include alleyways is the minimum variance that will alleviate this hardship. This criteria is met.

CRABTREE TERRACE NO. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 31 OF 33 C. Granting the variance will equal or exceed the purpose of the regulation to be modified.

<u>RESPONSE</u>: Based on meetings with City Planning Staff, the applicant understands that the intent and purpose of the alley requirement relates primarily to three goals.

• Assure sufficient parking

It is anticipated that each lot will have a two car garage with a driveway that will provide for offstreet parking. Four off-street parking spaces per dwelling unit exceeds the minimum City requirement by three spaces. In addition, as shown on the preliminary plans, driveways are proposed to be combined where possible to maximize the availability of on-street parking. Therefore, the proposal will equal or exceed the amount of parking that would be provided in an alleyway scenario given the same lot sizes. This criteria is met.

• Provide a safe pedestrian environment.

As described above, the proposal will provide a safe pedestrian environment. Curbs and landscape planter strips (with street trees) are proposed to separate pedestrian travel from the street. Safe pedestrian environments with front entry loaded garages on 50 foot wide lots accessing local public streets are found in many areas throughout this country, including Oregon City. Combining driveways, as is proposed, provides an additional method of enhancing pedestrian safety because it maximizes the amount of curb exposure and minimizes the number of driveways. Nothing unusual is being proposed that would in any way be unsafe for pedestrians. Therefore, the proposal provides a safe pedestrian environment that an equals or exceeds that which would be provided if alleys were provided. This criteria is met.

• Provide an attractive pedestrian environment.

Based on conversations with City staff, it is understood that at the time this requirement was adopted, there was an aesthetic concern with attached townhomes and homes on very small/narrow lots being dominated by garages. This concern has been remedied with the adoption of the Residential Design Standards (garage standards) found in Chapter 17.21 which minimize effects of garages in the pedestrian environment and enhances the appearance of residential structures. The future homes in this project will be subject to these standards. Furthermore, the proposed lot widths in the project mitigate for any perceived garage widths because the lots equal or exceed 50 feet, surpassing the 25 foot minimum lot width requirement for the R-3.5 District by 25 feet (or 50%). Fifty-foot wide lots, as are proposed, satisfies the minimum lot width requirement for the R-6 zone, which does not require alleyways. Therefore, the view from the street (pedestrian environment) will be similar to an R-6 subdivision. These factors, combined with the fact that all future homes will be detached (as opposed to attached homes) ensures that this purpose will be met. This criteria is met.

D. Any impacts resulting from the adjustment are mitigated;

<u>RESPONSE</u>: Mitigation for not including alleys is proposed in the form of wider lots than is required (50 feet), detached homes (breaking up visual mass of structures), combined driveway

CRABTREE TERRACE No. 2- SUBDIVISION APPLICATION CITY OF OREGON CITY MARCH 2012 PAGE 32 OF 33 approaches (maximizing curb exposure and minimizing access points), and compliance with the Residential Design Standards (garage standards). This criteria is met.

E. No practical alternatives have been identified which would accomplish the same purpose and not require a variance; and

<u>RESPONSE</u>: Based upon conversations with City staff, the variance is the only avenue to address this need, and there is no practical alternative that would accomplish the same purpose and not require a variance. This criteria is met.

F. The variance conforms to the comprehensive plan and the intent of the ordinance being varied.

RESPONSE: The subject property is designated MR (Medium Density Residential) by the City Comprehensive Plan complemented by a City Zoning designation of R-3.5. The City has an adopted Municipal Code that implements requirements for Streets, Subdivisions and Zoning as they relate to citizen involvement, land use, housing, public facilities, and transportation. As demonstrated in this written narrative, preliminary plans, and other documentation included in the application materials, these requirements are satisfied. Because these portion of the Municipal Code implement the comprehensive plan, approval of the variance conforms to the comprehensive plan. As described above under Section C above, the proposed variance conforms to the intent of the ordinance being varied. This criteria is met.

IV. CONCLUSION

The submittal requirements have been met and the required findings have been made for all applicable approval criteria. These findings serve as the basis for the City of Oregon City to approve the application and are supported by substantial evidence in the application materials. Therefore, the applicant respectfully requests approval of the proposed 30-lot subdivision and the variance request to allow residential local street access (Crabtree Terrace No. 2) instead of alleys.

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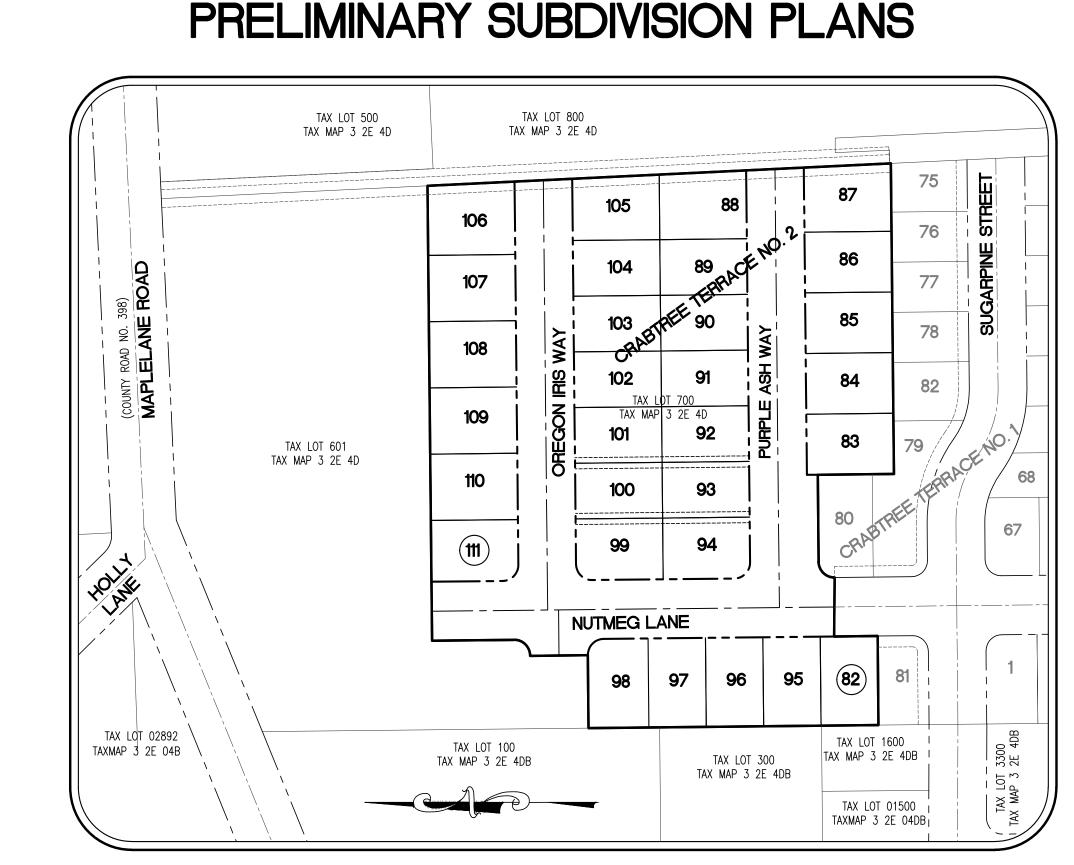
CRABTREE TERRACE NO. 2



VICINITY MAP NOT TO SCALE

SHEET INDEX

- COVER SHEET
- EXISTING CONDITIONS PLAN 2
- PRELIMINARY SUBDIVISION PLAT WITH BUILDING SETBACKS
- PRELIMINARY GRADING, EROSION CONTROL, AND TREE PLAN
- PRELIMINARY COMPOSITE UTILITY PLAN
- PRELIMINARY STREET PLAN 6
- PRELIMINARY STREET PROFILES AND CROSS-SECTIONS
- PRELIMINARY STREET PROFILES AND CROSS-SECTIONS 8
- PRELIMINARY CONNECTIVITY ANALYSIS AND TRANSPORTATION/ 9
- 10 PRELIMINARY AERIAL PHOTO PLAN
- 11 PRELIMINARY STREET TREE PLAN





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	PROJECT PURPOSE:	DETACHE & A VAR
/CIRCULATION PLAN	HORIZONTAL DATUM:	THE BA ESTABLI CENTER SUGARP PER TH

VERTICAL DATUM:

PROPERTY DESCRIPTION:

APPLICANT/OWNER

JOHN JONES CONSTRUCTION, INC. 16999 S. BRADLEY ROAD OREGON CITY, OR 97045

LAND USE PLANNING / CIVIL ENGINEERING / SURVEYING FIRM

AKS ENGINEERING & FORESTRY, LLC. CONTACT: MONTY HURLEY 13910 SW GALBREATH DRIVE, SUITE 100 SHERWOOD, OR 97140 PH: 503-925-8799 FAX: 503-925-8969

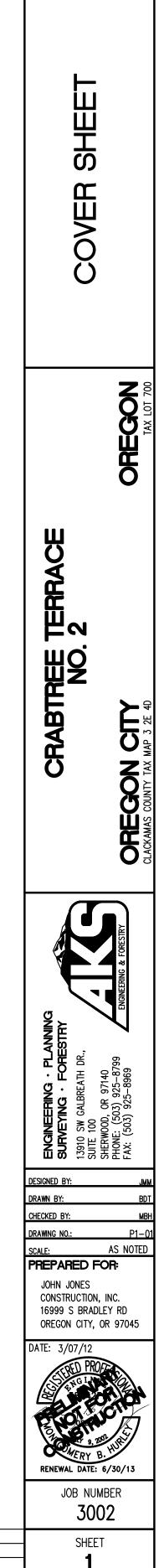
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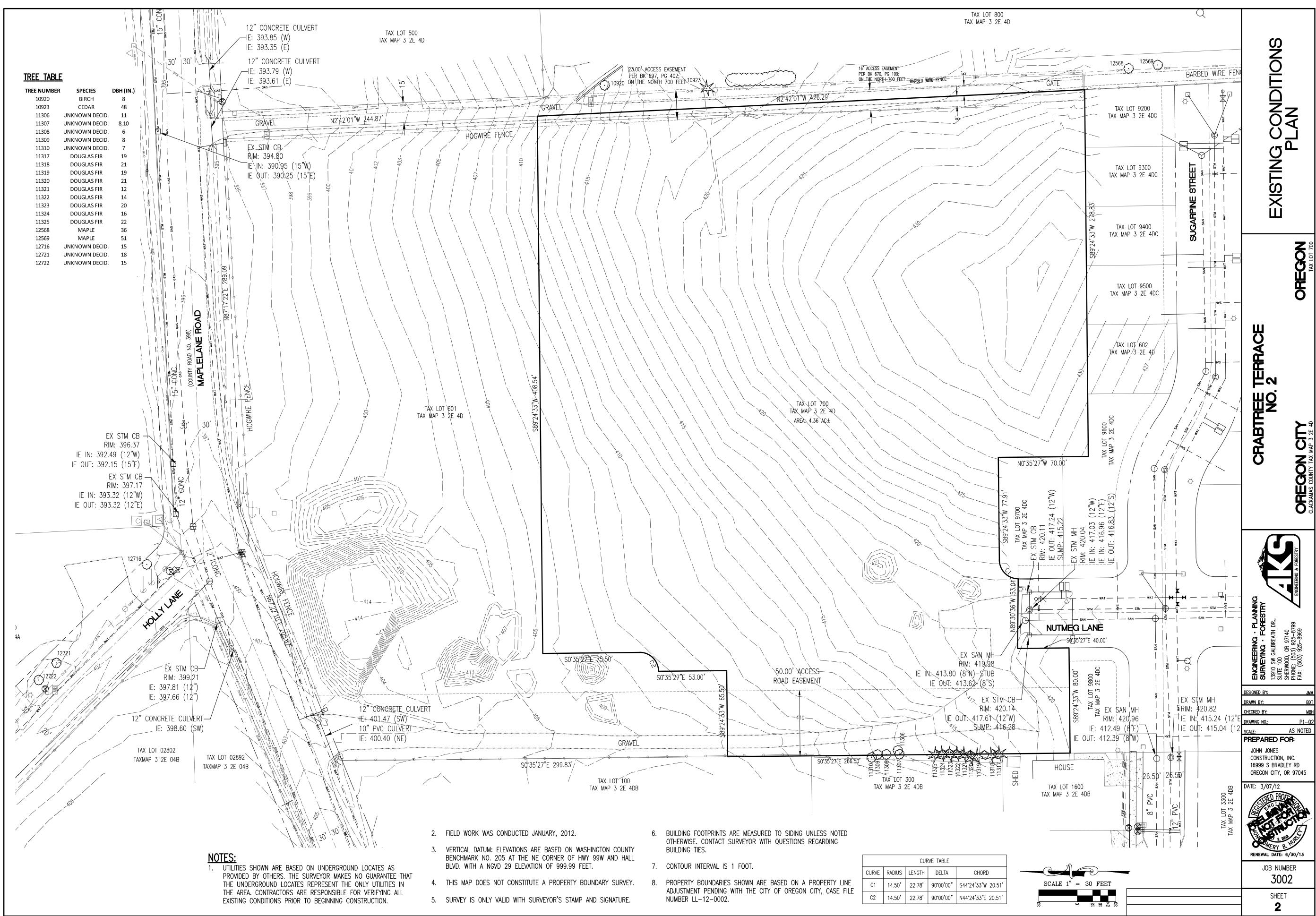
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CHED SINGLE-FAMILY RESIDENTIAL 30-LOT SUBDIVISION IN THE R-3.5 ZONE VARIANCE TO ALLOW FRONT-LOADED VEHICLE ACCESS TO LOCAL STREETS

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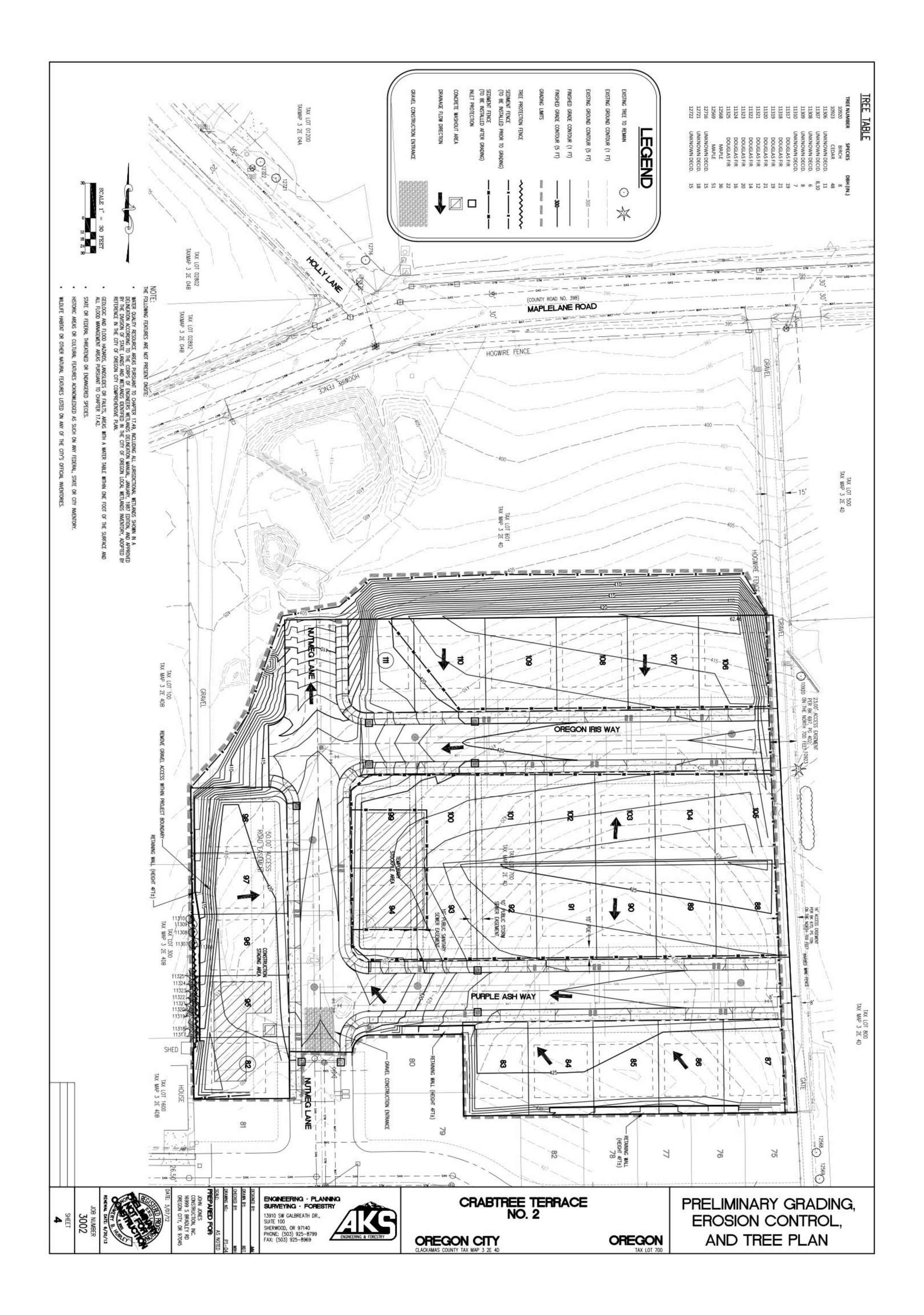
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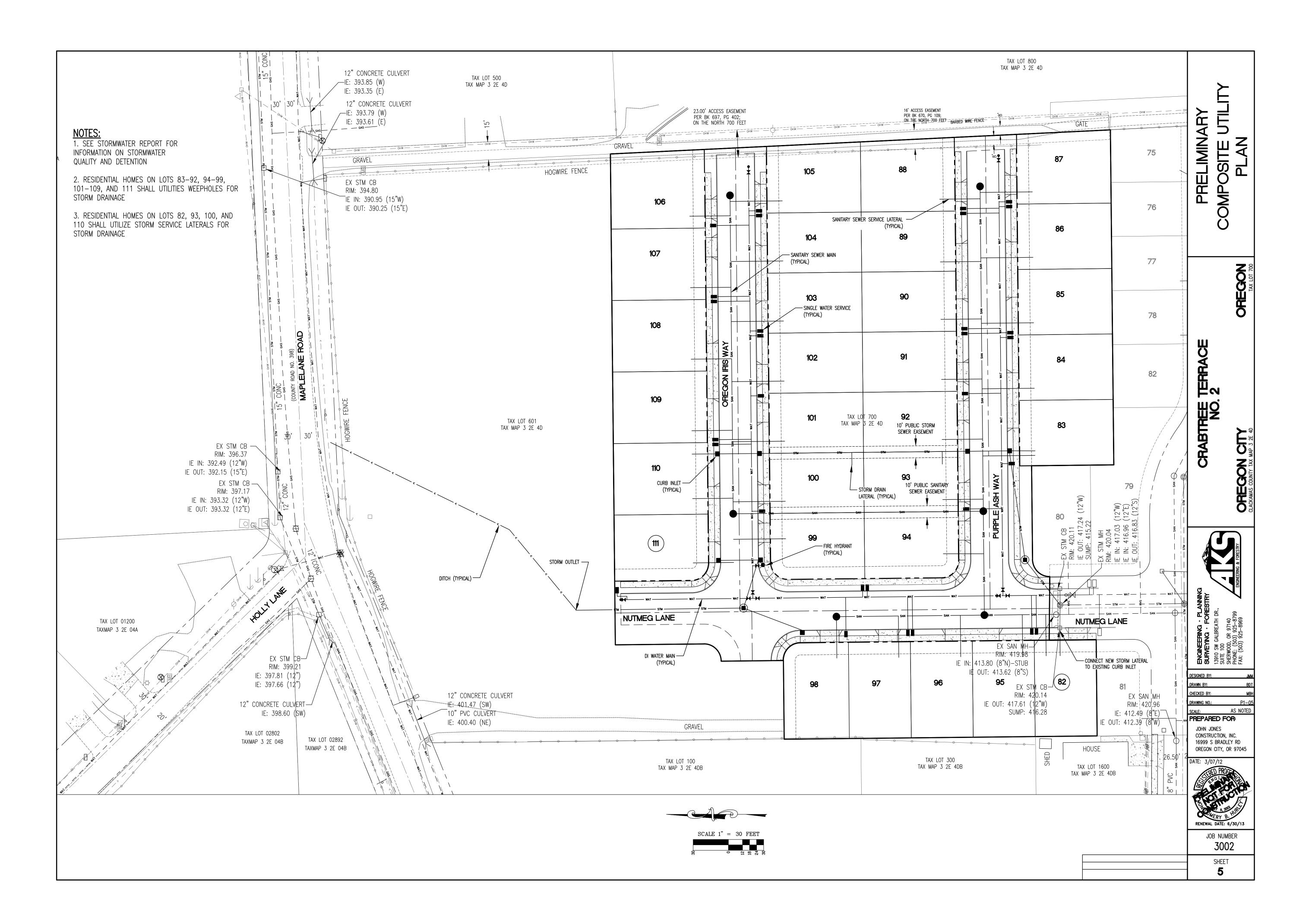


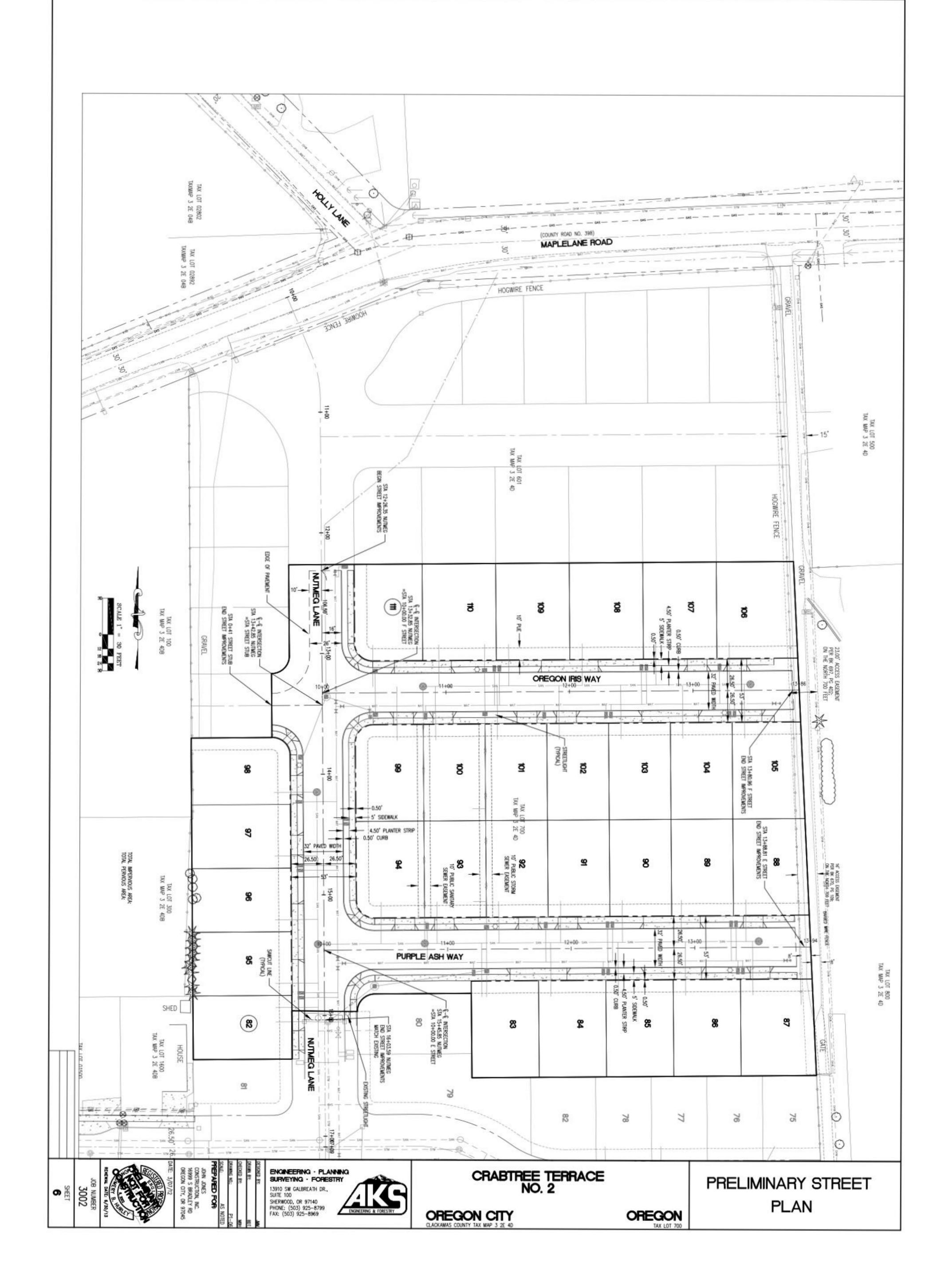
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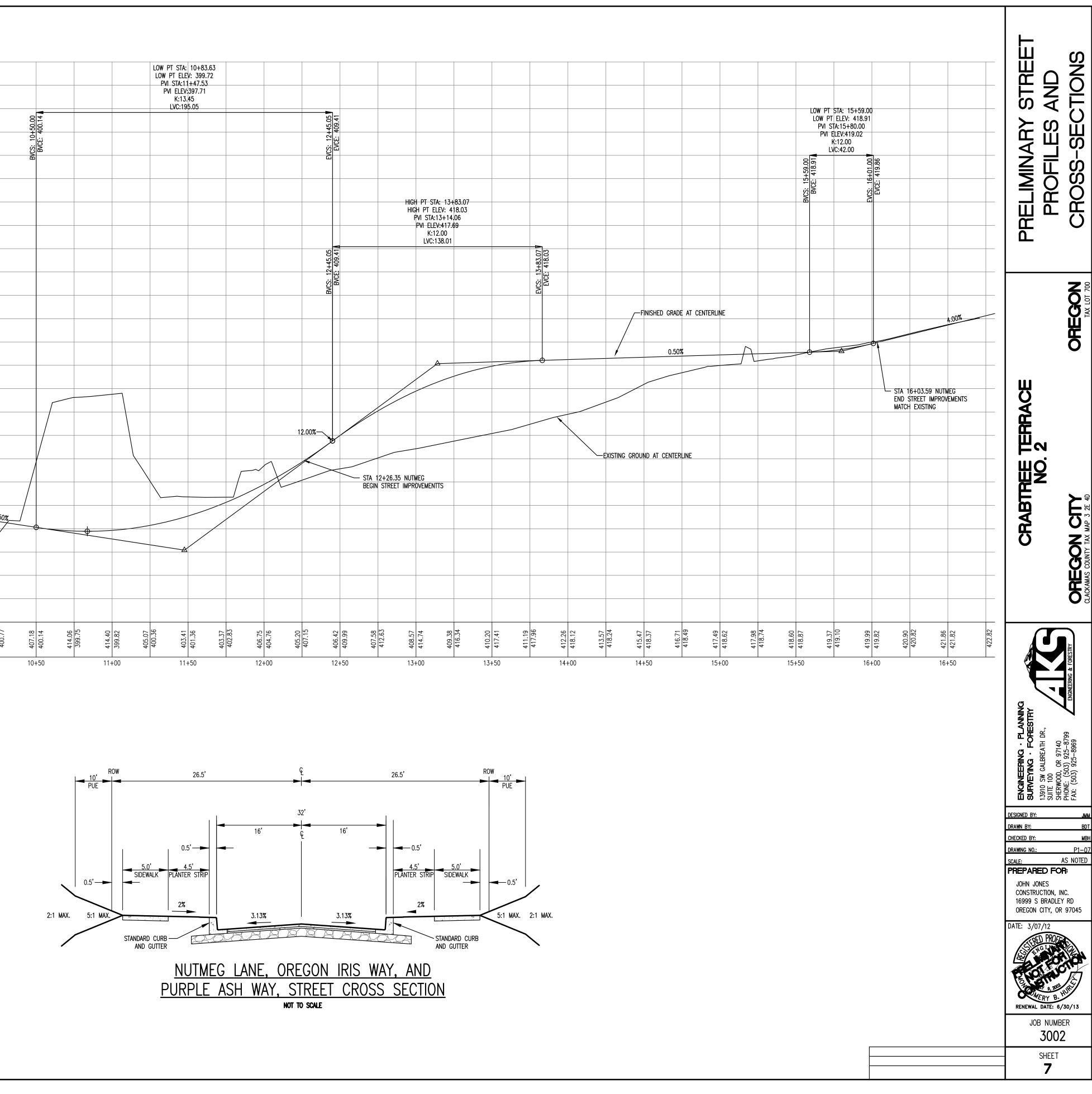


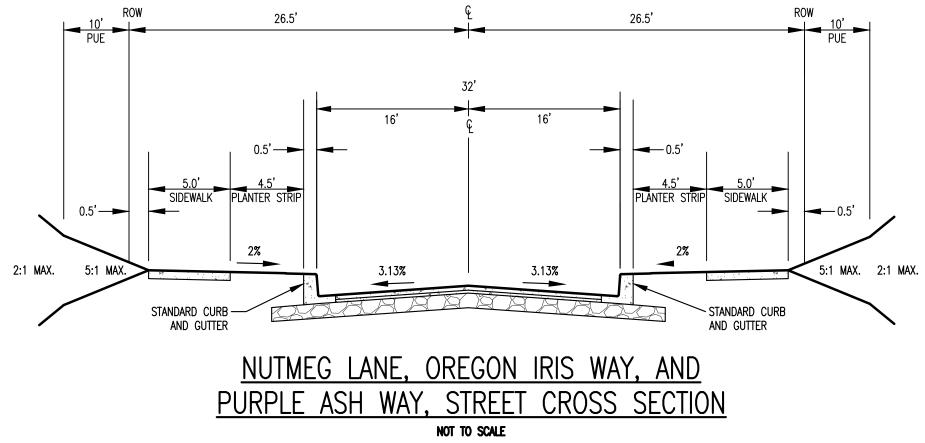




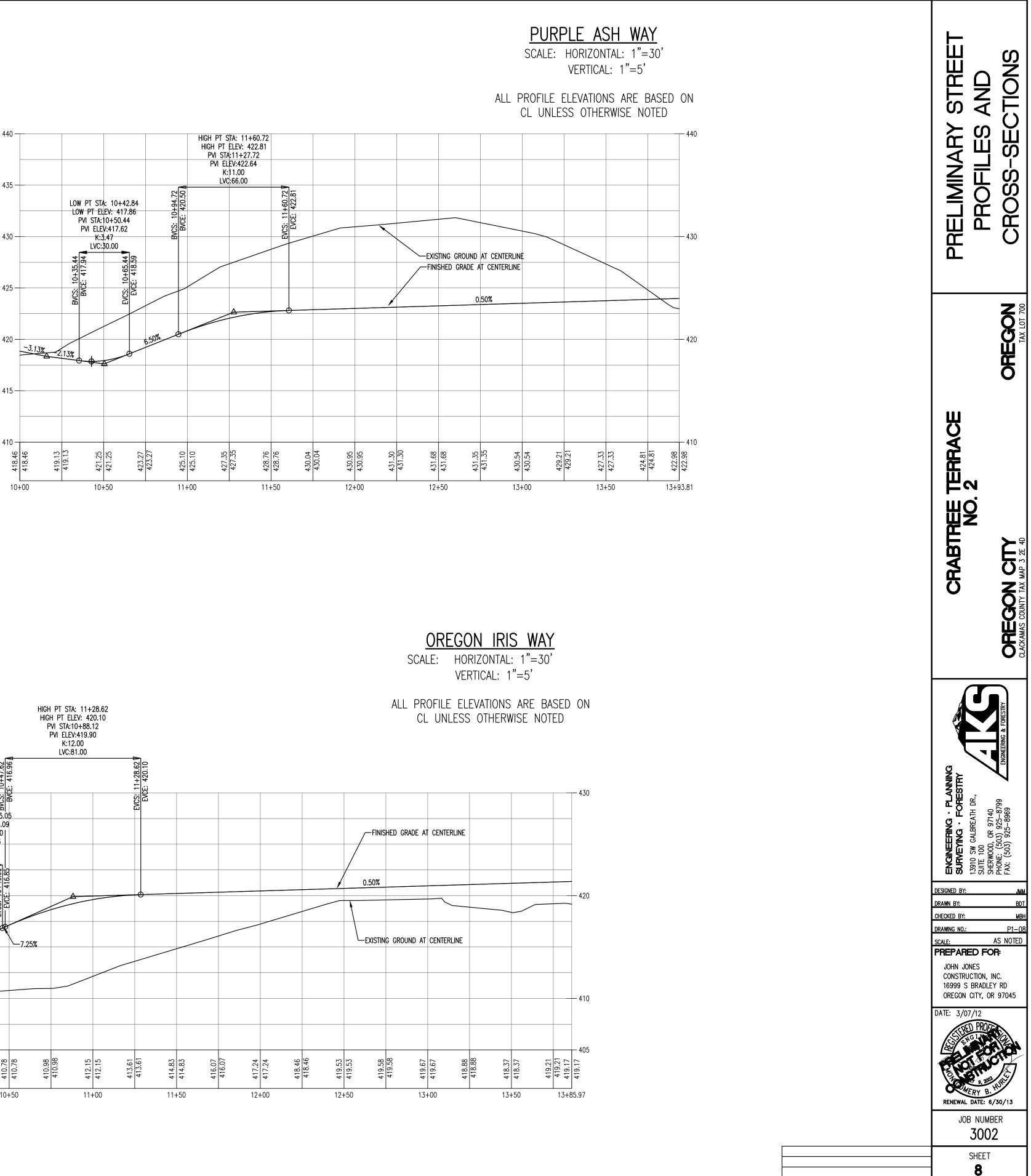
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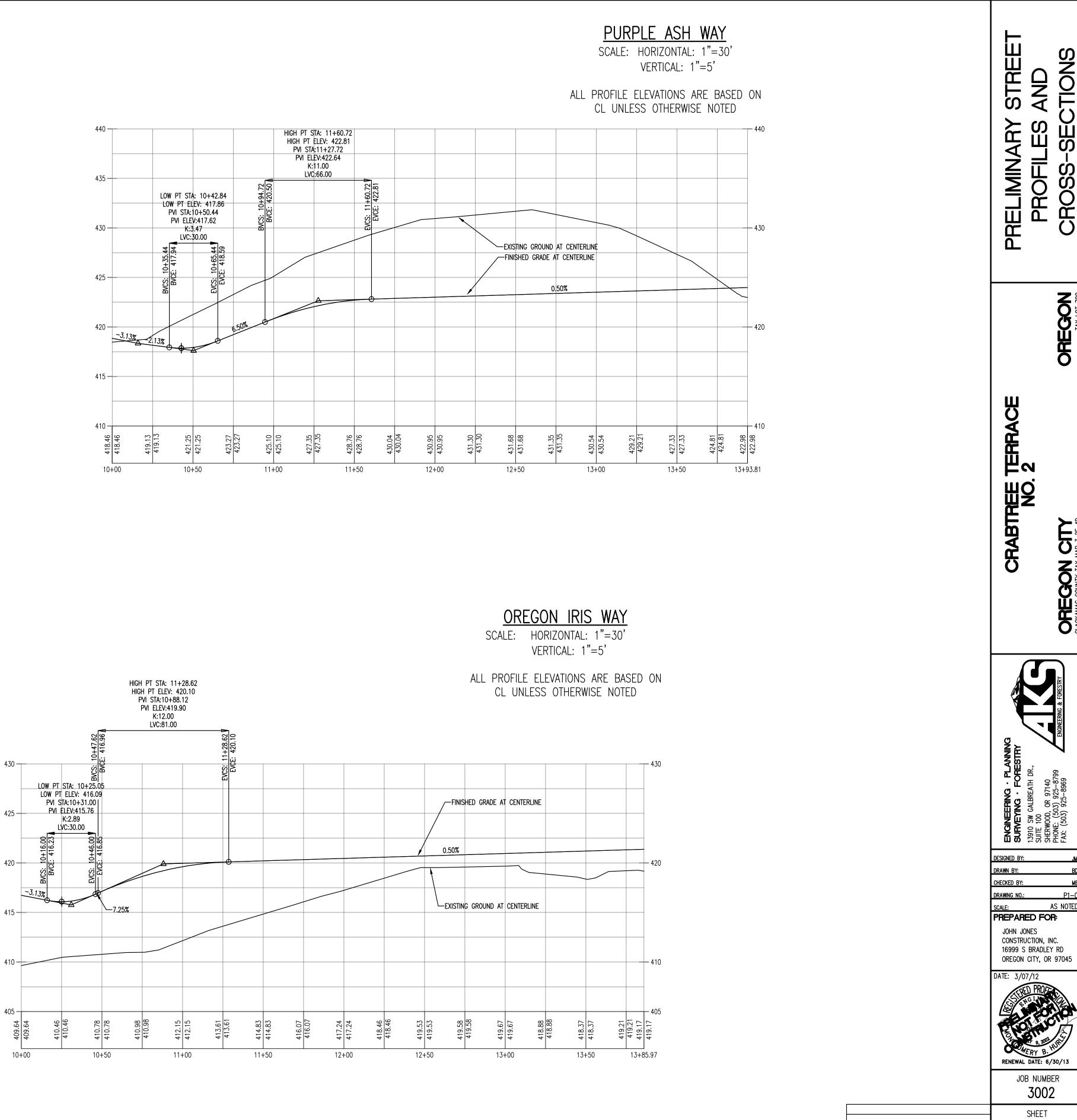
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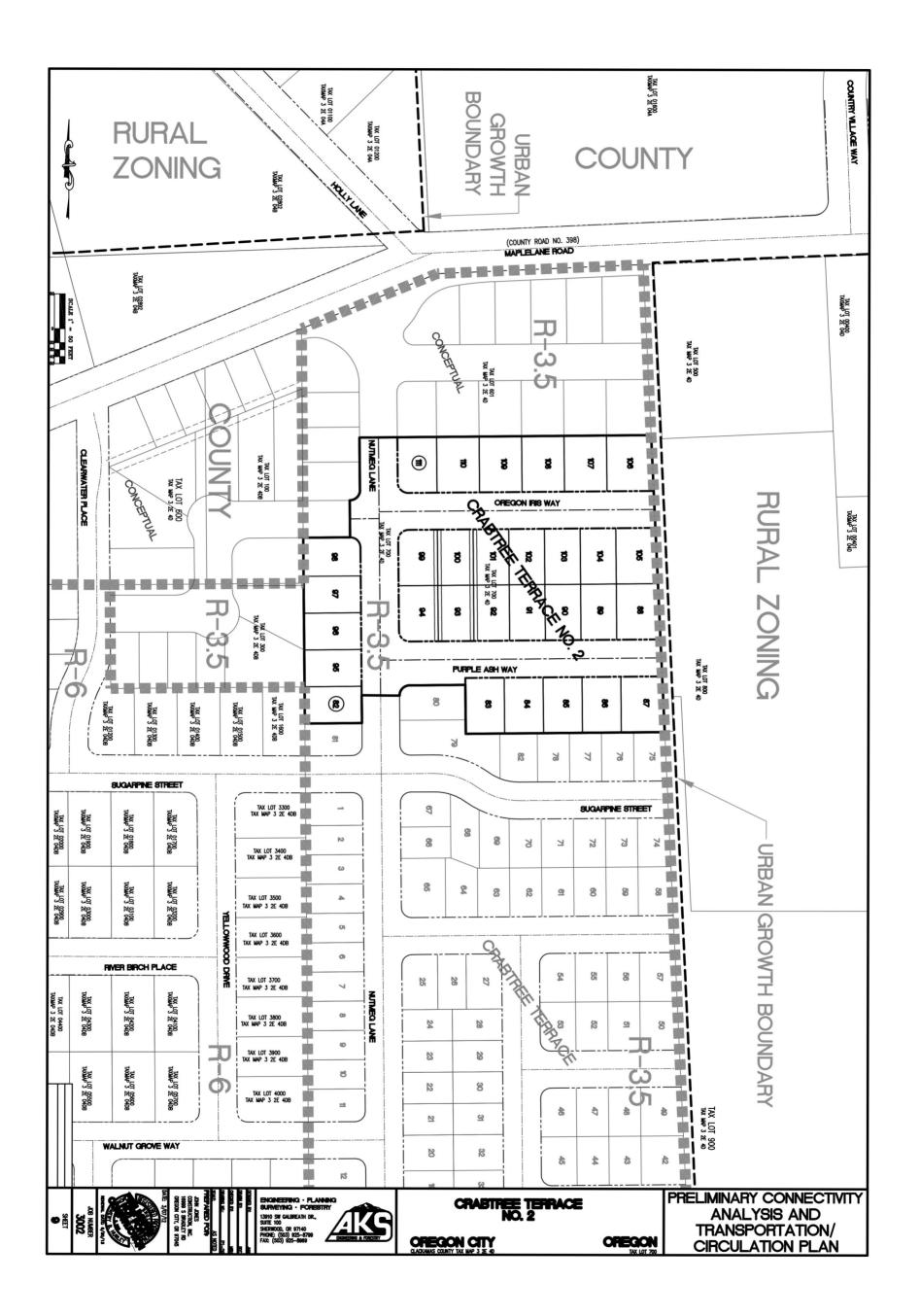




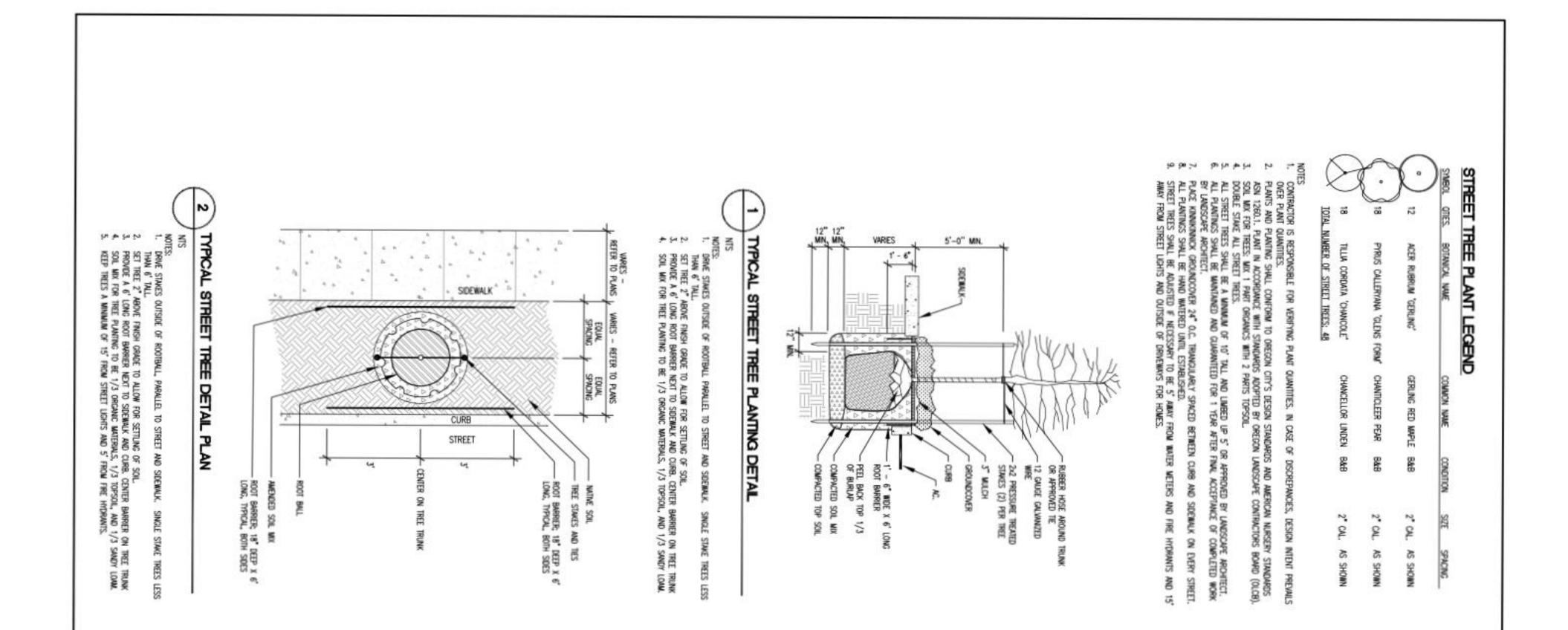
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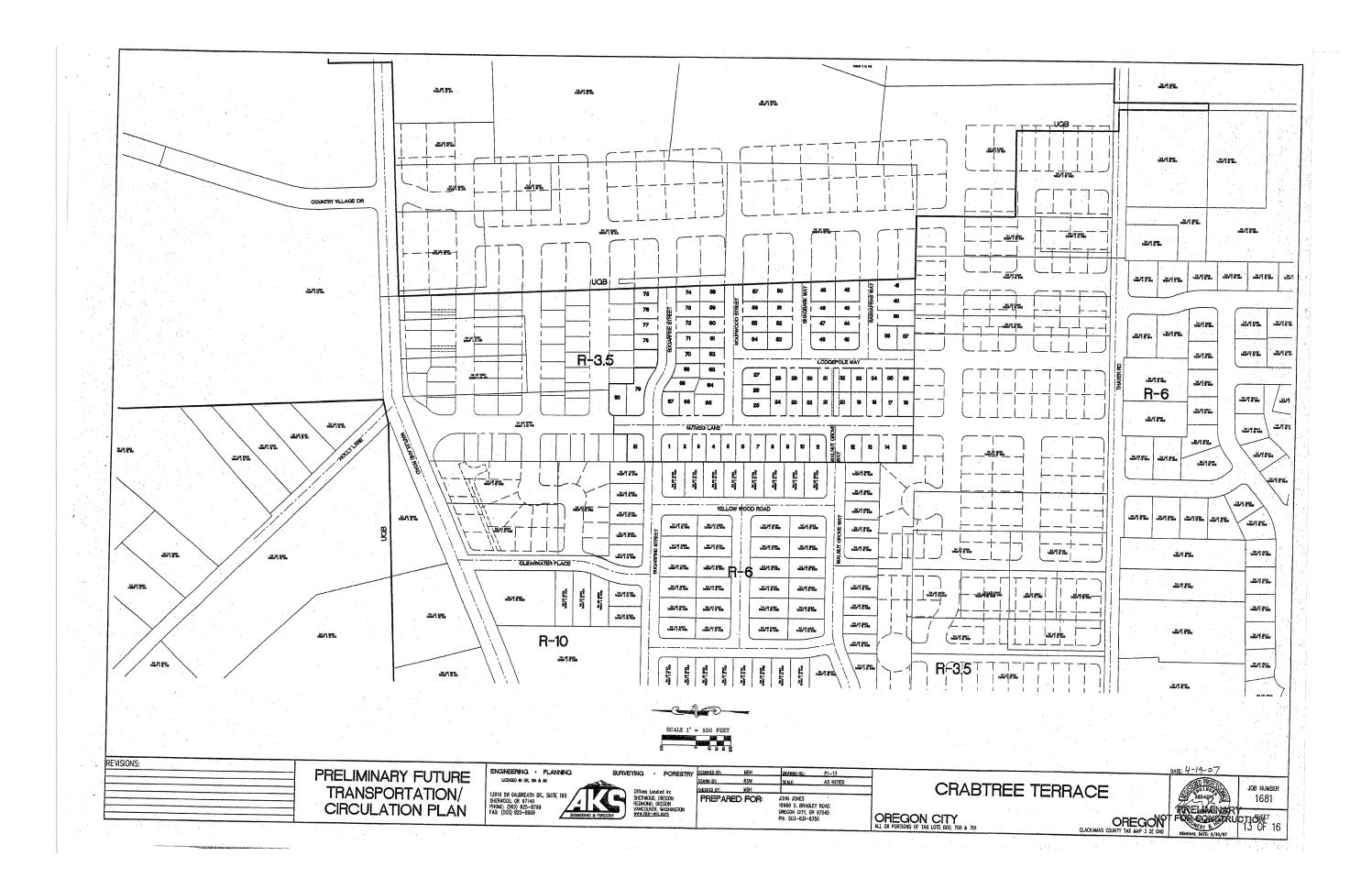














AKS ENGINEERING & FORESTRY, LLC ENGINEERING / SURVEYING / PLANNING / FORESTRY LANDSCAPE ARCHITECTURE / ARBORICULTURE

CRABTREE TERRACE NO. 2 STORMWATER REPORT

AKS JOB NO .:

3002

DATE:

MARCH 12, 2012

CLIENT:

ENGINEERING FIRM:

AKS ENGINEERING & FORESTRY, LLC. 13910 SW. GALBREATH DRIVE, SUITE 100 SHERWOOD, OR 97140 PH: 503-925-8799 FAX: 503-925-8969

JOHN JONES CONSTRUCTION, INC.

16999 S. BRADLEY ROAD OREGON CITY, OR 97045

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AKS ENGINEERING & FORESTRY, LLC ENGINEERING / SURVEYING / PLANNING / FORESTRY LANDSCAPE ARCHITECTURE / ARBORICULTURE

CRABTREE TERRACE NO. 2 STORMWATER REPORT

AKS JOB NO .:

3002

DATE:

MARCH 12, 2012

CLIENT:

ENGINEERING FIRM:

16999 S. BRADLEY ROAD OREGON CITY, OR 97045

JOHN JONES CONSTRUCTION, INC.

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STORMWATER REPORT

PROJECT: CRABTREE TERRACE NO. 2

1.0 PURPOSE OF REPORT

The purpose of this report is to document the criteria for which stormwater for this site will be designed to meet, the sources of information upon which the analysis is based, the design methodology, and the results of the analysis.

2.0 PROJECT LOCATION/DESCRIPTION

The proposed development consists of 4.4+/- acres identified as all or portions of Clackamas County Assessor's Map 3-2E-04D Tax Lot 700 after the property line adjustment. The project site is south of Maplelane Road, east of Clearwater Place, and north of Sugarpine Street, Nutmeg Lane is stubbed to the property.

3.0 REGULATORY DESIGN CRITERIA

3.1 STORMWATER QUANTITY MANAGEMENT CRITERIA

The required stormwater quantity management criteria are summarized below.

The post-development peak stormwater discharge rate from the site for the two-year, 24-hour duration design storm event shall at no time exceed half the pre-development peak stormwater runoff rate for the same design storm event.

The post-development peak stormwater discharge rate from the site for the five-year, 24-hour duration design storm event shall at no time exceed the pre-development peak stormwater runoff rate for the same design storm event.

The post-development peak stormwater discharge rate from the site for the 25-year, 24-hour duration design storm event shall at no time exceed the pre-development peak stormwater runoff rate for the ten-year, 24-hour duration design storm event.

The design storms are based on the standard SCS Type 1A rainfall distribution with a 24-hour distribution and a total depth of 2.6" (2-year), 3.1" (5-year), 3.4" (10-year), 4.0" (25-year), and 4.5" (100-year).

3.2 STORMWATER QUALITY MANAGEMENT CRITERIA

The required stormwater quality management criteria are summarized below.

The water quality design storm is 1/3 of the SCS 2-year / 24-hour design storm.

Permanent pool volumes shall be no less than 50% of the design water quality storm.

The remainder of the volumes shall be released through orifices sized to release the stormwater in no less than 12 hours.

4.0 SOURCES OF INFORMATION AND DESIGN METHODOLOGY

The Santa Barbara Urban Hydrograph (SBUH) Method was used for the stormwater analysis. This method utilizes the SCS Type 1A 24-hour storm. Hydrocad software aided in the analysis.

5.0 DESIGN PARAMETERS

5.1 DESIGN STORM

5.1.1 STORMWATER DETENTION FACILITY DESIGN

The majority of the stormwater flow from the subject site will be routed through the existing stormwater system in the Walnut Grove Estates subdivision to the existing stormwater facility located at the intersection of Maplelane Road and Thayer Road which was constructed as a subregional facility with the Wildhorse subdivision. The remaining portion of stormwater flow will outlet to a vegetated swale draining to the north and flow to a ditch on Maplelane Road as it has historically (in the pre-developed case). Our report finds that the amount of stormwater flow that reaches Maplelane Road post-development is less than pre-development.

5.1.2 INLET AND CONDUIT SIZING

The stormwater inlets (curb inlets) for the site are placed according to the grading (at all low points in grade and other necessary locations) and will adequately handle the stormwater for the site. Oversized catch basin curb inlets (4A) have been placed at all low points and other necessary locations. The distance between curb inlets is generally 400 feet or less.

The stormwater pipes are sized from the SBUH method and adequately handle the 25-year storm event (gravity flow).

5.2 PRE-DEVELOPED SITE TOPOGRAPHY AND LAND USE

5.2.1 SITE TOPOGRAPHY

The project site is approximately 4.4 acres+/-. The site has rolling slopes generally less than 11%. The site drains to the north and west. There are no existing drainages.

5.2.2 LAND USE

The site consists primarily of pasture and does not have any existing homes or outbuildings.

5.2.3 PRE-DEVELOPED INPUT PARAMETERS

The input parameters are shown for each subcatchment (basin) in the appendices.

5.3 SOIL TYPE

The soils for the site are classified as Jory silty clay loam (hydrologic group "C") according to the USDA Soil Survey for Clackamas County. Information on this soil type is provided in the Appendices.

5.4 POST-DEVELOPED SITE TOPOGRAPHY AND LAND USE

5.4.1 SITE TOPOGRAPHY

The post-developed site topography will be leveled out some, and the site will be developed with homes and street improvements.

5.4.2 LAND USE

The post-developed land use consists of 30 lots and 3 public streets. The lots will have single-family detached dwellings and are assumed to have an impervious area of 2,640 square feet each.

5.4.3 POST-DEVELOPED INPUT PARAMETERS

The input parameters are shown for each subcatchment (basin) in the appendices.

5.5 DESCRIPTION OF OFF-SITE CONTRIBUTORY BASINS

There are no off-site contributory basins.

6.0 CALCULATION METHODOLOGY

6.1 PROPOSED STORMWATER CONDUIT SIZING AND INLET SPACING

The proposed stormwater pipes are sized based on flows from the SBUH method and adequately handle the 25-year storm event.

6.2 PROPOSED STORMWATER QUANTITY CONTROL (DETENTION) FACILITY DESIGN

The majority of the stormwater flow from the subject site will be routed through the existing stormwater system in the Walnut Grove Estates subdivision to the existing stormwater facility located at the intersection of Maplelane Road and Thayer Road, which was constructed as a subregional stormwater facility with the wildhorse division. The offsite stormwater facility was sized to accommodate these lots. The remaining portion of stormwater flow will outlet to a vegetated swale draining to the north and flow to a ditch on Maplelane Road as it has historically (in the pre-developed case). Our report finds that the amount of stormwater flow that reaches Maplelane Road post-development is less than pre-development.

6.3 PROPOSED STORMWATER QUALITY CONTROL FACILITY DESIGN

Stormwater flow from the subject site will be routed through the existing stormwater system in the Walnut Grove Estates subdivision to the existing stormwater facility located at the intersection of Elder Road and Thayer Road.

6.4 ENERGY DISSIPATER CALCULATIONS

The outlet to the vegetated swale ditch will have a minimum 5ft x 5ft x 1ft class 50 riprap pad.

6.5 DOWNSTREAM ANALYSIS

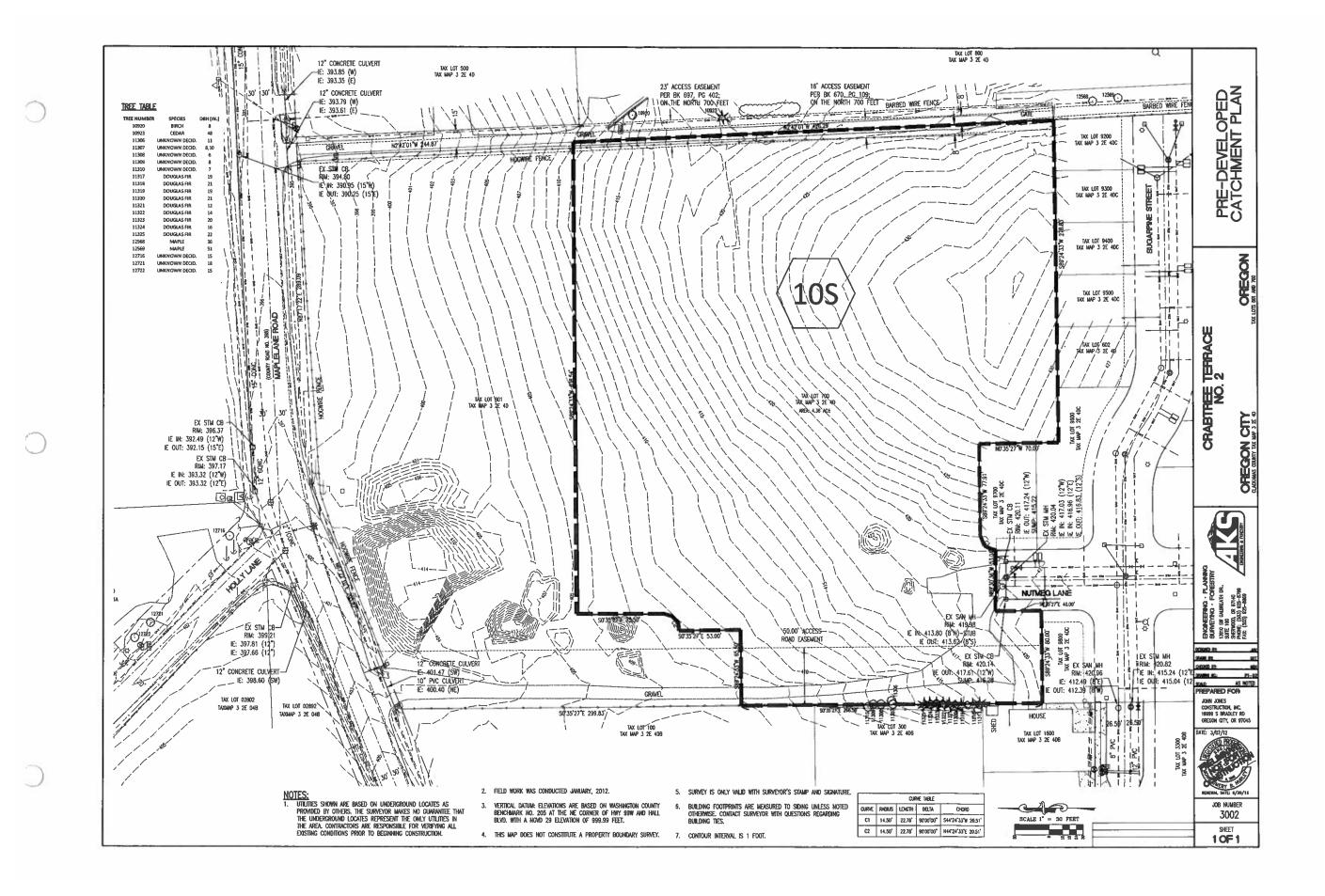
The majority of stormwater flow from the subject site will be routed through the existing stormwater system in the Walnut Grove Estates subdivision to the existing stormwater facility located at the intersection of Maplelane Road and Thayer Road. From the existing stormwater facility, the stormwater will flow through a storm sewer system that runs under Thayer Road and discharges into a stream on the south side of Thayer Road. There are no known downstream deficiencies. The remaining flow will drain to the ditch on Maplelane road as it has historically. There are no known downstream deficiencies.

Page 433 of 623

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

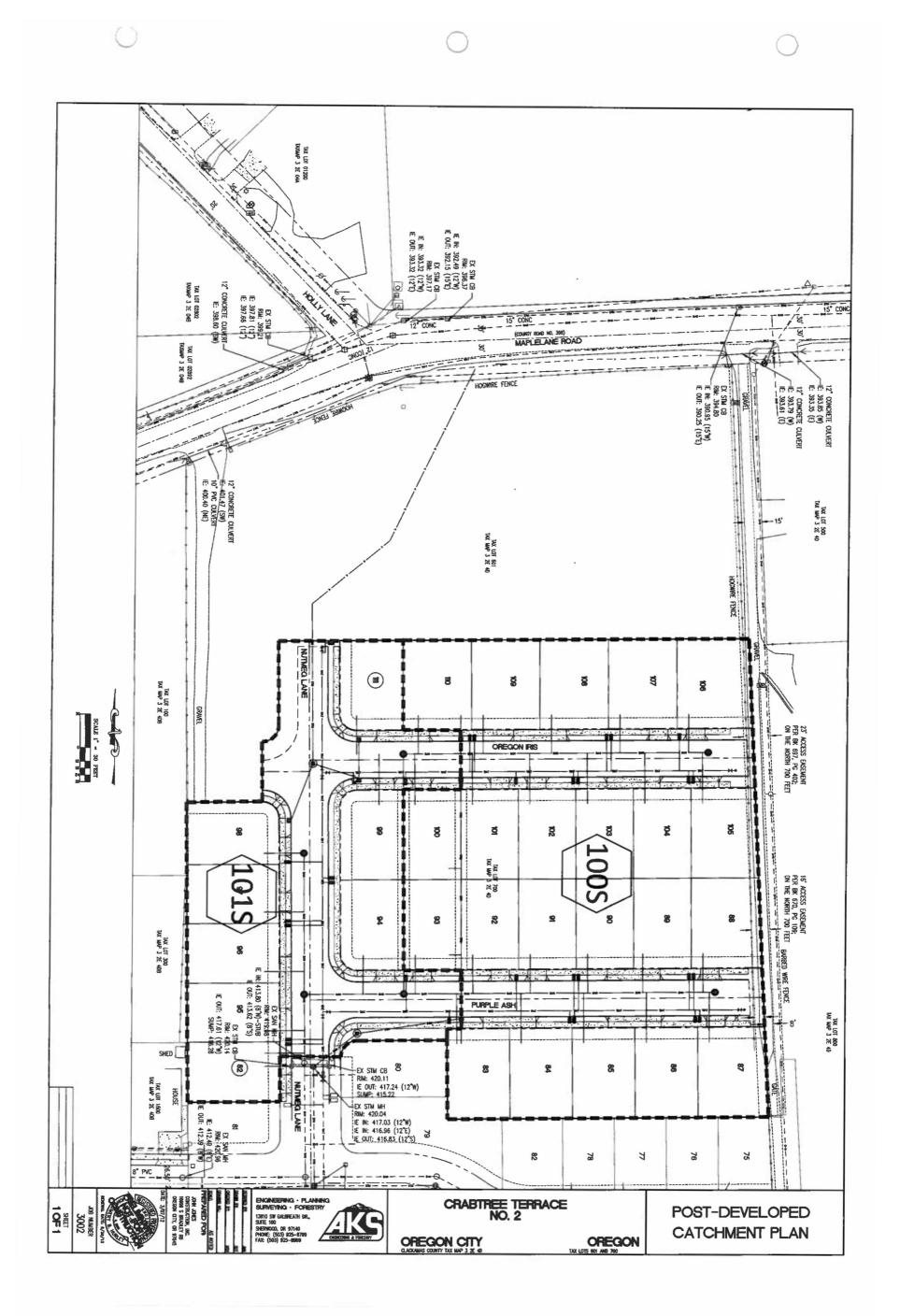
APPENDIX 1-1 PLAN VIEW PRE-DEVELOPED CONDITIONS

3c. TP 12-01 / VR 12-02: Crabtree Terrace II -30-lot Subdivision with Variance Request from

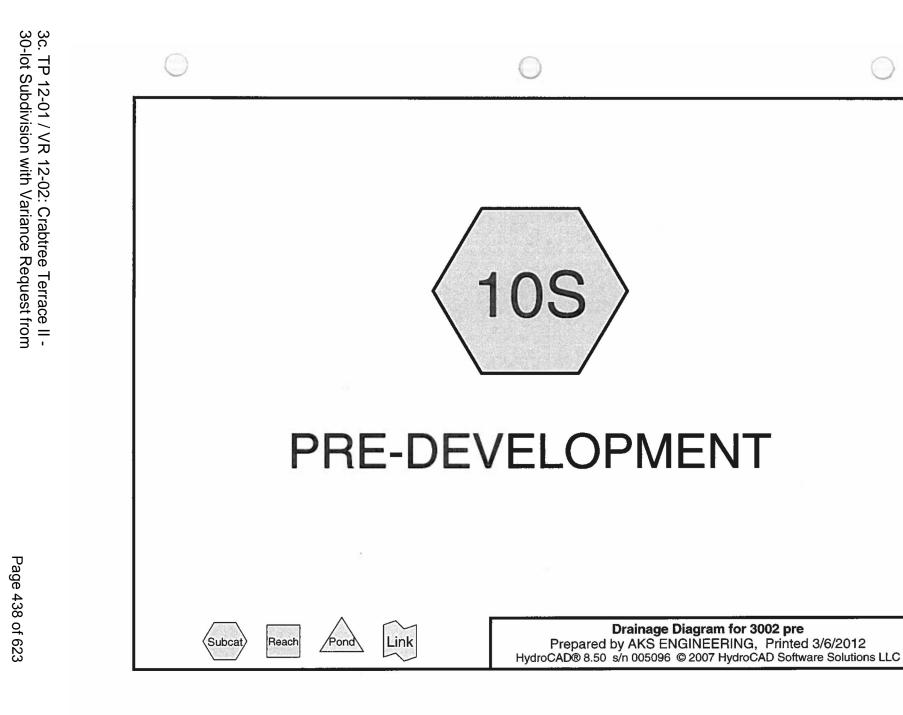


APPENDIX 1-2 PLAN VIEW POST-DEVELOPED CONDITIONS

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APPENDIX 2-1 ONSITE PRE-DEVELOPED HYDROGRAPH AND FLOW INFO. 2-YEAR STORM



Printed 3/6/2012 Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
4.360 4.360	86	Pasture/grassland/range, Poor, HSG C (10S) TOTAL AREA

Printed 3/6/2012 Page 3

Soil Listing (all nodes)

Area (acres)	Soil Goup	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
4.360	HSG C	10S
0.000	HSG D	
0.000	Other	
4.360		TOTAL AREA

Type IA 24-hr 2-YR Rainfall=2.60" Printed 3/6/2012 Page 4

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points Runoff by SCS TR-20 method, UH=SCS Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 10S: PREDEVELOPMENT Runoff Area=4.360 ac 0.00% Impervious Runoff Depth>1.12" Flow Length=757' Tc=23.8 min CN=86 Runoff=1.23 cfs 0.407 af

> Total Runoff Area = 4.360 ac Runoff Volume = 0.407 af Average Runoff Depth = 1.12" 100.00% Pervious = 4.360 ac 0.00% Impervious = 0.000 ac

3002 preType IA 24-hr 2-YR Rainfall=2.60"Prepared by AKS ENGINEERINGPrinted 3/6/2012HydroCAD® 8.50 s/n 005096 © 2007 HydroCAD Software Solutions LLCPage 5

Summary for Subcatchment 10S: PREDEVELOPMENT

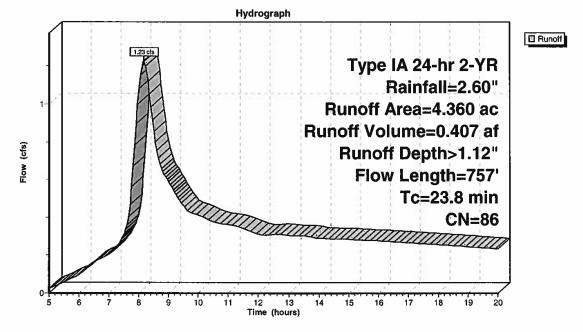
Runoff = 1.23 cfs @ 8.16 hrs, Volume= 0.407 af, Depth> 1.12"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type IA 24-hr 2-YR Rainfall=2.60"

	Area	(ac) C	N Des	cription			
	4.	360 8	36 Past	ure/grassla	and/range,	Poor, HSG C	
	4.	360	Perv	vious Area			
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description	
•	16.5	300	0.0633	0.30	.	Sheet Flow,	
_	7.3	457	0.0220	1.04		Grass: Short n= 0.150 P2= 2.60" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps	
	23.8	757	Total				

23.8 757 lotal

Subcatchment 10S: PREDEVELOPMENT



APPENDIX 2-2 ONSITE PRE-DEVELOPED HYDROGRAPH AND FLOW INFO. 5-YEAR STORM

()

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points Runoff by SCS TR-20 method, UH=SCS Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 10S: PREDEVELOPMENT Runoff Area=4.360 ac 0.00% Impervious Runoff Depth>1.49" Flow Length=757' Tc=23.8 min CN=86 Runoff=1.68 cfs 0.541 af

> Total Runoff Area = 4.360 ac Runoff Volume = 0.541 af Average Runoff Depth = 1.49" 100.00% Pervious = 4.360 ac 0.00% Impervious = 0.000 ac

3002 pre	Type IA 24-hr 5-YR Rainfall=3.10"
Prepared by AKS ENGINEERING	Printed 3/6/2012
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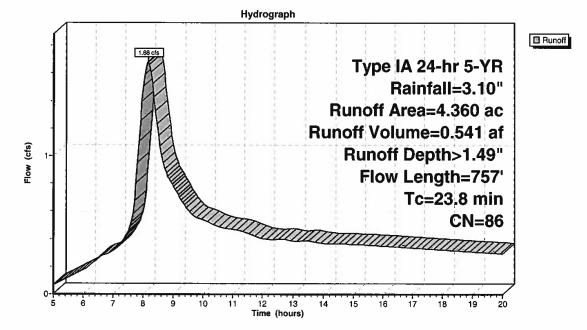
Summary for Subcatchment 10S: PREDEVELOPMENT

Runoff	=	1.68 cfs @	8.16 hrs,	Volume=	0.541 af	Depth>	1.49"
			•••••		V.V.I.I. WI	, Dopans	

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type IA 24-hr 5-YR Rainfall=3.10"

	Area	(ac) C	N Des	cription			
	4.	.360 8	36 Past	ure/grassla	and/range,	Poor, HSG C	
	4.	.360	Perv	vious Area			
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description	
-	16.5	300	0.0633	0.30		Sheet Flow,	
_	7.3	457	0.0220	1.04	-	Grass: Short n= 0.150 P2= 2.60" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps	•
_	23.8	757	Total				

Subcatchment 10S: PREDEVELOPMENT



()

APPENDIX 2-3 ONSITE PRE-DEVELOPED HYDROGRAPH AND FLOW INFO. 10-YEAR STORM

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points Runoff by SCS TR-20 method, UH=SCS Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 10S: PREDEVELOPMENT Runoff Area=4.360 ac 0.00% Impervious Runoff Depth>1.71" Flow Length=757' Tc=23.8 min CN=86 Runoff=1.97 cfs 0.622 af

> Total Runoff Area = 4.360 ac Runoff Volume = 0.622 af Average Runoff Depth = 1.71" 100.00% Pervious = 4.360 ac 0.00% Impervious = 0.000 ac

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Prepared by AKS ENGINEERING	
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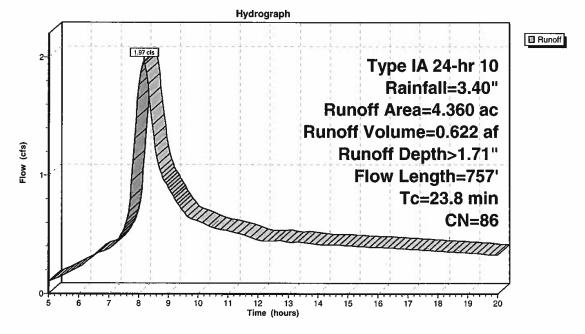
Summary for Subcatchment 10S: PREDEVELOPMENT

Runoff	=	1.97 cfs @	8.15 hrs.	Volume=	0.622 af. [Depth> 1.71"
1 Ion Ion		1.07 010 0	0.101110,	V Oluliilo-		

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type IA 24-hr 10 Rainfall=3.40"

_	Area	(ac) C	N Des	cription		
	4.	360 8	36 Past	ure/grassla	and/range,	Poor, HSG C
	4.	360	Perv	rious Area		
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
-	16.5	300	0.0633	0.30		Sheet Flow,
	7.3	457	0.0220	1.04		Grass: Short n= 0.150 P2= 2.60" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
	23.8	757	Total			

Subcatchment 10S: PREDEVELOPMENT



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APPENDIX 2-4 ONSITE PRE-DEVELOPED HYDROGRAPH AND FLOW INFO. 25-YEAR STORM

Type IA 24-hr 25 Rainfall=4.00" Printed 3/6/2012 Page 10

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points Runoff by SCS TR-20 method, UH=SCS Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 10S: PREDEVELOPMENT Runoff Area=4.360 ac 0.00% Impervious Runoff Depth>2.17" Flow Length=757' Tc=23.8 min CN=86 Runoff=2.55 cfs 0.789 af

> Total Runoff Area = 4.360 ac Runoff Volume = 0.789 af Average Runoff Depth = 2.17" 100.00% Pervious = 4.360 ac 0.00% Impervious = 0.000 ac

3002 preType IA 24-hr 25 Rainfall=4.00"Prepared by AKS ENGINEERINGPrinted 3/6/2012HydroCAD® 8.50 s/n 005096 © 2007 HydroCAD Software Solutions LLCPage 11

Summary for Subcatchment 10S: PREDEVELOPMENT

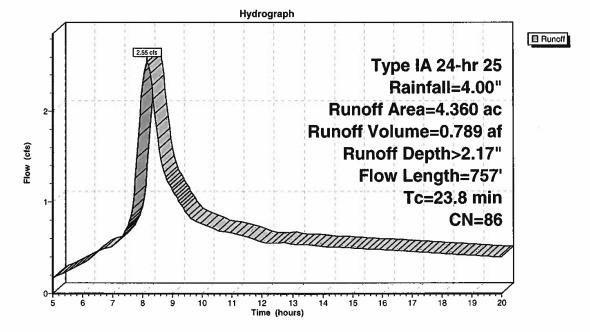
Runoff = 2.55 cfs @ 8.15 hrs, Volume= 0.789 af, Depth> 2.17"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type IA 24-hr 25 Rainfall=4.00"

	Area	(ac) C	N Des	cription			
	4.	360 8	86 Past	ture/grassla	and/range,	Poor, HSG C	
	4.	360	Perv	vious Area			
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description	
•	16.5	300	0.0633	0.30	` `	Sheet Flow,	
	7.3	457	0.0220	1.04		Grass: Short n= 0.150 P2= 2.60" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps	
•	23 B	757	Total				

23.8 757 Total

Subcatchment 10S: PREDEVELOPMENT



APPENDIX 2-5 ONSITE PRE-DEVELOPED HYDROGRAPH AND FLOW INFO. 100-YEAR STORM

Type IA 24-hr 100YR Rainfall=4.50" Printed 3/10/2012 C Page 3

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points Runoff by SCS TR-20 method, UH=SCS Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 10S: PRE-DEVELOPMENT Runoff Area=4.360 ac 0.00% Impervious Runoff Depth>2.56" Flow Length=757' Tc=23.8 min CN=86 Runoff=3.04 cfs 0.930 af

> Total Runoff Area = 4.360 ac Runoff Volume = 0.930 af Average Runoff Depth = 2.56" 100.00% Pervious = 4.360 ac 0.00% Impervious = 0.000 ac

3002 preType IA 24-hr 100YR Rainfall=4.50"Prepared by AKS ENGINEERINGPrinted 3/10/2012HydroCAD® 8.50 s/n 005096 © 2007 HydroCAD Software Solutions LLCPage 4

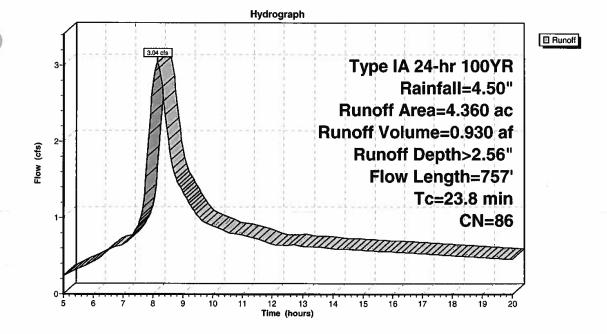
Summary for Subcatchment 10S: PRE-DEVELOPMENT

	Runoff	=	3.04 cfs @	8.14 hrs,	Volume=	0.930 af, Depth> 2.56"
--	--------	---	------------	-----------	---------	------------------------

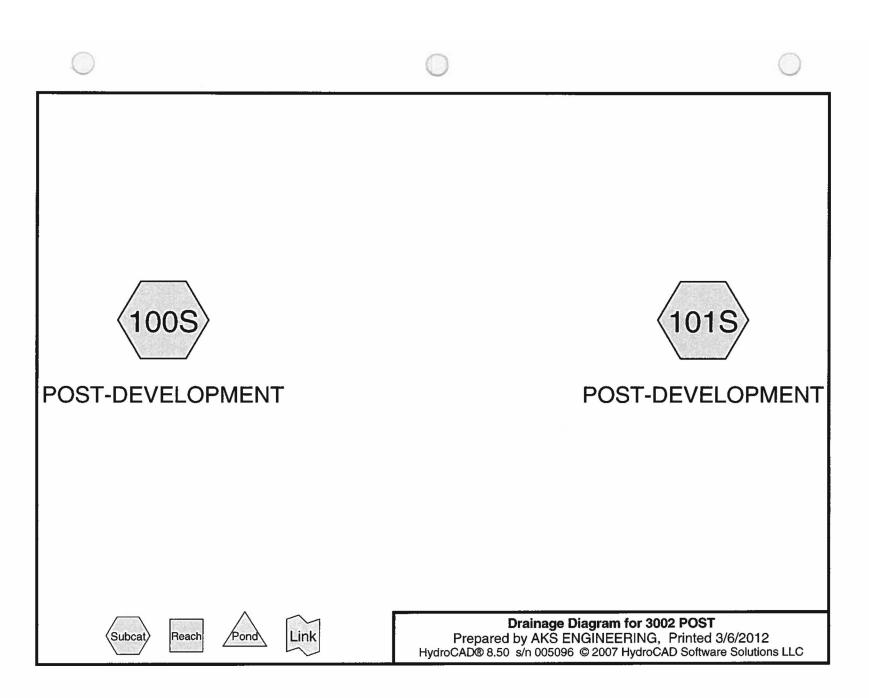
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type IA 24-hr 100YR Rainfall=4.50"

Area	(ac) C	N Desc	cription			
4.	360 8	6 Past	ure/grassla	and/range,	Poor, HSG C	
4.	360	Perv	rious Area		÷	
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description	
16.5	300	0.0633	0.30		Sheet Flow,	
7.3	457	0.0220	1.04		Grass: Short n= 0.150 P2= 2.60" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps	€ di Se se
23.8	757	Total			The second secon	

Subcatchment 10S: PRE-DEVELOPMENT



APPENDIX 3-1 ONSITE POST-DEVELOPED HYDROGRAPH AND FLOW INFO. 2-YEAR STORM



Printed 3/6/2012 Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.160	74	>75% Grass cover, Good, HSG C (100S,101S)
1.810	98	Paved parking & roofs (100S,101S)
1.390	98	Paved roads w/curbs & sewers (100S,101S)
4.360		TOTAL AREA

Printed 3/6/2012 Page 3

Soil Listing (all nodes)

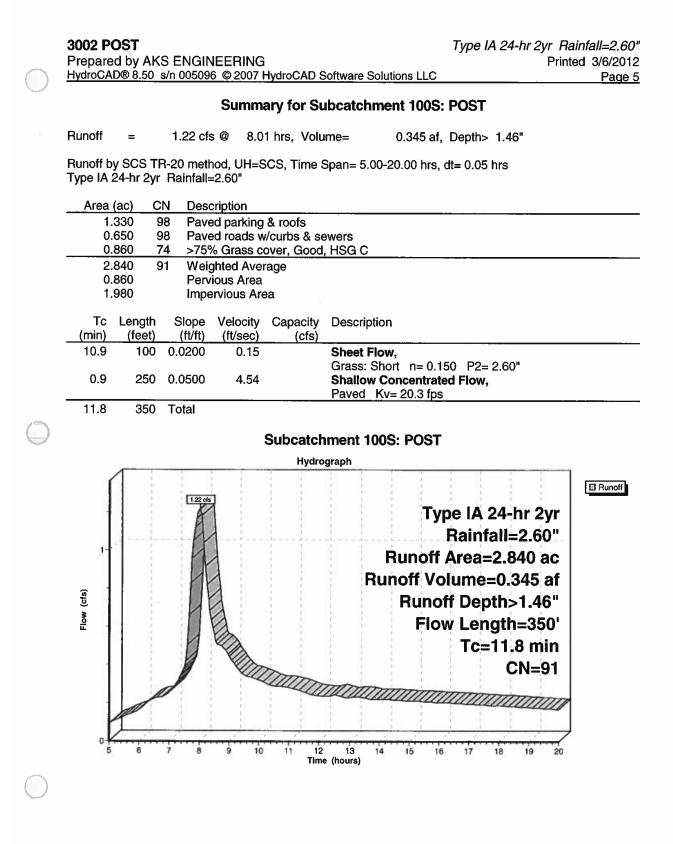
Area (acres)	Soil Goup	Subcatchment Numbers	
0.000	HSG A		
0.000	HSG B		
1.160	HSG C	100S, 101S	
0.000	HSG D		
3.200	Other	100S, 101S	
4.360		TOTAL AREA	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points Runoff by SCS TR-20 method, UH=SCS Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 100S: POSTRunoff Area=2.840 ac 69.72% Impervious Runoff Depth>1.46"
Flow Length=350' Tc=11.8 min CN=91 Runoff=1.22 cfs 0.345 afSubcatchment 101S: POSTRunoff Area=1.520 ac 80.26% Impervious Runoff Depth>1.59"

Flow Length=460' Tc=15.8 min CN=93 Runoff=0.72 cfs 0.202 af

Total Runoff Area = 4.360 acRunoff Volume = 0.547 afAverage Runoff Depth = 1.50"26.61% Pervious = 1.160 ac73.39% Impervious = 3.200 ac



3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

3002 POSTType IA 24-hr 2yr Rainfall=2.60"Prepared by AKS ENGINEERINGPrinted 3/6/2012HydroCAD® 8.50 s/n 005096 © 2007 HydroCAD Software Solutions LLCPage 6

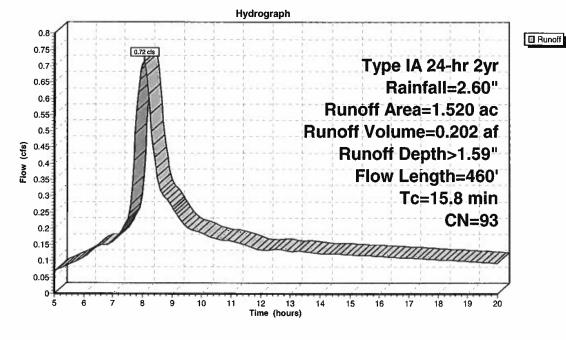
Summary for Subcatchment 101S: POST

Runoff = 0.72cfs	8.05 hrs, Volume=	0.202 af, Depth> 1.59"
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Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type IA 24-hr 2yr Rainfall=2.60"

_	Area	(ac)	CN	Desc	cription			
	0.	740	98	Pave	ed roads w	/curbs & se	ewers	
_	0.	300	74	>75%	% Grass co	over, Good,	, HSG C	
	1.	520	93	Weig	ghted Aver	age		
	0.	300		Perv	ious Area	-		
	1.	220		Impe	ervious Are	a		
	Tc (min)	Length (feet		lope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description	
	14.3	100	0.0	0100	0.12		Sheet Flow,	
_	1.5	360) 0.0	0410	4.11		Grass: Short n= 0.150 P2= 2.60" Shallow Concentrated Flow, Paved Kv= 20.3 fps	
	15.8	460) To	tal				

Subcatchment 101S: POST



APPENDIX 3-2 ONSITE POST-DEVELOPED HYDROGRAPH AND FLOW INFO. 5-YEAR STORM

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points Runoff by SCS TR-20 method, UH=SCS Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 100S: POSTRunoff Area=2.840 ac 69.72% Impervious Runoff Depth>1.85"
Flow Length=350' Tc=11.8 min CN=91 Runoff=1.57 cfs 0.437 afSubcatchment 101S: POSTRunoff Area=1.520 ac 80.26% Impervious Runoff Depth>1.99"
Flow Length=460' Tc=15.8 min CN=93 Runoff=0.90 cfs 0.252 af

Total Runoff Area = 4.360 ac Runoff Volume = 0.689 af Average Runoff Depth = 1.90"

26.61% Pervious = 1.160 ac 73.39% Impervious = 3.200 ac

	3002 PO	ST					Type IA 24-hr 5YR	
	Prepared	by AK	S ENGIN	IEERING				inted 3/6/2012
\bigcirc	HydroCAD	® 8.50 s	s/n 005090	5 © 2007 I	HydroCAD S	Software Solutions L	LC	Page 8
				Summa	ary for Su	ubcatchment 10	00S: POST	
	Runoff	=	1.57 cfs	s@ 8.0	0 hrs, Volu	ime= 0.43	7 af, Depth> 1.85"	
	Runoff bv	SCS TF	R-20 meth	od. UH=S	CS. Time	Span= 5.00-20.00	hrs. dt= 0.05 hrs	
	Type IA 2	4-hr 5YF	R Rainfal	=3.10"	,		,	
	Area (a	ac <u>)</u> C	N Desc	ription				
	1.3	30 9		d parking				··· <u>-</u> ···-
	0.6				/curbs & se over, Good			
	2.8	40 9	1 Weig	hted Ave		,		
	0.8 1.9			ious Area rvious Are	a			
			-					
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description		
	10.9	100	0.0200	0.15	()	Sheet Flow,	9	
	0.9	250	0.0500	4.54		Grass: Short n= Shallow Concer	= 0.150 P2= 2.60"	
						Paved Kv= 20.3		
-	11.8	350	Total					
\bigcirc					Subcatch	nment 100S: PC	ST	
					Hydro	ograph		
	ſ	1		1				Bunoff
	-		1.57 cls	}				
			A				ype IA 24-hr 5YR	
			H	1			Rainfall=3.10"	
	-		A	1		1. 2. 1. 1.	off Area=2.840 ac	
	(j) 1-	,	- FIF	1	1		Volume=0.437 af	
	Flow (cfs)	1	H	1	1.1	- K SI - JC - S	noff Depth>1.85"	
	E 1	1		A			Flow Length=350	1
			0				Tc=11.8 min	
		T.			Tim		CN=91	
	1		1			111111111	mmmmm	770
	o-	····			di d			7
	5	6	78	9 10	11 12 Tim	e (hours)	16 17 18 19 2	0
\bigcirc								

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

4

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\bigcirc	<u>HydroCAI</u>	D® 8.50	s/n 005096	6 © 2007	HydroCAD S	Software Solutions LLC	Page 9
				Summa	ary for Su	ibcatchment 101S: POST	
1	Runoff	=	0.90 cfs	s@ 8.04	4 hrs, Volu	me= 0.252 af, Depth> 1.99"	
			R-20 meth R Rainfal		CS, Time S	Span= 5.00-20.00 hrs, dt= 0.05 hrs	
	Area			cription			
	0.	740 9	8 Pave		& roofs /curbs & se over, Good		
)3 Weig Perv	ghted Aver ious Area ervious Are	age	· · · · · · · · · · · · · · · · · · ·	
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description	
	14.3	100	0.0100	0.12		Sheet Flow,	
	ି 1.5 	360	0.0410	4.11		Grass: Short n= 0.150 P2= 2.60" Shallow Concentrated Flow, Paved Kv= 20.3 fps	
	15.8	460	Total				
					Subcatch	nment 101S: POST	
					Hydro	ngraph	
	1-[ł	0.90 cfs	J			Runoff
			A	1		Type IA 24-hr 5YR	
	-		H	1		Rainfall=3.10"	
			T.F	1		Runoff Area=1.520 ac	
	(s)	1 1 1		2		Runoff Volume=0.252 af	
	Flow (cfs)		A	A		Runoff Depth>1.99"	
	Ë	1	И	E.		Flow Length=460'	
		1 1 1				Tc=15.8 min	
						CN=93	
	ſ			5			
	0	6	7 8	9 10		13 14 15 16 17 18 19 20	
\bigcirc					Tim	e (hours)	
0							

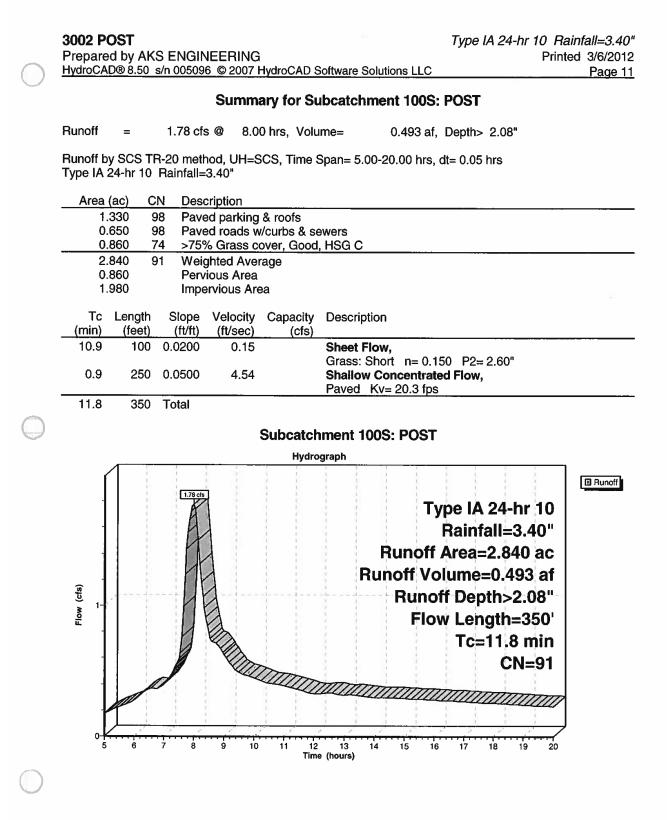
3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

APPENDIX 3-3 ONSITE POST-DEVELOPED HYDROGRAPH AND FLOW INFO. 10-YEAR STORM

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points Runoff by SCS TR-20 method, UH=SCS Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 100S: POSTRunoff Area=2.840 ac 69.72% Impervious Runoff Depth>2.08"
Flow Length=350' Tc=11.8 min CN=91 Runoff=1.78 cfs 0.493 afSubcatchment 101S: POSTRunoff Area=1.520 ac 80.26% Impervious Runoff Depth>2.23"
Flow Length=460' Tc=15.8 min CN=93 Runoff=1.02 cfs 0.282 af

Total Runoff Area = 4.360 ac Runoff Volume = 0.776 af Average Runoff Depth = 2.13" 26.61% Pervious = 1.160 ac 73.39% Impervious = 3.200 ac



3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

	3002 P					Type IA 24-hr 10 Rainfa	
	Prepare HydroCA	ed by AK D® 8.50	S ENGIN s/n 00509		-lvdroCAD	Software Solutions LLC Printed 3	
\bigcirc	<u>Invarious</u>	0.00	3/11 000005				Page 12
				Summa	ary for S	Subcatchment 101S: POST	
	Runoff	=	1.02 cfs	s@ 8.0	4 hrs, Vol	lume= 0.282 af, Depth> 2.23"	
	Runoff b Type IA	y SCS TI 24-hr 10	Rainfall=	nod, UH=S 3.40"	CS, Time	Span= 5.00-20.00 hrs, dt= 0.05 hrs	
	Area	(ac) C	N Desc	ription			
	0.	.480 §		d parking			
					/curbs & s over, Good		
				phted Aver			
		.300	Perv	ious Area	-		
	4	.220	impe	ervious Are	a		
		Length	Slope	Velocity	Capacity		
	<u>(min)</u> 14.3	(feet) 100	(ft/ft) 0.0100	<u>(ft/sec)</u> 0.12	(cfs)	Sheet Flow,	
	14.0	100	0.0100	0.12		Grass: Short n≈ 0.150 P2= 2.60"	
	1.5	360	0.0410	4.11		Shallow Concentrated Flow,	
	15.8	460	Total			Paved Kv= 20.3 fps	
\bigcirc							
S					Subcatc	hment 101S: POST	
		<u> </u>	5. 2		Hydr	rograph	
				_			Runoff
	1-	e ¹ 11.55 - 11.55 1 1	1.02 cfs			Type IA 24-hr 10	
			A			Rainfall=3.40"	
		1	A	1			
	-		I			Runoff Area=1.520 ac	
	÷	1		1		Runoff Volume=0.282 af	
	Flow (cfs)	1	H	2		Runoff Depth>2.23"	
	Flow		1	A		Flow Length=460'	
	~		4			Tc=15.8 min	
		1	1			CN=93	
			đ	~~	TIT	Timono	
	1				~		
				<u> </u>	1	Tc=15.8 min CN=93	
	0- 1 5	6	7 8	9 10	11 1	2 13 14 15 16 17 18 19 20	
-					Tin	me (hours)	
\bigcirc							

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

APPENDIX 3-4 ONSITE POST-DEVELOPED HYDROGRAPH AND FLOW INFO. 25-YEAR STORM

3002 POST Prepared by AKS ENGINEERING HydroCAD® 8.50 s/n 005096 © 2007 HydroCAD Software Solutions LLC

Type IA 24-hr 25YR Rainfall=4.00" Printed 3/6/2012 Page 13

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points Runoff by SCS TR-20 method, UH=SCS Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

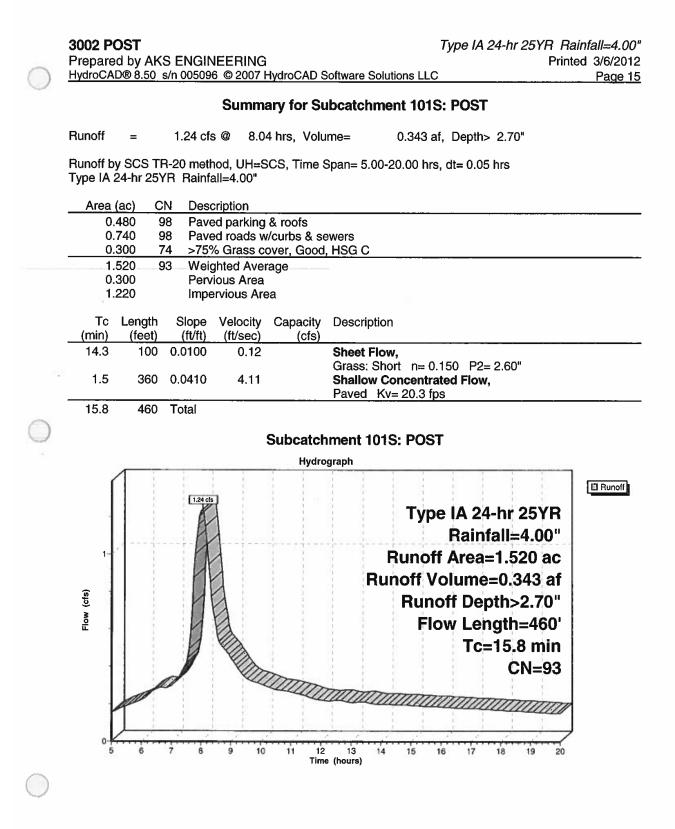
Subcatchment 100S: POSTRunoff Area=2.840 ac 69.72% Impervious Runoff Depth>2.56"
Flow Length=350' Tc=11.8 min CN=91 Runoff=2.21 cfs 0.606 afSubcatchment 101S: POSTRunoff Area=1.520 ac 80.26% Impervious Runoff Depth>2.70"
Flow Length=460' Tc=15.8 min CN=93 Runoff=1.24 cfs 0.343 af

Total Runoff Area = 4.360 ac Runoff Volume = 0.948 af Average Runoff Depth = 2.61"

26.61% Pervious = 1.160 ac 73.39% Impervious = 3.200 ac

3002 POST Prepared by AKS ENGINEERING	Type IA 24-hr 25YR Rainfall=4.00" Printed 3/6/2012
HydroCAD® 8.50 s/n 005096 © 2007 I	
Summ	ary for Subcatchment 100S: POST
Runoff = 2.21 cfs @ 8.0	00 hrs, Volume= 0.606 af, Depth> 2.56"
Runoff by SCS TR-20 method, UH=S Type IA 24-hr 25YR Rainfall=4.00"	SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Area (ac) CN Description	
	g & roofs //curbs & sewers cover, Good, HSG C
2.840 91 Weighted Aver 0.860 Pervious Area 1.980 Impervious Area	erage
Tc Length Slope Velocity (min) (feet) (ft/ft) (ft/sec)	
10.9 100 0.0200 0.15 0.9 250 0.0500 4.54	Grass: Short n= 0.150 P2= 2.60" Shallow Concentrated Flow,
11.8 350 Total	Paved Kv= 20.3 fps
1	Subcatchment 100S: POST Hydrograph
	Type IA 24-hr 25YR
2-	Rainfall=4.00"
	Runoff Area=2.840 ac
Flow (cfs)	Runoff Volume=0.606 af Runoff Depth>2.56"
ŭ 1-	Flow Length=350' Tc=11.8 min
	Flow Length=350' Tc=11.8 min CN=91
0-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	0 11 12 13 14 15 16 17 18 19 20 Time (hours)

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from



3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

APPENDIX 3-5 ONSITE POST-DEVELOPED HYDROGRAPH AND FLOW INFO. 100-YEAR STORM

3002 POST T Prepared by AKS ENGINEERING HydroCAD® 8.50 s/n 005096 © 2007 HydroCAD Software Solutions LLC

 Type IA 24-hr 100YR
 Rainfall=4.50"

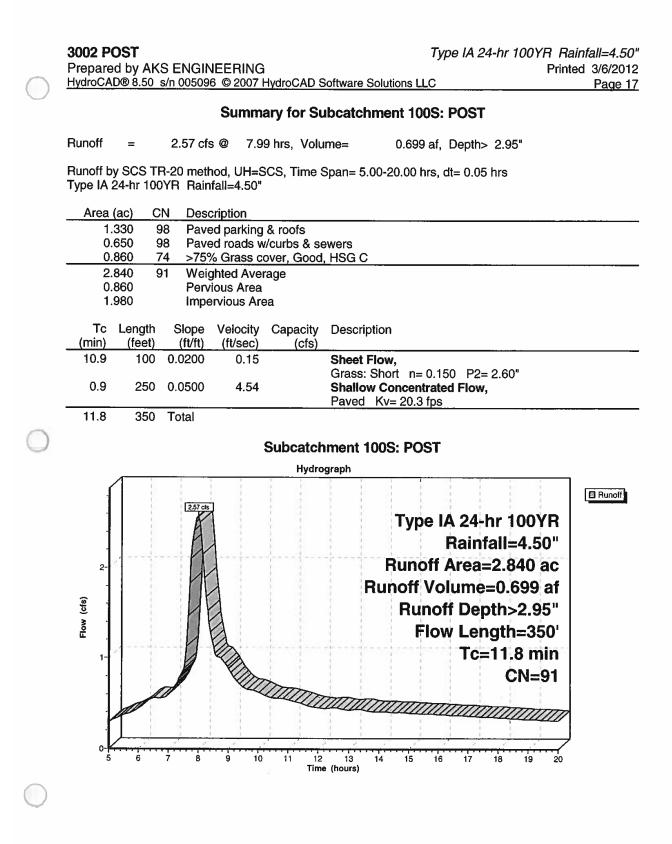
 Printed
 3/6/2012

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 Page 16

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points Runoff by SCS TR-20 method, UH=SCS Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 100S: POSTRunoff Area=2.840 ac 69.72% Impervious Runoff Depth>2.95"
Flow Length=350' Tc=11.8 min CN=91 Runoff=2.57 cfs 0.699 afSubcatchment 101S: POSTRunoff Area=1.520 ac 80.26% Impervious Runoff Depth>3.10"
Flow Length=460' Tc=15.8 min CN=93 Runoff=1.43 cfs 0.393 af

Total Runoff Area = 4.360 acRunoff Volume = 1.092 afAverage Runoff Depth = 3.01"26.61% Pervious = 1.160 ac73.39% Impervious = 3.200 ac



3002 POST	Type IA 24-hr 100YR Rainfall=4.50"
Prepared by AKS ENGINEERING	Printed 3/6/2012
HydroCAD® 8.50 s/n 005096 © 2007 HydroCAD Software Solutio	ns LLC Page 18

Summary for Subcatchment 101S: POST

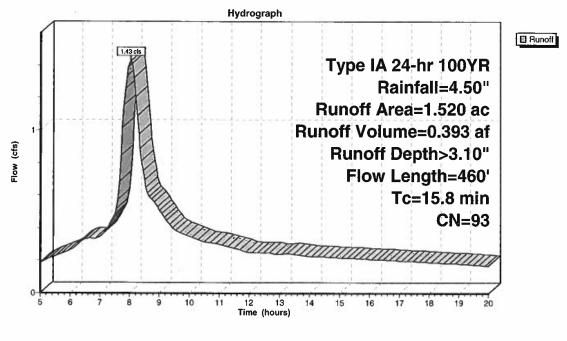
Runoff :	= 1.43	3 cfs @ 8.0	04 hrs, 1	Volume=	0.393 af,	Depth>	3.10"
----------	--------	-------------	-----------	---------	-----------	--------	-------

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type IA 24-hr 100YR Rainfall=4.50"

_	Area	<u>(ac)</u>	CN De	scription							
_	0.	480	98 Pav	ed parking	& roofs						
	0.	740	98 Pav	Paved roads w/curbs & sewers							
_	0.	300	74 >75	>75% Grass cover, Good, HSG C							
	1.	520	93 We	ighted Ave	rage						
	0.	300	Per	vious Area	-						
	1.	220	Imp	pervious Are	эа						
	Tc (min)	Length (feet)			Capacity (cfs)	Description					
	14.3	100	0.0100	0.12		Sheet Flow,					
	1.5	360	0.0410	4.11		Grass: Short $n=0.150 P2=2.60"$ Shallow Concentrated Flow, Paved Kv= 20.3 fps					
	15.8	460	Total								

15.8 460 Total

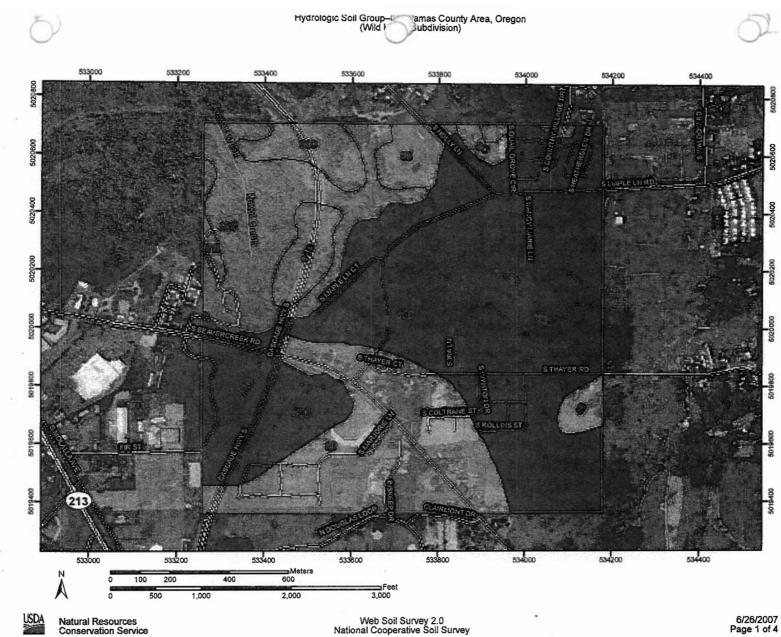
Subcatchment 101S: POST



Page 478 of 623

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

APPENDIX 4-1 SOIL INFORMATION



		GEND	MAP INFORMATION		
Area of Int	erest (AOI) Area of Interest (AOI)	Local Roads Other Roads	Original soil survey map sheets were prepared at public Viewing scale and printing scale, however, may vary fr original. Please rely on the bar scale on each map she map measurements.	rom th	
Soil Rati	Soil Map Units ngs A		Source of Map: Natural Resources Conservation Se Web Soil Survey URL: http://websoilsurvey.nrcs.usd Coordinate System: UTM Zone 10N		
	A/D B		This product is generated from the USDA-NRCS certifie the version date(s) listed below.	ed dat	
	B/D		Soil Survey Area: Clackamas County Area, Oregon Survey Area Data: Version 4, Dec 22, 2006		
3.22	c		Date(s) aerial images were photographed: 7/29/2000	0; 7/1	
	C/D D		The orthophoto or other base map on which the soil lin compiled and digitized probably differs from the backgr imagery displayed on these maps. As a result, some m	round	
ikojen rodenik	Not rated or not available		of map unit boundaries may be evident.	linor	
Political Fe					
Municip	alities Cities				
•					
Ē	Urban Areas				
Water Feat	ures Oceans				
~	Streams and Canals				
Transporta	tion Rails				
Roads	, cano				
Roads	Interstate Highways				
	US Routes				
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USDA Natural Resources Conservation Service Web Soil Survey 2.0 National Cooperative Soil Survey 6/26/2007 Page 2 of 4

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Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
8B	Bornstedt silt loam, 0 to 8 percent slopes	С	104.6	23.0%
80	Bornstedt silt loam, 8 to 15 percent slopes	с	3.4	0.7%
37D	Helvetia silt loam, 15 to 30 percent slopes	С	3.4	0.7%
45B	Jory silty clay loam, 2 to 8 percent slopes	В	213.1	47.0%
45C	Jory silty clay loam, 8 to 15 percent slopes	В	38.1	8.4%
91C	Woodburn silt loam, 8 to 15 percent slopes	с	26.8	5.9%
92F	Xerochrepts and Haploxerolls, very steep	С	64.5	14.2%
Totals for Area of Interes	st (AOI)		453.8	100.0%



Natural Resources Conservation Service

Web Soil Survey 2.0 National Cooperative Soil Survey 6/26/2007 Page 3 of 4

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition Component Percent Cutoff: None Specified Tie-break Rule: Lower



Natural Resources Conservation Service

Web Soil Survey 2.0 National Cooperative Soil Survey

J & K CONSTRUCTION & EXCAVATION LLC 16999 S. BRADLEY RD. OREGON CITY, OR 97045 (503) 680-9225	1128 19-7076/3250
	DATE 3-7-12
OTHE OF City of Or City	\$ 14 59500
	Muster Fine Dollars + Trascollars 1
CHASE JPMorgan Chase Bank, N.A.	1
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OB Land Use	19 gan

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CITY OF OREGON CITY FILL PERMIT FP 07-006

John Jones, Crabtree Terrace PH I

Address - 14616 Maplelane Road and 18778 Nancy Marie Lane, Oregon City, OR 97045

CONDITIONS OF APPROVAL

Approved By: <u>Adust C</u>

9/4/07

1) This Grading Permit is being issued for the subject area only and requires the applicant to follow the approved drawings dated August 28, 2007 by Monty Hurley, PE, AKS Engineering, LLC for John Jones. City approval date is September 4, 2007.

2) **Code Authority**. The City utilizes Appendix J, Grading, of the State of Oregon Structural Specialties Code, and Oregon City Municipal Code Chapter 15.48, Grading, Filling and Excavation. Applicable sections of this code shall apply to this fill permit. The City has also adopted Public Works Standards for Erosion and Sediment Control by Ordinance 99-1013. Pursuant to Oregon City Municipal Code Chapter 17.47, Erosion Control; <u>Development</u> is defined as "Means any human-caused change to improved or unimproved real estate, including but not limited to....mining, dredging, filling, grading, paving, excavation....". Applicable sections of these standards shall apply to this fill permit.

3) **Maximum Cut/Fill Slope**. The maximum Cut/Fill slope for permanent fill shall be 2:1 (2 horizontal to 1 vertical). Storage fill shall have a maximum slope of 1:1 (1 horizontal to 1 vertical) unless otherwise indicated on the plans. Steep slopes shall be adequately protected from erosion. If a vegetative cover cannot be established in time to prevent erosion, measures as outlined in the City of Oregon City Public Works Standards for Erosion and Sediment Control shall be used such as erosion blankets, or plastic sheet covering, or as indicated on the Erosion Control Plan.

4) **Property Line Set Back**. The applicant shall follow required set backs in the UBC, Sec. 7011 and City of Oregon City Public Works Stormwater and Grading Design Standards, Sec. 3.1.6, Setbacks.

5) **Preparation of Ground**. The ground surface shall be prepared to receive permanent fill by removing vegetation and other unsuitable materials. Benching may be required, refer to UBC, Sec. 7010(c). Failure to remove organic material is grounds for the City not to accept any fill and or compaction tests in order to issue other building or construction permits.

6) **Fill Material**. Detrimental amounts of organic material shall not be permitted in the fill. No rock or similar irreducible material with a maximum dimension greater than 12 inches shall be buried or placed in the fill. Refer to UBC, Sec. 7010(d).

7) **Compaction**. Storage fill does not require compaction. If compaction requirements for permanent fill are not specified on the grading plans by a civil engineer or through a Soils Engineering Report, then at a minimum the following compaction requirements shall be met. All fills shall be compacted to a minimum of 90 percent (95 percent is desirable) of maximum density as determined by AASHTO T99, unless otherwise noted. To obtain the compaction, fill

CITY OF OREGON CITY FILL PERMIT NO. FP-07-006

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

A registered professional geotechnical engineer or civil engineer (PE) shall be responsible for professional inspection of the site to ensure conformance with the grading plan, within their technical specialty, on behalf of the developer/owner. If a soils engineer prepared a soils engineering report, then that engineer shall be responsible for inspection within their area of expertise. Refer to UBC, Sec. 7014(c). Consultant shall supply the City with copies of the observation logs and all compaction tests on a periodic and regular basis.

12) **Completion of Work**. If engineered grading plans were prepared, the civil engineer preparing the grading plans shall submit an as-graded plan. If a soils engineering report was prepared, then the soils engineer shall prepare a final soils grading report per the UBC, Sec. 7015(a). The permittee shall notify the City when the grading operation is ready for final inspection. Final approval shall not be given until all requirements have been met.

13) **Tree Preservation**. The owner/developer shall protect the trees identified on Sheet C052 as being protected.

14) **Compliance**. The owner/developer that applies for, and receives, a fill grading permit from the City of Oregon City agrees to all City Codes, conditions of this permit, standards and specifications, and other rules and regulations that apply to this site and permit. Failure to comply shall subject the permit holder to legal action by the City to remedy all non-conforming work or situations and the cost involved pursuing such legal action.

Additionally, it is the responsibility of the permitee to ensure that all other Agencies' rules and regulations that affect this site have been satisfied and/or approval received. Granting of this permit by the City does not allow the permitee to ignore or violate any City or other Agency requirements that might affect this site. The permitee shall comply with all requirements prior to starting any work on this site.

14) Geotechnical Report. Not applicable.

- 15) **Other:**
 - **Construction Staking**. Contractor shall stake existing facilities on the site and protect them accordingly. The Engineer, or inspector, shall specify the requirements for filling and compacting material near existing structures. Contractor shall be responsible for any and all damage caused to these facilities during the placement and compaction of material in close proximity to existing facilities and the cost to repair or replace to original condition.
 - **Pre-grading meeting**. Not Applicable.

Attachments: Approved Grading Plans

CITY OF OREGON CITY FILL PERMIT NO. FP-07-006

ENGINEERING & FOR	139	10 SW G Sher	ERING & FORESTalbreath Drive, Suwood, OR 97140w.aks-eng.com3799Fax: 503-92	ite 100	ID = 4627 Offices Located In: Sherwood, OR Redmond, OR Vancouver, WA
Att 320	y of Orego n: <u>Bob Cu</u>) Warner-I egon City,	llison Milne Ro		DATE: 8/28/200 RE: Crabtree Ter Billing # 1681, 2088 From:Peter Boone	a contract subdivision
			OLLOWING:		
COPIES 1	DATE 8/28/2007	NO.	Check in the amoun Fee Schedule	DESCRIPTIO t of \$2,779.50 from Jo	N hn Jones Construction with
1	8/28/2007	1	Fill/Grading Applica		
6	8/28/2007	5	Full Size Clearing, D Site Grading Cost E	emolition, Grading &	Erosion Control Plans
1	8/28/2007				
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CITY OF OREGON CITY

FILL/GRADING APPLICATION

Per OCMC 15.48

15.48.030 Applicability--Grading permit required.

A. A city-issued grading permit shall be required before the commencement of any of the following filling or grading activities:

1. Grading activities in excess of ten cubic yards of earth;

2. Grading activities which may result in the diversion of existing drainage courses, both natural and manmade, from their natural point of entry or exit from the grading site;

3. Grading and paving activities resulting in the creation of impervious surfaces greater than two thousand square feet or more in area;

4. Any excavation beyond the limits of a basement or footing excavation, having an unsupported soil height greater than five feet after the completion of such a structure; or

5. Grading activities involving the clearing or disturbance of one-half acres (twenty-one thousand seven hundred eighty square feet) or more of land.

B. Those fill and grading activities proposed to be undertaken in conjunction with a land use application, including but not limited to subdivisions, planned unit developments, partitions and site plan reviews, are subject to the standards of this chapter. However, a separate grading permit is not required. Approval of the construction plans submitted through the land use application process shall constitute the grading permit required under this chapter.

Permission is hereby requested to perform fill/grading work as set forth below. It is understood that this application is limited to the work described herein and that all work is to be done in compliance with the provisions shown on the back of this application and with all other applicable rules, regulations and standards of the City; and that the permittee assumes full responsibility for said compliance, for acceptability of the work, and for repair or replacement thereof if defective, and for repair or replacement of any existing improvement damaged by the doing of the work.

JOB SITE: CRABTREE TERRACE	14616	S. MAPLELANE
OWNER: JOHN JONES	ADDRESS	503-631-8750
CONTRACTOR:	24 HI	3-RHONE
Signature of applicant or agent:	AM	ferres
DESCRIPTION OF WORK TO BE DONE P	ER THIS APPÍ	/ JCATION:
GRAMMY CONTRAM AND SUPE COLON	- /	

	EROSION	CONTROL	AND	SITE	GRADING
•					

Refer to back page for OCMC 15.48.090 - Submittal Requirements.

24 HRS. ADVANCE NOTICE MUST BE GIVEN FOR INSPECTION

- Exclusive of Saturdays, Sundays and holidays. Failure to obtain approval before proceeding with work may be cause for rejection. Any work to be done on a Saturday or holiday MUST be approved by the City at least 24 hours in advance during normal City work hours.

FILL/GRADING APPLICATION NUMBER:

FP-____

Page 1

I:\Engineering\Forms\Fill-Grading Application.doc

AKS ENGINEERING & FORESTRY, LLC.

13910 SW GALBREATH DRIVE, SUITE 100 SHERWOOD, OR 97140 503-925-8799



SITE GRADING COST ESTIMATE

CRABTREE TERRACE PHASE 1

JOB NO.: 1681 Estimate by: BOONE

.

SITE WORK	\$102,500.00
	\$10Z,300.00

1. The unit prices shown here are based on engineering experience and do not represent actual contractor bids. Actual contractor bids may vary significantly.

2. This estimate does not include:

Relocation of Utility Poles City, County, State, or Federal Permit Fees Consulting Services (Engineering, Surveying, Inspection, Observation, Construction Administration, Contractor Payment Review, Etc.) Geotechnical Engineering or Geotechnical Inspection Compaction / Soil Testing for Construction

3. Volumes and quantities listed here are approximate.

4. This estimate is intended for the City and Client's informational purposes only.

5. This estimate does not include items not specifically listed.

COSTS



AKS ENGINEERING & FORESTRY, LLC.

13910 SW GALBREATH DRIVE, SUITE 100 SHERWOOD, OR 97140 503-925-8799

SITE GRADING COST ESTIMATE

CRABTREE TERRACE PHASE 1

JOB NO.: Estimate by:

* .

1681 BOONE

SITE WORK	QUANTITY	UNIT	UNIT PRICE	COST
SITE WORK				
Mobilization	1	L.S.	\$1,250.00	\$1,250.00
Clearing, Grubbing, Tree Removal, and Root-Picking	9.6	AC.	\$1,000.00	\$9,600.00
Stripping and Stockpiling (9"+/- Depth)	1	L.S.	\$11,650.00	\$11,650.00
Grading - General Excavation (Cut)	1	L.S.	\$45,000.00	\$45,000.00
Grading - Embankment (Fill)	1	L.S.	\$35,000.00	\$35,000.00
TOTAL				\$102,500.00

SITE WORK

CITY OF OREGON CITY FILL PERMIT FP 07-004 John Jones, Crabtree Terrace PH II Address 14616 Marialana Baad and 18778 Nanay Maria Lana Oregon Cit

Address - 14616 Maplelane Road and 18778 Nancy Marie Lane, Oregon City, OR 97045

CONDITIONS OF APPROVAL

Development Services Manager

1) This Grading Permit is being issued for the subject area only and requires the applicant to follow the approved drawings dated July 31, 2007 by Monty Hurley, PE, AKS Engineering, LLC for John Jones. City approval date is August 10, 2007.

Approved By:

2) **Code Authority**. The City utilizes Appendix J, Grading, of the State of Oregon Structural Specialties Code, and Oregon City Municipal Code Chapter 15.48, Grading, Filling and Excavation. Applicable sections of this code shall apply to this fill permit. The City has also adopted Public Works Standards for Erosion and Sediment Control by Ordinance 99-1013. Pursuant to Oregon City Municipal Code Chapter 17.47, Erosion Control; <u>Development</u> is defined as "Means any human-caused change to improved or unimproved real estate, including but not limited to....mining, dredging, filling, grading, paving, excavation....". Applicable sections of these standards shall apply to this fill permit.

3) **Maximum Cut/Fill Slope**. The maximum Cut/Fill slope for permanent fill shall be 2:1 (2 horizontal to 1 vertical). Storage fill shall have a maximum slope of 1:1 (1 horizontal to 1 vertical) unless otherwise indicated on the plans. Steep slopes shall be adequately protected from erosion. If a vegetative cover cannot be established in time to prevent erosion, measures as outlined in the City of Oregon City Public Works Standards for Erosion and Sediment Control shall be used such as erosion blankets, or plastic sheet covering, or as indicated on the Erosion Control Plan.

Property Line Set Back. The applicant shall follow required set backs in the UBC, Sec.
 7011 and City of Oregon City Public Works Stormwater and Grading Design Standards, Sec.
 3.1.6, Setbacks.

5) **Preparation of Ground**. The ground surface shall be prepared to receive permanent fill by removing vegetation and other unsuitable materials. Benching may be required, refer to UBC, Sec. 7010(c). Failure to remove organic material is grounds for the City not to accept any fill and or compaction tests in order to issue other building or construction permits.

6) **Fill Material**. Detrimental amounts of organic material shall not be permitted in the fill. No rock or similar irreducible material with a maximum dimension greater than 12 inches shall be buried or placed in the fill. Refer to UBC, Sec. 7010(d).

7) **Compaction**. Storage fill does not require compaction. If compaction requirements for permanent fill are not specified on the grading plans by a civil engineer or through a Soils Engineering Report, then at a minimum the following compaction requirements shall be met. All fills shall be compacted to a minimum of 90 percent (95 percent is desirable) of maximum density as determined by AASHTO T99, unless otherwise noted. To obtain the compaction, fill

CITY OF OREGON CITY FILL PERMIT NO. FP-07-004

shall be placed in approximately horizontal layers not to exceed twelve inches thick. Each separate layer shall be thoroughly compacted. Fill material shall be placed within 2% of optimum moisture. Monitoring compaction testing of the fill activities shall be required at commencement and periodically during the project. See comments under Grading Inspection for frequency. These minimum requirements are not site specific or for any intended use. If a fill is intended for a specific use that includes a structure being placed on the fill, a soils engineer shall certify the site suitable for that use prior to receiving building permit approval from the City.

8) **Drainage**. Drainage shall be provided per the approved plans, Section 7012 of the UBC, and the City's Drainage Master Plan. Provisions should have been made on the attached Erosion Control Plan that address drainage. If not, then contractor shall construct a temporary sediment holding pond and temporary diversion swales into the pond to control erosion and sediment transport from leaving the site.

9) **Dust Control**. Dust shall not be permitted to leave the site. If dusty conditions exist, the permittee shall apply a fine spray of water on the surface to control the dust, or use other acceptable spray adhesive applications to control dust.

10) **Erosion/Sedimentation Control**. Erosion control measures shall be provided per Section 7013 of the UBC, the City's Drainage Master Plan, and the City's standard Erosion/Sedimentation Control. Applicant shall request City inspection and obtain approval of erosion control measures prior to grubbing and removal of topsoil.

Notes. Erosion and sediment control measures are temporary measures only. They shall be repaired, replaced, or installed at the direction of the inspector or the City. Failure to do so in a timely manner shall be a violation of this permit and shall be grounds for the City to revoke this permit. Contractor shall utilize all means to prevent erosion and sediment transport from leaving the site. This shall include (but not be limited to); road stabilization measures at entrance, sediment barriers such as silt fences and bio-bags, and temporary sediment traps or basins. This also includes diversion channels, vegetative or other soil stabilization measures such as mulching, and dust control measures.

11) **Grading Inspection**. All grading permits are subject to inspection by the City. The City inspector shall be notified 48 hours prior to starting grading operations. Inspection by the City at a minimum shall be required at the following events:

- After grubbing and removal of the topsoil, and prior to placement of fill.
- Periodically during filling operations, to observe proof rolling, and compaction testing done by an independent testing lab hired by the permittee and observed by the consultant. At a minimum, compaction testing shall be done once per quarter acre, at 2-foot vertical intervals, including at the surface.
- When grading operations are suspended prior to completion of the project.
- Upon notification that the work is completed and ready for final inspection.
- For storage fill, inspection shall be done prior to placement of fill, once during fill operations, and upon completion of fill.

CITY OF OREGON CITY FILL PERMIT NO. FP-07-004

A professionally registered geotechnical engineer or a civil engineer (PE) shall be responsible for professional inspection of the site to ensure conformance with the grading plan, within his technical specialty, on behalf of the developer/owner. If a soils engineer prepared a soils engineering report, then that engineer shall be responsible for inspection within his area of expertise. Refer to UBC, Sec. 7014(c). Consultant shall supply the City with copies of the observation logs and all compaction tests on a periodic and regular basis.

12) **Completion of Work**. If engineered grading plans were prepared, the civil engineer preparing the grading plans shall submit an as-graded plan. If a soils engineering report was prepared, then the soils engineer shall prepare a final soils grading report per the UBC, Sec. 7015(a). The permittee shall notify the City when the grading operation is ready for final inspection. Final approval shall not be given until all requirements have been met.

13) **Tree Preservation**. The owner/developer shall protect the trees identified on Sheet C052 as noted in red.

14) **Compliance**. The owner/developer that applies for, and receives, a fill grading permit from the City of Oregon City agrees to all City Codes, conditions of this permit, standards and specifications, and other rules and regulations that apply to this site and permit. Failure to comply shall subject the permit holder to legal action by the City to remedy all non-conforming work or situations and the cost involved pursuing such legal action.

Additionally, it is the responsibility of the permitee to ensure that all other Agencies' rules and regulations that affect this site have been satisfied and/or approval received. Granting of this permit by the City does not allow the permitee to ignore or violate any City or other Agency requirements that might affect this site. The permitee shall comply with all requirements prior to starting any work on this site.

14) Geotechnical Report. Not applicable.

- 15) **Other:**
 - **Construction Staking**. Contractor shall stake existing facilities on the site and protect them accordingly. The Engineer, or inspector, shall specify the requirements for filling and compacting material near existing structures. Contractor shall be responsible for any and all damage caused to these facilities during the placement and compaction of material in close proximity to existing facilities and the cost to repair or replace to original condition.
 - **Pre-grading meeting**. Not Applicable.

Attachments: Approved Grading Plans

CITY OF OREGON CITY FILL PERMIT NO. FP-07-004

KG

AKS ENGINEERING & FORESTRY, LLC 13910 SW Galbreath Drive, Suite 100 Sherwood, OR 97140 www.aks-eng.com LETTER OF TRANSMITTAL

ID = 4274 Offices Located In: Sherwood, OR Redmond, OR Vancouver, WA

Phone: 503-925-8799

Fax: 503-925-8969

To:City of Oregon City Attn: Bob Cullison 320 Warner-Milne Road Oregon City, OR 97045-0304

DATE: 7/31/2007 JOB NO.: 1681 RE: Crabtree Terrace Subdivision 14616 S. Maplelane Road Phase 2 - Grading Submittal Billing # 1681, 20883 From: Monty Hurley

WE ARE	SENDING Y	OU THE F	OLLOWING:		
COPIES	DATE	NO.		DESCRIPTIO	N
1	7/31/2007	1	Check for the amou	unt of \$2,360.75	
6	7/31/2007	4	Full Size - Clearing	, Demolition, Grading, a	nd Erosion Control Plans
1	7/31/2007	2	Original/Signed - F	ill/Grading Application	
1		2	Site Grading Cost I	Estimate	
For App	roval		ved as submitted	Resubmit	copies for approval
For your	use		ved as noted	Submit	copies for distribution
As requ			ed for corrections	Return	corrected prints
E For revie	ew and com	ment 🗹 D	elivered by BKim	<u>ible</u>	
FOR BI	DS DUE	C	PRINTS RETURN	ED AFTER LOAN TO US	

Remarks: If you have any questions, please call.

Copy To:File

SIGNED: Brenda Kimble for Monty Hurley

CITY OF OREGON CITY

FILL/GRADING APPLICATION

Per OCMC 15.48

15.48.030 Applicability--Grading permit required.

A. A city-issued grading permit shall be required before the commencement of any of the following filling or grading activities:

1. Grading activities in excess of ten cubic yards of earth;

2. Grading activities which may result in the diversion of existing drainage courses, both natural and manmade, from their natural point of entry or exit from the grading site;

3. Grading and paving activities resulting in the creation of impervious surfaces greater than two thousand square feet or more in area;

4. Any excavation beyond the limits of a basement or footing excavation, having an unsupported soil height greater than five feet after the completion of such a structure; or

5. Grading activities involving the clearing or disturbance of one-half acres (twenty-one thousand seven hundred eighty square feet) or more of land.

B. Those fill and grading activities proposed to be undertaken in conjunction with a land use application, including but not limited to subdivisions, planned unit developments, partitions and site plan reviews, are subject to the standards of this chapter. However, a separate grading permit is not required. Approval of the construction plans submitted through the land use application process shall constitute the grading permit required under this chapter.

Permission is hereby requested to perform fill/grading work as set forth below. It is understood that this application is limited to the work described herein and that all work is to be done in compliance with the provisions shown on the back of this application and with all other applicable rules, regulations and standards of the City; and that the permittee assumes full responsibility for said compliance, for acceptability of the work, and for repair or replacement thereof if defective, and for repair or replacement of any existing improvement damaged by the doing of the work.

JOB SITE: 14616 S. Maplelane Road	14616 Maplelane Road, Oregon City, Oregon	503-631-8750
NAME OWNER: John Jones	ADDRESS	PHONE
OWNER: JOHN JOHES		
CONTRACTOR: John Jones Construction, Inc.	24 HR PHONE 503-631-8	012

Signature of applicant or agent:

DESCRIPTION OF WORK TO BE DONE PER THIS APPLICATION:

Rough grading and erosion	n and sediment control m	easures for site.	 	
		·····	 	
-			 	

Refer to back page for OCMC 15.48.090 - Submittal Requirements.

24 HRS. ADVANCE NOTICE MUST BE GIVEN FOR INSPECTION

- Exclusive of Saturdays, Sundays and holidays. Failure to obtain approval before proceeding with work may be cause for rejection. Any work to be done on a Saturday or holiday MUST be approved by the City at least 24 hours in advance during normal City work hours.

FILL/GRADING APPLICATION NUMBER: FP-07-004

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AKS ENGINEERING & FORESTRY, LLC.

13910 SW GALBREATH DRIVE, SUITE 100 SHERWOOD, OR 97140 503-925-8799

SITE GRADING COST ESTIMATE

14616 S. MAPLELANE ROAD

JOB NO.:	1681
Estimate by:	MBH

SITE WORK	\$85,750.00

1. The unit prices shown here are based on engineering experience and do not represent actual contractor bids. Actual contractor bids may vary significantly.

2. This estimate does not include:

Relocation of Utility Poles City, County, State, or Federal Permit Fees Consulting Services (Engineering, Surveying, Inspection, Observation, Construction Administration, Contractor Payment Review, Etc.) Geotechnical Engineering or Geotechnical Inspection Compaction / Soil Testing for Construction

3. Volumes and quantities listed here are approximate.

4. This estimate is intended for the City and Client's informational purposes only.

5. This estimate does not include items not specifically listed.

COSTS

AKS ENGINEERING & FORESTRY, LLC.

13910 SW GALBREATH DRIVE, SUITE 100 SHERWOOD, OR 97140 503-925-8799

SITE GRADING COST ESTIMATE

14616 S. MAPLELANE ROAD

JOB NO.: Estimate by: 1681 MBH

SITE WORK	QUANTITY	UNIT	UNIT PRICE	COST
SITE WORK				
Mobilization	1	L.S.	\$1,250.00	\$1,250.00
Clearing, Grubbing, Tree Removal, and Root-Picking	7	AC.	\$1,000.00	\$7,000.00
Stripping and Stockpiling (9"+/- Depth)	1	L.S.	\$7,500.00	\$7,500.00
Grading - General Excavation (Cut)	1	L.S.	\$40,000.00	\$40,000.00
Grading - Embankment (Fill)	1	L.S.	\$30,000.00	\$30,000.00
TOTAL				\$85,750.00

SITE WORK

REPLINGER & ASSOCIATES LLC TRANSPORTATION ENGINEERING

May 31, 2012

Mr. Pete Walter City of Oregon City PO Box 3040 Oregon City, OR 97045

SUBJECT: REVIEW OF TRANSPORTATION IMPACT ANALYSIS – CRABTREE TERRACE NO. 2 – TP12-01 & VR12-02

Dear Mr. Walter:

In response to your request, I have reviewed the materials submitted in support of the proposed Crabtree Terrace No. 2 subdivision. The relevant materials included the project narrative, site plan and the Transportation Impact Study (TIS). The TIS was prepared in March 2012 under the direction of Todd E. Mobley, PE of Lancaster Engineering.

The proposed subdivision is located near the intersection of Nutmeg Lane and Sugarpine Street. It is located south of Maplelane Road, but the proposed subdivision does not abut it. Nutmeg Lane would provide access to the proposed 30-lot subdivision. Two local streets with an east-west orientation would be created by the proposal.

The applicant is seeking a variance from certain land use requirements including the requirement for alleys to serve the residential parcels. The transportation aspects of the variance were not addressed in the TIS, but are judged to be insignificant from a traffic operations or safety standpoint.

The TIA provides a basis upon which the development proposal can be evaluated for transportation impacts.

Comments

- **1. Study Area.** The study addresses the appropriate intersections. The engineer evaluated traffic patterns and traffic volumes and evaluated 4 locations. The key intersections were:
 - Maplelane Road/Holly Lane
 - Maplelane Road/Walnut Grove Way
 - Maplelane Road/Thayer Road
 - Beavercreek Road/Maplelane Road

The study area is appropriate.

2. *Traffic Counts.* The traffic counts used in the analysis were conducted in February 2012. Traffic counts were conducted during both the AM and PM peak periods and appear reasonable.

Mr. Pete Walter May 31, 2012 Page 2

- **3.** *Trip Generation.* The TIS presents information on trip generation from the construction of 30 single-family dwellings. The trip generation rates were taken from the Institute of Transportation Engineers' *Trip Generation.* The subdivision is predicted to produce 23 AM peak hour trips; 30 PM peak hour trips; and 288 weekday trips.
- **4.** *Trip Distribution.* The trip distribution seems reasonable. The trip distribution shows 75 percent of traffic going through the Maplelane/Thayer and Maplelane/Beavercreek intersections.
- **5.** *Traffic Growth.* The traffic counts were adjusted to account for background traffic and for approved, but not-yet-constructed houses in the area. The engineer estimated 41 houses could be constructed on vacant parcels in the area. In addition, an annual growth rate of 2 percent was applied for a two-year period. The traffic growth assumptions and methodology appear reasonable.
- **6. Analysis.** Traffic volumes were calculated for the intersections described in #1, above. At each location, the level of service (LOS) and delay calculations were provided to assess operations relative to the city's intersection LOS standard. The analysis was undertaken for the AM and PM peak hours and included year 2012 existing conditions, 2014 background conditions, and year 2014 total traffic conditions.

According to the engineer, there will be a slight degradation of service with increased traffic volumes. Of the four intersections, the poorest predicted performance is LOS "D" under both AM and PM peak hours at Thayer Road and Maplelane Road. Each of the other intersections is predicted to operate at LOS "B" or "C" under total traffic conditions. The performance of the intersections is predicted to meet city standards during the peak hours.

The engineer also analyzed the amount of traffic that may be expected on Walnut Grove Way immediately east of Maplelane Road. This is relevant because of the lack of alternative routes until such time as the local street system provides greater connectivity. The engineer concludes that local streets will not be overburdened by the proposed development. I concur. Increasing connectivity will help to provide alternative routes and disburse traffic in the future.

- 7. *Turn Lanes at Site Entrance(s).* The site access would be provided by an extension of Nutmeg Lane. A turn lane is not needed for this local residential street.
- **8.** Crash Information. The TIS did not provide crash information. This oversight should be corrected by submittal of an addendum to the TIS.
- **9.** *Pedestrian and Bicycle Facilities.* The narrative and site plan indicate pedestrian facilities would be provided as part of the development.
- **10. Site Plan and Access.** The subdivision access would be provided by an extension of Nutmeg Lane to the north of Sugarpine Street. Two new east-west streets will be created with appropriate stubs to connect with future development.

Mr. Pete Walter May 31, 2012 Page 3

- **11. Intersection Spacing.** Two new intersections would be created on Nutmeg Lane. The absence of alleys in the proposed subdivision may require reconfiguring the street network so the spacing proposed was not evaluated.
- **12. Sight Distance.** The engineer did not evaluate sight distance at the two new intersections. There is no reason to expect a problem meeting sight distance at or near the proposed locations.
- **13.** Consistency with the Transportation System Plan (TSP). The project narrative indicates frontage improvements would be made to city standards.
- **14. Conclusions and Recommendations.** The engineer concludes that traffic operations would be adequate at all the analyzed intersections. I concur with the conclusions of the applicant's engineer.

Conclusion and Recommendations

The absence of historical crash data and an analysis of safety issues should be corrected with submittal of an addendum. The results are very unlikely to reveal serious deficiencies that could be exacerbated by the development. Assuming the addendum does not reveal significant issues, I find that the TIA provides an adequate basis upon which to assess the impacts of the proposed subdivision.

If you have any questions or need any further information concerning this review, please contact me at <u>replinger-associates@comcast.net</u>.

Sincerely,

John Replinger, PE Principal

Oregon City\2012\TP12-01.docx



6605 SE Lake Road, Portland, OR 97222 • PO Box 22109, Portland, OR 97269-2109 Phone: 503-684-0360 Fax: 503-620-3433 E-mail: legals@commnewspapers.com

AFFIDAVIT OF PUBLICATION

State of Oregon, County of Clackamas, SS I, Charlotte Allsop, being the first duly sworn, depose and say that I am Accounting Manager of Clackamas Review/Oregon City News, a newspaper of general circulation, published at Clackamas/Oregon City, in the aforesaid county and state, as defined by ORS 193.010 and 193.020, that

City of Oregon City Notice of Public Hearing File #: TP12-01, VR12-02 CLK12451

a copy of which is hereto annexed, was published in the entire issue of said newspaper for

week in the following issue: May 2, 2012

harlotte allese

Charlotte Allsop (Accounting Manager)

Subscribed and sworn to before me this May 2, 2012.

NOTARY PUBLIC FOR OREGON My commission expires Supt 1, 2015

Acct #10048638 Attn: Pete Walter City of Oregon City PO Box 3040 Oregon City, OR 97045-0304

> Size: 2 x 6.25" Amount Due: \$148.12 Please remit to address above.

NOTICE OF PUBLIC HEARING

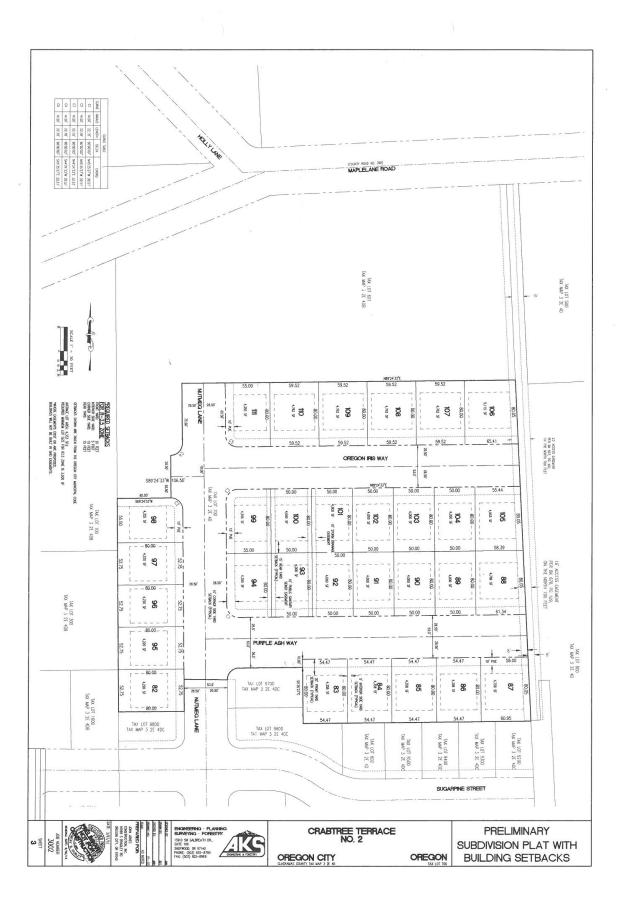
HEARING DATE: On Monday, June 11th, 2012 the City of Oregon City Planning Commission will conduct a public hearing at 7:00 p.m., in the Commission Chambers at City Hall, 615 Center Street, Oregon City 97045 on the following Type III Land Use Application. Any interested party may testify at the public hearing or submit written testimony at or prior to the close of the Planning Commission hearing. Written comments must be received by the Oregon City Planning Division, no later than May 25th, 2012 to be included in the Staff Report. Comments received after this date will be provided to the Planning Commission at the hearing. The public record will remain open until the Planning Commission closes the public hearing. FiLE NUMBER: TP 12-01: Subdivision / VR 12-02: Variance APPLICANT: AKS Engineering and Forestry, LLC. 13910 SW Galbreath Dr, Ste. 100. Sherwood, OR 97140 OWNER: John Jones Construction, Inc. 16999 S. Bradley Rd. Oregon City, OR 97045

Dr, ste. 100. Sherwood, OK 97 Ho OWNER: John Jones Construction, Inc.16999 S. Bradley Rd. Oregon City, OR 97045 REQUEST: The applicant is seeking Planning Commission approval of a 30-lot Subdivision and a Variance from the Alley requirements of OCMC 12.05.255 to allow direct garage access to local streets in the R-3.5 Dwelling district. LOCATION: 14616 Maplelane Rd, Oregon City, OR 97045, Clackamas County Map 3-2E-40, Tax Lot 700 CONTACT: Pete Walter, AICP, Associate Planner (503) 722-3789 NEIGHBORHOOD ASSOCIATION: Caufield OCMC CRITERIA: Administration and Procedures (17.50), Administration of Land Divisions (16.04), Subdivisions (16.08) Zoning Changes and Amendments (17.68), "R-3.5" – Dwelling District (17.16), Streets, Sidewalks and Public Places (12.04), Public and Street Trees (12.08), Minimum Improvements and Design Standards for Land Divisions (16.12), Tree Protection Standards (17.41), Erosion and Sediment Control (17.47), and Variances (17.60). The Oregon City Municipal Code is available on-line at www.orcity.org.

Municipal Code is available on-line at www.orcity.org. The applicant and all documents submitted by or on behalf of the applicant are available for inspection at no cost at the Oregon City, Planning Division, 221 Molalla Avenue, Suite 200, Oregon City, Oregon 97045, from 8:00 a.m. to 5:00 p.m. Monday through Thursday, and by appointment on Friday. The staff report, with all the applicable approval criteria, will also be available for inspection seven days prior to the hearing. Copies of these materials may be obtained for a reasonable cost in advance. Please be advised that any issue that is intended to provide a basis for appeal must be raised before the close of the Planning Commission hearing, in person or by letter, with sufficient specificity to afford the Planning Commission and the parties an opportunity to respond to the issue. Failure to raise an issue with sufficient specificity will preclude any appeal on that issue. The decision of the Planning Commission may be appealed to the City Commission by parties with standing within 14 days of the notice of decision. Any appeal will be based on the record. The procedures that govern the hearing will be posted at the hearing and are found in OCMC Chapters 17.50 and ORS 197.763. A city-recognized neighborhood association requesting an appeal fee waiver pursuant to 17.50.290(C) must officially approve the request through a vote of its general membership or board at a duly announced meeting prior to the filing of an appeal. Publish 05/02/2012.



Page 500 of 623



FILE COPY



Community Development - Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045 Ph (503) 722-3789 | Fax (503) 722-3880

NOTICE OF PUBLIC HEARING

Notice Mailed: May 11, 2012

HEARING DATE:	On Monday, June 11 th , 2012 the City of Oregon City Planning Commission will conduct a	
	public hearing at 7:00 p.m., in the Commission Chambers at City Hall, 615 Center Street,	
	Oregon City 97045 on the following Type III Land Use Application. Any interested party	
	may testify at the public hearing or submit written testimony at or prior to the close of	
	the Planning Commission hearing. Written comments must be received by the Oregon	
	City Planning Division, no later than May 25 th , 2012 to be included in the Staff Report.	
	Comments received after this date will be provided to the Planning Commission at the	
	hearing. The public record will remain open until the Planning Commission closes the	
	public hearing.	
FILE NUMBER:	TP 12-01: Subdivision	
	VR 12-02: Variance	
APPLICANT:	AKS Engineering and Forestry, LLC	
	13910 SW Galbreath Dr, Ste. 100	
	Sherwood, OR 97140	
OWNER:	John Jones Construction, Inc.	
	16999 S. Bradley Rd	
	Oregon City, OR 97045	
REQUEST:	The applicant is seeking Planning Commission approval of a 30-lot Subdivision and a	
	Variance from the Alley requirements of OCMC 12.05.255 to allow direct garage access	
	to local streets in the R-3.5 Dwelling district.	
LOCATION:	14616 Maplelane Rd, Oregon City, OR 97045	
	Clackamas County Map 3-2E-4D, Tax Lot 700	
CONTACT PERSON:	Pete Walter, AICP, Associate Planner (503) 722-3789	
NEIGHBORHOOD ASSOCIATION:	Caufield Neighborhood Association	
OREGON CITY MUNICIPAL CODE	Administration and Procedures (17.50), Administration of Land Divisions (16.04),	
(OCMC) CRITERIA:	Subdivisions (16.08) Zoning Changes and Amendments (17.68), "R-3.5" – Dwelling	
	District (17.16), Streets, Sidewalks and Public Places (12.04), Public and Street Trees	
	(12.08), Minimum Improvements and Design Standards for Land Divisions (16.12),	
	Tree Protection Standards (17.41), Erosion and Sediment Control (17.47), and Variances	
	(17.60). The Oregon City Municipal Code is available on-line at www.orcity.org.	

The applicant and all documents submitted by or on behalf of the applicant are available for inspection at no cost at the Oregon City Planning Division, 221 Molalla Avenue, Suite 200, Oregon City, Oregon 97045, from 8:00 a.m. to 5:00 p.m. Monday through Thursday, and by appointment on Friday. The staff report, with all the applicable approval criteria, will also be available for inspection seven days prior to the hearing. Copies of these materials may be obtained for a reasonable cost in advance. Please be advised that any issue that is intended to provide a basis for appeal must be raised before the close of the Planning Commission hearing, in person or by letter, with sufficient specificity to afford the Planning Commission and the parties an opportunity to respond to the issue. Failure to raise an issue with sufficient specificity will preclude any appeal on that issue. The decision of the Planning Commission may be appealed to the City Commission by parties with standing within 14 days of the notice of decision. Any appeal will be based on the record. The procedures that govern the hearing will be posted at the hearing and are found in OCMC Chapter 17.50 and ORS 197.763. A city-recognized neighborhood association requesting an appeal fee waiver pursuant to 17.50.290(C) must officially approve the request through a vote of its general membership or board at a duly announced meeting prior to the filing of an appeal.

1-800-GO-AVERY

32E04DC02000 Concept Custom Homes Inc 10121 SE Sunnyside Rd #115 Clackamas, OR 97015

32E04DC04200 Kelsey Brouillette 14680 Sourwood St Oregon City, OR 97045

32E04DC07100 Cedar Ridge Development Inc 10121 SE Sunnyside Rd Clackamas, OR 97015

32E04DC07400 John & Eva Jones 16999 S Bradley Rd Oregon City, OR 97045

32E04DC07700 Cedar Ridge Development Inc 10121 SE Sunnyside Rd Clackamas, OR 97015

32E04DC08000 Michael Harrison 14697 Sourwood St Oregon City, OR 97045

32E04DC08300 John & Eva Jones 16999 S Bradley Rd Oregon City, OR 97045

32E04DC08600 Cedar Ridge Development Inc 10121 SE Sunnyside Rd Clackamas, OR 97015

32E04DC08900 Cedar Ridge Development Inc 10121 SE Sunnyside Rd Clackamas, OR 97015

32E04DC09200 Concept Custom Homes Inc 10121 SE Sunnyside Rd #115 Clackamas, OR 97015



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32E04DC02100 Concept Custom Homes Inc 10121 SE Sunnyside Rd #115 Clackamas, OR 97015

32E04DC04300 John & Eva Jones 16999 S Bradley Rd Oregon City, OR 97045

32E04DC07200 Concept Custom Homes Inc 10121 SE Sunnyside Rd #115 Clackamas, OR 97015

32E04DC07500 Cedar Ridge Development Inc 10121 SE Sunnyside Rd Clackamas, OR 97015

32E04DC07800 Cedar Ridge Development Inc 10121 SE Sunnyside Rd Clackamas, OR 97015

32E04DC08100 Jessica Franklin 14689 Sourwood St Oregon City, OR 97045

32E04DC08400 John & Eva Jones 16999 S Bradley Rd Oregon City, OR 97045

32E04DC08700 Cedar Ridge Development Inc 10121 SE Sunnyside Rd Clackamas, OR 97015

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32E04DC09300 Cedar Ridge Development Inc 10121 SE Sunnyside Rd Clackamas, OR 97015

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32E04DC02200 Kimberly Brandstetter 18775 Nutmeg Ln Oregon City, OR 97045

32E04DC04400 Bonny Groshong 14696 Sourwood St Oregon City, OR 97045

32E04DC07300 John & Eva Jones 16999 S Bradley Rd Oregon City, OR 97045

32E04DC07600 Cedar Ridge Development Inc 10121 SE Sunnyside Rd Clackamas, OR 97015

32E04DC07900 Gloria Corvera 14705 Sourwood St Oregon City, OR 97045

32E04DC08200 Larry Findling 14681 Sourwood St Oregon City, OR 97045

32E04DC08500 John & Eva Jones 16999 S Bradley Rd Oregon City, OR 97045

32E04DC08800 Cedar Ridge Development Inc 10121 SE Sunnyside Rd Clackamas, OR 97015

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32E04A 01100 Douglas & Vivian Johnson 18572 Holly Ln Oregon City, OR 97045

32E04B 02802 Mary Trachsel 14545 Maple Lane Rd Oregon City, OR 97045

32E04D 00500 William Smith 14706 Maple Lane Rd Oregon City, OR 97045

32E04DB00100 Gary Boom 14594 Maple Lane Rd Oregon City, OR 97045

32E04B 02890 Mary Trachsel 14545 Maple Lane Rd Oregon City, OR 97045

32E04DB01300 Kevin Robert Alexander 14611 Sugarpine St Oregon City, OR 97045

32E04DB01600 Michael & Judy Montoya 14647 Sugarpine St Oregon City, OR 97045

32E04DB01900 Judith Herrmann Po Box 2064 Oregon City, OR 97045

32E04DB03300 Mark & Tamara Goddard 18740 Yellow Wood Rd Oregon City, OR 97045

32E04DB03600 Melinda & Nathan Green 18770 Yellow Wood Rd Oregon City, OR 97045



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32E04A 01200 Kendall Dukes 18582 Holly Ln Oregon City, OR 97045

32E04D 00400 Jo Ann Morris 14756 Maple Lane Rd Oregon City, OR 97045

32E04D 00800 Joan Louise Johnson 18730 Nancy Marie Ln Oregon City, OR 97045

32E04DB00200 Gary Barstad 14576 Maple Lane Rd Oregon City, OR 97045

32E04B 02892 Mary Trachsel 14545 Maple Lane Rd Oregon City, OR 97045

32E04DB01400 David Shaw 14623 Sugarpine St Oregon City, OR 97045

32E04DB01700 Ryan Michael Oliver 14614 Sugarpine St Oregon City, OR 97045

32E04DB03100 Brian & Diane Ward 14603 River Birch Pl Oregon City, OR 97045

32E04DB03400 Claudiu & Simona Rusnac 18750 Yellow Wood Rd Oregon City, OR 97045

32E04DC01800 Cedar Ridge Dev Inc 10121 SE Sunnyside Rd #115 Clackamas, OR 97015

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Feed Paper

Étiquettes faciles à peler Utilisez le gabarit AVERY® 5160®

32E04A 01600 Country Village Estates LLC 800 NW 6th Ave #200 Portland, OR 97209

32E04D 00401 Joe Ryan Morris 14770 Maple Lane Rd Oregon City, OR 97045

32E04D 00900 Kiyoko Grudier 14211 SE 120th PI Clackamas, OR 97015

32E04DB00300 Joni Sayre 14566 Maple Lane Rd Oregon City, OR 97045

32E04DB01200 Clarissa & Charles Inglehart 14599 Sugarpine St Oregon City, OR 97045

32E04DB01500 Larry Pearson 14635 Sugarpine St Oregon City, OR 97045

32E04DB01800 David Sobelson 14602 Sugarpine St Oregon City, OR 97045

32E04DB03200 Mark & Kimberly Tegman 14615 River Birch Pl Oregon City, OR 97045

32E04DB03500 James Burton & Diana Brown 18760 Yellow Wood Rd Oregon City, OR 97045

32E04DC01900 John & Eva Jones 16999 S Bradley Rd Oregon City, OR 97045

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1-800-GO-AVERY

32E04DC09500 Cedar Ridge Development Inc 10121 SE Sunnyside Rd Clackamas, OR 97015

32E04DC09800 John & Eva Jones 16999 S Bradley Rd Oregon City, OR 97045

Repliez à la hachure afin de révéler le rebord Pop-un

32E04DC09600

John & Eva Jones

16999 S Bradley Rd

Oregon City, OR 97045

chargement Sens de

Étiquettes faciles à peler Utilisez le gabarit AVERY® 5160®

32E04DC09700 Stacie Leanne Fisher 18720 Nutmeg Ln Oregon City, OR 97045

Leed Paper

Easy Peel® Labels Use Avery® Template 5160®



Community Development – Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045 Ph (503) 722-3789 | Fax (503) 722-3880

AFFIDAVIT OF POSTING NOTICE FOR LAND USE APPLICATIONS

John Jones Construction, Inc. 16999 S. Bradley Rd Oregon City, OR 97045

AKS Engineering and Forestry, LLC 13910 SW Galbreath Dr, Ste. 100 Sherwood, OR 97140 Project: TP 12-01: 30-Lot Subdivision VR 12-02: Variance
Location: 14616 Maplelane Rd, Oregon City
Tax Lot: Clackamas County Map 3-2E-4D - 700
Application Submitted: 3/22/2012
Application Incomplete: 4/17/2012
Application Complete: May 4, 2012
120-day Deadline: September 18th, 2012

A land use action requires the posting of a sign for a period of at least fourteen (14) days that provides a brief description of the application submitted. It is your responsibility to post the sign, which may be obtained at the Oregon City Department of Community Development. <u>Failure to post the sign by the date specified will result in the automatic extension of the public comment period.</u>

The sign shall be posted by <u>May 11th, 2012</u> so that it is clearly visible along the most traveled street fronting the property.

The sign shall be mounted on a sturdy backing (such as plywood), and posted within 10 to 15 feet of the street so that is clearly visible. The notice shall not be posted on trees or utility poles. If the weather is wet please cover the sign with clear plastic, or other clear weatherproof material.

Please remove the sign after the Public Hearing, not before June 11, 2012.

If you have any questions please contact me at (503) 496-1568.

Pete Walter, AICP, City of Oregon City - Planning Division 221 Molalla Ave., Ste. 200 Oregon City, Oregon 97045

PLEASE SIGN AND RETURN THIS NOTICE TO THE PLANNING DIVISION

I hereby certify that on (date) <u>5 11 12</u>, I posted the required notices on the subject site. If there is any delay in the city's land use process caused by the applicant's failure to correctly post the subject property for the required period of time and in the correct location, the applicant agrees to extend the one-hundred-twenty-day period in a timely manner.

5.11.12

Applicant or Representative WILLIAM C BERGEE Date



FILE COPY

Community Development – Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045 Ph (503) 722-3789 | Fax (503) 722-3880

LAND USE APPLICATION TRANSMITTAL

May 11th, 2012

 IN-HOUSE DISTRIBUTION (Email) BUILDING OFFICIAL DEVELOPMENT SERVICES MANAGER (Packet) PUBLIC WORKS- OPERATIONS (Email) CITY ENGINEER/PUBLIC WORKS DIRECTOR (Email) CITY ENGINEER/PUBLIC WORKS DIRECTOR (Email) TECHNICAL SERVICES (GIS) PARKS MANAGER ADDRESSING (email) POLICE (email) TRAFFIC ENGINEER REPLINGER AND ASSOCIATES (Packet) Mailed Notice to County CPO's Central Pt-New Era-Leland / Holcomb-Outlook/Beavercreek Mailed Notice Within 300' of Tax Lot 	MAIL-OUT DISTRIBUTION CITIZEN INVOLVEMENT COUNCIL (CIC) NEIGHBORHOOD ASSOCIATION <u>CAUFIELD</u> N.A. CHAIR (Packet) CLACKAMAS COUNTY TRANSP. & PLANNING KEN KENT CLACKAMAS FIRE DISTRICT #1 (email) (Packet) ODOT - Division Review OREGON CITY SCHOOL DISTRICT (email) TRI-MET METRO OREGON CITY POSTMASTER DLCD CITY ATTORNEY (email) OTHER:						
COMMENTS MAY BE SUBMITTED UP UNTIL THE PLAN HEARING DATE: June 11 th , 2012	5:00 PM, Friday, May 25 th , 2012 🔆						
PLANNER: Pete Walter, AICP, Associate Planner APPLICANT / OWNER: John Jones Construction, Inc. REPRESENTATIVE: AKS Engineering REQUEST: The applicant is seeking Planning Conduction, Alley requirements of OCMC 12.05.2	12-02: Variance (From Alley Requirement) (503) 496-1568 mmission approval of a 30-lot Subdivision and a Variance from the 155 to allow direct access to local streets in the R-3.5 District. R 97045, Clackamas County Map 3-2E-4D, Tax Lot 700						
This application material is referred to you for your information, study a Planning Department. Your recommendations and suggestions will be u wish to have your comments considered and incorporated into the staf processing of this application and ensure prompt consideration of your	used to guide the Planning staff when reviewing this proposal. If you freport, please return the attached copy of this form to facilitate the						
The proposal does not conflict with our interests.	The proposal conflicts with our interests for the reasons stated below.						
The proposal would not conflict our interests if the changes noted below are included.	The following items are missing and are needed for review:						
Signed							
Title							



Community Development – Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045 Ph (503) 722-3789 | Fax (503) 722-3880

May 4, 2012

John Jones Construction, Inc. 16999 S. Bradley Rd Oregon City, OR 97045

AKS Engineering and Forestry, LLC 13910 SW Galbreath Dr, Ste. 100 Sherwood, OR 97140 Project: TP 12-01: 30-Lot Subdivision VR 12-02: Variance
Location: 14616 Maplelane Rd, Oregon City
Tax Lot: Clackamas County Map 3-2E-4D - 700
Application Submitted: 3/22/2012
Application Incomplete: 4/17/2012
Application Complete: May 4, 2012
120-day Deadline: September 18th, 2012

DETERMINATION OF APPLICATION COMPLETENESS

Dear Applicant;

XX TP 12-01 and VR 12-02 have been deemed complete for processing.

For assistance regarding any current planning or engineering issues related to your project please contact me in the Community Development Department at (503) 657.0891. I look forward to working with your op your application.

Pete Walter, AICP, (503) 496-1568 Planning Division



City of Oregon City Permit Receipt RECEIPT NUMBER 00023340

Account Number: 015281

Date: 3/22/2012

Applicant:	TP 12-01 / VR 12-02, AKS	
Туре:	check # 1128	
Permit Number	Fee Description	Amount
TP-12-0001	4332 Subdivision Fee	13,570.00
TP-12-0001	4346 TIS >3 Inter/Key Corrid	640.00
TP-12-0001	4346 Traffic Impact Study Fee	385.00
	Total:	\$14,595.00

PC Variance \$2,346.00
Subdivision-301015 - \$13,570.00
TIS-Key Corridor - \$640.00
TIA-residential - \$1,025.00

$$$17,581.00$$

Total \$17,581.00
Fee's Owing = \$2,986

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from



Community Development – Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045 Ph (503) 722-3789 | Fax (503) 722-3880

LAND USE APPLICATION TRANSMITTAL May 11th, 2012

IN-HOUSE DISTRIBUTION (E) BUILDING OFFICIAL DEVELOPMENT SERVICES M PUBLIC WORKS- OPERATION CITY ENGINEER/PUBLIC WO TECHNICAL SERVICES (GIS) PARKS MANAGER ADDRESSING (email) POLICE (email) TRAFFIC ENGINEER REPLINGER AND ASSOCIATE Mailed Notice to County CPO'S Central Pt-New Era-Leland, Mailed Notice Within 300' of Tax Lot	MANAGER (Pachet) NS (email) DRKS DIRECTOR (Email)	MAIL-OUT DISTRIBUTION CITIZEN INVOLVEMENT COUNCIL (CIC) NEIGHBORHOOD ASSOCIATION <u>CAUFIELD</u> NA. CHAIR (Packet) N.A. LAND USE CHAIR (Packet) CLACKAMAS COUNTY TRANSP. & PLANNING KEN KENT CLACKAMAS FIRE DISTRICT #1 (ema;1) (Packet) ODOT - Division Review ODOT - Division Review OREGON CITY SCHOOL DISTRICT (ema;1) TRI-MET METRO OREGON CITY POSTMASTER DLCD CITY ATTORNEY (ema; 1) OTHER:						
COMMENTS DUE BY: COMMENTS N		5:00 PM, Friday, May 25 th , 2012 💛						
HEARING DATE:	June 11 th , 2012							
HEARING BODY:	Staff Review;XXF	LANNING COMMISSION;CC						
FILE # & TYPE: PLANNER:	TP 12-01: Subdivision, (30 Lots) / VR Pete Walter, AICP, Associate Planne	12-02: Variance (From Alley Requirement)						
APPLICANT / OWNER:	John Jones Construction, Inc.	(303) 430 1300						
REPRESENTATIVE:	AKS Engineering							
REQUEST:		mmission approval of a 30-lot Subdivision and a Variance from the						
		55 to allow direct access to local streets in the R-3.5 District.						
LOCATION:	14616 Maplelane Rd, Oregon City, C	R 97045, Clackamas County Map 3-2E-4D, Tax Lot 700						
Planning Department. Your recon wish to have your comments con processing of this application and	nmendations and suggestions will be sidered and incorporated into the sta	and official comments. If extra copies are required, please contact the used to guide the Planning staff when reviewing this proposal. If you if report, please return the attached copy of this form to facilitate the recommendations. Please check the appropriate spaces below. The proposal conflicts with our interests for the reasons stated below.						
	vould not conflict our interests if	The following items are missing and are						
the changes no	oted below are included.	needed for review:						
	Signed							
	Title							
PLEAS	E RETURN YOUR COPY OF THE APPLI	CATION AND MATERIAL WITH THIS FORM.						

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To:	The City of Oregon City
	Planning Commission
From:	Mark & Tamara Goddard
	18740 Yellow Wood Road
	Oregon City, OR 97045
	503.380.4559
	matasetati@comcast.net
Date:	15 June 2012
Subject:	Approval of John Jones Construction application TP 12-01 / VR 12-02 - Crabtree
5	Terrace 2

Dear Planning Commission members,

We are residents of the Walnut Grove subdivision and would like to urge you to accept the variance requested in TP 12-01 / VR 12-02 to exclude alleys from this development. We have studied the application carefully and are in full agreement with the developer in his rationale for requesting this variance. We feel that the plan as suggested by the developer keeps the same feel and flow of the existing neighborhood, which will enhance the sense of community and continuity.

The alley requirement <u>12.04.255</u> - <u>Street design</u>—<u>Alley</u> for R3.5 is new and was enacted after the original planning for this development. Crabtree Terrace 1 was built under the old zoning and we feel that Crabtree Terrace 2 and other adjoining developments should use the same design criteria. We believe that in this case the new alley requirement imposes an unfair and unnecessary burden on the developer and will have a negative impact on the neighborhood.

We fear that the changes necessary to accommodate alleys into the design will make that portion of the neighborhood feel ugly, crowded, and dense compared to the other sections. Forcing the houses to the front of the lots will eliminate much of the landscaping we now enjoy as we walk through the neighborhood. It will bring a closed-in urban feel that is not appropriate for this single-family home neighborhood. We believe it could also foster a sense of segregation between residents of the two distinct sections which will negatively impact the community.

In addition, the addition of alleys will have negative environmental impacts caused by the significant increase of impervious surfaces. There have been many studies showing that more asphalt and concrete and less green causes damage to the local ecology through both heat island effect and increased storm-water runoff.

We also fear that the addition of this distinctly different design into the neighborhood will negatively impact property values in an already hard-hit area. Quite frankly, we think that this design will give a low-class apartment feel to that section which we do not welcome. We have already lost nearly 30% of the value of our home due to this recession and are not pleased with the prospect of losing more.

Finally, we believe that the alley requirement will have a significant negative impact on the developer, who has also suffered through the current recession. It is not good to hurt local businesses, especially when there is no benefit to the community. Land lost to alleyways will reduce lot sizes and/or reduce the number of houses possible while increasing infrastructure costs. This imposes a real financial burden on the developer since his plans were made under the previous zoning requirements as part of the overall project. We have had the pleasure of getting to know Mr. Jones personally over the last few years and like him immensely. He is an honest and hard-working man who wants to work with the residents to create a nice neighborhood. The builder of our house graded the back yard in such a way that our yard was almost 24" below the lot behind us, creating a significant slope which would have brought lots of runoff water straight into our house. This also created a problem for Mr. Jones, who would have had to do additional grading to the lots behind us. When we contacted him to discuss options, he was very helpful and built us a very nice retaining wall at his own expense which solved both of our problems. We appreciate this attitude very much and think it should be encouraged.

Again, we would like to urge you to accept the variance requested in TP 12-01 / VR 12-02 to exclude alleys from this development. The application appears to meet all city requirements and we strongly feel that the variance requested to remove the alley requirement is in the best interest of all of the residents of our neighborhood.

Thank you for your consideration,

Mark A Goddard

Jamaha Q goddard Tamara D. Goddard

RICHARD B. HUGIFES KITT M. HUGHES 14726 SILGEBORIC WAY OREGON City, OR 99045

TO: City of OREGON City IN REGARD TO CRABITICE PHASE 2:

We ARE OPPOSED TO THE EXCLUSION OF JORDS + THE Replacement of Such with ally ways and the Current Design For the NeighBorhood CHANGE.

THE Replacement of Janos with Bail Ganages And THE CREATION OF GILLY WILLS WOULD BE BY PRSIGN a POTENTIAL SUFFETY HAZAND FOR SMALL CHILPREN DUE TO THE LACK OF SECARE JURDS AND PLAY AREAS. IN APPITION, WE BELIEVE THE TYPE OF PISIGN CUrrenty PROPOSED WILL LOWER PROPORTY VALUES IN OUR AREA.

Your Consideration of this nather and the Re-THINKING OF THE CURRENT PLAN is CRUCIAL FOR THE ENTURE OF OBR NEIGHBORITOOD

Sincentyi Bus. A Kitig Hugher

June 12, 2012 Attn: City of Oregon City Walnut ulo lin (in the Grove lu halivision undins tand Crabtru Terrace Phase that ana Was ami a nomes as homes sta A quali Jacto mis, un holuvision deprec ano ease don romes to be bult ank + Judy Hlo. Sugarpine Phil+KimLanZ 18687 Clear WaterPI 1464 one C. TY 0197045 hil fun 5-3-961-3008

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

Page 515 of 623

June 12, 2012

City of Oregon City 221 Molalla Avenue Suite 200 Oregon City, OR 97045

To Whom it May Concern:

I am concerned about the potential lot requirements for Crabtree Phase 2. The alley ways and reverse garages will not only diminish the property value of existing homes in Crabtree Phase 1 and adjacent subdivisions, but it will also attract a different type/quality of buyer due to the fact that the houses will not have back yards.

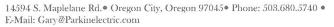
Please reconsider enforcing alley ways and reverse garages as a new lot requirement for the 2nd phase of the Crabtree subdivision.

Sincerely,

Angela Shore

Angela Shore 18852 Elder Road Oregon City, OR 97045

GARY BOOM





June 16, 2012

City of Oregon City Planning Commission Community Development - Planning 221 Molalla Ave. Suite 200 Oregon City, Oregon 97045

File Number: TP 12-01: Subdivision, VR 21-02 : Variance

Dear Planning Commission:

I am writing this letter to express my support for approval of the variance from the Alley requirements of OCMC 12.04.255 and to allow direct garage access to local streets in the R-3.5 Dwelling district.

I feel the requirement to construct an alleyway behind the homes in Crabtree Terrace No.2 is unsubstantiated and unwarranted. The developer has done an outstanding job in creating a visual aesthetic and architectural cohesion of homes in Crabtree Terrace No.1, which I feel would be lost with the creation of an alleyway system in Crabtree Terrace No.2. It is my opinion that the neighborhood "feel" would be lost by constructing an alleyway behind these traditional single-family homes by disconnecting the backyards from one another with an unnecessary strip of hard surface area. There could also be a concern for safety from a potential homebuyer with children because of the reduced play area in the backyards of these homes as the result of an alleyway, thus creating an economic hardship for the developer by limiting the marketability of the homes for sale in this development.

In conclusion, I feel the City Planning Commission should approve the variance and let Crabtree Terrace No.2 be completed without the alleyway system as originally designed and presented in the land use application. In these economic times the City should be striving to help developers with the creation of new, safe and appealing neighborhoods to stimulate the economic growth, not burden them with requirements to include useless land-use features.

Sincerely,

Gary Boom

June 13, 2012

To Whom It May Concern:

I was informed that there is a new housing development going in on Maple Lane. I live right next to that housing development on Nutmeg Lane. I am excited about this development for many reasons, but I do have a concern.

My concern is that this development is going to be rear entry homes. This brings concern for many reasons, but I will share a couple of the main ones with you. I am concerned that if the City of Oregon City requires the builder to build these types of homes it will significantly lower the value of my home and the homes in my neighborhood. While these types of homes, from your perspective, may look more appealing I do not believe they are, and I believe, they will be less appealing to those looking to purchase a home.

My other main concern is safety for children and pets. I do realize that my children/pets won't be living in these homes, but they may want to play with the children that do live there. If these homes are rear entry homes this leaves only the front yard and the alleyways for children/pets to play. My pets are outside during the day and I know, if I lived in those types of homes the dogs would not stay in a front yard with so many distractions and temptations going on around them. I also believe it is important for children to have a safe place to play and a front yard/alleyway does not bring security, in my mind, for safety.

Please reconsider this decision and let this housing development have front entry houses.

Thank you for your consideration

Stacie Fisher 503-939-1826

Oregon City Planning Commission

Meeting of June 11th, 2012

RE: Agenda Item 4a TP 12-01/VR 12-02 Crabtree Terrace Phase 2

The 2012 Mission and Goals for the City of Oregon City are to, Build a sustainable, healthy community that promotes Safety, Economic Opportunity, Livability, Environment and Uniqueness.

Development on Maplelane and Thayer Roads do not meet these goals, especially those of Safety and Livability. Let's look at the issues one by one....

SAFETY:

Cut through traffic into Walnut Grove Subdivision. Walnut Grove lots are only 3500 square feet with little to no backyards leaving children to play in front yards close to the street facing traffic.

I ask that you do your due diligence and read the 29 letters from angry Walnut Grove residents when Phase 1 was proposed, which speak to lack of safety, cut through traffic, dangerous living conditions and fears for their children and community. Phase 2 just proposes more of the same.....unsafe and unlivable conditions.

Safety and dangerous conditions exist on Maplelane for the many citizens who walk along the road trying to reach Albertson's and the shopping center. Many are children and teenagers that the City is putting into harm's way.

LIVABILITY& HEALTHY COMMUNITIES:

These lots are small, only about 4000 square feet, promoting the same dangerous living conditions as those of Walnut Grove. <u>IASK.....WHERE IS THE PARK!</u> There simply is no Park, no place to play, no place to gather and be community, simply NO Amenities at all.

TRANSPORTATION:

Cut through traffic is a major obstacle, there are Sight Distance problems on Clearview at Maplelane that will become more dangerous as traffic increases.

Traffic Counts for Maplelane, (posted 45MPH), are as much as 7000 ADT's per day and increasing every year. Find Traffic Counts, and comparables, Attached A future park and ride facility is indicated at south corner of the intersection of Beavercreek Road and Hwy 213. THAYER ROAD DEVELOPMENT is also being proposed. Were these trips figured into the Traffic Analysis??

The Intersection of Maplelane/Thayer **FAILS** County standards at LOS E (per traffic study for Thayer Road development).

LANDSLIDES - EROSION CONTROL

A citizen living in the 15700 Thayer Road area reported "concerns that Gas Lines, on his property, could possibly burst" due to land movement and sliding of the earth.

Just beyond the 15700 Thayer Road area lies an area filled with a plethora of huge deep seated landslides that cannot be mitigated. This part of Thayer has been declared UNSAFE by the School District, buses with children are NOT ALLOWED over this road. CLACKAMAS COUNTY repairs for 2006-07 were more than \$180,000 dollars and the road must be maintained on an annual basis. (maintenance costs attached) Commissioners, consider how much traffic development is putting on this road.

Erosion Control- An erosion control plan was not provided for Phase 1, even though parts of the subdivision are located close to an area of Chaotically mixed and deformed masses of rock, colluvium, & soil that have moved downslope in one or more events.

POLICE SERVICES

de la companya de la comp

The city is unable to provide police services. I urge you to watch the video of the February 1st, 2012 City Commission meeting. At point 34.24 of the tape Commissioner Smith speaks to his concerns for the \$3500 voluntary fee paid by developers for police services. This testimony was given in the public hearing for annexation of .89 acres at 14362 S Maplelane Ct, where Commissioner Smith chose to vote NO.

Commissioners, I urge you to read all the information and attachments I have provided. Ask yourself, can I really approve further development in an unsafe and unhealthy environment? Ask if this plan has been approved by the Fire Chief? These streets are narrow, it will be difficult for Fire Trucks to maneuver into some of these areas due to difficulty of access. Unfortunately the City is building too many subdivisions with restricted access compromising the citizens' safety and making them vulnerable to becoming trapped and unable to reach safety in dangerous situations

In ending, explain lot line adjustment at Lots 600 & 700.

Christine Kosinski, Unincorporated Clackamas County

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Clackamas County Traffic Engineering, 150 Beavercreek Road Oregon City, OR 97045 Questions about this report? Call 503-742-4400 MAPLELANE RD 50' NORTH OF BEAVERCREEK RD

LOCATION:

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Report Date: 10/31/2011 3:24 PM

Page 1

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Clackamas County Traffic Engineering, 150 Beavercreek Road Oregon City, OR 97045 Questions about this report? Call 503-742-4400 MAPLELANE RD 250' EAST OF HOLLY LN

LOCATION:

Page 1

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Clackamas County Traffic Engineering, 150 Beavercreek Road Oregon City, OR 97045 Questions about this report? Call 503-742-4400 MAPLELANE RD 200' WEST OF HOLLY LN

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32001 10/26/2011

Wednesday

Page 1

`	Subj: Date: From: To:		Repairs-Landsli d 3:06:34 P.M. Paci		ard Time	
			Landslide Status			
	Site_		Jan.2006-Dec.0 Cost	- T	Status	
	Thayer Rd		\$108,627.46 (incomplete	
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	S. End Rd	. <u>rock slide</u> Land slide	\$305,918.05	(actual)	completed	
	Clackamas Clack. R. [s River Dr.#	1 \$240,924.71	actual) (actual) (actual)	completed completed completed	5-24-06

Christine,

I hope I captured most of the information you requested. If I left out anything or you need any more assistance please don't hesitate to give me a call. Terry

Terry C. Learfield Road Operations Supervisor Clackamas Co. Transportation Maintenance *Redland Road – 400 ft East of Holly June 1, 2012 7525 ADT's per day – 10/25/11 2- narrow lanes, deep ditches, poor lighting, driveways off Redland, rural mailboxes, no bike lanes or sidewalks, homes 50-200 feet off road Posted speed: 45-50

*Redland Road - 300 ft West of Holly
9288 ADT's per day - 10/25/11
2-narrow lanes, deep ditches, poor lighting, driveways off Redland, rural mailboxes, no bike lanes or sidewalks, homes 50-200 feet off road
Posted speed: 45-50
*Designated safety corridor & one of 25 County Hot Spots-2012 report

Beavercreek @ Molalla Westbound 9696 ADT's per day 3/12/09 4-wide lanes, overhead lighting, no residential city mailboxes, bike lanes & sidewalks, well improved posted speed: about 30

Sunnyside @ 122nd Eastbound 14,355 ADT's per day 3/12/09 4-wide lanes, well lit, no residential at intersection city mailboxes, bike lanes & sidewalks, well improved posted speed: about 30

Sunnyside @ 97th Ave Eastbound 18,319 ADT's per day 3/31/09 4-wide lanes, well lit, no residential at intersection city mailboxes, bike lanes, well improved posted speed: about 30

Maplelane, Holly, Thayer = All 2-lane narrow roads with deep ditches, poor lighting, driveways to street rural mailboxes, no bike lanes or sidewalks, not improved Many homes sit very close to road, from 20 to some being about 100 feet from road Oregon City Planning Commission Meeting of June 25, 2012

RE: Crabtree Terrace Phase 2 TP 12-01 /VR 12-02

At the June 11th, 2012 meeting, and I'm assuming the same for tonight, the developer is not present, there is no staff report, no plat maps and no discussion regarding the traffic impact study. Therefore I'm guessing all this information will be dumped upon us at the final July 23rd meeting giving the citizens "a plethora of information at the last minute" and little time to be prepared to give "informed testimony". This process certainly puts the citizens at a huge disadvantage.

I am upset because I see a City that is attempting to keep the citizens out of actively participating in land use decisions, a huge breach of State Goal I which was implemented to insure that citizens have the opportunity to be involved in all phases of the planning process.

My concerns tonight are many and are found in the details of the Traffic Impact Study. The City had discussion with the Caufield Neighborhood Assn that clearly indicates street connections to Maplelane are planned in the future phase. Also, in 2007, Mr. Jones indicated his subdivision would connect into Holly Lane. My question to the City is "you met with 24 citizens in the Caufield Neighborhood, but you failed to do any outreach to the 500 plus citizens of Holly Lane. Just when were you going to tell these good people that you were going to take their street... Would it be....NEVER?

I refer you to Page 8 of the Traffic Impact Study. The City has approved new homes on Thayer Road, not far from Nutmeg Lane. Is it the City's plan to bring this traffic into Nutmeg and then access onto Maplelane and Holly? If so, this is even more ADT's per day into this intersection, and the City plans NO IMPROVEMENTS to Holly Lane leaving residents with unsafe and unlivable conditions.

In 2007, more than 113 citizens, living on HollyLane, Donovan Road and Holly Crest, signed their "Petition to Protect the Livability and Safety of Holly Lane". These signatures, along with 40 Citizen Comment Forms were turned into Mayor Norris and City Commissioners. This Petition speaks to the concerns of increased traffic coming from any and all new development approved by Oregon City. On the back side of the Petition is a map clearly indicating plans from the City proposing to extend Holly Lane from Henrici, to Maplelane, Thayer and then to connect with Holcomb Blvd.

The Holly Lane Petition was an attachment to a letter given to Mayor Norris in December of 2007 asking the City to act upon the need for 1-2 more connectors between Beavercreek Road and Redland Road since one little street, Holly Lane, could not provide North/South connections for this huge amount of ADT's per day. What the City was proposing would have destructive impacts to the street and would place the residents of Holly Lane in harms way.

I ask that you seriously consider the impacts of increasing traffic that Oregon City is proposing in the Maplelane, Holly and Redland areas. These people should not be victims to poor planning and monetary constraints that prevent the City from building the very roads they need to accommodate increasing development. In other words, development continues to NOT pay it's way, but to expect the people to suffer the ill effects of ever more residential development is simply being negligent to their needs.

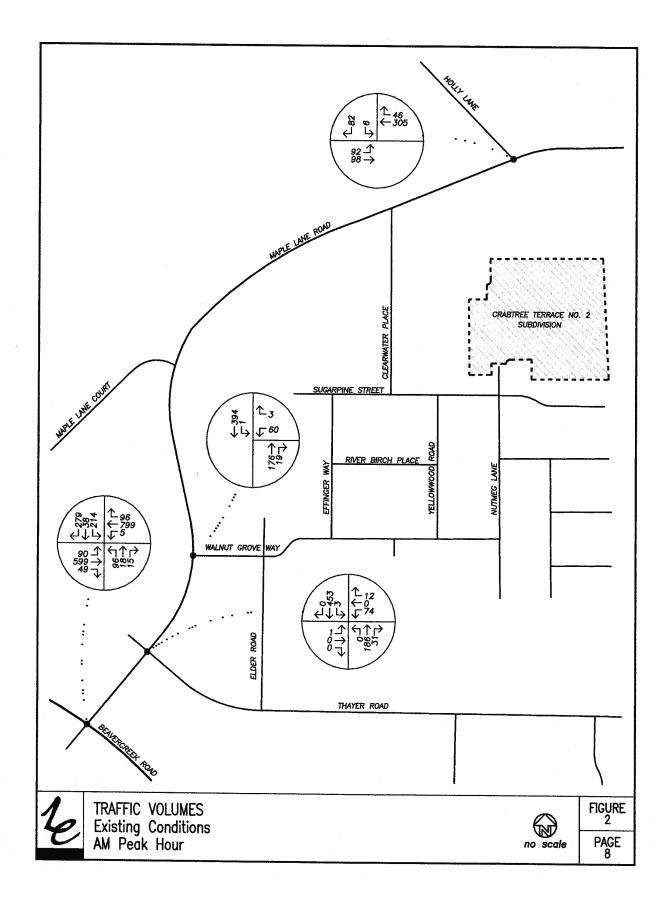
Even though the developer is proposing only 30 more homes at this time, approval for these additional homes does create far reaching implications for the residents of this area and I ask you to consider the fate and the future of the hundreds of residents of Holly Lane who would suffer terribly if this plethora of traffic is unleashed upon their neighborhood.

I ask that you NOT Approve this application until such time that Oregon City meets with the people of Holly Lane to create a suitable plan for traffic flow that is acceptable to the hundreds of residents, children and families who call Holly Lane their home.

Christine Kosinski Unincorporated Clackamas County

<u>P.S. If the Planning Commission</u> wishes to see the 113 signatures and 40 comment forms from the people of the Holly Lane area, I would be happy to provide these.

Encl: Holly Lane Petition Letter to Mayor Norris December of 2007 Pg. 8 of Traffic Impact Study

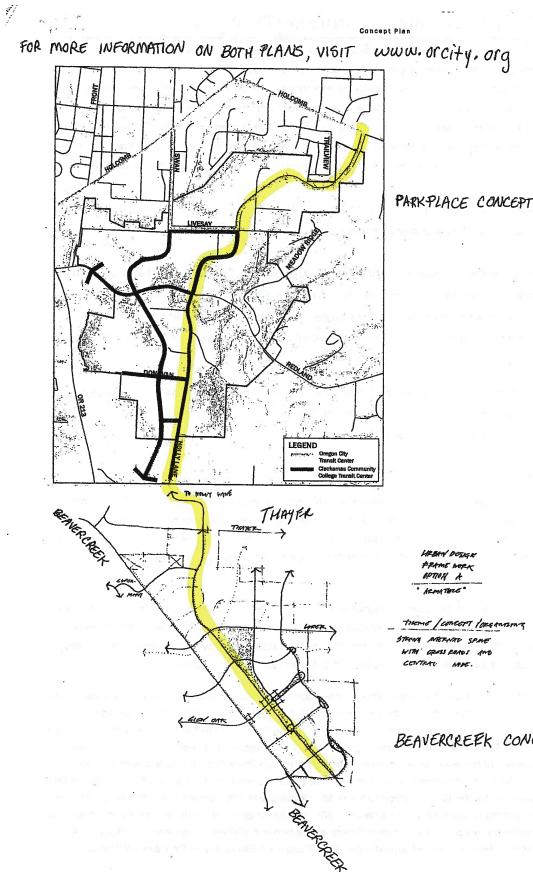


PROTECT THE LIVABILITY AND SAFETY OF HOLLY LN

Holly Ln is a minor arterial that runs between Redland Rd and Maplelane Rd. It serves local residential properties, Ogden Middle School and connects the northern area of Oregon City on Holcomb Blvd to destinations in the southern area of Oregon City, such as Berryhill Shopping Center, the College, High School, City Hall, retail and employment locations as well as performing as a by-pass to Hwy 213. It is characterized as a very narrow right-of-way with many single family residences that take direct access from Holly Ln, no stop control except at terminating intersections, several horizontal and vertical curves, steep grades and narrow to nonexistent shoulders, open ditches, no curb, gutter, sidewalks, or bike lanes, mailboxes on one side of the street, speed limit of 40- 45 mph though the average speed of drivers is 55 mph.

- New homes projected from Park Place Concept Plan: 1459
 New homes projected from Beavercreek Concept Plan: 1043-1317
- Holly Ln is the only continuous nearby North/South connector East of Hwy 213. Hwy 213 is nearing capacity and because Clackamas County, Oregon City, and ODOT cannot provide funding to either improve Hwy 213 nor provide alternate roads for these new developments, Holly Ln will be expected to take the brunt of the traffic from new developments as well as provide an alternate route to Hwy 213.
- Besides providing a connection to these proposed developments, Holly Ln will also be impacted by the outlying areas of Holcomb Blvd and Beavercreek Rd. This could potentially increase traffic volumes to nearly 13,000-16,000 vehicles per day from the current 3,000 ADT.
- A Swan Extension has been proposed to alleviate traffic on a **portion** of Holly Ln and provide improved connectivity, but extensive studies to confirm if this connection is feasible were never conducted nor an implementation strategy to determine if road construction is to be concurrent with development and prior to or concurrent to connecting Holly Ln to Holcomb Blvd and Holly Ln to Beavercreek Rd.
- We question the feasibility of the Swan Extension due to the steep bluffs on both sides of Redland Rd, the necessity of expensive bridges, the fact Clackamas County does not allow two intersections on a major arterial within 300 feet of one another, the cost such a connection would place on the community at an estimated cost of \$22 million, and the fact an EIS has not been conducted.

In conclusion, the residents of the Holly Ln neighborhood have come together to sign this petition requesting that improvements for Holly Ln be a top priority prior to the adoption of both Concept Plans. Traffic calming, speed reductions for Holly Ln, and the addition for 1-2 more north/south connectors from Beavercreek Rd to Redland Rd must be provided. We share concerns that due to the fact the residents of Holly Ln do not reside in Oregon City, we are unable to participate in the voting process of the areas to be annexed within the Concept Plans though development from the plans will greatly impact Holly Ln. We share concerns that we nor the Holly Ln representatives for the Park Place Concept Plan were purposefully never notified by the City of Oregon City of the Beavercreek Rd Concept Plan. We understand that Holly Ln is not currently operating at capacity, but to increase traffic to beyond capacity levels without improvements will be to the detriment of livability and result in serious safety threats to the families, children, and citizens of Holly Ln. Due to these concerns, the residents of Holly Ln **cannot support the Park Place nor Beavercreek Rd Concept Plans.**



PARKPLACE CONCEPT PLAN

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BEAVERCREEK CONCEPT PLAN

December 5, 2007

Mayor Alice Norris, City of Oregon City City Commissioners Larry Patterson, Manager 320 Warner-Milne Road Oregon City, OR 97045

RE: Traffic conditions-Holly Lane (Clackamas County)

Encl: 113 Signatures on Our Petition to "Protect the Livability and Safety of Holly Lane". As well we enclose 40 Citizen Comment Forms with our personal stories about the impact to our lives from traffic and development

We the people of the Holly Lane neighborhood, from 113 households representing more than 500 residents on Holly Lane, Donovan Road and Holly Crest have come together to seek protection under Oregon State Laws and Goals that <u>Safety, Protection, and Livability</u> be upheld and rightfully given to all the Citizens, Families and Children who reside in the Holly Lane neighborhood. We come together to request that proposed Traffic Plans from both the Park Place and Beavercreek Road Concept Plans be revised. Our enclosed Petition states that we are asking relief from both speeding and volume of traffic. We are asking for the addition of 1-2 more connectors between Beavercreek Road and Redland Road to help carry the tremendous volumes of traffic in this corridor (one north/south connector cannot do it all). We ask for lowered speed limits, traffic calming measures, the protection of our homes and we ask that Holly Lane be allowed to retain it's rural character as we have asked for since the inception of the Park Place Concept Plan. We ask that our above requests be instituted prior to any approval of either the Park Place or Beavercreek Concept Plans. From the first meetings for the Park Place Concept Plan, the residents of the Holly Lane neighborhood have been very active in attending meetings and being involved in the Charrette, the PAC meetings, the Planning Commission and City Commission meetings. We have worked hard to provide the City with studies and data, such as, traffic studies for volumes, ADT's, capacity, landslide and soil studies, accident rates and a plethora of other data which all show Holly Lane to be a dangerous corridor and situated in an area of landslides and soil slippage. It may be foolhardy to even contemplate the widening of the road due to the heavy deposits of Troutdale Formation, in fact, one Certified Geological Engineer, with many years of experience, feels it will be extremely difficult to attempt widening of Holly Lane from Redland Rd to the curve. After more than a year of meeting with the City and providing these volumes of data, we continued to be told that there is no money to "fix" Holly Lane. We also found out from other sources that the City was also planning to connect the Beavercreek Road Concept Plan to Thayer and Maplelane and then subsequently onto Holly Lane, with a proposed ADT of 33,000 trips per day! This information was never divulged to either the PAC members nor to the citizens of Holly Lane nor to The Park Place Neighborhood Association. The citizens of Holly Lane now decided it was time to ask Clackamas County to meet with them over the overwhelming concerns for traffic, safety and livability for the community and the fact that Holly Lane is a County Road. The Citizens met with Clackamas County on Wednesday, August 15, 2007 and again on Thursday, October 25, 2007. You will find attached the "Talking points for next meeting with Holly Lane residents, Prepared October 9, 2007, which were the talking points for our second meeting of October 25, 2007.

1 1 10

As you will read in our Petition, Holly Lane is a minor arterial running between Redland Road and Maplelane. It is a very narrow street, being only 8'5" (from the fog line to the double yellow center line) in some places. Holly Lane is lined with many single family residences which take direct access from Holly Lane, no stop controls except at terminating intersections, several horizontal and vertical curves, steep grades and narrow to nonexistent shoulders, open and deep ditches, no curb, gutter, sidewalks or bike lanes, mailboxes are on one side of the street.

Speed limits are set at 40-45 mph on this long straightaway road, although the average speed of drivers is +55mph. A recent traffic study performed by Clackamas County showed top speeds of **73mph** with a traffic study performed in 2006 showing top speeds of **98mph**, these speeds are simply unacceptable! Just recently, three Clackamas County Sheriff Officers issued 25 citations in about 7 hours, with all of these being for speeding and one citation for passing into the oncoming lane.

Holly Lane is the only continuous nearby North/South connector East of Hwy 213 and because this highway is currently at capacity and because Clackamas County, Oregon City and ODOT cannot provide funding to either improve Highway 213 nor provide alternate roads for these new developments, Holly Lane will be expected to take the brunt of the traffic from new developments as well as provide an alternate route to Hwy 213.

Traffic volumes on Holly Lane are currently 3,000 Average Trips per Day, with proposed traffic volumes from new development increasing capacity to **nearly** 16,000 vehicles per day, which is almost a 500% Increase and is totally unacceptable to the residents of Holly Lane.

Many of us have lived in the Holly Lane neighborhood for 40, 50, 60+ years. Some of us live in homes we have built or in homes which our parents or families have built, and in homes where we plan to retire. We the people of the Holly Lane neighborhood are Teachers, Laborers, Excavators, Professional Executives, Farmers, Mechanics, Chefs, Law Enforcement personnel and we represent many other professions. We are Parents, we are Grandparents, we are Children and Grandchildren, we are Widows and Widower's, some of us are retired, some of us need walkers and wheelchairs, and yet another of us is a paraplegic with special needs. Most of the retired residents have stated their homes are paid for. They are concerned that if large development occurs, they will lose their homes since most sit very close to the road. They speak of being forced to move due to widening of the roads or possibly because their home is in the way of "so called" progress. They are worried as they cannot afford to move on their fixed incomes.

We are asking only that we be allowed to retain our neighborhood, our community, where we live, play, relax....where we are family. We should not be the victims of development which has not paid it's fair share and for development which our State and municipalities have allowed to occur at an alarming rate without regard for the needs of necessary Infrastructure.

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We the citizens of Holly Lane will not allow our neighborhood street, our Holly Lane to be turned into a freeway. We have come together as community and we will not relent in our mission to provide our citizens, families and children with a "Safe and Livable" neighborhood as accorded to us under Oregon State Laws and Goals.

Submitted by: Christine Kosinski Clackamas County for: Holly Lane neighborhood e-mail:<u>britenshin@aol.com</u> (503) 656-1029

cc: Ted Kulongoski, Governor of Oregon David Bragdon, Metro Clackamas County Board of Commissioners Steve Wheeler, Clackamas County Cam Gilmour, Clackamas County Senator Kurt Schrader ODOT DLCD Steve Mayes, Oregonian Andy Parker, Oregonian Aaron Breniman, Oregon City News

Attached: Talking Points with Holly Lane Residents of October 9, 2007

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from



June 11, 2012

Pete Walter, AICP – Associate Planner City of Oregon City - Community Development - Planning 221 Molalla Avenue, Suite 200 Oregon City, OR 97045

RE: Crabtree Terrace No. 2 Subdivision Application (City File No. TP 12-01 & VR 12-02) – Additional Variance Findings

Dear Pete:

Thank you for meeting with us on June 30th to discuss the Crabtree Terrace No. 2 Subdivision application that we prepared for John Jones. Based upon your comments at the meeting, we understand that the application satisfies the Variance approval criteria for Sections 17.60.030.A and 17.60.020.F. As discussed with you, we have supplemented our existing narrative with additional findings and supporting documentation (attached), to demonstrate compliance with the remaining portions of the Variance approval criteria (Sections B through E).

If you have any questions regarding any of this information or need anything else, please let me know.

Sincerely, AKS Engineering & Forestry, LLC

Chapter 17.60 - VARIANCES

17.60.030 - Variance—Grounds.

A variance may be granted only in the event that all of the following conditions exist:

17.60.030 - Variance-Grounds.

A variance may be granted only in the event that all of the following conditions exist:

A. That the variance from the requirements is not likely to cause substantial damage to adjacent properties by reducing light, air, safe access or other desirable or necessary qualities otherwise protected by this title;

RESPONSE: The City zoning code allows for attached homes on 3,500 square foot lots in the R-3.5 zone with 5 foot rear yard setbacks to alleys. As illustrated on the preliminary plans, the proposed project involves single family detached homes on +/- 4,300 square foot lots with 15 foot rear yard setbacks that will provide for separation between individual homes.

• Light

Approval of the variance does not in any way reduce or negatively affect sunlight exposure for any other property or within the project site because it does not allow any buildings to be built any taller or closer to any property lines. In fact, approval of the variance facilitates the building of single-level homes. Both single and two story detached single-family homes will be built, which actually reduces shadows and further increases exposure to natural sunlight compared with other development that is permitted in the R-3.5 District such as zero-lot line attached townhomes with five foot rear alley setbacks.

• Air

Due to the increased setbacks provided in the proposal, compared with what is allowed in the R-3.5 District (zero lot line – 5 foot alley setbacks), approval of the variance also provides for enhanced air circulation. Approval of the variance improves air quality not only due to this but also because not including alleys reduces the amount of paving and grading that is required, thus reducing air pollution (dust and fumes) created by heavy construction equipment.

Safe Access

The proposal does not reduce or negatively affect pedestrian and/or vehicular access because curbs and landscape planter strips (with street trees) are proposed to separate pedestrian travel from vehicular travel. Combining driveways, as is proposed, provides an additional method of enhancing pedestrian safety because it maximizes the amount of curb exposure and minimizes the number of pedestrian / automobile conflicts in the project (driveways crossing sidewalks). In fact, streets without driveways can result in increased vehicle speeds due to drivers that would not be accounting for this potential conflict and/or streets lined with cars can result in hazards to children due to lessened visibility. Therefore, the proposal provides safe access in a manner that is consistent with that which would be provided in a similar project with alleys.

John Jones – Crabtree Terrace No. 2 Additional Variance Findings – City of Oregon City June 11, 2012 Page 2 of 7

• Other Desirable or Necessary Qualities

In addition to the above, as a result of not creating alleys, less pavement surface is necessary, thereby allowing for additional pervious surfaces within the project. Three different layouts with alleys are included (Exhibit 'A'). As shown in the drawings, between +/- 25,000 to +/- 30,000 square feet of additional impervious surfaces are created when alleys are included in the project. Reduction in pavement quantities is a well-established technique that reduces stormwater runoff and enhances downstream stormwater quality. Therefore, the proposed layout accomplishes this.

Without alleys, each home will have a rear yard. Rear yards provide homeowners, families, etc. the opportunity to quietly enjoy their property in an outdoor environment. Rear yards are utilized for outdoor gatherings with friends, relatives, and neighbors, cooking and dining, planting and tending to gardens, planting of trees and other vegetated screening, and provide areas for children to play sports. Many perspective home buyers, especially those with young children and/or pets will not consider a home without a rear yard. Alleys substantially impair and/or eliminate the opportunity for rear yards.

Based on the above, approval of the requested variance to not include alleys in the proposed subdivision will not cause substantial damage to adjacent properties by reducing light, air, safe access, or other desirable or necessary qualities protected by this title.

B. That the request is the minimum variance that would alleviate the hardship;

RESPONSE: Application of Oregon City Municipal Code (OCMC) 12.04.255 in such a manner as to require alleys for this specific property creates a hardship for John Jones. Over a significant period of time, John has made substantial efforts and financial investment towards creating an attractive community of affordable single-family detached homes on modest size lots and back yards available with room provided for children to exercise and play, holding family get-togethers and neighborhood gatherings, planting of trees, landscaping, gardening, and other forms of quiet personal enjoyment.

John acquired this land over the past 17 years, and in 2006, he submitted an application for the adjacent 81 lot Crabtree Terrace Subdivision to the City (City file TP 07-05 and WR 07-13). The project infrastructure was completed within all legally provided timeframes with the final plat recording in 2008. John sought to include this portion of his property in that application, but unfortunately, the OCMC does not have a provision for subdivision phasing, and he did not think the entire project could be completed in City required timeframes. Therefore, it was not included in the application. However, John always intended and desired to complete this phase of the project in a similar manner as the first phase. This is illustrated in the shadow plat included in the Crabtree Terrace preliminary plans (attached as Exhibit 'B').

Efforts and expenditures towards completion of the project as planned are evident in the record as John obtained a City approval for a grading permit and graded the property in 2007 and 2008 to prepare the site for development in accordance with a City approved grading permit (attached as Exhibit 'C'). Completion of Crabtree Terrace and grading performed on the subject site to date has established the street layout/ design, necessary sewer elevations, and site grading in accordance with the original plan for the property.

Subsequent to obtaining necessary City approvals and completing the Crabtree Terrace Subdivision and grading for this portion of the site, two significant changes have occurred. First, the economic downturn of the past several years, which has especially impacted the residential housing market, has delayed submittal of an

John Jones – Crabtree Terrace No. 2 Additional Variance Findings – City of Oregon City June 11, 2012 Page 3 of 7 application for this phase (Crabtree Terrace No. 2). Second, the City has adopted an alley requirement for R-3.5 properties. Due to the factors described above, the second condition places a hardship on the applicant.

Due to a variety of factors (listed below) alleys are not a viable way to complete this project:

Previous Site Grading

Previously performed site work set up how remainder of site would be graded / developed. This site work was performed and completed in accordance with an approved 2007 Grading Permit. This grading permit issued based on the City's approval of the Crabtree Terrace Subdivision (City file TP 07-05 and WR 07-13). See Exhibit 'C'. This work was completed in good faith prior to the Code change regarding alleys.

Site Dimensions / Geometry

The configuration of the site does not lend itself to providing alleys. The overall site dimensions and the existing street stub set up a logical "lot pattern" as shown in the preliminary plans. Nutmeg Lane runs in a north-south direction, and Purple Ash Way and Oregon Iris Way run in an east-west direction.

- There is no opportunity for an alley along the south boundary of the site (along the back of Lots 83-87) because it is the site boundary, there are existing developed lots with built homes, and there is a significant grade change along this line. This is demonstrated on Exhibits 'A' and 'E'.
- There is no opportunity for an alley along the east boundary of the site (lots 87, 88, 105, and 106) because the "lot pattern" is not set up for it, it is a site boundary, it is the City Limits and Urban Growth Boundary, and there is an existing easement along the line. This is demonstrated on Exhibits 'A' and 'E'.
- There is no opportunity for an alley along the north boundary of the site (along the back of lots 106-111) because it is a site boundary, the adjacent property is not being developed at this time, and there is a significant grade change along this line. This is demonstrated on Exhibits 'A' and 'E''.
- There is no opportunity for an alley along the west boundary of the site (lots 82 and 95-98) because it is a site boundary, a portion of it is the City Limits, and there is a significant grade change. This is demonstrated on Exhibits 'A' and 'E'.
- The geometry of the site is such that the lots are not deep enough to have alleys and maintain reasonable building envelopes. This is demonstrated on Exhibits 'A' and 'E'.
- Site boundaries prohibit the ability to develop and construct an alley, have a shared alley, and have the alley in a reciprocal access easement. This is demonstrated on Exhibits 'A' and 'E'.

Unintended / Undesirable Results

• Flat buildable lots – not possible

If alleys were introduced into the project, they would eliminate the possibility of creating flat buildable lots. To deal with grade changes on alley loaded lots (where grade cannot be accommodated in rear yards); garages may need to be located underneath homes and/or retaining walls would be needed. This would necessitate taller homes with stairs. In addition to stairs within the homes, grading the site for alleys and alley loaded homes may require stairs to be built in the front yards to accommodate several feet of elevation gain because it cannot be accommodated in the rear yards.

It is widely understood, that due to mobility factors, homes with stairs typically do not appeal to older residents, who are a desirable and stable demographic. By not including alleys and the resulting homes with stairs, the

June 11, 2012 Page 4 of 7 property owner can include single level and master on the main homes which encourage, not discourage senior citizens in the proposed subdivision. In addition, stairways in front yards make pedestrian access more cumbersome for pedestrian access. By not including alleys and the front yards with stairs, the subdivision encourages, not discourages pedestrian access to the homes.

• Loss of outdoor yards

The center area (lots 88-105) does not have adequate depth for a shared alley. With a depth of 80 foot for each lot, a 20-foot shared alley would effectively take away 10-feet from the lot. In addition to the 10 feet, there would need to be 20 feet for parking / maneuvering. The average home depth would be 40 feet, and the front yard (along the public street) contains a 10 foot public utility easement (PUE); therefore, the lots would not have any front or rear yards. There would be no areas to enjoy either a front or rear yard. Folks who live in Oregon City desire these areas.

• Additional Impervious Surfaces

An alley loaded project will significantly increase the amount of paving required for the subdivision because in addition to the alleyways, frontage streets also need to be provided. This increase in impervious surfaces requires more downstream storage capacity to accommodate runoff volumes as well as additional treatment area than the proposed subdivision design.

Based on 15 years of experience building and selling homes in the Oregon City area, John understands that potential homeowners/residents who are looking for a single-family detached home in this area consider a back yard to be a crucial amenity in their decision making processes. Introducing alleyways in any manner at all into this project eliminates or at the very least, significantly impacts the ability to provide back yards for homes. Back yards are considered essential to each and every lot / home in the project. Therefore, the minimum variance necessary to alleviate this hardship is that the alleyway requirement should not be applied to any of the lots / future homes included Crabtree Terrace No. 2 Subdivision.

C. Granting the variance will equal or exceed the purpose of the regulation to be modified.

RESPONSE: The OCMC does not contain a statement that clearly states the purpose of requiring alleys in the R-3.5 District. Historically in Oregon City, alleys were required only for commercial and industrial sites. Alley requirements in the R-3.5 zone were born out of the adoption of Park Place Concept Plan. Based upon correspondence with City staff, the applicant understands at that time, the purpose of requiring alleys was to "improve mobility and reduce obstacles to on-street parking". It is worth noting that while the Park Place Concept Plan itself discusses both single-family and multi-family housing types, alleyway access is only mentioned when discussing multi-family development, making no reference to alleys within single-family residential subdivisions.

Considering the purpose of alleys (to "improve mobility and reduce obstacles to on-street parking"):

- A preliminary circulation plan is included in the application materials showing that extensive connections are proposed within the project to connect to surrounding development that is supported by an extensive and efficient circulation system that provides for all forms of mobility including public streets for cars and bicyclists and sidewalks with curb extensions (exceeds City requirements) for pedestrians.
- The photographs from Google Earth "streetview" shown below depict a public street with attached dwelling units and rear-loaded garages accessed by alleys (left) and the street next to it with detached dwelling units

that are front loaded (right). As shown below, the street shown on the left accessed by alleys (attached units) is dominated by cars parked on both sides of the street while the adjacent street with detached homes (and garages in the front) is relatively unoccupied by street parking.





The above photos illustrate a typical situation: that the need for on-street parking is driven by the development type rather than a property's zoning district. Considering that Crabtree No. 2 subdivision proposes wide lots for detached homes, the need for on-street parking correspondingly decreases, which in turn improves mobility within the subdivision compared to the alleyway scenario shown above.

A preliminary parking plan is attached (Exhibit 'D') showing that the project will include 40 on-street parking spaces. This is more than one on-street parking space per home. In addition, the plan shows that 120 off-street parking spaces are also provided in the project. Considered in aggregate, there are more than 5 parking spaces per home. This exceeds any City requirement for parking. In addition, as shown on the preliminary plans, driveways are proposed to be combined where possible to maximize the availability of on-street parking.

Considering the fact that the proposed lots are 50 foot wide (double the R-3.5 standard) and driveways are proposed to be combined (proposed to reduce obstacles to on-street parking), the proposal exceeds the purpose of the regulation to be varied because it provides parking amounts that equal or exceed City requirements while proposing a housing/development type that reduces the need for on-street parking.

D. Any impacts resulting from the adjustment are mitigated;

<u>RESPONSE</u>: The following shows that mitigation is proposed for any impacts resulting from the adjustment:

• The proposed application provides sufficient on-street and off-street parking

It is anticipated that each lot will have a two car garage with a driveway that will provide for off-street parking. Four off-street parking spaces per dwelling unit exceeds the minimum City requirement by three spaces. In addition, as shown on the preliminary plans, driveways are proposed to be combined where possible to maximize the availability of on-street parking. These efforts result in excess of one on-street

John Jones – Crabtree Terrace No. 2 Additional Variance Findings – City of Oregon City June 11, 2012 Page 6 of 7 parking space per home. Therefore, the proposal will equal or exceed the amount of parking that would be provided in an alleyway scenario given the same lot sizes.

The proposed application provides a safe pedestrian environment.

As described above, the proposal will provide a safe pedestrian environment. Curbs and landscape planter strips (with street trees) are proposed to separate pedestrian travel from the street. Safe pedestrian environments with front entry loaded garages on 50 foot wide lots accessing local public streets are found in many areas throughout this country, including Oregon City. Combining driveways, as is proposed, provides an additional method of enhancing pedestrian safety because it maximizes the amount of curb exposure and minimizes the number of driveways. Finally, curb extensions are proposed at street intersections to provide further improve pedestrian circulation. Nothing unusual is being proposed that would in any way be unsafe for pedestrians. Therefore, the proposal provides a safe pedestrian environment that equals or exceeds that which would be provided if alleys were provided.

• The proposed application provides an attractive pedestrian environment.

Based on conversations with City staff, it is understood that at the time this requirement was adopted, there was an aesthetic concern with attached townhomes and homes on very small/narrow lots being dominated by garages. This concern has been remedied with the adoption of the Residential Design Standards (garage standards) found in Chapter 17.21 which minimize effects of garages in the pedestrian environment and enhances the appearance of residential structures. The future homes in this project will be subject to these standards. Furthermore, the proposed lot widths in the project mitigate for any perceived garage widths because the lots equal or exceed 50 feet, surpassing the 25 foot minimum lot width requirement for the R-3.5 District by 25 feet. Fifty-foot wide lots, as are proposed, satisfies the minimum lot width requirement for the R-6 zone, which does not require alleyways. Therefore, the view from the street (pedestrian environment) will be similar to an R-6 subdivision.

E. No practical alternatives have been identified which would accomplish the same purpose and not require a variance; and

<u>RESPONSE</u>: Understanding that alleys are now a requirement, they were given proper consideration when evaluating potential site layouts for the project. Three different layouts with alleys are included (Exhibit 'A') as examples of layouts that were considered. These layouts clearly show the impediments to including alleys in the project. Based upon the pitfalls associated with these layouts and the fact that they create more impervious surfaces, alternate layouts without alleys were developed and finally selected.

F. The variance conforms to the comprehensive plan and the intent of the ordinance being varied.

RESPONSE: The subject property is designated MR (Medium Density Residential) by the City Comprehensive Plan complemented by a City Zoning designation of R-3.5. The City has an adopted Municipal Code that implements requirements for Streets, Subdivisions, and Zoning as they relate to citizen involvement, land use, housing, public facilities, and transportation. As demonstrated in this written narrative, preliminary plans, and other documentation included in the application materials, these requirements are satisfied. Because these portions of the Municipal Code implement the comprehensive plan, approval of the variance conforms to the comprehensive plan. As described above under Section C above, the proposed variance conforms to the intent of the ordinance being varied.

John Jones – Crabtree Terrace No. 2 Additional Variance Findings – City of Oregon City June 11, 2012 Page 7 of 7

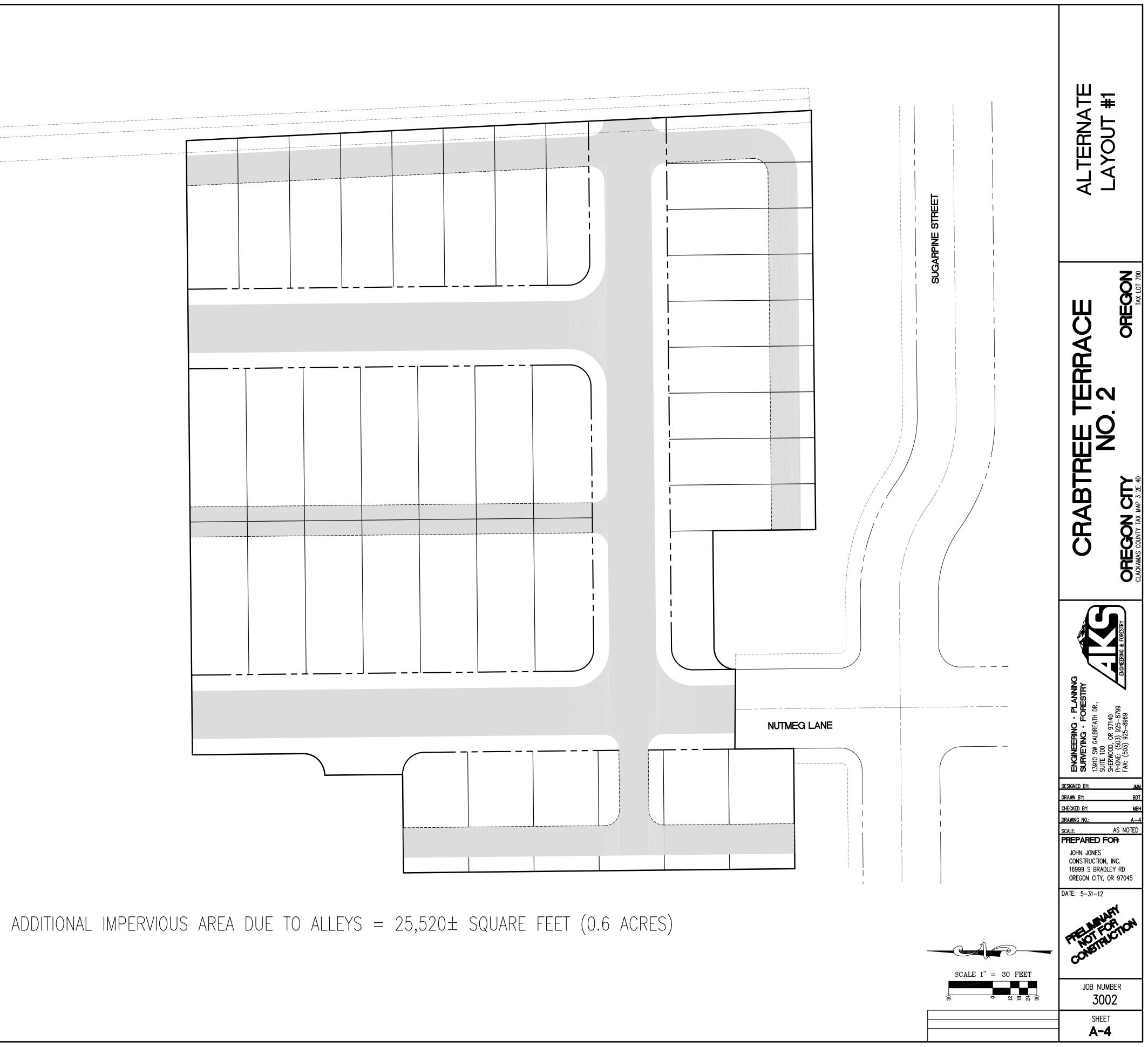


EXHIBIT 'A'

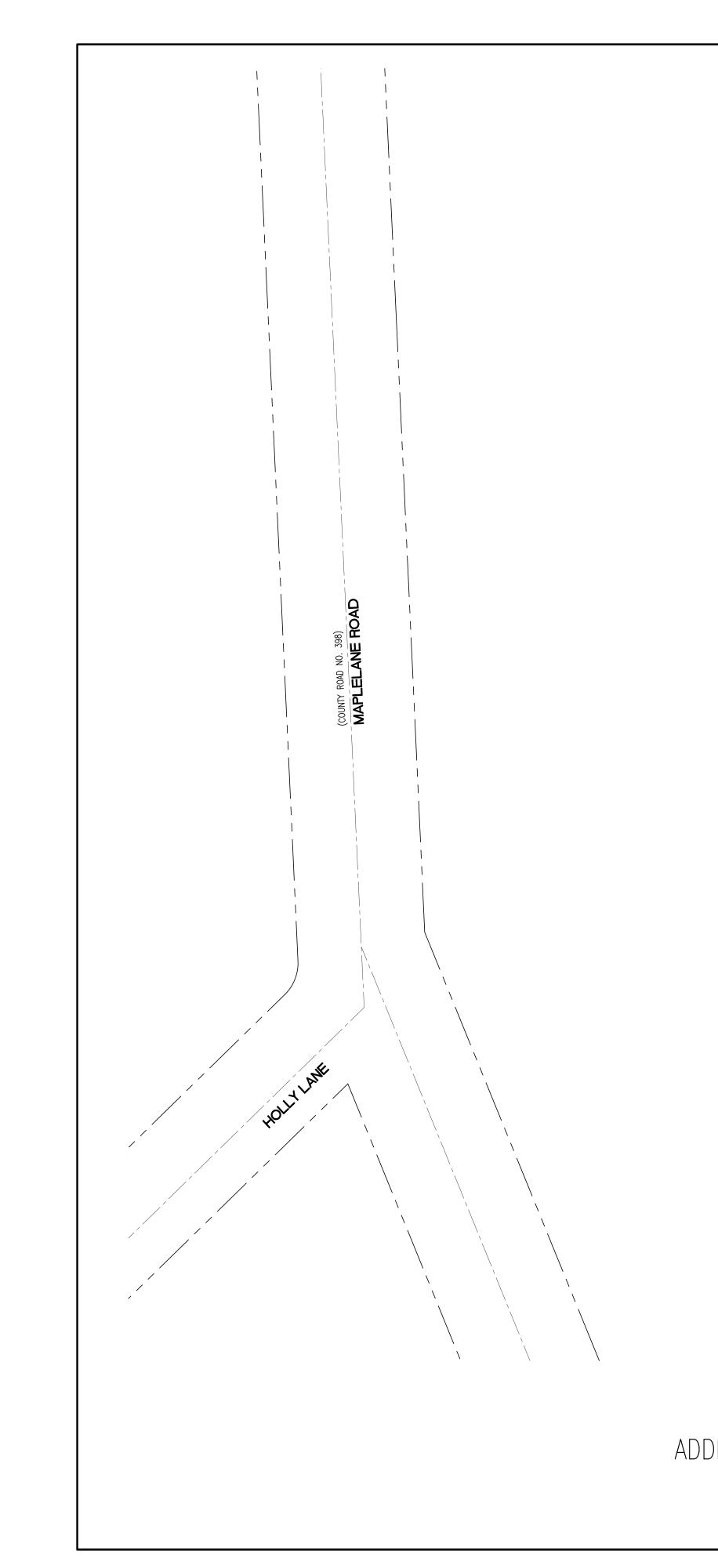
John Jones – Crabtree Terrace No. 2 Additional Variance Findings – City of Oregon City June 11, 2012

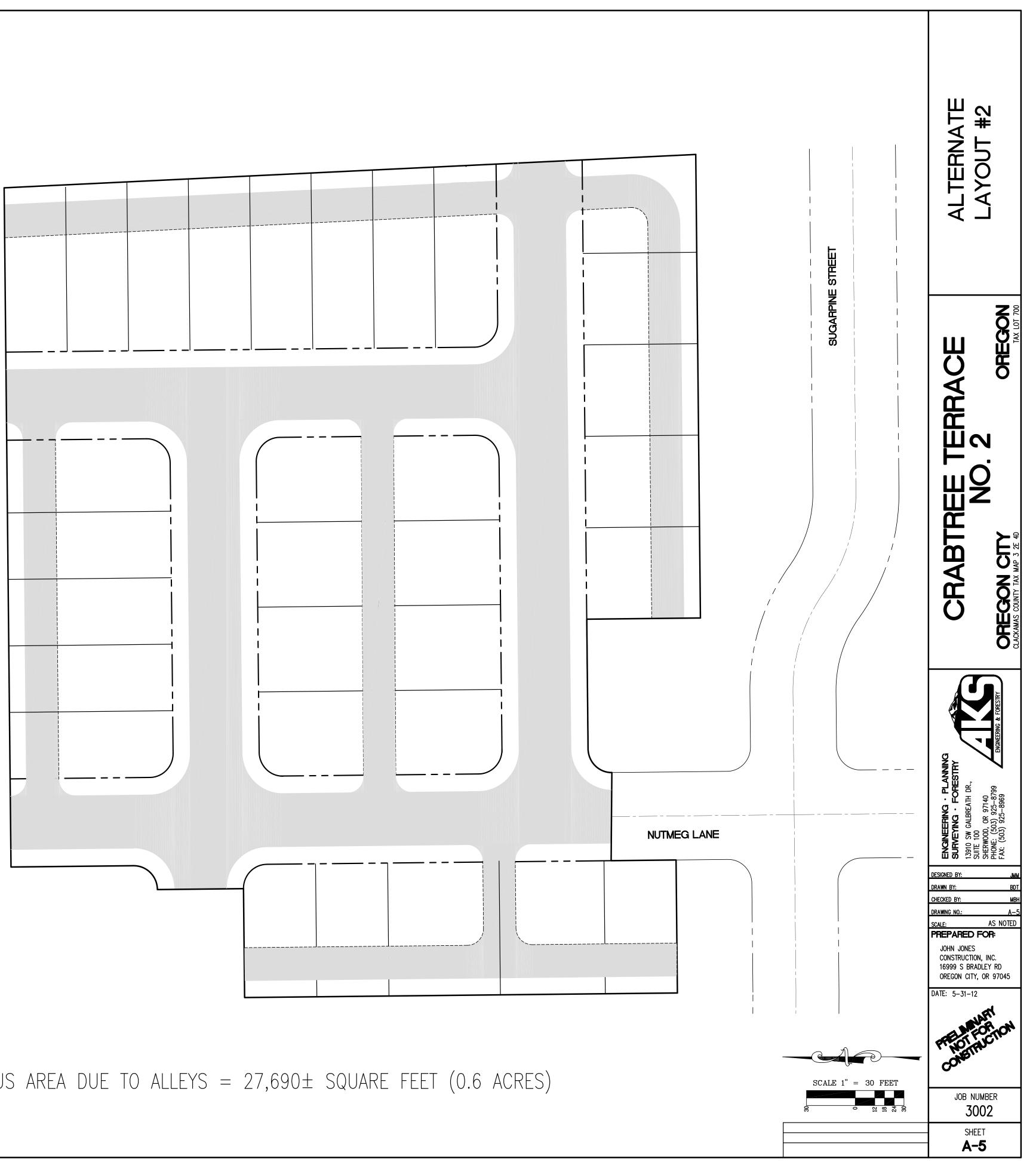
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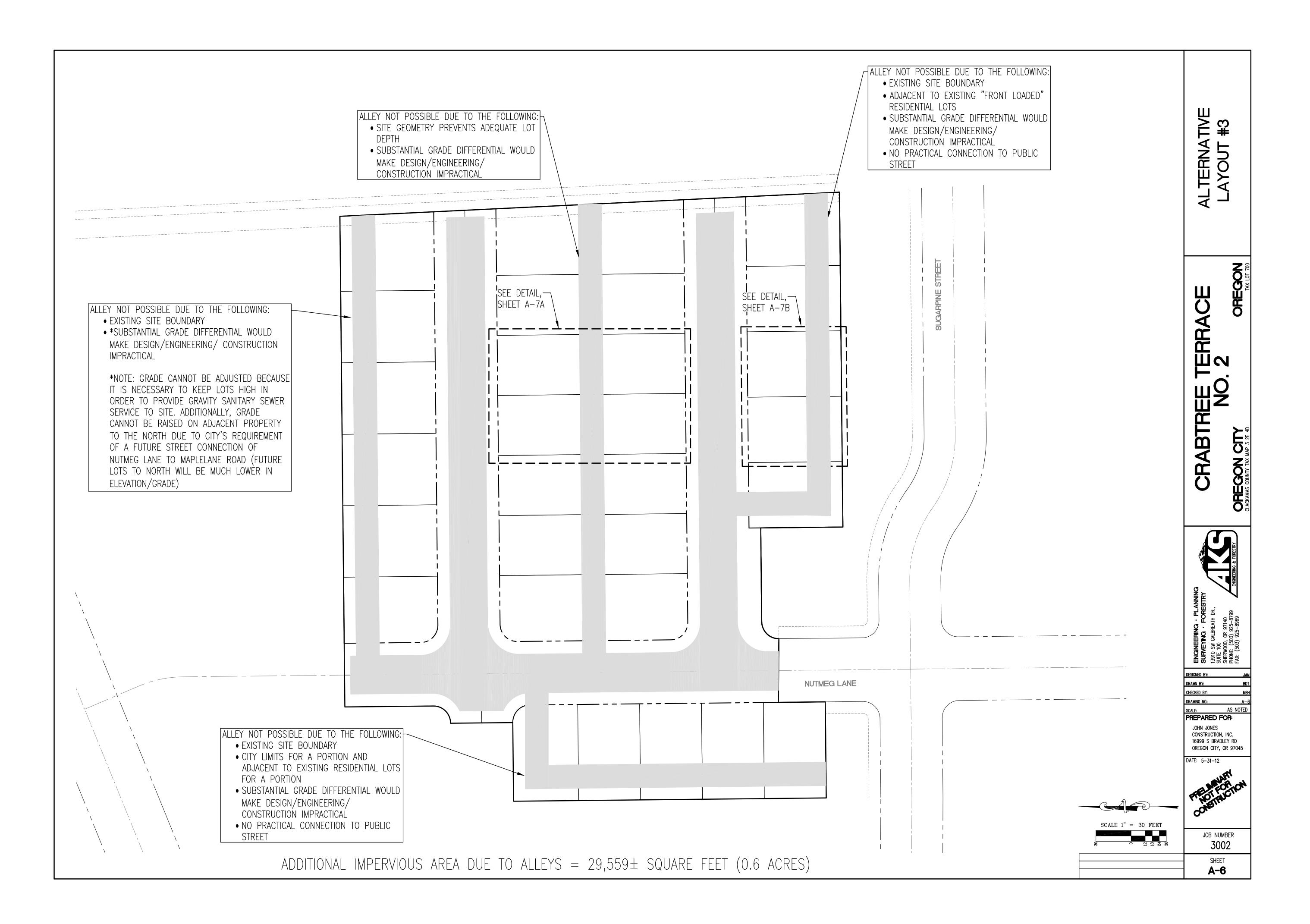


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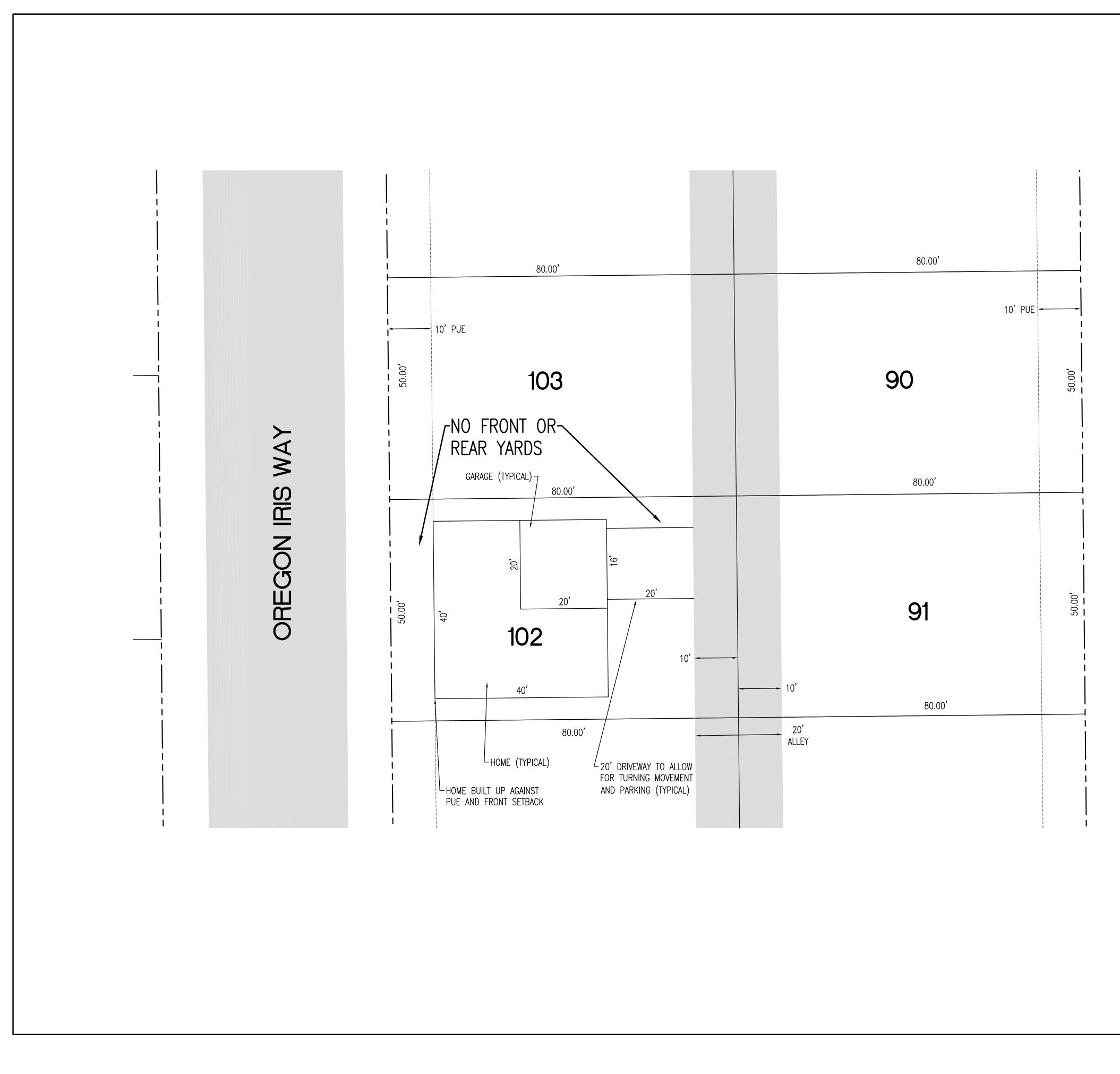


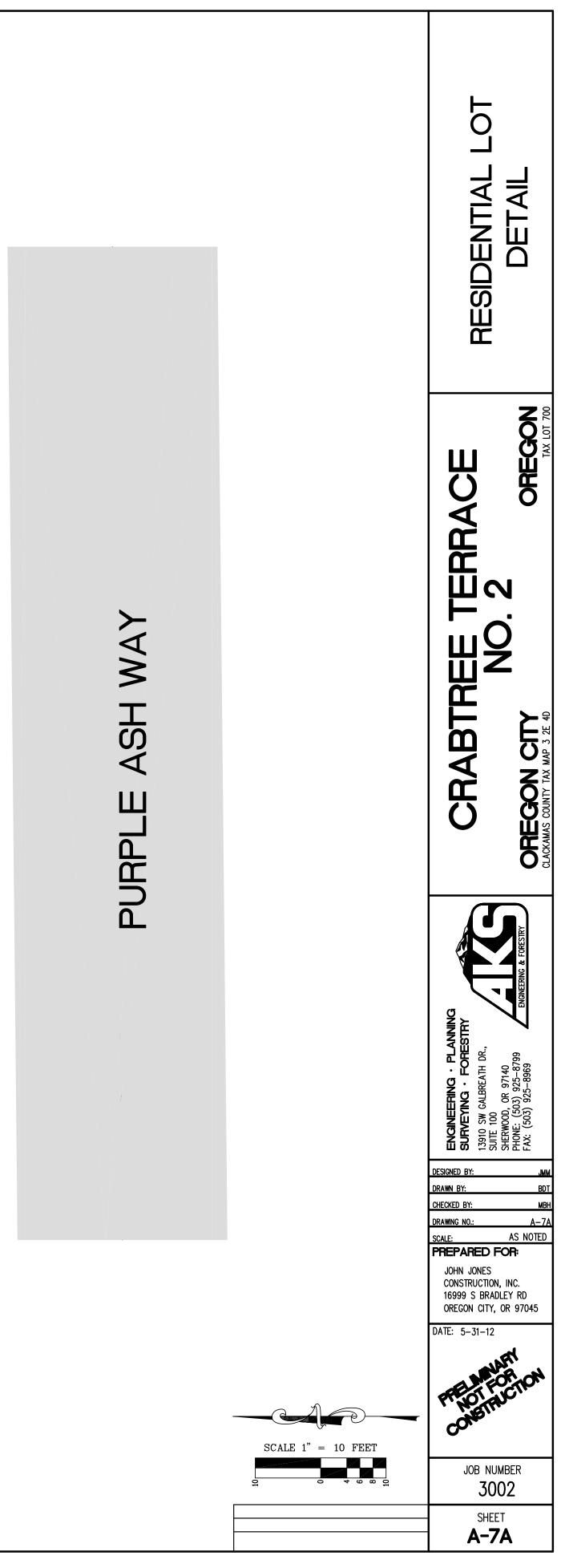
ADDITIONAL IMPERVIOUS AREA DUE TO ALLEYS = $27,690\pm$ SQUARE FEET (0.6 ACRES)



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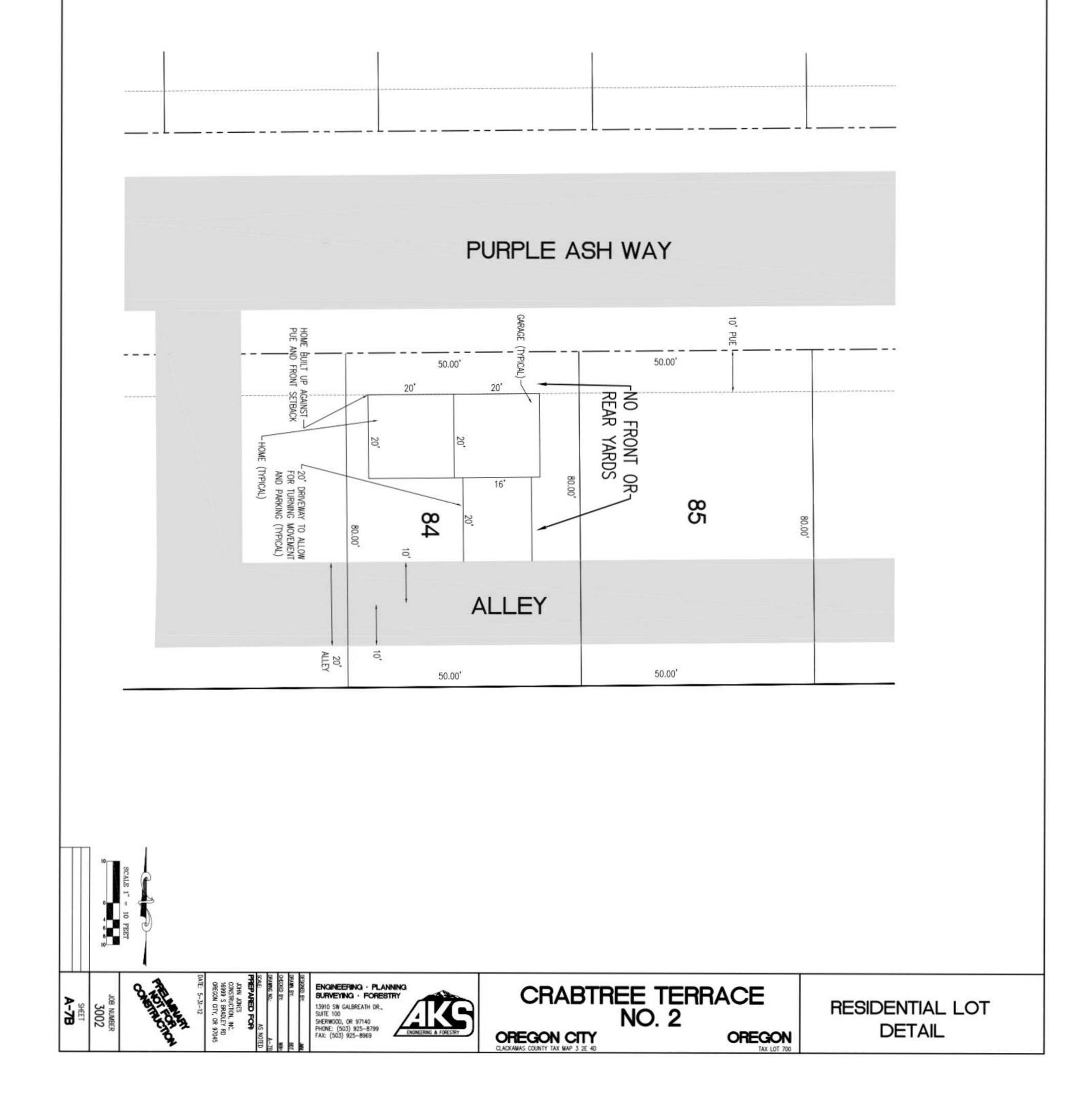
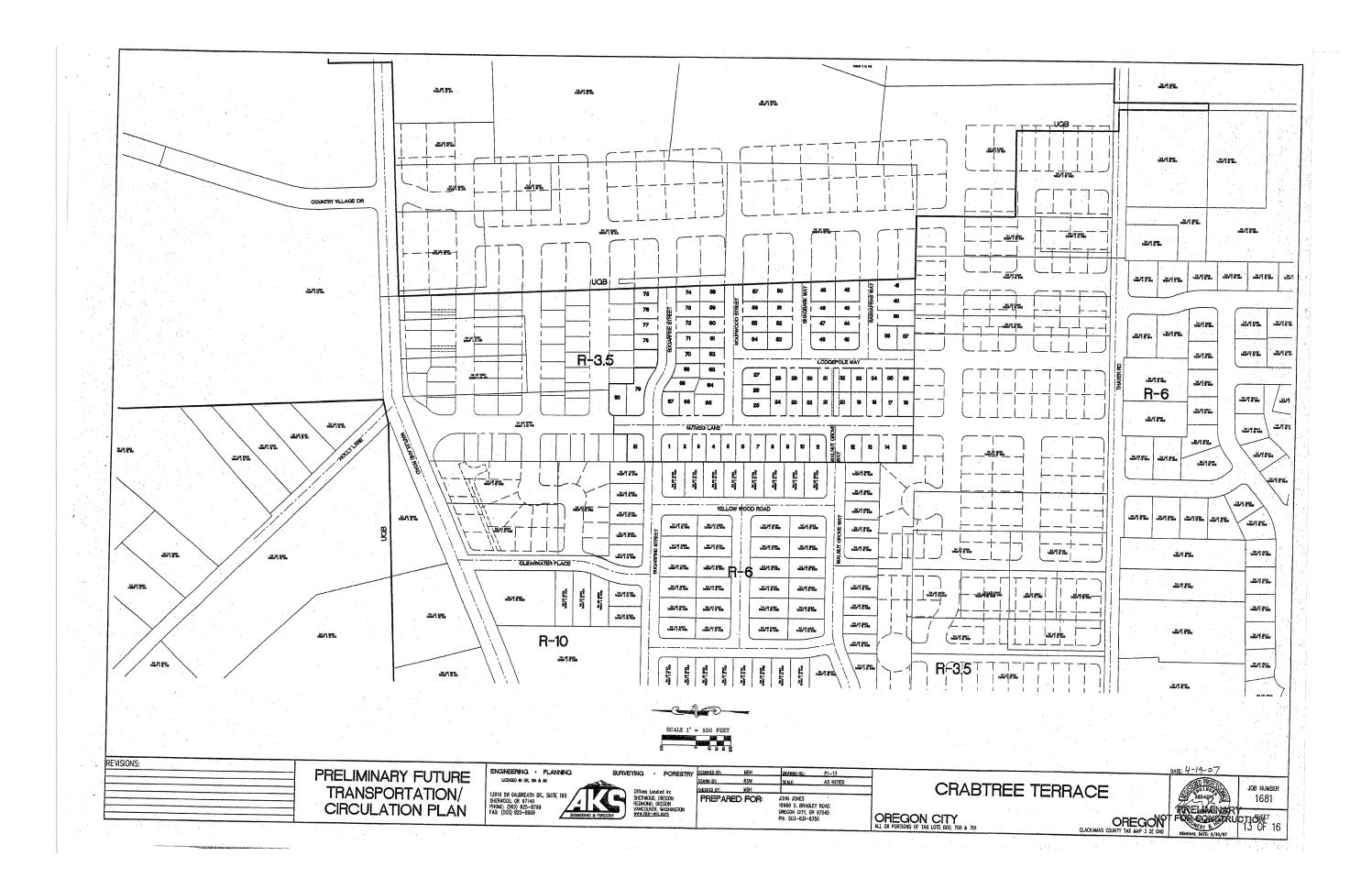




EXHIBIT 'B'

John Jones – Crabtree Terrace No. 2 Additional Variance Findings – City of Oregon City June 11, 2012





Ехнівіт 'С'

John Jones – Crabtree Terrace No. 2 Additional Variance Findings – City of Oregon City June 11, 2012

CITY OF OREGON CITY FILL PERMIT FP 07-004 John Jones, Crabtree Terrace PH II Address – <u>14616 Maplelane Road and 18778 Nancy Marie Lane, Oregon City, OR</u> 97045

CONDITIONS OF APPROVAL

Sec. 23

Approved By: //www. Development Services Manager

8/10/07

1) This Grading Permit is being issued for the subject area only and requires the applicant to follow the approved drawings dated July 31, 2007 by Monty Hurley, PE, AKS Engineering, LLC for John Jones. City approval date is August 10, 2007.

2) Code Authority. The City utilizes Appendix J, Grading, of the State of Oregon Structural Specialties Code, and Oregon City Municipal Code Chapter 15.48, Grading, Filling and Excavation. Applicable sections of this code shall apply to this fill permit. The City has also adopted Public Works Standards for Erosion and Sediment Control by Ordinance 99-1013. Pursuant to Oregon City Municipal Code Chapter 17.47, Erosion Control; <u>Development</u> is defined as "Means any human-caused change to improved or unimproved real estate, including but not limited to....mining, dredging, filling, grading, paving, excavation....". Applicable sections of these standards shall apply to this fill permit.

3) **Maximum Cut/Fill Slope**. The maximum Cut/Fill slope for permanent fill shall be 2:1 (2 horizontal to 1 vertical). Storage fill shall have a maximum slope of 1:1 (1 horizontal to 1 vertical) unless otherwise indicated on the plans. Steep slopes shall be adequately protected from erosion. If a vegetative cover cannot be established in time to prevent erosion, measures as outlined in the City of Oregon City Public Works Standards for Erosion and Sediment Control shall be used such as erosion blankets, or plastic sheet covering, or as indicated on the Erosion Control Plan.

Property Line Set Back. The applicant shall follow required set backs in the UBC, Sec.
 7011 and City of Oregon City Public Works Stormwater and Grading Design Standards, Sec.
 3.1.6, Setbacks.

5) **Preparation of Ground**. The ground surface shall be prepared to receive permanent fill by removing vegetation and other unsuitable materials. Benching may be required, refer to UBC, Sec. 7010(c). Failure to remove organic material is grounds for the City not to accept any fill and or compaction tests in order to issue other building or construction permits.

6) **Fill Material**. Detrimental amounts of organic material shall not be permitted in the fill. No rock or similar irreducible material with a maximum dimension greater than 12 inches shall be buried or placed in the fill. Refer to UBC, Sec. 7010(d).

7) **Compaction**. Storage fill does not require compaction. If compaction requirements for permanent fill are not specified on the grading plans by a civil engineer or through a Soils Engineering Report, then at a minimum the following compaction requirements shall be met. All fills shall be compacted to a minimum of 90 percent (95 percent is desirable) of maximum density as determined by AASHTO T99, unless otherwise noted. To obtain the compaction, fill

CITY OF OREGON CITY FILL PERMIT NO. FP-07-004

shall be placed in approximately horizontal layers not to exceed twelve inches thick. Each separate layer shall be thoroughly compacted. Fill material shall be placed within 2% of optimum moisture. Monitoring compaction testing of the fill activities shall be required at commencement and periodically during the project. See comments under Grading Inspection for frequency. These minimum requirements are not site specific or for any intended use. If a fill is intended for a specific use that includes a structure being placed on the fill, a soils engineer shall certify the site suitable for that use prior to receiving building permit approval from the City.

8) **Drainage**. Drainage shall be provided per the approved plans, Section 7012 of the UBC, and the City's Drainage Master Plan. Provisions should have been made on the attached Erosion Control Plan that address drainage. If not, then contractor shall construct a temporary sediment holding pond and temporary diversion swales into the pond to control erosion and sediment transport from leaving the site.

9) **Dust Control.** Dust shall not be permitted to leave the site. If dusty conditions exist, the permittee shall apply a fine spray of water on the surface to control the dust, or use other acceptable spray adhesive applications to control dust.

10) **Erosion/Sedimentation Control**. Erosion control measures shall be provided per Section 7013 of the UBC, the City's Drainage Master Plan, and the City's standard Erosion/Sedimentation Control. Applicant shall request City inspection and obtain approval of erosion control measures prior to grubbing and removal of topsoil.

Notes. Erosion and sediment control measures are temporary measures only. They shall be repaired, replaced, or installed at the direction of the inspector or the City. Failure to do so in a timely manner shall be a violation of this permit and shall be grounds for the City to revoke this permit. Contractor shall utilize all means to prevent erosion and sediment transport from leaving the site. This shall include (but not be limited to); road stabilization measures at entrance, sediment barriers such as silt fences and bio-bags, and temporary sediment traps or basins. This also includes diversion channels, vegetative or other soil stabilization measures such as mulching, and dust control measures.

11) **Grading Inspection**. All grading permits are subject to inspection by the City. The City inspector shall be notified 48 hours prior to starting grading operations. Inspection by the City at a minimum shall be required at the following events:

- After grubbing and removal of the topsoil, and prior to placement of fill.
- Periodically during filling operations, to observe proof rolling, and compaction testing done by an independent testing lab hired by the permittee and observed by the consultant. At a minimum, compaction testing shall be done once per quarter acre, at 2-foot vertical intervals, including at the surface.
- When grading operations are suspended prior to completion of the project.
- Upon notification that the work is completed and ready for final inspection.
- For storage fill, inspection shall be done prior to placement of fill, once during fill operations, and upon completion of fill.

CITY OF OREGON CITY FILL PERMIT NO. FP-07-004

A professionally registered geotechnical engineer or a civil engineer (PE) shall be responsible for professional inspection of the site to ensure conformance with the grading plan, within his technical specialty, on behalf of the developer/owner. If a soils engineer prepared a soils engineering report, then that engineer shall be responsible for inspection within his area of expertise. Refer to UBC, Sec. 7014(c). Consultant shall supply the City with copies of the observation logs and all compaction tests on a periodic and regular basis.

12) **Completion of Work**. If engineered grading plans were prepared, the civil engineer preparing the grading plans shall submit an as-graded plan. If a soils engineering report was prepared, then the soils engineer shall prepare a final soils grading report per the UBC, Sec. 7015(a). The permittee shall notify the City when the grading operation is ready for final inspection. Final approval shall not be given until all requirements have been met.

13) **Tree Preservation**. The owner/developer shall protect the trees identified on Sheet C052 as noted in red.

14) **Compliance.** The owner/developer that applies for, and receives, a fill grading permit from the City of Oregon City agrees to all City Codes, conditions of this permit, standards and specifications, and other rules and regulations that apply to this site and permit. Failure to comply shall subject the permit holder to legal action by the City to remedy all non-conforming work or situations and the cost involved pursuing such legal action.

Additionally, it is the responsibility of the permitee to ensure that all other Agencies' rules and regulations that affect this site have been satisfied and/or approval received. Granting of this permit by the City does not allow the permitee to ignore or violate any City or other Agency requirements that might affect this site. The permitee shall comply with all requirements prior to starting any work on this site.

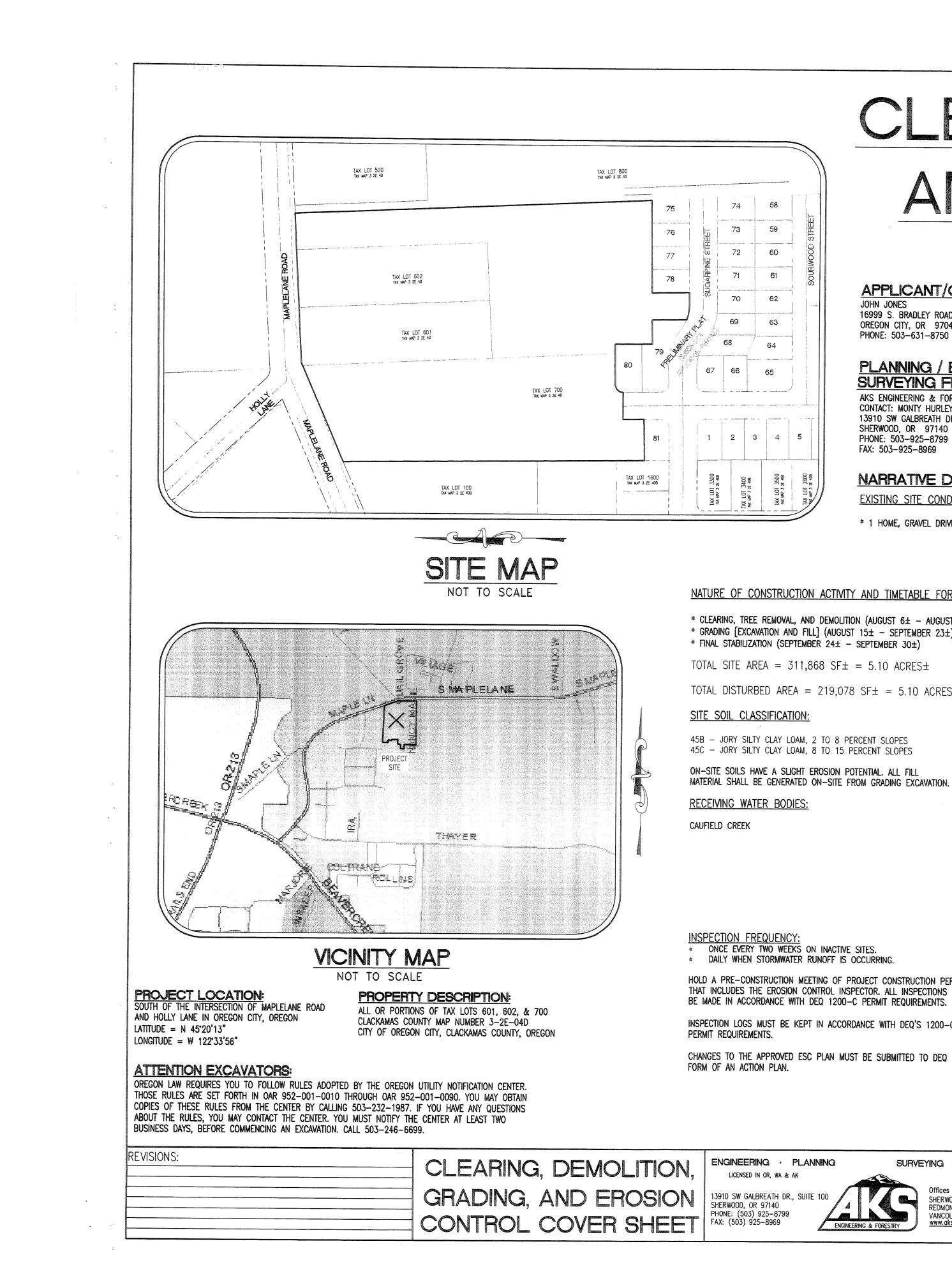
14) Geotechnical Report. Not applicable.

15) **Other:**

- **Construction Staking**. Contractor shall stake existing facilities on the site and protect them accordingly. The Engineer, or inspector, shall specify the requirements for filling and compacting material near existing structures. Contractor shall be responsible for any and all damage caused to these facilities during the placement and compaction of material in close proximity to existing facilities and the cost to repair or replace to original condition.
- **Pre-grading meeting**. Not Applicable.

Attachments: Approved Grading Plans

CITY OF OREGON CITY FILL PERMIT NO. FP-07-004



TP 12-01 / VR 12-02 with V

30

CLEARING, DEMOLITION, GRADING, AND EROSION CONTROL PLANS

APPLICANT/OWNER

JOHN JONES 16999 S. BRADLEY ROAD OREGON CITY, OR 97045 PHONE: 503-631-8750

PLANNING / ENGINEERING /

SURVEYING FIRM AKS ENGINEERING & FORESTRY, LLC. CONTACT: MONTY HURLEY 13910 SW GALBREATH DR. SUITE 100 SHERWOOD, OR 97140 PHONE: 503-925-8799 FAX: 503-925-8969

NARRATIVE DESCRIPTIONS EXISTING SITE CONDITIONS

* 1 HOME, GRAVEL DRIVEWAYS, BRUSH, TREES

NATURE OF CONSTRUCTION ACTIVITY AND TIMETABLE FOR MAJOR ACTIVITIES:

* CLEARING, TREE REMOVAL, AND DEMOLITION (AUGUST $6\pm$ – AUGUST $14\pm$) * GRADING [EXCAVATION AND FILL] (AUGUST $15\pm$ - SEPTEMBER $23\pm$) * FINAL STABILIZATION (SEPTEMBER 24± - SEPTEMBER 30±)

TOTAL SITE AREA = 311,868 SF \pm = 5.10 ACRES \pm

TOTAL DISTURBED AREA = 219,078 SF \pm = 5.10 ACRES \pm

45B - JORY SILTY CLAY LOAM, 2 TO 8 PERCENT SLOPES 45C - JORY SILTY CLAY LOAM, 8 TO 15 PERCENT SLOPES

- ON-SITE SOILS HAVE A SLIGHT EROSION POTENTIAL. ALL FILL

STANDARD EROSION AND SEDIMENT **CONTROL PLAN DRAWING NOTES:**

- 1. APPLY TEMPORARY AND PERMANENT SOIL STABILIZATION MEASURES ON ALL DISTURBED AREAS AS GRADING PROGRESSES (SCHEDULE a.5.b.ii.6). 2. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND FROM OCTOBER
- THROUGH MAY 31 EACH YEAR (SCHEDULE a.7.a.i). 3. DURING WET WEATHER PERIODS TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORK
- DAY IF RAINFALL IS FORECAST IN THE NEXT 24 HOURS (SCHEDULE a.7.a.ii). 4. ALL EROSION AND SEDIMENT CONTROLS NOT IN THE DIRECT PATH OF WORK MUST BE INSTALLED PRIOR TO ANY LAND DISTURBANCE (SCHEDULE a.7,c,ii)
- 5. PRESERVE EXISTING VEGETATION AND RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OF CONSTRUCTION (SCHEDULE a.7.c.iii.1).
- 6. ALL TEMPORARY SEDIMENT CONTROLS MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED (SCHEDULE a.7.c.iii.3).
- 7. SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION (SCHEDULE 0.7.d.i.(1)).
- 8. ALL ACTIVE CATCH BASINS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION (SCHEDULE a.7.d.i.(2))
- 9. WATER-TIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED SOILS FROM THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT IS TO DRAIN THE SOIL ON-SITE AT A DESIGNATED LOCATION USING APPROPRIATE BMPs: SOILS MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE (SCHEDULE a.7.d.iii.3).
- 10. TEMPORARY STABILIZATION OR COVERING OF SOIL STOCKPILES MUST OCCUR AT THE END OF EACH WORK DAY OR OTHER BMPs MUST BE IMPLEMENTED TO PREVENT TURBID DISCHARGES TO SURFACE WATERS (SCHEDULE a.7.e.ii.2). 11. DEVELOP AND MAINTAIN ONSITE A WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURE (SCHEDULE 0.7.e.iii.3). 12. ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL
- (SCHEDULE a.7.e.iii.(2)). 13. THE PERMITTEE MUST PROPERLY PREVENT AND MANAGE HAZARDOUS WASTE, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING
- CONSTRUCTION (SCHEDULE a.7.e.i.1 AND SCHEDULE a.7.e.iii.4). 14. SIGNIFICANT AMOUNTS OF SEDIMENT WHICH LEAVE THE SITE MUST BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE AND STABILIZED OR PROPERLY DISPOSED. THE CAUSE OF THE SEDIMENT RELEASE MUST BE FOUND AND PREVENTED FROM CAUSING A REOCCURRENCE OF THE DISCHARGED WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEANUP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIME FRAME (SCHEDULE a.7.f.i.1).
- 15. SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATERBODIES, OR DRY SWEEPING MUST BE USED TO CLEAN UP RELEASED SEDIMENTS (SCHEDULE a.7.f.i.2).
- 16. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW THE MANUFACTURER'S RECOMMENDATIONS. NUTRIENT RELEASES FROM FERTILIZERS TO SURFACE WATERS MUST BE MINIMIZED. TIME RELEASE FERTILIZERS SHOULD BE USED AND CARE SHOULD BE TAKEN IN THE APPLICATION OF FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE (SCHEDULE a.7.f.i.3).
- 17. SEDIMENT MUST BE REMOVED FROM BEHIND SEDIMENT FENCE WHEN IT HAS REACHED A HEIGHT OF 1/3 THE HEIGHT OF THE FENCE ABOVE THE GROUND, AND BEFORE FENCE REMOVAL (SCHEDULE a.7.f.ii.1). 18. SEDIMENT MUST BE REMOVED FROM BEHIND BIO BAGS AND OTHER BARRIERS WHEN IT HAS REACHED A HEIGHT OF
- TWO (2) INCHES AND BEFORE BMP REMOVAL (SCHEDULE a.7.f.ii.2). 19. CLEANING OF TRAPPED CATCH BASINS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT, AND AT COMPLETION OF PROJECT (SCHEDULE a.7.f.ii.3).
- 20. REMOVAL OF TRAPPED SEDIMENT IN A SEDIMENT BASIN OR SEDIMENT TRAP MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT, AND AT COMPLETION OF PROJECT (SCHEDULE a.7.f.ii.3 & 4).
- 21. DEQ MUST APPROVE OF ANY TREATMENT SYSTEM AND OPERATIONAL PLAN THAT MAY BE NECESSARY TO TREAT CONTAMINATED CONSTRUCTION DEWATERING OR SEDIMENT AND TURBIDITY IN STORMWATER RUNOFF (SCHEDULE a.7.f.iii).
- 22. SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR THIRTY (30) DAYS OR MORE, THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD (SCHEDULE a.8.a).
- 23. SHOULD CONSTRUCTION ACTIVITIES CEASE FOR FIFTEEN (15) DAYS OR MORE ON ANY SIGNIFICANT PORTION OF A CONSTRUCTION SITE. TEMPORARY STABILIZATION IS REQUIRED FOR THAT PORTION OF THE SITE WITH STRAW, COMPOST, OR OTHER TACKIFIED COVERING THAT WILL PREVENT SOIL OR WIND EROSION UNTIL WORK RESUMES ON THAT PORTION OF THE SITE (SCHEDULE a.8.b),

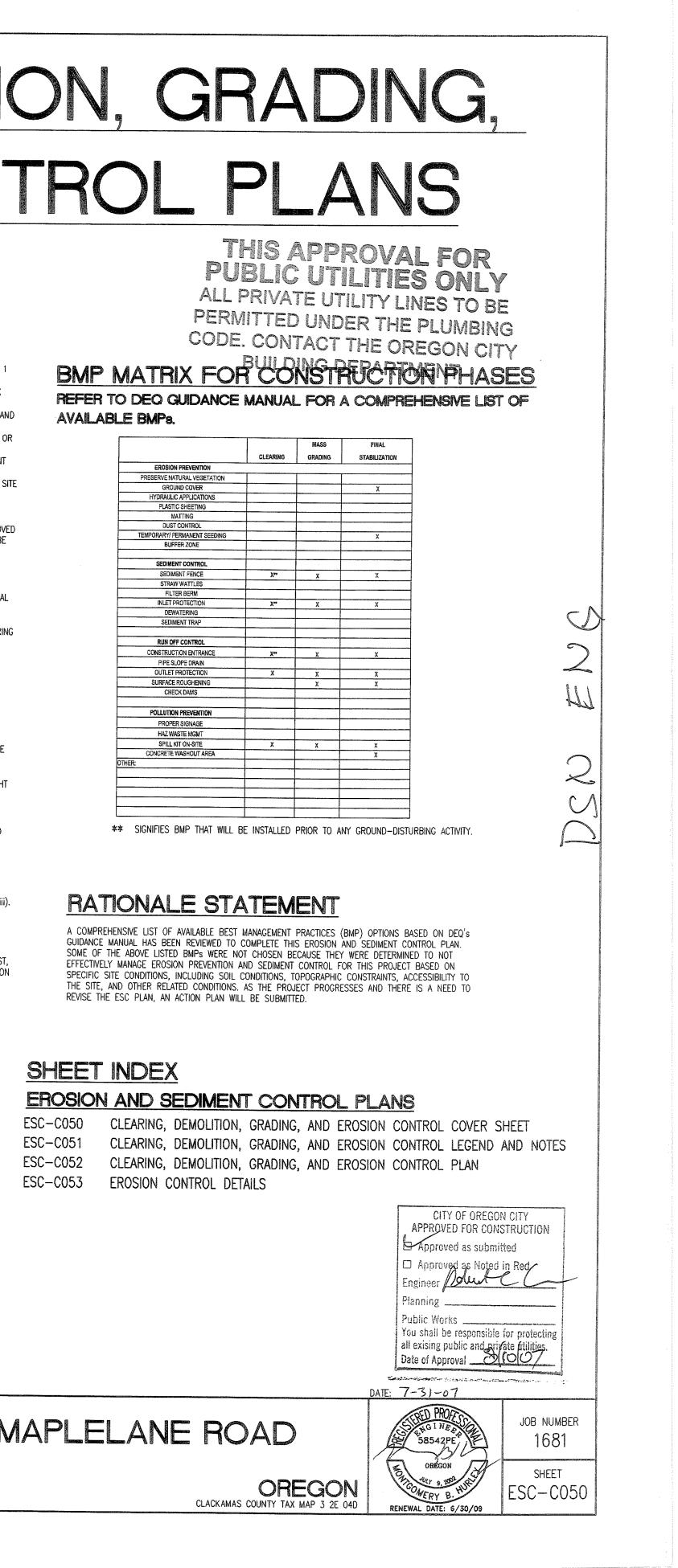
• ONCE EVERY TWO WEEKS ON INACTIVE SITES. • DAILY WHEN STORMWATER RUNOFF IS OCCURRING.

HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE EROSION CONTROL INSPECTOR. ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS.

INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C

CHANGES TO THE APPROVED ESC PLAN MUST BE SUBMITTED TO DEQ IN THE

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	EXISTING GROUND CONTOUR (1 FT)

FILL ACTIVITIES AND AS A MINIMUM, ONE TEST WILL BE TAKEN FOR EVERY 500 CUBIC YARDS PLACED OR 2 FEET VERTICAL,

COMPACTION TESTS AND REPORTS FOR EACH LOT SHALL BE CONDUCTED BY AN APPROVED TESTING LABORATORY, TEST

FREQUENCY SHALL BE PER THE PROJECT ENGINEER OR THE PROJECT'S GEOTECHNICAL ENGINEER. TESTING TO COMMENCE WITH

SHALL BE REPLACED WITH SUITABLE BACKFILL. FILLS ARE TO BE CONSTRUCTED IN HORIZONTAL LIFTS NOT TO EXCEED &

DIRECTED BY THE PROJECT ENGINEER OR THE PROJECTS GEOTECHNICAL ENGINEER) TO PROVIDE A FIRM FOUNDATION AND

SOFT SPOTS WITHIN PROPOSED BUILDING, PAVED OR SIDEMALK AREAS SHALL BE REMOVED TO THE DEPTH REQUIRED (AS

PROOF ROLLING. BENCHING IS REQUIRED ON FILLS WHERE THE EXISTING GROUND SLOPE EXCEEDS 5 HORIZONTAL TO 1

FINISH ORADES ARE TO DRAIN AS INDICATED ON THE PLANS, ROUGH ORADING SHALL BE FINISHED BY BLADING AND RAKING

FINISHES AS SPECIFIED. SHAPE FUTURE PAVED AREAS PER THE PLANS TO SUB GRADE ELEVATIONS THAT WILL ACCOMMODATE

ORADE THE SITE TO THE ELEVATIONS SHOWN ON THE DRAWINGS WITH THE NECESSARY ADJUSTMENTS TO ACCOMMODATE THE

GRASS IN SUCH A MANNER TO MEET ALL APPLICABLE REGULATIONS. ON-SITE DISPOSAL SHALL BE AS DETERMINED BY THE REMOVE AND DISPOSE OF ALL ORGANIC AND/OR UNSUITABLE MATERIALS, INCLUDING TREES, STUMPS, ROOTS, BRUSH, AND

PROJECT CRADING LINITS SHALL BE WITHIN THE PROJECT'S PROPERTY BOUNDARY AND/OR STREET RIGHT-OF-WAY, UNLESS

STRAIGHT ORADES SHALL BE BETWEEN FINISH ORADE AND/OR FINISH CONTOUR LINES SHOWN, UNLESS OTHERWISE NOTED.

10. THE CONTRACTOR SHALL PROTECT ALL TREES NOT SPECIFICALLY SHOWN TO BE REMOVED ON APPROVED PLANS.

13. AREAS TO RECEIVE FILL MATERIALS SHALL BE PREPARED BY REMOVING ALL ORGANIC AND UNSUITABLE MATERIALS AND

VERTICAL. BENCHING SHALL BE IN ACCORDANCE WITH PROJECT GEOTECHNICAL ENGINEERS RECOMMENDATIONS. MATERIAL IN

WHICHEVER RESULTS IN THE MOST TESTS.

TO REASONABLY SMOOTH CONTOURS WITH GENTLE TRANSITIONS.

PROJECT ENGINEER OR PROJECT'S GEOTECHNICAL ENGINEER.

INCHER FOORE MEYRINGE

FUTURE BASE ROCK AND PAVING.

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DREMEMON & LOBEZIEL

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FORESTRY

ACTIMITES. BUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING FRIOR TO BEDINNING SUBSTANTIAL CONSTRUC

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- INSURE THAT ALL PANED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT. THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING AND VACUUMING, MAY BE R CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURY
- THE AREA. NO ACTINITIES ARE PERMITTED TO OCCUR REYOND THE CONSTRUCTION BARRIER. DEFINEVIED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARAM PROTECTION AREAS SHALL BE
- SUITABLE MATERIAL, STRAW WATTLES, OR OTHER APPROVED MATERIALS. 3. SEDIMENT BARRERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS CONSTRUCTED OUT OF MULCH, CHIPPINGS,
- IN PLACE, FUNCTIONN,, AND REPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCIABALI OF CONSTRUCTION ACTIVIT I' YTT BYZE E2C WEVRINEEZ (WELL BROLECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.

AND DEMOLITION NOTES PRE-CONSTRUCTION, CLEARING,

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- INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM. 15. COVER CATCH BASING, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO P
 - 14. USE BMPs SUCH AS INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.
 - 12. AVOID PAVING IN WET WEATHER WHEN PAVING, CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.
- BE LICKED No WND DISPOSED IN THE TRASH. 12. SWEEPINGS FROM EXPOSED ADOREDE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEE
- INVERIMENT BE FOOVLED MULHIN ZIX LEEL OF TRUCK ACCESS AND BE CLEAVED WHEN IT REACHES 50% OF THE FROM ANY DISCHARGE FOWT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRE THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CANNOT BE CONSTRUCTED GREATER 11. AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE
- SEDIMENT AND SEDIMENT-LADEN WATER. 10. SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SP
- ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED. 9. ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION
- BE REQUIRED TO INSURE THAT ALL PANED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT. THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, THE WASHES, STREET SHEEPING, AND VACUUM 8. CONSTRUCTION ENTRANCES SUML BE INSTRUCED AT THE BEGINNING OF CONSTRUCTION AND IMMUTANED FOR THE DUP.
- SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES. 7. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION
- 25% WAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES. CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPE 6. EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, ERO
- LEGIMETER OF THE STOCKPILE. STOCKERES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND T 2' STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIDURATION. DURING "WET WEATH
- CR OTHER APPROVED MEASURES. 4. TEMPORARY SLOPE STARILIZATION MEASURES SHALL INCLUDE: CONFIRM EXPOSED SOIL WITH PLASTIC SHEETING, STRAW
- WITH APPROVED MIX AND APPLICATION RATE. 3. LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VECETATIVE COVER 1
- AETOCILA' OR THE USE OF OTHER APPROVED IMPLEMENTS, SURFACE ROUGHENING IMPROVES SEED BEDOING AND REDUCES RUN-3. SLOPE TO RECENE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SUBFACE ROUGHENED BY MEANS OF TRACK
 - INHE-IABE LESCRE (ROM BY WEIGHT) MNUML RYEORASS (40% BY WEIGHT)

 - CREEPING RED FESCUE (20% BY WEIGHT) DWARF PERENNIAL RYEGRASS (80% BY WEIGHT)
 - A. DWARF GRASS MIX (MIN, 100 LB./AC.)
- OTHERMISE AUTHORIZED: 1' ZEED RZED LOG LEWLOGWEL OG LEWWARENT ZEEDING ZHATT BE CONFLOZED OF ONE OF THE FOLLOWING MICTURES, I

AND SEDIMENT CONSTRUCTION NOTES GRADING, STREET, AND UTILITY EROSION

INVERSI OTHERMISE APPROVED BY THE PROJECT ENGINEER, PROJECT'S GEOTECHNICAL ENGINEER, AND DEVELOPER, HORIZONIAL TO 1 VERTICAL, ALTERNATIVELY, STRIPPINGS AND/OR EXCESS STRIPPINGS SHALL BE DISPOSED OF OFF STREPPINGS SHALL BE FREE OF VEGETATION AND TREE ROUTS, NO STREPPINGS SHALL BE PLACED ON SLOPES GREA CONSTELLION OF FINAL ORADING. THE STRIPPING REDISTRIBUTION SHALL NOT EXCEED 12" IN DEPTH ON INDIVIDUAL L STOCKPILED AND LATER SPREAD EVENLY OVER SURFACES NOT RECEIVING A HARO, OURABLE SURFACE (PAVENENT, B STRIPPING DEPTH SHALL BE AS REQUIRED BY THE PROJECT'S GEOTECHNICAL ENGINEER (6'±). STRIPPINGS SHALL E

- BY THE PROJECT'S GEOTECHNICAL ENGINEER). 17. ALL CUT AND FILL AREAS SHALL BE STRIPPED OF 500 AND OTHER NON-STRUCTURAL MATERIAL (DEPTH TO BE DE
- THAT WILL ALLOW TIME TO REVIEW THE STUDTION AND PREPARE A PLAN TO PROPERLY MITICATE THE WATER ENCO GEOLECHNICKLE ENGINEER AND PROJECT ENGINEER OF THE CONDITIONS FOUND AND COORDINATE THE ACTIVITIES IN 16 IF SPRINGS OR ORONINWATER ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTEY THE PRO
- ZA3RA FILL ALL OTHER ARRUNDER PAVEMENT IN PAVED AREAS, TOP OF CONCRETE IN SIDEWALK AREAS, AND FINISHED CRADE (TOP OF CUT SURFACE ADJUST FINISH ORADE AS REQUIRED DURING CONSTRUCTION. FINISHED GRADE CONTOURS TYPICALLY REPRESENT TO 15. FINISHED GRADE CONTOURS SHOWN ARE APPROXIMATE. FINAL GRADING ELEVATIONS ARE ±1". THE PROJECT ENGINE

OB EROJECT'S GEOTECHNICAL ENGINEER. 8 THE IDENTIFICATION OF REMOVAL OF UNSUTABLE MATERIAL SHALL BE DONE WITH CONSULTATION WITH THE PROJECT ENGINEER

VIEVS INFECT APPROVED BY THE APPLICABLE ACENCIES AND SPECIFICALLY SHOWN ON THE APPROVED PLANS.

OTHERWISE SHOWN ON PLANS. NO GRADING SHALL BE CONDUCTED IN WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE

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E.	TOPSOIL, OR OTHER LINSUITABLE	TE PREPARATION MUST INCLUDE THE REMOVAL OF VEGETATION, NON-COMPLYING FILL, ATERIAL PRIOR TO PLACEMENT OF THE FILL	nn IS 7
		UPPLYING THE RESULTS TO THE PROJECT ENCINEER,	ĸ

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I AEKLICYF' BENCHING WORL BE DONE VR 6EK JHE V666060 6FWRZ ZEE GEOLECHNICYF ENGINEEKING KEDOKL EOK APPROPRIATE BENCHING OF FILLS IS REQUIRED FOR FILLS OVER 5 FEET IN HEIGHT ON SLOPES IN EXCESS OF 5 HORIZONTAL TO

ADDITIONAL INFORMATION ON FILL SLOPES AND BENCHING.

CIRIPPING, STRIPPING, OTHER ACCEPTABLE MEANS AND METHODS. EROSION CONTROL MEASURES SHALL BE IN PLACE PRICE TO EARTHMORK OR SITE CUT AND FILL SLOPES SHALL BE PROTECTED FROM EROSION. SUCH CONTROL MAY CONSIST OF APPROPRIATE REVEGETATION OR

THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER AND THE PROJECT'S GEOTECHNICAL ENGINEER FOR

REQUERED INSPECTIONS AT THE FOLLOWING STARES OF CONSTRUCTION:

THIS TIME. A. INSPECTION OF SITE STRIPPING, BUT PRIOR TO FILL PLACEMENT. EROSION CONTROL MEASURES SHALL BE IN PLACE AT

B. IN PREPARATION OF BENCH CONSTRUCTION PRIOR TO FLL PLACEMENT,

C. AFTER PLACENENT OF EACH 500 YARDS UP HILL.

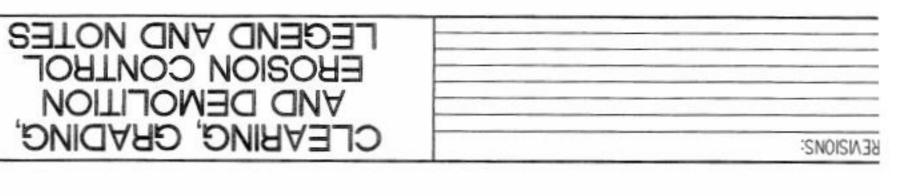
D. AFTER THE MAJORITY OF FILL HAS BEEN PLACED AND IS IN "ROUCH" GRADE BUT PRIOR TO FINAL GRADING.

E. DURING FINAL GRADING, BUT PRIOR TO BASE ROCK.

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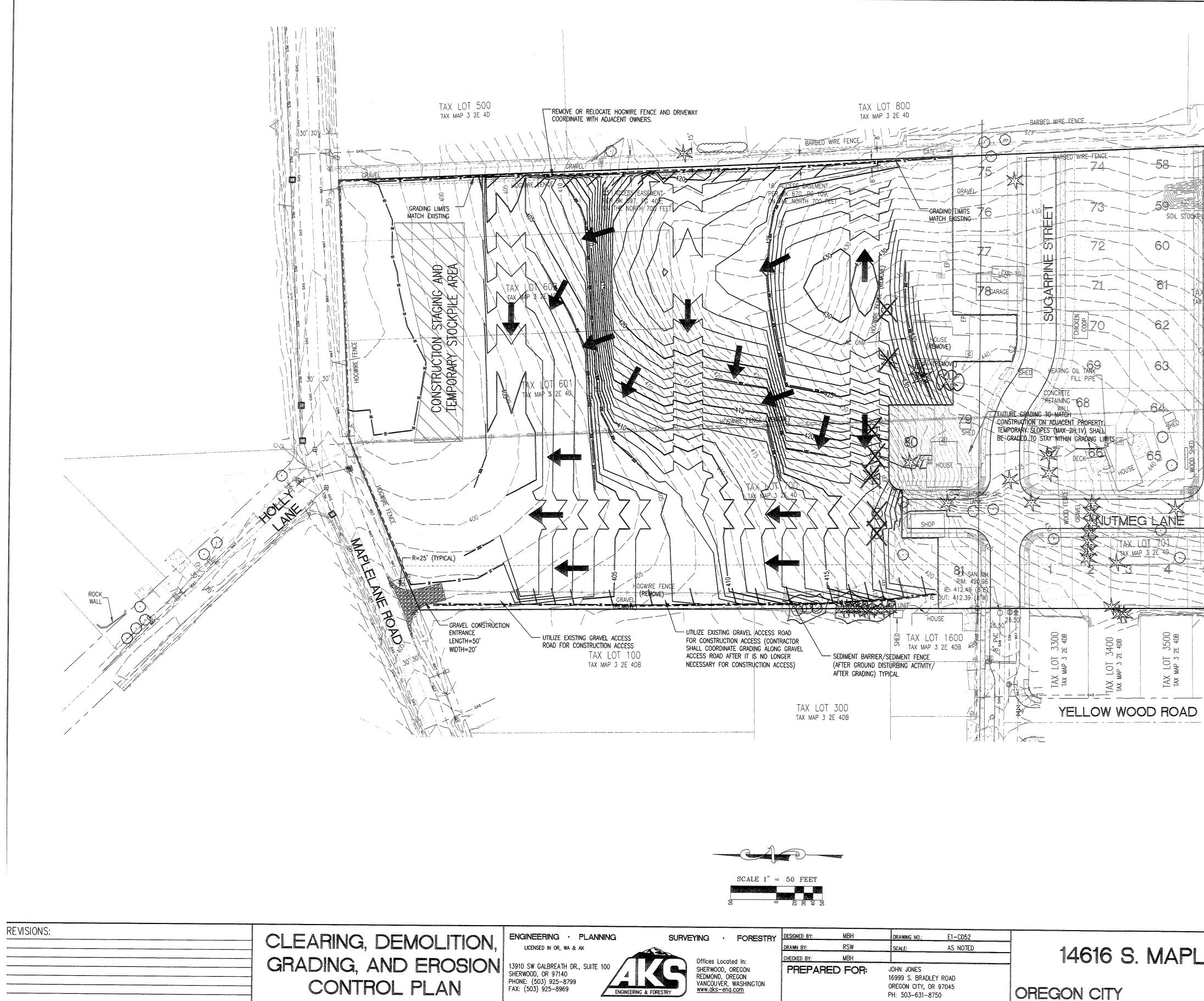
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- HWS ------

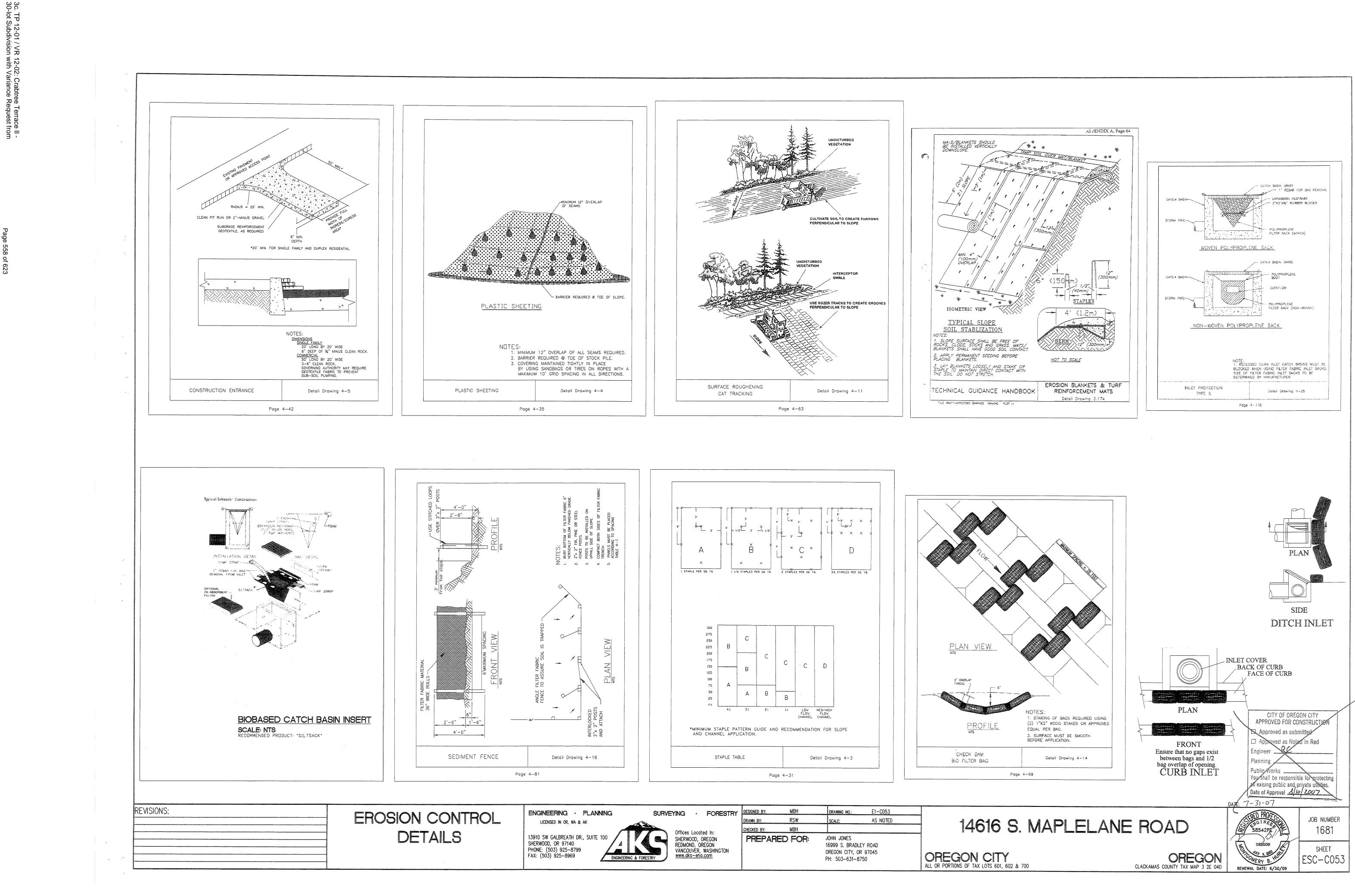
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	ORANGE CONSTRUCTION FENCE, TREE PROTECTION FENCE, AND DISTURBED AREA		
	INLET PROTECTION		
	GRAVEL CONSTRUCTION ENTRANCE		
	DRAINAGE FLOW DIRECTION		
		CITY OF OREG APPROVED FOR CO	ON CITY VSTRUCTION
		Approved as subn	3
		Engineer <u>RC</u>	
		Planning Public Works You shall be responsibl	
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CITY OF OREGON CITY FILL PERMIT FP 07-006

John Jones, Crabtree Terrace PH I

Address - 14616 Maplelane Road and 18778 Nancy Marie Lane, Oregon City, OR 97045

CONDITIONS OF APPROVAL

Approved By: Development Services Manager

9/4/07

1) This Grading Permit is being issued for the subject area only and requires the applicant to follow the approved drawings dated August 28, 2007 by Monty Hurley, PE, AKS Engineering, LLC for John Jones. City approval date is September 4, 2007.

2) Code Authority. The City utilizes Appendix J, Grading, of the State of Oregon Structural Specialties Code, and Oregon City Municipal Code Chapter 15.48, Grading, Filling and Excavation. Applicable sections of this code shall apply to this fill permit. The City has also adopted Public Works Standards for Erosion and Sediment Control by Ordinance 99-1013. Pursuant to Oregon City Municipal Code Chapter 17.47, Erosion Control; <u>Development</u> is defined as "Means any human-caused change to improved or unimproved real estate, including but not limited to....mining, dredging, filling, grading, paving, excavation....". Applicable sections of these standards shall apply to this fill permit.

3) **Maximum Cut/Fill Slope**. The maximum Cut/Fill slope for permanent fill shall be 2:1 (2 horizontal to 1 vertical). Storage fill shall have a maximum slope of 1:1 (1 horizontal to 1 vertical) unless otherwise indicated on the plans. Steep slopes shall be adequately protected from erosion. If a vegetative cover cannot be established in time to prevent erosion, measures as outlined in the City of Oregon City Public Works Standards for Erosion and Sediment Control shall be used such as erosion blankets, or plastic sheet covering, or as indicated on the Erosion Control Plan.

4) **Property Line Set Back**. The applicant shall follow required set backs in the UBC, Sec. 7011 and City of Oregon City Public Works Stormwater and Grading Design Standards, Sec. 3.1.6, Setbacks.

5) **Preparation of Ground**. The ground surface shall be prepared to receive permanent fill by removing vegetation and other unsuitable materials. Benching may be required, refer to UBC, Sec. 7010(c). Failure to remove organic material is grounds for the City not to accept any fill and or compaction tests in order to issue other building or construction permits.

6) **Fill Material.** Detrimental amounts of organic material shall not be permitted in the fill. No rock or similar irreducible material with a maximum dimension greater than 12 inches shall be buried or placed in the fill. Refer to UBC, Sec. 7010(d).

7) **Compaction**. Storage fill does not require compaction. If compaction requirements for permanent fill are not specified on the grading plans by a civil engineer or through a Soils Engineering Report, then at a minimum the following compaction requirements shall be met. All fills shall be compacted to a minimum of 90 percent (95 percent is desirable) of maximum density as determined by AASHTO T99, unless otherwise noted. To obtain the compaction, fill

CITY OF OREGON CITY FILL PERMIT NO. FP-07-006

shall be placed in approximately horizontal layers not to exceed twelve inches thick. Each separate layer shall be thoroughly compacted. Fill material shall be placed within 2% of optimum moisture. Monitoring compaction testing of the fill activities shall be required at commencement and periodically during the project. See comments under Grading Inspection for frequency. These minimum requirements are not site specific or for any intended use. If a fill is intended for a specific use that includes a structure being placed on the fill, a soils engineer shall certify the site suitable for that use prior to receiving building permit approval from the City.

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8) **Drainage**. Drainage shall be provided per the approved plans, Section 7012 of the UBC, and the City's Drainage Master Plan. Provisions should have been made on the attached Erosion Control Plan that address drainage. If not, then contractor shall construct a temporary sediment holding pond and temporary diversion swales into the pond to control erosion and sediment transport from leaving the site.

9) **Dust Control**. Dust shall not be permitted to leave the site. If dusty conditions exist, the permittee shall apply a fine spray of water on the surface to control the dust, or use other acceptable spray adhesive applications to control dust.

10) **Erosion/Sedimentation Control**. Erosion control measures shall be provided per Section 7013 of the UBC, the City's Drainage Master Plan, and the City's standard Erosion/Sedimentation Control. Applicant shall request City inspection and obtain approval of erosion control measures prior to grubbing and removal of topsoil.

Notes. Erosion and sediment control measures are temporary measures only. They shall be repaired, replaced, or installed at the direction of the inspector or the City. Failure to do so in a timely manner shall be a violation of this permit and shall be grounds for the City to revoke this permit. Contractor shall utilize all means to prevent erosion and sediment transport from leaving the site. This shall include (but not be limited to); road stabilization measures at entrance, sediment barriers such as silt fences and bio-bags, and temporary sediment traps or basins. This also includes diversion channels, vegetative or other soil stabilization measures such as mulching, and dust control measures.

11) **Grading Inspection**. All grading permits are subject to inspection by the City. The City inspector shall be notified 48 hours prior to starting grading operations. Inspection by the City at a minimum shall be required at the following events:

- After grubbing and removal of the topsoil, and prior to placement of fill.
- Periodically during filling operations, to observe proof rolling, and compaction testing done by an independent testing lab hired by the permittee and observed by the consultant. At a minimum, compaction testing shall be done once per quarter acre, at 2-foot vertical intervals, including at the surface.
- When grading operations are suspended prior to completion of the project.
- Upon notification that the work is completed and ready for final inspection.
- For storage fill, inspection shall be done prior to placement of fill, once during fill operations, and upon completion of fill.

CITY OF OREGON CITY FILL PERMIT NO. FP-07-006

FILL PERMIT NO. FP-07-006

3c. TP 12-01 / VR 12-02: Crabtree Terrace II -30-lot Subdivision with Variance Request from

A registered professional geotechnical engineer or civil engineer (PE) shall be responsible for professional inspection of the site to ensure conformance with the grading plan, within their technical specialty, on behalf of the developer/owner. If a soils engineer prepared a soils engineering report, then that engineer shall be responsible for inspection within their area of expertise. Refer to UBC, Sec. 7014(c). Consultant shall supply the City with copies of the observation logs and all compaction tests on a periodic and regular basis.

12) **Completion of Work**. If engineered grading plans were prepared, the civil engineer preparing the grading plans shall submit an as-graded plan. If a soils engineering report was prepared, then the soils engineer shall prepare a final soils grading report per the UBC, Sec. 7015(a). The permittee shall notify the City when the grading operation is ready for final inspection. Final approval shall not be given until all requirements have been met.

13) **Tree Preservation**. The owner/developer shall protect the trees identified on Sheet C052 as being protected.

14) **Compliance.** The owner/developer that applies for, and receives, a fill grading permit from the City of Oregon City agrees to all City Codes, conditions of this permit, standards and specifications, and other rules and regulations that apply to this site and permit. Failure to comply shall subject the permit holder to legal action by the City to remedy all non-conforming work or situations and the cost involved pursuing such legal action.

Additionally, it is the responsibility of the permitee to ensure that all other Agencies' rules and regulations that affect this site have been satisfied and/or approval received. Granting of this permit by the City does not allow the permitee to ignore or violate any City or other Agency requirements that might affect this site. The permitee shall comply with all requirements prior to starting any work on this site.

14) Geotechnical Report. Not applicable.

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- 15) Other:
 - **Construction Staking.** Contractor shall stake existing facilities on the site and protect them accordingly. The Engineer, or inspector, shall specify the requirements for filling and compacting material near existing structures. Contractor shall be responsible for any and all damage caused to these facilities during the placement and compaction of material in close proximity to existing facilities and the cost to repair or replace to original condition.
 - Pre-grading meeting. Not Applicable.

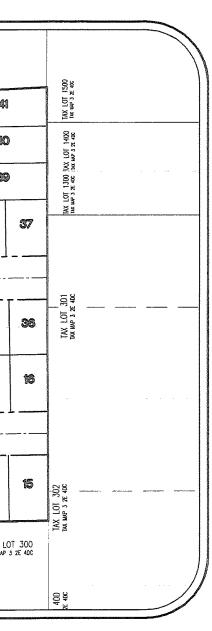
Attachments: Approved Grading Plans

CITY OF OREGON CITY

TP 12-01 / VR 12-02: with V ace II -est from

30

TAX LOT 900 TAX WAP 3 2E 40 TAX LOT 800 tax nap 3 2e 4d 41 49 42 57 50 74 75 40 56 51 48 43 73 **5**9 76 39 55 47 *ର୍*ଣ୍ଣ 72 60 52 77 36 37 JOHN JONES CONSTRUCTION, INC. 54 48 45 71 61 53 78 16999 S. BRADLEY ROAD OREGON CITY, OR 97045 70 62 PHONE: 503-631-8750 LODGEPOLE WAY 69 63 27 32 34 35 38 30 66 64 SURVEYING FIRM 26 80 23 22 21 20 67 66 65 25 TAX LOT 700 TAX MAP 3 ZE 40 SHERWOOD, OR 97140 PHONE: 503-925-8799 NUTMEG LANE FAX: 503-925-8969 12 13 14 15 8 8 10 EXISTING SITE CONDITIONS TAX LOT 5800 TAX LOT 5800 TAX WAP 3 2E 400 TAX WAP 3 2E 400 4000 26 408 3300 2f 408 3500 xe 409 3600 26 408 3700 £ 408 3800 26 409 3900 1990 TAX LOT 1600 Tax map 3 2E 4D0 3400 * 2 HOMES, PAVED DRIVEWAYS. TAX LOT TAX LOT TAX LAP 3 TAX LOT TAX LOT TAX LOT LOT We 3 TAX LOT NX LOT TAX LO OUTBUILDINGS, BRUSH, TREES SITE MAP NOT TO SCALE * CLEARING, TREE REMOVAL, AND DEMOLITION (SEPTEMBER $15\pm$ – OCTOBER $1\pm$) * GRADING [EXCAVATION AND FILL] (OCTOBER $1 \pm -$ OCTOBER $24 \pm$) * FINAL STABILIZATION (OCTOBER $24\pm$ – OCTOBER $30\pm$) G TOTAL SITE AREA = 426,084 SF \pm = 9.78 ACRES \pm · MARET <u>a</u>r TOTAL DISTURBED AREA = 426,084 SF \pm = 9.78 ACRES \pm (S¹m^{-/} 5 MAPLELANE 01 SITE SOIL CLASSIFICATION: WAR IE W 45B - JORY SILTY CLAY LOAM, 2 TO 8 PERCENT SLOPES 45C - JORY SILTY CLAY LOAM, 8 TO 15 PERCENT SLOPES ON-SITE SOILS HAVE A SLIGHT EROSION POTENTIAL. ALL FILL MATERIAL SHALL BE GENERATED ON-SITE FROM GRADING EXCAVATION AND UTILITY TRENCH SPOILS. **RECEIVING WATER BODIES:** PROJECT CAUFIELD CREEK **INSPECTION FREQUENCY:** • ONCE EVERY TWO WEEKS ON INACTIVE SITES. VICINITY MAP • DAILY WHEN STORMWATER RUNOFF IS OCCURRING. NOT TO SCALE HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE EROSION CONTROL INSPECTOR. ALL INSPECTIONS MUST PROJECT LOCATION: SOUTH OF THE INTERSECTION OF MAPLELANE ROAD PROPERTY DESCRIPTION: BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS. ALL OR PORTIONS OF TAX LOTS 600, 700, & 701 AND HOLLY LANE IN OREGON CITY, OREGON CLACKAMAS COUNTY MAP NUMBER 3-2E-04D INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200 C PERMIT LATITUDE = N $45^{\circ}20'3''$ **REQUIREMENTS.** CITY OF OREGON CITY, CLACKAMAS COUNTY, OREGON LONGITUDE = $W 122^{\circ}33'55^{\circ}$ CHANGES TO THE APPROVED ESC PLAN MUST BE SUBMITTED TO DEQ IN THE FORM OF AN ACTION PLAN. ATTENTION EXCAVATORS: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699. REVISIONS; CLEARING, DEMOLITION GRADING AND EROSION CONTROL COVER SHEE An and a second s



CLEARING, DEMOLITION, GRADING AND EROSION CONTROL PLANS

APPLICANT/OWNER

PLANNING / ENGINEERING /

AKS ENGINEERING & FORESTRY, LLC. CONTACT: MONTY HURLEY/RAND WALTZ 13910 SW GALBREATH DR SUITE 100

NARRATIVE DESCRIPTIONS

NATURE OF CONSTRUCTION ACTIVITY AND TIMETABLE FOR MAJOR ACTIVITIES:

STANDARD EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES:

- 1. APPLY TEMPORARY AND PERMANENT SOIL STABILIZATION MEASURES ON ALL DISTURBED AREAS AS GRADING
- PROGRESSES (SCHEDULE a.5.b.ii.6). 2. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND FROM OCTOBER THROUGH MAY 31 EACH YEAR (SCHEDULE a.7.a.i), DURING WET WEATHER PERIODS TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORK
- DAY IF RAINFALL IS FORECAST IN THE NEXT 24 HOURS (SCHEDULE a.7.a.ii). 4. ALL EROSION AND SEDIMENT CONTROLS NOT IN THE DIRECT PATH OF WORK MUST BE INSTALLED PRIOR TO ANY LAND DISTURBANCE (SCHEDULE a.7.c.ii)
- 5. PRESERVE EXISTING VEGETATION AND RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION (SCHEDULE a.7.c.iii.1).
- 6. ALL TEMPORARY SEDIMENT CONTROLS MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED (SCHEDULE a.7.c.iii.3). 7. SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE
- AT ALL TIMES DURING CONSTRUCTION (SCHEDULE a.7.d.i.(1)). 8. ALL ACTIVE CATCH BASINS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION (SCHEDULE a.7.d,i.(2))
- WATER-TIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED SOILS FROM THE CONSTRUCTION SITE, AN APPROVED EQUIVALENT IS TO DRAIN THE SOIL ON-SITE AT A DESIGNATED LOCATION USING APPROPRIATE BMPS; SOILS MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE (SCHEDULE a.7.d.iii.3).
- 10. TEMPORARY STABILIZATION OR COVERING OF SOIL STOCKPILES MUST OCCUR AT THE END OF EACH WORK DAY OR OTHER BMPs MUST BE IMPLEMENTED TO PREVENT TURBID DISCHARGES TO SURFACE WATERS (SCHEDULE a.7,e,ii.2). 11. DEVELOP AND MAINTAIN ONSITE A WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURE (SCHEDULE a.7.e.iii.3). 12. ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL
- (SCHEDULE a.7.e.iii.(2)). 13. THE PERMITTEE MUST PROPERLY PREVENT AND MANAGE HAZARDOUS WASTE, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING
- CONSTRUCTION (SCHEDULE a.7.e.i.1 AND SCHEDULE a.7.e.iii.4). 14. SIGNIFICANT AMOUNTS OF SEDIMENT WHICH LEAVE THE SITE MUST BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE AND STABILIZED OR PROPERLY DISPOSED, THE CAUSE OF THE SEDIMENT RELEASE MUST BE FOUND AND PREVENTED FROM CAUSING A REOCCURRENCE OF THE DISCHARGED WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEANUP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIME FRAME (SCHEDULE a.7.f.i.1).
- 15. SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATERBODIES, OR DRY SWEEPING MUST BE USED TO CLEAN UP RELEASED SEDIMENTS (SCHEDULE 0.7.f.i.2). 16. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW THE MANUFACTURER'S RECOMMENDATIONS. NUTRIENT RELEASES FROM FERTILIZERS TO SURFACE WATERS MUST BE MINIMIZED. TIME RELEASE
- FERTILIZERS SHOULD BE USED AND CARE SHOULD BE TAKEN IN THE APPLICATION OF FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE (SCHEDULE 0.7.f.i.3). 17. SEDIMENT MUST BE REMOVED FROM BEHIND SEDIMENT FENCE WHEN IT HAS REACHED A HEIGHT OF 1/3 THE HEIGHT
- OF THE FENCE ABOVE THE GROUND, AND BEFORE FENCE REMOVAL (SCHEDULE a.7.f.ii.1). 18. SEDIMENT MUST BE REMOVED FROM BEHIND BIO BAGS AND OTHER BARRIERS WHEN IT HAS REACHED A HEIGHT OF TWO (2) INCHES AND BEFORE BMP REMOVAL (SCHEDULE a.7.f.ii.2).
- 19. CLEANING OF TRAPPED CATCH BASINS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED. BY FIFTY (50) PERCENT, AND AT COMPLETION OF PROJECT (SCHEDULE a.7.f.ii.3).
- 20. REMOVAL OF TRAPPED SEDIMENT IN A SEDIMENT BASIN OR SEDIMENT TRAP MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT, AND AT COMPLETION OF PROJECT (SCHEDULE a.7.f.ii,3 & 4).
- 21. DEQ MUST APPROVE OF ANY TREATMENT SYSTEM AND OPERATIONAL PLAN THAT MAY BE NECESSARY TO TREAT CONTAMINATED CONSTRUCTION DEWATERING OR SEDIMENT AND TURBIDITY IN STORMWATER RUNOFF (SCHEDULE g.7.f.iii). 22. SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR THIRTY (30) DAYS OR MORE, THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD
- (SCHEDULE a.8.a), 23. SHOULD CONSTRUCTION ACTIVITIES CEASE FOR FIFTEEN (15) DAYS OR MORE ON ANY SIGNIFICANT PORTION OF A CONSTRUCTION SITE, TEMPORARY STABILIZATION IS REQUIRED FOR THAT PORTION OF THE SITE WITH STRAW, COMPOST, OR OTHER TACKIFIED COVERING THAT WILL PREVENT SOIL OR WIND EROSION UNTIL WORK RESUMES ON THAT PORTION OF THE SITE (SCHEDULE a.8.b),



CITY OF OREGON CITY APPROVED FOR CONSTRUCTION	
Approved as submitted	
□ Approved as Noted in Red,	
Engineer <u>Robert Ch</u>	
Planning	
Public Works You shall be responsible for protecting all exising public and private utilities. Date of Approval	

N ₉	ENGINEERING · PLANNING LICENSED IN OR, WA & AK		designed by: Drawn by: Checked by:	MBH RSW MBH	DRAWING NO.: SCALE:	E1-C050 AS NOTED		CRAB
	13910 SW GALBREATH DR., SUITE 100 SHERWOOD, OR 97140 PHONE: (503) 925–8799 FAX: (503) 925–8969 ENGINEERING & FORES	SHERWOOD, OREGON REDMOND, OREGON VANCOUVER, WASHINGTON	PREPARED		JOHN JONES CONS 16999 S. BRADLEY OREGON CITY, OR PH: 503-631-875	97045	OREGON ALL OR PORTIONS OF TAX	

BMP MATRIX FOR CONSTRUCTION PHASES REFER TO DEO GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE BMPs.

		MASS	FINAL
	CLEARING	GRADING	STABILIZATION
EROSION PREVENTION			
PRESERVE NATURAL VEGETATION			
GROUND COVER			X
HYDRAULIC APPLICATIONS			
PLASTIC SHEETING			
MATTING			
DUST CONTROL			
TEMPORARY/ PERMANENT SEEDING			X
BUFFER ZONE			
SEDIMENT CONTROL			
SEDIMENT FENCE	X**	X	X
STRAW WATTLES			
FILTER BERM			
INLET PROTECTION	X**	X	Х
DEWATERING			
SEDIMENT TRAP			
RUN OFF CONTROL			
CONSTRUCTION ENTRANCE	Χ**	X	X
PIPE SLOPE DRAIN			
OUTLET PROTECTION	X	X	X
SURFACE ROUGHENING		X	X
CHECK DAMS			
POLLUTION PREVENTION			
PROPER SIGNAGE			
HAZ WASTE MGMT			
SPILL KIT ON-SITE	X	X	X
CONCRETE WASHOUT AREA			
HER:	-		
			· · · · · · · · · · · · · · · · · · ·

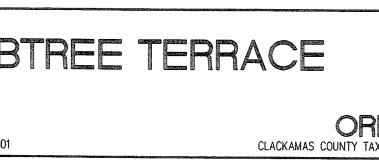
** SIGNIFIES BMP THAT WILL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY.

RATIONALE STATEMENT

A COMPREHENSIVE LIST OF AVAILABLE BEST MANAGEMENT PRACTICES (BMP) OPTIONS BASED ON DEQ'S GUIDANCE MANUAL HAS BEEN REVIEWED TO COMPLETE THIS EROSION AND SEDIMENT CONTROL PLAN. SOME OF THE ABOVE LISTED BMPs WERE NOT CHOSEN BECAUSE THEY WERE DETERMINED TO NOT EFFECTIVELY MANAGE EROSION PREVENTION AND SEDIMENT CONTROL FOR THIS PROJECT BASED ON SPECIFIC SITE CONDITIONS, INCLUDING SOIL CONDITIONS, TOPOGRAPHIC CONSTRAINTS, ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS. AS THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESC PLAN, AN ACTION PLAN WILL BE SUBMITTED.

SHEET INDEX

EROSION	NAND SEDIMENT CONTROL PLANS
ESC-C050	CLEARING, DEMOLITION, GRADING AND EROSION CONTROL COVER SHEET
ESC-C051	CLEARING, DEMOLITION, GRADING AND EROSION CONTROL LEGEND AND NOTES
ESC-C052	TREE PRESERVATION/REMOVAL PLAN AND TREE TABLE
ESC-C053	CLEARING, DEMOLITION, GRADING AND EROSION CONTROL PLAN
ESC-C054	EROSION CONTROL DETAILS



JOB NUMBER 1681 SHEET ESC-C050

DATE: 8-28-07

RENEWAL DATE: 6/30/09

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OREGO CLACKAMAS COUNTY TAX MAP 3 2E 04D

ENGINEERED GRADING NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE NECESSARY ARRANGEMENTS FOR COMPACTION TESTING AND FOR SUPPLYING THE RESULTS TO THE PROJECT ENGINEER.
- SITE PREPARATION MUST INCLUDE THE REMOVAL OF VEGETATION, NON-COMPLYING FILL, TOPSOIL, OR OTHER UNSUITABLE MATERIAL PRIOR TO PLACEMENT OF THE FILL.
- 3. NO CUT OR FILL SHALL EXCEED A GRADE OF 2 HORIZONTAL TO 1 VERTICAL UNLESS APPROVED BEFOREHAND BY THE PROJECT ENGINEER.
- APPROPRIATE BENCHING OF FILLS IS REQUIRED FOR FILLS OVER 5 FEET IN HEIGHT ON SLOPES IN EXCESS OF 5 HORIZONTAL TO 1 VERTICAL. BENCHING MUST BE DONE AS PER THE APPROVED PLANS. CONTACT GEOTECHNICAL ENGINEERING REPORT FOR ADDITIONAL INFORMATION ON FILL SLOPES AND BENCHING.
- CUT AND FILL SLOPES SHALL BE PROTECTED FROM EROSION. SUCH CONTROL MAY CONSIST OF APPROPRIATE REVEGETATION OR OTHER ACCEPTABLE MEANS AND METHODS. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTHWORK OR SITE STRIPPING
- THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER AND THE PROJECT'S GEOTECHNICAL ENGINEER FOR REQUIRED INSPECTIONS AT THE FOLLOWING STAGES OF CONSTRUCTION:
 - A. INSPECTION OF SITE STRIPPING, PRIOR TO FILL PLACEMENT. EROSION CONTROL MEASURES SHALL BE IN PLACE AT THIS TIME.
 - B. IN PREPARATION OF BENCH CONSTRUCTION PRIOR TO FILL PLACEMENT.
 - C. AFTER PLACEMENT OF EACH 500 YARDS OF FILL.
 - D. AFTER THE MAJORITY OF FILL HAS BEEN PLACED AND IS IN "ROUGH" GRADE BUT PRIOR TO FINAL GRADING.
 - E. DURING FINAL GRADING, BUT PRIOR TO BASE ROCK.
 - F. WHEN FINAL GRADING IS COMPLETE.

REVISIONS:

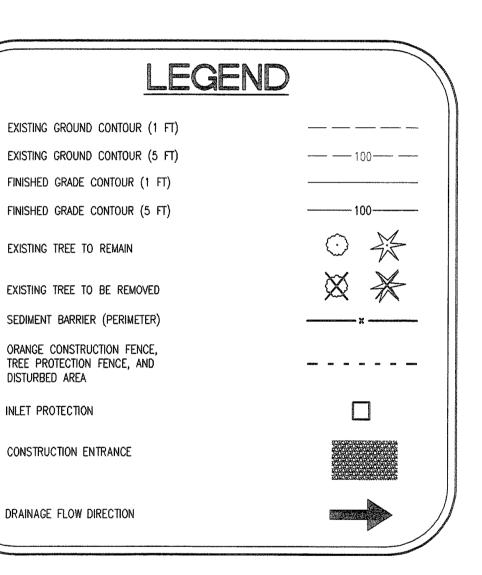
LEGEND AND NOTES

LEGEND PROPOSED <u>EXISTING</u> **EXISTING** PROPOSED \odot \odot DECIDUOUS TREE STORM SEWER CLEAN OUT STORM SEWER CATCH BASIN CONIFEROUS TREE STORM SEWER MANHOLE FIRE HYDRANT Ω GAS METER WATER BLOWOFF GAS VALVE GUY WIRE ANCHOR <u>(</u>______ £-----WATER METER POWER POLE WATER VALVE Ρ POWER VAULT DOUBLE CHECK VALVE POWER JUNCTION BOX AIR RELEASE VALVE POWER RISER SANITARY SEWER CLEAN OUT TELEPHONE/TELEVISION POLE SANITARY SEWER MANHOLE 0 TELEPHONE/TELEVISION VAULT T SIGN STREET LIGHT TELEPHONE/TELEVISION JUNCTION BOX 🛆 ¢ MAILBOX ME TELEPHONE/TELEVISION RISER MB EXISTING <u>PROPOSED</u> RIGHT-OF-WAY LINE BOUNDARY LINE PROPERTY LINE CENTERLINE _____ DITCH and grante where grante areas and and CURB EDGE OF PAVEMENT _____ EASEMENT FENCE LINE GRAVEL EDGE POWER LINE _____ PWR _____ PWR _____ OVERHEAD WIRE _____ OHW _____ OHW _____ OHW ____ ------ OHW ------- OHW -------TELEPHONE LINE ------ TEL ------ TEL ------TELEVISION LINE GAS LINE _____ ___ GAS _____ GAS _____ GAS _____ ----- GAS _____ GAS _____ STORM SEWER LINE SANITARY SEWER LINE ----- SAN -----WATER LINE

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- THE IDENTIFICATION OR REMOVAL OF UNSUITABLE MATERIAL SHALL BE DONE WITH CONSULTATION WITH THE PROJECT ENGINEER OR PROJECT'S GEOTECHNICAL ENGINEER.
- REMOVE AND DISPOSE OF ALL ORGANIC AND/OR UNSUITABLE MATERIALS, INCLUDING TREES, STUMPS, ROOTS, BRUSH, AND GRASS IN SUCH A MANNER TO MEET ALL APPLICABLE REGULATIONS. ON-SITE DISPOSAL SHALL BE AS DETERMINED BY THE PROJECT ENGINEER OR PROJECT'S GEOTECHNICAL ENGINEER.
- 10. THE CONTRACTOR SHALL PROTECT ALL TREES NOT SPECIFICALLY SHOWN TO BE REMOVED ON APPROVED PLANS.
- GRADE THE SITE TO THE ELEVATIONS SHOWN ON THE DRAWINGS WITH THE NECESSARY ADJUSTMENTS TO ACCOMMODATE THE FINISHES AS SPECIFIED. SHAPE FUTURE PAVED AREAS PER THE PLANS TO SUBGRADE ELEVATIONS THAT WILL ACCOMMODATE FUTURE BASE ROCK AND PAVING.
- 12. STRAIGHT GRADES SHALL BE BETWEEN FINISHED GRADE AND/OR FINISHED CONTOUR LINES SHOWN, UNLESS OTHERWISE NOTED. FINISH GRADES ARE TO DRAIN AS INDICATED ON THE PLANS. ROUGH GRADING SHALL BE FINISHED BY BLADING AND RAKING TO REASONABLY SMOOTH CONTOURS WITH GENTLE TRANSITIONS.
- 13. AREAS TO RECEIVE FILL MATERIALS SHALL BE PREPARED BY REMOVING ALL ORGANIC AND UNSUITABLE MATERIALS AND PROOF ROLLING. BENCHING IS REQUIRED ON FILLS WHERE THE EXISTING GROUND SLOPE EXCEEDS 5 HORIZONTAL TO 1 VERTICAL, BENCHING SHALL BE IN ACCORDANCE WITH PROJECT GEOTECHNICAL ENGINEER'S RECOMMENDATIONS, MATERIAL IN SOFT SPOTS WITHIN PROPOSED BUILDING, PAVED, OR SIDEWALK AREAS SHALL BE REMOVED TO THE DEPTH REQUIRED (AS DIRECTED BY THE PROJECT ENGINEER OR THE PROJECTS GEOTECHNICAL ENGINEER) TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH SUITABLE BACKFILL. FILLS ARE TO BE CONSTRUCTED IN HORIZONTAL LIFTS NOT TO EXCEED 8 INCHES LOOSE MEASURE.
- COMPACTION TESTS AND REPORTS FOR EACH LOT SHALL BE CONDUCTED BY AN APPROVED TESTING LABORATORY, TEST FREQUENCY SHALL BE PER THE PROJECT ENGINEER OR THE PROJECT'S GEOTECHNICAL ENGINEER. TESTING TO COMMENCE WITH FILL ACTIVITIES AND AS A MINIMUM, ONE TEST WILL BE TAKEN FOR EVERY 500 CUBIC YARDS PLACED OR 2 FEET VERTICAL, WHICHEVER RESULTS IN THE MOST TESTS.

PROJECT GRADING LIMITS SHALL BE WITHIN THE PROJECT'S PROPERTY BOUNDARY AND/OR STREET RIGHT-OF-WAY, UNLESS OTHERWISE SHOWN ON PLANS. NO GRADING SHALL BE CONDUCTED IN WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE AREAS UNLESS APPROVED BY THE APPLICABLE AGENCIES AND SPECIFICALLY SHOWN ON THE APPROVED PLANS.



- FINISHED GRADE CONTOURS SHOWN ARE APPROXIMATE. FINAL GRADING ELEVATIONS ARE ONE-FOOT ±. THE PROJECT ENGINEER 15. MAY ADJUST FINISHED GRADE AS REQUIRED DURING CONSTRUCTION. FINISHED GRADE CONTOURS TYPICALLY REPRESENT TOP OF PAVEMENT IN PAVED AREAS, TOP OF CONCRETE IN SIDEWALK AREAS, AND FINISHED GRADE (TOP OF CUT SURFACE OR TOP OF STRUCTURAL FILL) ALL OTHER AREAS.
- 16. IF SPRINGS OR GROUNDWATER ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE PROJECT'S GEOTECHNICAL ENGINEER AND PROJECT ENGINEER OF THE CONDITIONS FOUND AND COORDINATE THE ACTIVITIES IN A MANNER THAT WILL ALLOW TIME TO REVIEW THE SITUATION AND PREPARE A PLAN TO PROPERLY MITIGATE THE WATER ENCOUNTERED.
- ALL CUT AND FILL AREAS SHALL BE STRIPPED OF SOD AND OTHER NON-STRUCTURAL MATERIAL (DEPTH TO BE DETERMINED 17, BY THE PROJECT'S GEOTECHNICAL ENGINEER).
- STRIPPING DEPTH SHALL BE AS REQUIRED BY THE PROJECT'S GEOTECHNICAL ENGINEER (6''±). STRIPPINGS SHALL BE 18. STOCKPILED AND LATER SPREAD EVENLY OVER SURFACES NOT RECEIVING A HARD, DURABLE SURFACE (PAVEMENT, ETC.) UPON COMPLETION OF FINAL GRADING. THE STRIPPING REDISTRIBUTION SHALL NOT EXCEED 12" IN DEPTH ON INDIVIDUAL LOTS. STRIPPINGS SHALL BE FREE OF VEGETATION AND TREE ROOTS. NO STRIPPINGS SHALL BE PLACED ON SLOPES GREATER THAN 4 HORIZONTAL TO 1 VERTICAL. ALTERNATIVELY, STRIPPINGS AND/OR EXCESS STRIPPINGS SHALL BE DISPOSED OF OFF-SITE, UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER, PROJECT'S GEOTECHNICAL ENGINEER, AND DEVELOPER.
- 19. THE PROJECT'S GEOTECHNICAL ENGINEER IS JIM IMBRIE WITH GEOPACIFIC ENGINEERING, INC. (503-598-8445).

GRADING, STREET, AND UTILITY EROSION AND SEDIMENT CONSTRUCTION NOTES

- SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING MIXTURES, UNLESS OTHERWISE AUTHORIZED: A. DWARF GRASS MIX (MIN. 100 LB./AC.)
 - DWARF PERENNIAL RYEGRASS (80% BY WEIGHT) CREEPING RED FESCUE (20% BY WEIGHT)
 - B. STANDARD HEIGHT GRASS MIX (MIN. 100LB./AC.)
 - ANNUAL RYEGRASS (40% BY WEIGHT) • TURF-TYPE FESCUE (60% BY WEIGHT)
- 2. SLOPE TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY
- 3. LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE.
- 4. TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES,
- 5. STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. DURING "WET WEATHER" PERIODS. STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.
- EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
- 7. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
- 8. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING. BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- 9. ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.
- 10. SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.
- 11. AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CANNOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.
- 12. SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH,
- 13. AVOID PAVING IN WET WEATHER. CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.
- 14. USE BMPs SUCH AS INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.
- 15. COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.

PRE-CONSTRUCTION, CLEARING. AND DEMOLITION NOTES

- 1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- 2. SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS CONSTRUCTED OUT OF MULCH, CHIPPINGS, OR OTHER SUITABLE MATERIAL, STRAW WATTLES, OR OTHER APPROVED MATERIALS.
- 3. SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.
- 4. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- 5. RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES.

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SEDIMENT AND TURBID WATER NOTES

AS NOTED IN THE 1200-C GRADING PERMIT APPLICATION, THERE ARE MORE STRINGENT REQUIREMENTS FOR CONSTRUCTION PROJECTS THAT HAVE THE POTENTIAL TO DISCHARGE SEDIMENT OR TURBID WATER INTO WATER BODIES THAT ARE LISTED FOR TURBIDITY OR SEDIMENTATION ON THE MOST RECENTLY EPA-APPROVED OREGON 303(d) LIST OR THAT HAVE AN ESTABLISHED TOTAL MAXIMUM DAILY LOAD FOR SEDIMENTATION OR TURBIDITY. THERE ARE NO WATER BODIES AS DESCRIBED ABOVE THAT ARE ADJACENT TO THIS PROJECT; THEREFORE, THE POTENTIAL FOR SEDIMENT OR TURBID WATER DISCHARGE INTO A LISTED WATER BODY IS VERY UNLIKELY. HOWEVER, I OREGON CITY OFFICIALS DETERMINE THAT THERE IS POTENTIAL FOR SUCH A DISCHARGE, THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER TO OBTAIN EROSION CONTROL SPECIFICATIONS THAT WILL EFFECTIVELY TREAT SUCH SEDIMENT AND TURBID WATER.

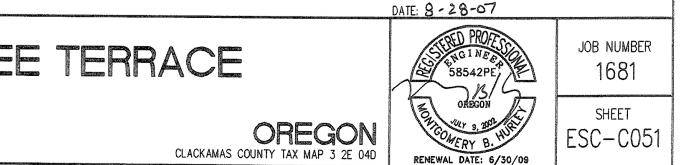
EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION

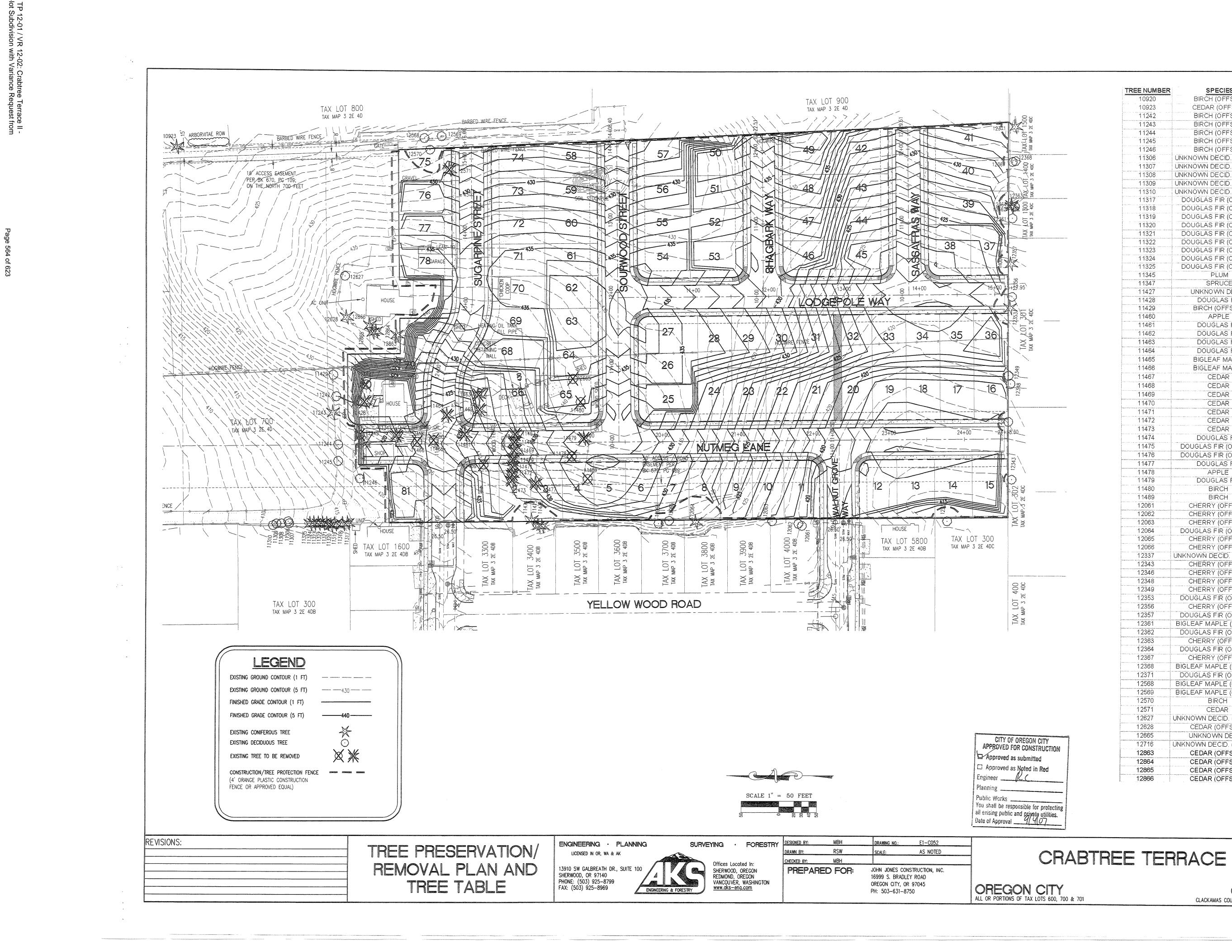
- 1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- ALL SEDIMENT BARRIERS TO BE INSTALLED AFTER GRADING SHALL BE INSTALLED IMMEDIATELY FOLLOWING ESTABLISHMENT OF FINISHED GRADE AS SHOWN ON THESE PLANS.
- 3. INLET PROTECTION SHALL BE IN PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.
- 4. LONG TERM SLOPE STABILIZATION MEASURES (INCLUDING MATTING) SHALL BE IN PLACE OVER AREAS WITH A SLOPE MORE THAN

OTHER MISCELLANEOUS BMP NOTES

- TO PREVENT ILLICIT CONNECTION AND ILLEGAL DISCHARGE: 1. INSPECT SITE BEFORE BEGINNING THE JOB FOR EVIDENCE OF ILLICIT CONNECTIONS OR ILLEGAL DUMPING OR DISCHARGES.
- 2. INSPECT SITE REGULARLY DURING PROJECT EXECUTION FOR EVIDENCE OF ILLICIT CONNECTIONS OR ILLEGAL DUMPING OR DISCHARGES
- OBSERVE SITE PERIMETER FOR EVIDENCE OR POTENTIAL OF ILLICITLY DISCHARGED OR ILLEGALLY DUMPED MATERIAL WHICH MAY ENTER THE JOB SITE.
- 4. IDENTIFICATION OF ILLICIT CONNECTIONS AND ILLEGAL DUMPING OR DISCHARGES:
 - A. SOLIDS: LOOK FOR DEBRIS OR RUBBISH PILES, SOLID WASTE DUMPING OFTEN OCCURS ON ROADWAYS WITH LIGHT TRAFFIC LOADS OR IN AREAS NOT EASILY VISIBLE FROM THE TRAVELED WAY.
 - B. LIQUIDS: 1. VISIBLE SIGNS OF STAINING OR UNUSUAL COLORS TO THE PAVEMENT OR SURROUNDING ADJACENT SOILS. 2. DISCOLORATION OR OILY SUBSTANCES IN THE WATER OR STAINS AND RESIDUES DETAINED WITH DITCHES, CHANNELS OR DRAINAGE BOXES. 3. PUNGENT ODORS COMING FROM THE DRAINAGE SYSTEMS.
 - 4. ABNORMAL WATER FLOW DURING THE DRY WEATHER SEASON.
 - 5. URBAN AREAS EVIDENCE OF ILLICIT CONNECTIONS OR ILLEGAL DISCHARGES IS TYPICALLY DETECTED AT THE STORM DRAIN OUTFALL LOCATIONS OR AT THE MANHOLES. SIGNS OF AN ILLICIT CONNECTION OR ILLEGAL DISCHARGE CAN INCLUDE:
 - * ABNORMAL WATER FLOW DURING THE DRY WEATHER SEASON. * - UNUSUAL FLOWS IN SUB-DRAIN SYSTEMS USED FOR DEWATERING.
 - * PUNGENT ODORS COMING FROM THE DRAINAGE SYSTEMS. * - DISCOLORATION OR OILY SUBSTANCES IN THE WATER OR STAINS AND RESIDUES DETAINED
 - WITHIN DITCHES. * - EXCESSIVE SEDIMENT DEPOSITS, PARTICULARLY ADJACENT TO OR NEAR ACTIVE OFF-SITE
- CONSTRUCTION. 5. NOTIFY THE PROJECT SUPERINTENDENT OF ANY ILLICIT CONNECTIONS, DUMPINGS, OR DISCHARGES AT THE TIME OF DISCOVERY.
- VEHICLES AND EQUIPMENT SHOULD BE WASHED OFF-SITE AT A CONTROLLED WASH FACILITY WHEN AT ALL POSSIBLE.
- 7. USE "DRY CLEANING METHODS" SUCH AS WIPING DOWN WHENEVER POSSIBLE RATHER THAN WATER WASHING VEHICLES ON SITE. 8. IF CLEANING MUST BE CONDUCTED ON-SITE, IT SHALL BE CONDUCTED IN A DEDICATED AREA WITH THE FOLLOWING CHARACTERISTICS:
 - LOCATED AWAY FROM THE STORM DRAIN INLETS, DRAINAGE FACILITIES, OR WATERCOURSES.
 - PAVED WITH CONCRETE OR ASPHALT, OR STABILIZED WITH AN AGGREGATE BASE. BERMED TO CONTAIN WASH WATERS AND TO PREVENT RUN-ON AND RUNOFF.
 - CONFIGURED WASH AREA WITH A SUMP TO ALLOW COLLECTION AND DISPOSAL OF WASH WATER. DISCHARGE WASH WATER TO A SANITARY OR PROCESS WASTE SEWER (WHERE PERMITTED), OR TO A DEAD END SUMP. WASH WATERS SHALL NOT BE DISCHARGED TO STORM DRAINS OR WATERCOURSES. USED ONLY WHEN NECESSARY.
- 9. WHEN CLEANING VEHICLES OR EQUIPMENT WITH WATER:
 - USE AS LITTLE WATER AS POSSIBLE. CONSIDER USING A HIGH PRESSURE SPRAYER AND USE THE POSITIVE SHUTOFF DO NOT USE SOLVENTS OR DETERGENTS TO CLEAN VEHICLES OR EQUIPMENT ON SITE.
 - DO NOT USE STEAM CLEANING ON SITE.
- 10. INSPECT AND CLEAN WORK AREAS REGULARLY TO LIMIT WIND-BLOWN DEBRIS AND POLLUTANTS TRANSPORTED BY STORMWATER.
- TO REUSE AND RECYCLE CONSTRUCTION WASTES: 1. CUT AND FILL AREAS ARE PLANNED TO BALANCE.

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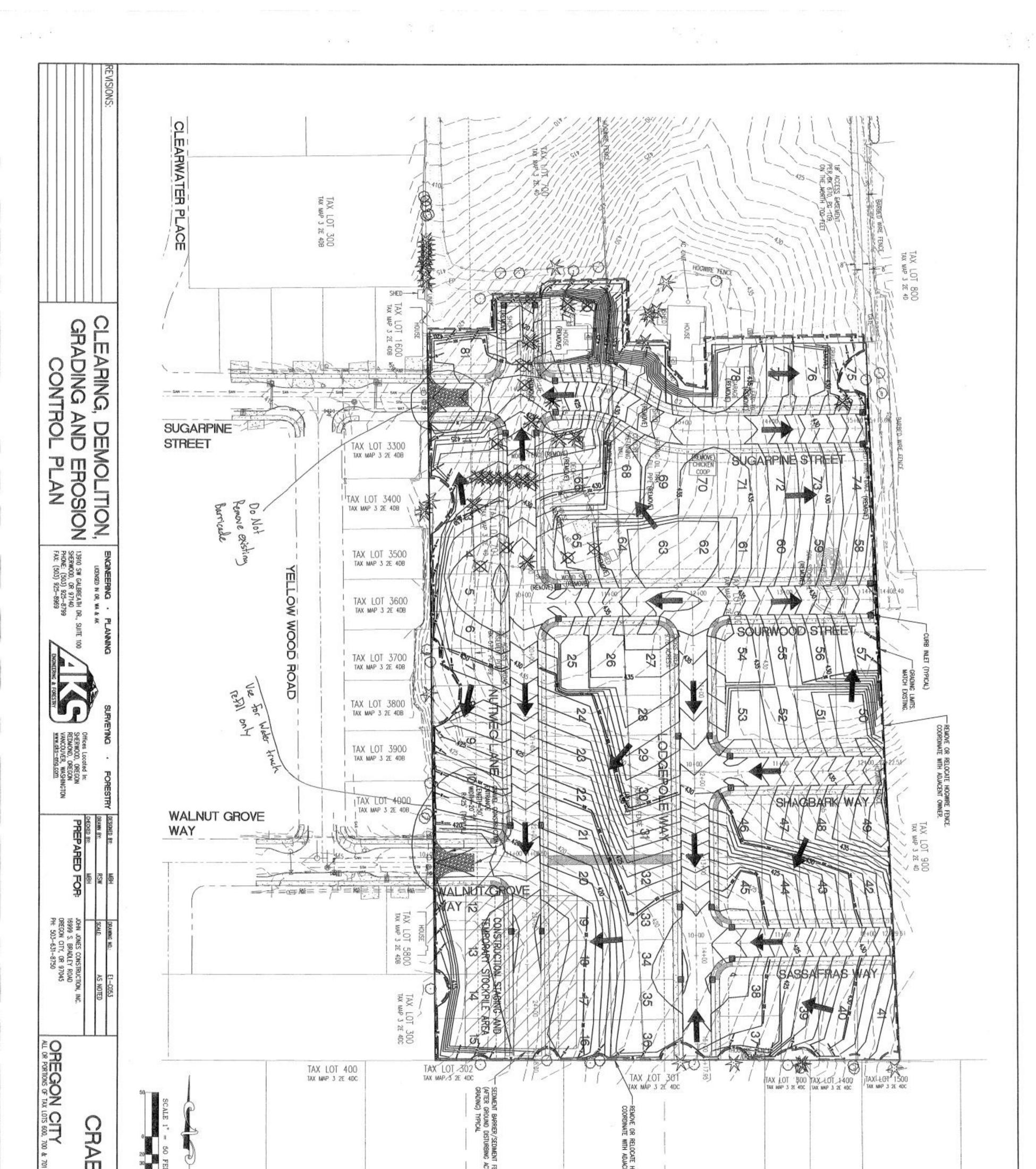
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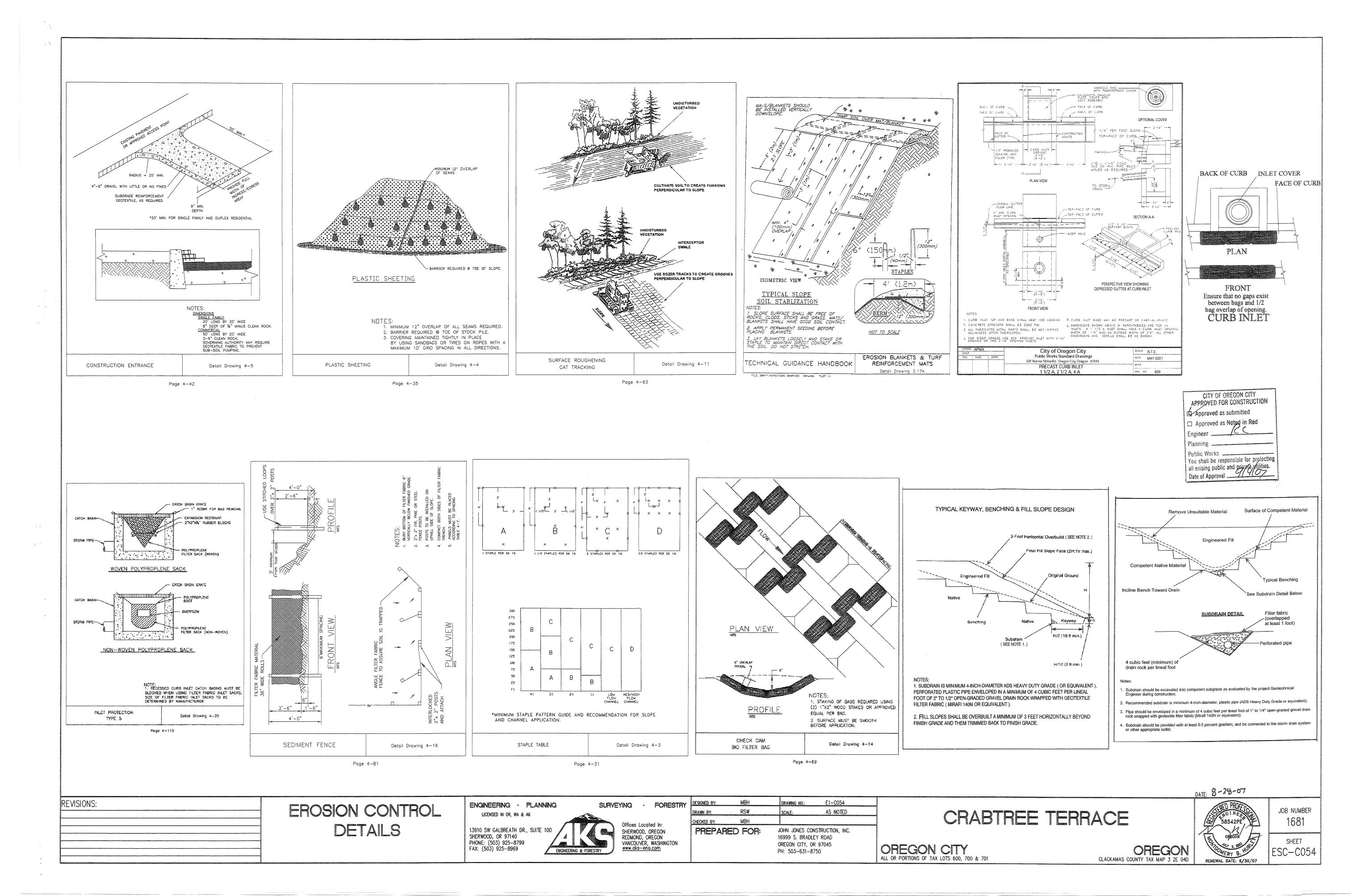
OREGON CLACKAMAS COUNTY TAX MAP 3 2E 04D

ERY B. RENEWAL DATE: 6/30/07

DATE: 8-29-07



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CLACKAMAS COUNTY TAX MAP 3 22 040 RENEWAL DATE: 6/30/09 LOC	TERRACE	CITY OF OREGON CITY APPROVED FOR CONSTRUCTION Approved as submitted Approved as Noted in Red Engineer Planning Public Works You shall be responsible for protecting all exising public and privels utilities. Date of Approval	NOTES: 1. All existing wells, septic systems, drawifields, and oil tanks shall be decommissioned per all applicable city, county, state, and federal requirements. 2. There shall be no grading within 2 feet of the site permeter property boundary.	EXEMPT GROUND CONTOUR (1 FT) FINISED GROUND CONTOUR (5 FT) FINISED GROUE CONTOUR (5 FT) FINISED GROUE CONTOUR (5 FT) FORSING TREE TO RELINANT DISTING TREE TO RELINANT SECOND TREEMONED SECOND TRUES (FTER GROUND DISTURBED ACTIVITY/AFTER GROUND INCET POTECTION NLET POTECTION NLET POTECTION NLET POTECTION FINISE DRAWLE FLOW DIRECTION ENTRANCE	
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3c. TP 12-01 / VR 12-02: C 30-lot Subdivision with Vari

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13910 SW GALBREATH DR., SUITE 100 SHERWOOD, OR 97140 PHONE: (503) 925–8799 FAX: (503) 925–8969 ENGINEERING & FORES	SHERWOOD, OREGON REDMOND, OREGON VANCOUVER, WASHINGTON	Uttices Located In: SHERWOOD, OREGON REDMOND, OREGON VANCQUVER, WASHINGTON	Uttices Located in: SHERWOOD, OREGON REDMOND, OREGON VANCOUVER, WASHINGTON	Uttices Located in: SHERWOOD, OREGON REDMOND, OREGON VANCQUVER, WASHINGTON	SHERWOOD, OREGON REDMOND, OREGON VANCOUVER, WASHINGTON	PREPAF	red fo	1	JOHN JONES C 16999 S. BRAE DREGON CITY, PH: 503-631-	OR 97045	OREGON ALL OR PORTIONS OF TAX	

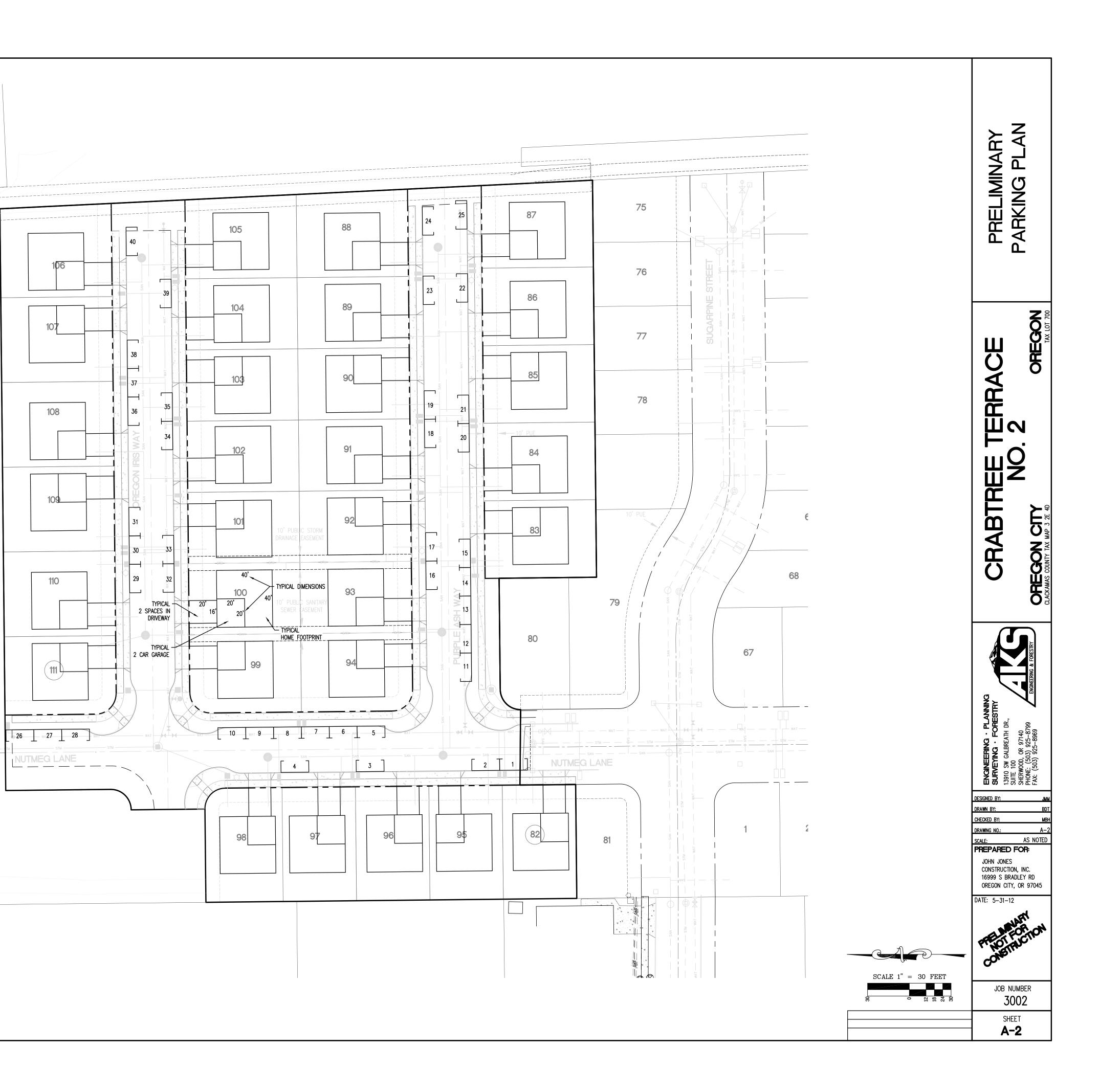


EXHIBIT 'D'

John Jones – Crabtree Terrace No. 2 Additional Variance Findings – City of Oregon City June 11, 2012

PARKINGOFF-STREET120 SPACES*ON-STREET40 SPACESTOTAL160 SPACES

*NOTE: THIS IS 4 SPACES PER HOME (2 IN GARAGE AND 2 IN DRIVEWAY).

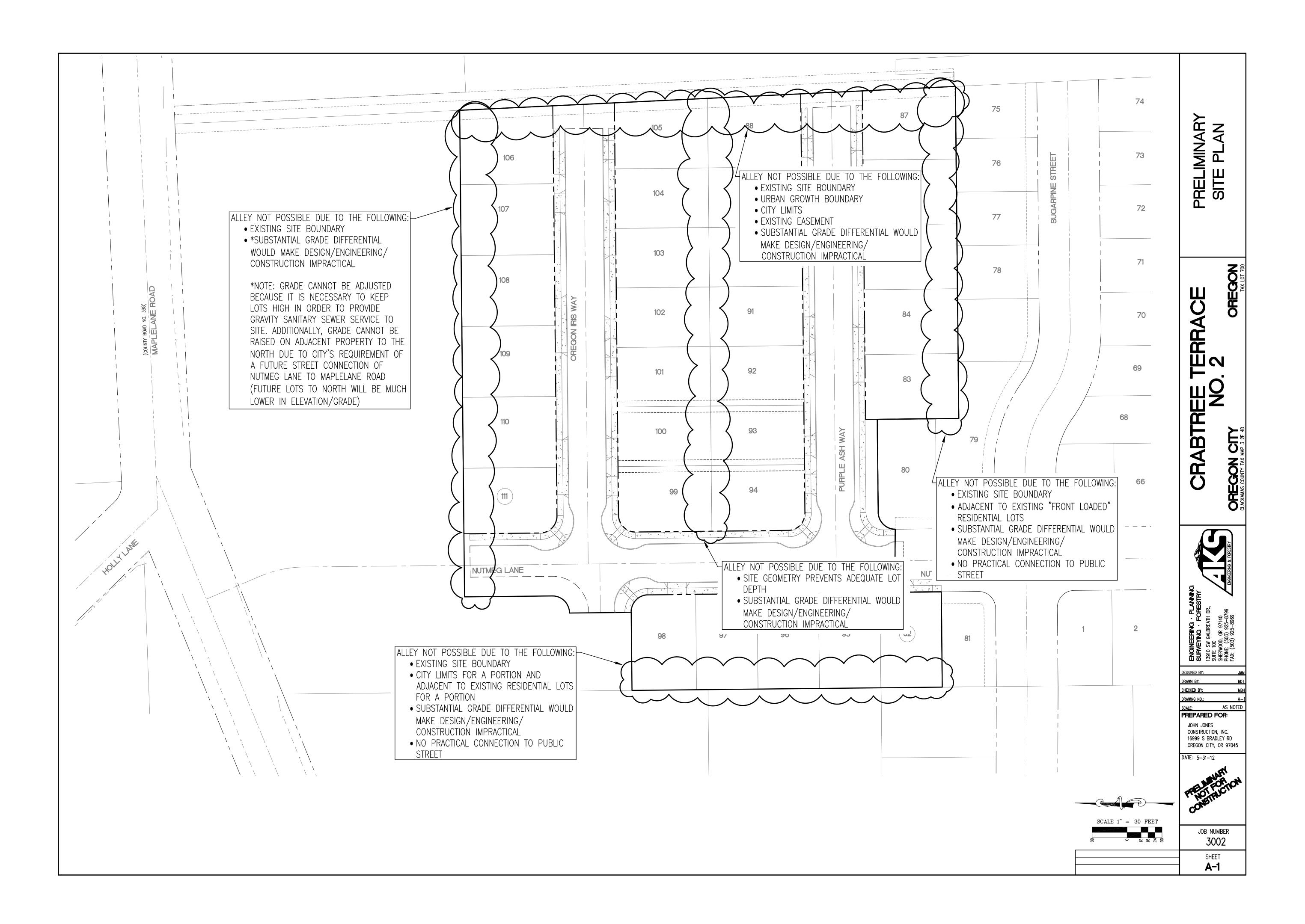


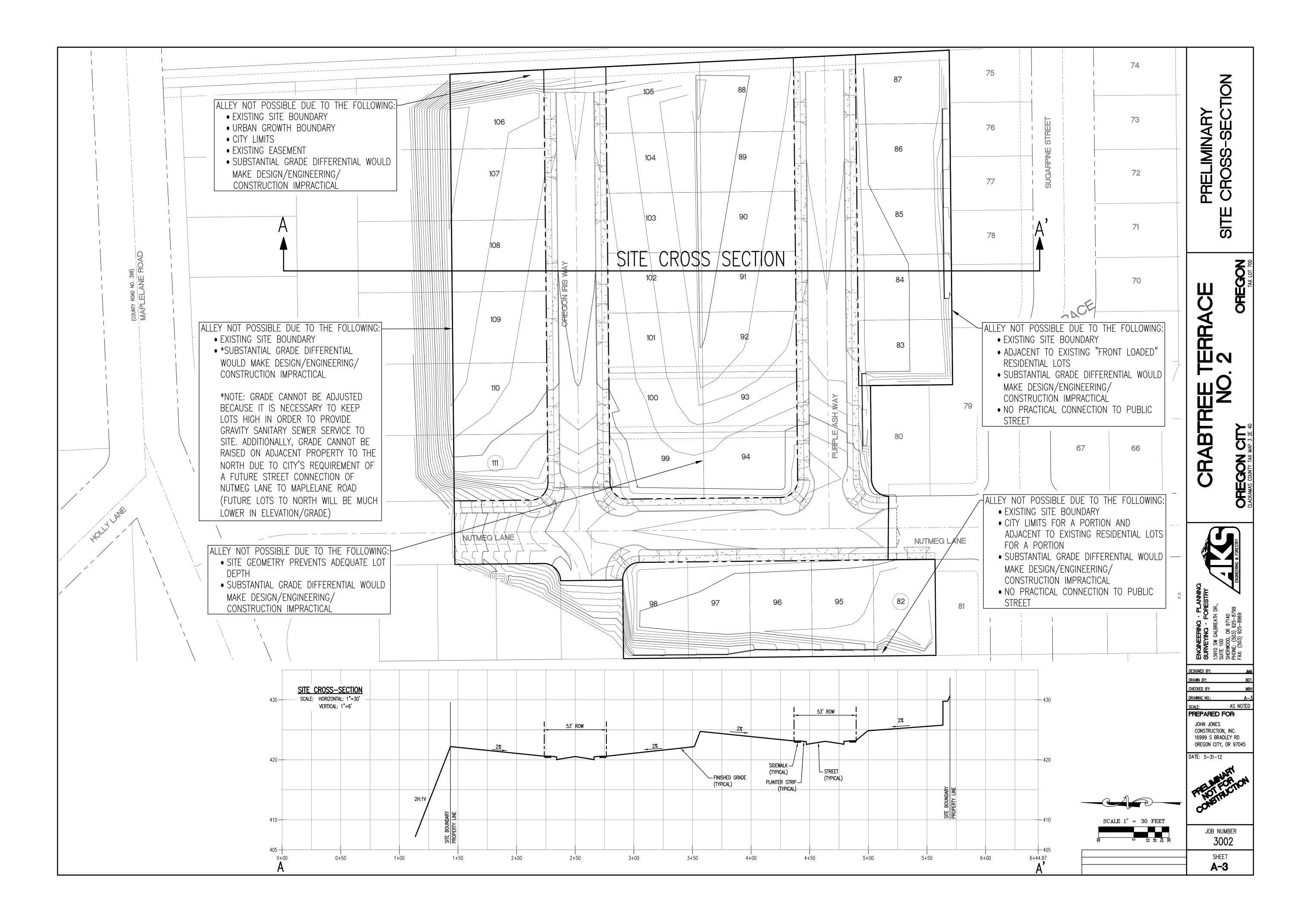


Ехнівіт 'Е'

John Jones – Crabtree Terrace No. 2 Additional Variance Findings – City of Oregon City June 11, 2012

3c. TP 12-01 / VR 12-02: Crabtree Terrace II -30-lot Subdivision with Variance Request from







TECHNICAL MEMORANDUM

To:	Monty Hurley, AKS Engineering & Forestry
From:	Todd E. Mobley, PE, PTOE
DATE:	June 12, 2012
Subject:	Crabtree Terrace No. 2 – Oregon City Alley Variance Discussion



321 SW 4th Ave., Suite 400 Portland, OR 97204 phone: 503.248.0313 fax: 503.248.9251 lancasterengineering.com

This memo is written to address the proposed variance for the subject application to allow plat approval in the R-3.5 zoning district without alleys.

PREMISE FOR ALLEY REQUIREMENT

The requirement for alley access in the R-3.5 zoning district is a product of difficulties experienced with higher-density residential development, particularly where narrow lots each have direct driveway access to the street. In higher density development, lot widths can be narrower, resulting in most of the street frontage taken up by driveways. The complications that arise from this type of development are reflected directly in Section 12.04.095 of the Oregon City Municipal Code. This code section addresses street design and curb cuts, stating the following:

12.04.095 Street Design - Curb Cuts

To assure public safety, reduce traffic hazards and promote the welfare of pedestrians, bicyclists and residents of the subject area, such as a cul-de-sac or dead-end street, the decision maker shall be authorized to minimize the number and size of curb cuts (including driveways) as far as practicable where any of the following conditions are necessary:

- A. To provide adequate space for on-street parking;
- B. To facilitate street tree planting requirements;
- C. To assure pedestrian and vehicular safety by limiting vehicular access points; and
- D. To assure that adequate sight distance requirements are met.

While this code section is not a direct approval criteria for the proposed variance, it is important, since it speaks directly to the transportation difficulties that can be experienced with individual driveway approaches to narrow residential lots.

PROPOSED SUBDIVISION PLAN

As shown in other application materials, the proposed subdivision is not at the maximum allowable density within the R-3.5 zoning district. As a result, each lot has at least 50 feet of street frontage. This is the same amount of frontage that would be allowable in the lower density R-6 or R-8 zoning districts where there is no requirement for alleys. The result is a project that looks and functions much like an R-6 subdivision, with driveways and street frontages that are very similar to the



adjacent, prior phase of Crabtree Terrace by the same applicant, as well as other residential development throughout Oregon City.

On-Street Parking

As shown on the Preliminary Parking Plan, a total of 40 on-street parking spaces would be provided with the subdivision as proposed. At approximately 1.3 on-street spaces per dwelling unit, this is a reasonable amount of on-street parking and is possible due to the 50-foot lot frontages and a logical arrangement of driveways to each lot.

Street Trees

Similar to on-street parking, street tree plantings are also provided in reasonable quantity (a total of 48 street trees, or 1.6 per lot). The proposed lot widths allow this number of street trees. These street trees are accommodated in planter strips, which provide adequate space for necessary utility meters and vaults to serve the homes in the subdivision.

Safety

Because the lot frontages are of standard width, there are no more potential conflict points between pedestrians and vehicles than there would otherwise be in an R-6 or R-8 subdivision. This is an important consideration, since approval of the proposed variance would not result in a less safe environment than the Code would otherwise allow with similar residential development. A number of lots include combined driveway approaches to the street, which further minimizes the number of driveways that pedestrians must cross along the street.

Curb extensions are proposed at the two intersections within the subdivision, which enhance pedestrian safety by maximizing visibility of pedestrians waiting to cross the street and minimizing the crossing distance. With the standard-width lots, thoughtful driveway spacing, and amenities such as curb extensions at intersections within the site, the project will offer a safe environment for pedestrians and bicycles, much like many detached single-family home subdivisions in Oregon City.

It should be noted that recent nearby subdivision approvals within the R-3.5 zone *did* include alleys, although lot frontages were narrower than the 50 feet proposed for Crabtree Terrace No. 2.

Sight Distance

New street intersections and driveway approaches will meet the applicable sight distance requirements as proposed. There are no inherent problems with sight distance resulting from the proposed access configuration.

Concerns with Alley Loading

The subject site is within and immediately adjacent to suburban, detached single-family homes. This development pattern is not conducive to alley loading, as car ownership and automobile reliance is generally higher than in higher density urban development. By implementing alleys in this more traditional single-family home neighborhood, there could be unintended consequences, such as:



- Higher vehicle ownership in detached single-family homes generally coincides with more ownership of RV's, boats, and trailers, which can present parking and circulation challenges with alleys.
- Ingress and egress in alleys result in higher traffic volumes at concentrated locations where the alleys intersect the public street. Conversely, driveways disperse vehicle movements.
- With no driveways along local residential streets that allow parking on both sides of the street, the result may be car-lined streets, where residents prefer to use on-street parking in front of their home. Also, trailers or RV's may occupy off-street parking, leaving on-street parking as the only option for residents.

SUMMARY & CONCLUSIONS

With direct driveway access to the streets, Crabtree Terrace No. 2 will provide the same level of safe operation that would be present with subdivisions in the R-6 or R-8 zoning districts in Oregon City. This is possible due to the size of the lots within Crabtree Terrace No. 2 and the provision for lot frontages of at least 50 feet. Complications that could arise with higher-density development such as limited opportunities for on-street parking, street trees, and space for utility vaults and meters are well addressed by the proposed subdivision plan.

It is recommended that the proposed variance be approved.



Memorandum

To: From: Date: Re:	Pete Walter, AICP – Associate Planner – City of Oregon City Monty Hurley, PE, PLS – AKS Engineering & Forestry June 29, 2012 Crabtree Terrace Critical Project Milestones							
11/17/2006	Crabtree Terrace Pre-Application Conference Request Submitted							
	(For entire project including Crabtree Terrace No.'s 1 and 2)							
12/12/2006	Crabtree Terrace Pre-Application Conference Held							
	(For entire project including Crabtree Terrace No.'s 1 and 2 - Phasing Discussed)							
♦ 4/1/2007	Crabtree Terrace No.'s 1 and 2 Traffic Impact Study Prepared (Entire Project)							
4/13/2007	Crabtree Terrace No.'s 1 and 2 Neighborhood Meeting (Entire Project)							
	(Showed an overall phased subdivision plan to neighbors and discussed future detached homes with 2 car garages - neighbors did not want tall/skinny homes)							
4/20/2007	*Crabtree Terrace No. 1 Land Use Application Submitted							
	(Shadow plat included in application showed Crabtree Terrace No. 2)							
7/31/2007	Crabtree Terrace No. 2 Grading Permit Submitted							
8/1/2007	Crabtree Terrace No.'s 1 and 2 DEQ 1200-C Erosion Control Permit Submitted							
8/10/2007	Crabtree Terrace No. 2 Grading Permit Approved							
♦ 8/20/2007	Crabtree Terrace No.'s 1 and 2 DEQ 1200-C Erosion Control Permit Approved							
8/21/2007	Crabtree Terrace No. 1 Land Use Application Approved							
8/28/2007	Crabtree Terrace No. 1 Grading Permit Submitted							
9/4/2007	Crabtree Terrace No. 1 Grading Permit Approved							
11/27/2007	Crabtree Terrace No. 1 Construction Plans Submitted							
12/3/2007	Crabtree Terrace No. 1 Construction Plans Approved							
♦ 5/9/2008	Crabtree Terrace No. 1 Final Subdivision Plat Recorded							
7/31/2009	**City Code Change Requiring Alleys in R-3.5 Zone Effective							

*The intention was to submit Crabtree Terrace No. 1 and Crabtree Terrace No. 2 as one single land use application with one approval; however, the City did not have a phasing mechanism in place at the time of application, and it was too large of a project for the owner to do in one phase. [See attached pre-application conference narrative and maps (11/17/2006) showing all phases of the Crabtree Terrace Subdivision with phase lines in place and written narrative discussing phasing.]

**The intention was to submit the land use application for Crabtree Terrace No. 2 in 2008 (well before the City Code change), however due to the severe economic conditions, the owner was not able to submit it. (Homes were not selling, lot prices had dropped dramatically, etc.)



AKS ENGINEERING & FORESTRY, LLC 13910 SW Galbreath Drive, Suite 100 Sherwood, OR 97140

www.aks-eng.com

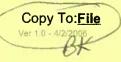
LETTER OF TRANSMITTAL ID = 1932 Offices Located In: Sherwood, OR Redmond, OR Vancouver, WA

Phone: 503-925-8799 Fax: 503-925-8969

To: City of Oregon City Attn: City of Oregon City Planning Department 320 Warner-Milne Road Oregon City, OR 97045-0304 DATE: 11/17/2006 JOB NO.: 1681 RE: Maple Lane Subdivision Thayer Road Subdivision #1681 & 1682 Pre Application Conference Billing # 1681, 20883 From: Monty Hurley

WE ARE	SENDING Y	OU THE F	OLLOWING:		
COPIES	DATE	NO.		DESCRIPTIC	DN
10 of Each	11/16/2006	3	11 x 17 - Preliminary Layo	out 2	
1	11/16/2006	1	AKS Check No. 1940 for the amount of \$815.00		
10 of Each	11/16/2006	3	Full Size - Preliminary La	yout 2	
10	11/16/2006	2	Pre-Application Form		
10 of Each	11/16/2006	7	Pre-Application Narrative		
	Constants:				
For App			ved as submitted	Resubmit	copies for approval
For your			ved as noted	Submit	copies for distribution
As requ			ed for corrections	Return	corrected prints
For review	ew and comr	ment 🛄			
FOR BI	DS DUE	E	PRINTS RETURNED AFT	ER LOAN TO US	3

Remarks: If you have any questions, please call.



SIGNED: Brenda Kimble for Monty Hurley

http://www.andersonengineering.com/contactus.html

Name <u>AKS ENGINETRING AND FORESTRY</u> Contact Person <u>MONTY HURLEY</u> Address <u>13910 SW GALBREATH</u> DKIVE, SUITE 100 SHERWOOD, OR 97140 De Phone 503-925-3799 $Owner(s):/CONTRACT PURCHASER(S)Name JOHN JONESAddress 16999 S. BRADLEY ROADOKEGON CITY, OR 97045Phone 503-631-9750MAX Slog Property Description: Tax Assessor Map Number(s): 3 2E 04D Goo, 601, 602, 700, 701 3 2E 04C 3300, 3400 Addition Property Lawe Part Addition Property Lease (100, 100, 100, 100, 100, 100, 100, 100$	n: City Hall-320 Warner Milne Rd.
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Address <u>13910</u> SW GALBREATH DRIVE, SUITE 100 SHERWOOD, OR 97140 Phone <u>503-925-3799</u> Where (s): / CONTRACT PURCHASER (S) Name <u>JOHN JONES</u> Address <u>16999</u> S. <u>BRADLEY ROAN</u> OREGON CITY, OR 97045 Phone <u>503-631-9750</u> Property Description: Tax Assessor Map Number(s): <u>3 2E 04D Goo, 601, 602, 700, 701</u> <u>3 2E 04C 3300, 3400</u> Addition Addition Addition Addition Property Lescription: Tax Assessor Map Number(s): <u>3 2E 04C 3300, 3400</u> Address: <u>MAPLELANE ROAD (NEAR HOLY LAME</u>) Property Lescription Pro- Addition Address: <u>MAPLELANE ROAD (NEAR HOLY LAME</u>) Address: <u>MAPLELANE ROAD (NEAR HOLY LAME</u>) MAX Sological Content of the form of the	ative tailed narrative description of your proposal and ar ific questions you want the Community elopment Department to respond to at the Pre- ication Conference. Plot Plan (8½" x 11" or 11" x 17") Parcel and building setback dimensions Existing and proposed structures Location and dimensions of easements and drivewa Location of utilities – storm, sanitary sewers & wal (including size of service and street location) Width of adjacent right of way erty Zoning Report (Obtained from City Hall) (tional Information / Requirement al Subdivision / Minor Partition Requirements e map (if area is over 25% slope) ificant Tree Locations (all trees over 6 inches) ty layout
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	ing space calculations ed on use and square footage of building)
Proposed Development Action.	
SUBDIVISION	
* SUBDIVISION	
a 10/1	
Applicant Signature 13/10-	
The pre-application conference is to provide the applicant the necessary information	Date 11-16-06
proposal. Pre-Application Conferences expire six (6) months from the meeting dat Please Teview this material and return comments prior to the ab	to make an informed decision regarding their land u

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AKS ENGINEERING & FORESTRY, LLC	1040
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City of Oregon City Permit Receipt RECEIPT NUMBER 00011991

Account name:	007441	Date: 11/17/2006	
Applicant:	PA 06-72, AKS		
Туре:			
Permit Number	Fee Description	Amo	ount
PA-06-072	4332 Pre-App Fee	81	5.00
		Total: 81	5.00

<pre>************************************</pre>
\$815.00
Receipt Total = \$815.00 ***********************************

Receipt Summary

Receipt Total = \$815.00
Change Due = \$0.00 **********************************

****** City of Oregon City P0 Box 3040 Oregon City, OR 97045 ********** Reg# #/Rcpt#: 006-00081226 [AH] Accounting Date: Fri, Nov 17, 2006 Date/Time: Fri, Nov 17, 2006 12:19 PM 4332/COMMUNITY DEV-LAND USE FILING Ref #: PA-06-072 \$815.00 \$815.00 Receipt Total **** Payment Data: Pmt# :1 Payer: AKS Method: CK Ref#: 1940 \$815.00 Amount Ξ _ ****** Receipt Summary ****** \$815.00 Total Tendered = Receipt Total \$815.00 \$0.00 Change Due

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

MAPLELANE ROAD PRE-APPLICATION NARRATIVE

A. Description

The proposed subdivision is located on Clackamas County Tax Assessor's Map 3-2E-04D Tax Lots 600, 601, 602, 700, and 701. The subject property is approximately 17 acres.

The property was recently annexed into the City of Oregon City and it is our understanding that it will be zoned R3.5. The applicant proposes a 137+/- lot subdivision development for detached homes. The proposed subdivision will conform to the applicable requirements of the Oregon City Municipal Code. The preliminary plat subdivision application may vary in the total number of lots, tracts, layout, and street locations. Additionally, variances may be requested.

B. Specific Questions/Issues for this Development

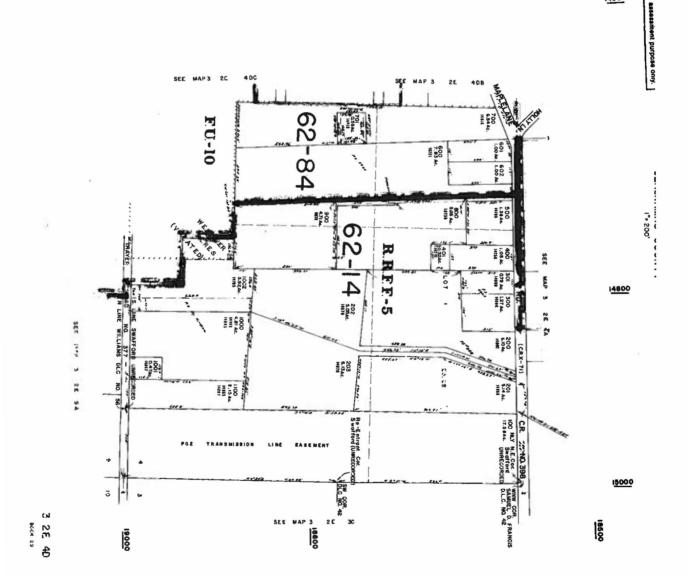
- 1. Please confirm that the subdivision portion of the property is between the minimum and maximum allowable residential densities.
- 2. It is the applicant's desire to provide two car garages. Please review this section of the code for discussion.
- 3. Please provide information on the neighborhood association and contact so that we can have a neighborhood meeting.
- 4. Please provide copies of all adjacent as-builts, including the recent subdivision to the west.
- 5. Please verify the building setbacks adjacent to the City Limits and Urban Growth Boundary.

1

- 6. Are there any other issues or site constraints?
- 7. Please verify the ability to phase the subdivision.

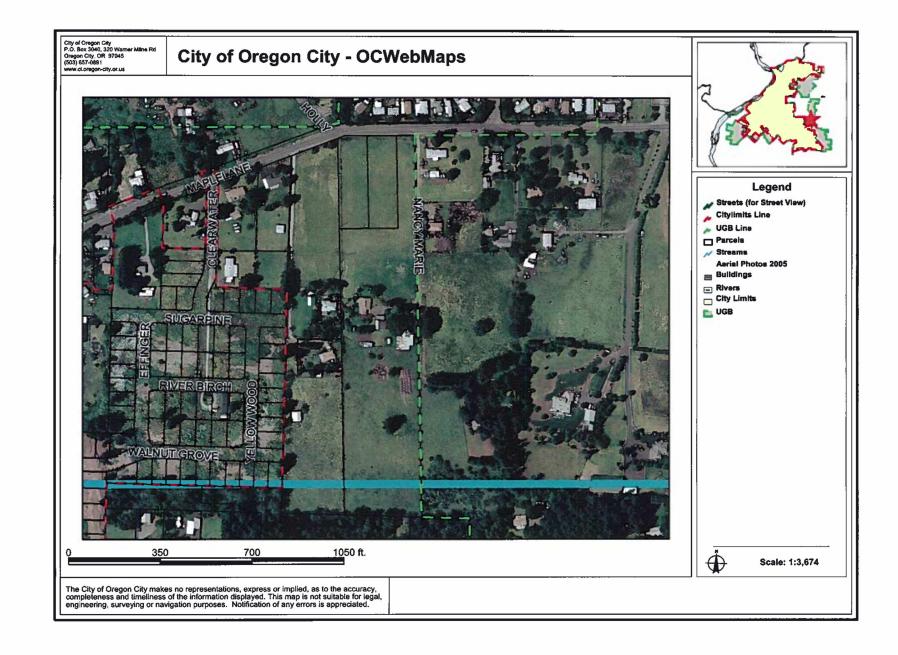
11/16/2006

AKS Engineering & Forestry, LLC

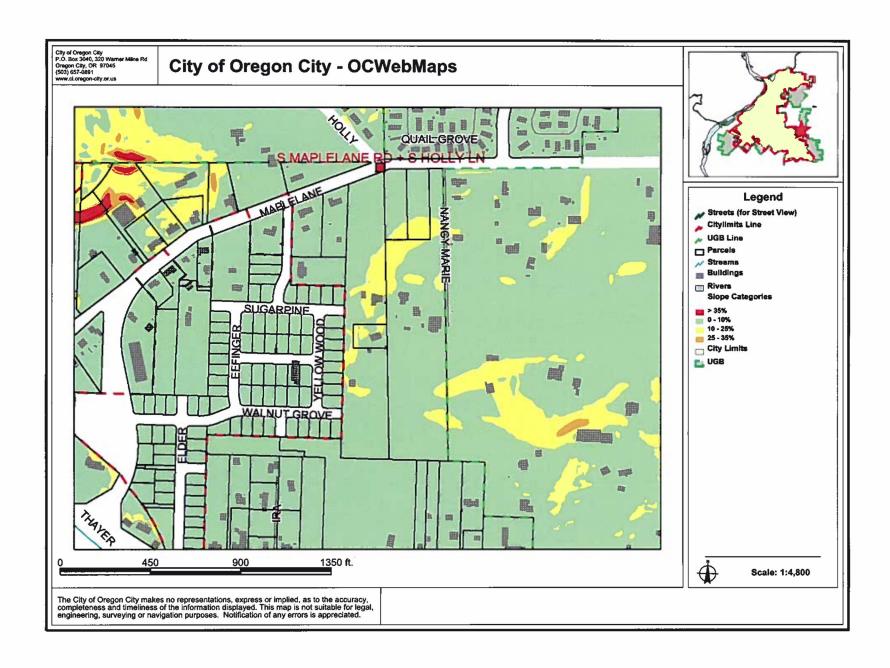


3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

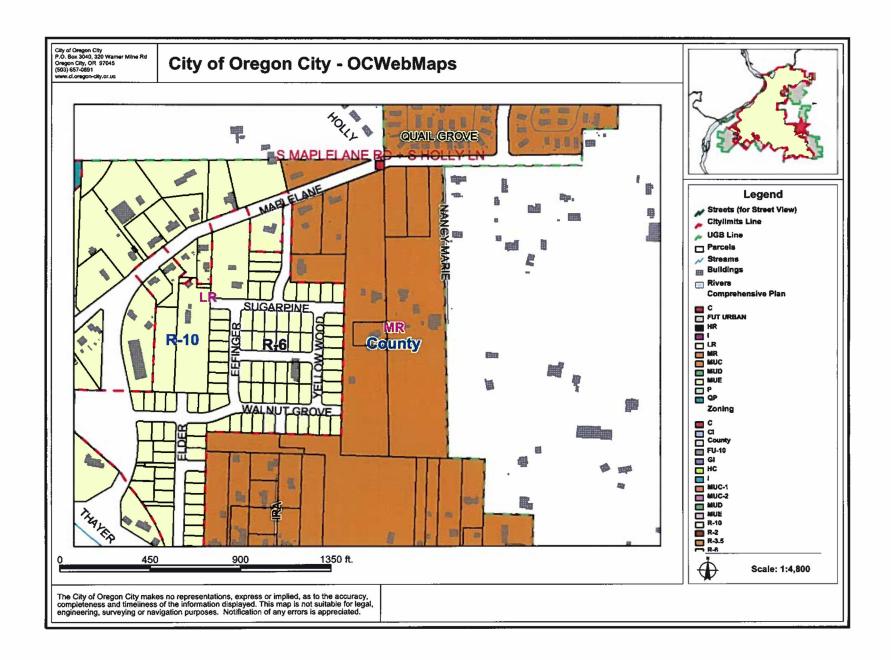
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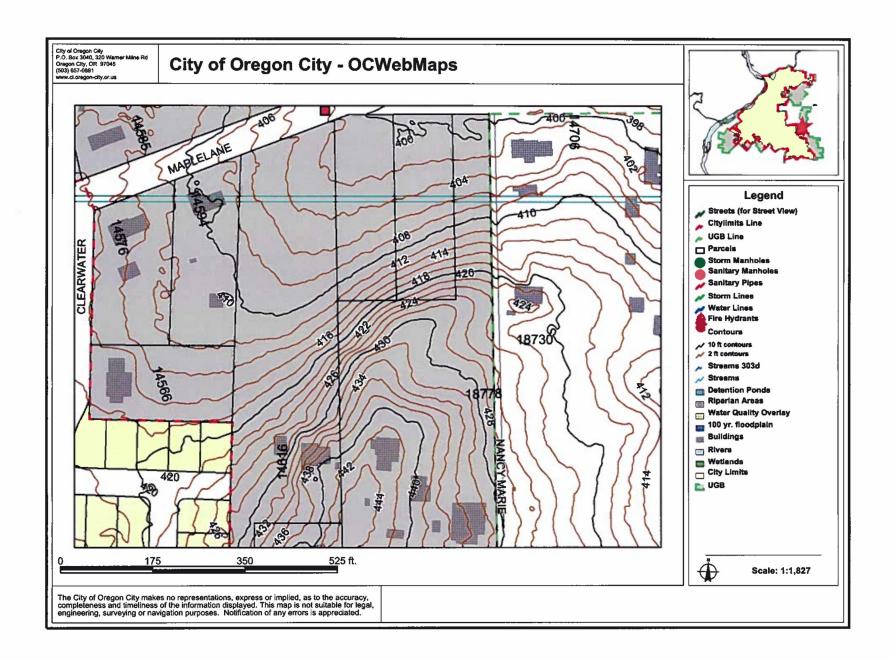


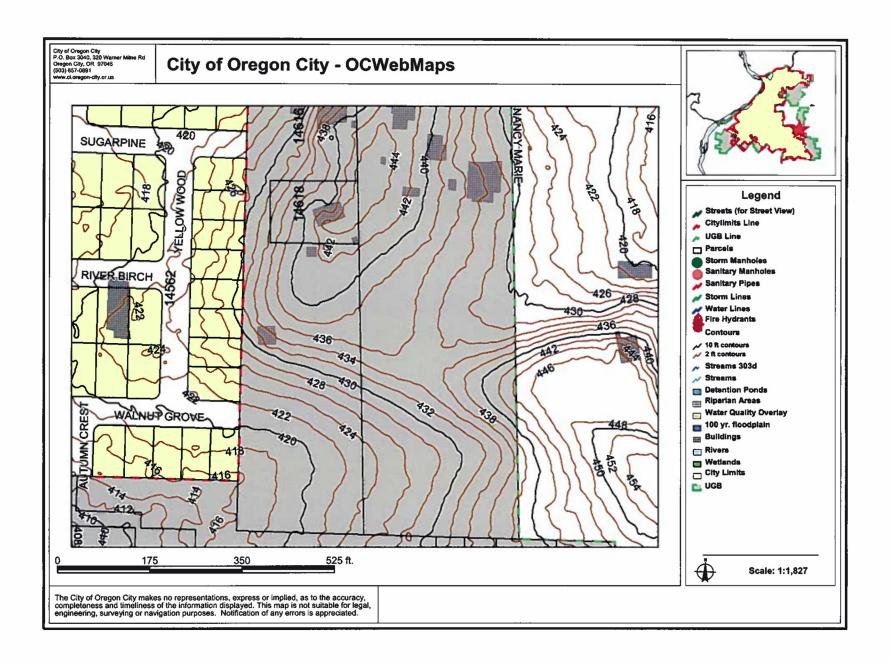








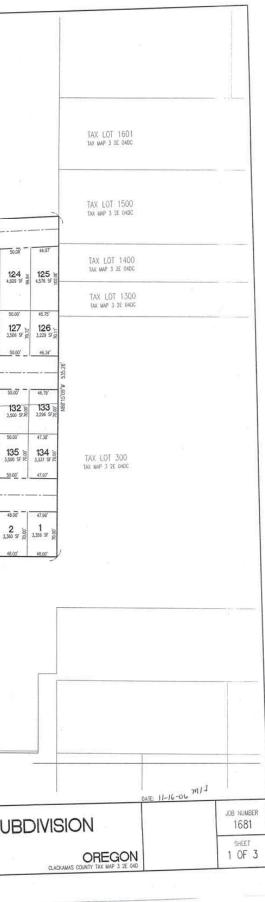






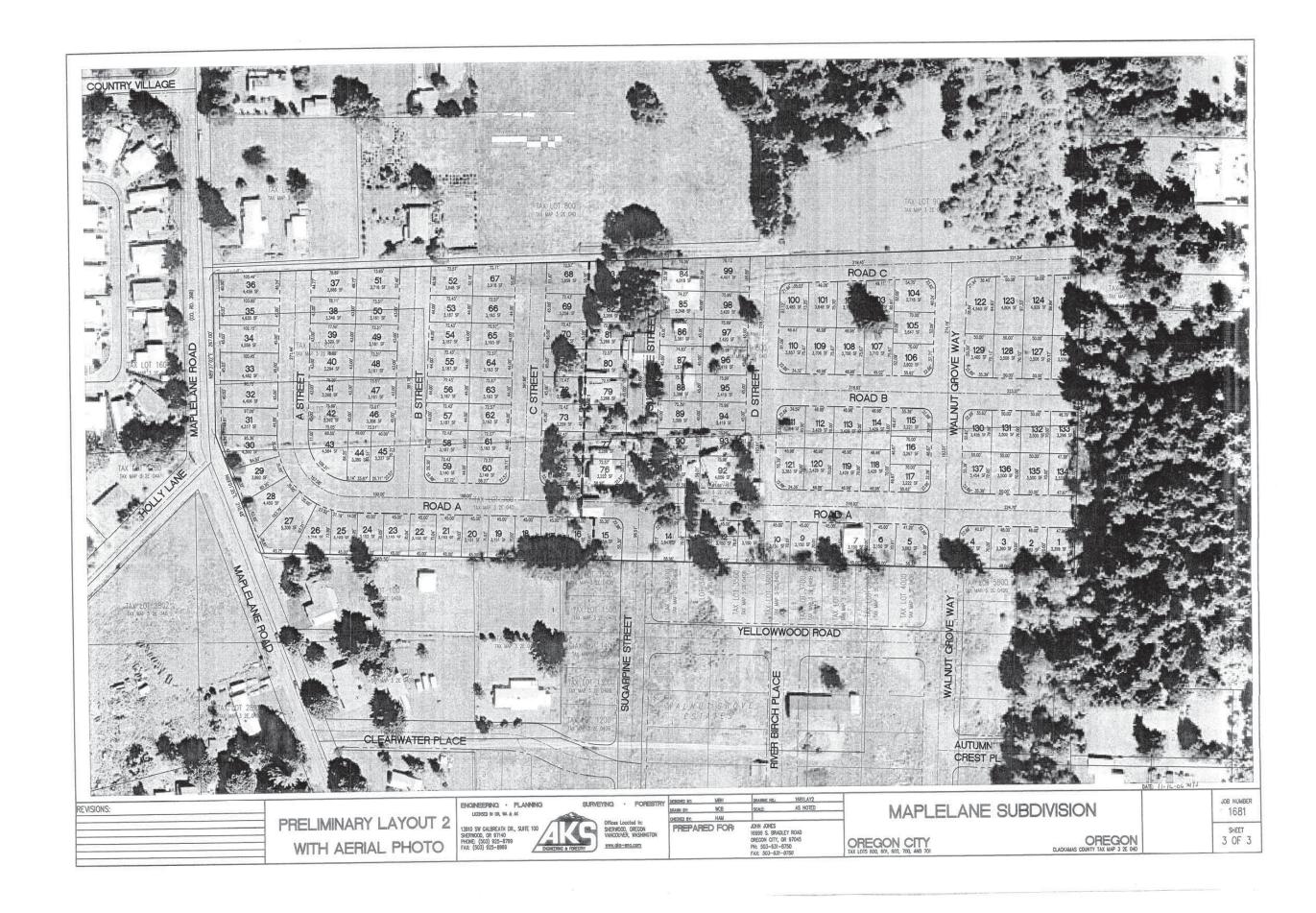


Page 589 of 623



3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from







PHONE: 503.727.2000

www.perkinscoie.com

FAX: 503.727.2222

1120 N.W. Couch Street, Tenth Floor Portland, OR 97209-4128

Michael C. Robinson PHONE: (503) 727-2264 FAX: (503) 346-2264 EMAIL: MRobinson@perkinscoie.com

June 29, 2012

VIA E-MAIL

Charles Kidwell, Chair Oregon City Planning Commission c/o City of Oregon City Planning Department 221 Molalla Avenue, Suite 200 Oregon City, OR 97045

Re: City of Oregon City File Nos. TP 12-01/VR 12-02, Crabtree Terrace Phase 2 Subdivision

Dear Chair Kidwell and Members of the Planning Commission:

This office represents Mr. John Jones, the applicant for the above-referenced applications. I am writing to comment on the June 11 and June 25, 2012 letters submitted to the Planning Commission by Ms. Christine Kosinski. I have provided the letters to Mr. Jones and AKS Engineering and Forestry, LLC, Mr. Jones' engineering firm for these applications. We had previously decided to reserve our comments on Ms. Kosinski's testimony until the continued public hearing. However, having read Ms. Kosinski's June 25, 2012 letter, Mr. Jones has now asked me to respond to certain issues raised in both her letters. We will reserve comment on some of the substantive issues until the continued hearing on July 23, 2012. However, Mr. Jones believes it is important to address her testimony regarding the processing of the hearing and the additional evidence provided to your Planning Department.

1. The complete application and additional argument and evidence submitted to the Planning Department is available in the Planning Department office and online through the Planning Department website.

Ms. Kosinski asserts in her June 25, 2012 letter, that there were "no plat maps and no discussion regarding the traffic impact study." While she is correct that there was no staff report or discussion regarding the applicant's traffic impact study, it is not because the evidence necessary to prepare a staff report is not in the possession of the Planning Department; instead, it was because the applicant requested a continued public hearing and therefore there was no staff

84301-0001/LEGAL24053968.1 ANCHORAGE • BEIJING • BELLEVUE • BOISE • CHICAGO • DALLAS • DENVER • LOS ANGELES • MADISON • NEW YORK PALO ALTO • PHOENIX • PORTLAND • SAN DIEGO • SAN FRANCISCO • SEATTLE • SHANGHAI • WASHINGTON, D.C. Perkins Cole UP

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

Charles Kidwell, Chair Oregon City Planning Commission June 29, 2012 Page 2

report and no need for a substantive discussion of the application at a hearing where only the continuance would be discussed. The Planning Commission allowed Ms. Kosinski to testimony at the June 11 and June 25 hearings as a courtesy and Mr. Jones appreciates receiving your information early. However, there is no "error" where the Planning Commission is considering a continuance request only.

As the Planning Commission knows, the reason the applicant requested a second continuation of the public hearing is that it did not provide its information to the Planning Department until June 11, 2012, leaving inadequate time for the Planning Department to prepare a staff report for the Planning Commission for the June 25, 2012 hearing. The applicant and the Planning Department believed it prudent to ask the Planning Commission to continue the hearing one last time so that the Planning Department had adequate time to review Mr. Jones' additional argument and evidence and prepare a staff report for the July 23, 2012 public hearing.

2. The applicant's argument and evidence is available now at the Planning Department office and on the Planning Department's website.

Ms. Kosinski asserts that there will be a large amount of information submitted at the July 23, 2012 public hearing and that this places individuals wishing to testify on the application at a "huge disadvantage." Ms. Kosinski is incorrect.

First, it is the applicant who has requested two (2) continuances in order to meet with the Planning Department and address the Planning Department's concerns. As Mr. Konkol told the Planning Commission on June 25, 2012, all of the evidence and argument submitted by the applicant, including the complete application and the supplemental argument and evidence submitted on June 11, 2012 is available both at the Planning Department offices and online. Everyone who is interested in this application has ample opportunity to review that argument and evidence.

Second, the initial evidentiary hearing will be July 23, 2012. The public is able to submit new argument and evidence up to and including the initial evidentiary hearing. The applicant is likely to submit some additional argument and evidence at that hearing. However, the vast majority of the argument and evidence the applicant intends to rely upon has already been submitted to the Planning Department and it is available for review by the public at any time.

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Charles Kidwell, Chair Oregon City Planning Commission June 29, 2012 Page 3

3. Statewide Planning Goal 1, "Citizen Participation" is not only fulfilled but it is irrelevant to this application.

Ms. Kosinski asserts that the City is "attempting to keep the citizens out of actively participating in land use decisions, a huge breach of State Goal I [sic]." The Planning Commission should deny this assertion for two (2) reasons.

First, the City has provided notice of the original hearing on June 11, 2012 in four (4) ways, three (3) of which are not required by state law but are required by the City which does more than state law requires for notice of quasi-judicial hearings. First, the City mailed notice of the public hearing to all property owners within the required radius of the subdivision site. Second, the City published notice in the local newspaper of the public hearing. Third, the City required the applicant to post notice of the public hearing on the property site. Fourth, the City provided notice of the relevant citizen participation organization ("CPO"). Thus, the City has done more than required by state law to provide notice to the public. Ms. Kosinski's presence at two (2) public hearings demonstrates that the City's notices have been successful.

Second, Statewide Planning Goal 1 is not directly applicable to quasi-judicial applications. ORS 197.175(2). Moreover, the City's comprehensive plan is acknowledged as consistent with Statewide Planning Goal 1 because the City has an acknowledged citizen participation program. The City has followed this citizen participation program and is, therefore, consistent with Statewide Planning Goal 1.

4. The Crabtree Terrace Phase 1 Subdivision is irrelevant to the Phase 2 application.

Ms. Kosinski has asserted on two (2) occasions that the Phase 1 approval is somehow relevant to Phase 2. She is incorrect. While she is free to submit Phase 1 argument and evidence into the record of this application, in order for it to be relevant, one must demonstrate that that argument and evidence is relevant to the approval criteria as it is applied to the Phase 2 application.

Ms. Kosinski's June 25, 2012 letter references a 2007 neighborhood meeting, the 2007 traffic impact analysis and a 2007 analysis of the extension of various roads. None of these matters are relevant to the application before the Planning Commission.

Moreover, to the extent that traffic impacts are a relevant approval criterion, the evidence in the record for the Phase 2 application supports a finding that the relevant approval criteria are satisfied. Larger legislative issues concerning regional road and matters outside the scope of this application public hearing are irrelevant. The applicant has the burden of proof to demonstrate that relevant approval criteria for this subdivision and variance are satisfied and if the Planning Commission agrees, the Planning Commission must approve the application. However, issues

84301-0001/LEGAL24053968.1

Charles Kidwell, Chair Oregon City Planning Commission June 29, 2012 Page 4

extraneous to this application and not having to do with the approval criteria are not a basis for deciding the application.

Mr. Jones does not dispute Ms. Kosinski's right to testify but her citation to inapplicable Statewide Planning Goals, her failure to address the approval criteria and the evidence supporting the applicant's finding that these approval criteria are satisfied by his evidence, and the spurious charge that the City is depriving citizens of an opportunity to participate should be rejected by the Planning Commission and should not be a basis for action on Mr. Jones' application. Mr. Jones welcomes a review of his application based on approval criteria and evidence on the record, not based on a past approval with out of date testimony and evidence.

Very truly yours,

Michael C. Robinson

MCR:cfr

Cc: Mr. John Jones (via facsimile) Mr. Tony Konkol (via email) Mr. Pete Walter (via email) Ms. Jennifer Bragar (via email) Mr. Monty Hurley (via email) Mr. Chris Goodell (via email)

84301-0001/LEGAL24053968.1

12.04.255 - Street design—Alleys.

Public alleys shall be provided in the following districts R-5, R-3.5, R-2, MUC-1, MUC-2 and NC zones unless other permanent provisions for private access to off-street parking and loading facilities are approved by the decision maker. The corners of alley intersections shall have a radius of not less than ten feet.

(Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010)

7/16/2012 11:30 AM



Community Development – Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045 Ph (503) 722-3789 | Fax (503) 722-3880

PROPERTY LINE ADUSTMENT STAFF REPORT AND DECISION

If you have any questions about this application, Please contact the Planning Division Office at 503.722.3789.

March 14, 2012				
FILE NUMBER:	LL 12-02: Property line Adjustment			
OWNER:	John and Eva Jones 16999 Bradley Road Oregon City, Oregon 97045			
APPLICANT:	AKS Engineering and Forestry 13910 SW Galbreath Drive, Suite 100 Sherwood, OR 97140			
REQUEST:	The applicant submitted this Property line Adjustment request to adjust common property lines that would exchange property between Clackamas County Map 3-2E-4D, Tax Lot 601 and Clackamas County Map 3-2E-4D, Tax Lot 700.			
ZONING:	"R-3.5" Dwelling District			
DECISION:	Approval			
REVIEWER: Pete Walter, AICP				

Type I decisions do not require interpretation or the exercise of policy or legal judgment in evaluating approval criteria and include lot line adjustments, zone changes upon annexation as provided in Section 17.06.050 for which there is no discretion provided, final plats, and final planned unit development plans where there are no material deviations from the approved preliminary plans. Because no discretion is involved, Type I decisions do not qualify as a land use, or limited land use, decision. The decision-making process requires no notice to any party other than the applicant. One representative from each of the city-recognized neighborhood associations, who has been identified by the neighborhood coordinator, will be distributed a monthly compilation of all Type I activities. The Community Development Director's decision is final and not appealable by any party through the normal city land use process. IF YOU HAVE ANY QUESTIONS ABOUT THIS APPLICATION, PLEASE CONTACT THE PLANNING DIVISION OFFICE AT (503) 722.3789.

Associate Planner

LL 12-02: Staff Report

Page 1 of 4

BACKGROUND:

The purpose of this application is to adjust the common line between Clackamas County Tax Lot 3-2E-4D-700 and 3-2E-4D-601.

SUMMARY:

This Property Line Adjustment application was submitted to adjust common property lines between Clackamas County 3-2E-4D-700 and 3-2E-4D-601.

Following the property line adjustment, Clackamas County Tax Lot 3-2E-4D-601 would be increased to approximately 2.71 acres and Clackamas County Tax Lot 3-2E-4D-700 would consist of approximately 4.36 acres.

Clackamas County Map	Approximate Initial Area	Approximate Amount Exchanged	Approximate Resulting Area
3-2E-4D-700	6.07 acres	2.51 acres	4.36 acres
3-2E-4D-601	1.00 acres		2.71 acres

Both tax lots are currently vacant.

CHAPTER 16.20 PROPERTY LINE ADJUSTMENTS - PROCESS AND STANDARDS

16.20.020 Adjustment/abandonment submission requirements.

Finding: Complies as Proposed. The applicant submitted all of the requirements within OCMC Chapter 16.20.020.

CHAPTER 17.08 R-10 SINGLE-FAMILY DWELLING DISTRICT

17.16.040 - Dimensional standards. Dimensional standards in the R-3.5 district are:

A. Minimum Lot Areas.

1. Residential uses, three thousand five hundred square feet per unit.

2. Non-residential uses, zero minimum;

Finding: Complies as Proposed. Following the Property Line Adjustment, Clackamas County Tax Lot 3-2E-4D-601 would be approximately 2.71 acres and Clackamas County Tax Lot 3-2E-4D-700 would consist of approximately 4.36 acres, both exceeding the minimum lot size of 3,500 square feet per lot.

B. Minimum lot width, twenty-five feet;

Finding: Complies as Proposed. Following the Property Line Adjustment, Clackamas County Tax Lot 3-2E-4D-601 would be approximately 485 feet wide and Clackamas County Tax Lot 3-2E-4D-700 would be approximately 496 feet wide, both exceeding the minimum lot width of twenty-five feet.

C. Minimum lot depth, seventy feet;

Finding: Complies as Proposed. Following the Property Line Adjustment, Clackamas County Tax Lot 3-2E-4D-601 would be approximately 240 feet deep and Clackamas County Tax Lot 3-2E-4D-700 would be approximately 418 feet deep, both exceeding the minimum lot depth of seventy feet.

D. Maximum building height, two and one-half stories, not to exceed thirty-five feet;

LL 12-02: Staff Report

Page 2 of 4

E. Minimum Required Setbacks:

1. Front yard, five feet minimum setback,

2. Front porch, zero feet minimum setback,

3. Interior side yard,

Detached unit, five feet minimum setback

Attached unit, seven feet minimum setback on the side that does not abut a common property line. 4. Corner side yard, ten-foot minimum setback,

5. Rear yard, fifteen-foot minimum setback,

6. Rear porch, ten-foot minimum setback.

7. Attached and detached garage, twenty feet minimum setback from the public right-of-way where access is taken, except for alleys. Detached garages on an alley shall be setback a minimum of five feet. **Finding: Not Applicable.** The applicant has not proposed a structure with this property line adjustment. Structures will be reviewed upon submittal of building permit applications.

F. Garage standards: See Chapter 17.20—Residential Design Standards.

Finding: Not Applicable. The applicant has not proposed a structure with this property line adjustment. Structures will be reviewed for compliance with Chapter 17.20 upon submittal of building permit applications.

G. Maximum lot coverage: The footprint of all structures two hundred square feet or greater shall cover a maximum of fifty-five percent of the lot area.

Finding: Not Applicable. The applicant has not proposed a structure with this property line adjustment. Structures will be reviewed upon submittal of building permit applications.

CONCLUSION AND DECISION:

Based on the attached property line adjustment record, the City of Oregon City approves the Property Line Adjustment for the above-mentioned properties. Please note that approval of this Property line Adjustment does not affect any existing easements or encumbrances which may be located on the subject properties.

APPROVAL PROCESS:

- 1. The current deed holders or their assigns shall sign the revised deeds for the approved legal descriptions. These deeds shall be recorded at the Clackamas County Clerk's Office.
- 2. The applicant shall submit a mylar copy of the record of survey for signature by the Community Development Director prior to recordation at the Clackamas County Surveyor's Office.
- 3. The applicant shall provide the City Technical Services Department a CAD file of the final survey. The preferred file type is an AutoCAD*.dwg. If AutoCAD is not the CAD system used, a *.dxf format will be sufficient.
- 4. Provide the City of Oregon City a file copy of the final Property line Adjustment as filed by Clackamas County, including the Clackamas County Survey Number.
- 5. The applicant shall record the final property descriptions with Clackamas County within **two years of the Community Development Director's approval**, after which the decision shall be null and void.

LL 12-02: Staff Report

Page 3 of 4

EXHIBITS:

- Vicinity Map (On-File)
 Application (On File)
 Property Line Adjustment Survey (On File)

LL 12-02: Staff Report

Page 4 of 4



Application Number: _		_		
Property A:				
Address:		City	State	Zip
Clackamas County N	lap Number			
Owner(s) Signature				
Owner(s) Name Prin	ted		Date	
Mailing Address				
City	State	Zip	Phone ()	
Property B:				
Address:		City	State	Zip
Clackamas County N	lap Number			
Owner(s) Signature				
Owner(s) Name Prin	ted		Date	
Mailing Address				
			Phone ()	
Property A:			Property B:	
Area Prior to Adjustr	nent	<i>I</i>	Area Prior to Adjustment	
Area After Adjustme	nt	/	Area After Adjustment	
Total Area Adjusted		1	Fotal Area Adjusted	
Lot Coverage After A	Adjustment	I	Lot Coverage After Adjustme	nt
Setbacks After Adjus	stment:	<u>S</u>	Setbacks After Adjustment:	
Front Yard: Main Str	ucture	_ F	Front Yard: Main Structure _	
Accesso	ry Building(s)	-	Accessory Buildi	ng(s)
	icture		Side Yard: Main Structure	
	ry Building(s)		Accessory Buildi	
	icture	_	Side Yard: Main Structure	
	ry Building(s)		Accessory Buildi	
	icture		Rear Yard: Main Structure	
Accesso	ry Building(s)	_	Accessory Buildi	ng(s)

All signatures represented must have the full legal capacity and hereby authorize the filing of this application and certify that the information and exhibits herewith are correct and indicate the parties willingness to comply with all code requirement.



The application will not be deemed complete without all of the requirements proceeding.

City of Oregon City, Community Development Department, 320 Warner Milne Road, P.O. Box 3040, Oregon City, OR 97045, (503) 657-0891

www.orcity.org

The application for a property line adjustment or abandonment shall include two (2) copies of the following documents submitted to the planning manager:

1. ____ A Completed Application Form

2. ____ A Current "Trio" (Deed Report) for the Subject Property(ies)

3. ____ Narrative

A complete and detailed narrative description that addresses the dimensional standards of the zone and other applicable criteria (lot width, depths, setbacks, and lot coverage.)

4. ____ Boundary Survey

Prepared by an Oregon Professional Land Surveyor (Including the Surveyor's Name and Address)

- **D** The map scale and true north point
- □ The location, width and names of all existing or platted streets, other public ways and easements within the proposed partition, and other important features, such as the general outline and location of permanent buildings.
- 5. ____ Additional Information or Reports (If Required by Planning Staff)
- 6. ____ Legal Descriptions of the Parent Parcel(s) and the Resulting Parcels to be Created

7. ____ Receipt from the County Assessor's Office

Indicating that all taxes each of the subject sites are paid in full for the preceding tax year.

8. ___ Copies

Two (2) copies of all information, reports, and drawings (full-sized and 8.5" by 11") pertaining to this application.

9. ____ Electronic Version of All Application Materials

10. ____ All Required Application Fees

Incomplete Applications will be Rejected

Lot Line Adjustment Application Submittal Checklist



AKS ENGINEERING & FORESTRY, LLC ENGINEERING / SURVEYING / PLANNING / FORESTRY LANDSCAPE ARCHITECTURE / ARBORICULTURE

February 16, 2012

City of Oregon City Attention: Community Development Department 221 Molalla Avenue, Ste 200 Oregon City, OR 97045 Phone: (503) 722-3789

RE: 14616 S Maplelane Road – Lot Line Adjustment Application for John Jones (AKS Job #3002)

This letter serves as the Narrative for the Lot Line Adjustment Application. The purpose of this application is to adjust the common line between Tax Lot 3 2E 4D 601 and 3 2E 4D 700. This application meets the applicable standards of *16.20.040 Adjustment/Abandonment Approval* and the dimensional standards of the R3.5 zone.

Subject properties:

Property A

Address - 14616 S Maplelane Road, Oregon City, 97045 Tax Lot Number 3 2E 4D 700 Zoning – R3.5 Residential Medium Density Area Prior to Adjustment – 6.07 Acres Area after Adjustment – 4.36 Acres Lot width After Adjustment – 496 feet +/-Lot Depth After Adjustment – 418 feet +/-Height – N/A Setbacks After Adjustment:

- 1. Front yard N/A
- 2. Front porch N/A
- 3. Interior side yard N/A
- 4. Corner side yard N/A
- 5. Rear yard N/A
- 6. Rear N/A
- 7. Attached garage N/A

Lot Coverage After Adjustment - N/A

SHERWOOD, OR 503.925.8799 FAX: 503.925.8969 13910 SW GALBREATH DRIVE, SUITE 100 SHERWOOD, OR 97140 VANCOUVER, WA 12011 NE 99TH STREET, SUITE 1530 VANCOUVER, WA 98682 **REDMOND, OR** P.O. BOX #1459 REDMOND, OR 97756

WWW.AKS-ENG.COM

Property B

Address - 14616 S Maplelane Road, Oregon City, 97045 Tax Lot Number 3 2E 4D 601 Zoning – R3.5 Residential Medium Density Area Prior to Adjustment - 1.00 Acres Area after Adjustment – 2.71 Acres Lot width After Adjustment - 485 feet +/-Lot Depth After Adjustment - 240 feet +/-Height – N/A Setbacks After Adjustment: 1. Front yard - N/A 2. Front porch - N/A 3. Interior side yard - N/A 4. Corner side yard - N/A 5. Rear yard - N/A

- $\begin{array}{ccc} \text{S.} & \text{Rear } \text{yard} = 1 \\ \text{6.} & \text{Rear} \text{N/A} \end{array}$
- 7. Attached garage N/A

Lot Coverage After Adjustment – N/A

PAGE 2 OF 2

ENGINEERING PLANNING FORESTRY

13910 S.W. Galbreath Dr., Suite 100 Sherwood, Oregon 97140 Phone: (503) 925-8799 Fax: (503) 925-8969



LANDSCAPE ARCHITECTURE SURVEYING Offices Located In: SHERWOOD, OREGON VANCOUVER, WASHINGTON www.aks-eng.com

EXHIBIT A

Legal Description of Adjusted Tax Lot 700

A tract of land located in the Southeast One-Quarter of Section 4, Township 3 South, Range 2 East, Willamette Meridian, City of Oregon City, Clackamas County, Oregon being more particularly described as follows:

Beginning at a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR." at the northwest corner of Lot 81 of the plat "Crabtree Terrace"; thence along the west line of Document Number 2007-038885 (adjusted per Document Number 2011-058197) North 00°35'27" West 266.50 feet to a point; thence leaving said west line North 89°24'33" East 65.50 feet to a point; thence North 00°35'27" West 53.00 feet to a point; thence along a non-tangent curve to the left with a Radius of 14.50 feet, a Delta of 90°00'00", a Length of 22.78 feet, and a Chord of North 44°24'33" East 20.51 feet to a point of tangency; thence North 00°35'27" West 75.50 feet to a point; thence North 89°24'33" East 408.54 feet to a point on the west line of the tract per Document Number 2004-004926; thence along said west line South 02°42'01" East 426.29 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the north lines of Lots 75, 76, 77, 78, and 79 of the plat "Crabtree Terrace" South 89°24'33" West 278.83 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along the north line of said plat North 00°35'27" West 70.00 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said north line South 89°24'33" West 77.91 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said north line along a curve to the left with a Radius of 14.50 feet, a Delta of 90°00'00", a Length of 22.78 feet, and a Chord of South 44°24'33" West 20.51 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said north line North 89°30'36" West 53.01 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said north line South 00°35'27" East 40.00 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said north line South 89°24'33" West 80.00 feet to the Point of Beginning.

The above described tract of land contains 4.36 acres, more or less.



ENGINEERING PLANNING FORESTRY

13910 S.W. Galbreath Dr., Suite 100 Sherwood, Oregon 97140 Phone: (503) 925-8799 Fax: (503) 925-8969



LANDSCAPE ARCHITECTURE SURVEYING Offices Located In: SHERWOOD, OREGON VANCOUVER, WASHINGTON www.aks-eng.com

EXHIBIT B

Legal Description of Adjusted Tax Lot 601

A tract of land located in the Southeast One-Quarter of Section 4, Township 3 South, Range 2 East, Willamette Meridian, City of Oregon City, Clackamas County, Oregon being more particularly described as follows:

Beginning at a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR." at the northwest corner of Lot 81 of the plat "Crabtree Terrace"; thence along the west line of Document Number 2007-038885 (adjusted per Document Number 2011-058197) North 00°35'27" West 266.50 feet to the True Point of Beginning; thence continuing along said west line North 00°35'27" West 299.83 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the south right-of-way line of Maplelane Road (30.00 feet from center line) North 67°22'10" East 205.67 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said south right-of-way line North 87°17'22" East 289.09 to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said south right-of-way line North 87°17'22" East 289.09 to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said south right-of-way line North 87°17'22" East 289.09 to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said south right-of-way line North 87°17'22" East 289.09 to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR." on the west line of the tract per Document Number 2004-004926; thence along said west line South 02°42'01" East 244.87 feet to a point; thence leaving said west line South 89°24'33" West 408.54 feet to a point; thence South 00°35'27" East 75.50 feet to a point; thence along a curve to the right with a Radius of 14.50 feet, a Delta of 90°00'00", a Length of 22.78 feet, and a Chord of South 44°24'33" West 65.50 feet to the True Point of Beginning

The above described tract of land contains 2.71 acres, more or less.



ENGINEERING PLANNING FORESTRY 13910 S.W. Galbreath Dr., Suite 100

Sherwood, Oregon 97140

Phone: (503) 925-8799

Fax: (503) 925-8969



LANDSCAPE ARCHITECTURE SURVEYING Offices Located In: SHERWOOD, OREGON VANCOUVER, WASHINGTON www.aks-eng.com

EXHIBIT C

Legal Description of Exchange Parcel

A tract of land located in the Southeast One-Quarter of Section 4, Township 3 South, Range 2 East, Willamette Meridian, City of Oregon City, Clackamas County, Oregon being more particularly described as follows:

Beginning at a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR." at the northwest corner of Lot 81 of the plat "Crabtree Terrace"; thence along the west line of Document Number 2007-038885 (adjusted per Document Number 2011-058197) North 00°35'27" West 266.50 feet to the True Point of Beginning; thence continuing along said west line North 00°35'27" West 299.83 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the south right-of-way line of Maplelane Road (30.00 feet from center line) North 67°22'10" East 200.31 feet to a point; thence along the west line of Parcel III of Document Number 2007-010577 South 02°42'22" East 232.15 feet to a point; thence South 89°24'33" West 114.24 feet to a point; thence South 00°35'27" East 75.50 feet to a point; thence along a curve to the right with a Radius of 14.50 feet, a Delta of 90°00'00", a Length of 22.78 feet, and a Chord of South 44°24'33" West 20.51 feet to a point; thence South 00°35'27" East 53.00 feet to a point; thence South 89°24'33" West 65.50 feet to the True Point of Beginning

The above described tract of land contains 1.10 acres, more or less.

7-17-12 REGISTERED PROFESSIONAL AND SURVEYOR OREGON JANUARY 9, 2007 NICK WHITE 70652LS RENEWS: 6/30/12



LANDSCAPE ARCHITECTURE SURVEYING Offices Located In: SHERWOOD, OREGON VANCOUVER, WASHINGTON www.aks-eng.com

EXHIBIT D

Legal Description of Exchange Parcel

A tract of land located in the Southeast One-Quarter of Section 4, Township 3 South, Range 2 East, Willamette Meridian, City of Oregon City, Clackamas County, Oregon being more particularly described as follows:

Beginning at a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR." at the northwest corner of Lot 81 of the plat "Crabtree Terrace"; thence along the west line of Document Number 2007-038885 (adjusted per Document Number 2011-058197) North 00°35'27" West 566.33 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the south right-of-way line of Maplelane Road (30.00 feet from center line) North 67°22'10" East 205.67 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said south right-of-way line North 87°17'22" East 107.09 feet to the northeast corner of Parcel III of Document Number 2007-010577 and the True Point of Beginning; thence continuing along said south right-of-way North 87°17'22" East 182.00 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR." on the west line of the tract per Document Number 2004-004926; thence along said west line South 02°42'01" East 244.87 feet to a point; thence leaving said west line South 89°24'33" West 182.12 feet to a point on the east line of said Parcel III; thence along said east line North 02°42'01" West 238.13 feet to the True Point of Beginning.

The above described tract of land contains 1.01 acres, more or less.

2-17-12 REGISTERED PROFESSIONAL LAND SURVEYOR OREGON JANUARY 9, 2007 NICK WHITE 70652LS RENEWS: 6/30/12

ENGINEERING PLANNING FORESTRY 13910 S.W. Galbreath Dr., Suite 100

Sherwood, Oregon 97140 Phone: (503) 925-8799 Fax: (503) 925-8969



LANDSCAPE ARCHITECTURE SURVEYING Offices Located In: SHERWOOD, OREGON VANCOUVER, WASHINGTON www.aks-eng.com

EXHIBIT E

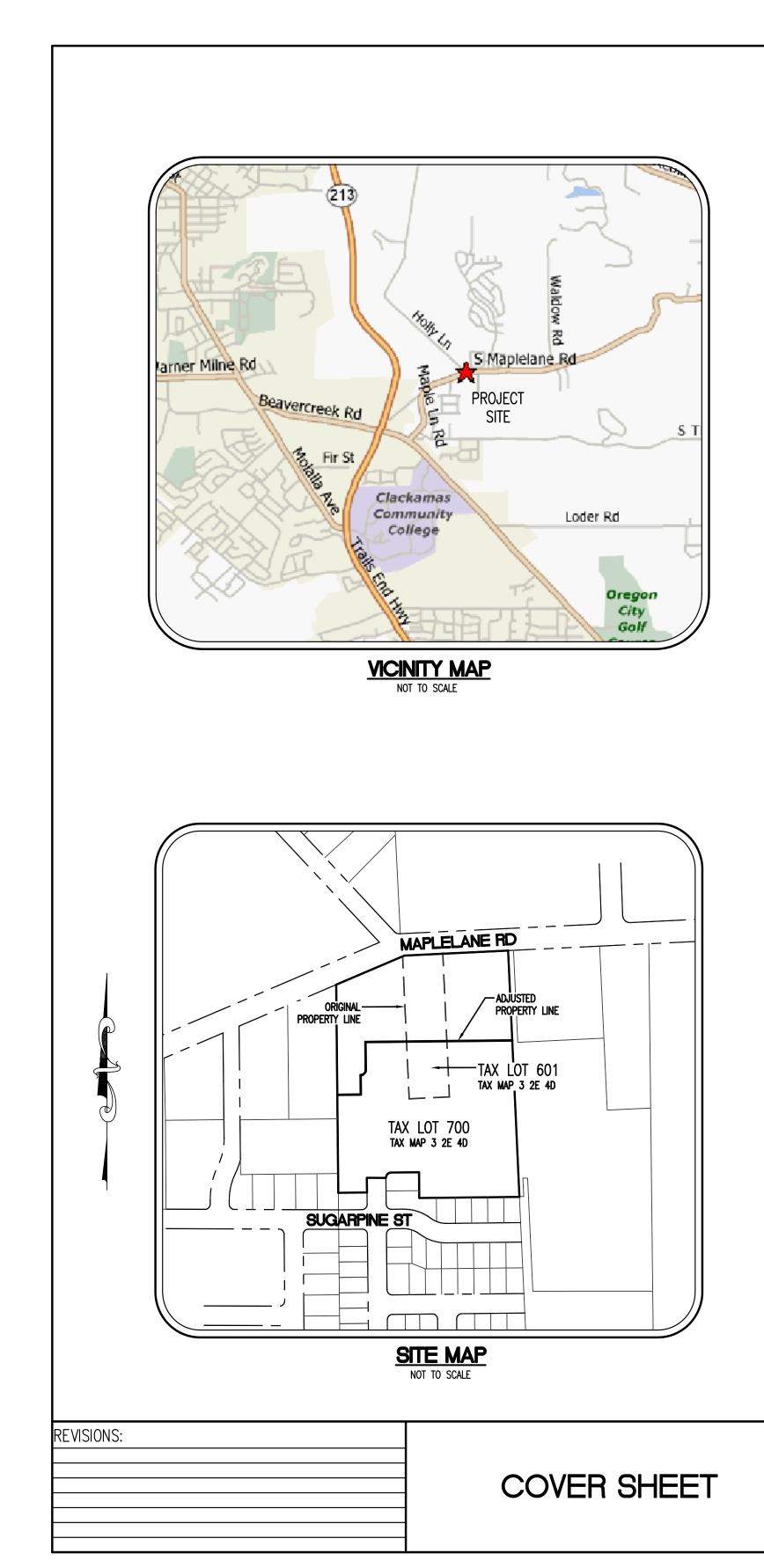
Legal Description of Exchange Parcel

A tract of land located in the Southeast One-Quarter of Section 4, Township 3 South, Range 2 East, Willamette Meridian, City of Oregon City, Clackamas County, Oregon being more particularly described as follows:

Beginning at a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR." at the northwest corner of Lot 81 of the plat "Crabtree Terrace"; thence along the west line of Document Number 2007-038885 (adjusted per Document Number 2011-058197) North 00°35'27" West 266.50 feet to a point; thence leaving said west line North 89°24'33" East 65.50 feet to a point; thence North 00°35'27" West 53.00 feet to a point; thence along a non-tangent curve to the left with a Radius of 14.50 feet, a Delta of 90°00'00", a Length of 22.78 feet, and a Chord of North 44°24'33" East 20.51 feet to a point of tangency; thence North 00°35'27" West 75.50 feet to a point; thence North 89°24'33" East 114.24 feet to a point on the east line of Parcel III of Document Number 2007-010577 and the True Point of Beginning; thence North 89°24'33" East 151.87 feet to a point; thence along the south line of said Parcel III North 02°42'22" West 156.02 feet to the True Point of Beginning.

The above described tract of land contains 17,256 square feet, more or less.

2-17-12 REGISTERED LAND SURVEYOR OREGON JANUARY 9, 2007 NICK WHITE 70652LS **RENEWS: 6/30/12**



3c. TP 12-01 / VR 12-02: Crabtree Terrace II -30-lot Subdivision with Variance Request from

13910 S SHERWO PHONE: FAX: (5

14616 S. MAPLELANE ROAD PROPERTY LINE ADJUSTMEN

LOCATED IN THE SOUTHEAST 1/4 OF SECTION 4, TOWNSHIP 3 SOUTH, RANGE 2 EAST, WILLAMETTE MERIDIAN, CITY OF OREGON CITY, CLACKAMAS COUNTY, OREGON

O	W	'N	E	7
				_

JOHN JONES CONSTRUCTION 16999 S. BRADLEY ROAD OREGON CITY, OR 97045 PHONE: (503) 631-8750

<u>SHEET INDEX</u>

SURVEYING FIRM

AKS ENGINEERING & FORESTRY, LLC. CONTACT: NICK WHITE 13910 SW GALBREATH DRIVE, SUITE 100 PHONE: (503) 925-8799 FAX: (503) 925-8969

SITE DESCRIPTION:	TAX LOTS 601 AND 700, TAX MAP 3 2E 04D SE 1/4 OF SECTION 4, T3S, R2E, W.M.		
PROPERTY ADDRESS:	14616 S. MAPLELANE RD OREGON CITY, OR 97045		
ZONE:	R-3.5 ZONE		
<u>SETBACKS</u> :	MINIMUM REQUIRED SETBACKS: FRONT YARD: SIDE YARD: CORNER SIDE YARD REAR YARD:	20 FT 5 FT 10 FT 15 FT	

1. COVER SHEET 2. PROPERTY LINE ADJUSTMENT PLAN

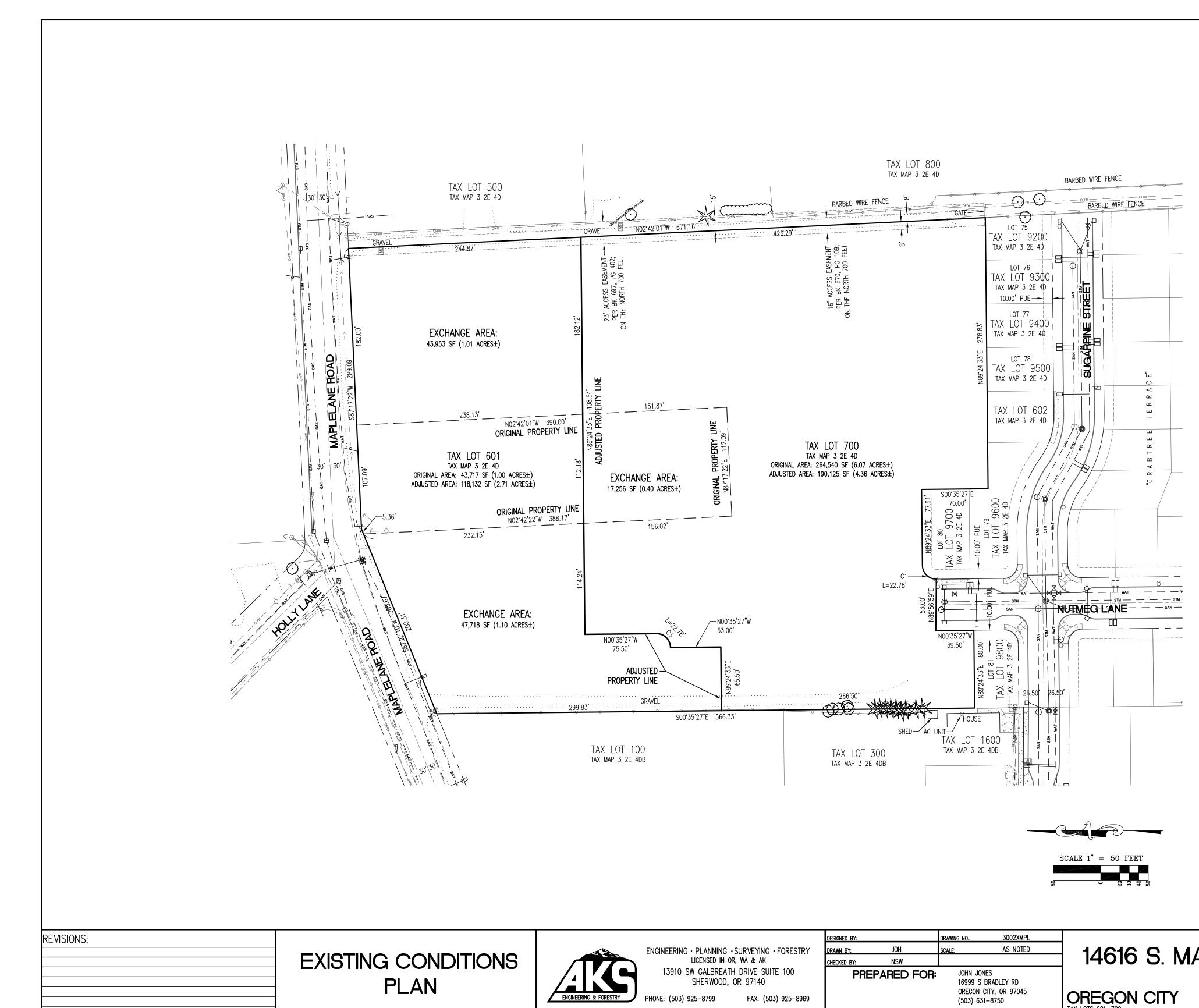
FIRE HYDRANT WATER BLOWOFF WATER METER WATER VALVE DOUBLE CHECK VALVE AIR RELEASE VALVE SANITARY SEWER CLEAN OUT SANITARY SEWER MANHOLE SIGN STREET LIGHT	
MAILBOX	MB
Right-of-way line	
BOUNDARY LINE	
PROPERTY LINE	
CENTERLINE	
DITCH	
CURB	
EDGE OF PAVEMENT	
EASEMENT	
FENCE LINE	0
GRAVEL EDGE	
POWER LINE	
OVERHEAD WIRE	
COMMUNICATIONS LINE	
GAS LINE	
STORM SEWER LINE	
SANITARY SEWER LINE	
WATER LINE	

DECIDUOUS TREE

CONIFEROUS TREE

ENGINEERING · PLANNING	SURVEYING · FORESTRY	DESIGNED BY:	DRAWING NO.: PLA4-001	
LICENSED IN OR. WA & AK			scale: AS NOTED	
	Offices Located In:	CHECKED BY: NSW		14616 S. MAPLEL
13910 SW GALBREATH DR., SUITE 100	SHERWOOD, OREGON	PREPARED FOR:	JOHN JONES	
SHERWOOD, OR 97140 PHONE: (503) 925-8799	REDMOND, OREGON VANCOUVER, WASHINGTON		16999 S BRADLEY RD OREGON CITY, OR 97045	
	NGINEERING & FORESTRY		(503) 631-8750	OREGON CITY
				TAX LOTS 601, 700

EXISTING	STORM SEWER CLEAN OUT	EXISTING ○	
	STORM SEWER CATCH BASIN STORM SEWER MANHOLE GAS METER GAS VALVE GUY WIRE ANCHOR POWER POLE POWER VAULT POWER JUNCTION BOX POWER PEDESTAL COMMUNICATIONS VAULT COMMUNICATIONS RISER		
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		DATE: 02/09/12	
PLELA	NE ROAD	REGISTERED PROFESSIONAL LAND SURVEYOR	JOB NUMBER 3002
C	CLACKAMAS COUNTY TAX MAP 3 2E 4D	1 1 7065215	SHEET 1 OF 2

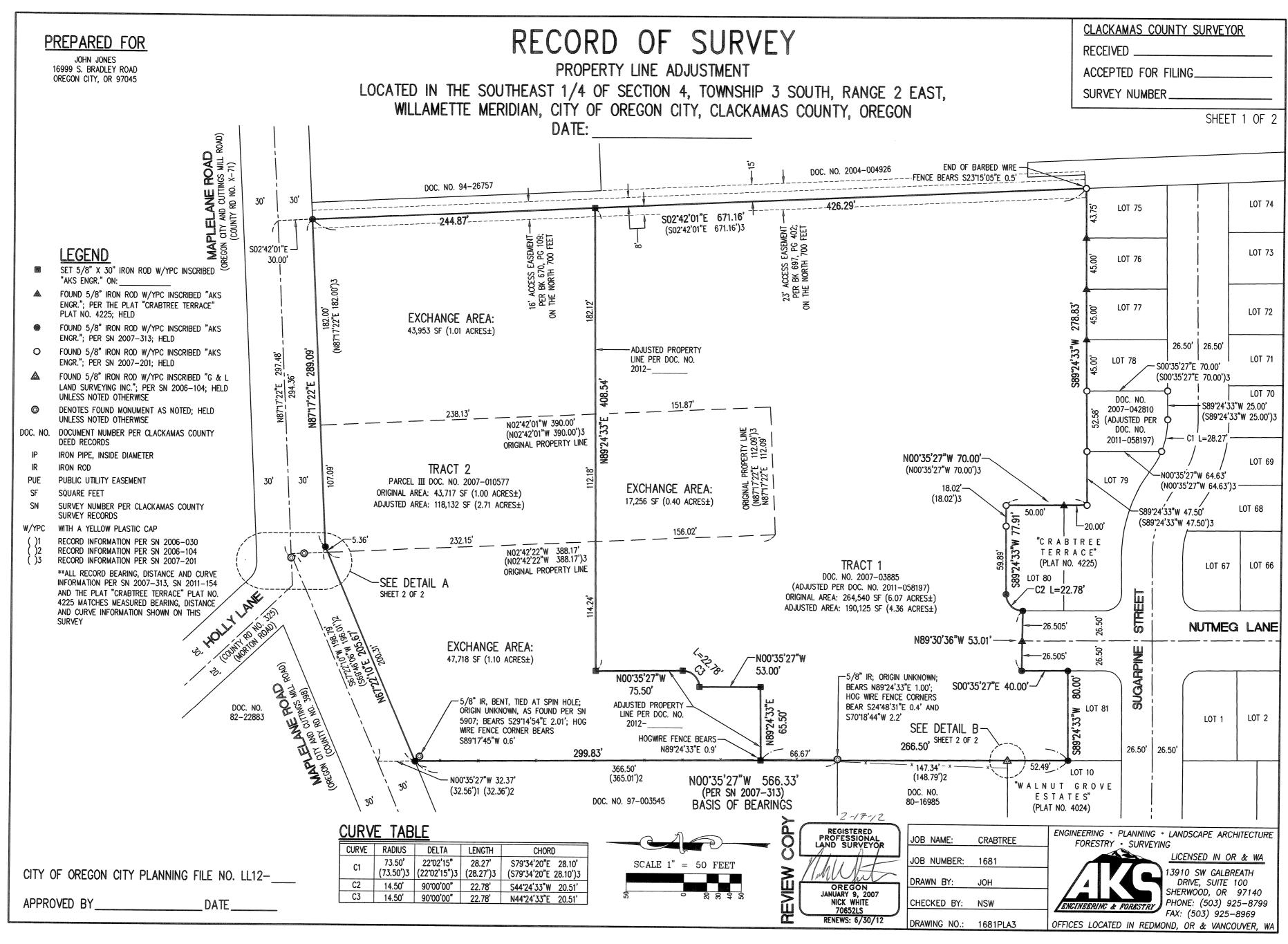


3c. TP 12-01 / VR 12-02: Crabtree Terrace II -30-lot Subdivision with Variance Request from

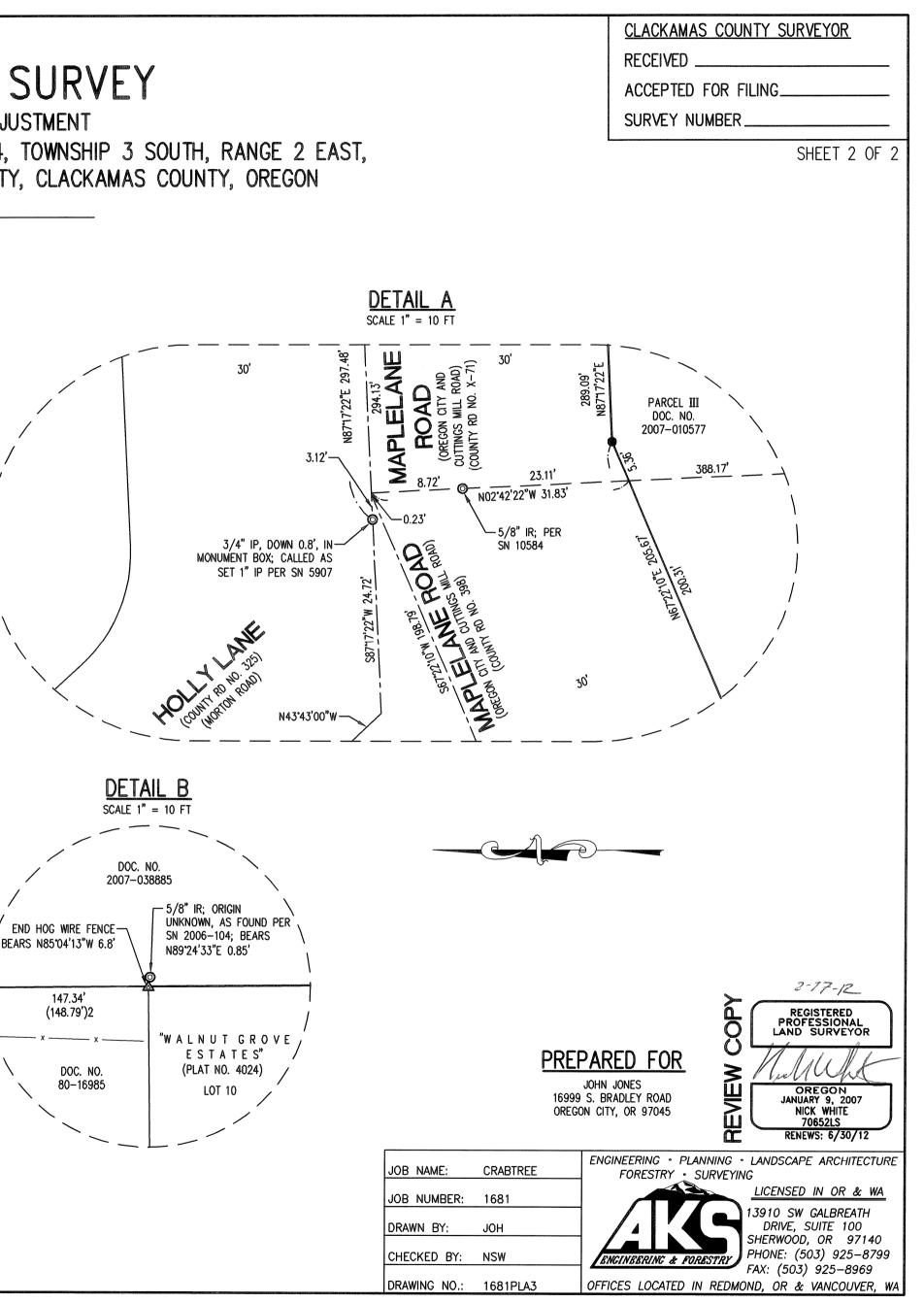
			DESIGNED BY:		DRAWNG NO.:	3002XMPL		
	LICENCED IN OD WA & AK		DRAWN BY:	JOH	SCALE:	AS NOTED	14616	S MAPLE
			CHECKED BY:	NSW			14010	3. MAFLEL
	13910 SW GALBREATH DRIVE SUITE 100 SHERWOOD, OR 97140		PREPARED FOR		16999 S BRADLEY RD			
Engineering & Forestry	PHONE: (503) 925-8799	FAX: (503) 925-8969			OREGON CIT (503) 631-8	Y, OR 97045 8750	OREGON TAX LOTS 601, 700	CITY

 NOTES: UTILITIES SHOWN ARE BASED ON UNDERGROUND LOCATES AS PROVIDED BY OTHERS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION. ELEVATIONS ARE BASED ON GPS STATION #0037 PER SURVEY NUMBER 24286, BRASS DISK LOCATED AT THE SECTION CORNER OF SECTIONS 3, 4, 9, AND 10, T3S, R2E, W.M. ELEVATION = 393.07 (NAD83 INTERNATIONAL FEET). THIS MAP DOES NOT CONSTITUTE A PROPERTY BOUNDARY SURVEY. SURVEY IS ONLY VALID WITH SURVEYOR'S STAMP AND SIGNATURE. BUILDING FOOTPRINTS ARE MEASURED TO SIDING UNLESS NOTED OTHERWISE. CONTACT SURVEYOR WITH QUESTIONS REGARDING BUILDING TIES. 						
CURVE CURVE C1 C2 C3	RADIUS 14.50' 73.50' 14.50'	LENGTH 22.78' 28.27' 22.78'	DELTA 90°00'00" 22°02'15" 90°00'00"	CHORD S44'24'33"W 20.51' S79'34'20"E 28.10' N44'24'33"E 20.51'		
			<u>D/</u>	ATE: 02/09/12		
E	ANE	ROA		REGISTERED PROFESSIONAL LAND SURVEYOR	JOB NUMBER 3002	
	CLACKAMA	ORE	GON MAP 3 2E 4D	OREGON JANUARY 9, 2007 NICK WHITE 70652LS RENEWS: 6/30/12	2 OF 2	

ige 612 of 623



RECORD OF SURVEY PROPERTY LINE ADJUSTMENT LOCATED IN THE SOUTHEAST 1/4 OF SECTION 4, TOWNSHIP 3 SOUTH, RANGE 2 EAST, WILLAMETTE MERIDIAN, CITY OF OREGON CITY, CLACKAMAS COUNTY, OREGON DATE: NARRATIVE THE PURPOSE OF THIS SURVEY IS TO ADJUST THE PROPERTY LINE BETWEEN DOCUMENT NUMBER 2007-03885 (ADJUSTED PER DOCUMENT NUMBER 2011-058197) AND PARCEL III OF DOC. NO. 2007-010577, CLACKAMAS COUNTY DEED RECORDS FOR THE FUTURE SUBDIVISION OF "CRABTREE TERRACE NO. 2" WITHIN TRACT 1. THE BASIS OF BEARINGS AND BOUNDARY DETERMINATION IS PER SURVEY NUMBERS 2007-313 AND 2011-154, CLACKAMAS COUNTY SURVEY RECORDS AND THE PLAT "CRABTREE TERRACE". FOUND MONUMENTS, BEARINGS, DISTANCES, AND CURVE INFORMATION PER SAID SURVEYS AND PLAT ARE HELD. BEARS N85'04'13"W 6.8'



After Recording Return To: John Jones Construction 16999 S Bradley Rd Oregon City OR 97045

Send Tax Statements To: No Change



BARGAIN AND SALE DEED

John J. Jones and Eva Kay Jones, grantors, convey to John Jones Construction, Inc., an Oregon Corporation, grantee, the following real property:

See Attached Exhibit A

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The true consideration for this conveyance is \$NIL. (Here comply with requirements of ORS 93.030)

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 197.352. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930 AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 197.352. Dated this 1st day of February, 2007.

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John J. Jones

Ever K. Jones mer

STATE OF Oregon County of Clackamas

This instrument was acknowledged before me on this 1^{st} day of February, 2007 by John J. Jones and Eva K. Jones.

Debbie J. Chase Notary Public for Oregon My commission expires: 11/17/08

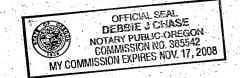


EXHIBIT A

PARCEL II:

PART OF THE JAMES G. SWAFFORD DONATION LAND CLAIM IN SECTION 4, TOWNSHIP 3 SOUTH, RANGE 2 EAST, OF THE WILLAMETTE MERIDIAN, IN THE COUNTY OF CLACKAMAS AND STATE OF OREGON, AND BEING A PORTION OF THAT TRACT OF LAND CONVEYED TO GUSTAV HARTFELL, ET UX, BY DEED RECORDED IN CLACKAMAS COUNTY DEED BOOK 514, PAGE 690 AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTH LINE OF SAID DONATION LAND CLAIM, WHICH POINT IS THE NORTHEAST CORNER OF THAT TRACT OF LAND CONVEYED TO C.L. MORRIS, ET UX, BY DEED RECORDED IN CLACKAMAS COUNTY DEED BOOK 299, PAGE 646, SAID POINT ALSO BEING SOUTH 88°00' WEST 17.0 CHAINS (BY MORE RECENT MEASUREMENT 1115.7 FEET) FROM THE NORTHEAST CORNER OF SAID DONATION LAND CLAIM; THENCE SOUTH 88°00' WEST ALONG SAID DONATION LAND CLAIM LINE A DISTANCE OF 393.00 FEET TO THE TRUE POINT OF BEGINNING OF THE TRACT TO BE DESCRIBED HEREIN; THENCE FROM SAID TRUE POINT OF BEGINNING SOUTH 2°00' EAST 1514.52 FEET TO A POINT IN THE SOUTH LINE OF SAID HARTFELL TRACT; THENCE NORTH 89°19'40" WEST ALONG SAID SOUTH LINE 294.29 FEET TO A POINT; THENCE NORTH 2°00' WEST 1492.05 FEET TO A POINT IN THE CENTER-LINE OF THE COUNTRY ROAD KNOWN AS MAPLE LANE; THENCE NORTH 70°00' EAST ALONG SAID CENTER-LINE TO THE POINT OF INTERSECTION WITH THE NORTH LINE OF SAID DONATION LAND CLAIM, A DISTANCE OF 28.39 FEET; THENCE NORTH 88°00' EAST ALONG SAID DONATION LAND CLAIM LINE 267.00 FEET TO THE TRUE POINT OF BEGINNING, TOGETHER WITH AND SUBJECT TO A ROADWAY EASEMENT, TO BE USED IN COMMON WITH OTHERS FOR INGRESS AND EGRESS, OVER AND ACROSS A 16.00 FOOT STRIP OF LAND BEING 8.00 FEET ON EACH SIDE OF THE NORTH 700.00 FEET OF THE EAST LINE OF HE HEREIN DESCRIBED TRACT OF LAND.

EXCEPTING THEREFROM A PORTION OF THAT CERTAIN TRACT OF LAND DESCRIBED IN DEED TO W.E. FOUCH, ET UX, RECORDED MARCH 3, 1966 IN BOOK 670, PAGE 109, DEED RECORDS, SITUATED IN THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 3 SOUTH, RANGE 2 EAST OF THE WILLAMETTE MERIDIAN, IN THE COUNTY OF CLACKAMAS AND STATE OF OREGON, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE SOUTH RIGHT-OF-WAY OF MAPLE LANE ROAD NO. 398, 70 FEET WEST OF THE EAST LINE OF SAID FOUCH TRACT; THENCE SOUTH 88°00' WEST, ALONG SAID SOUTH RIGHT-OF-WAY 112 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT; THENCE SOUTH 2°00' EAST PARALLEL WITH THE SAID EAST LINE 390 FEET;

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THENCE SOUTH 88°00' WEST PARALLEL WITH SAID SOUTH RIGHT-OF-WAY 112 FEET TO THE WEST LINE OF SAID FOUCH TRACT; THENCE NORTH 2°00' WEST ALONG SAID WEST LINE 390 FEET, MORE OR LESS, TO SAID SOUTH RIGHT-OF-WAY; THENCE NORTH 70°00' EAST ALONG SAID SOUTH RIGHT-OF-WAY 28.39 FEET; THENCE CONTINUING ALONG SAID RIGHT-OF-WAY NORTH 88°00' EAST 85 FEET TO THE TRUE POINT OF BEGINNING.

FURTHER EXCEPTING A PORTION OF THAT CERTAIN TRACT OF LAND DESCRIBED IN DEED TO W.E. FOUCH, ET UX, RECORDED MARCH 3, 1966 IN BOOK 670, PAGE 109, DEED RECORDS, SITUATED IN THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 3 SOUTH, RANGE 2 EAST OF THE WILLAMETTE MERIDIAN, IN THE COUNTY OF CLACKAMAS AND STATE OF OREGON, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTH RIGHT-OF-WAY OF MAPLE LANE ROAD NO. 398, 70 FEET WEST OF THE EAST LINE OF SAID FOUCH TRACT; THENCE SOUTH 88°00' WEST ALONG SAID SOUTH RIGHT-OF-WAY 112 FEET; THENCE SOUTH 2°00' EAST, PARALLEL WITH THE SAID EAST LINE 390 FEET; THENCE NORTH 88°00' EAST PARALLEL WITH SAID SOUTH RIGHT-OF-WAY 112 FEET TO A POINT ON A LINE WHICH IS 70 FEET WEST OF SAID EAST LINE; THENCE NORTH 2°00' WEST PARALLEL WITH AND 70 FEET WEST OF SAID EAST LINE 390 FEET TO THE POINT OF BEGINNING.

PARCEL III:

A PORTION OF THAT CERTAIN TRACT OF LAND DESCRIBED IN DEED TO W.E. FOUCH, ET UX, RECORDED MARCH 3, 1966 IN BOOK 670, PAGE 109, DEED RECORDS, SITUATED IN THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 3 SOUTH, RANGE 2 EAST OF THE WILLAMETTE MERIDIAN, IN THE COUNTY OF CLACKAMAS AND STATE OF OREGON, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTH RIGHT-OF-WAY OF MAPLE LANE ROAD NO. 398, 70 FEET WEST OF THE EAST LINE OF SAID FOUCH TRACT; THENCE SOUTH 88°00' WEST, ALONG SAID SOUTH RIGHT-OF-WAY 112 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT; THENCE SOUTH 2°00' EAST PARALLEL WITH THE SAID EAST LINE 390 FEET; THENCE SOUTH 88°00' WEST PARALLEL WITH SAID SOUTH RIGHT-OF-WAY 112 FEET TO THE WEST LINE OF SAID FOUCH TRACT; THENCE NORTH 2°00' WEST ALONG SAID WEST LINE 390 FEET, MORE OR LESS, TO SAID SOUTH RIGHT-OF-WAY; THENCE NORTH 70°00' EAST ALONG SAID SOUTH RIGHT-OF-WAY 28.39 FEET; THENCE CONTINUING ALONG SAID RIGHT-OF-WAY NORTH 88°00' EAST 85 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL IV:

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A PORTION OF THAT CERTAIN TRACT OF LAND DESCRIBED IN DEED TO W.E. FOUCH, ET UX, RECORDED MARCH 3, 1966 IN BOOK 670, PAGE 109, DEED RECORDS, SITUATED IN THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 3 SOUTH, RANGE 2 EAST OF THE WILLAMETTE MERIDIAN, IN THE COUNTY OF CLACKAMAS AND STATE OF OREGON, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTH RIGHT-OF-WAY OF MAPLE LANE ROAD NO. 398, 70 FEET WEST OF THE EAST LINE OF SAID FOUCH TRACT; THENCE SOUTH 88°00' WEST, ALONG SAID SOUTH RIGHT-OF-WAY 112 FEET; THENCE SOUTH 2°00' EAST PARALLEL WITH THE SAID EAST LINE 390 FEET; THENCE NORTH 88°00' EAST PARALLEL WITH SAID SOUTH RIGHT-OF-WAY 112 FEET TO A POINT ON A LINE WHICH IS 70 FEET WEST OF SAID EAST LINE; THENCE NORTH 2°00 WEST PARALLEL WITH AND 70 FEET WEST OF SAID EAST LINE 390 FEET TO THE POINT OF BEGINNING.

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FATCO NO. I LOODEN

After recording return to: John Jones and Eva K. Jones 16999 S. Bradley Rd Oregon City, Oregon 97045

Until a change is requested all Tax Statements Shall be sent to the following address: NO CHANGE FROM CURRENT ADDRESS ON FILE

THIS SPACE PROVIDED FOR RECORDER'S USE



BARGAIN AND SALE DEED FOR PROPERTY LINE ADJUSTMENT

John Jones Construction Inc., an Oregon corporation, Grantor, conveys to John Jones and Eva K. Jones, Grantees, the following described real property:

SEE EXHIBIT A FOR TRANSFER PARCEL LEGAL DESCRIPTION SEE EXHIBIT B FOR ADJUSTED GRANTORS LEGAL DESCRIPTION SEE EXHIBIT C FOR ADJUSTED GRANTEES LEGAL DESCRIPTION

Grantor is vested by Doc. No. 2007-042810, Clackamas County Deed Records

Grantee is vested by Doc. No. 2007-03885, Clackamas County Deed Records

Grantor and Grantee execute this deed to facilitate an approved Property Line Adjustment through the City of Oregon City Case File No. LL11-06

This property is free of liens and encumbrances, EXCEPT: THOSE OF PUBLIC RECORD, IF ANY.

"BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, AND SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, AND SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009."

True consideration for this conveyance is \$ Non-Monetary(Here comply with the requirements of ORS 93.030)

7 day of October _____, 2011. Dated this

GRANTOR: JOHN JONES CONSTRUCTION INC., An Oregon corporation

By:

John Jones, President

By: Eva Kjonis VIP

Eva K. Jones, Vice-President

GRANTEES

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Eva K	lone	5)		

State of County of

This instrument was acknowledged before me on <u>Utober 1,1</u>, 2011 by John Jones as President and Eva K. Jones, as Vice-President of John Jones Construction Inc., an Oregon corporation on behalf of the corporation



State of Oregon

County of (SS

This instrument was acknowledged before me on _ by John Jones and Eva K. Jones



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Notary Public - State of Oregon

Notary Public - State of Oregon

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from

. 2011



LANDSCAPE ARCHITECTURE SURVEYING

Offices Located In: SHERWOOD, OREGON VANCOUVER, WASHINGTON www.aks-eng.com

EXHIBIT A

Legal Description of Exchange Parcel

A tract of land located in the Southeast One-Quarter of Section 4, Township 3 South, Range 2 East, Willamette Meridian, City of Oregon City, Clackamas County, Oregon being more particularly described as follows:

Beginning at a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR." at the northwest corner of Lot 81 of the plat "Crabtree Terrace"; thence along the west line of Document Number 2007-038885 North 00°35'27" West 566.33 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the south right-of-way line of Maplelane Road (30.00 feet from center line) North 67°22'10" East 200.31 feet to a point; thence leaving said right-of-way line along the east line of said Document Number 2007-038885 South 02°42'22" East 388.17 feet to the True Point of Beginning; thence along the south line of Parcel III of Document Number 2007-010577 North 87°17'22" East 112.09 feet to a point; thence along the east line of said Parcel III North 02°42'01" West 390.00 feet to a point on the said south right-of-way line; thence along said south right-of-way line North 87°17'22" East 182.00 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the east line of Document Number 2007-042810 South 02°42'01" East 671.16 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the north lines of Lots 75, 76, 77, 78, and 79 of the plat "Crabtree Terrace" South 89°24'33" West 278.83 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along the north line of said plat North 00°35'27" West 70.00 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said north line South 89°24'33" West 18.02 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the east line of said Document Number 2007-038885 North 02°42'22" West 200.23 feet to the True Point of Beginning.

The above described tract of land contains 150,890 square feet (3.46 acres), more or less.



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LANDSCAPE ARCHITECTURE SURVEYING

Offices Located In: SHERWOOD, OREGON VANCOUVER, WASHINGTON www.aks-eng.com

EXHIBIT B

Legal Description of Adjusted Tax Lot 602

A tract of land located in the Southeast One-Quarter of Section 4, Township 3 South, Range 2 East, Willamette Meridian, City of Oregon City, Clackamas County, Oregon being more particularly described as follows:

Beginning at a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR." at the northwest corner of Lot 78 of the plat "Crabtree Terrace"; thence along the west line of said Lot 78 South 00°35'27" East 70.00 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the north right-of-way line of Sugarpine Street (26.50 feet from centerline) South 89°24'33" West 25.00 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said north right-of-way line along a curve to the right with a Radius of 73.50 feet, a Delta of 22°02'15", a Length of 28.27 feet and a Chord of North 79°34'20" West 28.10 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the east line of Lot 79 of said plat North 00°35'27" West 64.63 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR." at the easterly northeast corner of said Lot 79; thence North 89°24'33" East 52.58 feet to the Point of Beginning.

The above described tract of land contains 3,632 square feet, more or less.

9-14-11 REGISTERED SIONA RUE SURVEYOR AND OREGON JANUARY 9, 2007 NICK WHITE 70652LS RENEWS: 6/30/12

3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from



LANDSCAPE ARCHITECTURE SURVEYING

Offices Located In: SHERWOOD, OREGON VANCOUVER, WASHINGTON www.aks-eng.com

EXHIBIT C Legal Description of Adjusted Tax Lot 700

A tract of land located in the Southeast One-Quarter of Section 4, Township 3 South, Range 2 East, Willamette Meridian, City of Oregon City, Clackamas County, Oregon being more particularly described as follows:

Beginning at a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR." at the northwest corner of Lot 81 of the plat "Crabtree Terrace"; thence along the west line of Document Number 2007-038885 North 00°35'27" West 566.33 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the south right-of-way line of Maplelane Road (30.00 feet from center line) North 67°22'10" East 200.31 feet to a point; thence leaving said right-of-way line along the east line of said Document Number 2007-038885 South 02°42'22" East 388.17 feet to a point; thence along the south line of Parcel III of Document Number 2007-010577 North 87°17'22" East 112.09 feet to a point; thence along the east line of said Parcel III North 02°42'01" West 390.00 feet to a point on the said south right-of-way line; thence along said south right-of-way line North 87°17'22" East 182.00 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the east line of Document Number 2007-042810 South 02°42'01" East 671.16 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence along the north lines of Lots 75, 76, 77, 78, and 79 of the plat "Crabtree Terrace" South 89°24'33" West 278.83 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along the north line of said plat North 00°35'27" West 70.00 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said north line South 89°24'33" West 77.91 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said north line along a curve to the left with a Radius of 14.50 feet, a Delta of 90°00'00", a Length of 22.78 feet, and a Chord of South 44°24'33" West 20.51 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said north line North 89°30'36" West 53.01 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said north line South 00°35'27" East 40.00 feet to a 5/8 inch iron rod with a yellow plastic cap inscribed "AKS ENGR."; thence continuing along said north line South 89°24'33" West 80.00 feet to the Point of Beginning.

The above described tract of land contains 264,540 square feet (6.07 acres), more or less.



3c. TP 12-01 / VR 12-02: Crabtree Terrace II - 30-lot Subdivision with Variance Request from