

**PLANNING COMMISSION**  
**(Revised) Meeting Agenda**  
**Monday, April 28, 2014**  
**7:00 PM**  
**City Council Chambers – 155 NW 2<sup>nd</sup> Avenue**

**Commissioner Tyler Smith (Chair)**

**Commissioner John Savory (Vice Chair)**

**Commissioner John Serlet**

**Commissioner (Vacant)**

**Commissioner Shawn Hensley**

**Commissioner Larry Boatright**

**Commissioner (Vacant)**

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- 1. CALL TO ORDER**
- 2. MINUTES**
  - a. *March 10, 2014 Planning Commission Minutes*
- 3. CITIZEN INPUT ON NON-AGENDA ITEMS**
- 4. PUBLIC HEARING:**
  - a. *The applicant is requesting approval of Phase II of the Dinsmore Estates Subdivision, a 9.6 acre subdivision for 41 detached single family home lots. (Dinsmore Estates Phase II SUB 14-02)*
  - b. *The applicant is requesting approval of a Planned Unit Development and Subdivision which will include 5 identical buildings with three homes each on individually plated lots for a total of 15 townhomes. (Emerald Gardens Townhomes PUD 14-01/SUB 14-01)*
  - c. *City Staff is requesting consideration of a text amendment to streamline, clarify, and update the development review process for industrially zoned land in the Canby Pioneer Industrial Park. (Code Streamlining Industrial Development TA 12-02)*
- 5. FINAL DECISIONS - None**
- 6. NEW BUSINESS - None**
- 7. ITEMS OF INTEREST/REPORT FROM STAFF**
  - a. *Next Planning Commission meeting – Monday, May 12, 2014*
- 8. ITEMS OF INTEREST/GUIDANCE FROM PLANNING COMMISSION**
- 9. ADJOURNMENT**

*The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired or for other accommodations for person with disabilities should be made at least 48 hours before the meeting at 503-266-7001. A copy of this agenda can be found on the City's web page at [www.ci.canby.or.us](http://www.ci.canby.or.us) City Council and Planning Commission Meetings are broadcast live and can be viewed on OCTS Channel 5. For a schedule of the playback times, please call 503-263-6287.*



**MINUTES**  
**CANBY PLANNING COMMISSION**  
7:00 PM – March 10, 2014  
City Council Chambers – 155 NW 2<sup>nd</sup> Avenue

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**PRESENT:** Commissioners Tyler Smith, John Savory, Shawn Hensley, John Serlet, and Larry Boatwright

**ABSENT:** None

**STAFF:** Bryan Brown, Planning Director, Renate Mengelberg, Economic Development Director, and Laney Fouse, Planning Staff

**OTHERS:** Curt McLeod

**1. CALL TO ORDER**

Chair Smith called the meeting to order at 7:00 pm. Chair Smith welcomed new Planning Commissioner Larry Boatwright.

**2. CITIZEN INPUT** – None

**3. PUBLIC HEARINGS** – None

**4. NEW BUSINESS**

- a. *Proposed Text Amendment (TA 14-01) – Consider an expedited development review option within the Canby Industrial Master Plan area.*

Bryan Brown, Planning Director, entered his report into the record about the proposed process and text changes for a Canby Pioneer Industrial Park Overlay Zone. He said this would create a predictable, speedy process for industrial customers who wanted to come to Canby. He said if they met all of the Code requirements, the applicant could choose either a Type II or a Type III process. He said for Type II application, a notice would go out to surrounding property owners who could then respond to staff with comments, after those comments were received, a staff report would be written, but the decision was the Planning Director's. He said the Type III process was the Planning Commission's decision and would be used if there was an aspect of the Code that was not fully met or an applicant wanted to substitute a standard. He explained the positive parts included reducing the process by 20-30 days and lessening the work load for staff. He said the negative sides were less review by not coming before the Planning Commission and less public vetting. Mr. Brown said they had been utilizing another area in the Code which was modifications to existing development, and those modifications were also a Type II process which had lessened the Planning Commission's workload by half.

Commissioner Savory asked what the average timeline for a Type III process was.

Mr. Brown said the goal was 45-60 days to get through the process. He said the clock did not start until the application was deemed complete and staff had 120 days to approve an application. He said the written notice of the public hearing allowed people to submit comments in writing before the public hearing and with the Type II applications, there were 10 days to respond with comments.

Chair Smith supported the concept. He said he did not think the public lost out on anything because there was an appeals process and this would simply streamline the process in some cases.

Mr. Brown said he thought half of applications submitted would use the Type II, and the other half would use the Type III. He said there might be a possible issue if through the Type II process it was found that there needed to be a Type III process.

Commissioner Savory asked about the jobs per acre provision which would be changed from 12 to 6.

Renate Mengelberg, Economic Development Director, explained the difficulty of attracting businesses at 12 jobs per acre and it was also hard to measure. She said manufacturing used sophisticated equipment that led to fewer but more highly skilled and better paying jobs. She said this streamlining would keep the Code more current. She said her preference would be to have no jobs per acre requirement, but to be conservative she had cut the number in half.

Mr. Brown commented that it would help the Industrial park avoid the large warehouse type facilities that had only a few people working in them.

Commissioner Savory asked what xeriscape meant. Ms. Mengelberg said it was sustainability oriented and had to do with drought tolerant plants in the landscape design.

Commissioners reached a consensus to move forward with the proposed text amendment. Mr. Brown said staff would bring this back to the Commission in about 40-50 days.

## **5. FINAL FINDINGS**

### *a. SUB 13-01 Northwood Estates Phase II Findings, Conclusions and Final Order*

Mr. Brown said for Condition #76 there was an error in one of the lot numbers. He said he would have to review what the lot number should be.

Commissioner Savory suggested for Condition #22 to remove the second “only.”

There was consensus to adopt the Final Findings for Northwood Estates Phase II Findings, Conclusions and Final Order (SUB 13-01) as amended on Condition #22 and authorizing staff to check for accuracy of the lot numbers on Condition #76.

## **6. MINUTES**

### *a. January 27, 2014 – Planning Commission Minutes*

***Motion:*** *A motion was made by Commissioner Hensley and seconded by Commissioner Savory to approve the January 27, 2014 minutes as written. Motion passed 4/0, 1 abstention.*

## **7. ITEMS OF INTEREST FROM STAFF**

### *a. Jason Bristol’s Emerald Gardens Townhomes*

Mr. Brown discussed an upcoming 15 unit attached townhomes application for property between 3<sup>rd</sup> and 4<sup>th</sup> Avenues by the Fairgrounds.

### *b. Dinsmore Estates Subdivision Phase II*

Mr. Brown reported on a new subdivision application that was on 10 acres just south of 13<sup>th</sup> Avenue.

Mr. Brown reported that two annexation applications would be coming in front of the Commission in June to be on the November ballot.

- c. Ms. Mengelberg, Economic Development Director is launching a new program available for business developers called “Open Counter,” an online program to make the permitting process easier and more understandable to businesses.

## 8. ITEMS OF INTEREST/GUIDANCE FROM PLANNING COMMISSION

Commissioner Savory asked about the code changes for two-story buildings. Mr. Brown said the direction was to keep a master list of code changes and bring them to the Commission each meeting or every other meeting for concurrence, and once or twice a year make the changes to the code. The two-story issue would be brought back to the Commission soon.

## 9. ADJOURNMENT

***Motion:*** Commissioner Savory moved for adjournment, Commissioner Hensley seconded. Motion passed 5/0. Meeting adjourned at 7:53 pm.

The undersigned certify the **March 10, 2014** were presented to and **APPROVED** by the Planning Commission of the City of Canby.

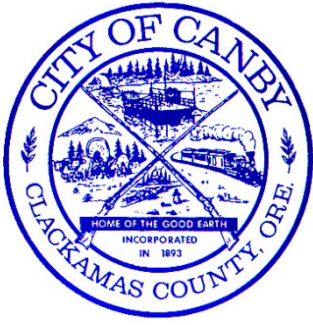
**DATED** this 28<sup>th</sup> day of April, 2014

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Bryan Brown, Planning Director

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Laney Fouse, Minutes Taker

Assisted with Preparation of Minutes – Susan Wood





# City of Canby

## SUBDIVISION STAFF REPORT

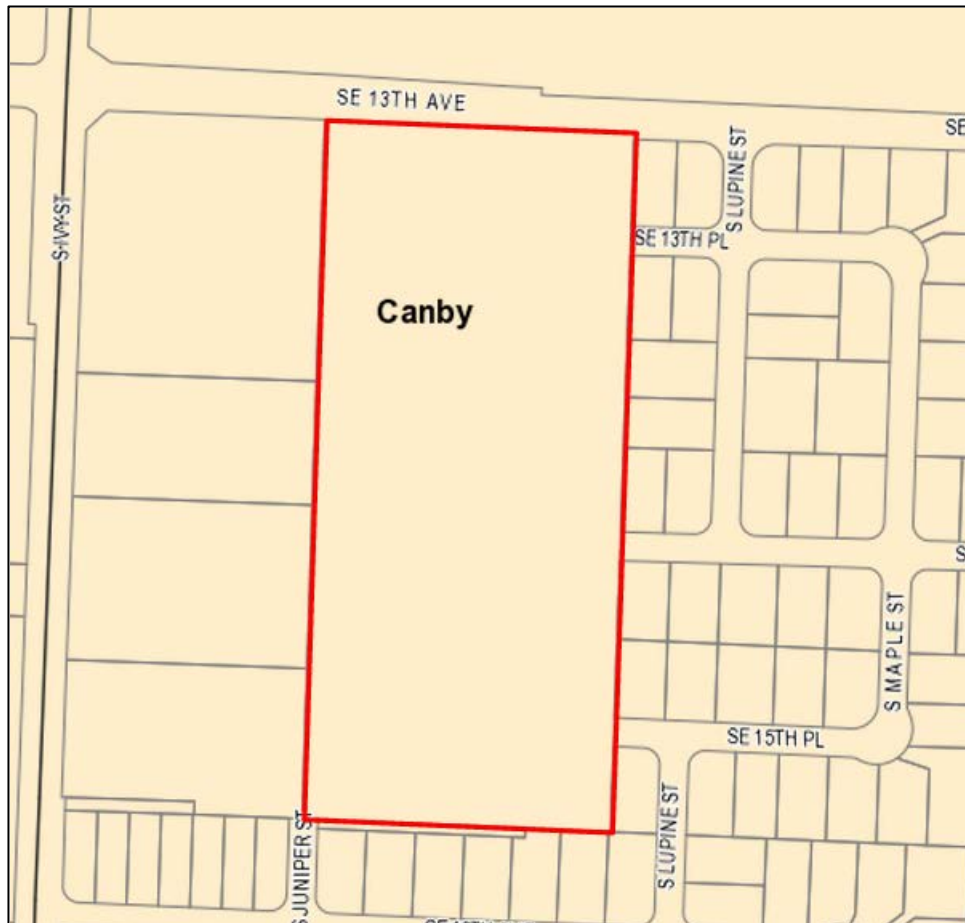
FILE #: SUB 14-02

Prepared for the April 28, 2014 Planning Commission Meeting

**LOCATION:** SE 13<sup>th</sup> Ave between S Ivy and S Lupine

**ZONING:** R-1 Low Density Residential

**TAX LOTS:** 41E04DA04700 (Bordered property in map below)



**LOT SIZE:** 9.56 acres

**OWNER:** 4700 Development LLC- owned by Scott Family Limited Partnership

**APPLICANT:** Scott Family Limited Partnership

**APPLICATION TYPE:** Subdivision (Type III)

**CITY FILE NUMBER:** SUB 14-02

I. **PROJECT OVERVIEW & EXISTING CONDITIONS**

The applicant's narrative states the following:

*A 41 lot subdivision with all lots intended to be suitable for detached single family residences is proposed. The site area is 9.56 acres. Dedications for SE 13th Avenue and interior streets will account for 1.92 acres (83,743 square feet), leaving 7.64 acres available for development. The net density for the overall site is one dwelling for each 8,117 square feet or 5.37 dwellings per net acre.*

*The development will extend SE 13th, 14th and 15th Place into the site from their current temporary dead ends along the site's eastern boundary. An extension of S Juniper Street, currently terminated at the SW corner of the site, will connect to the extension of SE 15th Place from Tofte Farms No.3. The extensions of S Juniper Street, SE 14th Place and SE 15th Place and will provide access and the beginning of the street system for parcels located west of the site, as access to S Ivy Street for these properties will be limited. S Juniper Street is partially located on this site and partially on the "McRobbie parcel". The owner of the "McRobbie parcel" and the applicant have agreed to dedicate the right-of-way for the full width of S Juniper Street.*

*Internal streets are proposed to continue with the City's old standard right of way width of 40 feet while providing the new standard pavement width of 34 feet. Sidewalk widths will be per the new City standard of 6 feet, with the sidewalk and part of the planter strip being located within an easement on the lots.*

*Public sanitary sewer is available from the S Ivy Street / SE 13th Avenue intersection, from streets in Tofte Farms and from S Juniper Street in the southwest corner. Domestic water is available in all public streets. Storm water will be collected and directed to a vegetated treatment facility installed with Phase 1 of Dinsmore Estates that was constructed with the intention of serving both phases of the subdivision. Storm water leaving the water treatment facility will be conveyed to a system of interconnected drywells that were also installed during Phase 1 and were intended to serve both phases of Dinsmore Estates. The treatment facility is owned and maintained by the Dinsmore Estates HOA, while the drywells are owned and maintained by the City of Canby.*

*A pre application conference with the City occurred on August 7, 2013. No issues of concern were identified, beyond usual and expected considerations of Code compliance. A traffic impact study for the development was completed by DKS & Associates for the City of Canby on January 30, 2014. The traffic study recommended against the applicants' proposal to extend S Larch Street to connect to SE 13th Avenue and thereby creating a new intersection on SE 13th Avenue. In order to comply with the DKS recommendation, the applicant has modified the subdivision layout to eliminate the new intersection on SE 13th Avenue.*

II. **ATTACHMENTS**

- A. Application form
- B. Application narrative
- C. Traffic Impact Study dated 3.20.14
- D. Neighborhood meeting notice and notes
- E. Pre-application meeting minutes



- F. Storm drainage report dated November 5, 2013
- G. Lighting cut sheets
- H. Draft Development Agreement between Scott and McRobbie
- I. Sheet 1 Tentative Site Plan dated February 2014, revised 4/10/14
- J. Sheet 2 Utility Plan dated February 2014, revised 4/10/14
- K. Sheet 3 Street Profiles dated February 2014, revised 4/10/14
- L. Sheet 4 Topographic Survey dated February 2008
- M. Other items submitted for SUB 14-02 application
- N. Written comments submitted prior to printing of the Planning Commission packet

### III. MAJOR TOPICS FOR PLANNING COMMISSION CONSIDERATION

The following is a list of staff interpretations and potential conditions of approval that the Planning Commission may want to discuss/comment on and/or use as a basis to apply additional conditions of approval:

- Review proposed wall along SE 13<sup>th</sup>, see 16.08.110 page 4.
- Review traffic study findings, specifically findings on a S Larch extension. See 16.08.150 page 5.
- Review driveway-to-driveway and intersection-to-driveway findings; see 16.10.070(B)(9-10) pages 6-7.
- Review proposed flag lots; see 16.16.030(B) pages 7-8.
- Review infill home findings; see 16.21.050 page 8.
- Review lighting findings; see 16.43 pages 8-10.
- Review concerns over a Larch Street connection. Review proposed access spacing standards and access spacing exception standards; see 16.46.030 and 16.46.070 pages 11-13.
- Review street cross sections and proposed transition from adjacent streets; see 16.64.010(A)(3) pages 14-16.
- Review proposed half street dedication of S. Juniper; see 16.64.010(H) page 16.
- Give input on trees/landscaping along the SE 13<sup>th</sup> Avenue; see 16.64.010(M) pages 17-18.
- Review proposed block widths/double frontages; see 16.64.020(B) page 18 and 16.64.040(D) page 20.
- Give input on pedestrian path lighting, ownership, and maintenance responsibilities; see 16.64.030(C) page 19.
- Review proposed stormwater infrastructure; see 16.64.070(D) pages 24-25.
- Review proposed street layout and connectivity; see 16.86.060 pages 29-30.

### IV. APPLICABLE CRITERIA & FINDINGS

Major approval criteria used in evaluating this application are the following chapters from the *City of Canby's Land Development and Planning Ordinance (Zoning Code)*:

- 16.08 General Provisions
- 16.10 Off-street Parking and Loading
- 16.16 R-1 Zone
- 16.21 Residential Design Standards
- 16.43 Signs
- 16.43 Outdoor Lighting Standards

- 16.46 Access Limitations on Project Density
- 16.56 Land Division General Provisions
- 16.62 Subdivisions-Applications
- 16.64 Subdivisions-Design Standards
- 16.68 Subdivisions Final Procedures and Recordation
- 16.86 Street Alignments
- 16.89 Application and Review Procedures
- 16.120 Parks, Open Space, and Recreation Land General Provisions

Applicable code criteria are highlighted below in **gray**, with findings and discussion after the citations; most full code citations are omitted for brevity. If not discussed below, other standards from the code are either met fully, not applicable, and/or do not warrant discussion. Most met provisions have no discussion for brevity. Many standards for driveways, parking, fences, setbacks, height, etc. will be verified for compliance when the homebuilder applies for building permits.

## *Chapter 16.08 General Provisions*

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### **16.08.110 A-B, E, G Fences**

**Findings:** This section states that fences cannot be more than 6' in rear yards, that the Planning Commission can require sight blocking/noise mitigating fences, and that fences must not conflict with vision clearance. The applicant is proposing a 6' wall with 6'6" columns along SE 13<sup>th</sup> Avenue; this wall will not be in the right of way and will be privately maintained. **Condition #35** states that the homeowner's association's CC&Rs for Dinsmore Estates shall state that the HOA is responsible for the wall's maintenance. **Condition #39** requires that wall easement HOA maintenance responsibilities be noted on the final plat.

Sections 16.08.110(G) and 16.64.070(R) state that: "No fence/wall shall be constructed throughout a subdivision...where the effect or purpose is to wall said project off from the rest of the community unless reviewed and approved by the Planning Commission." Depictions of the proposed wall along SE 13<sup>th</sup> are on Sheet 3 and included in the Planning Commission packet.

### **16.08.110 H Fences**

**Findings:** The above section contains provisions pertaining to fencing along pedestrian pathways; these would be applicable to lots 2 and 3. Therefore, **Condition #36** is proposed that specifies lots 2 and 3 are subject to special fence standards; staff proposes that these standards are also included in the CC&Rs for the homeowner's association.

### **16.08.150 Traffic Impact Study (TIS).**

*Contains standards pertaining to traffic studies including purpose, scoping, determination, submittal requirements, content, methodology, neighborhood and through-trip studies, mitigation, conditions of approval, and rough proportionality determination.*

**Findings:** The applicant submitted a traffic study conducted by DKS. The following findings were made from the traffic study:

- *The proposed development would generate an additional 30 net new trips in the a.m. peak hour and 39 net new trips in the p.m. peak hour.*
- *There were five crashes recorded at the study intersections over the previous three years. The increased traffic associated with the proposed project is not expected to influence safety at any of the intersections.*
- *Adequate sight distance would be provided at all site accesses. With the development, the sight distance triangles should be kept clear of permanent objects (large signs, landscaping, retaining walls, etc.) that could potentially restrict intersection sight distance. Additionally, it is recommended that parking be prohibited within 20-feet of intersections. Staff comment: **Condition #13** is proposed to address this finding.*
- *The study intersections would operate within the mobility standards defined by the City and Clackamas County with the additional traffic loading generated by the project site and the Sequoia Parkway extension. With the development of Hope Village all intersections would continue to operate at acceptable levels.*
- *Internal local roadways should be constructed to the City's standards. Proper signage and traffic control devices should be provided at intersections. Staff comment: **Conditions #12 & 17** are proposed to address this finding.*
- *The development should include sidewalks along the project frontages to SE 13th Avenue and SE 16<sup>th</sup> Avenue. Staff comment: The boundaries of Dinsmore Phase II do not extend to SE 16<sup>th</sup> Avenue, therefore this finding has been disregarded.*
- *The proposed S Larch Street would be located approximately 500 feet east of S Ivy Street which would not meet the City's street spacing standard of 660 feet along arterial roadways. A deviation to the City's access spacing standard would be required. It is recommended that this deviation not be granted at this time and that the site utilize S Lupine Street as direct connection to SE 13th Avenue. The proposed layout of S Larch Street to SE 13th Avenue could be primarily maintained to provide access for lot 1, but the actual vehicle connection to SE 13th Avenue would not be provided. Providing access for pedestrians, bicycles, and emergency vehicles to SE 13th Avenue from S Larch Street would be recommended. Staff comment: The applicant originally proposed extending S Larch to connect to SE 13<sup>th</sup> Avenue. Because of the recommendations of the traffic study, the applicant has modified their plans and is now not proposing to extend S Larch.*
- *Traffic signal warrants (warrant 3: peak hour) were evaluated at the intersections of S Ivy Street/SE 16<sup>th</sup> Street and SE 13th Street/S Larch Street and were not satisfied under current conditions with the proposed project. Additionally, left and right turn lane warrants were evaluated at these intersections and not met.*

#### **16.08.160 Safety and Functionality Standards**

**Findings:** The above section contains general infrastructure, vision clearance, street improvement, and transportation/TSP compliance standards. These topics are discussed under 16.10, 16.46, 16.62, and 16.64. Vision clearance standards will be applicable at the time of home construction and will be verified with residential building permits.

## *Chapter 16.10 Off Street Parking & Loading*

### **16.10.070 Parking lots and access**

#### **B. Access.**

6. To afford safe pedestrian access and egress for properties within the city, a sidewalk shall be constructed along all street frontages, prior to use or occupancy of the building or structure proposed for said property...

**Findings:** Chapter 16.64 discusses sidewalks.

<b>Minimum Access Requirements</b>			
<b>16.10.070(B)(8): Minimum access requirements for residential uses - ingress and egress for residential uses shall not be less than the following (except that in the case of flag lots, section 16.64.0400) shall apply):</b>			
<i>Dwelling units</i>	<i>Minimum number of accesses required</i>	<i>Minimum access width</i>	<i>Sidewalks &amp; Curbs (in addition to driveways)</i>
1 or 2	1	12 feet	none required
20-49	Option A: 1 access OR Option B: 2 accesses	20 feet  12 feet	Minimum of one sidewalk connection to residences and parking areas; curb required if sidewalk adjacent to driveway.

**Findings:** It is unclear if the above standard is applicable to subdivisions or just for individual homes; these standards are met either way.

9. Maximum driveway widths and other requirements except for single-family dwellings [see subsection (d) below]:

- d. The minimum distance between two driveways on one single-family residential lot shall be thirty (30) feet. There is no minimum setback distance between a driveway and the property line for driveways on single-family residential lots.

**Findings:** The above standard conflicts with Canby's Public Works Design Standards' driveway-to-driveway separation requirement; consistency between the two documents is a needed Code amendment. The Public Works Design Standards and Table 16.46.030 only require a 10 foot driveway-to-driveway separation with no specification for driveways on the same lot (Section 2.211(g)). Staff proposes to address this at the building permit stage and/or with code amendments. **Condition #54** specifies minimum and maximum driveway widths specified in the Public Works Design Standards.

10. Distance Between Driveways and Intersections- Except for single-family dwellings [see subsection (f) below] the minimum distance between driveways and intersections shall be as provided below. Distances listed shall be measured from the stop bar at the intersection:

- f. The minimum distance between driveways for single-family residential houses and an intersection shall be thirty (30) feet. The distance shall be measured from the curb intersection point [as measured for vision clearance area (16.04.670)].

**Findings:** Lot intersection-to-driveway spacing will be verified for compliance during the building permit process. Canby's Public Works Design Standards require a more restrictive 50' intersection-to-driveway separation; consistency between the two documents is a needed Code amendment. Staff proposes to address this at the building permit stage and/or with code amendments.

## 16.16 R-1 Low Density Residential Zone

### **16.16.010 Uses permitted outright**

Uses permitted outright in the R-1 zone shall be as follows:

- A. Single-family dwelling; one single-family dwelling per lot;

**Findings:** The applicant proposes to construct single family homes on the lots created by this subdivision.

### **16.16.030 Development standards**

The following subsections indicate the required development standards of the R-1 zone:

- A. Minimum and maximum lot area: seven thousand (7,000) square feet minimum, and ten thousand (10,000) square feet maximum, per single-family dwelling...

**Findings:** All lots meet the minimum and maximum lot area requirements except for lots 17 and 19, which are proposed flag lots at 12,469sf and 12,470sf. Exception standards are discussed below.

#### **B. Lot area exceptions**

1. The Planning Commission may approve an exception to the minimum and maximum lot area standards in subsection 16.16.030.A as part of a subdivision or partition application when all of the following standards are met:
  - a. The average area of all lots created through the subject land division... shall be no less than seven thousand square feet and no greater than ten thousand square feet.
  - d. As a condition of granting the exception, the city will require the owner to record a deed restriction with the final plat that prevents the re-division of over-sized lots (e.g., ten thousand square feet and larger), when such re-division would violate the average lot area provision in subsection 16.16.030.B.1.a. All lots approved for use by more than one dwelling shall be so designated on the final plat.
2. A public benefit must be demonstrated in order to allow more than ten percent of the lots to be outside of the minimum and maximum lot areas in subsection 16.16.030.A.
3. The Planning Commission may modify the maximum lot area requirements in 16.16.030.A if these cannot be met due to existing lot dimensions, road patterns, or other site characteristics.

**Findings:** The submitted narrative states that the average lot size is 7,982sf. A condition based on Section (B)(1)(d) above is not required because re-division of the lot is not possible in order to meet the minimum R-1 lot size. A demonstration of the public benefit of the proposed flag lots is not required because not more the 10% of the proposed lots are outside the R-1 lot area standards.

**C.** *Minimum width and frontage: sixty feet, except that the Planning Commission may approve lots having less frontage subject to special conditions to assure adequate access.*

**Findings:** The above standards are met except for the flag lot frontages; 16.64.040(C) permits the Planning Commission to permit flag lots that, by design, do not usually meet lot frontage standards.

## *16.21 Residential Design Standards*

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### **16.21.050 Infill Homes**

**Findings:** Infill homes are defined in 16.04.255 as “existing and new single family dwellings, manufactured homes, two-family dwellings, duplexes and triplexes on lots that are located in an R-1 or R-1.5 zoning district, and that have existing homes on two adjacent sides. Each adjacent home must be within 25 feet of the common lot line with the infill homes and have pre-existed for at least 5 years (dated from the existing homes final building permit approval).”

Staff interprets that there are no lots with existing homes on two adjacent sides; the eastern edge of lots 17 and 19 minimally abut two existing lots, but staff has determine that these lots do not meet the above definition.

## *16.42 Signs*

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**Findings:** If any signs are to be proposed, then the applicant shall apply for a sign permit.

## *16.43 Outdoor Lighting Standards*

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### **16.43.030 Applicability.**

*The outdoor lighting standards in this section apply to the following:*

**A.** *New uses, buildings, and major additions or modifications:*

- 1.** *For all proposed new land uses, developments, buildings, and structures that require a building permit, all outdoor lighting fixtures shall meet the requirements of this Code.*

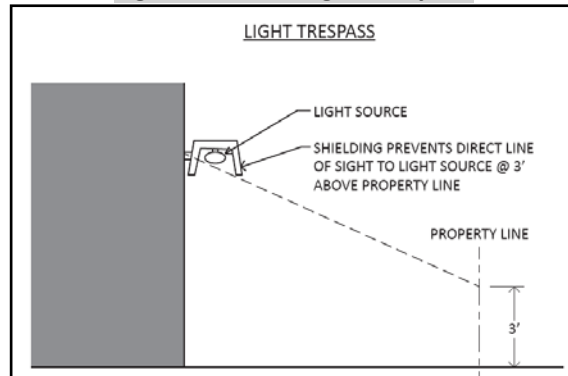
**Findings:** The code’s language above states that all new “developments” are subject to 16.43. The Planning Commission has recently interpreted that 16.43 is not applicable to a subdivision; the proposed fixtures were submitted for the Planning Commission’s general knowledge; the applicant has not submitted lighting layouts because CUB usually makes these plans after subdivision approval. The Planning Commission may consider the applicability of lighting

standards again as it deems appropriate.

**16.43.060 Prohibited Light and Lighting.**

**A.** All outdoor light sources, except street lights, shall be shielded or installed so that there is no direct line of sight between the light source or its reflection at a point 3 feet or higher above the ground at the property line of the source. Light that does not meet this requirement constitutes light trespass. Streetlights shall be fully shielded. However, the applicant is permitted to have some unshielded lighting if lumens are within the limits of Table 16.43.070 below.

**Figure 16.43.1: Light Trespass**



**Findings:** Staff interprets that the above standards means the light trespass Figure 16.43.1 above is not applicable to streetlights because it shows private property lights, not lights in the public right of way.

However, Table 16.43.070 (below) could be determined to be applicable because the above standard states that "Streetlights shall be fully shielded". The definitions below attempt to clarify the meaning of "fully shielded"; in addition an internet search provides many pictorial examples of shielded lighting:

16.43.020(M) Definitions:

**"Shielding.** A device or technique for controlling the distribution of light. Four levels of shielding are defined as follows:

1. **Fully Shielded.** A luminaire emitting no luminous flux above the horizontal plane;
2. **Shielded.** A luminaire emitting less than 2.0 percent of its luminous flux above the horizontal plane;
3. **Partly Shielded.** A luminaire emitting less than 10 percent of its luminous flux above the horizontal plane;
4. **Unshielded.** A luminaire that may emit its flux in any direction."

The applicant has submitted lighting cut sheets from Canby Utility; the Planning Commission should determine if this proposed lighting is satisfactory or if alternative lighting with more shielding should be required.

**16.43.060 Prohibited Light and Lighting.**

**B.** The following lighting systems are prohibited from being installed or used except by special use permit:

3. Other very intense lighting, defined as having a light source exceeding 5200 lumens.

**16.43.070 Luminaire Lamp Lumens, Shielding, and Installation Requirements.**

A. All outdoor lighting shall comply with the limits to lamp wattage and the shielding requirements in Table 16.43.070 per the applicable Lighting Zone. These limits are the upper limits. Good lighting design will usually result in lower limits.

**Table 16.43.070 – Luminaire Maximum Lumens and Required Shielding**

Lighting Zone	Fully Shielded	Shielded	Partly Shielded	Unshielded (Shielding is highly encouraged. Light trespass is prohibited.)
LZ 1	2600 lumens or less	800 lumens or less	None Permitted	Low voltage landscape lighting and temporary holiday lighting.

**Findings:**

Zone LZ 1 above is applicable to residential zones. The applicant has submitted lighting cut sheets from Canby Utility; the sheets do not state the lumen output of the lighting. The applicant will either use LED lighting or high pressure sodium lighting; this decision will dictate which of the two submitted cut sheet fixtures will be used. Planning Commission should determine if this proposed lighting is satisfactory or if lighting within the limits of the above table should be required.

**16.43.080 Height Limits.**

**Findings:** Per 16.43.080(A)(5), mounting height standards do not apply to streetlights.

## *16.46 Access Limitations on Project Density*

**16.46.010 Number of units in residential development.**

A. Single-family residential access, public and private roads:

1. Roads shall be a minimum of 28 feet in width with parking restricted to one side only, or a minimum of 36 feet in width with no parking restriction.

**Findings:** The proposed roads are to be 34' with no parking restrictions; 34' streets will transition from the adjacent 36' foot roads, per the TSP. A code edit is needed to make this section consistent with the TSP.

2. The number of units permitted are as follows:

One access: 30 units

Two accesses: 132 units

Three accesses: 207 units

For more than three accesses, use the following formula: # of units permitted =  $(60 \times (1 + (.05 \times \# \text{ of access points}))) \times (\# \text{ of access points})$

**Findings:** When applying the above standard to individual lots, then the proposal complies with



the above standard; each lot will have an access.

When applying the above standard to the subdivision and adjacent developments, then the proposal also complies. Four accesses/streets serve the proposed subdivision and adjacent developments, permitting up to 288 units per the above formula. The applicant's narrative states that 213 platted lots currently utilize the four accesses, so up to 75 new lots would be permitted.

**B. Single ownership developments (condominiums, townhouses, manufactured homes, multi-family developments, etc.).**

1. Two lane access roads/drives shall be a minimum width of 20 feet with no parking permitted, or 28 feet with parking restricted to one side only, or 36 feet with no parking restrictions. Three lane access roads/drives shall be a minimum width of 32 feet with no parking permitted, or 40 feet with parking restricted to one side.

2. The number of units permitted are as follows:

<u>Two lane access road/drive</u>	
One access:	30 units
Two accesses:	165 units
Three accesses:	258 units

**Findings:** Staff believes the above section is not applicable to subdivisions. However, if it is, the proposal would comply. There are no new access roads proposed; access to the proposed lots will be from existing streets in adjacent developments.

**D. All turnaround systems shall meet or exceed the requirements of the parking provisions of Chapter 16.10.**

**Findings:** Staff believes the above standard is not applicable to this development. There are temporary dead end streets but no turn around systems such as cul-de-sacs.

**G. Public roads accessing any development shall be a minimum of two travel lanes (twenty-four (24) feet of paved width) to the nearest improved collector or arterial street...**

**Findings:** Staff believes the above section is not applicable because this phase does not propose any streets directly adjacent to a collector or arterial (SE 13<sup>th</sup>). However, SE 13<sup>th</sup> Place, which connects to SE 13<sup>th</sup> via S Lupine is 34'.

**16.46.030 Access connection.**

**A. Spacing of accesses on City streets.** The number and spacing of accesses on City streets shall be as specified in Table 16.46.030. Proposed developments or land use actions that do not comply with these standards will be required to obtain an access spacing exception and address the joint and cross access requirements of this Chapter.

**TABLE 16.46.030**

**Access Management Guidelines for City Streets**

<b>Street Facility</b>	<b>Maximum spacing** of roadways</b>	<b>Minimum spacing** of roadways</b>	<b>Minimum spacing** of roadway to driveway***</b>	<b>Minimum Spacing** driveway to driveway***</b>
Arterial	1,000 feet	660 feet	330 feet	330 feet or combine
Neighborhood/Local	600 feet	150 feet	50 feet****	10 feet

\*\* Measured centerline on both sides of the street

\*\*\* Private access to arterial roadways shall only be granted through a requested variance of access spacing policies when access to a lower classification facility is not feasible (which shall include an access management plan evaluation).

\*\*\*\* Not applicable for single-family residential driveways; refer to section 16.10.070(B)(10) for single-family residential access standards

Note: Spacing shall be measured between access points on both sides of the street.

**Findings:** The development proposes arterial and local streets per Figure 7-1 of the TSP.

**For Local Streets:** See 16.10.070(B)(9-10) for discussion on driveway-to-driveway and roadway-to-driveway spacings; roadway minimum and maximum spacing standards are met.

**For Arterial Streets (SE 13<sup>th</sup> Avenue):** Per above, no private driveways are allowed onto SE 13<sup>th</sup> Avenue, so the roadway to driveway and driveway to driveway standards are not applicable. S Ivy and S Lupine are separated by ~940'. All standards above are met.

A Larch Street extension to SE 13<sup>th</sup> Avenue would not meet the above 660' roadway spacing standard. The spacing from S Ivy Street to S Larch Street was proposed as 500', with 440' between S Larch and S Lupine.

**16.46.070 Exception standards**

**A.** An exception may be allowed from the access spacing standards if the applicant can provide proof of unique or special conditions that make strict application of the provisions impractical. Applicants shall include proof that:

1. Indirect or restricted access cannot be obtained;
2. No engineering or construction solutions can be reasonably applied to mitigate the condition; and
3. No alternative access is available from a street with a lower functional classification than the primary roadway.

**B.** Access Management Plan Required. An applicant requesting an access exception may be required to submit an access management plan...

**C.** The granting of the exception shall be in harmony with the purpose and intent of these regulations and shall not be considered until every feasible option for meeting access standards is explored.

**D.** No exception shall be granted where such hardship is self-created.

**E.** Reasons for denying access spacing exception applications include, but are not limited to, traffic safety concerns, expected or planned traffic increases due to development or road construction, and emergency service provision issues.

**Findings:**

The applicant's narrative states:

*The applicant commissioned a traffic study with the City to analyze the transportation system in the vicinity of the project, including the new SE 13th Avenue/Larch Street intersection. As a part of the traffic study, the intersection spacing requirements for this proposed intersection were analyzed and an exception was considered. The City's traffic engineer, DKS & Associates, recommended that an exception to the access spacing requirements not be granted at this time. Therefore, the applicant has modified the proposed development plan to eliminate the connection of S Larch Street to SE 13<sup>th</sup> Avenue.*

*At the applicant's neighborhood meeting, the residents of the Tofte Farms neighborhood were united in that a new connection to SE 13th Avenue was needed. Their concern is that without a new connection to 13th Avenue in this development, the bulk of the traffic generated by this development and future developments farther west will flow through back through the Tofte Farms neighborhood to S Lupine Street. It is anticipated that the City will receive testimony from the Tofte Farms neighbors of the development concerning this issue.*

The submitted Traffic Study states the following; staff recommends adhering to the city traffic engineer's (DKS) recommendation:

*To meet the requirements of an exception to the access spacing standards, an alternatives analysis would be required that demonstrates that an alternative meeting City standards has operational, safety, or site development issues that could be improved with the proposed deviation. An initial review of the site plan without the S Larch Street connection to SE 13th Avenue appears to not have significant operational, safety, or site access/development constraints. Therefore, at this time it is recommended that a deviation for the connection of S Larch Street not be granted and that the site utilize S Lupine Street as access to SE 13th Avenue to comply with City standards.*

Neighborhood groups are expected to advocate for a Larch Street connection. Therefore, the city asked DKS to prepare a scope of work for additional traffic analysis into this issue (included in the packet, dated 4.15.14). The Planning Commission has the following options regarding a Larch Street connection:

1. Concur with the city traffic engineer's current recommendation and corresponding layout submitted by the applicant and approve the subdivision without a Larch Street connection.
2. Direct staff to have DKS proceed with additional analysis; there is no guarantee that DKS will then recommend a Larch Street connection. Staff has not yet proceeded with this study because of the estimated \$5,000 cost to the city. The applicant has followed DKS's current recommendation to omit the Larch Street connection, so having the applicant bear this cost would not be a reasonable request.
3. Direct the applicant to re-submit a layout that includes a Larch Street connection against the city traffic engineer's recommendation. This will require staff to re-notify the county and other applicable agencies, as a revised design might affect their assessment of the proposal. The county has jurisdiction over S. Ivy, so they in particular may have input on intersection spacing in the vicinity. Staff would also need to review and prepare a revised staff report or memo if designs are revised.

## 16.56 Land Division Regulation

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**Findings:** Chapter 16.56 contains general language regarding land divisions and has no specific evaluation criteria.

## 16.62 Subdivisions-Applications

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### **16.62.020 Standards and criteria.**

**Findings:** This chapter contains general standards pertaining to Code/Comprehensive Plan conformance, functional layout standards, Low Impact Development (LID), utility/infrastructure provisions, traffic study requirements, and Safe Routes to School (SRTS) consideration for developments.

Baker Prairie, Lee, and Ackerman schools are all less than a mile from this proposal; a pedestrian study for SE 13<sup>th</sup> Avenue was recently conducted, which gave several recommendations pertaining to SRTS. This application was also routed to the Bike and Pedestrian Committee and the Canby School District for comment; no comments were received regarding SRTS at the time of this staff report. All streets contain sidewalks that promote safe routes to schools.

## 16.64 Subdivisions-Design Standards

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### **16.64.010 Streets**

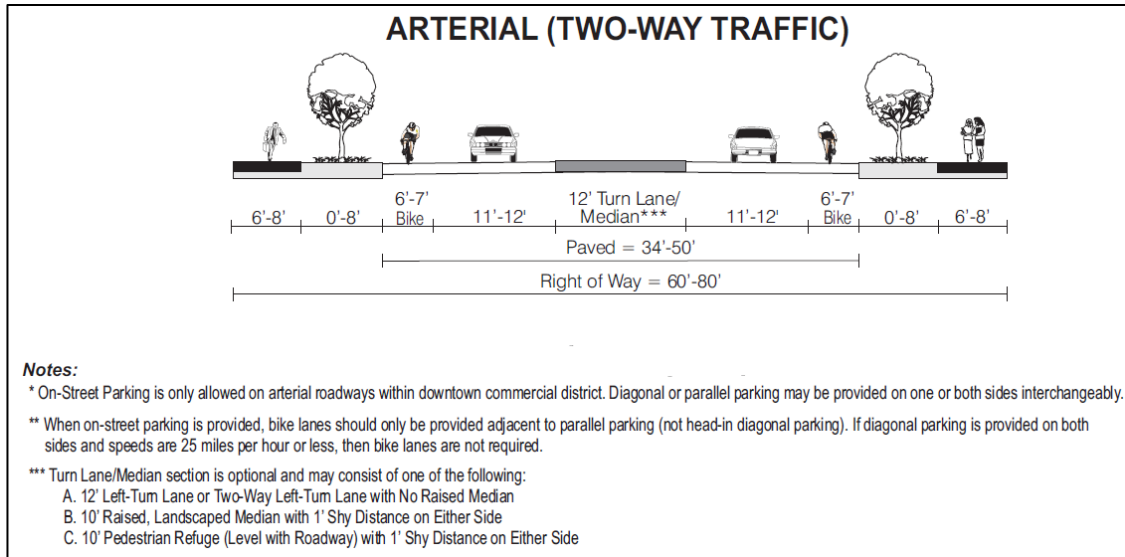
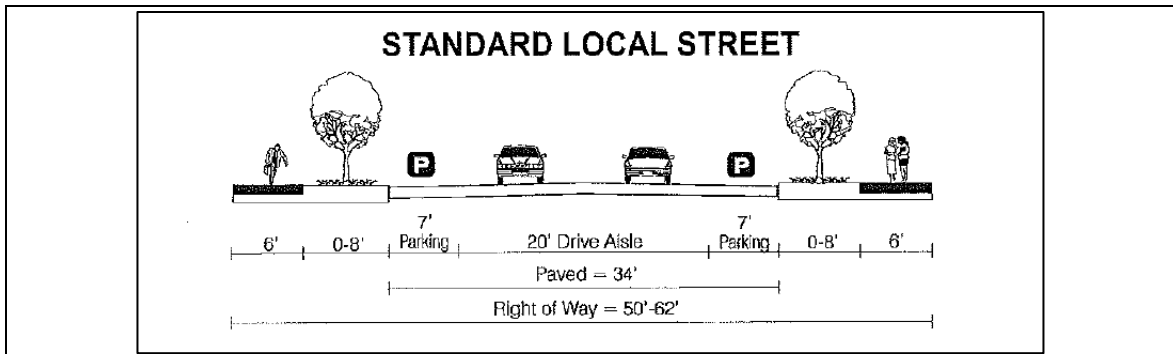
**A. Generally.** *The location, width and grade of streets shall be considered in relation to existing and planned streets, to topographical conditions, to public convenience and safety, and to the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation pattern with intersection angles, grades, tangents, and curves appropriate for the traffic to be carried. Where location is not shown in a development plan, the arrangement of streets shall either:*

- 1.** *Provide for the continuation or appropriate projection of existing principal streets in surrounding areas; or*

**Findings:** The proposed streets shall meet the above standards; see 16.08.150 for discussion on the traffic study and under (3) below on the proposed street cross sections. All streets, except for Larch, will be extended from adjacent developments/street stubs. A bike/pedestrian path is proposed from Larch to SE 13<sup>th</sup>.

- 3.** *Minimum right-of-way and roadway width shall follow the requirements of the Canby Public Works Design Standards;*

**Findings:** Canby's Public Work's Design Standards for roadway and right-of-way widths refer to the standards of the TSP. Figure 7-5 of the TSP calls for the following street cross sections:



This development involves local streets and an arterial street (SE 13<sup>th</sup> Avenue). Sheet 3, Street Profiles, depicts cross sections of the proposed streets.

SE 13<sup>th</sup> Avenue, an arterial street, is proposed to have a roadway width of 22', a 6' curb tight sidewalk, and 2' planter behind the sidewalk. This configuration matches the adjacent Tofte Farms cross section, but the roadway lane width is 3' greater than called for in the TSP above (12' vehicle lane + 7' bike lane=19' required in the TSP above). This leaves less right of way width for sidewalk and planters. See discussion under 16.64.010(M) regarding street trees; curb tight planters as depicted above are not proposed by the applicant. **Condition #xxx** states that the applicant provide a bike lane that matches adjacent bike lane widths and alignments along SE 13<sup>th</sup> Avenue.

Local streets meet the TSP cross sections above. Neighboring developments have 36' local streets with 5 foot sidewalks per the old TSP standards. To meet them most recent TSP local street standard (above), the applicant proposes to transition to 34' streets and 6' sidewalks with 4.5' planter strips, therefore the lots adjacent to the existing eastern streets stubs will have a slightly angled curb line because they will be in the transition area. The applicant's narrative states the following:

*New interior streets are proposed as public streets with a 40 foot wide right of way and 34 feet of pavement. The right-of-way width will match what has been dedicated in neighboring developments so that the finished developments will have similar appearance in their setbacks. The street section in the new development will be slightly narrower than with neighboring*

*developments (from old standard of 36 feet to new standard of 34 feet) however, the sidewalk will be one foot wider on each side (to comply with the new 6-foot standard). The width of the planter strip will therefore remain constant between this subdivision and the neighboring subdivisions. The proposed measures are sufficient to satisfy the requirements in Sec. 16.46.010.A for roadway and pavement width, number of access points, and number of dwelling units.*

**4. Consider opportunities to incrementally extend and connect local streets to provide for safe and convenient bike and pedestrian circulation.**

**Findings:** Refer to the discussion of the pedestrian walkway under 16.64.030(B), street connectivity findings under 16.86.060, the applicant’s narrative under the Project Overview in Section I, and the street layout review above for discussion on local street extension and bike/pedestrian circulation.

**B. Permeable Surfaces.**

**Findings:** This section encourages permeable surfaces; see 16.34.070 for LID discussion.

**D. Alignment.**

**Findings:** All streets align with adjacent streets. Locust and Juniper Streets appear to have a north/south alignment with the existing alignments to the north.

**E. Future Extension of Streets.**

**Findings:** This section encourages extension opportunities for streets adjoining unplatted acreage; a barricade may be required at the dead end street. Streets are planned to extend to the unplatted acreage to the west; staff recommends that dead end street signage/reflectors, as currently used in existing street stubs, be installed for to alert vehicles of dead end streets. Therefore, **Condition #14** is proposed.

**F. Intersection Angles.**

**Findings:** This section calls for street intersections to be at or near 90 degrees; all intersections appear to be 90 degrees

**G. Existing Streets. Whenever existing streets, adjacent to or within a tract, are of inadequate width, dedication of additional right-of-way shall be provided at the time of subdivision.**

**Findings:** All streets are new and will be dedicated at full width.

**H. Half Streets.**

**Findings:** This section discourages half streets; no half streets are proposed. Half of S Juniper Street will be dedicated to the city by the owners of TL 5100 (“McRobbie”). **Condition #34** ensures the city receives this dedication.

**J. Marginal Access Streets.** *Where a subdivision abuts or contains an existing or proposed arterial street, the commission may require marginal access streets, through lots with suitable depth, screen planting contained in a nonaccess reservation along the rear property line, or such other treatment as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic.*

**Findings:** This proposal abuts SE 13<sup>th</sup> Avenue, but the street does not run through the development, but rather is on the periphery. A masonry wall is also proposed along the SE 13<sup>th</sup> Avenue frontage which serves as a separation from SE 13<sup>th</sup> for lots 1-6. In addition, SE 13<sup>th</sup> Place runs parallel to SE 13<sup>th</sup> to serve local traffic; no residential driveways are permitted onto SE 13<sup>th</sup> Avenue.

**L. Street Names.**

**Findings:** Proposed street names are noted on the Tentative Site Plan and will be noted on the final plat.

**M. Planting Easements.** *The Planning Commission may require additional easements for planting street trees or shrubs.*

**Findings:** Sheet 3, Street Profiles, depicts the cross section of local streets and of SE 13<sup>th</sup>. For local streets, a 4.5’ planter is proposed partially in the right of way and partially on private property. **Condition #38** addresses needed planting easements on the final plat and **Condition #42** addresses street tree fees.

For SE 13<sup>th</sup>, a 2 foot right of way area is proposed behind the proposed 6’ sidewalk. The applicant’s Utility Plan, Sheet 2, shows that 13<sup>th</sup> Avenue improvements are proposed to match adjacent Tofte Farms street, sidewalk, and planting area improvements to the east. However, the applicant has indicated that they do not intend to provide the tree “bump outs” as Tofte has, so it is unclear at this time if trees are anticipated along the 13<sup>th</sup> Avenue frontage. In addition, Tofte Farms #4 to the east has landscaping easements; the tentative plan does not show any landscaping easements along SE 13<sup>th</sup> Avenue. The applicant has indicated they may plan to install other landscaping instead of trees. Another option is to pay the city street tree fee and have the city install and maintain appropriate trees along SE 13<sup>th</sup> if trees fit in the 2’ strip. However, it is unlikely that this strip is adequate for trees.

Per above, the Planning Commission may require additional easements from planting street trees or shrubs. Any additional easements would encroach into the yards of lots 1-6. Tofte Farms to the east has wall “bump outs” that accommodate trees without encroaching as much into rear yards along SE 13<sup>th</sup>. The SE 13<sup>th</sup> Avenue cross section as currently proposed only gives 2’ for planting behind the sidewalk because most of the right of way is being used for a 22’

paved vehicle/bike lane area.

The TSP does not require a planter strip/street trees along arterials, but it encourages a 0-8' planting strip. If the applicant proposes landscaping in lieu of trees, then the homeowner's association will be required to maintain and plant the landscaping. If trees are to be attempted and/or if the Planning Commission wants to require planting easements, then the applicant should pay the city street tree fee for establishment of trees along SE 13<sup>th</sup>. Therefore, **Conditions #24 & 42** are proposed.

Staff would like the Planning Commission's feedback on street trees, the proposed SE 13<sup>th</sup> Avenue cross section, and potential landscape easements. Staff has proposed **Conditions #24 & 42**. These conditions should be re-worded/omitted accordingly per the Planning Commission's input. The following options are available:

1. Approve the proposed plans and **Conditions #24 & 42** as is.
2. Require a landscape easement along the SE 13<sup>th</sup> Avenue and require the wall to be moved back to accommodate a planting strip.
3. Require landscape easement "bump outs" similar to Tofte Farms to accommodate trees.
4. Require narrower vehicle travel lanes along SE 13<sup>th</sup> to make more room for a planting strip.

**N. Grades and Curbs.** *Grades shall not exceed seven percent on arterials, ten percent on collector streets, or fifteen percent on any other street. In flat areas allowance shall be made for finished street grades having a minimum slope of .5 percent. Centerline radii of curves shall not be less than three hundred feet on major arterials, two hundred feet on secondary arterials, or one hundred feet on other streets, unless specifically approved by the City, and shall be to an even ten feet.*

**Findings:** The applicant shall submit grading and erosion control plans for approval by Canby Public Works prior to the construction of public improvements; grading shall meet the requirements in the above section. Street curves shall meet the above requirements-**Condition #18** addresses this requirement.

#### **16.64.015 Access**

**Findings:** The above section contains general standards concerning grading, access standards, sidewalk requirements, pedestrian linkage requirements, and TSP compliance standards. These various requirements are addressed with grading conditions (**Condition #25** states that grading shall follow the standards of 16.64.015(B)) and discussion under 16.08, 16.10, 16.46, 16.64, and 16.86.

#### **16.64.020 Blocks.**

##### **B. Sizes**

**Findings:** The above section specifies that block lengths be no larger than 600' and that block depths be sufficient to provide two lot depths. All block lengths are less than 600', but lots 1-6 do not meet the lot depth requirement; lot layouts are built upon previous lot layouts to the east. The Planning Commission may discuss this issue as deemed appropriate.



**16.64.030 Easements**

**Findings:** The above section requires a 12' utility easements along lot street frontages and permits the Planning Commission to require other easements as appropriate. This easement may be combined with other street, sidewalk, or planting easements. **Condition #37** addresses utility easements.

- C. Pedestrian Ways.** *In any block over six hundred feet in length, a pedestrian way or combination pedestrian way and utility easement shall be provided through the middle of the block. ...All pedestrian ways shall address the following standards to provide for the safety of users:*
- 1. Length should be kept to a minimum and normally not in excess of two hundred feet;*
  - 2. Width should be maximized and shall not be below ten feet. For pathways over one hundred feet long, pathway width shall increase above the minimum by one foot for every twenty feet of length;*
  - 3. A minimum of three foot-candles illumination shall be provided. Lighting shall minimize glare on adjacent uses consistent with the outdoor lighting provisions in section 16.43 of this code;*
  - 4. Landscaping, grade differences, and other obstructions should not hinder visibility into the pedestrian way from adjacent streets and properties. Fencing along public pedestrian ways shall conform with the standards in Section 16.08.110;*
  - 5. Surrounding land uses should be designed to provide surveillance opportunities from those uses into the pedestrian way, such as with the placement of windows;*
  - 6. Exits shall be designed to maximize safety of users and traffic on adjacent streets; and*
  - 7. Use of permeable surfacing materials for pedestrian ways and sidewalks is encouraged whenever site and soil conditions make permeable surfacing feasible. Permeable surfacing includes, but is not limited to: paving blocks, turf block, pervious concrete, and porous asphalt. All permeable surfacing shall be designed, constructed, and maintained in accordance with the Canby Public Works Design Standards and the manufacturer's recommendations. Maintenance of permeable surfacing materials located on private property are the responsibility of the property owner.*

**Findings:** The block length from S Ivy to S Lupine will be ~940, so a pedestrian connection is proposed between lots 2 and 3. The pedestrian way's length is ~120 feet and with is 12'. Per (3) above, the pathway shall be lighted. No visual obstructions to the pathway are anticipated; homes may have side windows to provide surveillance opportunities. The pedestrian way exits onto sidewalks for the safety of users. No permeable surfacing of the walkway is proposed.

Street lights may sufficiently light the pathway per (3) above or additional lighting may be necessary; lights are to be in compliance with 16.43. Staff would like the Planning Commission's input on desired lighting for the pathway and/or direction if the height standards and lumen standards of 16.43 should be applicable to pedestrian pathway lighting.

The pathway is identified as "Tract E" on Sheet 1, Tentative Site Plan. City Public Works staff has requested that these pathways not be maintained by city staff. Therefore, **Condition #40** specifies that Tract E shall be dedicated as a public walkway to be owned and maintained by the Dinsmore Estates HOA on the final plat.

**16.64.040 Lots**

**A. Size and Shape.** *The lot size, width, shape and orientation shall be appropriate for the location of the subdivision and for the type of development and use contemplated. To provide for proper site design and prevent the creation of irregularly shaped parcels, the depth of any lot or parcel shall not exceed three times its width (or four times its width in rural areas) unless there is a topographical or environmental constraint or an existing man-made feature such as a railroad line.*

**Findings:** The above standard is met as long as flag lot “poles” are not counted as part of the lot depth.

**C. Lot Frontage.** *All lots shall meet the requirements specified in Division III for frontage on a public street, except that the Planning Commission may allow the creation of flag lots, cul-de-sac lots and other such unique designs upon findings that access and building areas are adequate. Lots that front on more than one major street shall be required to locate motor vehicle accesses on the street with the lower functional classification.*

**Findings:** Two flag lots are proposed, which the Planning Commission may permit as part of the subdivision process. Lots 1-6 front more than one street; per 16.46.030 private driveways are not permitted onto arterial streets.

**D. Double Frontage.** *Double frontage or through lots should be avoided except where essential to provide separation of residential development from traffic arteries or to overcome specific disadvantages of topography and orientation.*

**Findings:** Lots 1-6 are proposed to be double frontage lots; no specific reason for the double frontage lots has been given except that the lot layouts are following the pattern established by Tofte Farms to the east.

**E. Lot Side Lines**

**F. Resubdivision.** *In subdividing tracts into large lots which at some future time are likely to be resubdivided, the location of lot lines and other details of the layout shall be such that resubdivision may readily take place without violating the requirements of these regulations and without interfering with the orderly development of streets. Restriction of building locations in relationship to future street rights-of-way shall be made a matter of record if the commission considers it necessary.*

**Findings:** The above standards call for lot side lines to be at right angles; all lots appear to meet this standard. The large flag lots cannot be subdivided because they would not meet minimum R-1 lot sizes. No future street alignments are likely to be proposed.

**I. Flag Lots or Panhandle-shaped Lots.** *The commission may allow the creation of flag lots provided that the following standards are met:*

- 1.** *Not more than one flag lot shall be created to the rear of any conventional lot and having frontage on the same street unless it is found that access will be adequate and that multiple flag lots are the only reasonable method to allow for development of the site. Every flag lot shall have access to a public street.*

2. The access strip is to be a minimum of twenty feet in width and shall be paved for its full width...Access strips not less than ten feet in width may be permitted where two such drives abut and are provided with reciprocal easements for use...
4. Design and locations of buildings on flag lots shall be such that normal traffic will have sufficient area to turn around, rather than necessitating backing motions down the access strip. The commission may establish special setback requirements at the time of approving the creation of flag lots.
6. The area of a panhandle shaped or flag lot shall be considered to be the rear or buildable portion of the lot and shall not include the driveway or access strip.
7. For the purposes of defining setbacks, flag lots shall have three side yards and one rear yard. The rear yard may be placed on any side of the main dwelling.

**Findings:** Both of the two proposed flag lots are to the rear of one conventional lot. A 10' access strip is proposed for each flag lot; the applicant's narrative states that reciprocal easements are proposed for driveways and utility accesses; **Condition #41** requires documentation of this reciprocal easement. **Condition #55** states that the driveways of lots 17 and 19 be paved and **Condition #56** addresses building orientation and turn around design.

*J. Designation of Lots as 'Infill Home' Sites. The Planning Commission may require that homes built on one or more lots adjacent to existing development be subject to any or all of the requirements of 16.21.050 - Infill Homes...*

**Findings:** See discussion under 16.21.

**16.64.060 Grading of building sites.**

The commission may impose bonding requirements, similar to those described in section 16.64.070, for the purpose of ensuring that grading work will create no public hazard nor endanger public facilities where either steep slopes or unstable soil conditions are known to exist.

**Findings:** Staff does not propose a grading bond because the site has flat topography with no steep slopes with little possibility for issues.

**16.64.070 Improvements**

**Findings:** The above standards state that public improvements shall be made by the land divider, that the city shall approve of and be notified of improvement work, the land divider shall pay all applicable fees, that the city may require changes to address issues that arise during construction, that underground utilities be installed prior to street surfacing, and that utility stubs be placed to eliminate the need to disturb street surfacing when connections are made.

Per above, the applicant shall submit engineered plans of all public improvements, including: curbing and sidewalks; planter strips; streets; street lighting; street signage; street striping; park improvements; storm; sewer; electric; water/fire hydrants; cable; lot, street and perimeter monumentation; underground telephone lines; CATV lines; and natural gas lines (**Conditions #2 & 3**).

Note: Installation of sidewalks is customarily not required until homes are built on their respective lots and is permitted by 16.64.070(G); curbing is normally installed by the developer. **Condition #57** states that all sidewalks and planters fronting house lots shall be installed on their respective lots at the time of home construction.

Prior to the start of any public improvement work, the applicant must schedule a pre-construction conference with the city and obtain sign-off from the City Engineer applicable Canby Public Works personnel, Canby Planning, and from other applicable agencies (**Conditions #2 & 3**).

Sanitary system and storm drainage plans shall be approved by DEQ prior to the construction of public improvements (**Conditions #19 & 23**).

All public improvements must be installed prior to the recordation of the final plat. Alternatively, if the applicant wishes to forgo construction of public improvements until after the recordation of the final plat, then the applicant shall pay a bond in accordance with 16.64.070(N-P) to the city as assurance (**Condition #7**).

A separate final plat application is required for review and approval prior to execution and filing of record. Prior to the recordation of the final plat, the city will route the plat to applicable agencies for comment; the city will not approve the final plat until the requirements of all city departments and agencies are met (**Condition #27**).

**5.** *A map showing public improvements "as built" shall be filed with the city engineer within sixty days of the completion of the improvements.*

**Findings:** **Condition #30** states that all "as built" of public improvements, including: curbing and sidewalks; planter strips; streets; street lighting; street signage; street striping; park improvements; storm; sewer; electric; water/fire hydrants; cable; lot, street and perimeter monumentation; underground telephone lines; CATV lines; and natural gas lines, shall be filed at Canby Public Works and Canby Planning within sixty days of the completion of improvements and prior to the recordation of the final plat.

**B.** *The following improvements shall be installed at the expense of the subdivider unless specifically exempted by the Planning Commission:*

- 1.** *Streets, including drainage and street trees;*
- 2.** *Complete sanitary sewer system;*
- 3.** *Water distribution lines and fire hydrants;*
- 4.** *Sidewalks and any special pedestrian ways;*
- 5.** *Street name and traffic-control signs;*
- 6.** *Streetlights;*
- 7.** *Lot, street and perimeter monumentation;*
- 8.** *Underground power lines and related facilities;*
- 9.** *Underground telephone lines, CATV lines, natural gas lines, and related facilities;*

**Findings:** See discussion above; monumentation requirements are addressed in **Conditions #43-46**. All power lines are proposed to be underground.

11. *If fencing is being proposed as part of subdivision development, the subdivider shall be responsible for installing fencing along public streets and pedestrian ways. Fencing shall be constructed in accordance with the standards in Section 16.08.10*

**Findings:** See discussion under 16.08.110.

**C. Streets.**

1. *All streets, including alleys, within the subdivision and streets adjoining, but only partially within the subdivision shall be improved.*

**Findings:** All new streets are proposed at full width. The portion of the development that abuts SE 13<sup>th</sup> Avenue shall be improved at half width, including roadway, sidewalk, and planter improvements. Sheet 3 depicts the cross section of SE 13<sup>th</sup> improvements. The applicant's narrative states the following:

*SE 13th Avenue is a designated arterial. Ten feet of additional right-of-way dedication is proposed along the SE 13<sup>th</sup> Avenue in order to bring the south ½ right-of-way width to 30 feet from centerline, Arterials are required to have a right-of-way width of 60-80 feet and the dedication will bring the street into conformance with this right-of-way standard and will make the right-of-way consistent with Tofte Farms 3, Tofte Farms and Tofte Farms 2 subdivisions located farther east. The southern ½ street width is proposed as 22 feet from the center of the right-of-way, the same width as provided along the frontage of Tofte Farms, which will provide for a full street width of 44 feet, consistent with the City's arterial street standard of 34-50 feet paved. A six-foot wide curb-tight sidewalk will also be provided that will be consistent with the existing curb-tight sidewalks already located along the north and south sides of this segment of SE 13<sup>th</sup> Avenue.*

The above standards also specify that streets be constructed to city standards, encourages LID construction alternatives, and states that monuments be reestablished and protected in monument boxes at every street intersection and all points of curvature and points of tangency of street centerlines as required by ORS statutes. See discussion of stormwater infrastructure under (D) below. **Condition #45** states that monuments be reestablished and protected in monument boxes at every street intersection and all points of curvature and points of tangency of street centerlines as required by Oregon Revised Statutes Chapter 92.

3. *Street Trees. Street trees shall be provided consistent with the provisions of Chapter 12.32.*

**Findings:** See discussion under 16.64 010(M).

4. *Prior to city approval of the final subdivision plat, all perimeter and back lot line monumentation shall be installed and the installation of the front lot monumentation (along and within street rights-of-way) shall be guaranteed. Any monuments destroyed during improvement installation shall be replaced at the developer's expense.*

**Findings:** Monumentation requirements are addressed in **Conditions #43-46**; per above, monumentation shall be installed and the installation of the front lot monumentation (along and within street rights-of-way) shall be guaranteed. Any monuments destroyed during improvement installation shall be replaced at the developer's expense.

5. *If any lot abuts a street right-of-way that does not conform to the design specifications of this ordinance, the owner may be required to dedicate up to one-half of the total right-of-way width required by this ordinance.*

**Findings:** See discussion of 13<sup>th</sup> Avenue improvements above under 16.64.070(C)(5).

6. *The proposed use shall not impose an undue burden on the transportation system. The City may require the applicant to provide adequate information, such as a traffic impact study, to demonstrate the level of impact to the surrounding street system. The developer shall be required to mitigate impacts attributable to the project.*

**Findings:** See the traffic study discussion under 16.08.150.

8. *Dedication of land for streets, transit facilities, sidewalks, bikeways, paths, or access ways shall be required where the existing transportation system will be impacted by or is inadequate to handle the additional burden caused by the proposed use.*
9. *Improvements such as paving, curbing, installation or contribution to traffic signals, construction of sidewalks, bikeways, access ways, paths, or streets that serve the proposed use where the existing transportation system may be burdened by the proposed use.*

**Findings:** See improvement discussion under 16.64.070. **Condition #40** addresses dedication of the pedestrian walkway.

**D. Surface Drainage and Storm Sewer System.**

**Findings:** The above sections require sewer and storm drainage facilities and encourages LID stormwater management with methods such as pervious pavement, green roofs, bioswales, etc. All storm drainage must be contained on-site and may not be connected into any existing city storm drainage infrastructure. Sanitary sewer plans shall be submitted at the pre-construction conference and approved by DEQ and the city prior to installation (**Conditions #2, 3, & 19**). This section also requires submittal of a stormwater management report, which was submitted by the applicant and is part of the Planning Commission packet. The applicant's narrative states the following pertaining to stormwater management:

*Storm water from new roofs will be injected into the ground using infiltration chambers, as is common with most single family housing in Canby. Stormwater from the streets will be directed to a water quality treatment facility located at the southern end of the site as shown on the plans and maps included with the application. Storm water will be conveyed from the water quality treatment facility into existing drywells that were installed during Phase 1 of Dinsmore Estates and intended to accommodate the street runoff from Phases 1 and 2. The water quality treatment facility is private and will be owned and maintained by the Dinsmore Estates HOA. The drywells in Phase 1 of Dinsmore Estates are owned and maintained by the City of Canby.*

*Storm water will be managed through a combination of public and private facilities. LID Approaches such as green roofs, pervious pavements and roadside swale often are not good fits*

for residential subdivisions. Green roofs tend to work best of flatter roofs and are not as good of a fit for the pitched roof architecture seen in residential subdivisions today. Pervious pavements tend to function better in mature subdivisions where there isn't a lot of ground disturbing activity taking place. The home building, landscaping, and fence building activities common in new subdivisions tend to deposit soil and other landscaping material onto the surface of the roadway, often clogging it, and preventing it from functioning as intended. Once material works its way down into the pores of the porous pavement, it becomes nearly sealed and it functions like standard pavement. Roadside swales can be problematic in residential subdivisions as the swales make it difficult to get out of cars parked against the curb line, as the planter strip is often soggy or under a few inches of water.

LID approaches proposed in this subdivision include infiltration chambers installed for roof runoff throughout the development. Each home in the subdivision will have its roof runoff directed to an infiltration chamber system buried beneath the yard of the lot. This will spread out the roof runoff across the site. Runoff from the street will be collected in catch basins and piped to an existing LID water quality treatment swale located along the southern property line of this subdivision and the northern property line of Dinsmore Estates. After the roadway storm water runoff is treated by this facility it will be conveyed through an existing pipe system to drywells in SE 16th Avenue for underground injection.

**E. Sanitary Sewers.**

**F. Water System.**

**G. Sidewalks.** Sidewalks shall be required on both sides of a public street and in any special pedestrian way within the subdivision, except that in the case of identified arterials, or industrial districts, the commission may approve a subdivision without sidewalks if alternative pedestrian routes are available. Sidewalk construction may be postponed until the actual construction of buildings on the lots, provided that adequate assurance is given that such sidewalks will be installed.

**H. Bicycle Routes.** If appropriate to the extension of a system of bicycle routes, existing or planned, the commission may require the installation of bicycle lanes within streets or the construction of separate bicycle paths.

**I. Street Name Signs.** Street name signs shall be installed at all intersections according to city standards or deposit made with the city of an amount equal to the cost of installation.

**J. Street Lighting System.** Streetlights shall be required to the satisfaction of the manager of the Canby Utility Board.

**Findings:**

The above standards require sewer, water, sidewalk, bike routes, street signage and street lighting be installed by the applicant. **Condition #16** requires striping of a bike lane along SE 13<sup>th</sup> to match adjacent bike lanes to the east.

The applicant shall be responsible for installing all required street signage, including street name signs, at the time of construction and installation of public improvements. Staff would prefer not to coordinate a street sign deposit arrangement with the applicant for administrative logistics reasons. CUB must approve all street lighting- **Conditions #2 &3** cover this.

**K. Other Improvements.**

1. *Curb cuts and driveway installation are not required of the subdivider but, if installed, shall be according to city standards.*

**Findings:** No curb cuts or driveways are proposed or shown on the submitted plans. **Condition #6** states that the applicant must obtain a city Street Opening Permit if the applicant wishes to install curb cuts and driveways so that the city may verify compliance with city access spacing standards. Otherwise, driveway spacing will be verified for compliance during the building permit process.

2. *Street tree planting is required of the subdivider and shall be according to city requirements.*

**Findings:** **Condition #42** addresses street tree requirements. See discussion 16.64.010(M).

3. *The developer shall make necessary arrangements with utility companies or other persons or corporations affected, 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, unless overhead installation has been specifically approved by the commission because of unique circumstances at the site.*

**Findings:** The applicant stated that all utilities will be underground.

**M. Survey Accuracy and Requirements.**

**Findings:** Monumentation requirements are addressed in **Conditions #46-46**. The City Engineer or County surveyor shall verify that the standards in this section are met prior to the recordation of the subdivision plat.

**N. Agreement for Improvements.**

**O. Bond.**

**P. Guarantee.**

**Findings:** The above sections state that the applicant shall install all public improvements prior to final plat approval or obtain assurances/bonds to cover the amount of required improvements should the city have to make to improvements.

The applicant shall be responsible for installing all public improvements prior to the recordation of the final plat. No public improvement work shall be commenced until it is approved by all applicable parties. Alternatively, **Condition #7** states that if the applicant wishes to forgo construction of public improvements until after the recordation of the final plat, then the applicant shall file an agreement for improvements, pay a bond, and guarantee the improvement work in accordance with 16.64.070(N-P) above.

The applicant must guarantee all public improvement work with a maintenance bond in accordance with (P) above-see **Condition #9**.



**R.** No fence/wall shall be constructed throughout a subdivision where the effect or purpose is to wall said project off from the rest of the community unless reviewed and approved by the Planning Commission.

**Findings:** See discussion under 16.08.110.

## *16.68 Subdivision Final Procedures and Recordation*

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### **16.68.010 Responsibilities of applicant.**

Following the action of the city in approving or conditionally approving a tentative plat for a subdivision, the applicant shall be responsible for the completion of all required improvements, or the posting of adequate assurances in lieu thereof, to the satisfaction of the city, prior to transfer of title of any of the lots involved.

**Findings:** **Condition #7** addresses the above requirement.

### **16.68.020 Submittal of subdivision plat.**

**Findings:** This section specifies that the applicant shall record the subdivision plat at Clackamas County within one year from city approval and submit a copy of the approval plat to the city. If the applicant wishes to proceed with the subdivision after the expiration of the one year period, the city may grant an extension of not more than six months; the request must be filed before the end of the one-year period. **Condition #31** addresses this requirement.

### **16.68.030 Information required on plat.**

**Findings:** **Condition #29** states that the final plat must contain the information required in 16.68.030 above, including a copy of all deed restrictions referenced in the plat or prepared to be recorded with the plat.

### **16.68.040 Information to accompany plat.**

The following data shall accompany the final plat:

**A.** A preliminary title report issued by a title insurance company in the name of the owner of the land, showing all parties whose consent is necessary and their interest in the premises;

**Findings:** The county ensures all parties whose consent is necessary sign the final plat.

**B.** Sheets and drawings showing the following:

1. Traverse data including the coordinates of the boundary of the subdivision and ties to section corners and donation land claim corners, and showing the error of closing, if any,
2. The computation of distances, angles, and courses shown on the plat,
3. Ties to existing monuments, proposed monuments, adjacent subdivisions, street corners and state highway stationing;

**Findings:** Monumentation requirements are addressed in **Conditions #43-46**. The final plat must contain the information required in 16.68.040(B) above (**Condition #29**).

**C.** A copy of any deed restrictions applicable to the subdivision;

**Findings:** **Condition #33** addresses the above.

**D.** A copy of any dedication requiring separate documents;

**Findings:** **Condition #34** regarding half-street dedication of Juniper addresses the above.

- E.** A certificate by the city engineer that the subdivider has complied with the requirements for bonding or otherwise assured completion of required improvements; and
- F.** A certificate of the subdivider of the total cost or estimate of the total cost for the development of the subdivision in accordance with the provisions and requirements of this title or any other ordinance or regulation of the city relating to subdivision development. This certificate is to be accompanied by a final bid estimate of the subdivider's contractor, if there is a contractor engaged to perform the work, and the certificate of the total cost estimate must be first approved by the city engineer.

**Findings:** If the applicant chooses to pay a bond for some or all of the required public improvements, then a certificate from the designated city engineer for this proposal shall be obtained that states the requirements in (E) and (F) above. (**Condition #8**)

**16.68.050 Technical plat review.**

- A.** Upon receipt by the city, the plat and other data shall be reviewed to determine that the subdivision, as shown, is substantially the same as it appeared on the approved tentative plat and that there has been compliance with provisions of the law and of these regulations.
- B.** The City may make such checks in the field as are desirable to verify that the plat is sufficiently correct on the ground, and their representatives may enter the property for this purpose.
- C.** If the City determines that full conformity has not been made, the City shall advise the subdivider of the changes or additions that must be made and shall afford the subdivider an opportunity to make the changes or additions.

**Findings:** **Condition #29** addresses the above requirements.

**16.68.060 Planning Commission approval.**

Approval of the plat shall be indicated by the signatures of the Planning Director or their designee. After the plat has been approved by all city and county officials, one reproducible copy of all data (plat face, dedications, certificates, approvals), one copy of all plat data in a "dxf" digital format, and one copy of recorded restrictive and protective covenants shall be returned to the City Planner.

**16.68.070 Filing of final plat.**

Approval of the plat by the city, as provided by this division, shall be conditioned on its prompt recording. The subdivider shall, without delay, submit the plat to the county assessor and the county governing body for signatures, as required by Oregon Revised Statutes Chapter 92. The plat shall be prepared as provided by Oregon Revised Statutes Chapter 92. Approval of the final plat shall be null and void if the plat is not recorded within six months of the date of the signature of the Planning Director.

**Findings:** The city does not need a “dxf” format of the final plat, **Condition #33** states that the applicant shall submit a copy of the final plat to the city. **Condition #32** states that the applicant shall record the final plat at the county within 6 months after the final plat is approved by the city.

## *16.86 Street Alignments*

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**16.86.020 General provisions.**

- A.** The Transportation System Plan shall be used to determine which streets are to be arterials, collectors, and neighborhood connectors. All new streets are required to comply with the roadway design standards provided in Chapter 7 of the TSP. The city may require right-of-way dedication and/or special setbacks as necessary to ensure adequate right-of-way is available to accommodate future road widening projects identified in the TSP.
- B.** Right-of-way widths and cross section standards for new streets shall be in conformance with the Canby Transportation System Plan and the Public Works Design Standards.
- C.** The Public Works Director shall be responsible for establishing and updating appropriate alignments for all streets.

**Findings:** The city engineer assigned to review this proposal is reviewing street alignments. See 16.64.010(A)(3) for TSP compliance discussion.

- F.** Bikeways and bike lanes shall be provided consistent with the Bicycle Plan element of the Transportation System Plan.
- G.** Pedestrian facilities shall be provided consistent with the Pedestrian Plan element of the Transportation System Plan.

**Findings:** See discussion on bicycle lanes under 16.64.070(H). Additionally, the traffic study did not recommend any bike and pedestrian circulation improvements as mitigation for this project. A 6’ sidewalk is proposed along the project’s 13<sup>th</sup> Avenue street frontage.

**16.86.060 Street Connectivity**

When developing the street network in Canby, the emphasis should be upon a connected continuous grid pattern of local, collector, and arterial streets rather than discontinuous curvilinear streets and cul-de-sacs. Deviation from this pattern of connected streets shall only be permitted in cases of extreme topographical challenges including excessive slopes (35 percent plus), hazard areas, steep drainage-ways and wetlands. In such cases, deviations may be allowed but the connected continuous pattern must be reestablished once the topographic challenge is passed.

**Findings:** Local streets are being extended from adjacent streets where possible. The street network is a grid where possible, although not all blocks are the same length and width. No cul-de-sacs or curvilinear streets are proposed. Dead end streets are anticipated to be extended when adjacent properties develop. A bike/pedestrian connection is proposed to break up the long block length from S Ivy to S Lupine.

## *16.89 Application and Review Procedures*

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**Findings:** This application is being processed in accordance with Chapter 16.89. Notice of the public hearing was mailed to owners and residents of lots within 500 feet of the subject development and to applicable agencies. Notice of the meeting was posted at the Development Services Building and City Hall and was published in the *Canby Herald*. This chapter requires a Type III process for subdivisions. A neighborhood meeting is required and was held; minutes and a sign-in sheet from the meeting are part of the Planning Commission packet. In addition, a pre-application conference was held and the minutes of the pre-application meeting are part of the Planning Commission packet.

## *16.120 Parks, Open Space, and Recreation Land-General Provision*

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### **16.120.020 Minimum standard for park, open space and recreation land**

**Findings:** Residential construction will be charged park SDCs in lieu of dedicating park land.

V.

#### **PUBLIC TESTIMONY**

Notice of this application and opportunity to provide comment was mailed to owners and residents of lots within 500 feet of the subject properties and to all applicable public agencies. All citizen and agency comments/written testimony will be presented to the Planning Commission.

VI.

#### **CONDITIONS OF APPROVAL**

Staff concludes, with conditions, that the application will meet the requirements for approval. Staff has concluded the following conditions of approval:

1. Approval of this application is based on submitted application materials and public testimony. Approval is strictly limited to the submitted proposal and is not extended to any other development of the properties. Any modification of development plans not in conformance with the approval of application file #SUB 14-02, including all conditions of approval, shall first require an approved modification in conformance with the relevant sections of this *Canby Land Development and Planning Ordinance*. Approval of this application is based on the following:
  - a. Application form
  - b. Application narrative
  - c. Traffic Impact Study dated 3.20.14
  - d. Neighborhood meeting notice and notes
  - e. Storm drainage report dated November 5, 2013

- f. Sheet 1 Tentative Site Plan dated February 2014, revised 4/10/14
- g. Sheet 2 Utility Plan dated February 2014, revised 4/10/14
- h. Sheet 3 Street Profiles dated February 2014, revised 4/10/14
- i. Sheet 4 Topographic Survey dated February 2008
- j. Other items submitted for SUB 14-02 application

**Public Improvement Conditions:**

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**General Public Improvement Conditions:**

- 2. Prior to the start of any public improvement work, the applicant must schedule a pre-construction conference with the city and obtain construction plan sign-off from:
  - a. City of Canby Planning
  - b. City of Canby City Engineer
  - c. Canby Public Works
  - d. Canby Fire District
  - e. Canby Utility
  - f. Clackamas County
  - g. Northwest Natural Gas
  - h. Canby Telcom
  - i. Wave Broadband
  - j. Oregon Department of Environmental Quality (DEQ)
- 3. The applicant shall submit engineered plans of all public improvements for review at the pre-construction conference, including:
  - a. Curbing, sidewalk, and planter plans
  - b. Streets plans
  - c. Street lighting plans
  - d. Street signage plans
  - e. Street striping plans
  - f. Stormwater system plans
  - g. Sewer system plans
  - h. Electric plans
  - i. Water/fire hydrants plans
  - j. Cable/broadband plans
  - k. Underground telephone plans
  - l. CATV plans
  - m. Natural gas plans
- 4. The applicant shall address all comments made in the city engineer's memorandum dated April 14, 2014.
- 5. The development shall comply with all applicable City of Canby Public Works Design Standards.
- 6. The applicant must obtain a city Street Opening Permit if the applicant wishes to install curb cuts and driveways during the construction of public improvements so that the city may verify compliance with city access spacing standards.

**Fees/Assurances:**

- 7. All public improvements must be installed prior to the recordation of the final plat. If the applicant wishes to forgo construction of public improvements until after the recordation of the final plat, then the applicant shall pay a bond

in accordance with 16.64.070(N-P) to the city as assurance for later installation.

8. If the applicant chooses to pay a bond for some or all of the required public improvements, then the applicant shall obtain a certificate from the city engineer that states:
  - a. The applicant has complied with the requirements for bonding or otherwise assured completion of required public improvements.
  - b. The total cost or estimate of the total cost for the development of the subdivision. This is to be accompanied by a final bid estimate of the subdivider's contractor, if there is a contractor engaged to perform the work, and the certificate of the total cost estimate must be first approved by the city engineer.
9. The applicant must guarantee all public improvement work with a maintenance bond in accordance with 16.64.070(P).
10. The applicant must pay the city Master Fee authorized engineering plan review fee equal to 0.4% of public improvement costs prior to the construction of public improvements.

**Streets, Signage & Striping:**

11. A roadway striping plan shall be submitted by the applicant and shall be approved by city engineer and by the Public Works street department prior to the construction of public improvements.
12. A roadway signage plan shall be submitted by the applicant and shall be approved by the city engineer and by the Public Works street department prior to the construction of public improvements.
13. Per the TIS findings, the roadway signage and/or striping plan shall show no parking signs and/or painted curbs within 20-feet of intersections.
14. The roadway signage plan shall show signage/reflectors, similar to adjacent developments, at the termination of dead end streets.
15. Per the city engineer's memorandum dated 4.14.14, the roadway signage plan shall delineate the westbound turning radius at the McRobbie driveway with 4" traffic buttons to prevent motorists from entering the property.
16. The roadway striping plan shall show bike lane striping along SE 13<sup>th</sup> Avenue that matches the bike lane width and alignment of Tofte Farms to the east.
17. The applicant shall be responsible for installing all required street signage and striping at the time of construction of public improvements.
18. The city engineer shall verify that street curves shall meet the requirements of 16.64.101(N).

**Sewer:**

19. The applicant shall submit documentation of DEQ approval of sewer plans prior to the construction of public improvements.
20. Sewer plans shall address the comments made in the city engineer's memorandum dated 4.14.14.

**Stormwater:**

21. Stormwater systems shall be designed in compliance with the Canby Public Works Design Standards.
22. Stormwater plans shall address the comments made in the city engineer's

memorandum dated 4.14.14.

23. The applicant shall submit documentation of DEQ approval of storm drainage plans prior to the construction of public improvements.

**Landscaping**

24. If the applicant proposes landscaping instead of trees along SE 13<sup>th</sup> Avenue, then the Dinsmore Estates Homeowner’s Association will be required to plant and maintain the landscaping. The applicant shall submit appropriate CC&R documentation of HOA landscaping responsibilities. Landscaping shall be installed prior to final plat approval.

**Grading/Erosion Control:**

25. The applicant shall submit grading and erosion control plans for approval by Canby Public Works prior to the construction of public improvements. Grading shall follow the guidelines in 16.64.015.
26. The applicant shall grade all areas of the site, including the proposed lots, to a height within one foot of the planned house foundation ground elevation.

**Final plat conditions:**

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**General Final Plat Conditions:**

27. The applicant shall apply for a final plat at the city and pay any applicable city fees to gain approval of the final subdivision plat. Prior to the recordation of the final plat at Clackamas County, it must be approved by the city and all other applicable agencies. The city will distribute the final plat to applicable agencies for comment prior to signing off on the final plat. Applicable agencies may include:
  - a. City of Canby Planning
  - b. City Engineer
  - c. Canby Public Works
  - d. Canby Fire District
  - e. Canby Utility
  - f. Clackamas County
  - g. Northwest Natural Gas
  - h. Canby Telcom
  - i. Wave Broadband
  - j. Oregon Department of Environmental Quality (DEQ)
28. All public improvements or assurances shall be made prior to the approval of the final plat.
29. The final plat must contain the information required in 16.68.030, 16.68.040(B), and 16.68.050. The city engineer or county surveyor shall verify that these standards are met prior to the recordation of the subdivision plat.
30. All “as built” of public improvements, including: curbing and sidewalks; planter strips; streets; street lighting; street signage; street striping; storm; sewer; electric; water/fire hydrants; cable; underground telephone lines; CATV lines; and natural gas lines, shall be filed at the Canby Public Works and the Canby Planning Department within sixty days of the completion of improvements and prior to the recordation of the final plat.
31. Clackamas County Surveying reviews pending subdivision plat documents for Oregon Statutes and county requirements. The subdivision plat must be recorded at

Clackamas County within one year of approval of the tentative plat or the applicant must request that the Planning Director approve a six-month extension for recordation of the approved final plat.

32. The applicant shall record the final plat at Clackamas County within 6 months after the final plat is approved by the city.
33. The applicant or county shall provide the city with a copy of the final plat in a timely manner after is recorded at Clackamas County, including any CC&Rs recorded in conjunction with the final plat.

#### **Dedications**

34. The western half of S. Juniper Street shall be dedicated to the city and all associated documentation shall be submitted to the city prior to recordation of the final plat.

#### **Fences/Walls:**

35. The Dinsmore Estates Homeowner's Association CC&Rs shall state that the HOA is responsible for maintenance of the wall along SE 13<sup>th</sup> Avenue.
36. Lots 2 and 3 abutting the pedestrian pathway are subject to the fencing standards of lots abutting pathways in 16.08.110(H). The CC&Rs shall also specify that lots 2 and 3 are subject to the fence standards of 16.08.110(H).

#### **Easements**

37. A 12 foot utility easement along all of the lot's street frontages shall be noted on the final plat. This easement may be combined with other easements and shall be measured from the property boundary.
38. These areas where sidewalks and planters are partially located on private property shall be noted with a sidewalk easement on the final plat. This easement may be combined with other easements and shall be measured from the property boundary.
39. The final plat shall depict an easement for the wall along SE 13<sup>th</sup> Avenue and shall contain a note that the wall is owned and maintained by the Dinsmore Estates Homeowner's Association.
40. The final plat shall indicate that "Tract E" shall be dedicated as a public walkway and noted that it is to be owned and maintained by the Dinsmore Estates HOA.
41. Reciprocal access easements for lots 17 and 19 shall be identified on the final plat and associated documentation shall be submitted to the city prior to recordation of the final plat.

#### **Street Trees**

42. The applicant shall pay the city fee for city establishment of street trees per the Tree Regulation standards in Chapter 12.32 of the Canby Municipal Code. If trees are proposed along SE 13<sup>th</sup> Avenue, then the applicant shall also pay the city street tree fee for establishment of trees along SE 13th. All street tree fees shall be paid prior to the recordation of the final plat.

#### **Monumentation/Survey Accuracy Conditions**

43. Lot and perimeter monumentation shall be approved by the county surveyor and/or the city engineer.
44. The county surveyor and/or the city engineer shall verify that the standards of



16.64.070(M) are met prior to the recordation of the final plat.

45. Monuments shall be reestablished and protected in monument boxes at every street intersection and all points of curvature and points of tangency of street centerlines as required by Oregon Revised Statutes Chapter 92. The city or county surveyor shall verify compliance with this condition prior to the recordation of the final plat.
46. Installation of the front lot monumentation (along and within street rights-of-way) shall be guaranteed. Any monuments destroyed during improvement installation shall be replaced at the developer's expense. The city engineer or county surveyor shall confirm required monuments prior to the recordation of the subdivision plat.

#### **Residential Building Permits Conditions:**

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47. Construction of all required public improvements and recordation of the final subdivision plat must be completed prior to the construction of any homes.
48. The homebuilder shall apply for a City of Canby Site Plan Permit and County Building Permit for each home.
49. The homebuilder shall apply for a City of Canby Erosion Control Permit.
50. All residential construction shall be in accordance with applicable Public Works Design Standards.
51. On-site stormwater management shall be designed in compliance with the Canby Public Works Design Standards.
52. Prior to the issuance of a City Site Plan Review permit, final construction plans must be approved by the city.
53. Clackamas County Building Codes Division will provide structural, electrical, plumbing, and mechanical plan review and inspection services for home construction. The applicable county building permits are required prior to construction of each home.
54. Per the Canby Public Works Design Standards, minimum residential driveway widths at the inside edge of the sidewalk shall be 12 feet and the maximum residential driveways widths shall be 24 feet with an allowed exception for 28 feet for a home with 3 or more garages.
55. The access strips for lots 17 and 19 shall be paved.
56. Design and locations of residences on lots 17 and 19 shall be such that normal traffic will have sufficient area to turn around, rather than necessitating backing motions down the access strip.
57. Sidewalks and planters shall be constructed by the homebuilder as shown on the approved site plans.

## VII. **Decision**


Based on the application submitted and the facts, findings, and conclusions of this report, staff recommends that the Planning Commission **approve** Subdivision File #SUB 14-02 pursuant to the Conditions of Approval presented in this Staff Report in Section VI.

**Sample motion:** I move to approve Subdivision File #SUB 14-02 pursuant to the Conditions of Approval presented in this Staff Report in Section VI.

April 14, 2014

**MEMORANDUM**

**TO:** Ms. Angie Lehnert  
City of Canby

**FROM:** Hassan Ibrahim, P.E.   
Curran-McLeod, Inc.

**RE: CITY OF CANBY  
DINSMORE ESTATES 2 (SUB 14-02)**

We have reviewed the submitted preliminary plans on the above mentioned project and have the following comments:

1. SE 13<sup>th</sup> Avenue is a City arterial street, existing right-of-way width is adequate (60' wide). Half street improvements matching the existing width will be required along the entire site frontage with 10:1 asphalt tapers to match existing asphalt surface. The improvements will include curbs, sidewalks, street lights and utilities in conformance with section 2.207 of the City of Canby Public Works Design Standards dated June 2012.
2. All interior streets shall be designed to local street standards with 34-foot paved width, curbs, planters, 6' sidewalks, streets lights and utilities. Sidewalk and PUE shall be wide enough to encompass both facilities.
3. Street trees shall be selected from the City approved tree list. The street tree ordinance requires the developer to pay the City \$200 per tree for installation and one (1) year period maintenance, the property owners will take over all of the responsibilities after that date.
4. All street names and traffic signs shall be installed by the developer as part of this development.
5. Due to the temporary configuration at the intersection of SE 15<sup>th</sup> Place S. Juniper Street. We recommend the westbound turning radius at the McRobbie driveway be delineated with 4" traffic buttons to prevent motorists from mistakenly entering private property.

Ms. Angie Lehnert  
April 14, 2014  
Page 2

6. We recommend two individual sanitary sewer laterals serving lots 17 and 19 or the combined sewer line shall be private.
7. All sanitary sewer laterals shall have cleanouts located in the sidewalk to differentiate between the public and private sections.
8. Pursuant to ORS 223.304(4), System Development Charges (SDC) cost reimbursements shall be paid for the offsite sanitary sewer segment on SE 13<sup>th</sup> Avenue.
9. Private storm drainage discharge shall be disposed on-site, the design methodology shall be in conformance with the City of Canby, June 2012 Public Works Standards.
10. The maintenance of the existing pretreatment facility shall continue to be the sole responsibility of Dinsmore Estates Home Owner's Association if it is used for additional runoff treatment from Dinsmore Estates 2.
11. Storm drainage analysis will be required to demonstrate how the storm runoff generated from the new impervious surfaces will be disposed. The storm drainage report shall be in conformance with the requirements as stated in Chapter 4 of the City of Canby Public Works Design Standards dated June 2012.

Should you have any questions or need additional information, please let me know.

**CITY OF CANBY –COMMENT FORM**

If you are unable to attend the Public Hearing, you may submit written comments on this form or in a letter addressing the Planning Commission. Please send comments to the City of Canby Planning Department:

**By mail:** Planning Department, PO Box 930, Canby, OR 97013  
**In person:** Planning Department at 111 NW Second Street  
**E-mail:** [lehnerta@ci.canby.or.us](mailto:lehnerta@ci.canby.or.us)

Written comments to be included in the Planning Commission’s meeting packet are due on *Wednesday, April 16, 2014*. Written comments can also be submitted up to the time of the Public Hearing on *Monday, April 28, 2014* and may be delivered in person to the Planning Commission during the *Public Hearing at 7 pm* in the City Council Chambers, 155 NW 2<sup>nd</sup> Avenue.

**Application: SUB 14-02 DINSMORE ESTATES**

**COMMENTS:**

CANBY TELECOM SERVICES WILL BE AVAILABLE THROUGH THE DEVELOPMENT

THE DEVELOPER IS REQUIRED TO PROVIDE TRENCHES FOR PLACING UNDERGROUND COMMUNICATION FACILITIES, WE WILL PLACE AND PROVIDE ALL MATERIALS

THERE IS NO DEVELOPMENT FEE.

**YOUR NAME:** DINH VU

**EMAIL:** \_\_\_\_\_

**ORGANIZATION or BUSINESS (if any):** CANBY TELECOM

**ADDRESS:** \_\_\_\_\_

**PHONE # (optional):** \_\_\_\_\_

**DATE:** APRIL 11<sup>TH</sup>, 2014

**Thank you!**

Dan Kizer  
Field Engineer  
3123 Broadway, NE  
Salem, OR 97303  
Telephone: (503) 226-4211 x8166  
Email: daniel.kizer@nwnatural.com



April 16, 2014

Laney Fouse  
Planning Dept.  
City of Canby  
PO Box 930  
Canby, OR 97013

Re: Public Hearing Notice Request for Comments  
Dinsmore Estates Phase II Subdivision Land Use Application Review

There is a natural gas distribution system adjacent to the subject property, which is located south of SE 13<sup>th</sup> Ave, between Ivy Street and Lupine Street in Canby. This natural gas system is stubbed to the subject property boundary and is capable of providing service to the proposed 42-lot subdivision.

If the Applicant is interested in natural gas please contact NW Natural online at [www.nwnatural.com/Business/Partners/BuilderServices](http://www.nwnatural.com/Business/Partners/BuilderServices).

Civil plans for the subdivision will need to be submitted to [ncproj@nwnatural.com](mailto:ncproj@nwnatural.com) before NW Natural can process the gas service application request.

We appreciate being included in the planning process. Please contact me if you have any questions or require more information.

Sincerely,



Dan Kizer  
Salem Resource Center Field Engineer

## Angeline Lehnert

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**From:** Hixson, Robert <roberth@co.clackamas.or.us>  
**Sent:** Wednesday, April 16, 2014 11:43 AM  
**To:** Angeline Lehnert  
**Cc:** Kent, Ken  
**Subject:** SUB 14-02, Dinsmore Estates

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Dear Ms. Lehnert,

Engineering staff have reviewed the submitted traffic study prepared by DKS and are in agreement with the evaluations and conclusions.

The County intersections of Ivy/16<sup>th</sup> and Ivy/13<sup>th</sup> will continue to operate adequately with the addition of site generated traffic.

Clackamas County Traffic Engineering staff have no objections to the proposed subdivision.

Sincerely,

Robert Hixson  
Clackamas County, DTD Engineering  
150 Beaver Creek Road  
Oregon City, OR 97045  
503-742-4708 (phone)  
503-742-4659 (fax)  
[roberth@co.clackamas.or.us](mailto:roberth@co.clackamas.or.us)  
Office hours: 7:30 AM - 4:00 PM Monday - Friday

# MEMORANDUM

**DATE:** April 15, 2014

**TO:** Bryan Brown, City of Canby

**FROM:** Chris Maciejewski, PE, PTOE  
Steve Boice, PE, PTOE

**SUBJECT:** Canby Dinsmore Estates Additional Traffic Analysis Scope

P#11010-036-000

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This memorandum describes the scope of services to evaluate intersection sight distance at the intersection of SE 13<sup>th</sup> Avenue/S Lupine Street and conduct additional transportation analysis with regards to the proposed second phase of the Canby Dinsmore Estates development. The development is located on the south side of SE 13<sup>th</sup> Avenue between S Ivy Street and S Lupine Street (see attached). The 9.56 acre lot (tax lot 4700) is currently undeveloped, while the application would construct a 39 lot subdivision for single family housing.

As part of the subdivision, a new street connection (S Larch Street) is proposed to “T” into the south side of SE 13<sup>th</sup> Avenue between S Ivy Street and S Lupine Street across from Ackerman Middle School. The traffic study for this application found that the proposed connection of S Larch Street to SE 13<sup>th</sup> Avenue would not meet the City’s street access spacing standard; therefore it was recommended that the site utilize S Lupine Street as access to SE 13<sup>th</sup> Avenue to comply with City standards.<sup>1</sup> The site would access S Ivy Street via SE 16<sup>th</sup> Avenue.

It is anticipated that several other developments may occur within the southeast quadrant of the intersection of S Ivy Street/SE 13<sup>th</sup> Avenue adjacent to this development which would also be required to utilize S Lupine Street to access SE 13<sup>th</sup> Avenue (assuming no connection from S Larch Street). The purpose of this study is to evaluate the performance and safety at the intersection of SE 13<sup>th</sup> Avenue/S Lupine Street considering the anticipated future development of these tax lots.

## SCOPE OF SERVICES

### Task 1: Data Collection

Vehicle turn movement counts will be collected at the study area intersection of:

- SE 13<sup>th</sup> Avenue/S Lupine Street

<sup>1</sup> Canby Dinsmore Estates Development Phase 2 Traffic Impact Study, DKS Associates, March 2014.

This intersection will be reviewed to determine the existing geometry, traffic control, and operations during the weekday morning and evening (7:00 -9:00 am and 4:00 to 6:00 pm) peak hour. These are the times during a typical weekday when the study area street system would be expected to experience the highest vehicle volume and the site would generate significant traffic.

Collision records at this intersection over the previous three years will be reviewed and summarized in a table to determine if there are any safety related concerns with the anticipated traffic growth. Furthermore, a site visit will be made to ensure that adequate sight distance is provided at the intersection and that all vision triangles are clear from any obstructions.<sup>2</sup>

## **Task 2: Traffic Analysis**

The amount of new vehicle trips generated by the anticipated developments will be estimated using trip generation estimates published in the ITE Trip Generation Manual for similar land use type<sup>3</sup>.

The distribution of site vehicle traffic will be based on the existing travel patterns as determined by traffic counts and the City of Canby Travel Forecast Tool.

The new vehicle trips generated by the proposed future developments will be added onto the existing traffic volumes to identify the expected traffic operating conditions once the site is built and fully occupied. The Sequoia Parkway extension to SE 13<sup>th</sup> Avenue is anticipated to be constructed this spring so will be considered the analysis<sup>4</sup>. The analysis will consider the impacts to SE Lupine Street (local residential street) and the need for a neighborhood traffic management plan based on the anticipated number of through trips along the roadway with the anticipated developments.

## **Task 3: Documentation**

The findings of tasks 1 and 2 will be presented in a Draft Memorandum that will be submitted to the City (one electronic copy) within two weeks from notice to proceed. After the City has reviewed the Draft memorandum, we will make appropriate edits and submit a Final Memorandum (one electronic copy).

## **Task 4: Meetings**

The DKS project manager will attend up to one (1) coordination meeting or hearing as part of this project. Additional meetings, as directed by the City, will be provided for an additional fee on a time and expenses basis.

<sup>2</sup> A Policy on Geometric Design of Highways and Streets, AASHTO, 2011, Intersection Sight Distance.

<sup>3</sup> Trip Generation Manual, Institute of Transportation Engineers, 9<sup>th</sup> Edition.

<sup>4</sup> The Sequoia Parkway extension to SE 13<sup>th</sup> is anticipated to increase traffic volumes along SE 13<sup>th</sup> Avenue by 20 vehicles per hour. City of Canby Transportation System Plan, Technical Memorandum #6, DKS Associates, June 2010.



## **BUDGET**

The level of effort for these tasks is up to 38 hours in addition to data collection efforts. Therefore, including expenses, our fee estimate for this effort is \$4,500.

If you have any questions, please feel free to call or email.

# **Application for Subdivision**

## **Dinsmore Estates 2**

**Applicant:**

**Scott Family Limited Partnership**

# Table of Contents

- I. Written Narrative
- II. Traffic Impact Study
- III. Neighborhood Meeting Notes
- IV. Pre-Application Meeting Minutes
- V. Record of Survey & County Determination of Legal Lot of Record
- VI. Maps
  - a. Vicinity Map
  - b. Assessor Map
  - c. Large Sheet 1 – Tentative Site Plan
  - d. Large Sheet 2 – Utility Plan
  - e. Large Sheet 3 – Street Profiles
  - f. Large Sheet 4 – Topographic Survey
- VII. Storm Drainage Report
- Loose Mailing Labels

## I. Written Narrative

**Application for Subdivision**

Owner/Applicant	Scott Family Limited Partnership 130 SW 2nd Avenue - Suite 103 Canby, Oregon 97013 503-266-5488 503-266-4570 fax Contact: Tom Scott
Representative	Sisul Engineering 375 Portland Avenue Gladstone, OR 97027 (503) 657-0188 Contact: Pat Sisul
Location	North of the first phase of the Disnmore Estates subdivision. South of SE 13 <sup>th</sup> Avenue and the Ackerman Center, west of the Tofte Farms neighborhood and 350 feet east of South Ivy St.
Legal Description	Tax Lots 4700, T4S R1E Section 4DA, WM
Comprehensive Plan	LDR - Low Density Residential
Zoning	R-1 (Low Density Residential Zone)
Site Size	9.56 Acres
Proposal	To develop a 41 lot subdivision, with all lots suitable for detached single family dwellings, consistent with R-1 zoning standards.

## **SITE DESCRIPTION**

The Dinsmore Estates Phase 2 site is located south of SE 13<sup>th</sup> Avenue, west of the Tofte Farms neighborhood and approximately 350 feet east of South Ivy Street. The site has 430 feet of frontage on SE 13<sup>th</sup> Avenue, across from the Ackerman Center. Several streets are temporarily terminated at the site's boundaries, including SE 13<sup>th</sup>, 14<sup>th</sup> & 15<sup>th</sup> Place along the site's east property line and S Juniper Street at the site's southwestern corner.

The property was annexed into the City Canby in 2008 together with the 3 other properties to the west of this site. The parcel is zoned R-1, as are adjacent properties to the east and south within the City limits and as are properties immediately north of SE 13<sup>th</sup> Avenue. Properties immediately to the west of the site, and Hope Village, across S. Ivy Street, are zoned as Medium Density Residential, R-1.5. One parcel, located in the SE quadrant of the SE 13<sup>th</sup> Avenue/S Ivy Street intersection is zoned C-R, Residential Commercial.

The site has utilized for agricultural farming for several years. A few trees planted by neighboring property owners encroach into the property along the west property line, otherwise the site is bare of trees. The site appears as flat to the eye, but there is a slight fall from south to north, about 4 feet from the south property line to the northwest property corner. The site has no noticeable physical features or identified constraints.

New homes are located east of the site in the Tofte Farms neighborhood and to the south in phase 1 of Dinsmore Estates. Homes on larger parcels are located between the site and S Ivy Street. The Ackerman Center and the Canby Adult Center are located across SE 13<sup>th</sup> Avenue to the north. Hope Village is located west across SE 13<sup>th</sup> Avenue.

## **PROPOSAL**

A 41 lot subdivision with all lots intended to be suitable for detached single family residences is proposed.

The site area is 9.56 acres. Dedications for SE 13<sup>th</sup> Avenue and interior streets will account for 1.92 acres (83,743 square feet), leaving 7.64 acres available for development. The net density for the overall site is one dwelling for each 8,117 square feet or 5.37 dwellings per net acre.

The development will extend SE 13<sup>th</sup>, 14<sup>th</sup> and 15<sup>th</sup> Place into the site from their current temporary dead ends along the site's eastern boundary. An extension of S Juniper Street, currently terminated at the SW corner of the site, will connect to the extension of SE 15<sup>th</sup> Place from Tofte Farms No. 3. The extensions of S Juniper Street, SE 14<sup>th</sup> Place and SE 15<sup>th</sup> Place and will provide access and the beginning of the street system for parcels located west of the site, as access to S Ivy Street for these properties will be limited. S Juniper Street is partially located on this site and partially on the "McRobbie

parcel”. The owner of the “McRobbie parcel” and the applicant have agreed to dedicate the right-of-way for the full width of S Juniper Street.

Internal streets are proposed to continue with the City’s old standard right of way width of 40 feet while providing the new standard pavement width of 34 feet. Sidewalk widths will be per the new City standard of 6 feet, with the sidewalk and part of the planter strip being located within an easement on the lots.

Public sanitary sewer is available from the S Ivy Street / SE 13<sup>th</sup> Avenue intersection, from streets in Tofte Farms and from S Juniper Street in the southwest corner. Domestic water is available in all public streets. Storm water will be collected and directed to a vegetated treatment facility installed with Phase 1 of Dinsmore Estates that was constructed with the intention of serving both phases of the subdivision. Stormwater leaving the water treatment facility will be conveyed to a system of interconnected drywells that were also installed during Phase 1 and were intended to serve both phases of Dinsmore Estates. The treatment facility is owned and maintained by the Dinsmore Estates HOA, while the drywells are owned and maintained by the City of Canby.

A pre application conference with the City occurred on August 7, 2013. No issues of concern were identified, beyond usual and expected considerations of Code compliance. A traffic impact study for the development was completed by DKS & Associates for the City of Canby on January 30, 2014. The traffic study recommended against the applicants’ proposal to extend S Larch Street to connect to SE 13<sup>th</sup> Avenue and thereby creating a new intersection on SE 13<sup>th</sup> Avenue. In order to comply with the DKS recommendation, the applicant has modified the subdivision layout to eliminate the new intersection on SE 13<sup>th</sup> Avenue.

## APPLICABLE CRITERIA AND STANDARDS

### Identification of Applicable Criteria and Standards

The following sections of the City of Canby Land Development and Planning Ordinance apply to this application:

- 16.10 Off-Street Parking and Loading
- 16.16 R-1 Low Density Residential Zone
- 16.46 Access Limitations on Project Density
- 16.56 Land Division General Provisions
- 16.64 Subdivisions – Design Standards
- 16.86 Street Alignments
- 16.88 General Standards & Procedures
- 16.89 Application and Review Procedures
- 16.120 Park, Open Space and Recreation Land General Provisions

### LAND USE AND DEVELOPMENT ORDINANCE

#### *Chapter 16.10 Off-Street Parking and Loading*

The parking requirement for single family dwellings is two spaces per dwelling unit (Table 16.10.050). This requirement can be satisfied when building plans are submitted for each lot.

#### *Chapter 16.16 R-1 Low Density Residential Zone*

The proposed subdivision will create 41 new lots for detached single family dwellings. The proposed residential use is allowed outright in the zone (16.16.010.A). New lots in the R-1 Zone are required to meet the development standards specified in Sec. 16.16.030. Development standards for structures can be verified when plans for building permits are submitted. The following table lists requirements and how the application proposes to satisfy each standard:

#### *Section 16.16.030 R-1 Zone Dimensional Standards*

Requirement	Proposed
16.16.030.A Minimum and maximum lot area: 7,000 sq. ft. and 10,000 sq. ft.	Lots proposed = 41 Min. lot area = 7,145 sq. ft. Max. lot area = 12,470 sq. ft. (flag lot) Average lot area = 7,982 sq. ft.
16.16.030.C Minimum width and frontage: 60 feet	All lots have more than the minimum width of 60 feet. Lots 17 & 19 have 10 feet of frontage due to their flag lot orientation, all other lots have at least 60 feet of frontage.



16.18.030.D Minimum yard requirements: Street yard, 20 feet for side w/dwy Other street yards, 15 feet Rear yard, 20 feet for two story building, 15 feet for one story Interior yard: 7 feet, or zero lot line	These requirements will be satisfied when building plans are submitted for structures on each proposed lot.
16.16.030.E Maximum building height: 35 feet	This requirement will be satisfied when building plans are submitted for structures on each proposed lot.
16.16.030.F Maximum amount of impervious surface: 60 percent	This requirement will be satisfied when building plans are submitted for structures on each proposed lot.
16.16.30.G Other regulations.	These requirements will be satisfied when building plans are submitted for structures on each proposed lot.

*Chapter 16.46 Access Limitations on Project Density*

*16.46.010 Number of Units in Residential Development*

The development proposes to create detached single family residences on individual lots, therefore Sec. 16.46.010A is the appropriate standard.

Four streets will enter the subdivision, the extension of SE 13<sup>th</sup> Place, SE 14<sup>th</sup> Place, SE 15<sup>th</sup> Place from the east and the extension of S Juniper Street from the south. Since no new connections to arterial streets are proposed, the number of street connections between the Tofte Farms and Dinsmore Estates neighborhoods to SE 13<sup>th</sup> Avenue and S Ivy Street will remain at four. These connections include the existing SE 16<sup>th</sup> Avenue connection to S Ivy Street in Dinsmore Estates and the S Lupine St, S Pine St & S Ponderosa St connections to SE 13<sup>th</sup> Avenue from the Tofte Farms neighborhood. Using the City's formula in 16.46.010.A.2, four street connections would permit up to 288 residential units. Currently, 213 platted lots utilize the 4 points of access (192 in Tofte Farms, 21 lots in Dinsmore Estates Phase 1) allowing for up to 75 additional residences that could be created in Dinsmore Estates Phase 2 and the other neighboring properties to utilize the four access points under the City's standard.

The applicant had originally proposed extending S Larch Street to connect to SE 13<sup>th</sup> Avenue, creating a new intersection on SE 13<sup>th</sup> Avenue across from the egress driveway from the Ackerman Center. The traffic impact study prepared by DKS & Associates for the City of Canby recommended against creating the new intersection because the intersection spacing would not meet the City of Canby's access spacing standards. The applicant therefore modified the proposal to comply with the recommendations of the DKS study prior to submitting the application to the City for review.

New interior streets are proposed as public streets with a 40 foot wide right of way and 34 feet of pavement. The right-of-way width will match what has been dedicated in neighboring developments so that the finished developments will have similar appearance in their setbacks. The street section in the new development will be slightly narrower than with neighboring developments (from old standard of 36 feet to new standard of 34 feet) however, the sidewalk will be one foot wider on each side (to comply with the new 6-foot standard). The width of the planter strip will therefore remain constant between this subdivision and the neighboring subdivisions. The proposed measures are sufficient to satisfy the requirements in Sec. 16.46.010.A for roadway and pavement width, number of access points, and number of dwelling units.

#### *16.46.030 Access Connection*

The applicant originally proposed one new street connection on the perimeter of the development, a connection of a new street, S Larch Street, to SE 13<sup>th</sup> Avenue. SE 13<sup>th</sup> Avenue is a designated arterial street in the City of Canby's Transportation Plan. Table 16.46.30 Access Management Guidelines for City Streets limits typical intersection spacing on arterials to between 660 and 1,000 feet. S Larch Street was proposed to be located between the existing streets of S Ivy Street and S Lupine Street, across from the Ackerman Center egress driveway. S Ivy Street and S Lupine Street are separated by 940 feet along the centerline of SE 13<sup>th</sup> Avenue. The spacing from S Ivy Street to S Larch Street was proposed as 500 feet, with 440 feet between S Larch Street and S Lupine Street. Given the 940 feet of spacing between S Ivy Street and S Lupine Street, a new street connection cannot be provided in this street segment that will meet the City's typical spacing requirement.

The applicant commissioned a traffic study with the City to analyze the transportation system in the vicinity of the project, including the new SE 13<sup>th</sup> Avenue / S Larch Street intersection. As a part of the traffic study, the intersection spacing requirements for this proposed intersection were analyzed and an exception was considered. The City's traffic engineer, DKS & Associates, recommended that an exception to the access spacing requirements not be granted at this time. Therefore, the applicant has modified the proposed development plan to eliminate the connection of S Larch Street to SE 13<sup>th</sup> Avenue.

At the applicant's neighborhood meeting, the residents of the Tofte Farms neighborhood were united in that a new connection to SE 13<sup>th</sup> Avenue was needed. Their concern is that without a new connection to 13<sup>th</sup> Avenue in this development, the bulk of the traffic generated by this development and future developments farther west will flow through back through the Tofte Farms neighborhood to S Lupine Street.

It is anticipated that the City will receive testimony from the Tofte Farms neighbors of the development concerning this issue.

### *16.46.070 Exception Standards*

With the applicant's current submittal, all intersections conform to the Access Management Guidelines for City Streets, Table 16.46.30 and no exceptions are necessary. As discussed above, the applicant had originally proposed one new intersection, S Larch Street / SE 13<sup>th</sup> Avenue that did not conform to the Access Management Guidelines for City Streets. The City's Traffic Engineer, DKS & Associates, recommended that a deviation for the connection of S Larch Street to SE 13<sup>th</sup> Avenue not be granted at this time. Therefore, the applicant modified the Site Plan accordingly prior to submitting the application for review.

The applicant's development is near the intersection of two designated arterials, S Ivy Street and SE 13<sup>th</sup> Avenue. S Ivy Street is a north-south street located west of the proposed development. Existing intersections on S Ivy Street in the vicinity of the development include SE 13<sup>th</sup> and SE 16<sup>th</sup> Avenues, intersections separated by 1,140 feet. The 1,140 foot spacing is beyond the 1,000 foot maximum intersection spacing, but does not allow for a new street connection to be created without dropping the intersection spacing below the minimum standard of 660 feet. Any future connection to S Ivy Street between SE 13<sup>th</sup> and SE 16<sup>th</sup> Avenues would require a deviation from the City's access spacing requirements and would likely have to work around the existing homes that face S Ivy Street that are likely remain with development of the parent parcels.

Because no intersection can be created to S Ivy Street that meets the intersection spacing requirements, the applicant proposed a new intersection to SE 13<sup>th</sup> Avenue across from the egress driveway from the Ackerman Center. As previously discussed, the new S Larch Street intersection would have created substandard intersection spacing of 500 feet to S Ivy Street and 440 feet S Lupine Street. The City's Traffic Engineer, DKS & Associates, recommended that a deviation for the new intersection not be granted at this time.

With no new connections, 4 access points are available to the Tofte Farms/Dinsmore Estates neighborhoods. Using the City's formula in 16.46.010.A.2, four street connections would permit up to 288 residential units. Currently, 213 platted lots utilize the existing connections (192 in Tofte Farms and 21 lots in Dinsmore Estates Phase 1). Per the formula, up to 75 more lots could be created from the undeveloped property in this application and along S Ivy Street.

### *Chapter 16.49 Site & Design Review*

Site and Design Review is required for all new development, except for single family and two-family dwellings (16.49.030).

Dwellings in the proposed subdivision will not require site and design review.

*Division IV Land Division Regulations*

*Chapter 16.62 Subdivisions-Applications*

An application that satisfies the filing procedures and information required in Sec. 16.62.010 has been submitted.

Standards and criteria for approval of a subdivision are set forth in Sec. 16.62.020, as follows:

*A. Conformance with other applicable requirements of the Land Development and Planning Ordinance;*

*B. The overall design and arrangement of lots shall be functional and shall adequately provide building sites, utility easements, and access facilities deemed necessary for the development of the subject property without unduly hindering the use or development of adjacent properties;*

*C. Subdivision design and layout shall incorporate Low Impact Development techniques where possible to achieve the following:*

*1. Manage stormwater through a land development strategy that emphasizes conservation and use of onsite natural features integrated with engineered stormwater controls to more closely mimic predevelopment hydrologic conditions.*

*2. Encourage creative and coordinated site planning, the conservation of natural conditions and features, the use of appropriate new technologies and techniques, and the efficient layout of open space, streets, utility networks and other public improvements.*

*3. Minimize impervious surfaces.*

*4. Encourage the creation or preservation of native vegetation and permanent open space.*

*5. Clustering of residential dwellings where appropriate to achieve (1-4) above. The arrangement of clustered dwellings shall be designed to avoid linear development patterns.*

*D. It must be demonstrated that all required public facilities and services are available, or will become available through the development, to adequately meet the needs of the proposed land division.*

*E. The layout of subdivision streets, sidewalks, and pedestrian ways supports the objectives of the Safe Routes to Schools Program by providing safe and efficient*

*walking and bicycling routes within the subdivision and between the subdivision and all schools within a one-mile radius. During review of a subdivision application, city staff will coordinate with the appropriate school district representative to ensure safe routes to schools are incorporated into the subdivision design to the greatest extent possible.*

*(Ord. 890 section 53, 1993; Ord. 740 section 10.4.40(B), 1984; Ord. 1338, 2010)*

*F. A Traffic Impact Study (TIS) may be required in accordance with Section 16.08.150. (Ord. 1340, 2011)*

Applicable requirements of other sections of the Land Development and Planning Ordinance are discussed in other sections of this narrative and on the maps included with the application, demonstrating that the proposed land division conforms to applicable criteria.

The overall design and layout of the site is functional and provides adequate building sites, as all lots exceed the minimum lot area standards for the R-1 Zone. Each lot has access to a public street and has easy connectivity to nearby arterial streets. The proposed layout connects to existing stubbed streets and provides connections for future developments to the west along S Ivy Street. The proposed layout provides connectivity within the neighborhood and the proposed connection of a pedestrian walkway to SE 13<sup>th</sup> Avenue in between Lots 2 and 3. This walkway will provide direct connectivity and a safe and efficient walking/bicycling route to the Ackerman Center and Philander Lee Elementary School campuses.

The design of the development proposes to create a development consistent with R-1 development standards, including minimum lot sizes of 7,000 square feet, which precludes the clustering of homes. Street widths are proposed to meet the minimum City standard width of 34 feet from curb to curb, which will allow for parking on both sides of the street, similar to other nearby developments. The site has been used for agricultural land and is devoid of vegetation, other than a few trees that encroach into the property along the western property line. Stormwater from new roofs will be injected into the ground using infiltration chambers, as is common with most single family housing in Canby. Stormwater from the streets will be directed to a water quality treatment facility located at the southern end of the site as shown on the plans and maps included with the application. Stormwater will be conveyed from the water quality treatment facility into existing drywells that were installed during Phase 1 of Dinsmore Estates and intended to accommodate the street runoff from Phases 1 and 2. The water quality treatment facility is private and will be owned and maintained by the Dinsmore Estates HOA. The drywells in Phase 1 of Dinsmore Estates are owned and maintained by the City of Canby.

All necessary public facilities and services are available to the site, as discussed in other sections of this narrative and as shown on the plans and maps included with the application. A traffic study has been commissioned by the applicant, through the City of Canby, in order to investigate the effect of the proposed development on nearby streets and intersections. A copy of this study is included with the application.

Based on this discussion of approval standards and criteria, the proposed subdivision has been shown to comply with all relevant requirements.

#### *Chapter 16.64 Subdivisions Design Standards*

##### *Section 16.64.010 Streets*

The proposed interior street system will be designed and constructed to the local street standard. Several streets that have been temporarily dead ended at the site boundaries will be extended into or through the proposed development. SE 13<sup>th</sup> Avenue will be widened and new curb and sidewalk will be installed on the south side.

SE 13<sup>th</sup> Avenue is a designated arterial. Ten feet of additional right-of-way dedication is proposed along the SE 13<sup>th</sup> Avenue in order to bring the south ½ right-of-way width to 30 feet from centerline, Arterials are required to have a right-of-way width of 60-80 feet and the dedication will bring the street into conformance with this right-of-way standard and will make the right-of-way consistent with Tofte Farms 3, Tofte Farms and Tofte Farms 2 subdivisions located farther east. The southern ½ street width is proposed as 22 feet from the center of the right-of-way, the same width as provided along the frontage of Tofte Farms, which will provide for a full street width of 44 feet, consistent with the City's arterial street standard of 34-50 feet paved. A six-foot wide curb-tight sidewalk will also be provided that will be consistent with the existing curb-tight sidewalks already located along the north and south sides of this segment of SE 13<sup>th</sup> Avenue.

Interior streets are proposed to incorporate a combination of old and new street standards. So as not to push the homes back farther onto the lots than on neighboring developed lots, the right-of-way width for new local streets is proposed to match the old standard of 40 feet, similar to neighboring developments. Street pavement widths are proposed to meet the City's new narrower 34-foot standard instead of the old 36-foot standard, in order to reduce impervious surfacing. Sidewalks will be constructed to the new standard of 6 feet, instead of the old standard of 5 feet. The combination of a narrower street standard and a wider sidewalk will keep the back of the sidewalk on a consistent line and will result in a consistent planter strip width. Sidewalks and a portion of the planter strip will be constructed within an easement on the lots. This will minimize the amount of land taken for public use along the street frontage and permit a more efficient use of the site.

Proposed new streets names include "S Larch Street" and "S Locust Street" pending City approval. The other streets are extensions of existing streets.

##### *Section 16.64.015 Access*

No connection to a State Highway is proposed, therefore the project does not have to be reviewed for conformance with state access management standards.

Horizontal street alignments are proposed to continue existing streets and vertical alignments will be created that will provide for adequate drainage. The site is nearly flat

and is devoid of vegetation, therefore onsite grading for streets will be minimal. All streets are designed with sidewalks located on both sides. Sidewalks will be constructed at the time that the homes are constructed. Lot access and driveway locations will be reviewed at the time of building permits.

The public road system is designed to continue extensions of existing streets through the site and to provide logical connections to neighboring properties for future development. The proposed road network allows for convenient access for residents, visitors, deliveries, emergency vehicles, and garbage collection.

#### *Section 16.64.020 Blocks*

The City requires subdivisions to be designed to accommodate blocks that provide lots of suitable size and access in multiple directions. This project builds upon the previously established block widths and grid pattern established by Tofte Farms No. 3 and it forms the basis for future blocks to the west, with proposed extensions of SE 13<sup>th</sup> Place, SE 14<sup>th</sup> Place and SE 15<sup>th</sup> Place.

#### *Section 16.64.030 Easements*

Easements will be provided as necessary to satisfy requirements of the City. No block lengths over 600 feet in length are being created. One pedestrian walkway is proposed to connect SE 13<sup>th</sup> Place to SE 13<sup>th</sup> Avenue.

#### *Section 16.64.040 Lots*

(16.64.040.A & B) Lot sizes and shapes comply with dimensional requirements for the R-1 Zone, as previously discussed in this narrative and as shown on the proposed site plan.

(16.64.040.C) All R-1 lots have at least 60 feet of frontage on the new interior streets, except for Lots 17 & 19, which are flag lots with ten feet of frontage. These two lots widen out to over 82 feet of width at the proposed building lines. The Planning Commission may allow unique designs upon finding that access is adequate. The proposed access will be similar to other flag lot or shared driveway configurations throughout the City of Canby.

(16.64.040.D) Double frontage lots are created along SE 13<sup>th</sup> Avenue, a traffic arterial. No other double frontage lots are being created.

(16.64.040.E) Lot side lines all are at right angles to the fronting streets.

(16.64.040.F) No lots in the subdivision can be redivided.

(16.64.040.H) No hazardous situation related to flooding or soil instability has been identified on the site.

(16.64.040.I) Lots 17 and 19 are proposed as flag lots, with each flag lot being created behind a street fronting lot. A shared access drive will be constructed in the 20 foot wide shared “flag pole” area and reciprocal easements will be created for the use of the driveway and for shared utility access. The area of the flag lots, excluding the flag pole, are over 12,000 square feet, well over the minimum required area for the R-1 Zone, that will provide ample room to develop floor plans that provide for adequate access, turning movements, and setbacks from adjoining properties.

(16.64.040.J) The proposed development does not meet the “Infill” standards.

*Section 16.64.050 Parks and Recreation.*

No area is proposed for dedication for public open space on this site. The City has indicated that they would prefer the fee in lieu payment to be provided with building permits.

*Section 16.64.060 Grading of Building Sites*

Minor grading will be accomplished on the site to create suitable building sites.

*Section 16.64.070 Improvements*

Improvements for the subdivision will be accomplished as required by this section. Plans have been submitted as part of this application to show the arrangement of streets and sidewalks, public utilities, and other improvements necessary to provide for the convenience, health, and safety of future residents of this community and of the City. Please refer to specific plans for details. Following approval of the preliminary plan, more detailed construction plans will be submitted to the City for review. At the same time the detailed construction plans will also be submitted to private utility service providers such as the gas, and communications companies so that they may design their system improvements to serve the subdivision.

Streets within the development and the south side of SE 13<sup>th</sup> Avenue will be constructed to the City’s standard structural section. SE 13<sup>th</sup> Avenue will be widened and curb and sidewalk will be installed on the south side of the street. Street lighting and street signage will be installed with the street improvements. Driveway approaches, sidewalks, and street trees will be installed as homes are constructed in the development.

Stormwater will be managed through a combination of public and private facilities. LID Approaches such as green roofs, pervious pavements and roadside swale often are not good fits for residential subdivisions. Green roofs tend to work best of flatter roofs and are not as good of a fit for the pitched roof architecture seen in residential subdivisions today. Pervious pavements tend to function better in mature subdivisions where there isn’t a lot of ground disturbing activity taking place. The home building, landscaping, and fence building activities common in new subdivisions tend to deposit soil and other landscaping material onto the surface of the roadway, often clogging it, and preventing it from functioning as intended. Once material works its way down into the



pores of the porous pavement, it becomes nearly sealed and it functions like standard pavement. Roadside swales can be problematic in residential subdivisions as the swales make it difficult to get out of cars parked against the curblin, as the planter strip is often soggy or under a few inches of water.

LID approaches proposed in this subdivision include infiltration chambers installed for roof runoff throughout the development. Each home in the subdivision will have its roof runoff directed to an infiltration chamber system buried beneath the yard of the lot. This will spread out the roof runoff across the site. Runoff from the street will be collected in catch basins and piped to an existing LID water quality treatment swale located along the southern property line of this subdivision and the northern property line of Dinsmore Estates. After the roadway stormwater runoff is treated by this facility it will be conveyed through an existing pipe system to drywells in SE 16<sup>th</sup> Avenue for underground injection.

Although some sanitary sewer will be connected into the Tofte Farms sewer system, the majority of the lots in this subdivision will drain to the sanitary sewer trunk line in S Ivy Street either through the existing sewer main in S Juniper Street & SE 16<sup>th</sup> Avenue or by way of a new sewer main in S Larch Street to SE 13<sup>th</sup> Avenue. New public water mains and fire hydrants will be constructed in all new streets and will connect to the existing water mains terminated at the property boundaries. Extension of the dead end water mains in neighboring subdivisions will increase water quality and fire protection in the surrounding neighborhood.

#### *Section 16.64.080 Low Impact Development Incentives*

The project does not plan to increase density or building heights allowed through the incentives offered in this section.

#### *Chapter 16.86 Street Alignments*

This chapter is intended to insure that adequate space is provided in appropriate locations for the planned expansion, extension, or realignment of public streets and it is further intended to allow for the safe utilization of streets once developed. SE 13<sup>th</sup> Avenue is proposed to be constructed to its full and final width. The extensions of SE 13<sup>th</sup> Place, SE 14<sup>th</sup> Place, SE 15<sup>th</sup> Place and S Juniper Street are proposed to be constructed to comply with the standard as are the two new streets, S Larch Street and S Locust Street.

#### *Chapter 16.88 General Standards and Procedures*

The general standards and procedures set out in this chapter apply to the regulations of all sections of this title, except as may be specifically noted. The application has been submitted to the City by the property owner and the appropriate fees have been paid (Sec. 16.88.030).

*Chapter 16.89 Application and Review Procedures*

The purpose of this chapter is to establish standard decision-making procedures that will enable the City, the applicant, and the public to review applications and participate in the decision-making process in a timely and effective way.

This application is a Type III procedure. A Pre-application meeting was held with City and utility company representatives on August 7, 2013. No issues of concern were identified, beyond usual and expected considerations of Code compliance. A Neighborhood meeting with local neighbors and representatives of the Southeast Canby Neighborhood Association was held on January 30, 2014. Neighborhood concerns will be minimal, but a major concern was that the City's traffic engineer, DKS & Associates, had recommended against allowing a deviation to the access spacing requirements that would have permitted a proposed connection of S Larch Street to SE 13<sup>th</sup> Avenue. Neighbors living in Tofte Farms are concerned that without this new connection to SE 13<sup>th</sup> Avenue, much of the traffic generated by this subdivision and future development farther west will go through their neighborhood and will change their neighborhood character.

*Chapter 16.120 Parks Open Space and Recreation Land*

The City of Canby shall require park land dedication or a fee in lieu of park land dedication in the form of a system development charge. The City has indicated that it would prefer that lots in this subdivision pay a system development charge rather than dedicate park land.

**CONCLUSION**

The foregoing narrative and accompanying plans and documents, together demonstrate that the proposed subdivision generally conforms with the applicable criteria and standards of the City's Land Development and Planning Ordinance. Therefore, the applicant requests that the Planning Commission approve the application.

## II. Traffic Impact Study

# DRAFT MEMORANDUM

**DATE:** January 30, 2014

**TO:** Bryan Brown, City of Canby

**FROM:** Chris Maciejewski, PE, PTOE  
Steve Boice, PE  
Ronald Ramos, EIT

**SUBJECT:** **Canby Dinsmore Estates Development Phase II Traffic Impact Study**  
P#11010-030-000

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This memorandum summarizes the potential transportation impacts associated with the proposed second phase of the Dinsmore Estates development in the City of Canby. This study builds upon the traffic study conducted as part of the annexation which evaluated 40 single family homes and 23 condominiums/townhouses<sup>1</sup>. The project site is located on the south side of SE 13<sup>th</sup> Avenue between S Ivy Street and S Lupine Street (see attached site plan). The 9.56 acre lot (tax lot 4700) is currently undeveloped and zoned R-1 (Low Density Residential). The proposed application (shown in the attached site plan) would construct a 39 lot subdivision for single family housing, which is an outright permitted development based on the City's low density residential (LDR) comprehensive plan zoning.

As part of the subdivision, a new street connection (S Larch Street) is proposed to "T" into the south side of SE 13<sup>th</sup> Avenue between S Ivy Street and S Lupine Street. Access to S Ivy Street would be provided by the existing intersection at SE 16th Avenue. Additionally, SE 13th Place, SE 14th Place, and SE 15th Place would be extended west from S Lupine Street to S Juniper Street.

This study provides a summary of existing conditions within the study area, estimated project trip generation and distribution, peak hour intersection operations at surrounding intersections, and a review of site access and circulation.

<sup>1</sup> Dinsmore Annexation Traffic Impact Study, Lancaster Engineering, February 2003.

## EXISTING CONDITIONS

This section covers the existing intersection operating conditions in the study area. Included is a description of roadway characteristics, jurisdictional intersection operation standards, and existing intersection operational analysis.

### Roadway Characteristics

Characteristics of the roadways within the study area (S Ivy Street, SE 13<sup>th</sup> Avenue, and SE 16<sup>th</sup> Avenue) are summarized in Table 1. Clackamas County has jurisdiction over S Ivy Street, and the remaining roads are under the jurisdiction of the City of Canby. Both S Ivy Street and SE 13<sup>th</sup> Avenue are designated as arterial roadways, while SE 16<sup>th</sup> Avenue is a local road.

Overall, pedestrian and bicycle facilities are available with the exception of SE 16<sup>th</sup> Avenue. There are currently no sidewalks present along the project frontages on the south side of SE 13<sup>th</sup> Avenue or the north side of SE 16<sup>th</sup> Avenue. Striped bike lanes are provided along both sides of SE 13<sup>th</sup> Avenue. In addition, there are no transit facilities within the study area, but the City of Canby has a Dial-A-Ride service that is free for shopping and \$1.00 for general transportation within the urban growth boundary.

**Table 1: Roadway Characteristics**

Roadway	Jurisdiction	Functional Classification	Cross-Section	Posted Speed	Pedestrian Facilities	Bicycle Facilities
S Ivy St	Clackamas County	Arterial Roadway	2 Lanes with left turn lanes	30 mph North of SE 13 <sup>th</sup> Ave; 40 mph South of SE 13 <sup>th</sup> Ave	Sidewalks	Shoulder
SE 13 <sup>th</sup> Ave	City of Canby	Arterial Roadway	2 Lanes with left turn lanes	25mph (20mph school zone)	Sidewalk on north side	Yes
SE 16 <sup>th</sup> Ave	City of Canby	Local Road	2 Lanes	25 mph	None	None

## Intersection Operations

All study intersections must operate at or below respective jurisdiction operating standards or mitigation may be necessary to approve future growth. The intersection performance measures vary by jurisdiction of the roadways. The intersection performance under City jurisdiction (S Ivy Street /SE 16th Avenue) must comply with the City’s level of service (LOS) and volume to capacity (v/c) ratio requirements, while the intersection of S Ivy Street/SE 13<sup>th</sup> Avenue must satisfy Clackamas County LOS requirements.

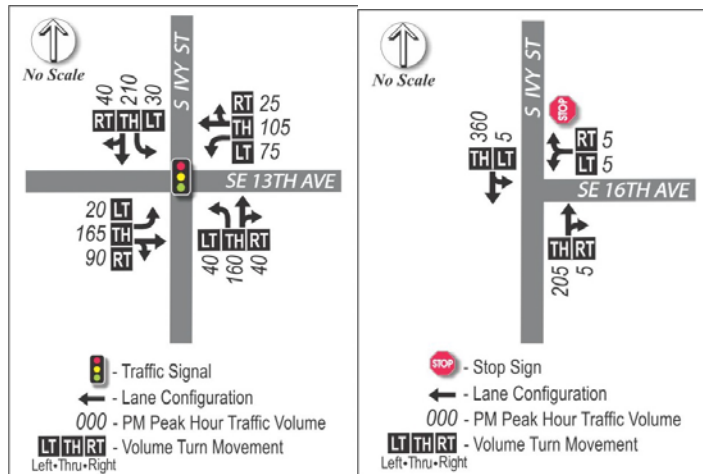


Figure 1: Existing Volumes (PM Peak Hour)

The City’s operating standards require that a LOS “D” or better and a volume to capacity (v/c) ratio equal to or less than 0.85 be maintained for all study area intersections. Clackamas County operating standards require LOS “D” or better at signalized intersections located outside of the Metro urban growth boundary (UGB)<sup>2</sup>.

To assess intersection performance, traffic counts were collected at study intersections during the evening peak period (4:00 – 6:00 p.m) when volumes along adjacent roadways are greatest. The existing volumes are shown in Figure 2. The existing traffic operating conditions was determined for the p.m. peak hour based on the 2000 Highway Capacity Manual methodology for signalized and unsignalized intersections<sup>3</sup>. The conditions include the estimated average delay, level of service (LOS), and volume-to-capacity (V/C) ratio of the study intersections. The volume to capacity ratio reported for unsignalized intersections is for the worst stop controlled movement (typically the minor street left turn).

The weekday p.m. peak hour intersection operations are listed in Table 2. During the p.m. peak hour, all study area intersections currently operate within the adopted mobility targets. The intersections operate with v/c ratios of 0.51 or less, indicating that they have a significant amount of reserve capacity to accommodate future growth.

<sup>2</sup> Clackamas County Transportation System Plan, Appendix 2 – Performance Standards

<sup>3</sup> 2000 Highway Capacity Manual, Transportation Research Board, Washington DC, 2000.

**Table 2: Existing Intersection Operations Summary (PM Peak Hour)**

Intersection	Intersection Control	Mobility Standard	Existing		
			Delay (s)	LOS	V/C
S Ivy St/SE 13 <sup>th</sup> Ave	Signalized	LOS D	11.5	B	0.51
S Ivy St/SE 16 <sup>th</sup> Ave	Unsignalized (Two way stop)	LOS D	11.8	B	0.02

## Safety

Crash records for the previous three years (2010-2012) were used to determine the safety history at surrounding intersections to determine if there are any safety related concerns with anticipated traffic growth at these locations<sup>4</sup>. A summary of the recorded crashes during this time is given below in Table 3. A total of five crashes were recorded, where four crashes occurred at the signalized intersection of S Ivy Street/SE 13<sup>th</sup> Avenue.

There was one fatality recorded at the intersection of S Ivy Street/SE 13<sup>th</sup> Avenue. This crash was an angle collision involving a vehicle travelling southbound and westbound. The causal factor was recorded as disobeying the traffic signal. Additionally, one pedestrian crash was recorded at this intersection. This crash involved a left turning vehicle from SE 13<sup>th</sup> Avenue that failed to yield to pedestrians located in the crosswalk. This left turn movement is currently a permitted left turn, which relies on the drivers to yield to pedestrians when they are in the crosswalks as shown in figure 1.

No crash trends were found at any of the study intersections and crash rates per million entering vehicles (MEV) are low (0.3 for S Ivy Street/SE 13<sup>th</sup> Avenue and 0.2 for S Ivy Street/SE 16<sup>th</sup> Avenue). The anticipated increase in traffic associated with the proposed development is not expected to influence safety at these intersections.



**Figure 2: S Ivy Street at SE 13<sup>th</sup> Avenue**

<sup>4</sup> Oregon Department of Transportation Crash Data System, <https://zigzag.odot.state.or.us>

**Table 3: ODOT Crash Data from 01/01/2010 to 12/31/2012**

Intersection	Collision Type	Injury	Weather	Year
S Ivy St/ SE 13th Ave	Angle	Fatal	Clear	2011
S Ivy St/ SE 13th Ave	Pedestrian	INJ B	Cloudy	2011
S Ivy St/ SE 13th Ave	Turning Movement	PDO	Rain	2012
S Ivy St SE 13th Ave	Turning Movement	PDO	Cloudy	2012
S Ivy St SE 16th Ave	Rear-end	PDO	Clear	2011

## **FUTURE CONDITIONS**

The following section summarizes the p.m. peak hour transportation operating conditions for the expected opening year of the project (2014). Future traffic operating conditions were analyzed at the study intersections to determine if the transportation network can support traffic generated by the proposed residential development. If City of Canby or Clackamas County operating standards are not met then mitigations may be necessary to improve network performance.

### **Project Trip Generation**

The amount of new vehicle trips generated by the proposed subdivision was estimated using trip generation estimates published in the ITE Trip Generation Manual for Single-Family Detached Housing<sup>5</sup>. The project site is currently undeveloped; therefore all trips generated to the site were treated as new trips to the existing roadway network. The proposed site is expected to generate 30 (8 in, 22 out) a.m. peak hour trips, 39 (25 in, 14 out) p.m. peak hour trips, and 371 daily trips. Table 4 summarizes the trip generation estimates for the proposed site.

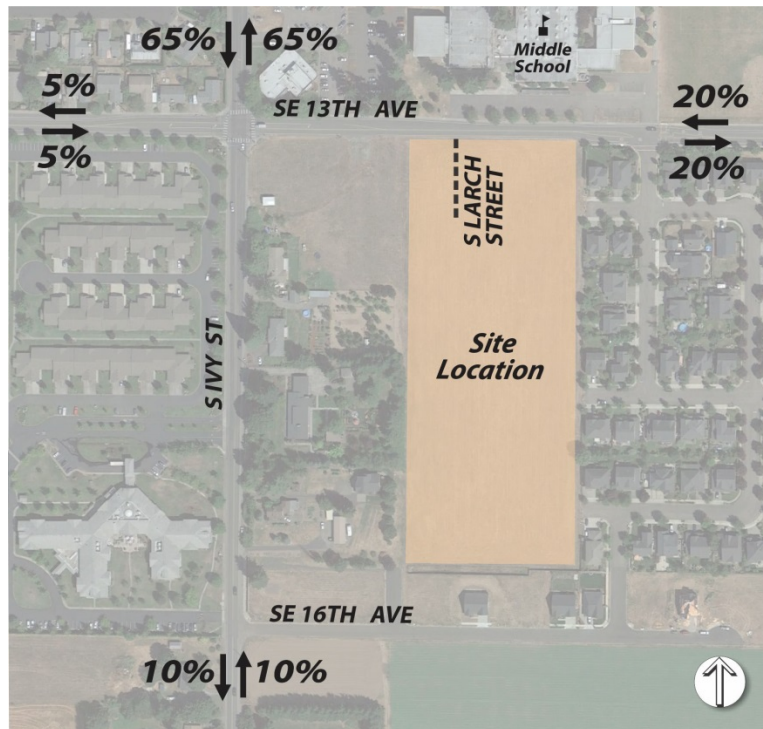
<sup>5</sup> Trip Generation Manual, Institute of Transportation Engineers, 9<sup>th</sup> Edition.



**Table 4: Trip Generation Summary**

Land Use (ITE Code)	Units	Total Daily Trips	Time	Trip Generation	Peak Hour Trips		
			Period	Rate	In	Out	Total
Single Family Detached (210)	39	371	AM Peak	0.75 trips/unit	8	22	30
			PM Peak	1.0 trips/unit	25	14	39

The distribution of site vehicle traffic was based on the previous study conducted as part of the annexation of the site. The project trip distribution is shown on figure 3.



**Figure 3: Project Trip Distribution**

## Traffic Impact Analysis

A traffic impact analysis for the proposed project was conducted in accordance to the City’s requirements<sup>6</sup>. The new vehicle trips generated by the proposed subdivision was added onto the existing traffic volumes to identify the expected traffic operating conditions once the development is built and fully occupied. The traffic conditions were evaluated at the same study intersections as was considered in the Existing Conditions Analysis. At this time, there are two approved but un-built development projects in the study area. The Sequoia Parkway extension to SE 13<sup>th</sup> Street is anticipated to be constructed next spring, so it was considered in year of opening future analysis<sup>7</sup>. Additionally, the Hope Village development located on the west side of SE 13<sup>th</sup> Street south SE 16<sup>th</sup> Avenue is anticipated to generate approximately 60 trips during the p.m. peak hour.

All intersections would continue to operate within acceptable levels during the p.m. peak hour with additional traffic loadings associated with the project and Sequoia Parkway extension. The operation results are summarized in table 5. As shown, all intersections have reserve capacity, and the development of Hope Village is not anticipated to impact these intersections.

**Table 5: Existing Intersection Operations Summary with Project and Sequoia Extension (PM Peak Hour)**

Intersection	Intersection Control	Mobility Standard	Total		
			Delay (s)	LOS	V/C
S Ivy St/SE 13 <sup>th</sup> Ave	Signalized	LOS D	11.4	B	0.52
S Ivy St/SE 16 <sup>th</sup> Ave	Unsignalized (Two way stop)	LOS D	11.5	B	0.03
S Larch St/SE 13 <sup>th</sup> Ave	Unsignalized (Two way stop)	LOS D	15.8	C	0.03

<sup>6</sup> City of Canby Transportation System Plan, Chapter 10: Implementation Plan, December 2010.

<sup>7</sup> The Sequoia Parkway extension to SE 13<sup>th</sup> is anticipated to increase traffic volumes along SE 13<sup>th</sup> Avenue by 20 vehicles per hour. City of Canby Transportation System Plan, Technical Memorandum #6, DKS Associates, June 2010.

## Site Access

The project is proposing to construct a new street connection to SE 13<sup>th</sup> Avenue (S Larch Street). The existing accesses on S Lupine Street to SE 13<sup>th</sup> Avenue and on SE 16<sup>th</sup> Avenue to S Ivy Street would be maintained. It appears from the site plan that the alignment of the proposed S Larch Street would be opposite the existing Ackerman Middle School access (egress only) located on the north side of the roadway. This access is located approximately 500 feet from the center line of S Ivy Street. According to the City's Transportation System Plan (TSP) access spacing standards for street facilities<sup>8</sup>, the minimum required distance between roadways along an arterial is 660 feet. Therefore; a deviation to this standard would be required for S Larch Street.



**Figure 4: Proposed site access along SE 13<sup>th</sup> Ave – looking east**

The intersection of SE 13<sup>th</sup> Avenue/S Lupine Street is located approximately 940 feet from the center line of S Ivy Street. With this, a new street connection could not be provided within this segment given the City's spacing standard for street facilities. To meet the requirements of an exception to the access spacing standards, an alternatives analysis would be required that demonstrates that an alternative meeting City standards has operational, safety, or site development issues that could be improved with the proposed deviation. An initial review of the site plan without the S Larch Street connection to SE 13<sup>th</sup> Avenue appears to not have significant operational, safety, or site access/development constraints. Therefore, at this time it is recommended that a deviation for the connection of S Larch Street not be granted and that the site utilize S Lupine Street as access to SE 13<sup>th</sup> Avenue to comply with City standards. The proposed layout of S Larch Street to SE 13<sup>th</sup> Avenue could be primarily maintained to provide access for lot 1<sup>9</sup>, but the actual vehicle connection to SE 13<sup>th</sup> Avenue would not be provided. Providing access for pedestrians, bicycles, and emergency vehicles to SE 13<sup>th</sup> Avenue from S Larch Street would be recommended.

Traffic signal warrants (warrant 3: peak hour) were evaluated at the intersections of S Ivy Street/SE 16<sup>th</sup> Street and SE 13<sup>th</sup> Street/S Larch Street and were not satisfied under current conditions with the proposed project<sup>10</sup>. Additionally, left and right turn lane warrants were evaluated at these intersections and not met.

## Sight Distance

A site visit on December 12, 2013 found that adequate sight distance would be provided under current conditions at both site accesses to the arterial roadway system. The intersection sight distance findings are

<sup>8</sup> Access Management, Canby Transportation System Plan, Chapter 7 - "Motor Vehicle Plan", 2010.

<sup>9</sup> The City's access spacing standard for driveways along an arterial roadway is 330 feet.

<sup>10</sup> Manual on Uniform Traffic Control Devices, Federal Highway Administration, 2009

summarized in table 6. With the development, the sight distance triangles should be kept clear of permanent objects (large signs, landscaping, retaining wall, etc.) that could potentially restrict intersection sight distance.

**Table 6: Intersection Sight Distance and Geometrics**

Intersection	Posted Speed	Intersection Geometry	Traffic Control	Turning Movement	Sight Distance Required <sup>11</sup>	Sight Distance Adequate?
S Ivy St/ SE 16 <sup>th</sup> St	40 mph	3-way	Stop control SE 16th St	Left	445 ft.	Yes
				Right	385 ft.	Yes
SE 13th St/ S Larch St	25 mph	3-way	Stop control S Larch St	Left	280 ft.	Yes
				Right	240 ft.	Yes

On street parking is currently permitted on the east side of S Ivy Street near SE 16<sup>th</sup> Street. The Manual of Uniform Traffic Control Devices (MUTCD)<sup>12</sup> recommends prohibiting on-street parking within 20-feet of intersections, which would reduce the impact of on-street parking on sight distance. Therefore, it is recommended that the City consider prohibiting on-street parking along S Ivy Street and SE 16th Avenue within 20-feet of the intersection.

## Circulation Review

The application proposes a new street connection (S Larch Street) to “T” into the south side of SE 13<sup>th</sup> Avenue between S Ivy Street and S Lupine Street. Additionally, SE 13th Place, SE 14th Place, and SE 15th Place would be extended west from S Lupine Street to S Juniper Street. Based on the City’s street spacing standards, it is recommended that S Larch Street terminate just north of SE 13<sup>th</sup> Place and provide access to lot 2. A driveway could be provided along SE 13<sup>th</sup> Avenue for lot 1. Access to SE 13<sup>th</sup> Avenue would be provided by S Lupine Street to the east.

All new street facilities should conform to the City’s requirements for local roads. Overall, the internal roadway configuration proposed would provide full connectivity within the site and provide access to each tax lot. Proper signage and traffic control devices should be provided at all internal intersections.

It is recommended that sidewalks be provided along the development frontages of SE 13<sup>th</sup> Avenue and SE 16<sup>th</sup> Avenue. Internally, the street system should be constructed to the City’s local street standard which features sidewalks and parking on both sides.

<sup>11</sup> A Policy on Geometric Design of Highways and Streets, AASHTO, 2011, Intersection Sight Distance

<sup>12</sup> Manual on Uniform Traffic Control Devices, Federal Highway Administration, 2009

## Additional Considerations

A pedestrian study was conducted along SE 13th Avenue between S Aspen Way and S Forest Rd as part of the Sequoia Parkway extension to SE 13th Avenue<sup>13</sup>. This pedestrian study identified several traffic calming measures to enhance pedestrian safety along the roadway which includes the frontage of the proposed project site. There were four segment treatment recommendations from the study that are within the frontage of the proposed project site.

- Install “End School Zone” sign.
- Install speed signs with increased signs.
- Installation of sidewalk on SE 13<sup>th</sup> Avenue (south side).
- Surround parking areas with extended curb work and paint individual parking stalls.

It is recommended that the applicant construct the sidewalk on SE 13<sup>th</sup> Avenue along their frontage as part of this application.

## FINDINGS

- The proposed development would generate an additional 30 net new trips in the a.m. peak hour and 39 net new trips in the p.m. peak hour.
- There were five crashes recorded at the study intersections over the previous three years. The increased traffic associated with the proposed project is not expected to influence safety at any of the intersections.
- Adequate sight distance would be provided at all site accesses. With the development, the sight distance triangles should be kept clear of permanent objects (large signs, landscaping, retaining walls, etc.) that could potentially restrict intersection sight distance. Additionally, it is recommended that parking be prohibited within 20-feet of intersections.
- The study intersections would operate within the mobility standards defined by the City and Clackamas County with the additional traffic loading generated by the project site and the Sequoia Parkway extension. With the development of Hope Village all intersections would continue to operate at acceptable levels.
- Internal local roadways should be constructed to the City’s standards. Proper signage and traffic control devices should be provided at intersections.
- The development should include sidewalks along the project frontages to SE 13<sup>th</sup> Avenue and SE 16<sup>th</sup> Avenue.
- The proposed S Larch Street would be located approximately 500 feet east of S Ivy Street which would not meet the City’s street spacing standard of 660 feet along arterial roadways. A deviation to the City’s access spacing standard would be required. It is recommended that this deviation not be granted at this time and that the site utilize S Lupine Street as direct connection to SE 13<sup>th</sup> Avenue. The proposed layout of S Larch

<sup>13</sup> SE 13<sup>th</sup> Avenue Pedestrian Study, DKS Associates, June 2013.

Street to SE 13<sup>th</sup> Avenue could be primarily maintained to provide access for lot 1, but the actual vehicle connection to SE 13<sup>th</sup> Avenue would not be provided. Providing access for pedestrians, bicycles, and emergency vehicles to SE 13<sup>th</sup> Avenue from S Larch Street would be recommended.

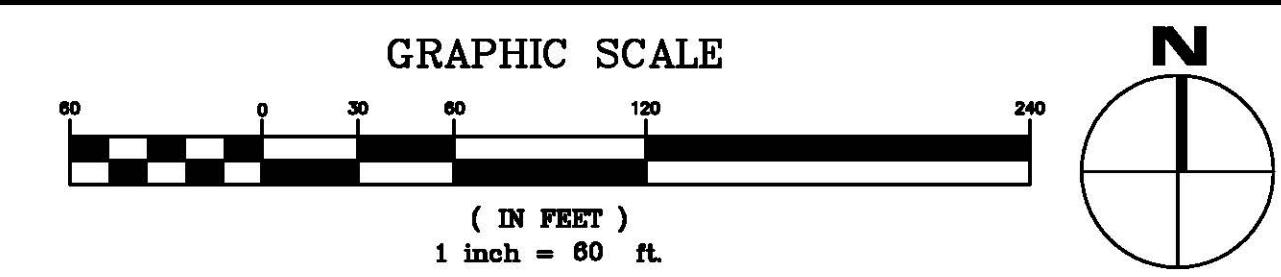
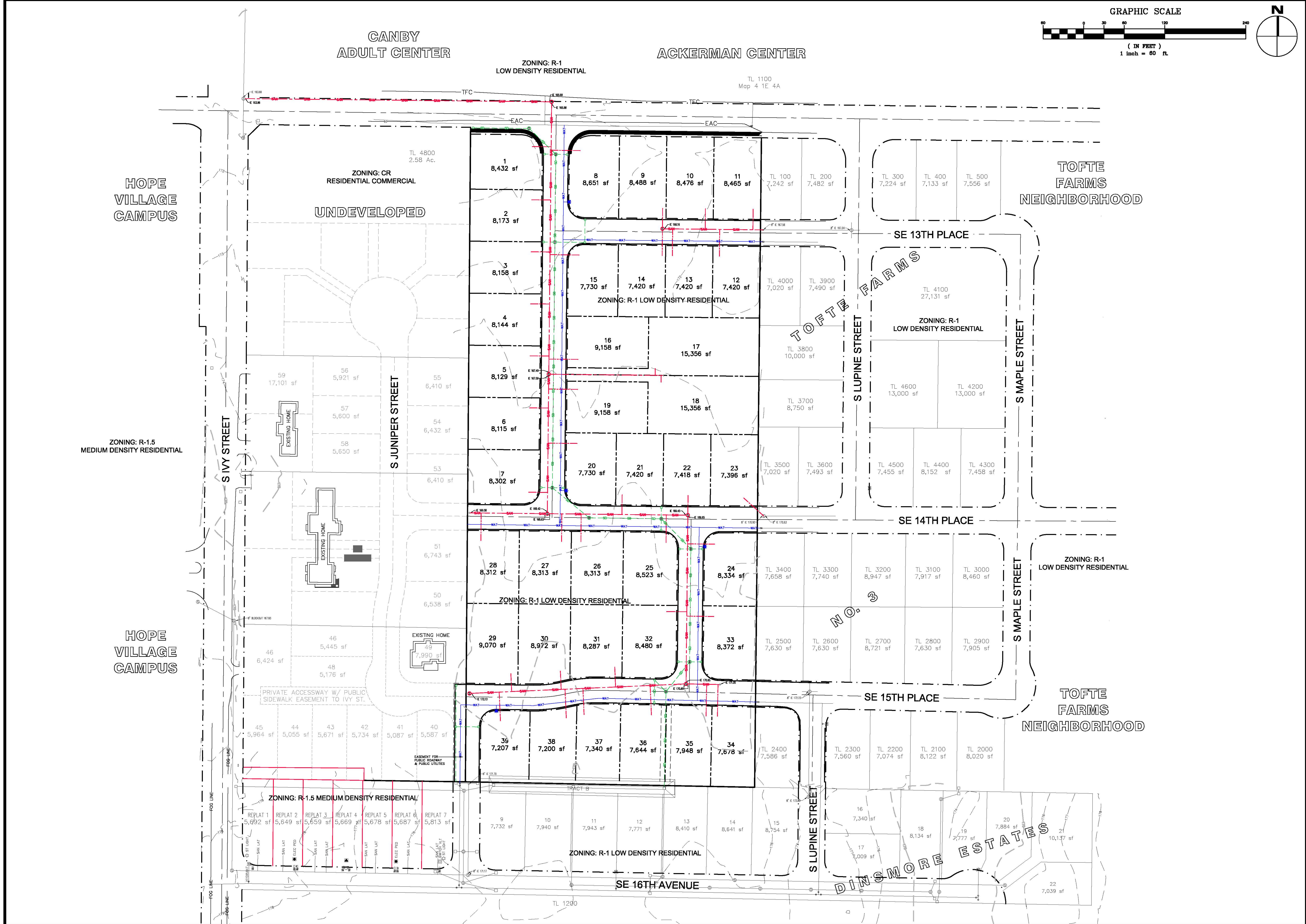
- Traffic signal warrants (warrant 3: peak hour) were evaluated at the intersections of S Ivy Street/SE 16<sup>th</sup> Street and SE 13<sup>th</sup> Street/S Larch Street and were not satisfied under current conditions with the proposed project<sup>14</sup>. Additionally, left and right turn lane warrants were evaluated at these intersections and not met.

If you have any questions, please feel free to call or email.

Attached:

- Site plan
- Traffic Counts
- Crash Records (2010-2012)
- PM Peak Hour Operation Reports

<sup>14</sup> Manual on Uniform Traffic Control Devices, Federal Highway Administration, 2009



REVISIONS	BY

DINSMORE ESTATES 2  
WILLOW CREEK ESTATES, INC.

Pre-Application Meeting  
Utility Plan

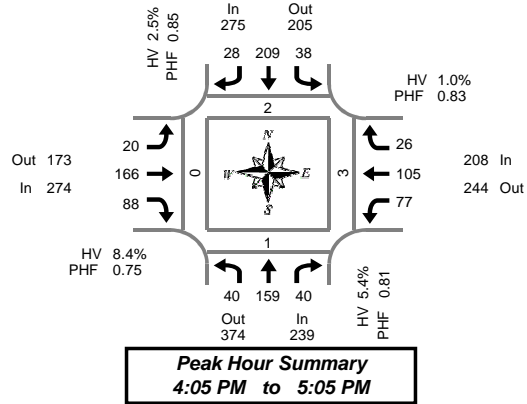
**SISUL ENGINEERING**  
376 PORTLAND AVENUE  
GLADSTONE, OREGON 97027  
(503) 687-0188  
07-134-Layout.dwg

DATE: JUNE, 2013  
SCALE: H: 1" = 60'  
DRAWN: AK/PS  
JOB: SGL 07-134  
SHEET: 2  
OF 2 SHEETS

# Total Vehicle Summary



Clay Carney  
(503) 833-2740



## S Ivy St & SE 13th Ave Wednesday, December 11, 2013 4:00 PM to 6:00 PM

### 5-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 13th Ave				Westbound SE 13th Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	1	5	3	0	2	16	1	0	2	10	7	0	5	7	3	0	62	0	0	0	0
4:05 PM	5	11	3	0	4	17	1	0	0	13	13	0	4	13	0	0	84	1	0	0	0
4:10 PM	10	18	2	0	3	23	4	0	1	9	9	0	8	6	0	0	93	0	1	1	0
4:15 PM	3	15	5	0	4	23	2	0	1	8	3	0	2	13	1	0	80	0	0	0	0
4:20 PM	3	15	3	0	3	8	2	0	1	14	10	0	5	13	3	0	80	0	0	0	0
4:25 PM	2	13	1	0	5	17	3	0	1	18	4	0	9	14	3	0	90	0	0	0	0
4:30 PM	0	15	3	0	2	15	3	0	5	18	16	0	6	6	3	0	92	1	0	0	0
4:35 PM	4	18	5	0	0	15	2	0	0	15	4	0	3	6	1	0	73	0	0	0	0
4:40 PM	4	11	7	0	5	18	2	0	4	22	7	0	10	2	2	0	94	0	0	0	0
4:45 PM	1	6	5	0	6	17	4	0	2	15	4	0	8	12	3	0	83	0	0	1	0
4:50 PM	2	12	0	0	3	23	1	0	3	10	8	0	8	8	3	0	81	0	0	0	0
4:55 PM	2	12	2	0	2	18	2	0	1	11	5	0	8	8	1	0	72	0	0	1	0
5:00 PM	4	13	4	0	1	15	2	0	1	13	5	0	6	4	6	0	74	0	0	0	0
5:05 PM	2	15	2	0	3	19	2	0	1	8	5	0	9	10	3	0	79	0	0	0	0
5:10 PM	5	5	1	0	4	18	3	0	2	10	5	0	1	6	7	0	67	0	0	0	0
5:15 PM	4	10	4	0	3	19	0	0	3	7	7	0	10	6	4	0	77	0	0	0	0
5:20 PM	3	16	4	0	1	14	4	0	1	14	4	0	5	6	5	0	77	0	0	0	0
5:25 PM	2	18	4	0	8	14	2	0	6	10	6	0	4	13	1	0	88	0	0	0	0
5:30 PM	1	11	3	0	4	23	1	0	0	15	2	0	2	5	4	0	71	0	0	0	0
5:35 PM	3	7	1	0	2	13	3	0	2	14	8	0	4	8	0	0	65	0	0	0	0
5:40 PM	5	10	3	0	0	16	3	0	2	8	5	0	5	6	2	0	65	0	0	0	0
5:45 PM	7	10	0	0	2	13	6	0	2	22	7	0	5	6	1	0	81	0	0	0	0
5:50 PM	2	18	3	0	2	20	0	0	3	9	2	0	3	6	2	0	70	0	0	0	0
5:55 PM	4	12	1	0	1	16	0	0	2	11	4	0	3	4	3	0	61	0	0	0	0
Total Survey	79	296	69	0	70	410	53	0	46	304	150	0	133	188	61	0	1,859	2	1	3	0

### 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 13th Ave				Westbound SE 13th Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	16	34	8	0	9	56	6	0	3	32	29	0	17	26	3	0	239	1	1	1	0
4:15 PM	8	43	9	0	12	48	7	0	3	40	17	0	16	40	7	0	250	0	0	0	0
4:30 PM	8	44	15	0	7	48	7	0	9	55	27	0	19	14	6	0	259	1	0	0	0
4:45 PM	5	30	7	0	11	58	7	0	6	36	17	0	24	28	7	0	236	0	0	2	0
5:00 PM	11	33	7	0	8	52	7	0	4	31	15	0	16	20	16	0	220	0	0	0	0
5:15 PM	9	44	12	0	12	47	6	0	10	31	17	0	19	25	10	0	242	0	0	0	0
5:30 PM	9	28	7	0	6	52	7	0	4	37	15	0	11	19	6	0	201	0	0	0	0
5:45 PM	13	40	4	0	5	49	6	0	7	42	13	0	11	16	6	0	212	0	0	0	0
Total Survey	79	296	69	0	70	410	53	0	46	304	150	0	133	188	61	0	1,859	2	1	3	0

### Peak Hour Summary 4:05 PM to 5:05 PM

By Approach	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 13th Ave				Westbound SE 13th Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	239	374	613	0	275	205	480	0	274	173	447	0	208	244	452	0	996	2	1	3	0
%HV	5.4%				2.5%				8.4%				1.0%				4.5%				
PHF	0.81				0.85				0.75				0.83				0.95				

By Movement	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 13th Ave				Westbound SE 13th Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	40	159	40	239	38	209	28	275	20	166	88	274	77	105	26	208	996
%HV	0.0%	3.1%	20.0%	5.4%	0.0%	2.9%	3.6%	2.5%	0.0%	13.9%	0.0%	8.4%	1.3%	1.0%	0.0%	1.0%	4.5%
PHF	0.56	0.83	0.59	0.81	0.68	0.83	0.88	0.85	0.56	0.75	0.73	0.75	0.74	0.66	0.65	0.83	0.95

### Rolling Hour Summary 4:00 PM to 6:00 PM

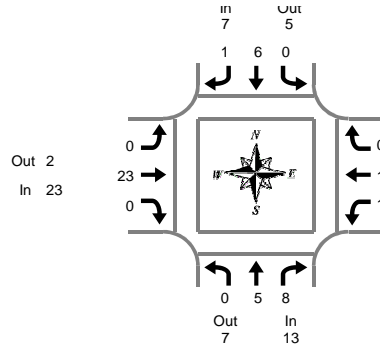
Interval Start Time	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 13th Ave				Westbound SE 13th Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	37	151	39	0	39	210	27	0	21	163	90	0	76	108	23	0	984	2	1	3	0
4:15 PM	32	150	38	0	38	206	28	0	22	162	76	0	75	102	36	0	965	1	0	2	0
4:30 PM	33	151	41	0	38	205	27	0	29	153	76	0	78	87	39	0	957	1	0	2	0
4:45 PM	34	135	33	0	37	209	27	0	24	135	64	0	70	92	39	0	899	0	0	2	0
5:00 PM	42	145	30	0	31	200	26	0	25	141	60	0	57	80	38	0	875	0	0	0	0



# Heavy Vehicle Summary



Clay Carney  
(503) 833-2740



## S Ivy St & SE 13th Ave

Wednesday, December 11, 2013

4:00 PM to 6:00 PM

### Heavy Vehicle 5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 13th Ave				Westbound SE 13th Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
4:05 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	3
4:20 PM	0	2	0	2	0	1	0	1	0	4	0	4	1	0	0	1	8
4:25 PM	0	1	1	2	0	1	0	1	0	5	0	5	0	0	0	0	8
4:30 PM	0	0	2	2	0	1	0	1	0	10	0	10	0	0	0	0	13
4:35 PM	0	1	3	4	0	0	0	0	0	1	0	1	0	0	0	0	5
4:40 PM	0	0	2	2	0	0	0	0	0	1	0	1	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
4:55 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
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	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
5:35 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	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	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
5:55 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Survey	0	6	8	14	0	11	1	12	2	24	1	27	1	1	0	2	55

### Heavy Vehicle 15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 13th Ave				Westbound SE 13th Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	1	0	1	0	1	1	2	0	1	0	1	4
4:15 PM	0	4	1	5	0	3	0	3	0	10	0	10	1	0	0	1	19
4:30 PM	0	1	7	8	0	1	0	1	0	12	0	12	0	0	0	0	21
4:45 PM	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	2
5:45 PM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
Total Survey	0	6	8	14	0	11	1	12	2	24	1	27	1	1	0	2	55

### Heavy Vehicle Peak Hour Summary

4:05 PM to 5:05 PM

By Approach	Northbound S Ivy St			Southbound S Ivy St			Eastbound SE 13th Ave			Westbound SE 13th Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	13	7	20	7	5	12	23	2	25	2	31	33	45
PHF	0.41			0.58			0.30			0.50			0.39

By Movement	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 13th Ave				Westbound SE 13th Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	5	8	13	0	6	1	7	0	23	0	23	1	1	0	2	45
PHF	0.00	0.31	0.29	0.41	0.00	0.50	0.25	0.58	0.00	0.30	0.00	0.30	0.25	0.25	0.00	0.50	0.39

### Heavy Vehicle Rolling Hour Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 13th Ave				Westbound SE 13th Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	5	8	13	0	7	1	8	0	23	1	24	1	1	0	2	47
4:15 PM	0	5	8	13	0	7	1	8	0	22	0	22	1	0	0	1	44
4:30 PM	0	1	7	8	0	4	1	5	2	12	0	14	0	0	0	0	27
4:45 PM	0	0	0	0	0	4	1	5	2	1	0	3	0	0	0	0	8
5:00 PM	0	1	0	1	0	4	0	4	2	1	0	3	0	0	0	0	8

# Peak Hour Summary

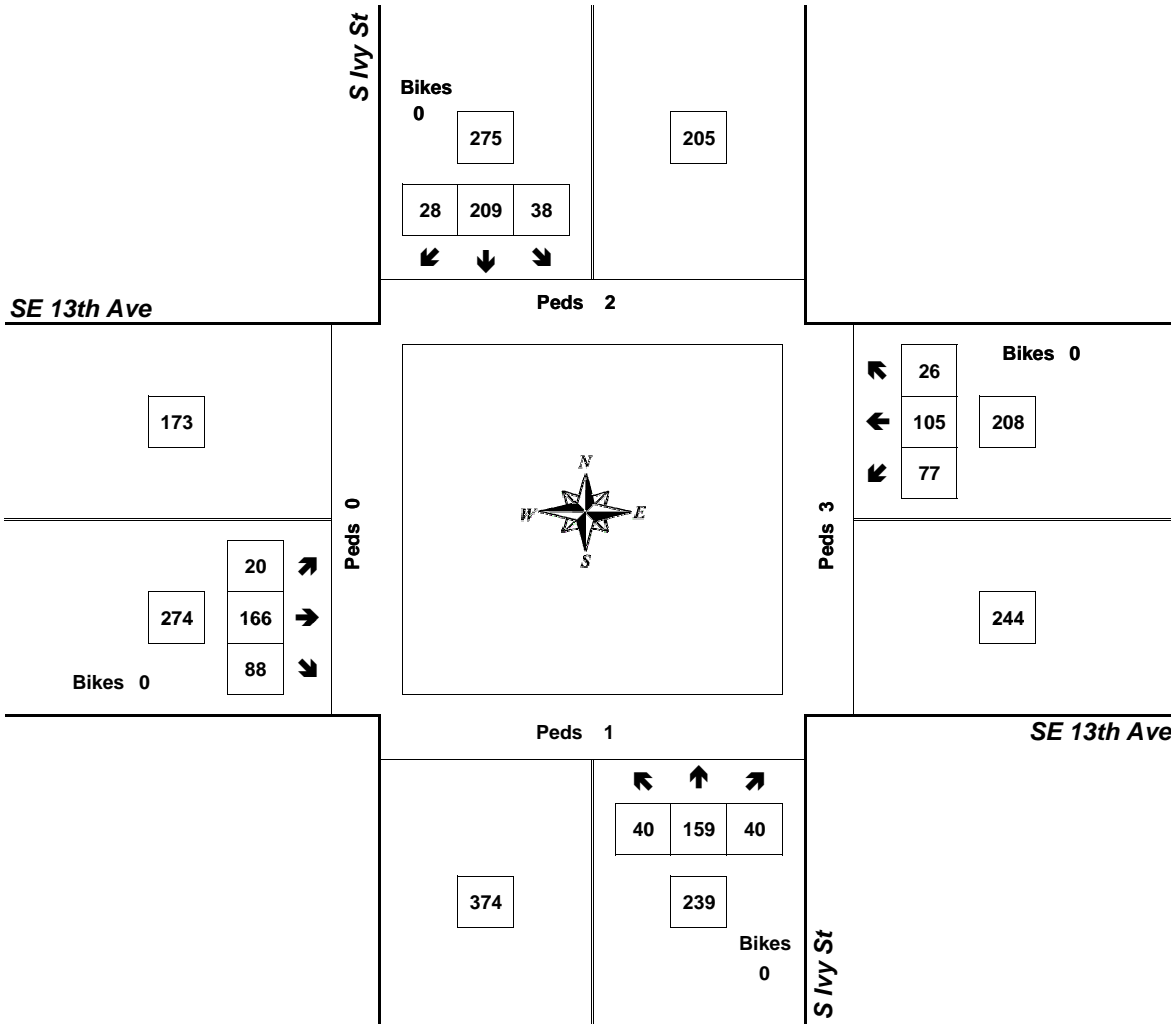


Clay Carney  
(503) 833-2740

## S Ivy St & SE 13th Ave

4:05 PM to 5:05 PM

Wednesday, December 11, 2013



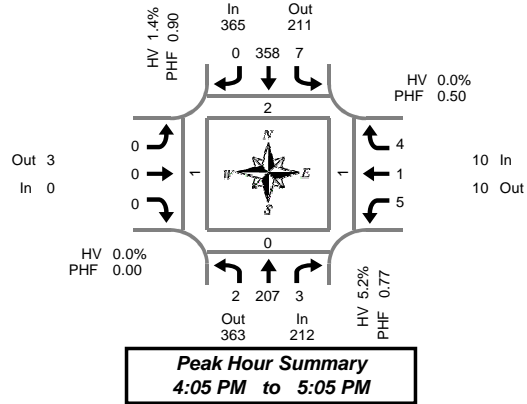
Approach	PHF	HV%	Volume
EB	0.75	8.4%	274
WB	0.83	1.0%	208
NB	0.81	5.4%	239
SB	0.85	2.5%	275
<b>Intersection</b>	<b>0.95</b>	<b>4.5%</b>	<b>996</b>

Count Period: 4:00 PM to 6:00 PM

# Total Vehicle Summary



Clay Carney  
(503) 833-2740



## S Ivy St & SE 16th Ave Wednesday, December 11, 2013 4:00 PM to 6:00 PM

### 5-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 16th Ave				Westbound SE 16th Ave				Interval Total	Pedestrians Crosswalk						
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West			
4:00 PM	0	10	2	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:05 PM	0	19	1	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 PM	0	21	0	0	0	37	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:15 PM	2	26	0	0	0	31	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4:20 PM	0	13	0	0	1	21	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
4:25 PM	0	15	1	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	19	0	0	1	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:35 PM	0	19	0	0	1	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	19	0	0	1	33	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0
4:45 PM	0	12	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	10	0	0	1	35	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
4:55 PM	0	15	1	0	2	28	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0
5:00 PM	0	19	0	0	0	29	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	19	1	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	0	9	1	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	18	0	0	1	31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	16	0	0	0	24	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
5:25 PM	0	17	1	0	1	22	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
5:30 PM	0	14	0	0	0	27	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	13	0	0	1	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	0	16	0	0	0	23	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
5:45 PM	0	14	0	0	0	23	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	25	0	0	1	21	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
5:55 PM	0	8	1	0	2	22	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Total Survey	2	386	9	0	13	655	8	0	0	0	0	0	5	1	11	1	1,090	2	0	1	1			

### 15-Minute Interval Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 16th Ave				Westbound SE 16th Ave				Interval Total	Pedestrians Crosswalk						
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West			
4:00 PM	0	50	3	0	0	96	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
4:15 PM	2	54	1	0	1	78	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	57	0	0	3	88	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0
4:45 PM	0	37	1	0	3	93	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0
5:00 PM	0	47	2	0	0	85	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	51	1	0	2	77	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
5:30 PM	0	43	0	0	1	72	3	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
5:45 PM	0	47	1	0	3	66	2	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0
Total Survey	2	386	9	0	13	655	8	0	0	0	0	0	5	1	11	1	1,090	2	0	1	1			

### Peak Hour Summary 4:05 PM to 5:05 PM

By Approach	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 16th Ave				Westbound SE 16th Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	212	363	575	0	365	211	576	0	0	3	3	0	10	10	20	0	587	2	0	1	1
%HV	5.2%				1.4%				0.0%				0.0%				2.7%				
PHF	0.77				0.90				0.00				0.50				0.85				

By Movement	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 16th Ave				Westbound SE 16th Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	2	207	3	212	7	358	0	365	0	0	0	0	5	1	4	10	587
%HV	0.0%	5.3%	0.0%	5.2%	0.0%	1.4%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%
PHF	0.25	0.78	0.75	0.77	0.58	0.89	0.00	0.90	0.00	0.00	0.00	0.00	0.63	0.25	0.33	0.50	0.85

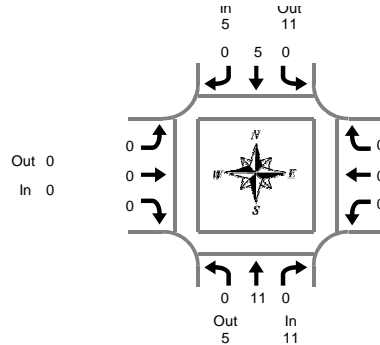
### Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 16th Ave				Westbound SE 16th Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	2	198	5	0	7	355	0	0	0	0	0	0	4	1	4	0	576	2	0	1	1
4:15 PM	2	195	4	0	7	344	0	0	0	0	0	0	5	1	3	0	561	2	0	1	1
4:30 PM	0	192	4	0	8	343	3	0	0	0	0	0	3	1	6	0	560	1	0	1	1
4:45 PM	0	178	4	0	6	327	6	0	0	0	0	0	2	1	6	0	530	0	0	0	1
5:00 PM	0	188	4	0	6	300	8	0	0	0	0	0	1	0	7	1	514	0	0	0	0

# Heavy Vehicle Summary



Clay Carney  
(503) 833-2740



**Peak Hour Summary**  
4:05 PM to 5:05 PM

## S Ivy St & SE 16th Ave

Wednesday, December 11, 2013  
4:00 PM to 6:00 PM

### Heavy Vehicle 5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 16th Ave				Westbound SE 16th Ave				Interval Total	
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:20 PM	0	3	0	3	0	1	0	1	0	0	0	0	0	0	0	0	0	4
4:25 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	2
4:35 PM	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4:40 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	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	0	1
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	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	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
5:40 PM	0	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	0
5:50 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	12	0	12	0	9	0	9	0	0	0	0	0	0	0	0	0	21

### Heavy Vehicle 15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 16th Ave				Westbound SE 16th Ave				Interval Total	
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total		
4:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	4	0	4	0	3	0	3	0	0	0	0	0	0	0	0	0	7
4:30 PM	0	7	0	7	0	1	0	1	0	0	0	0	0	0	0	0	0	8
4:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	1	0	1	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	0
5:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Survey	0	12	0	12	0	9	0	9	0	0	0	0	0	0	0	0	0	21

### Heavy Vehicle Peak Hour Summary

4:05 PM to 5:05 PM

By Approach	Northbound S Ivy St			Southbound S Ivy St			Eastbound SE 16th Ave			Westbound SE 16th Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	11	5	16	5	11	16	0	0	0	0	0	0	16
PHF	0.39			0.42			0.00			0.00			0.50

By Movement	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 16th Ave				Westbound SE 16th Ave				Total	
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total		
Volume	0	11	0	11	0	5	0	5	0	0	0	0	0	0	0	0	0	16
PHF	0.00	0.39	0.00	0.39	0.00	0.42	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50

### Heavy Vehicle Rolling Hour Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound S Ivy St				Southbound S Ivy St				Eastbound SE 16th Ave				Westbound SE 16th Ave				Interval Total	
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total		
4:00 PM	0	11	0	11	0	7	0	7	0	0	0	0	0	0	0	0	0	18
4:15 PM	0	11	0	11	0	6	0	6	0	0	0	0	0	0	0	0	0	17
4:30 PM	0	7	0	7	0	3	0	3	0	0	0	0	0	0	0	0	0	10
4:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	0	3

# Peak Hour Summary

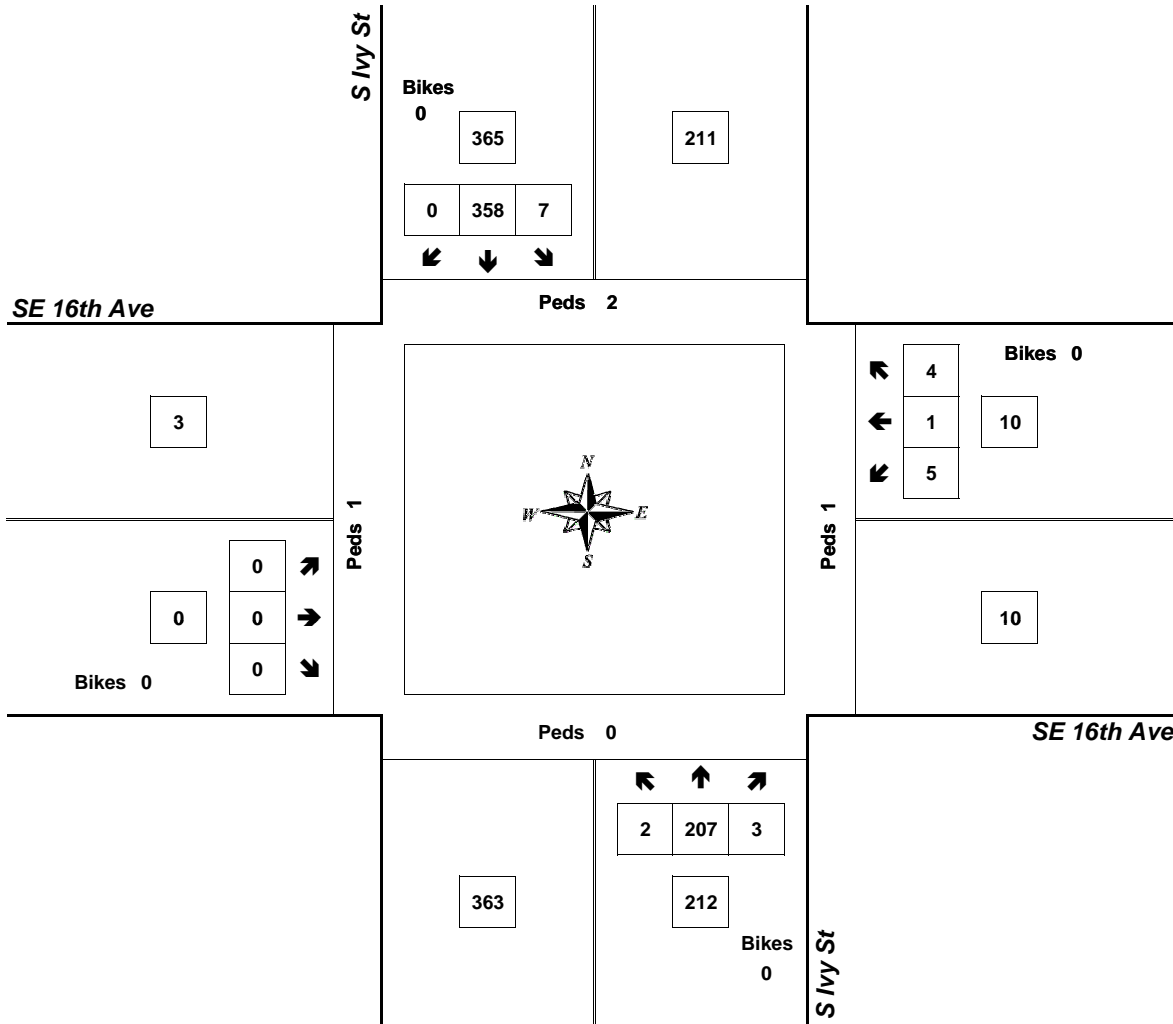


Clay Carney  
(503) 833-2740

## S Ivy St & SE 16th Ave

4:05 PM to 5:05 PM

Wednesday, December 11, 2013



Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.50	0.0%	10
NB	0.77	5.2%	212
SB	0.90	1.4%	365
<b>Intersection</b>	<b>0.85</b>	<b>2.7%</b>	<b>587</b>

Count Period: 4:00 PM to 6:00 PM

IVY ST at SW 13TH AVE, City of Canby, Clackamas County, 01/01/2010 to 12/31/2012

Total crash records: 4

SPCL USE	TRLR QTY	MOVE	FROM	TO	P#	TYPE	SVRTY	E	X	RES	LOC	ERROR	ACT	EVENT	CAUSE
01 NONE	0	TURN-L	TURN-L	TURN-L	01	DRVR	NONE	49	F	OR-Y		029	000	000	02
PRVTE		W -N	W -N										000	000	00
SCHL BUS													000	000	02

SPCL USE	TRLR QTY	MOVE	FROM	TO	P#	TYPE	SVRTY	E	X	RES	LOC	ERROR	ACT	EVENT	CAUSE
01 NONE	0	STRGHT	STRGHT	STRGHT	01	DRVR	INJC	23	M	NONE		020,050	000	040,100	04,30
PRVTE		E -W	E -W										000	000	00
PSNGR CAR													000	000	04,30
01 NONE	0	STRGHT	STRGHT	STRGHT	01	DRVR	INJC	14	F	OR<25			000	000	00
PRVTE		E -W	E -W										000	000	00
PSNGR CAR													000	000	00
02 NONE	0	STRGHT	STRGHT	STRGHT	02	PSNG	INJC	14	F	OR<25			000	040,100	00
PRVTE		N -S	N -S										000	000	00
PSNGR CAR													000	000	00
02 NONE	0	STRGHT	STRGHT	STRGHT	02	PSNG	INJC	18	F	OR<25			000	040,100	00
PRVTE		N -S	N -S										000	000	00
PSNGR CAR													000	000	00

SPCL USE	TRLR QTY	MOVE	FROM	TO	P#	TYPE	SVRTY	E	X	RES	LOC	ERROR	ACT	EVENT	CAUSE
01 NONE	0	STRGHT	STRGHT	STRGHT	01	DRVR	NONE	17	F	OR-Y		000	000	000	00
PRVTE		S -N	S -N										000	000	00
PSNGR CAR													000	000	00
02 NONE	0	TURN-L	TURN-L	TURN-L	02	DRVR	NONE	20	F	NONE		028,004	000	000	02
PRVTE		N -E	N -E										000	000	00
PSNGR CAR													000	000	02

SPCL USE	TRLR QTY	MOVE	FROM	TO	P#	TYPE	SVRTY	E	X	RES	LOC	ERROR	ACT	EVENT	CAUSE
01 NONE	0	TURN-L	TURN-L	TURN-L	01	DRVR	NONE	16	M	OR-Y		004,028	000	000	02
PRVTE		S -W	S -W										000	000	00
PSNGR CAR													000	000	02
02 NONE	0	STRGHT	STRGHT	STRGHT	02	DRVR	NONE	24	M	OR-Y			000	000	00
PRVTE		N -S	N -S										000	000	00
PSNGR CAR													000	000	00

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

SE 13TH AVE at IVY ST, City of Canby, Clackamas County, 01/01/2010 to 12/31/2012

CITY OF CANBY, CLACKAMAS COUNTY

Total crash records: 1

SPCL USE	TRLR QTY	MOVE	FROM	TO	P#	TYPE	SVRTY	E	X	RES	LOC	ERROR	ACT	EVENT	CAUSE	
00974	01	NONE	0	STRGHT	01	DRVR	NONE	39	M	OR-Y	OR<25	020	000	000	04	
				N - S												00
				PSNGR CAR												04
	02	NONE	0	STRGHT												00
				E - W												00
				PSNGR CAR												00
				PSNGR CAR												00
	02	NONE	0	STRGHT												00
				E - W												00
				PSNGR CAR												00
				PSNGR CAR												00

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

SE 16TH AVE at IVY ST, City of Canby, Clackamas County, 01/01/2010 to 12/31/2012

CITY OF CANBY, CLACKAMAS COUNTY

Total crash records: 1

SPCL USE	TRLR QTY	MOVE	FROM	TO	P#	TYPE	SVRTY	E	X	RES	LOC	ERROR	ACT	EVENT	CAUSE
01 NONE	0	STRGHT	S -N		01	DRVR	NONE	29	F	OR-Y		016,043,026	038		27,07
02 NONE	0	STOP	S -N		01	DRVR	NONE	40	F	OR-Y	OR<25	000	012		00
PRVTE													000		27,07
PSNGR CAR													000		00










Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.


























HCM Unsignalized Intersection Capacity Analysis  
 1: SE 16th Ave & S Ivy St

Canby Dinsmore Estates Phase II  
 Existing Conditions - PM

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	5	5	205	5	5	360
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	6	6	241	6	6	424
Pedestrians	1					1
Lane Width (ft)	11.0					11.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						1109
pX, platoon unblocked						
vC, conflicting volume	680	246			248	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	680	246			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 %	99	99			100	
cM capacity (veh/h)	414	791			1317	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	12	247	429			
Volume Left	6	0	6			
Volume Right	6	6	0			
cSH	544	1700	1317			
Volume to Capacity	0.02	0.15	0.00			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	11.8	0.0	0.2			
Lane LOS	B		A			
Approach Delay (s)	11.8	0.0	0.2			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			0.3			
Intersection Capacity Utilization			35.2%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Signalized Intersection Capacity Analysis  
2: SE 13th Ave & S Ivy St

Canby Dinsmore Estates Phase II  
Existing Conditions - PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	165	90	75	105	25	40	160	40	30	210	40
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Lane Width	11	11	11	11	11	11	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.5		4.0	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frbp, ped/bikes	1.00	0.99		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	
Frt	1.00	0.95		1.00	0.97		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1486	1473		1590	1621		1531	1556		1559	1603	
Flt Permitted	0.67	1.00		0.53	1.00		0.57	1.00		0.63	1.00	
Satd. Flow (perm)	1047	1473		894	1621		921	1556		1028	1603	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	174	95	79	111	26	42	168	42	32	221	42
RTOR Reduction (vph)	0	30	0	0	12	0	0	10	0	0	8	0
Lane Group Flow (vph)	21	239	0	79	125	0	42	200	0	32	255	0
Confl. Peds. (#/hr)	2		1	1		2			3	3		
Heavy Vehicles (%)	8%	8%	8%	1%	1%	1%	5%	5%	5%	3%	3%	3%
Turn Type	Perm		Perm		pm+pt		pm+pt					
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	7.8	7.8		7.8	7.8		15.3	14.1		14.1	13.5	
Effective Green, g (s)	7.8	7.8		7.8	7.8		15.3	14.1		14.1	13.5	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.44	0.40		0.40	0.39	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.5		4.0	4.5	
Vehicle Extension (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lane Grp Cap (vph)	233	328		199	361		424	627		423	618	
v/s Ratio Prot		c0.16			0.08		c0.00	0.13		0.00	c0.16	
v/s Ratio Perm	0.02			0.09			0.04			0.03		
v/c Ratio	0.09	0.73		0.40	0.35		0.10	0.32		0.08	0.41	
Uniform Delay, d1	10.8	12.6		11.6	11.4		5.7	7.2		6.4	7.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	7.0		0.5	0.2		0.0	0.1		0.0	0.2	
Delay (s)	10.8	19.6		12.1	11.7		5.7	7.3		6.4	8.0	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		19.0			11.8			7.0			7.8	
Approach LOS		B			B			A			A	
<b>Intersection Summary</b>												
HCM Average Control Delay			11.5			HCM Level of Service				B		
HCM Volume to Capacity ratio			0.51									
Actuated Cycle Length (s)			35.0			Sum of lost time (s)			12.5			
Intersection Capacity Utilization			52.3%			ICU Level of Service			A			
Analysis Period (min)			15									

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis  
 3: SE 13th Ave & S Larch St

Canby Dinsmore Estates Phase II  
 Existing Conditions - PM

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	235	0	0	205	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	255	0	0	223	0	0
Pedestrians					235	
Lane Width (ft)					11.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					18	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	485					
pX, platoon unblocked						
vC, conflicting volume			490		713	490
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			490		713	490
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			880		327	474
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>			
Volume Total	255	223	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	880	1700			
Volume to Capacity	0.15	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
<b>Intersection Summary</b>						
Average Delay			0.0			
Intersection Capacity Utilization			16.8%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 1: SE 16th Ave & S Ivy St

Canby Dinsmore Estates Phase II  
 Existing with Project and Sequoia Extension - PM























Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		Y			Y
Volume (veh/h)	6	9	206	7	10	360
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	7	11	242	8	12	424
Pedestrians	1					1
Lane Width (ft)	11.0					11.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						1109
pX, platoon unblocked						
vC, conflicting volume	695	248			252	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	695	248			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 %	98	99			99	
cM capacity (veh/h)	408	794			1319	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	18	251	435
Volume Left	7	0	12
Volume Right	11	8	0
cSH	576	1700	1319
Volume to Capacity	0.03	0.15	0.01
Queue Length 95th (ft)	2	0	1
Control Delay (s)	11.5	0.0	0.3
Lane LOS	B		A
Approach Delay (s)	11.5	0.0	0.3
Approach LOS	B		

Intersection Summary			
Average Delay		0.5	
Intersection Capacity Utilization		39.6%	ICU Level of Service A
Analysis Period (min)		15	

HCM Signalized Intersection Capacity Analysis  
2: SE 13th Ave & S Ivy St

Canby Dinsmore Estates Phase II  
Existing with Project and Sequoia Extension - PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	166	90	76	106	31	40	163	42	42	214	40
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Lane Width	11	11	11	11	11	11	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.5		4.0	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frbp, ped/bikes	1.00	0.99		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	
Frt	1.00	0.95		1.00	0.97		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1486	1473		1590	1610		1531	1555		1559	1604	
Flt Permitted	0.66	1.00		0.54	1.00		0.59	1.00		0.62	1.00	
Satd. Flow (perm)	1040	1473		902	1610		958	1555		1022	1604	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	175	95	80	112	33	42	172	44	44	225	42
RTOR Reduction (vph)	0	28	0	0	15	0	0	11	0	0	8	0
Lane Group Flow (vph)	21	242	0	80	130	0	42	205	0	44	259	0
Confl. Peds. (#/hr)	2		1	1		2			3	3		
Heavy Vehicles (%)	8%	8%	8%	1%	1%	1%	5%	5%	5%	3%	3%	3%
Turn Type	Perm		Perm		pm+pt		pm+pt					
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	7.8	7.8		7.8	7.8		14.2	12.9		14.2	12.9	
Effective Green, g (s)	7.8	7.8		7.8	7.8		14.2	12.9		14.2	12.9	
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.41	0.37		0.41	0.37	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.5		4.0	4.5	
Vehicle Extension (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lane Grp Cap (vph)	235	333		204	364		416	581		441	600	
v/s Ratio Prot		c0.16			0.08		c0.00	0.13		0.00	c0.16	
v/s Ratio Perm	0.02			0.09			0.04			0.04		
v/c Ratio	0.09	0.73		0.39	0.36		0.10	0.35		0.10	0.43	
Uniform Delay, d1	10.5	12.4		11.3	11.2		6.1	7.8		6.1	8.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	6.6		0.5	0.2		0.0	0.1		0.0	0.2	
Delay (s)	10.6	18.9		11.8	11.5		6.2	7.9		6.2	8.2	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		18.3			11.6			7.6			8.0	
Approach LOS		B			B			A			A	
<b>Intersection Summary</b>												
HCM Average Control Delay			11.4			HCM Level of Service				B		
HCM Volume to Capacity ratio			0.52									
Actuated Cycle Length (s)			34.5			Sum of lost time (s)			12.5			
Intersection Capacity Utilization			52.6%			ICU Level of Service			A			
Analysis Period (min)			15									

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis  
3: SE 13th Ave & S Larch Ave

Canby Dinsmore Estates Phase II  
Existing with Project and Sequoia Extension - PM

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	236	14	4	206	7	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	257	15	4	224	8	2
Pedestrians					235	
Lane Width (ft)					11.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					18	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	485					
pX, platoon unblocked						
vC, conflicting volume			507		732	499
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			507		732	499
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		98	100
cM capacity (veh/h)			868		317	469
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>			
Volume Total	272	228	10			
Volume Left	0	4	8			
Volume Right	15	0	2			
cSH	1700	868	342			
Volume to Capacity	0.16	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.2	15.8			
Lane LOS		A	C			
Approach Delay (s)	0.0	0.2	15.8			
Approach LOS			C			
<b>Intersection Summary</b>						
Average Delay			0.4			
Intersection Capacity Utilization			25.3%		ICU Level of Service	A
Analysis Period (min)			15			

### III. Neighborhood Meeting Notes



**Scott Family L.P**  
**4700 Development, LLC**  
**Canby, Oregon 97013**  
**503-266-5488**  
**503-266-4570 FAX**

January 30, 2014

RE: Neighborhood Meeting - Proposed Single Family Residential  
Development - Southeast 13<sup>th</sup> Ave - Tax Lot #41E04DA04700 - 9.56 acres

To Whom It May Concern:

A neighborhood meeting was held at Hope Village Community Center - 1535 S. Ivy St., Canby, Oregon at 7pm on Thursday, January 30, 2014 to present information and answer questions concerning our proposed SFR development. All property owners living within 500 feet of the subject property were notified at least fourteen (14) days in advance.

We have enclosed list of the attendees that signed in upon entering the meeting.

The following is a list of comments and questions raised during the meeting:

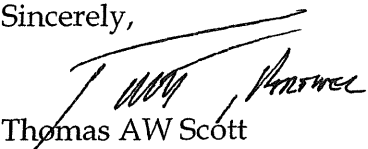
- Has the proposal been submitted to the City?
- Can you tell us why the City is not allowing an access to 13<sup>th</sup> Ave? Asked about intersection spacing. Have you seen cases in the City where the distance of intersection spacing is less? Could the citizens make a request to the City to allow an access from your development to 13<sup>th</sup> Ave.? Could a "right in only" access be installed on 13<sup>th</sup> Ave to new development?
- Will future developments to the West have additional egress/access to S. Ivy St.
- 
- Lupine intersection at 13<sup>th</sup> Ave
  - The Tofte wall was constructed too close and with the slope of the road it is difficult to see cars approaching from West.

- Do you anticipate that they will change the location of the existing speed hump on 13<sup>th</sup> & Lupine?
- Asked if additional calming devices will be installed to slow traffic
- Does the school district have adequate space for additional students?
  - How will students walk to schools across street? Additional crosswalks?
- What style of homes will be built in the subdivision(s)?
- What price range will the homes be sold?
- When would homes begin to be built and lived in?
- What is the zoning/comprehensive plan designation of this property and surrounding properties?
- Will the layout that you are proposing change in any way?
- Will a monument wall be installed on 13<sup>th</sup> Ave? Style? Height?

We answered all above questions to the best of our ability. All in attendance seemed to be satisfied with our responses.

Thank you for your time.

Sincerely,



Thomas AW Scott  
Partner

# DISNMORE ESATES - PHASE II

Neighborhood Meeting - January 30, 2014

Hope Village Community Center.

## Attendance

Name	Address	Phone #	E-mail
Bob Kautzman	Hope Village		
Maynard Nafziger	" "	651-2476	
T McRobbie	1550 S IUY		
Paula French	1441 S Dwyer	266 9646	
Brent & Carolyn Popma	1212 SE 17th Ave		
Crall Gingrich	Hope Village	266-9810	
Susan Myers	372 SE 13th Place Totte Farms	701-4254	SusanMyers@Comcast.com
Cody Maco	364 SE 14th Pl Totte Farms	266-2169	
Phil Reiersen	1415 S. Lupine Totte	816-9124	
Daisy Thorne	1427 S Pepperwood	939 8453	daisythomas@wbcable.net
Kris Hurley	376 SE 14th Pl.	503-680-2418	christine.s@wbcable.net
Wes Bentley	373 SE 13th Pl	503 651-1664	
Jim Gable	284 SE 16th Ave	360-601-0625	
Jason Montecardo	384 SE 13th place	503-453-5214	Jason.Montecardo@Comcast.com

# Scott Family L.P.

4700 Development, LLC

130 SW 2<sup>nd</sup> Avenue

Canby, Oregon 97013

503-266-5488

503-266-4570 FAX

January 13, 2014

RE: Neighborhood Meeting - Proposed Single Family Residential Development  
Southeast 13<sup>th</sup> Ave - Tax Lot #41E04DA04700 - 9.56 acres

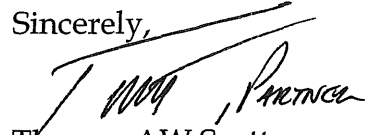
Dear Property Owner,

You are invited to attend a neighborhood meeting to discuss a proposed 41 lot single family low-density residential development on vacant property located South of Southeast 13<sup>th</sup> Avenue North of Southeast 16<sup>th</sup> Avenue in Canby. The meeting will be held at 7pm on Thursday, January 30, 2014 at Hope Village Community Center - 1535 S. Ivy St., Canby, Oregon.

Enclosed is a layout of the development. We will be providing general information concerning the proposal. If you have any questions, concerns or thoughts about our development we would like to discuss them at this meeting. Thank you for your time and we look forward to seeing you at the meeting.

If you are unable to attend the meeting but would like to discuss the development with us, please give us a call at 503-266-5488.

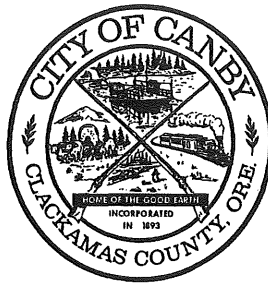
Sincerely,



Thomas AW Scott  
Partner

Encl.

## IV. Pre-application Meeting Minutes



## Pre-Application Meeting

### **Dinsmore Estates II**

**August 7, 2013**

**10:30 AM**

#### **Attended by:**

Angie Lehnert, Planning Department, 503-266-7001  
Jerry Nelzen, Public Works Department, 503-266-0759  
Solomon Jacobsen, Public Works Department, 503-266-0782  
Gary Stockwell, CU Electric Department, 503-263-4307  
Dinh Vu, Canby Telcom, 503-266-8201  
Dan Mickelsen, Storm/Erosion Control, 503-266-0698  
Doug Quan, CU Water Department, 971-563-6314

Hassan Ibrahim, Curran-McLeod Engineering, 503-684-3478  
Dave Michaud, Wave Broadband, 971-338-3270  
Pat Sisul, Sisul Engineering, 503-657-0188  
Gary Callahan, NW Natural, 503-806-9324  
Tom Scott, Property Owner, 503-266-5488  
Bryan Brown, Planning Department, 503-266-0702

*This document is for preliminary use only and is not a contractual document.*

#### **SISUL ENGINEERING, Pat Sisul**

- This meeting is for Dinsmore Estates phase II. The layout for the subdivision is a familiar street pattern extending the Tofte Farm streets west through the development and incorporating Dinsmore Estates Phase I.
- There are 39 buildable lots.
- We are proposing to extend the water lines from Tofte Farms and Dinsmore Estates Phase I.
- We are proposing to bring the sanitary sewer in from the intersection of SE 13<sup>th</sup> Avenue and S Ivy Street. Due to the lack of depth from the sewer lines from Tofte Farms Phase I.
- There are 4 existing drywells, which were put in on SE 16<sup>th</sup> Avenue along with Tract B south of lots 36 through 39 for storm water quality infiltration system that overflows into the drywells. After meeting with Bryan earlier, he referred me to Gordon Monroe and we discussed the use of the drywells and since they are permitted through DEQ they were intended to be used for this site. We need to do a performance test for these drywells to determine how much water they can take. I do need to speak with Canby Utility about getting enough water to these drywells. This will take a lot of water approximately 4 to 5 hundred gallons per minute, which is a lot of volume and we will need pull from more than one source to accomplish the test.

#### **PROPERTY OWNER, Tom Scott**

- Tom was asked if he wanted to add anything about Phase II and he said we would like to talk about the parks and traffic study requirements.

#### **CANBY TELCOM, Dinh Vu**

- We would like to have an open trench line when the development starts and from there service to the individual lots. We will wait for the electrical design from Gary and if we need anything else we will let you know.

**CURRAN-MCLEOD ENGINEERING, Hassan Ibrahim**

- I will be addressing the questions you asked on your information sheet. First question, are there any concerns about taking the sewer up to 13<sup>th</sup> and down to Ivy Street. I looked at the Waste Water Master Plan and there are no issues with capacity. Question two, as far as the minimum slope of 0.4% to maintain the six foot going down to S Ivy Street. Pat said even with that we cannot maintain the six foot depth. Hassan said he was not to concerned about the depth, but what comes to mind is we need the separation between water and sewer and that is the only issue I have is maintaining it vertically and horizontally. Other than that, we can be at four feet and serve those lots. Pat said we are trying to keep from having to artificial build the lots up to accommodate the sewer. Hassan said it is the only option you have to deal with it and we need to protect the water systems.
- The streets meet the spacing requirements and the only issue is S Juniper Street and you show it as an easement and Pat said yes. Hassan said from a legal perspective I am not sure an easement is a way to go. My understanding of an easement is the owner still owns the land and if anything happened it comes back on the property owner. Tom said the property is already in City Limits the land came in at the same time as our annexation, we do not need an easement, but an agreement to build improvements on their property should suffice. Hassan asked if we would get it as right-of-way dedication and Tom said yes. Hassan said it would solve the problem and Pat said we will pursue it as right-of-way. Bryan inquired if they would pursue purchasing it, is that what you do, I mean get it as actual right-of-way. Tom said I hope they would not make us purchase it for improvement to their property. Bryan stated they would get benefits from it also. Tom said he talked to the property owner and they are on board with us doing this, I would assume you would need a right-of-way dedication. Bryan said he agreed with Hassan on a right-of-way would be better than an easement. Hassan said he was not sure of the configuration of what we are building, are we building this sharp angle, a radius or do a return and put up a barricade. It is in the middle of his field and I do not know how he feels about it, we could push another 15 to 20 feet. Tom said he presumed we would keep the asphalt two feet short of curb line and not build a curb. Hassan said he was concerned about the turning movement on this corner. Pat said he does not farm it and Hassan asked if we could work through it when you do the design or is it something we resolve now. Pat asked what are you thinking a return to the west and Hassan said yes or maybe half way through as long as we have a 28 foot radius, it is a minimum requirement by the Fire Department. The people heading in the west bound lane can make that turn. Tom stated the property owner's would like to move their driveway to S Juniper Street and possibly we could make some type of an approach. Hassan said yes, if we could build it to the right-of-way line. Tom said eventually in their development of SE 15<sup>th</sup> Avenue it will extend to the west and if we could do some kind of asphalt stub into their driveway placing a sign stating it is a private driveway. Hassan agreed. Dan said you could put a concrete approach, which angles up to show it is a driveway, not a street. Pat wanted to clarify the conversation stating we have a full 28 foot width and bring the curb up to and Hassan said maybe half way to half delta and Pat said half way around the corner. Hassan said you could neck it down for people to understand it is not a public street. I am just concerned about the traffic coming west bound and making the corner. Pat asked if they

wanted to put in a stop sign. Discussion ensued about the stop sign. Dan said the citizen living in lot 29 could be "T-boned" if they were trying to get into their driveway if they were traveling on S Juniper Street and someone traveling west bound on SE 15<sup>th</sup> Avenue. We had the same problems in Faist Farms and we put up stop signs. Tom said I think you would like to have a stop sign there. Jerry said are the plans denoting we put a stop sign in and Hassan said it would be prudent to place a stop there. Pat could come up with something and we can have further discussions.

- You asked if the S Larch Street should align with Ackerman's driveway. Pat said the existing driveway is an exit only from the school. Bryan said basically they need to be aligned with a 50 foot minimum off-set that is what the Code states. Discussion ensued on the alignment. Dan said the issue would be more for crosswalks than the alignment. The consensus was to talk to the traffic engineer if this alignment was correct with the Code.
- The next question we have is the 36 foot wide street and 40 foot right-of-way or should we change to the standard local street cross section as stated in the TSP (Transportation System Plan). My theory on this, we have this TSP and at some point we need to conform to it. I know it does match with the arrangement of the current streets in Tofte Farms subdivision. Bryan stated what he thought was the difference is right-of-way versus easements because it talks about a wider right-of-way in the TSP. Hassan said if you go down to 34 feet from the 36 foot wide street. Bryan wanted to make sure he understood that the streets were 36 foot and the TSP said they need to be 34 feet for pavement. I think it is based upon actual true functionality and so it will save developers money in paving because technically we do not need 36 feet wide streets. Hassan stated with those local streets you need to accommodate for on-street parking and the way the TSP defines it as 7 foot, 7 foot and 2-10 foot lanes. Bryan said you have so many streets coming in and matching, he could not make up his mind which way was best because like you said at some point we cannot keep ignoring the brand new TSP. Tom asked what the reason for the right-of-way in the TSP. Bryan said I do not remember anybody talking about it and it just showed up there, I was not that involved in every aspect of the TSP. Tom asked what will that do to the lot size and Bryan said that is the issue because it is going to change all of your lot sizes. Pat said your lot sizes are 70 wide and it will take about 350 square feet out of each one. Tom asked what will happen to the 36 foot lane, 7 feet of right-of-way, curb, planter strip and sidewalk. Bryan said the other impact generally speaking we do not have an ordinance but we have been putting it in the Conditions of Approval. The Planning Commission has put 19 feet outside of your garage to park a car and not overhang the sidewalk and the setbacks are from the property boundary and if the right-of-way is wider, then you do not have to worry about the 19 foot anymore because you will be setting back from a wider right-of-way from your house. Not only is it taking more property it is probably setting your house back farther. Hassan asked if this can be solved through a variance and just keep it the way it is with the 40 foot right-of-way. Bryan said he was not sure we have to do a variance to do it, but we probably want to mention it in the Staff Report we are using the argument there are so many streets coming into this development and we want to match the existing development. If we cannot see any huge benefit to switching at this location to our new standard, we do not have to do it, I think we can argue it makes sense to match the other. I want to make sure we are not giving up something we thought would be preferable. In our historical streets all the public



improvements the sidewalks and the utilities all have been in the right-of-ways but Canby has been putting them all in private property as easements and this new TSP is switching them back. Tom asked are you going to put all the utilities inside the right-of-way or in the 4-1/2 foot planter strips will have the transformers, telephone, cable and gas instead of behind the sidewalk. Hassan said every jurisdiction has an additional easement, it is not 12 foot, but an 8 foot easement. Bryan said it might be an additionally narrower easement. Gary said what does right-of-way width has to do with PUE (public utility easement). Hassan said if we are asking for wider right-of-way and Bryan said can we do without the utilities and Hassan said we may need some. Gary stated he would set a transformer 6 inches behind the curb and when it gets hit are you going to come out in the middle of the night and repair them. Hassan said from what Bryan was saying is we are tilting towards the narrow right-of-way with sidewalk and utilities. Gary said the PUE does not always start at the back of the walk. Some of these subdivision's PUE starts in the middle or the front of the walk, the PUE is subjective of how wide it is to get all the dry utilities behind the sidewalk, our equipment could be targeted with people opening car doors, driving vehicles over the curb damaging our gear. Is an 8 foot PUE acceptable or is a 12 foot PUE acceptable, it depends on the street profile and where the back walk lies and we have room to set the equipment. Tom said he agreed but he was trying to understand what a 50 right-of-way means to everybody, if we are not putting utilities in it and the City's not going to take care of it or use it, why are we doing it. Gary said if it is a 50 foot right-of-way and there is room behind the sidewalk I would be more than happy to go in the right-of-way. If our utilities are above ground they need to be behind the sidewalk protected from traffic and how it lands with PUE/right-of-way really is not that big of concern for us. Bryan said I do not think we are changing the locations of anything except if we want to narrow the pavement to 34 from the 36 feet, otherwise we are not changing the position on anything. Hassan said he was inclined to go with the 36 foot just for the fact, but again if you look at the TSP it states you have to have a planter strip and the sidewalks are now going to be 6 foot not 5 foot anymore. Where do we want to draw the line with all of these variables and you are asking why do we need the extra right-of-way and I am just interpreting the TSP. Discussion ensued on the design of Tofte Farms and Dinsmore Estates Phase I. Bryan said he was okay with the idea of arguing it is better to match in this instance. We can use the name Dinsmore Estates II and it being a part of the original master plan development and is supposed to be tied together. The argument can be used in front of the Planning Commission and hopefully they will buy it. Hassan asked who makes this argument, is that you or does the developer. Bryan said we both make it, they make it in their narrative and submittal indicating you are cognoscente of some slight changes in the TSP, right-of-way, sidewalk and street paving widths. These are not major differences. Angie asked if it could be narrowed down and Bryan said he could see the street being narrowed to 34 feet and have a narrower parallel parking space and a narrow lane. Angie stated it would get you larger lots and Hassan said you are narrowing each side of the street by one foot. Angie said you might have to design it to where it meets a transition. Hassan said on a radius it would look fine but on a straight run it will look odd. Bryan said you can do the transition for the pavement and you will also be transitioning from a 5 foot to a 6 foot wide sidewalk in the same space. Pat said if you take a foot from the street and add it to the sidewalk, the back of the sidewalk will remain the same and Bryan concurred. Gary

said there are all sorts of design criteria and we would be out in the right-of-way and then turn and go into the lots and if you start adding the 90 degree up, out and turning, I will not be able to utilize the conduit. Tom said I understand but who decided on putting the 50 foot right-of-way in the TSP when no one knows where it came from. Bryan said the intent was if you had wider right-of-ways it would be potentially more flexible to be able to get rid of any easements on the private property, therefore the private property is free and clear of an encumbrances such as electric lines coming across because it is in the right-of-way. Whether we can achieve it by an adequate right-of-way widths, where everything can go into the street and it is how it used to be nationwide. Hassan said if your setbacks are from the right-of-way they are not from an easement. Bryan said the utilization of the lot changes because right-of-way widths are greater. Hassan said this scenario is you are getting 5 feet on each side and it is impacting those lots. Pat said what really hurts is the corner lots and Gary said you will have a burden of meeting square footage on your lots. Tom said if you are not going to use the right-of-way for utilities why do it. Gary said at least with easements the homeowners will have their flower beds and Tom said you will still make the homeowner maintain it. Gary said as long as our above ground utilities are behind the sidewalk, I do not care if they are in the right-of-way or easement that is Canby Utility's statement. Bryan said we can have further discussions, but I think we can get by without doing the extra right-of-way. Do we agree we are going to try to transition to the pavement and sidewalk. Pat said we will keep the sidewalks straight and narrow the street a foot. Hassan said it sounds like we have support to go the narrower right-of-way. The answer was yes.

- Street names used in the subdivision are fine and Bryan stated they are used across the north side of town and they shift around Ivy Street and these streets are about the same distance from Ivy Street all the way along and they are as good as any.
- We discussed the public roadway easements, do you have anything to add and Pat said no.
- We will need to do a storm drainage performance analysis on the existing drywells. I know you mentioned something about LID (low impact development) and Jerry said it was not his call but I thought we going back to drywells. Hassan said what Pat said is he believes any capacity from this development should be able to be handled by the existing drywells without adding anymore drywells. I know that Darwin is a big fan of implementing LID's. Gary asked if the planter strip will just be planter strips or infiltration swales and Jerry said they will be planter strips. Pat said we need to make sure we can get all the northern storm water from this subdivision to the existing drywells. In my discussion with Gordon Munro it has to be an LID approach, drywells are not permitted unless you can show an LID facility is not applicable. Bryan and Pat both said the Codes state you go with an LID solution first. Jerry said how about pervious pavement and Bryan said it is a low impact development. Jerry asked if they would entertain it and Pat asked if the City wants pervious pavement and Jerry said absolutely. Bryan said in parallel parking areas not driving lanes. Pat said the preference is using pervious asphalt and the answer was yes. Pat asked Doug if there was a way to connect to a couple of fire hydrants on SE 16<sup>th</sup> Avenue to test the drywells. We tried with one fire hydrant when they were put in and it was not enough flow. Doug asked if they tested the drywells before the new system was put in and the answer was before. If you need to pull from multiple sources the water should be available. SE 13<sup>th</sup> Avenue is 14 inch ductile iron main feeding into an 8 inch and S Ivy is a 10 inch PVC main. You should have

adequate flow in the area to accomplish your performance test. Pat asked if we get the meters from you and Doug said yes. Dan asked when they needed the water to do the test. Pat said they would do the test during the rainy season and Dan said from the drywells they overflow into Tract B? Pat said it is the other way, it goes into Tract B and then overflows into the drywells. Jerry said if the pervious fails it will go to the overflow and Pat said he could design it to and the answer was yes. Discussion ensued on storm water retention. If the drywells cannot handle the entire subdivision they would do a swale the length of SE 13<sup>th</sup> Avenue behind the sidewalk.

### **CANBY UTILITY, ELECTRIC DEPARTMENT, Gary Stockwell**

- The issue of PUE versus right-of-way I think we finished the discussion as long as I have 8 to 10 foot of right-of-way/easement by the sidewalk we should be okay. One exception is lot 11 adjacent to SE 13<sup>th</sup>, it is our main conduit run, which goes through there and it will be used to serve the property and I need to set a large vault there. The vault is 8 x 10 foot and the external dimensions are 8 x 8 by 10 x 8, it will be adjacent to 13<sup>th</sup> and Pat said in the proposed swales and Gary said yes. It will be a switch vault and if we decide to install a switch it will be inside the vault, but there will be no above ground utilities associated with it. I will need easement somewhere in this area for the vault. Space throughout the subdivision behind the sidewalks for utilities. Is this subdivision going to be where you know where the driveways will be and the answer was yes and Gary said we will make a point of contact and do what we always do getting the power to the lots. I will not develop a plan until the City decides how many lots there will be in case the road widths change. When the plat is approved with the number of lots, send me the drawing and I will go ahead and get the plan together.
- Are we going to go with the normal standard of me drawing in the street lights according to the 200 foot spacing or are you going to draw in the street lights and supply the City with the photometrics, if they are going to require it. It is still a grey area on how the City wants to handle the lighting of subdivisions. Are we going with LED or high pressure sodium? Angie asked if our lighting chapter applies and Bryan said when he read the chapter it does not really say anything about street lighting. Pat said to answer your question, I would give you a plan and have you design it. Gary said it will show the style and wattage. The style will be the 24 foot cobra head and Jerry said we would like to go with LED. Bryan asked who maintains the street lights and the answer was the City. Jerry said we do the lamps and photo cells and Gary said with the LED's you just tell us they are not working and we will fix them. Jerry said he did not know how to require Tom to put in LED's, we do not have anything going that direction and if the City decided if we wanted to go with LED's we would make up the difference on money. It is double the cost of fixtures and Gary said the style we are using now is approximately \$80 and the LED's we put in on Sequoia Parkway was \$290 per light.
- Gary told Tom the fee structure has changed since you last developed. We used to charge per lot and now it is actual cost and I will not be able to determine it until I know I am serving 39 lots. Tom said once you get the file you will be able to do your drawing and determine the cost and Gary said yes.

**NW NATURAL, Gary Callahan**

- I am basically here in case you have any questions for us. The tie-ins will basically go in the same as the power and other than that everything is self-explanatory. Tom said we will be doing the same stubs, it will be conduit or open trench correct and Gary said yes. Gary said open trench except when going across roadways.

**CANBY UTILITY, WATER DEPARTMENT, Doug Quan**

- On SE 13<sup>th</sup> Avenue you have a 14 inch ductile iron.
- The hydrant spacing is fine.
- To the west of where 14<sup>th</sup> Avenue dead ends you will need to put a 2 inch blow off on the line because you only have one house feeding off the short stub.
- All joints on the pipes will be restrained, Field Lok or equivalent and Pat asked if he had a preference and Doug stated as long as it is restrained.
- There is a requirement in our specs for a W to be stamped into the curb line where each water meter is located. Pat asked if he needed to do it for sewer and Dan said you did it in Phase I and Jerry said he wanted to talk about it and if you would consider putting the cleanout in the sidewalk area and running the sanitary "Y" out and up with the back side at the 6 inch past all the utilities and gluing a caps on both of them. When this is completed our inspection process is completed and Tom said you want the cleanout with a box in the sidewalk. Jerry said I would not need anything stamped on the curb because you will have a Brooks box in the center of the sidewalk and we would know exactly where it is for locating. Dan said if you do not glue on the caps they will blow off and you do not want that for your inspection with the County. Jerry said if you glued a 3034 cap on both ends and run them out of the ground. Pat said you want us to go back with the 6 inch stub beyond the PUE and Jerry said yes and Tom agreed we would have to go back and do it anyway and Gary said if you do it up front you do not have to fight the existing utilities. Jerry asked if they could use a push in reducer instead of Fernco's. Dan stated they are 6 to 4 reducers.

**WAVE BROADBAND, Dave Michaud**

- We would like the same as Canby Telcom an open trench line and when Gary is done with his design we would like a copy to do our design.

**CITY OF CANBY, PUBLIC WORKS DEPARTMENT, Jerry Nelzen**

- We have vision clearance problems at Tofte Farms with the wall on SE 13<sup>th</sup> Avenue. Pat said we are thinking of a swale on one side and it would be back. Tom said we will place the wall on the property line. Jerry said that is a concern of mine with the intersection and having vehicles inching forward past the crosswalk to see. Gary said if you stop your swale short the vault would fit right there in the corner. What they did at Tofte Farms was built an easement area and placed a brick gate for us swing it open to access our vault. Sol said if you stay with the 30 foot rule of the intersection it should be fine. Pat asked if the traffic calming on 13<sup>th</sup> completed and Bryan said yes and he would get Pat a copy. Bryan stated he does not know all the requirements in the study, it was Matilda who was totally involved in it and I have not looked at it, but there are several items suggested for future traffic calming. Of course the purpose for the study was for Sequoia to 13<sup>th</sup> Avenue, it might have some

relation to your development also. Jerry said the walls for Tofte Farms and signage are in the traffic study, they want us to move the walls and I have not measured them, but I wanted to bring it up. Gary asked was the caveat for your wall, it is a continuous thing I get addressed after the fact from the Home Owners Association want an illumination for their entry sign on the wall. If you want the sign illuminated and a meter base there I would like some direction from you on getting conduit to the area. Tom said he would like to see solar panels because it is expensive and Gary said if you put it in the Home Owners Association contract and use power to someone's house serving a couple of lights and give the owner a reduction in their dues.

#### **CITY OF CANBY, EROSION CONTROL, Dan Mickelsen**

- Dan had a couple of questions on sewer. Lots 17 and 18, is it an 8 inch stub going back the flag lots. If not, each lot should have their own service. Pat said it was proposed to extend the 8 inch main up the driveway to serve the lots and Dan said he just wanted clarification.
- Have you thought of going towards S Lupine with you sewer instead of heading west to S Ivy Street. Discussion ensued on the direction and how full the S Ivy main line is now and putting more in would over tax the line. Pat said he did not think they had the elevation to go to Lupine, but we can look at taking as much as we can to that direction. Dan said if we can take this to a 10 or 12 inch line as opposed to an overtaxed 8 inch line and Jerry said this will max out Ivy Street. Tom said if we can get depth we do not care where we go and Pat said he did not believe we will have the depth. Do you have a survey for this area and Hassan said he might have something and he would look. Pat asked Dan if he had the as-builts and he said he should. Pat said if you do, we will have to study it and see what we can do. Doug said if your sanitary is going to be shallow you need to be diligent on the crossings for the water lines.
- You will need to have an erosion control plan and application. Are you planning on removing any soils and the answer was no, it will stay on site.
- Dan asked when they planning on starting construction and Tom said next spring.

#### **CITY OF CANBY, PUBLIC WORKS DEPARTMENT, Sol Jacobsen**

- I would like to touch on the landscape plans and what I would like to have is the trees on the plans to alleviate any problems with their placement and will not conflict with the street light poles, hydrants, sewer and water lines. Sol handed them a copy of the Street Tree code. I know there will be a total number of tree requirements for the development and there are no expectations if the tree placement will conflict with the utilities on the lots. I would rather omit the trees from the inception of the job rather than taking them down prematurely because they are in the wrong placement. Sol asked if they planned on putting a park in the development and Tom said no. Basically, it is just standard requirements of distance between the utilities and once we know where the street lights will be placed we can lay out 30 feet from those and probably 30 foot spacing on the centers of the trees. Tom asked about the driveways and Sol stated typically the driveway's approach from the wing is 10 feet on either side. I would be happy to layout the placement with anyone of your representatives, if you want. Tom said it would be great to do Phase I and I will walk it with you and see how it is compared to what you want. Sol said he would have no problem and give me a call and

we will schedule it. We have a recommended street tree list, which tells you what is appropriate for 3 and 4 foot planter strips and also there are 18 trees that are permitted under power line usage and obviously inside the development the utilities will be underground and will work for the smaller planter strips size 2. If you have something you would like and it is not on the list run it by me because potentially it may work and what we ultimately want to make sure they will not cause any issue for the homeowners in the future. Tom asked Sol if he wanted the trees to be uniformed. Sol said he would like the streets uniformed, but I do not want to require the variety be the same for the entire subdivision. If something catastrophic happens I do not want to lose a whole neighborhood worth of trees, there are about 5 or 6 different varieties at Tofte Farms and I would say 4 to 5 of them are inappropriate for the neighborhood and if we could avoid doing it that would be great. I will accept 1.5 inch caliper trees as opposed to 2 inch trees, which may allow you to get containerized stock instead of B & B (balled & burlaped) it may be easier to procure and a little bit cheaper. Pat asked does Tom have to put money down with the City guaranteeing the trees will go in and Tom said it would be held by certificate of occupancy and Sol agreed. To gain occupancy you would have to have the trees put in and Pat said you do not want to plant a tree in July and Sol agreed and had no expectancy. Bryan said if you start work next spring we will have a new tree ordinance adopted by then. Matilda is working on it right now and that means the City will be planting the trees and we would collect the money, which is \$200 per tree and Sol stated he did not think it was that much and it would put the warranty on us for a year. It would allow us to put the trees in at the appropriate time of year and we would water them for a year. It is the way we will be doing it from now on and Pat said it was a good way to do it by paying for the trees. Tom asked if it was the homeowners maintenance anymore and Sol said for the first year the City would maintain it and we are actually doing all of the pruning for all of the residential trees also. We are doing some in-fill in placing when we can with our budget.

**CITY OF CANBY, PLANNING DEPARTMENT, Bryan Brown**

- Bryan handed out the traffic study done for the annexation and he stated he read it and summarized part of it in the memo. There was good information and since it was an annexation apparently they did a future analysis to 2018 and it was a 2003 study. It has been 10 years and there has been some changes, one of the things which seems to be relevant is we have a project on the drawing board that has been designed and engineered for sidewalks on S Ivy Street including a signal light at Township and S Ivy Street. It was discussed in this study and was also anticipated to be a level of service D intersection with signal needed regardless of this development. What that says is your development will contribute a small portion of a need for a traffic signal at Township and I think we need to do a traffic study today and see if the numbers come out similar and see if there is some sort of portion share that might be a contribution towards the signal. You do not have to pay for it, but you may have to contribute your proportional share and I would like to get DKS Engineering's help to adequately demonstrate the new portion of your proportionate share to go to the signal. If not, the other reason to do a traffic study would be to focus on the new study, which was completed on 13<sup>th</sup> Avenue traffic calming issues. You will have some impact on pedestrian environment and you can wave your flag saying I am the first one to contribute toward the

implementation of one of those suggestions in the new study. I do not know what they were because I have not spent time studying it, there may be one near your development that could be within a reasonable price range and again a proportionate share. We will have DKS do a traffic study aiming at those ideas, the traffic generation study will tell us what it will be and I think the study purpose would be to see what the impact is on the adjacent 13<sup>th</sup> and possibly the signal at Township Road. We need to have \$500 deposit from you and the sooner the better to have DKS develop a scope of work and the scope of work can tell you how much your study will cost you.

- Basically Matilda Deas is our Parks guru and she is the one completely familiar with the current Parks Master Plan and where the Parks Board has been trying to head and she would rather collect SDC (system development charges) then have a park in this development. The question to you would be do you want a park and if not, we would be perfectly happy with no park, just doing cash in lieu. Tom asked is it a 2 acre minimum requirement and Bryan said yes. It is potentially an issue because I was looking at the fact if I were to do a park in here the logical place would be to get rid of these flag lots and that is not quite big enough you would have to take one of these other lots. It talks about 2 acre minimum and Tom said the dedication is 1.05 or just over 1 acre and Bryan said what it comes out to if you wanted to dedicated park land that is what the amount would be is 1.05 or something. Any how our preference would be for you to pay the SDC or you can contemplate where you would put a 1.05 acre park. Supposedly the SDC and the park land dedication are supposed to come out and in reality they never do match exactly and it depends on the price of the lots and the Code talks about an assessment of your property values before they are plated, so you are assessing it as park land not assessing it as a residential lot. Tom said he would probably pay the SDC and Bryan said they are currently \$4,725 per house, which is pretty high but we are doing good things with that money. What our plan is eventually, we will probably apply it to park land further south when the area gets annexed with the wilderness necklace trail or another bigger park rather than a smaller park. One of the arguments we already have is Legacy Park not too far away.
- We have an estimate of your fees in the memo and it is \$6,040 per lot for your 39 lots.
- I want you to be aware and I am not sure if it was being collected in the past, but we are intending to collect the Public Improvement Plan Review fee, which is equal to 0.4% of the total estimated cost of all of your public improvements, water, sewer, electric, sidewalks and streets. It will go to Hassan and his firm for reviewing the improvement plans that is what it will be used for. I do not know if you paid for it in the past or not, but it has been there in the fee structure and there may have been a rumor, it was not collected.
- Tom asked Bryan about the Neighborhood Association meetings. Bryan said you are supposed to hold the meeting with them to share your plans. Tom inquired do I have to do it during their scheduled meetings or can I just notify them and Bryan said you will do the same notification list you turn in with the application to us to notify people for the public hearing. You can arrange your own meeting place and time, have it recorded and give us the minutes of the meeting showing proof you held it. It will show you shared what you are doing with them and an opportunity to comment and record some of their suggestions for you to note in your plan. Pat asked if Suzan was the chair for the homeowner's association and Bryan said he confirmed it today. Tom said I assume you want us to get a list of participants

in the notification area or just notify her. Angie said the Code has a procedure to follow. Pat said we would have to notify the chair and notify a radius of residents within a certain footage. What do we do with Hope Village? Angie said you would have to notify the occupants and Pat said we have ran into this problem before with apartment complexes and they do not have a list they can give us, we just started handing out notices to the apartment numbers and go from there. Angie said Hope Village would be able to assist you. Bryan said you could call the manager and ask them for help. Angie stated you could ask if they have a distribution list and Pat said they do have a system whereas the row managers will distribute the letter to the other people in their rows. We would not have anything formally written for every resident and Bryan said if you show some evidence you have made some attempt to get it into the hands and explain how you did it. Pat explained during their annexation process we had a few residents of Hope Village show up and Tom said they would get a hold of the director.



V. Record of Survey & County Determination of  
Legal Lot of Record

SN 2007-42.9

# BOUNDARY SURVEY FOR TOM SCOTT IN THE SE 1/4 OF SECTION 4, T4S R1E, W.M. CITY OF CANBY, CLACKAMAS COUNTY, OREGON

SCALE 1" = 100' JULY 18, 2007

GAYLORD LAND SURVEYING, INC.  
2910 S.E. OAK GROVE BLVD.  
MILWAUKEE, OREGON 97267  
(503)654-1492

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR  
PATRICK M. GAYLORD  
JULY 10, 1996  
2787

REVIEWED THROUGH 06/30/09

**NARRATIVE**

THE PURPOSE OF THIS SURVEY IS TO LOCATE AND MONUMENT THE BOUNDARY OF THAT TRACT OF LAND AS DESCRIBED BY DEED RECORDED AS FEE NO. 2006-106720, CLACKAMAS COUNTY DEED RECORDS, FOR THE PROPOSED SUBDIVISION PLAT OF DIMSHORE ESTATES, THE COUNTY DEED RECORDS, FOR THE PROPOSED SUBDIVISION PLAT OF DIMSHORE ESTATES, THE NORTHERN PORTION OF THE PROPERTY, AS ACCORDING TO SURVEY OF FRANK SPERB, AS REVISION IN 1935. THIS SURVEY IS SN 1960, CLACKAMAS COUNTY SURVEY SERVICES, AS SPECIFICALLY CALLED BY FEE NO. 2006-106720. I HAVE HELD IT AND THE MONUMENTS THEREON, AND I HAVE AGAIN HELD IT AS SUCH, EXCEPT AS REQUIRED OTHERWISE BY NO. 97-037998 SURVEY FOR THE SOUTHERN PORTION OF THE PROPERTY DESCRIBED BY FEE NO. 97-037998 AND I HAVE AGAIN HELD IT AS SUCH, EXCEPT AS REQUIRED OTHERWISE BY THIS CENTERLINE OF SECTION 4 BASED ON THE FOUND SECTION MONUMENTS AND OFFSET TO THE EASTERN END OF THE 1/16TH LINE OF THE SOUTHERLY PORTION OF THE PROPERTY RECORDED PLATS OF TOFTE FARMS NOS. 3 & 4. I HELD THE CENTERLINE OF SOUTH STREET 30 FEET EAST OF THE SOUTHEAST CORNER OF PARTITION PLAT NO. 1986-049 (PLAT NO. 3740) AND THEN OFFSET THIS LINE 30 FEET EAST FOR THE EAST RIGHT OF WAY LINE OF SOUTH STREET PER THE CLACKAMAS COUNTY ROAD FILE MOOTHS. I HELD THE 1/16TH LINE COMPUTED FROM LP-049, PARTITION PLAT NO. 1986-049 AND SN 28741 BASED ON THE 1/4 CORNER PER SECTIONS 33624 AND THE IRON BAR AT LINE CENTERLINE PER SN 1960 AND SN 29175 AND INTERSECTED THE SOUTH RIGHT OF WAY LINE OF 13TH AVENUE. I HELD THE 1" IRON PIPE AS NOTED AT THE SOUTHWEST CORNER OF THE NORTHERLY PORTION AND I HELD THE 5/8" IRON PIPE AS NOTED NEAR THE EAST RIGHT OF WAY LINE FOR THE ELL IN THE NORTH LINE I HELD THE 1/2" IRON PIPE AS NOTED AND A LINE PERPENDICULAR TO THE AFORESAID NORTH LINE. FOR THE REMAINDER OF THE NORTH LINE I HELD THIS 1/2" IRON PIPE AND THE 1/2" IRON PIPE NOTED NEAR THE LINE FOR THE EAST LINE OF THE SOUTHERLY PORTION OF THE PROPERTY I HELD THE NORTHERLY CORNER OF TRACT A, TOFTE FARMS NO. 3, AND THE RECORD DISTANCE PER THE DEED BOOK 378 PAGE 630 NORTH FROM THE COMPUTED 1/16TH CORNER. THE SOUTH LINE OF THE EAST LINE OF THE SOUTHERLY PORTION OF THE PROPERTY IS 606 AND IS DEPICTED AS SUCH ON SN 1960. I HELD THE SOUTH LINE OF THE SOUTHERLY PORTION TO THE SAID POINT AND ON LINE WITH THE SOUTHEAST CORNER OF PARTITION PLAT NO. 1986-049, AND INTERSECTED THE EAST RIGHT OF WAY LINE OF IVY STREET.

### NOTES & LEGEND

- O - 5/8" X 6' IRON ROD WITH YELLOW PLASTIC CAP MARKED "GAYLORD LAND SURVEYING, INC. ON 7/22/07-2607"
- - MONUMENT FOUND AS NOTED HELD UNLESS OTHERWISE NOTED
- ALL PIPE DIAMETERS ARE INSIDE MEASUREMENT
- (RMM) = REMEASURED RECORD DATA PER RECORD NOTED
- SN = SURVEY NUMBER, CLACKAMAS COUNTY SURVEY RECORDS
- (RECORD)1 = TOFTE FARMS NO. 3, PLAT NO. 3630
- (RECORD)2 = SN 1960
- (RECORD)3 = SN 28741
- (RECORD)4 = SN 28741
- (RECORD)5 = USBT ENTRY 2000-103
- (RECORD)6 = FEE NO. 97-037998

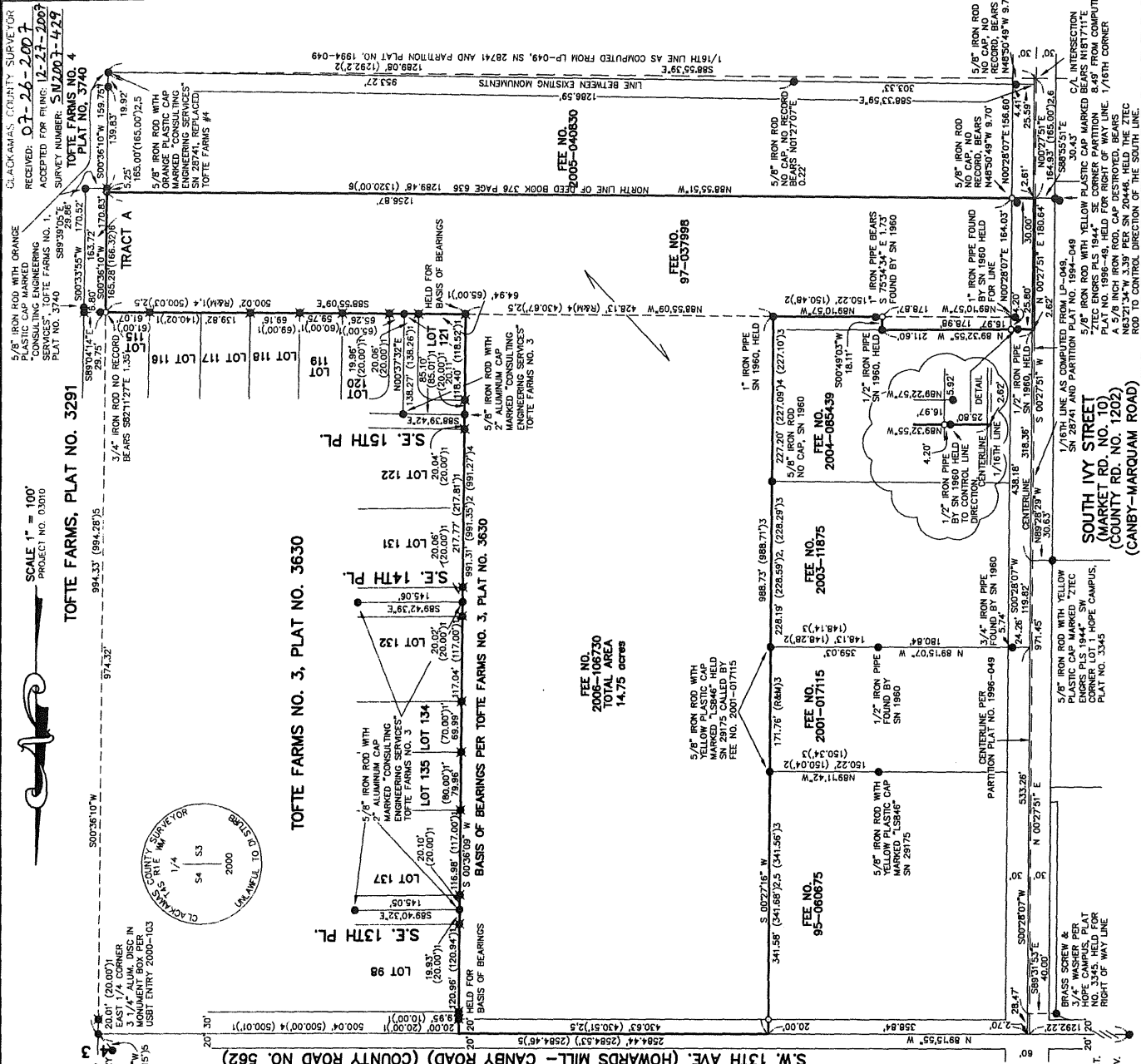
### REFERENCES

- HOPE CAMPUS, PLAT NO. 3345
- TOFTE FARMS, PLAT NO. 3281
- TOFTE FARMS NO. 3, PLAT NO. 3740
- PARTITION PLAT NO. 1986-049
- USBT ENTRY 2000-103
- SN 1960
- SN 28741
- PS 28741

### MEDIA CERTIFICATE

I, PATRICK M. GAYLORD, CERTIFY THAT THIS SURVEY WAS PREPARED WITH HP 51645A INK ON OCE 86-6542 INK JET PAPER, PAGE 277, CALLED AS "FISH PLATE" BY DTM ENV. 78, ITEM 74 IN 1917

PATRICK M. GAYLORD  
2787



SCALE 1" = 100'

PROJECT NO. 03010

TOFTE FARMS, PLAT NO. 3291

BRASS TABLET PER USBT ENTRY 2000-103

3 1/4" ALUM. DISC IN WOODEN CASE PER USBT ENTRY 2000-103

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3 1/4" ALUM. DISC IN WOODEN CASE PER USBT ENTRY 2000-103



RESEARCH REQUEST

DATE: 8/7/02 STAFF: M6-d  
 LEGAL/MAP NO.: T 4 S, R 1 E SECTION 4DA, TAX LOT(S) 4700(4701), 4900, 5000, 5100  
 ZONING: EFU-80 11/93 PRIOR ZONING: EFU-20 6/18/79  
R-20 12/14/67  
 REQUEST BY: Lester Bradley PNW Title  
 ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_  
 STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
 PHONE: \_\_\_\_\_ FAX: (503) 659-7160

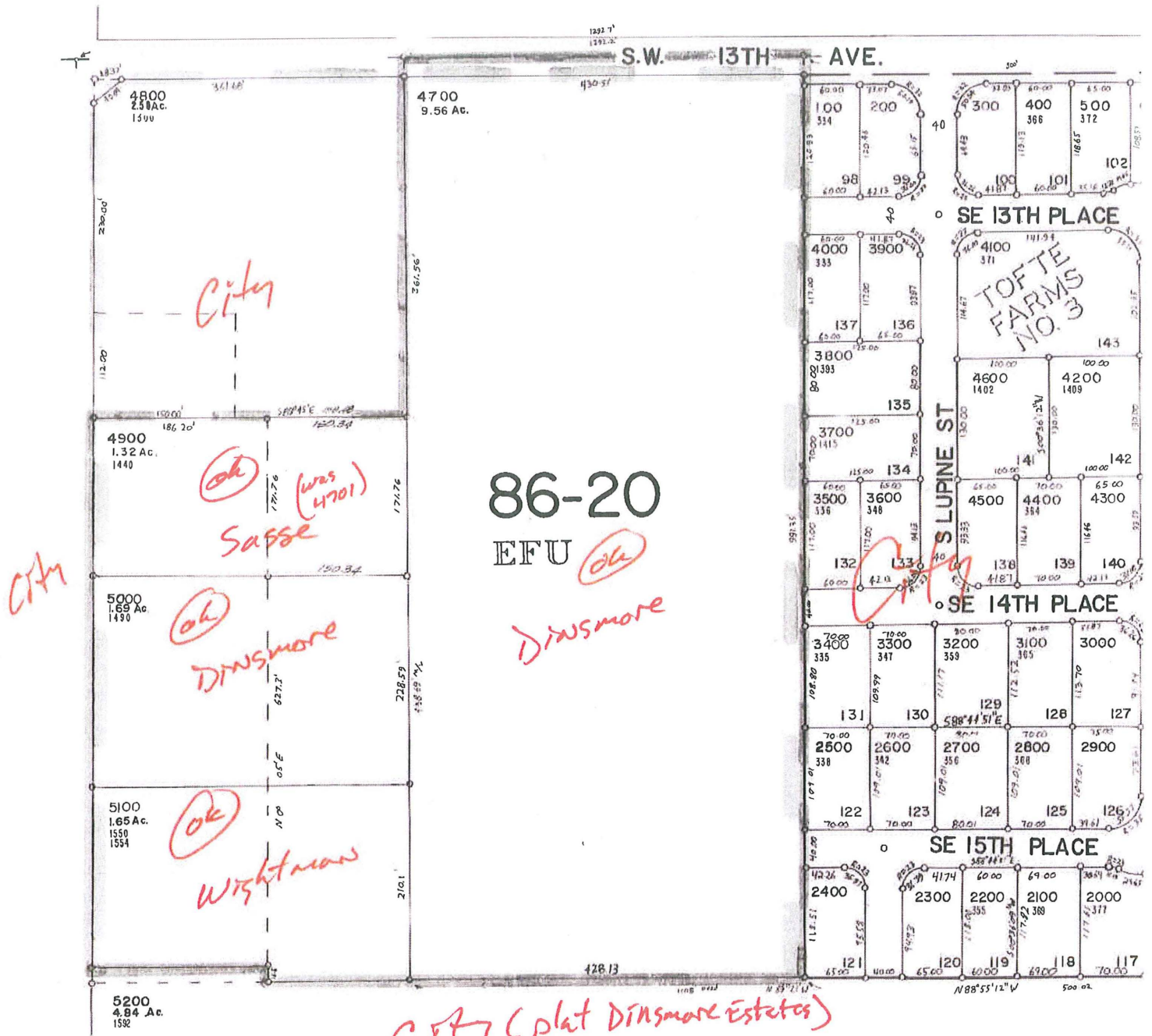
REQUESTED INFORMATION:

Legal lots of record? See also discrepancy in assessor maps (enclosed)

RESPONSE: TL's 4700, 4900, 5000 + 5100 (see Map #4) are each separate lots of record. Former 4701 was property line adjustment from TL 4700 to 4900 since 7/5/00 (date of last Research request).

STAFF: [Signature] DATE: 8/07/02

NOTE: These comments pertain to land use designations and regulation in effect, on the date of this response, to the specific parcel(s) of property and to the specific question asked. Regulation are subject to periodic change. A LEGAL LOT OF RECORD IS/MAY BE BUILDABLE SUBJECT TO THE REQUIREMENTS OF THE ZONE IN WHICH IT IS LOCATED DWELLINGS ARE NOT ALLOWED OUTRIGHT IN SOME ZONING DISTRICTS PLEASE CONSULT WITH THE PLANNING DIVISION, THE SOILS SECTION AND/OR OTHER APPROPRIATE DEPARTMENTS PRIOR TO CONSTRUCTION.



4

Map # 4-1E-04DA  
 @ County Plan Map (GIS)  
 8/7/02

## VI. Maps

a. Vicinity Map

b. Assessor Map

c. Large Sheet 1 – Tentative Site Plan

d. Large Sheet 2 – Utility Plan

e. Large Sheet 3 – Street Profiles

f. Large Sheet 4 - Topographic Survey

# Dinsmore Estates 2 Vicinity Map

Map 4 1E 4DA Tax Lot 4700

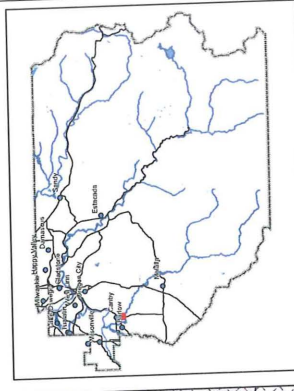


4 1 E 04DA  
CANBY

N.E.1/4 S.E.1/4 SEC.4 T.4S. R.1E. W.M.  
CLACKAMAS COUNTY  
1" = 100'

Cancelled Taxlots  
4701  
5200

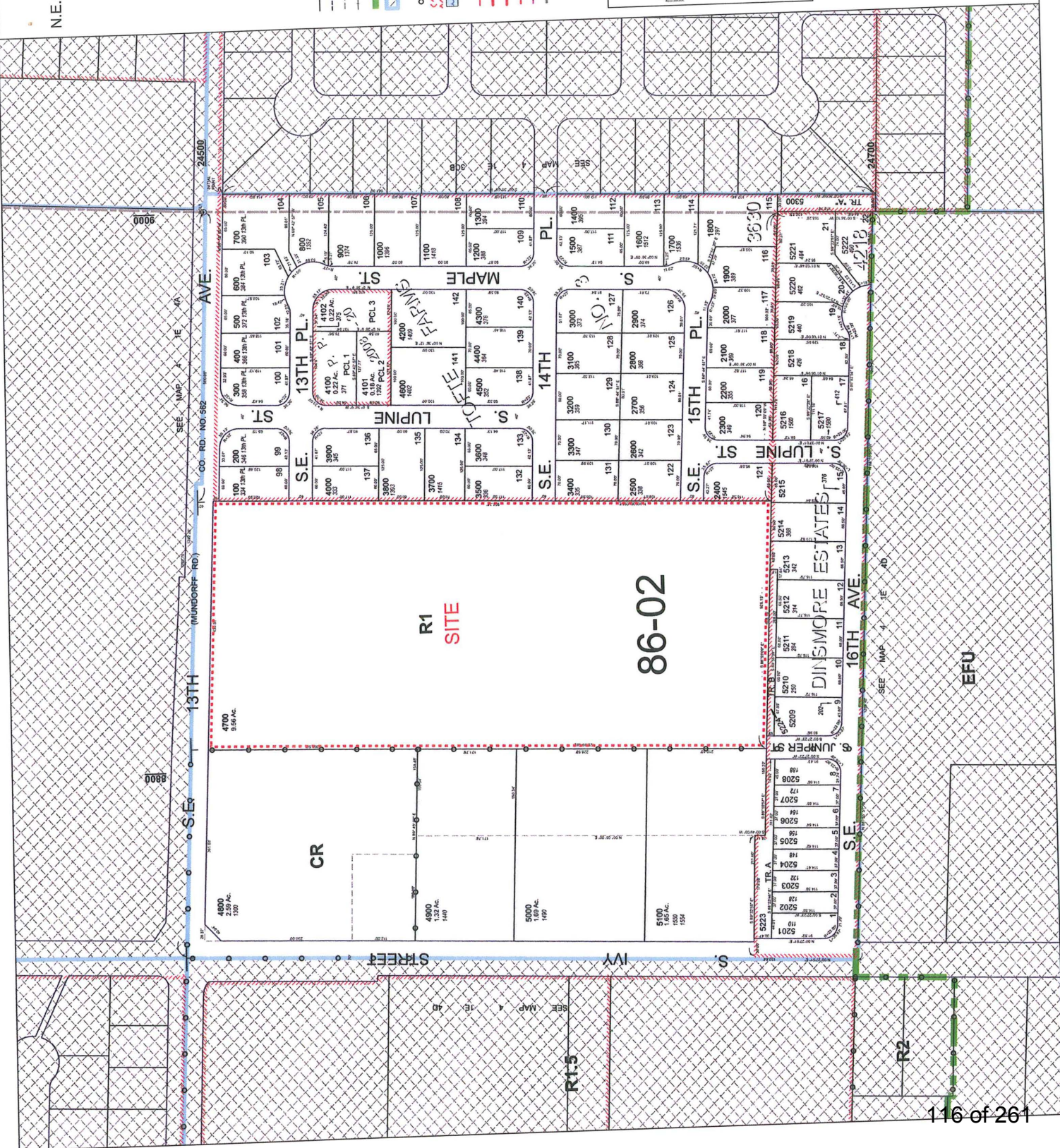
- Parcel Boundary
- Private Road ROW
- Historical Boundary
- Railroad Centerline
- Tax/Codell Lines
- Map Index
- Water Lines
- Land Use Zoning
- Plats
- Water
- Corner
- Section Corner
- 1/16th Line
- Govt Lot Line
- DLC Line
- Meander Line
- PLSS Section Line
- Historic Corridor 40'
- Historic Corridor 20'



THIS MAP IS FOR ASSESSMENT  
PURPOSES ONLY

4 1 E 04DA  
CANBY

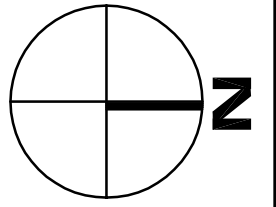
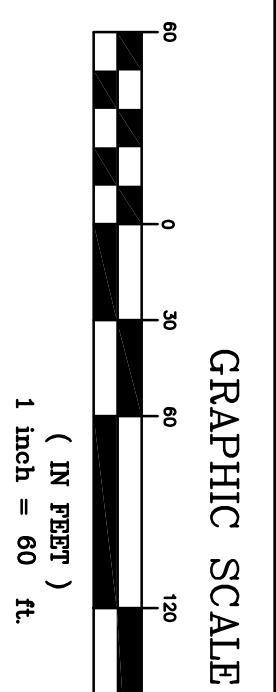
1/14/2014



GANBY  
ADULT CENTER

ACKERMAN CENTER

TL 1100  
Map 4 IE 4A



HOPE  
VILLAGE  
CAMPUS

HOPE  
VILLAGE  
CAMPUS

S IVY STREET

UNDEVELOPED

TAX LOT 4800  
TOFTE  
CR Zoning  
Residential Commercial

TAX LOT 4900  
SASSE  
R-1.5 Zoning

TAX LOT 5000  
SCOTT  
R-1.5 Zoning

TAX LOT 5100  
MCROBBIE  
R-1.5 Zoning

DINSMORE  
WEST  
ESTATES

S JUNIPER STREET

DINSMORE  
ESTATES

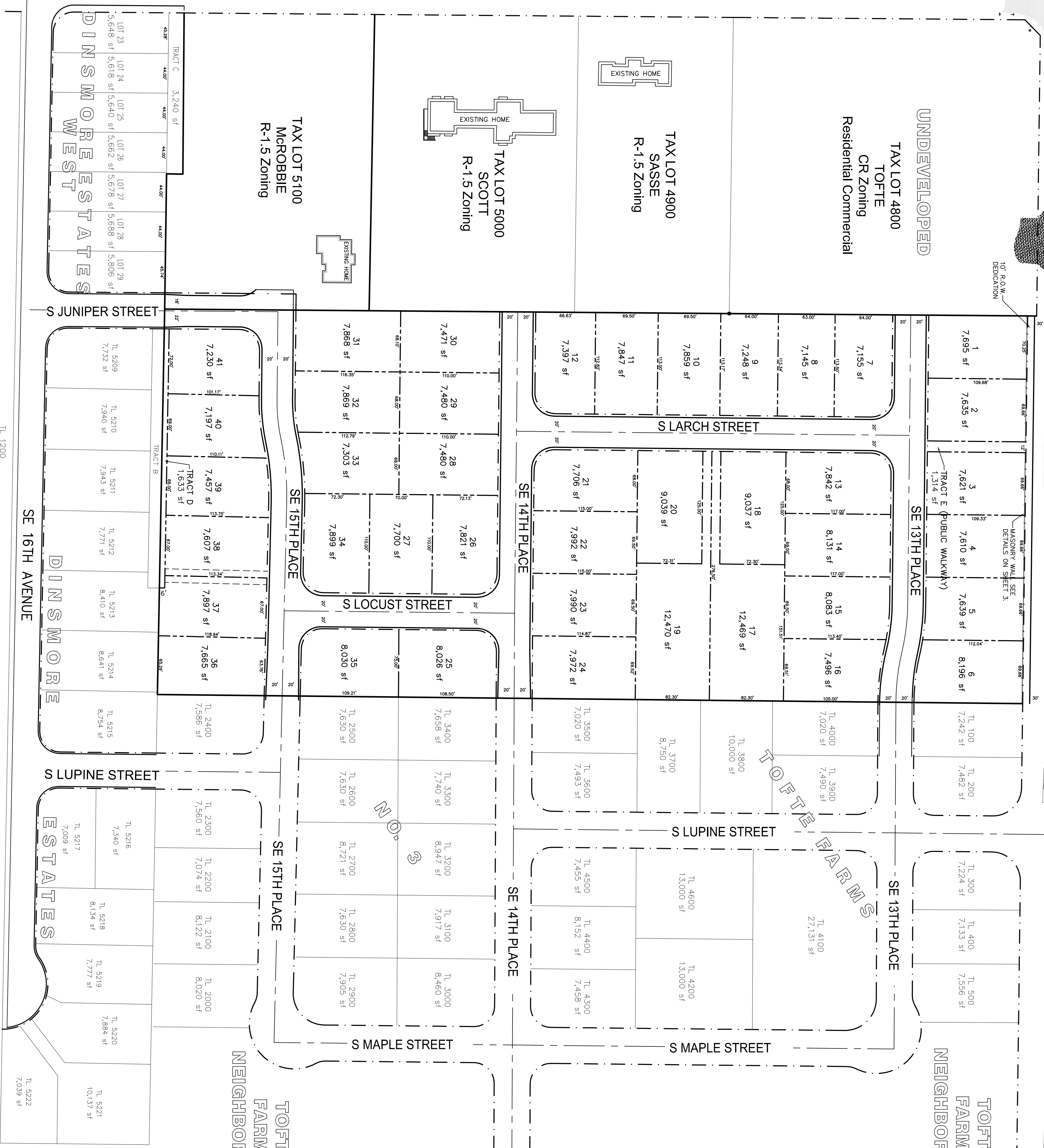
S LUPINE STREET

DINSMORE  
ESTATES

S MAPLE STREET

TOFTE  
FARMS  
NEIGHBORHOOD

TOFTE  
FARMS  
NEIGHBORHOOD



NO.	DATE	BY

DINSMORE ESTATES 2  
Scott Family Limited Partnership

Tentative Plan  
Site Plan

**SISUL ENGINEERING**  
375 PORTLAND AVENUE  
GLADSTONE, OREGON 97027  
(503) 657-0188  
07-134-Layout.dwg

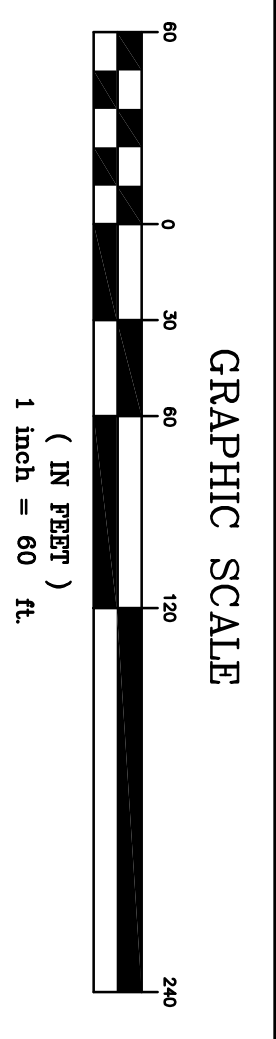
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JOB: SGL 07-134  
SHEET: 1  
OF 4 SHEETS



CANBY  
ADULT CENTER

ACKERMAN CENTER

TL 1100  
Map 4 IE 4A



HOPE  
VILLAGE  
CAMPUS

HOPE  
VILLAGE  
CAMPUS

S IVY STREET

UNDEVELOPED

PROPOSED  
SUBDIVISION

DINSMORE ESTATES  
WEST

DINSMORE ESTATES  
WEST

SE 16TH AVENUE

S LUPINE STREET

DINSMORE  
ESTATES

DINSMORE  
ESTATES

SE 15TH PLACE

TOFTE  
FARMS  
NEIGHBORHOOD

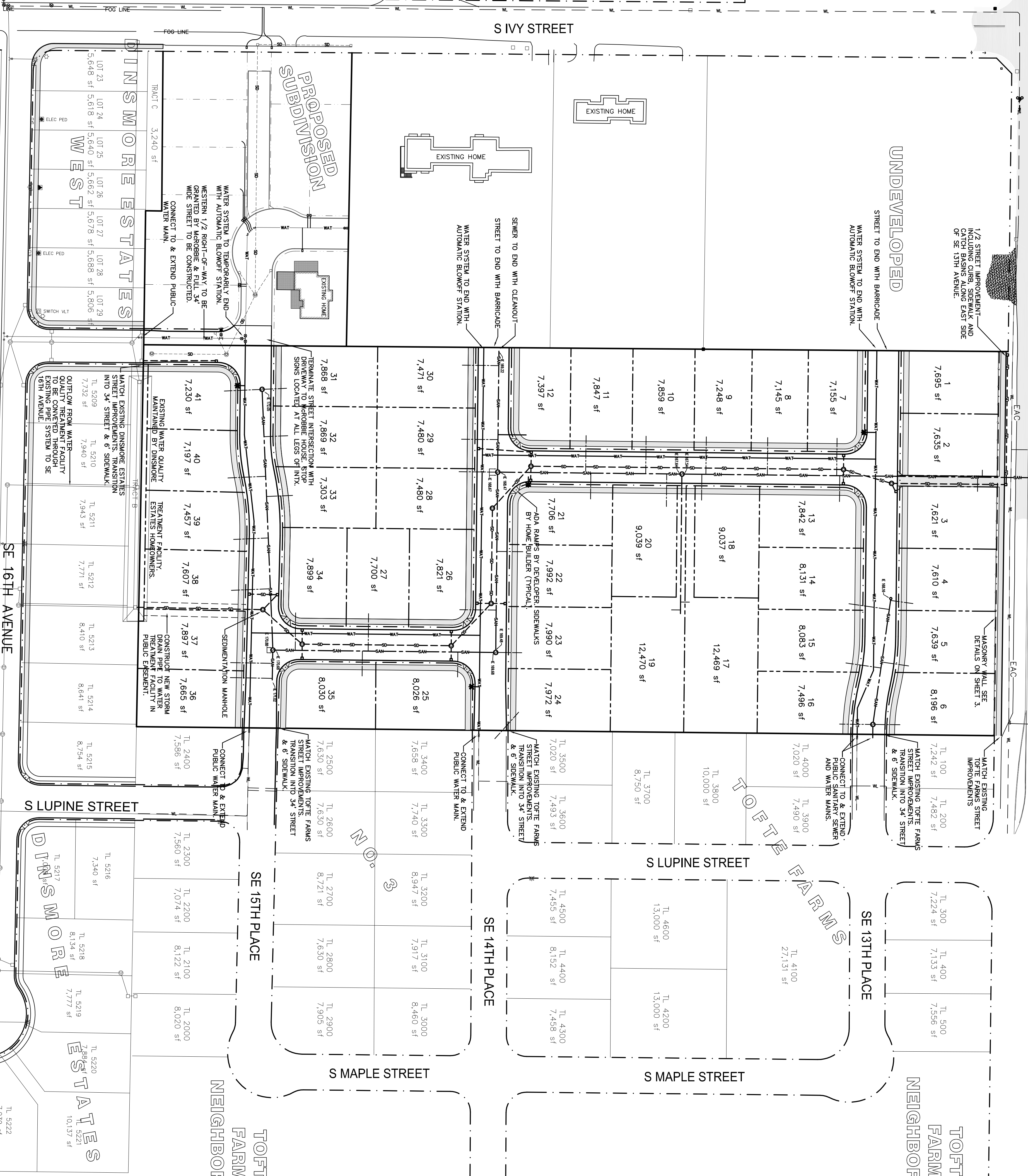
SE 14TH PLACE

TOFTE  
FARMS  
NEIGHBORHOOD

S LUPINE STREET

S MAPLE STREET

S MAPLE STREET



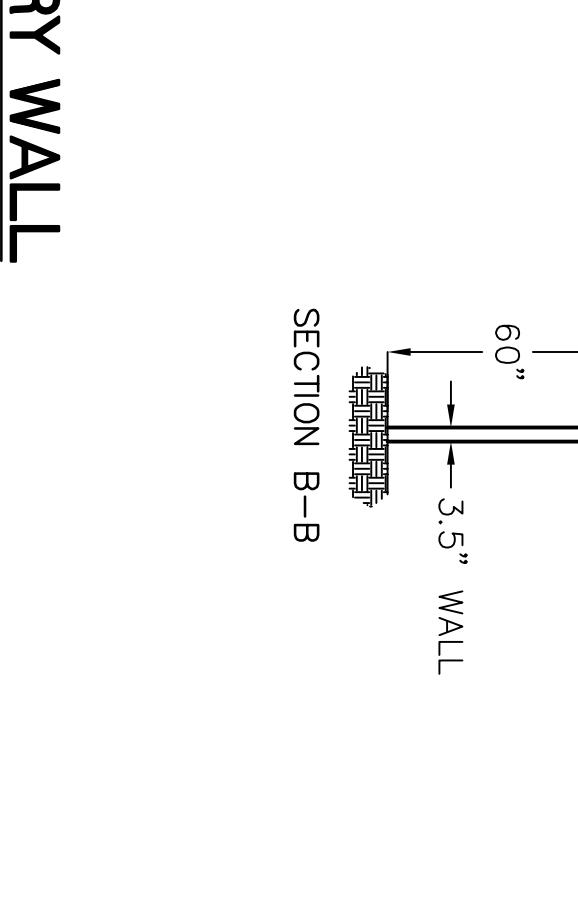
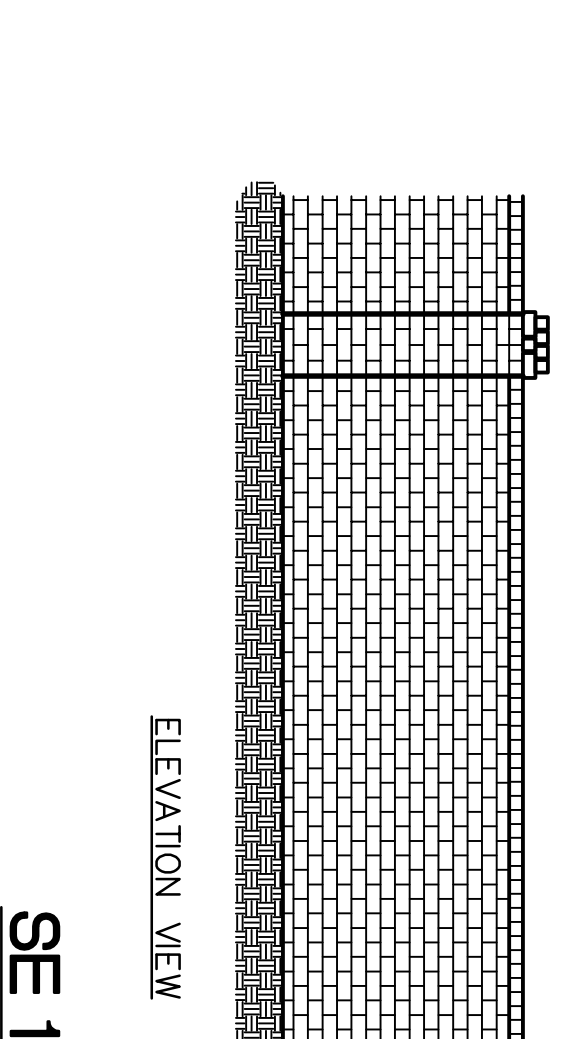
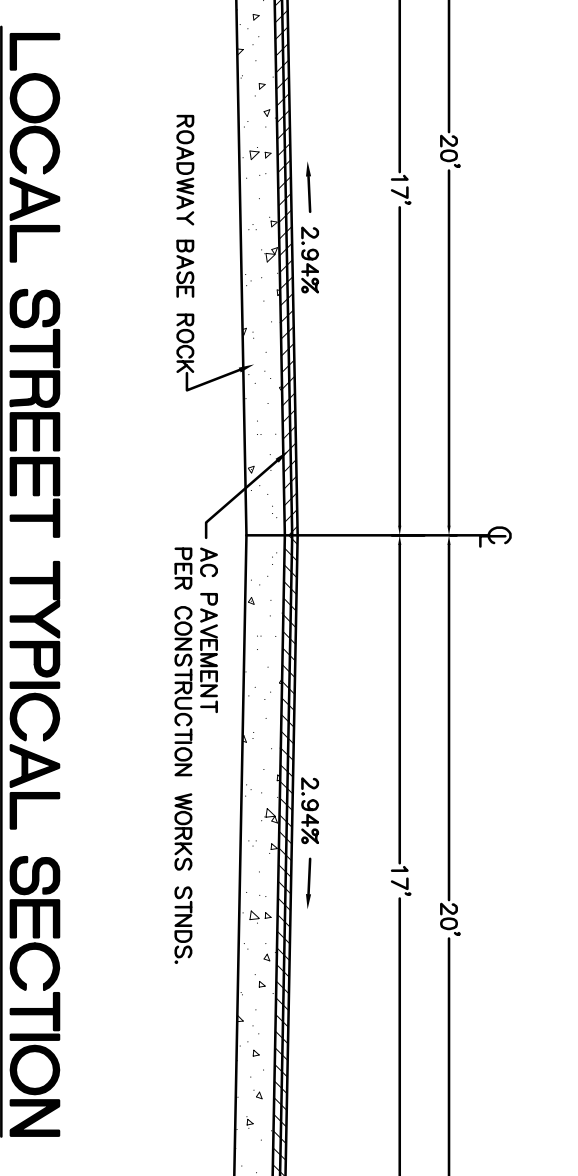
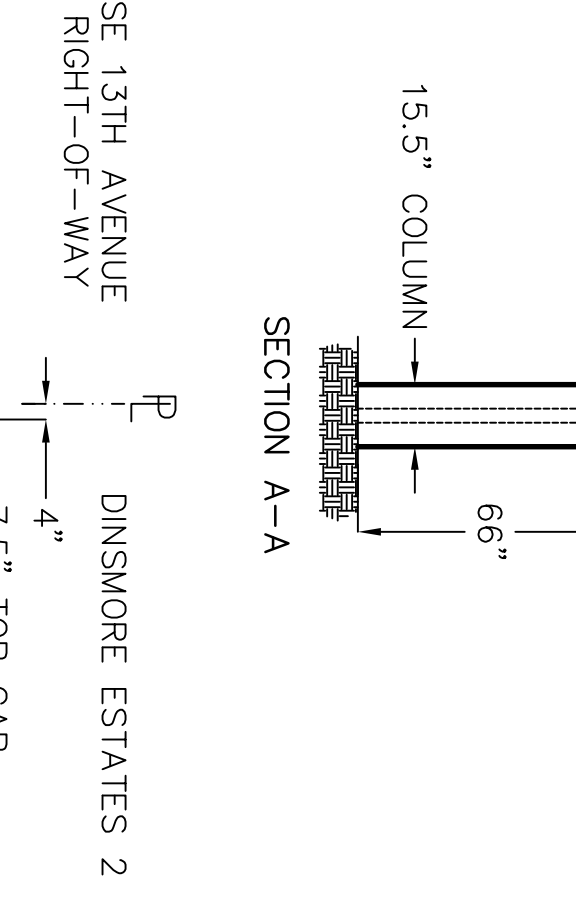
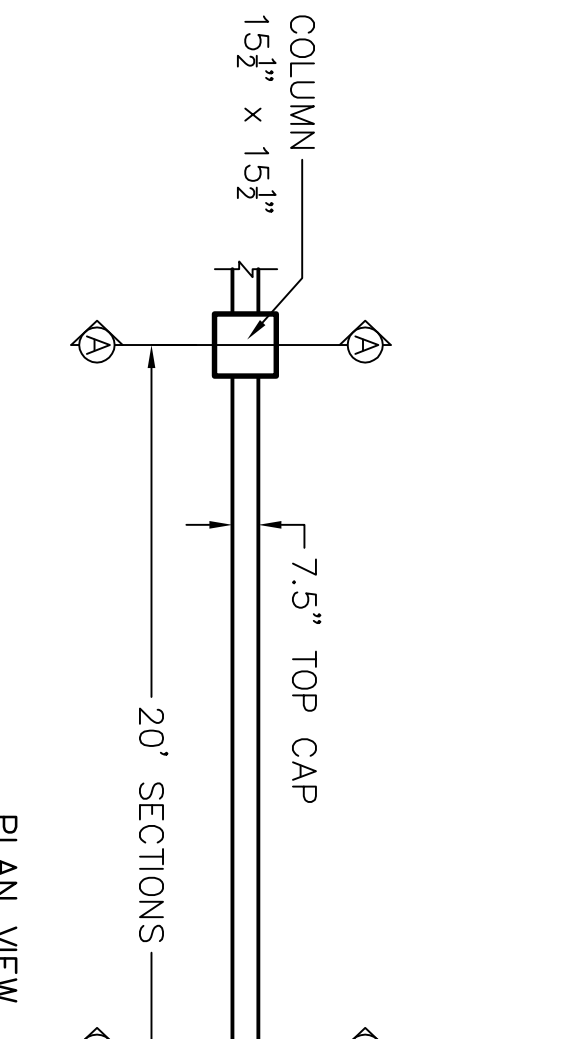
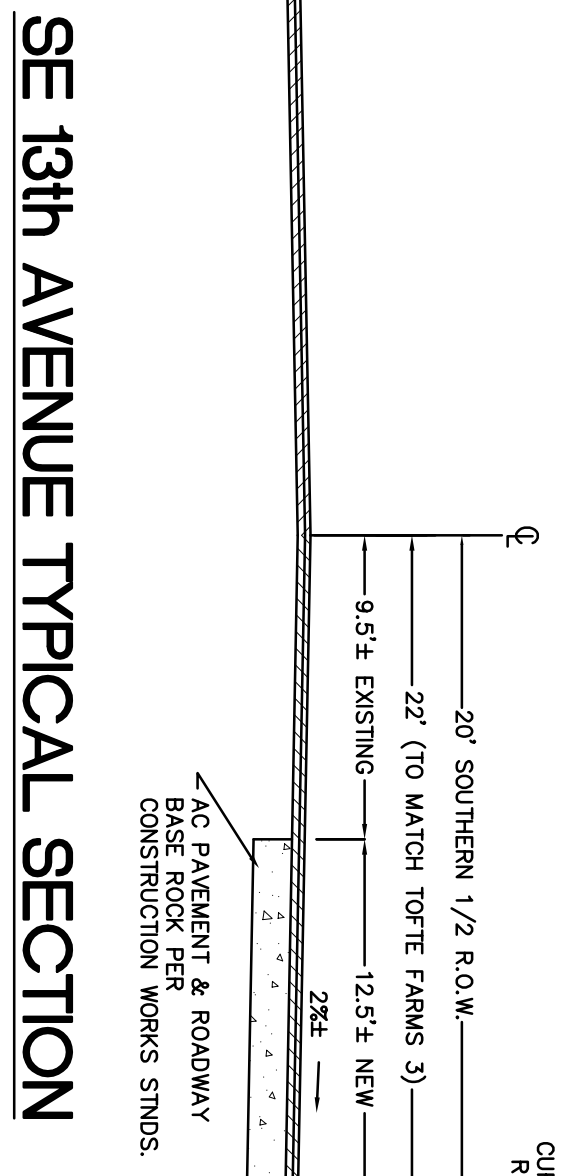
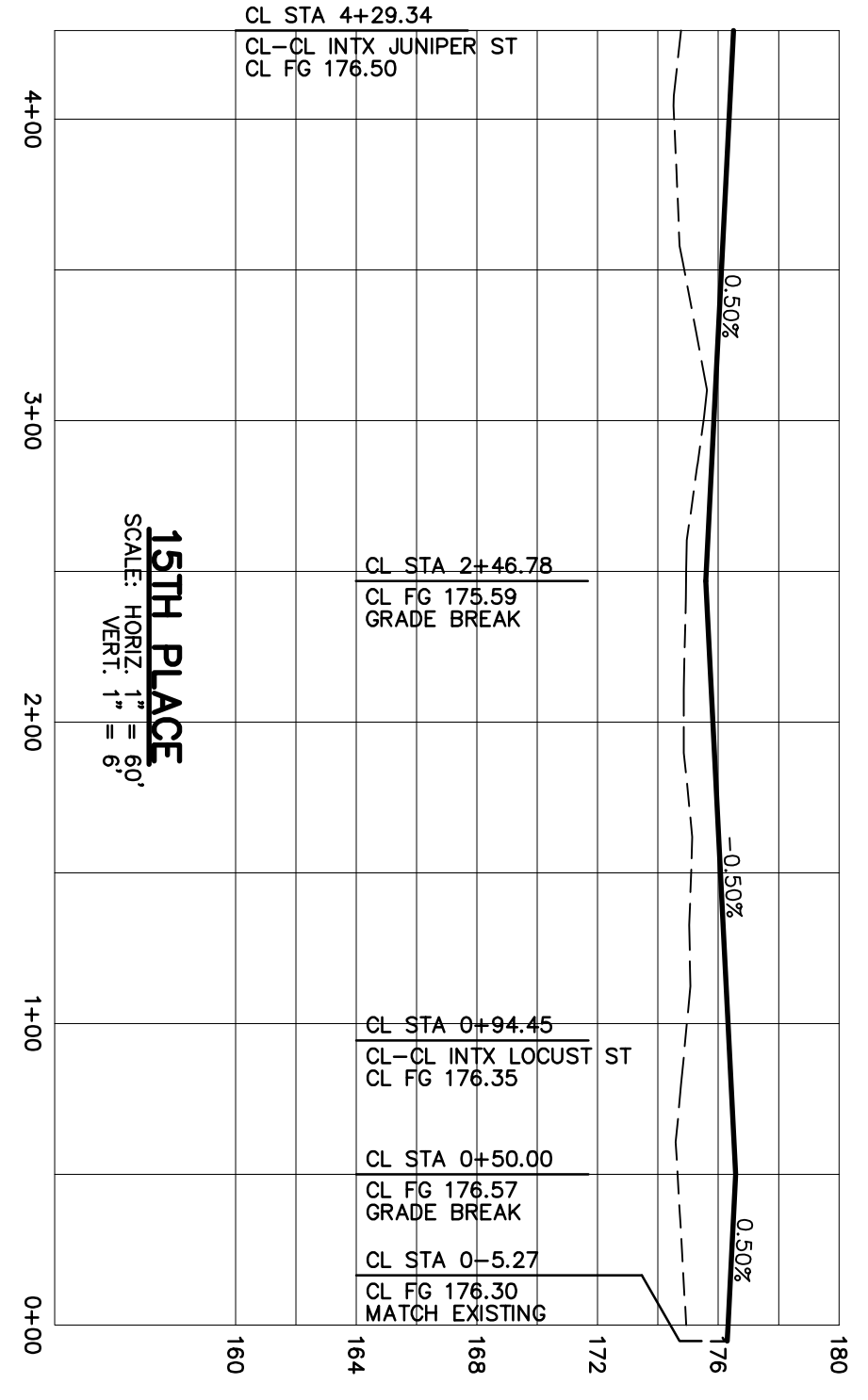
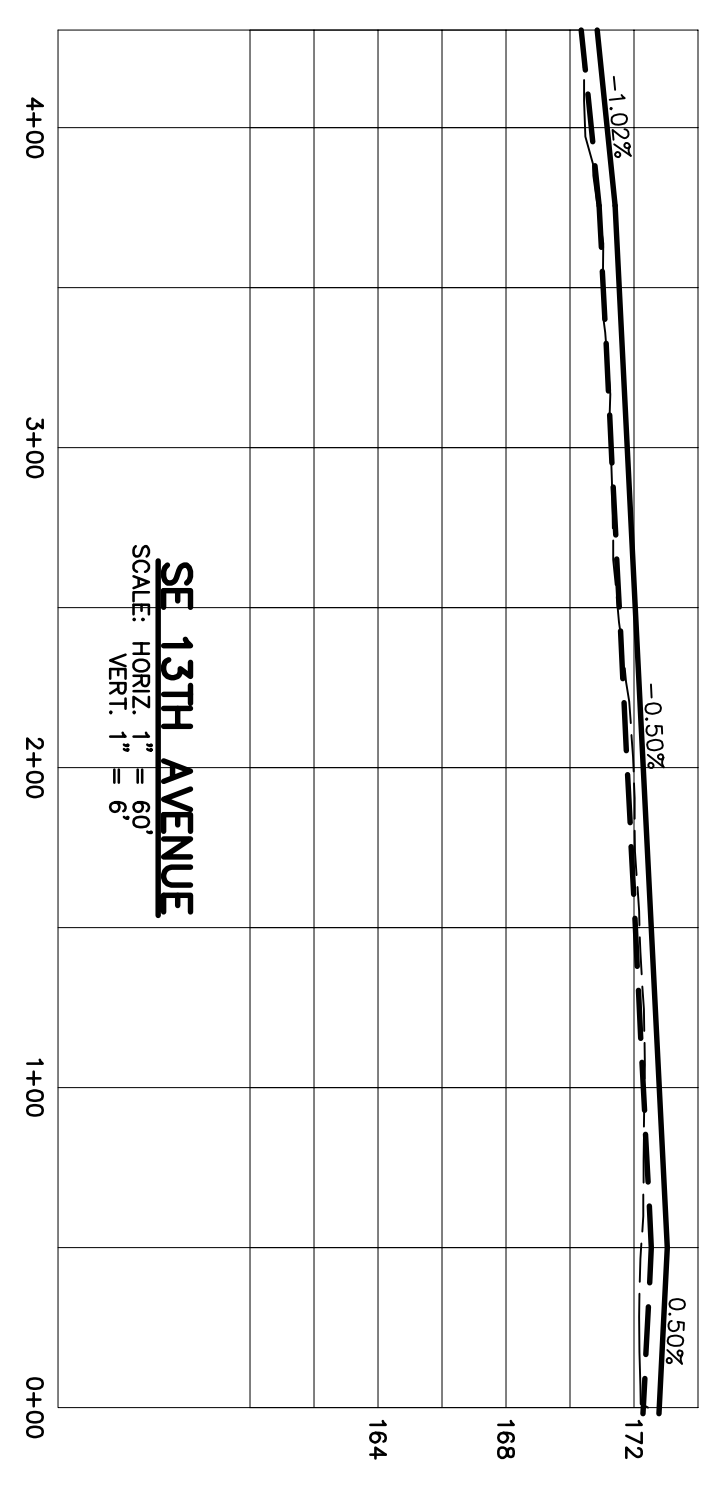
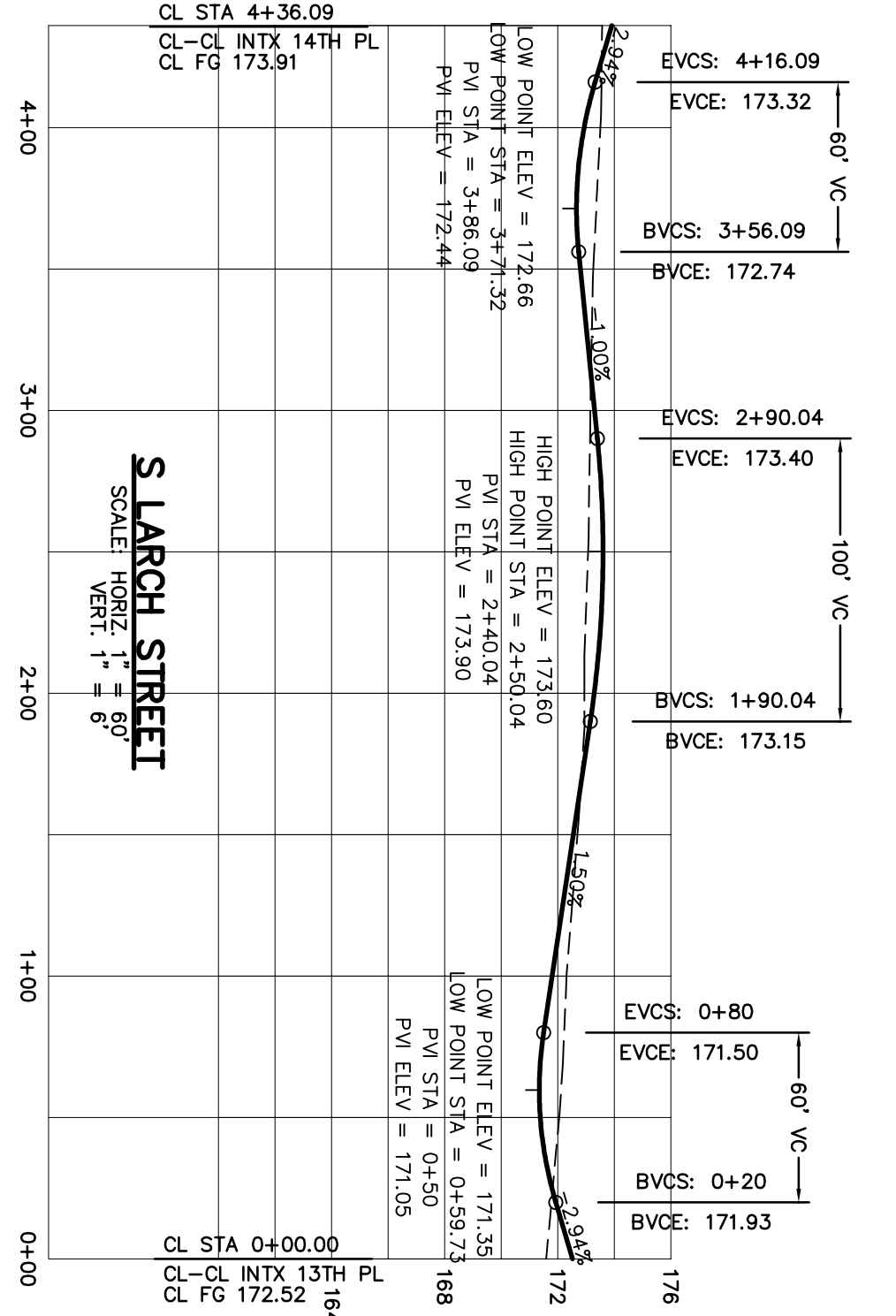
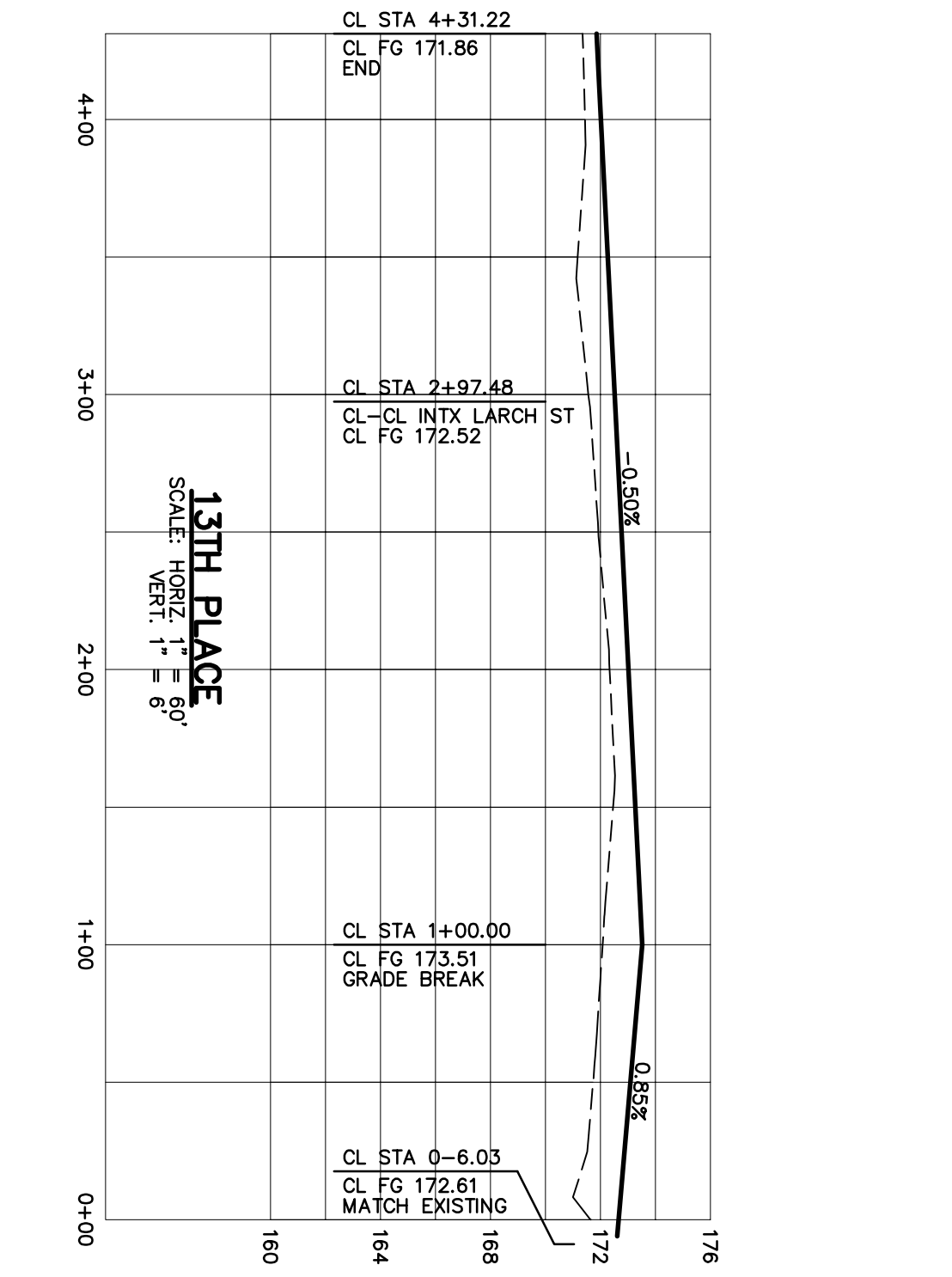
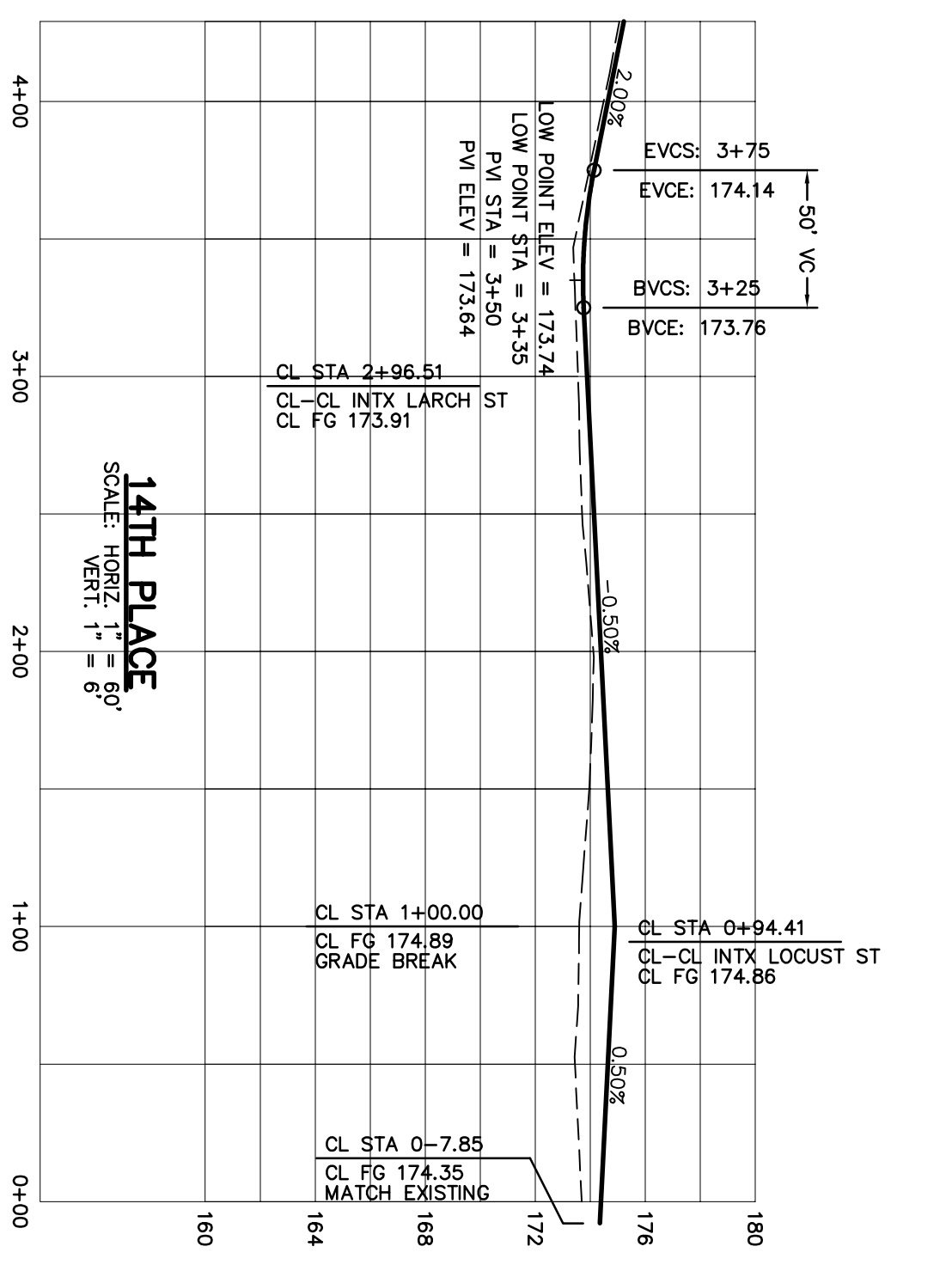
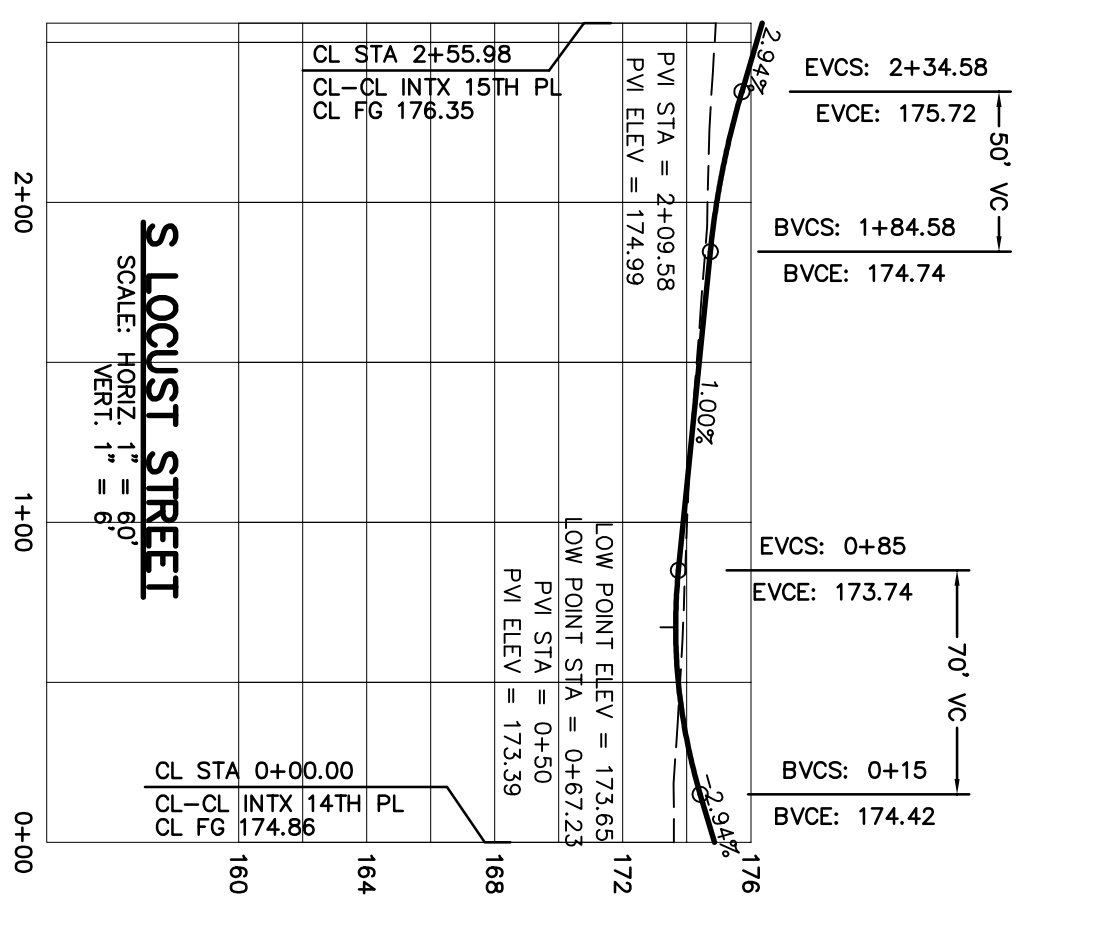
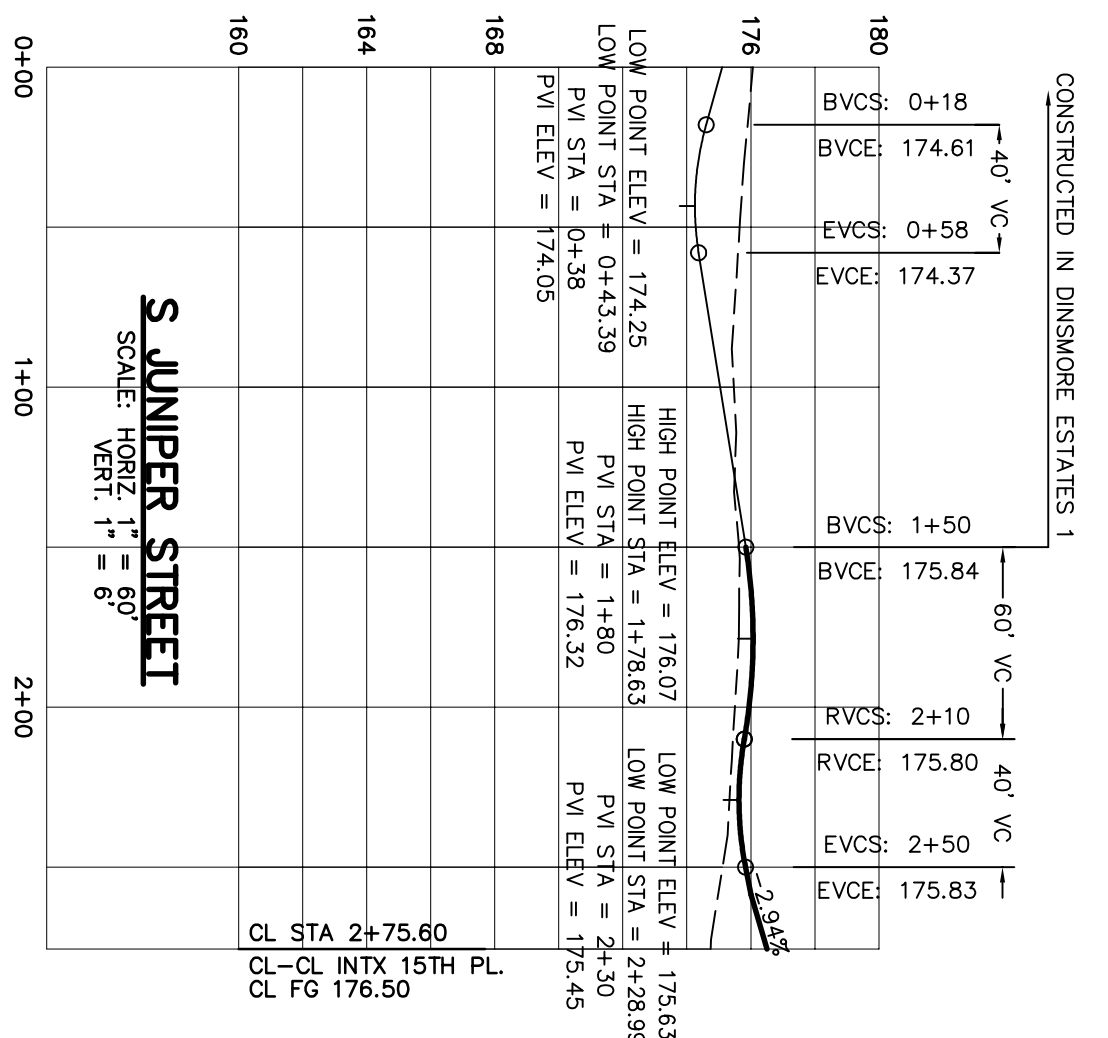
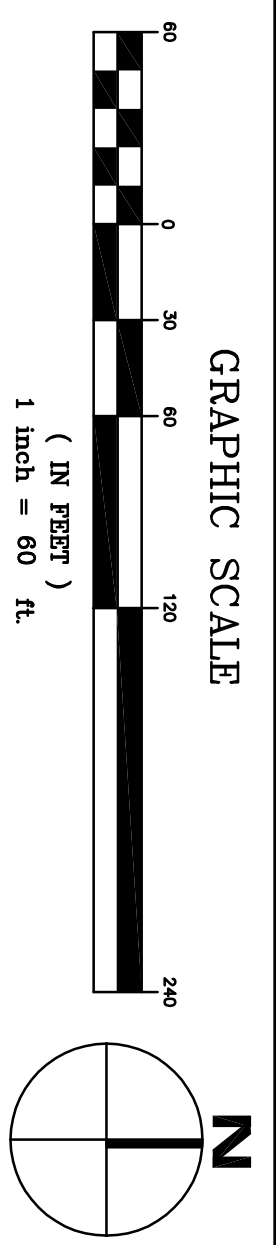
NO.	REVISIONS	BY

DINSMORE ESTATES 2  
Scott Family Limited Partnership

Utility Plan

**SISUL ENGINEERING**  
375 PORTLAND AVENUE  
GLADSTONE, OREGON 97027  
(503) 657-0188  
07-134-Layout.dwg

DATE FEB 2014  
SCALE H: 1" = 60'  
DRAWN AK/PS  
JOB SGL 07-134  
SHEET 2  
OF 4 SHEETS



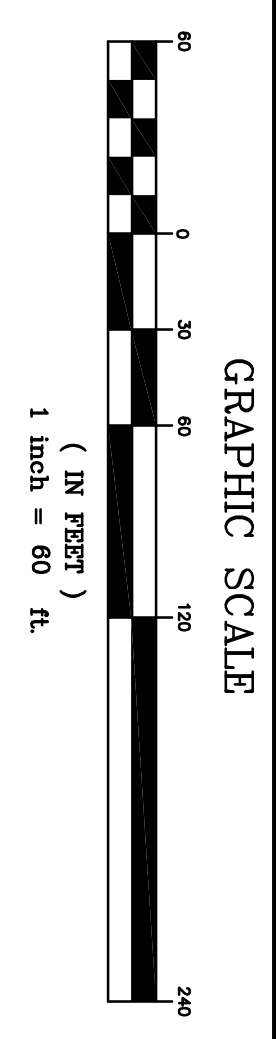
**SISUL ENGINEERING**  
 375 PORTLAND AVENUE  
 GLADSTONE, OREGON 97027  
 (503) 657-0188  
 07-134-Layout.dwg

Street Profiles

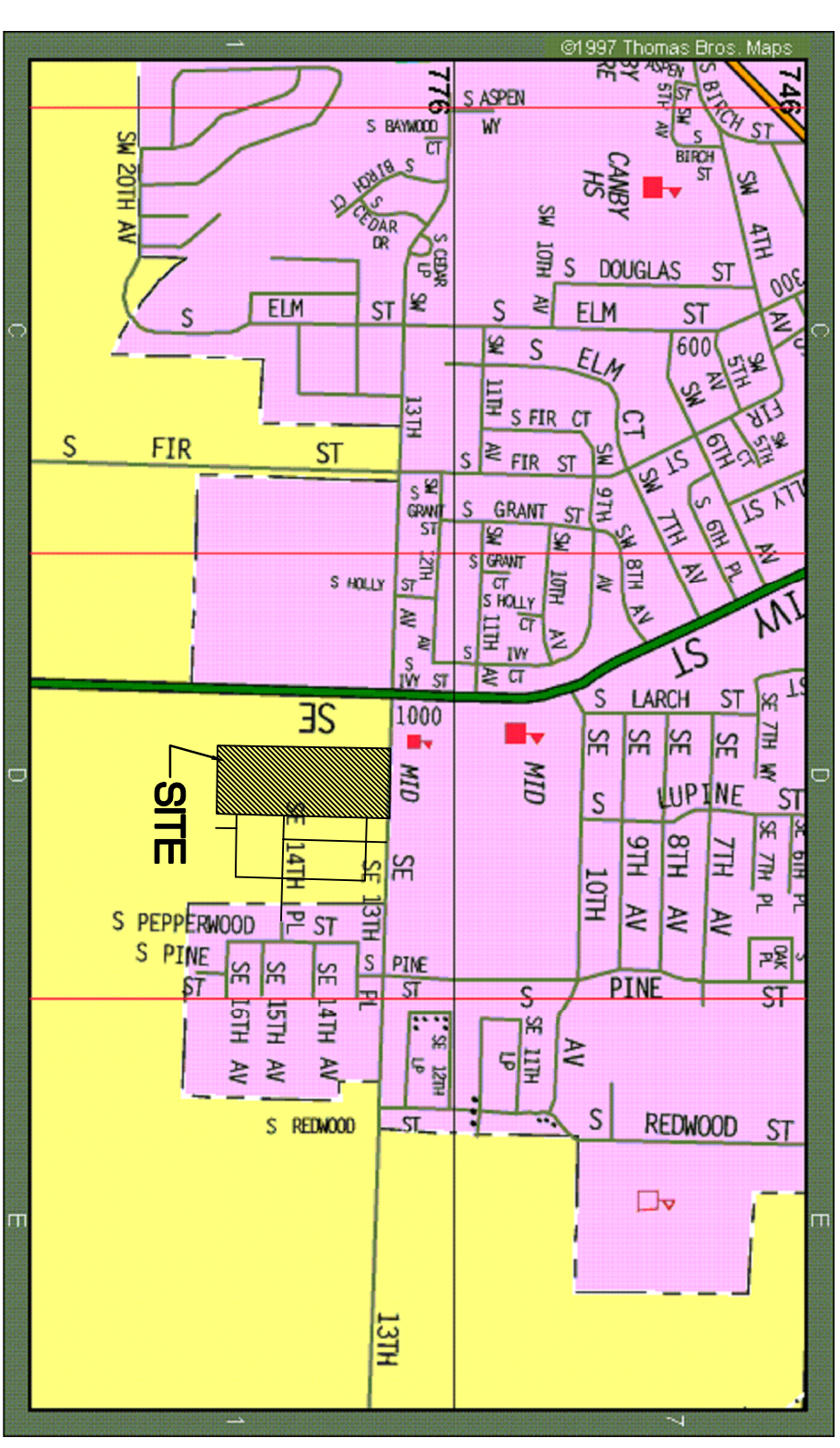
DINSMORE ESTATES 2  
 Scott Family Limited Partnership

REV	DATE	BY	CHK
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2	1/20/14	MS	MS
3	1/20/14	MS	MS
4	1/20/14	MS	MS

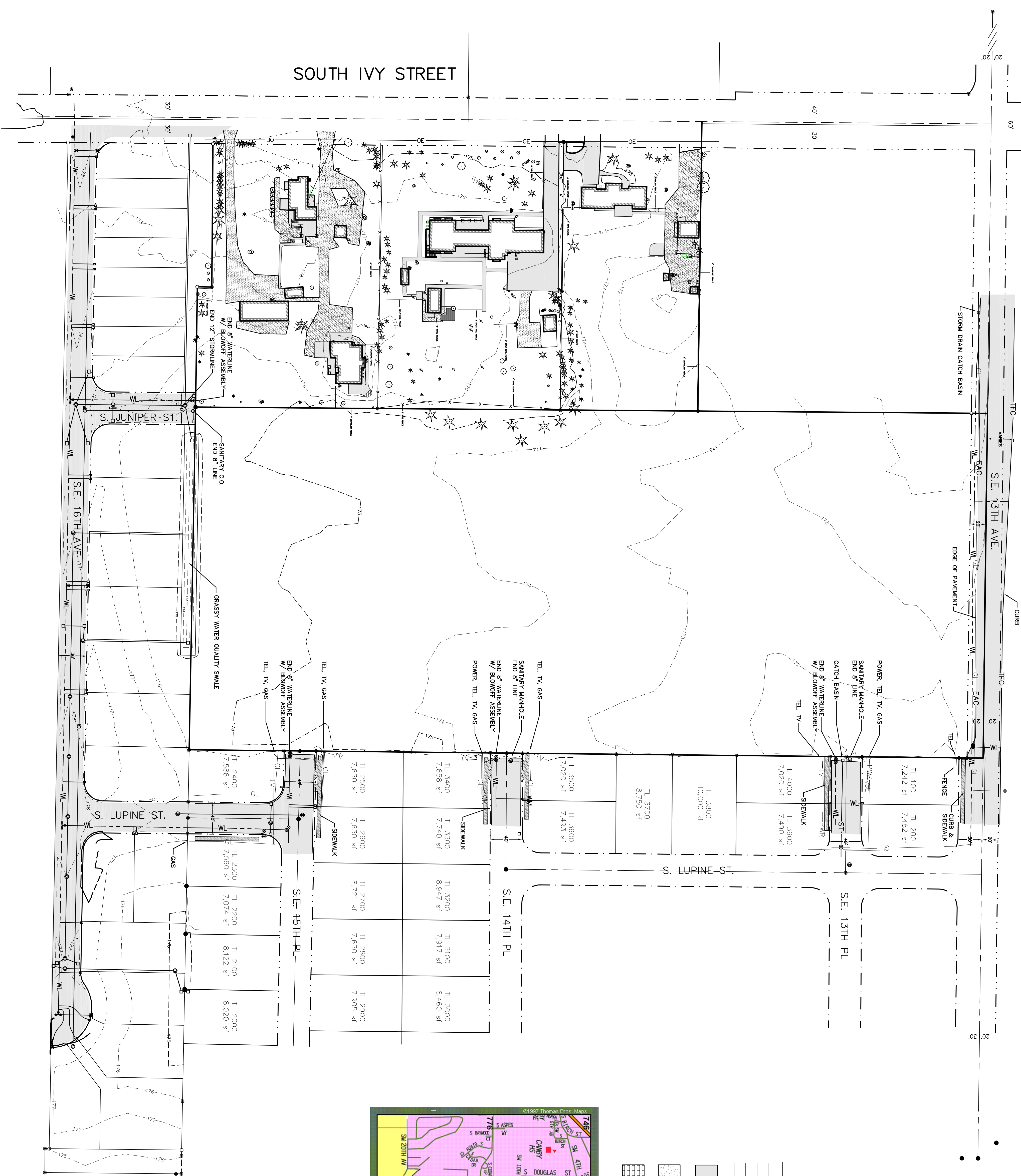
DATE: FEB 2014  
 SCALE: H: 1" = 60'  
 DRAWN: AK/PS  
 JOB: SOL 07-134  
 SHEET: 3  
 OF 4 SHEETS



- TOPOGRAPHY LEGEND
- STUMP AS NOTED
  - CATCH BASIN
  - MAIL BOX
  - POWER METER
  - POWER RISER
  - WATER SNIFFER
  - WATER VALVE
  - POWER POLE WITH UNDERGROUND
  - GAS METER
  - COLUMN
  - SPRINKLER VALVE
  - BUSH
  - DECIDUOUS TREE
  - CONIFEROUS TREE
  - OVERHEAD ELECTRICAL LINE
  - CHANNEL FENCE
  - BARRIQUADE FENCE
  - OVERHEAD ELECTRICAL LINE
  - EXISTING CONCRETE SURFACE
  - EXISTING GRANUL SURFACE
  - EXISTING GRANUL SURFACE



- PLANNING NOTES.
1. NO WATERCOURSES ARE LOCATED ONSITE.
  2. NO ROCK OUTCROPPINGS, MARSHES, WETLANDS, OR WOODED AREAS ARE LOCATED ONSITE.



Topographic Survey

DINSMORE ESTATES 2  
Scott Family Limited Partnership

**SISUL ENGINEERING**  
375 PORTLAND AVENUE  
GLADSTONE, OREGON 97027  
(503) 657-0188  
07-134-FULL TOPO.dwg

DATE FEB. 2008  
SCALE H: V = 1" = 60'  
DRAWN AK  
JOB SOL 07-134  
SHEET 4  
OF 4 SHEETS

## VII. Storm Drainage Report

# ***Dinsmore Estates 2***

J.O. SGL 07-134

November 5, 2013

## ***STORM DRAINAGE REPORT FOR SUBDIVISION APPLICATION***

### **SISUL ENGINEERING**

*A Division of Sisul Enterprises, Inc.*

**375 PORTLAND AVE.**

**Gladstone, OR 97027**

phone: (503) 657-0188

fax: (503) 657-5779



*EXPIRES 6/30/14*

*DATED 11/5/13*

## **Dinsmore Estates 2:**

**THE SITE:** Dinsmore Estates 2 is the second phase of a two-phase subdivision located in southeast Canby, east of S. Ivy Street and south of SE 13<sup>th</sup> Avenue and the Ackerman School campus. Dinsmore Estates 2 is located to the north of Dinsmore Estates 1, a 22-lot subdivision that was platted in 2008. Phase 2 will consist of 41 lots having an allowable minimum lot size of 7,000 sf. A few homes have been constructed in Phase 1, but less than 50% of the subdivision lots are currently built upon.

To the north of Phase 1 and to the west of Phase 2 there are four oversized parcels that contain single family homes. The southern of the four parcels is owned by the McRobbie family & will be referred to as the McRobbie parcel. When Dinsmore Estates 2 is developed a portion of the public street system will encroach into the McRobbie parcel.

The streets within Dinsmore Estates 1 & 2 are owned by the City of Canby. SE 13<sup>th</sup> Avenue is also owned by the City of Canby. S Ivy Street is owned and by Clackamas County and maintained jointly by Clackamas County and the City of Canby.

The subdivision is located approximately at elevation 180, approximately 65 feet higher than the Molalla River, which is located approximately 1,500 south of Phase 1. The general contour of the terrain is a slight fall to the south toward the Molalla River. Street grades are very nearly flat in most cases, with all surrounding streets having a grade of less than 5 percent.

**STORM DRAINAGE SYSTEMS:** This area of Canby is not served by a conveyance pipe storm drain system that will carry runoff to a stream or river. Canby has very few storm drain pipe networks and has typically relied on drywell infiltration as the preferred method of stormwater disposal. Prior to development of the surrounding subdivisions, this area had no improved storm drain system. Storm water runoff would typically pond in the low points of the agricultural fields until it dissipates through a combination of infiltration and evaporation.

The Dinsmore Estates 2 site is currently an agricultural field and there is no runoff from the Dinsmore Estates 2 site. During rainfall events, water pools in the furrows of the field until it dissipates through infiltration and evaporation.

The storm drain system for Dinsmore Estates Phases 1 & 2 is designed to accommodate storm water runoff through two separate and distinct systems. Collection and disposal of rainwater from private property are privately maintained storm drain systems that are maintained by individual homeowners. It is the responsibility of each homeowner to operate and maintain and underground storm drain disposal system on their lot that can accommodate the anticipated runoff from the lot. These systems are separate from the public storm drain system designed to dispose of the street runoff.

Dinsmore Estates (Phase 1) was designed with an oversized storm drain disposal system in order to accommodate a portion of the Phase 2 site. Four 26-foot deep drywells were installed near the intersection of SE 16<sup>th</sup> Avenue & S Lupine Street for the purpose of underground stormwater disposal. It was anticipated that these four drywells would accommodate all of Phase 1 and all of, or a substantial portion of Phase 2. A grassy water quality swale was installed along the rear of several lots in Phase 1 and is used to pre-treat the storm water prior to conveyance to the drywells for disposal. The size of the pre-treatment facility will be checked with this report.

The drywells in Dinsmore Estates are registered and rule authorized with the Oregon DEQ. Per the City of Canby storm water consultants, because the existing drywells are registered and rule authorized and they

were intended to serve future phases of development, then these existing UIC facilities can be used provided that the developer can demonstrate that they have adequate capacity.

**DESIGN STORM:** The table in Section 4.301.a of the City of Canby Public Works Design Standards (June 2012) identifies that UIC facilities shall be designed using a design storm having a minimum recurrence interval of 10 years. The table also identifies that the following facilities shall be designed using a design storm having the following recurrence intervals:

LID facilities for infiltration systems	10 years
Minor: Streets, curbs, gutters, inlets, catch basin & connector drains	10 years
Major: Laterals (collectors) <250 tributary acres	10 years

1973 NOAA Atlas 2, Volume X and U.S. Department of Agriculture Isohyets for 24 hour storms in Oregon identify the 10 year, 24 hour storm event for Canby as having less than 3.5 inches of precipitation. The Regional Precipitation-Frequency Analysis and Spatial Mapping of 24-Hour Precipitation for Oregon performed for the Oregon Department of Transportation Research Unit (Final Report dated January, 2008) identifies a 10 year storm for this area as having 24-hour precipitation totaling 3.0-3.5 inches. We will use a 10 year storm with total rainfall of 3.5 inches for our analysis.

The Master Plan also states that, "The disposal capacity of dry wells must be based upon the percolation rate of the native soils at the disposal levels. Typically this capacity is adequate for disposal of as much as one to two acres of impermeable area with the typical design used in the Canby area, although this varies greatly with the materials encountered.

**CALCULATING STORMWATER FLOWS:** Stormwater flows will be calculated using the Santa Barbara Urban Hydrograph (SBUH) method using a Type 1A SCS storm.

**SOIL:** Per the Soil Survey of Clackamas County Area, Oregon, prepared by the USDA, the soils underlying Dinsmore Estates, Dinsmore Estates 2 and the surrounding area are, 53A Latourell loam, hydrologic group "B".

#### **CONTRIBUTING AREA:**

##### Dinsmore Estates (Phase 1):

The area currently draining into the Dinsmore Estates drywells consists of the public street area of Dinsmore Estates (Phase 1) and Tract B, the water quality facility. The streets include SE 16<sup>th</sup> Avenue, S Juniper Street, a portion of S Lupine Street, and the eastern ½ of S Ivy Street along the Dinsmore Estates frontage. The contributing width is assumed to include the paved street, curb, planter strip, driveways and the public sidewalk. Driveway and sidewalk areas include the portion that extends to the back of the public sidewalk. Since most lots have not yet been built on, driveway widths have been assumed for each lot. Typical driveways are assumed to be 24-foot wide, lots having a width of less than 50 feet are assumed to have a 20 foot wide driveway. Flag lots or shared driveway were assumed to have a driveway width equal to the width of the accessway. All driveways are assumed to have 5-foot wide triangular wings on each side.

Runoff from all other privately owned areas is anticipated to drain to private infiltration chamber storage systems or to infiltrate onsite.

Paved streets (to back of curb)	45,038 sf
Sidewalks	8,586 sf
Driveways (between curb & sidewalk)	2,574 sf
<hr/>	
Total impervious area =	56,198 sf = 1.29 Ac
Planter strip	11,059 sf
Tract B	3,624 sf
<hr/>	
Total pervious area =	14,683 sf = 0.34 Ac

Dinsmore Estates (Phase 2):

The area assumed to drain to the Dinsmore Estates drywells includes all of the public street areas of Dinsmore Estates 2 and area to expand the water treatment facility located in Tract B in Dinsmore Estates (Phase 1). The streets include SE 13<sup>th</sup> Place, SE 14<sup>th</sup> Place, SE 15<sup>th</sup> Place, S Locust Street, S Larch Street, the new portion of S Juniper Street and the southern ½ of SE 13<sup>th</sup> Avenue along the Dinsmore Estates 2 frontage. Topographic survey shows that the existing portions of SE 13<sup>th</sup> Place, SE 14<sup>th</sup> Place and SE 15<sup>th</sup> Place all drain away from Dinsmore Estates to the east. SE 13<sup>th</sup> Avenue also appears to drain away to the east and the west and will not receive any drainage from the roadway beyond the frontage of the site. Contributing street areas in Dinsmore Estates 2 are similar to those for Dinsmore Estates 1 (above). Runoff from all other privately owned areas is anticipated to drain to private infiltration chamber storage systems or to infiltrate onsite.

Paved streets (to back of curb)	85,513 sf
Sidewalks	24,324 sf
Driveways (between curb & sidewalk)	5,071 sf
<hr/>	
Total impervious area =	114,908 sf = 2.64 Ac
Planter strip	11,948 sf
Tract B (additional area)	1,589 sf
<hr/>	
Total pervious area =	13,537 sf = 0.31 Ac

McRobbie Parcel:

Development of the McRobbie parcel is somewhat tied to development of Dinsmore Estates 2, as the access to the McRobbie parcel will come via S Juniper Street (which is partially located on the Dinsmore 2 property) and SE 15<sup>th</sup> Place (which is fully on the Dinsmore 2 property). Developers are looking at the property and it is likely that this property may develop shortly after Dinsmore Estates 2 does. It is not known whether the McRobbie parcel will drain into its own storm drain disposal system or to the Dinsmore Estates system, however, because the developments will share SE Juniper Street, there is a likelihood



that at least a portion of the McRobbie site will drain into the Dinsmore drywell system when developed. For the purposes of this report, we are assuming that all of the new public right-of-way in the McRobbie parcel will drain to the Dinsmore Estates drywells. A Site Plan has been assumed for the McRobbie property in order to estimate the area of development that may occur. This plan may be considerably different than the plan submitted by a developer at the time of development, but it gives us some logical numbers to work with.

The area assumed to drain to the Dinsmore Estates drywells includes the public street areas of SE 15<sup>th</sup> Place, the new portion of S Juniper Street and the eastern ½ of S Ivy Street along the McRobbie frontage. Contributing street areas on the McRobbie property are also assumed to extend to the back of the public sidewalk. We also assumed that a shared private driveway and a public sidewalk connection from S Juniper Street to S Ivy Street would drain to the public system. Runoff from all other privately owned areas is anticipated to drain to private infiltration chamber storage systems or to infiltrate onsite.

Paved streets (to back of curb)	13,377 sf
Sidewalks	5,113 sf
Driveways (between curb & sidewalk)	4,420 sf
Total impervious area =	22,910 sf = 0.53 Ac

Planter strip	2,106 sf
Total pervious area =	2,106 sf = 0.05 Ac

**RUNOFF CURVE NUMBERS:** Paved streets, Sidewalks, Driveway CN = 98  
 Planter strips, Tract B (lawn, good condition) CN = 80

**TIME OF CONCENTRATION:**

The majority of the area in the drainage basin is impervious surface. We will assume no sheet flow will occur. The time of concentration will be a combination of gutter flow and pipe flow. The hydraulically-most-distant point in the subdivision will occur in the NE corner of the site along SE 13<sup>th</sup> Avenue.

Gutter fall to the west will be approximately 282 feet at an avg. slope of 0.005 (1/2 percent).

$V = k(\text{slope})^{0.5}$	V = velocity, s = 0.005, k = 27 (pavement)	V = 1.9 ft/sec
T = L / V	T = travel time, L = length = 282, V = velocity	T = 2.5 minutes

Pipe flow from 13<sup>th</sup> Avenue to the water quality swale will be approximately 1250 feet, at an assumed slope of 0.008 (0.8 percent).

$V = k(\text{slope})^{0.5}$	V = velocity, s = 0.008, k = 42 (concrete pipe)	V = 3.8 ft/sec
T = L / V	T = travel time, L = length = 1250, V = velocity	T = 5.5 minutes

Pipe flow from the water quality swale to Manhole 2-1 in SE 16<sup>th</sup> Avenue is 146 LF @ 1.44 percent slope.

$V = k(\text{slope})^{0.5}$	V = velocity, s = 0.0144, k = 42 (concrete pipe)	V = 5.0 ft/sec
T = L / V	T = travel time, L = length = 146', V = velocity	T = 0.5 minute

Pipe flow from Manhole 2-1 to Drywell 2-2 (the first drywell in series) is 204.5 LF @ 0.5 percent slope.

$$V = k(\text{slope})^{0.5}$$

$$T = L / V$$

V = velocity, s = 0.005, k = 42 (concrete pipe)  
 T = travel time, L = length = 204.5', V = velocity

V = 3.0 ft/sec  
 T = 1.1 minute

Time of Concentration = Sum of Travel times = (2.5 + 5.5 + 0.5+ 1.1) minutes = 6.6 minutes

**KING COUNTY HYDROGRAPH PROGRAMS INPUT VALUES:**

Required data: Area (perv), CN (perv), Area (imperv), CN (imperv), time of concentration

Total Pervious Areas, Area (perv) = 0.70 Acres, CN (perv) = 80

Total Impervious Areas, Area (imperv) = 4.45 Acres, CN (perv) = 98

Time of concentration = 6.6 minutes

**KING COUNTY SBUH COMPUTATIONS FOR 10 YEAR, 24-HOUR STORM:**

Surface Water Management Division

HYDROGRAPH PROGRAMS  
 Version 4.20

- 1 - INFO ON THIS PROGRAM
- 2 - SBUHYD
- 3 - ROUTE
- 4 - ROUTE2
- 5 - ADDHYD
- 6 - BASEFLOW
- 7 - PLOTHYD
- 8 - DATA
- 9 - RDFAC
- 10 - RETURN TO DOS

ENTER OPTION: 2

SBUH/SCS METHOD FOR COMPUTING RUNOFF HYDROGRAPH

STORM OPTIONS:

- 1 - S.C.S. TYPE-1A
- 2 - 7-DAY DESIGN STORM
- 3 - STORM DATA FILE

SPECIFY STORM OPTION: 1

S.C.S. TYPE-1A RAINFALL DISTRIBUTION

ENTER: FREQ(YEAR), DURATION(HOUR), PRECIP(INCHES)

10,24,3.5

-----  
 \*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
 \*\*\*\*\* 10-YEAR 24-HOUR STORM \*\*\*\*\* 3.50" TOTAL PRECIP. \*\*\*\*\*  
 -----

ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
 0.70,80,4.45,98,6.6

DATA PRINT-OUT:

AREA (ACRES)	PERVIOUS		IMPERVIOUS		TC (MINUTES)
	A	CN	A	CN	
5.1	.7	80.0	4.4	98.0	6.6

PEAK-Q (CFS)	T-PEAK (HRS)	VOL (CU-FT)
<b>4.08</b>	7.67	56919

← 10 YR PEAK FLOW

ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:  
07-134-10.hyd

SPECIFY: C - CONTINUE, N - NEWSTORM, P - PRINT, S - STOP

### DRYWELL SYSTEM CAPACITY:

GeoPacific Engineering, Inc. performed onsite drywell performance testing of the Dinsmore Estates drywells on October 21, 2013. The November 5, 2013 Report from GeoPacific states that "Drywells one through four may be assumed to infiltrate at a maximum estimated rate of 2,500 gpm."

We will apply a Factor of Safety of two to allow for slowing of the flow rate over time due to debris. The Factor of Safety would reduce the maximum rate of flow to 1,250 gpm.

The conversion from GPM to CFS is made by the equation 448.8 GPM = 1 CFS

$1,250 \text{ GPM} * (1 \text{ CFS} / 448.8 \text{ GPM}) = 2.78 \text{ CFS}$

Each drywell is capable of infiltrating a maximum estimated rate of 2.78 cfs.

The four drywells are capable of infiltrating  $2.78 \text{ cfs} * 4 = \mathbf{11.1 \text{ cfs}}$ .

Two drywells would be adequate for the anticipated flow. The system is adequate. ✓

### WATER QUALITY TREATMENT FACILITY:

DEQ approved a two-prong water quality treatment facility approach for Dinsmore Estates in 2008. The bulk of the development would drain through the Tract B water quality treatment facility on the rear of Lots 9 through 13 while the cul-de-sac in the eastern corner of Dinsmore Estates would drain through a sedimentation manhole. The size of the basin not draining through the Tract B water quality facility is:

Paved streets (to back of curb)	8,663 sf
Sidewalks	1,539 sf
Driveways (between curb & sidewalk)	1,395 sf
<hr/>	
Total impervious area =	11,597 sf = 0.27 Ac
Planter strip	1,350 sf
<hr/>	
Total pervious area =	1,350 sf = 0.03 Ac

The remainder of the development drains through the Tract B facility. The size of impervious and pervious basins draining to Tract B are therefore:

Paved streets (to back of curb)	135,265 sf
Sidewalks	36,484 sf
Driveways (between curb & sidewalk)	10,670 sf
<hr/>	
Total impervious area =	182,419 sf = 4.19 Ac
Planter strip	23,763 sf
Tract B	5,213 sf
<hr/>	
Total pervious area =	28,976 sf = 0.67 Ac

The water quality facility is designed to have untreated flows entering on the east and west ends and treated flows leaves out the center of the facility. The western basin includes the McRobbie parcel and portions of Dinsmore Estates and Dinsmore Estates 2. The eastern basin includes portions of Dinsmore Estates and Dismore Estates 2. The impervious areas draining to each basin are noted below (these areas will need to be confirmed during final design):

Tract B WQ Facility West Basin	
Paved streets (to back of curb)	49,352 sf
Sidewalks	11,211 sf
Driveways	5,991 sf
<hr/>	
Total impervious area =	66,554 sf = 1.53 Ac
Tract B WQ Facility East Basin	
Paved streets (to back of curb)	85,913 sf
Sidewalks	25,273 sf
Driveways	4,679 sf
<hr/>	
Total impervious area =	115,865 sf = 2.66 Ac

Section 4.310 of the City of Canby Public Works Design Standards, states that the design of water quality treatment facilities shall be per Clean Water Services Design Manual, Chapter 4, paragraph 4.06.

Per Clean Water Services Design Manual, Chapter 4, paragraph 4.05:

**a. Water Quality Storm**

The water quality storm is the storm required by regulations to be treated. The storm defines both the volume and rate of runoff. The water quality storm is defined in subsection 4.05.4 (d). Subsection 4.05.4 (d) defines the water quality storm as a dry weather storm event totaling 0.36 inches of precipitation falling in 4 hours with an average storm return period of 96 hours.

**b. Water Quality Volume (WQV)**

The WQV is the volume of water that is produced by the water quality storm. The WQV equals 0.36 inches over the impervious area that is required to be treated as shown in the formula below:

$$\text{Water Quality Volume (cu.ft)} = \frac{0.36 \text{ (in.)} \times \text{Area (sq.ft.)}}{12 \text{ (in./ft.)}}$$

Tract B West Basin:

With an impervious area of 66,554 sf being treated; the West WQV = 1,997 cu ft.

Tract B East Basin:

With an impervious area of 115,865 sf being treated; the East WQV = 3,476 cu ft.

**c. Water Quality Flow (WQF)**

The WQF is the average design flow anticipated from the water quality storm as shown in the formulas below:

$$\text{Water Quality Flow (cfs)} = \frac{\text{Water Quality Volume (cu.ft.)}}{14,400 \text{ seconds}}$$

Tract B West Basin:

With the West WQV = 1,997 cu ft; the West WQF = 0.14 cfs

Tract B East Basin:

With the East WQV = 3,476 cu ft; the East WQF = 0.24 cfs

Tract B West Basin Flow Velocity & Residence Time:

Haestad Methods FlowMaster I version 3.13

Trapezoidal - Dinsmore Estates 2			
Comment: Tract B West WQF			
Solve For.....Depth			
Bottom Width...	2.00 ft	<b>Velocity.....</b>	<b>0.15 fps</b>
Lt Side Slope..	4.00:1 (H:V)	Flow Area.....	0.91 sf
Rt Side Slope..	4.00:1 (H:V)	Flow Top Width..	4.31 ft
Manning's n....	0.240	Wetted Perimeter	4.38 ft
Channel Slope..	0.0050 ft/ft	Critical Depth..	0.05 ft
Depth.....	0.29 ft	Critical Slope..	2.3418 ft/ft
Discharge.....	0.14 cfs	Froude Number...	0.06

Residence Time T = Length/Velocity

Velocity = 0.15 feet/sec.

L=118 feet

Residence Time = 118 feet/0.15 fps = 787 sec = 13.1 min. > 9 minutes ✓

Tract B East Basin Flow Velocity & Residence Time:

Haestad Methods FlowMaster I version 3.13

— Trapezoidal - Dinsmore Estates 2 —

Comment: Tract B East WQF

Solve For.....Depth

Bottom Width...	2.00 ft	Velocity.....	0.18 fps
Lt Side Slope..	4.00:1 (H:V)	Flow Area.....	1.34 sf
Rt Side Slope..	4.00:1 (H:V)	Flow Top Width..	5.05 ft
Manning's n....	0.240	Wetted Perimeter	5.14 ft
Channel Slope..	0.0050 ft/ft	Critical Depth..	0.07 ft
Depth.....	0.38 ft	Critical Slope..	2.1137 ft/ft
Discharge.....	0.24 cfs	Froude Number...	0.06

Residence Time  $T = \text{Length}/\text{Velocity}$

Velocity = 0.18 feet/sec.

L=135 feet

Residence Time = 135 feet/0.18 fps = 750 sec = 12.5 min. > 9 minutes

✓

**CONVEYANCE PIPING CALCULATIONS:**

Conveyance piping shall be able to carry the 10 year storm event without surcharge. Per Section 4.206 of the City of Canby Public Works Design Standards, the Santa Barbara Urban Hydrograph (SBUH) method will be acceptable for estimating the peak runoff rates to be used in sizing storm drainage conveyance improvements.

Conveyance Piping Downstream of the Water Quality Treatment Swale will be required to carry flow from the following basin areas, as calculated earlier:

Paved streets (to back of curb)	135,265 sf
Sidewalks	36,484 sf
Driveways (between curb & sidewalk)	10,670 sf
<hr/>	
Total impervious area =	182,419 sf = 4.19 Ac
Planter strip	23,763 sf
Tract B	5,213 sf
<hr/>	
Total pervious area =	28,976 sf = 0.67 Ac

As with the earlier calculation:  
Pervious CN = 80, Impervious CN = 98, Time of concentration = 6.6 minutes

Use King County Program to calculate peak flow to Tract B.

SBUH/SCS METHOD FOR COMPUTING RUNOFF HYDROGRAPH

STORM OPTIONS:

- 1 - S.C.S. TYPE-1A
- 2 - 7-DAY DESIGN STORM
- 3 - STORM DATA FILE

SPECIFY STORM OPTION: 1

S.C.S. TYPE-1A RAINFALL DISTRIBUTION  
ENTER: FREQ(YEAR), DURATION(HOUR), PRECIP(INCHES)  
10,24,3.5

-----  
\*\*\*\*\* S.C.S. TYPE-1A DISTRIBUTION \*\*\*\*\*  
\*\*\*\*\* 10-YEAR 24-HOUR STORM \*\*\*\* 3.50" TOTAL PRECIP. \*\*\*\*\*  
-----

ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1  
0.67,80,4.19,98,6.6

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
4.9	.7	80.0	4.2	98.0	6.6

PEAK-Q(CFS)	T-PEAK(HRS)	VOL(CU-FT)
3.85	7.67	53658

ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:  
07-134B-10.hyd

Verify Pipe Capacity from Tract B to the manhole in SE 16<sup>th</sup> Avenue

Haestad Methods FlowMaster I version 3.13

Circular Channel: Manning's Equation - Dinsmore Estates 2

Comment: Pipe from Tract B to MH 2-1 in 16th Ave

Solve For.....Actual Depth

Diameter.....	1.00 ft	Velocity.....	6.68 fps
Slope.....	0.0174 ft/ft	Flow Area.....	0.58 sf
Manning's n....	0.013	Critical Slope	0.0113 ft/ft
Discharge.....	3.85 cfs	Critical Depth	0.83 ft
Depth.....	0.69 ft	Percent Full..	68.86 %
		Froude Number.	1.49
		Full Capacity.	4.70 cfs
		QMAX @.94D....	5.06 cfs

Pipe is adequate

Verify Pipe Capacity from Manhole 2-1 to Drywell 2-2 in SE 16<sup>th</sup> Avenue

Haestad Methods FlowMaster I version 3.13

Circular Channel: Manning's Equation - Dinsmore Estates 2

Comment: Pipe from Tract B to MH 2-1 in 16th Ave

Solve For.....Actual Depth

Diameter.....	1.00 ft	Discharge greater than QMAX
Slope.....	0.0050 ft/ft	Velocity..... ??????.?? fps
Manning's n....	0.013	Flow Area..... ??????.?? sf
Discharge.....	3.85 cfs	Critical Slope. ??????.?? ft/ft
Depth.....	1.00 ft	Critical Depth. ??????.?? ft
		Percent Full... ????.?? %
		Froude Number.. ??????.??
		Full Capacity.
		2.52 cfs
		QMAX @.94D....
		2.71 cfs

Pipe is undersized and will surcharge in MH 2-1.

The 12-inch diameter pipe needs to be replaced with 15-inch diameter pipe (see calculation below) or a new pipe should be installed over the top of the existing 12-inch diameter pipe and the 12-inch pipe would remain in place. The minimum diameter pipe of the second pipe over the 12-inch pipe would be a 10-inch diameter pipe. This capacity of this existing pipe shall be rechecked during final design because it is possible that if the McRobbie parcel were to install its own storm drain facility that it would take enough load off of the system that the existing pipe would be adequate.



Circular Channel: Manning's Equation - Dinsmore Estates 2

Comment: Pipe from Tract B to MH 2-1 in 16th Ave

Solve For.....Actual Depth

Diameter.....	1.25 ft	Velocity.....	4.17 fps
Slope.....	0.0050 ft/ft	Flow Area.....	0.92 sf
Manning's n....	0.013	Critical Slope	0.0066 ft/ft
Discharge.....	3.85 cfs	Critical Depth	0.79 ft
Depth.....	0.88 ft	Percent Full..	70.36 %
		Froude Number.	0.82
		Full Capacity.	4.57 cfs
		QMAX @.94D....	4.91 cfs



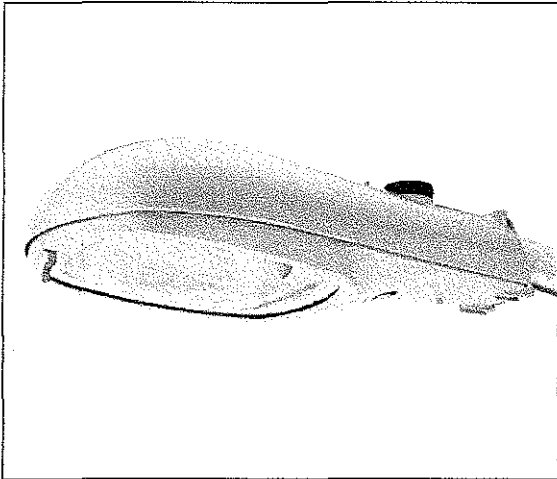
Consistent with LEED® goals  
& Green Globes™ criteria  
for light pollution reduction

# Roadway Series 115

## Roadway Lighting — Cutoff Style

50-400W HPS, 70-250W MH

### PRODUCT OVERVIEW



### Applications:

- Roadways
- Residential streets
- Storage areas
- Parking lots
- Campuses
- Parks

### Features:

Rugged die-cast aluminum housing is powder-coated for durability and corrosion resistance

Two-bolt mast arm mount provides easy, secure installation and adjustability for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. Optional four-bolt mounting provides extra security in high-vibration applications

Die-cast trigger latch on doorframe enables easy and secure one-hand opening for re-lamping and maintenance

Large surface area "breathing seal" gasket seals the optical chamber to prevent intrusion by insects and environmental contaminants. Heat-resistant gasket material remains effective over the life of the fixture

Wildlife shield is cast into the housing (not a separate piece) on the two-bolt unit and is easily adjustable for 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) mast arms.

Photocontrol receptacle is adjustable without tools

Anodized aluminum reflectors provide uniform lighting distribution with either flat or sag clear tempered glass

Surge protection device (standard with ELBD models) exceeds IEEE/ANSI C62.41 Category C criteria

New DTL photocontrol for solid-state lighting (available with PCSS option) exceeds ANSI C136.10 criteria

NEMA wattage label, terminal block, and NEMA photocontrol receptacle are standard

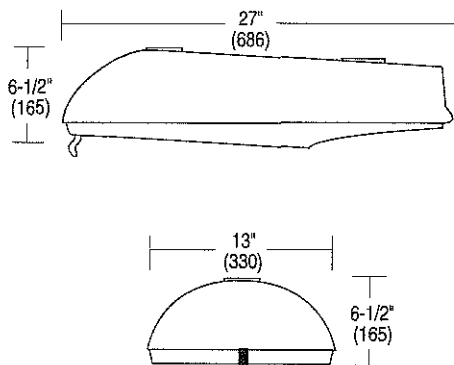
All electrical components warranted by American Electric Lighting's 6-year guarantee

E39 mogul base socket standard

Suitable for -30°C MH / -40°C HPS

Complies with ANSI: C136.2, C136.10, C136.14, C136.15, C136.31

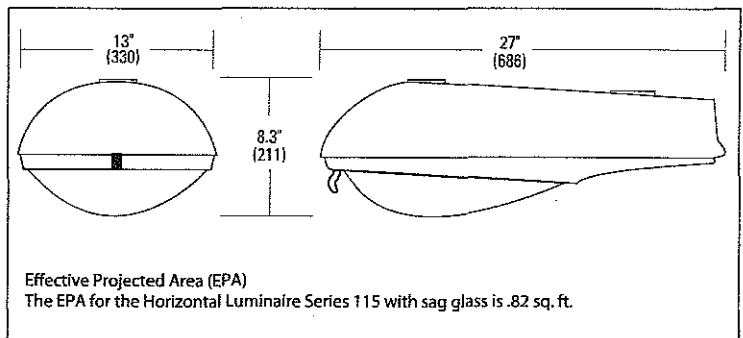
### DIMENSIONS



Effective Projected Area (EPA)  
The EPA for the Horizontal Luminaire Series 115 with cutoff is .74 sq. ft.  
Approx. Wt. = 19 lbs.

### PREFERRED SELECTION CATALOG NUMBERS

115 10S CA MT1 R2 FG EC



Effective Projected Area (EPA)  
The EPA for the Horizontal Luminaire Series 115 with sag glass is .82 sq. ft.

# Roadway Series 115

## Roadway Lighting — Cutoff Style

50-400W HPS, 70-250W MH

### ORDERING INFORMATION

Example: 115 15S CA MT1 R3 FG LC PC HP

Series	Wattage / Source	Ballast	Voltage	Distribution
115 Single Door Cobrahead	05 50W 07 70W 10 100W <sup>12</sup> 13 100/150W Wired 100W 14 100/150W Wired 150W 15 150W 17 175W <sup>1</sup> 20 200W 25 250W <sup>1</sup> 40 400W <sup>1</sup>	S HPS M MH <sup>2</sup> XN High Reactance (Lag) Normal Power Factor XH High Reactance (Lag) High Power Factor CA CWA <sup>2</sup> CT CWI SC SCWA MR Mag Reg (3 Coil) ELBD Electronic Ballast/Driver <sup>3</sup>	120 120V 208 208V <sup>12</sup> 240 240V 277 277V 347 347V 480 480V MT1 Multi-tap Wired 120V MT2 Multi-tap Wired 240V MT7 Multi-tap Wired 277V TT3 Tri-tap Wired 347V DT2 Dual Tap 120/240 Wired 240V DT4 Dual Tap 240/480 Wired 480V	R2 Roadway Type II R3 Roadway Type III Refer to optic distribution matrix below for compatibility. FG Flat Glass Clear Tempered* SG Sag Glass Clear Tempered

ⓔ See ballast matrix for EISA compliant options

### Options

<b>Mounting</b>	(blank) 2-bolt Internal EF External Fitter (2-bolt only) 4B 4-bolt Internal M2 2-bolt Internal 2" Setting E2 External Fitter 2" Mast Arm (2-bolt only) F2 4-Bolt Internal 2" Setting	<b>Photocontrol Receptacle</b>	(blank) NEMA Photocontrol Receptacle (standard) NR No Photocontrol Receptacle <sup>8</sup>
<b>Paint</b> <sup>5</sup>	(blank) Gray (standard) BK Black BZ Bronze DDB Dark Bronze WH White UP Unpainted	<b>Lamp</b>	LC Lamp Included, Clear LD Lamp Included, Deluxe/Coated
<b>Terminal Block</b>	(blank) Terminal Block (standard) T2 Wired to L1 & L2 Positions T3 3 Wire Operation (L1, N, L2 Position) <sup>6</sup>	<b>Starter</b> <sup>9</sup>	(blank) Open Board (standard) EC Encapsulated Plug-in OP Open Plug-in
<b>Listing</b>	UL UL Listed CS CSA Certified	<b>Misc.</b>	PC Photocontrol Included per Voltage Specified <sup>8</sup> BF 3G Vibration <sup>11</sup> PCSS Solid-State Lighting Photocontrol (120-277V) <sup>8</sup> BL Bubble Level SS Stainless Steel Fasteners (external) CF Charcoal Filter PL Distribution Pattern Indicator Label LA Lightning Arrestor (Void UL/CSA Certified Options)
<b>Fusing</b> <sup>7</sup>	SF Single Fuse (120, 277, 347V) DF Double Fuse (208, 220, 240, 480V)	<b>Sh Shorting Cap</b> <sup>8</sup> <b>HK Hinge Keeper</b> <b>HP High Performance</b> <sup>10</sup> <b>RG Rubber Silicone Optical Gasket</b>	

### Notes:

- When ordered with metal halide, these wattages do not comply with California Title 20 regulations
- CA ballast not available with 175W - 400W metal halide in the U.S.; must use SC
- 100 and 150W HPS and 150W MH only; 150W HPS requires 556 lamp
- Nighttime Friendly™ optic
- Other colors available, please contact your local American Electric Lighting representative
- T3 option only available with 240, 480, DT2, DT4, MT2
- Not available in MT, TT, DT voltages
- PC, PCSS and SH not available with NR option
- For HPS products only
- FG optics only
- Tested to withstand 3G vibration, 4B option required
- Not available with ELBD electronic ballast/driver

### Optic Distribution

	R2 SG	R3 SG	R2 FG	R3 FG	R2 FG HP	R3 FG HP
05S	▲	▲	▲	▲	▲	▲
07S	▲	▲	▲	▲	▲	▲
07M	▲	-	▲	-	▲	-
10S	▲	▲	▲	▲	▲	▲
10M	▲	-	▲	-	▲	-
15S	▲	▲	▲	▲	▲	▲
13S	▲	▲	▲	▲	▲	▲
14S	▲	▲	▲	▲	▲	▲
15M	▲	-	▲	-	▲	-
17M	▲	-	▲	▲	-	-
20S	▲	-	▲	-	-	-
25S	▲	-	▲	-	-	-
25M	▲	-	-	-	-	-
40S	▲	-	▲	-	-	-



American Electric Lighting  
Acuity Brands Lighting, Inc.  
3825 Columbus Rd. S.W., Granville, OH 43023  
Phone: 800-537-5710 Fax: 740-587-6114  
www.americanelectriclighting.com

### BALLAST MATRIX

#### Roadway 115

Watts	120	208	240	277	347	480	DT2	DT4
055	RH,RN	-	-	XN	-	-	-	-
075	CA,CT,RH,RN	XN,XH,CA,CT	XN,XH,CA,CT	XN,XH,CA	XH,XN	XN,XH	XN,XH,CA,CT	-
07M	XN,XH	XN,XH	XN,XH	XN,XH	-	-	-	-
105	CA,CT,ELBD,MR,RH,RN	CA,CT,ELBD,XN,XH	CA,CT,ELBD,MR,XH,XN	CA,ELBD,XH,XN	CT	CA	CA,CT,MR,XH,XN	-
10M	XN,XH	XN,XH	XN,XH	XN,XH	-	XN,XH	-	-
155	CA,CT,ELBD,MR,RH,RN	CA,CT,ELBD,XN,XH	CA,CT,ELBD,MR,XH,XN	XN,XH,ELBD,CA,CT	XH,XN,CT	CA,MR,XN,XH	CA,CT,MR,XH,XN	-
135	RN,RH	-	-	-	-	-	-	-
145	RN,RH	-	-	-	-	-	-	-
15M	XN,XH,ELBD	XN,XH,ELBD	XN,XH,ELBD	XN,XH,ELBD	-	XN,XH	-	-
ⓔ 17M	SC	SC	SC	SC	SC	SC	SC	SC
205	CA,CT,XN,XH	CA,CT	CA,CT,XN,XH	CA,CT	-	CA	CA,CT,XN,XH	MR
255	CA,CT,XN,XH	CA,CT	CA,CT,RN,RH,XN,XH	CA,CT	-	CA	CA,CT,XN,XH	-
ⓔ 25M	SC	SC	SC	SC	SC	SC	SC	SC
405	-	RN,RH	RN,RH	-	-	-	-	-

#### Roadway 115 continued

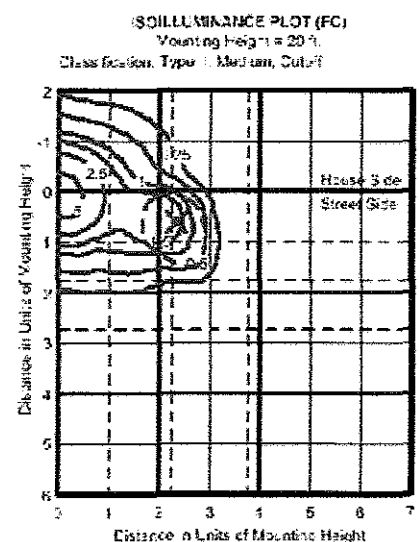
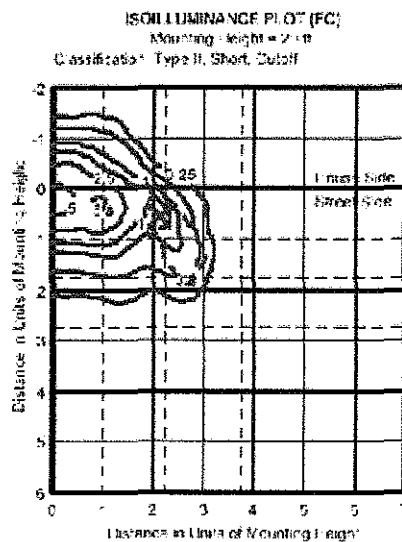
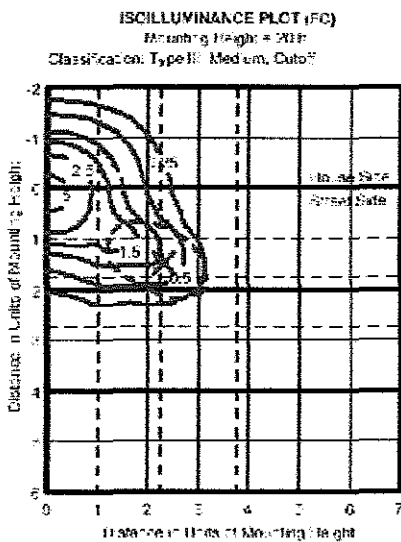
Watts	MT1	MT2	MT7	TT3
055	XH,XN	XH,XN	XH,XN	-
075	CA,XH,XN	CA,XH,XN	CA,XH,XN	XH,XN
07M	-	-	-	-
105	CA,CT,XH,XN	CA,CT,XH,XN	CA,CT,XN,XH	-
10M	XH,XN	XH,XN	XH,XN	-
155	CA,CT,XH,XN	CA,CT,XH,XN	CA,CT,XH,XN	XH,XN
135	-	-	-	-
145	-	-	-	-
15M	SC	SC	SC	XH,XN
ⓔ 17M	SC	SC	SC	-
205	CA,CT	CA,CT	CA,CT	-
255	CA,CT	CA,CT	CA,CT	CA
ⓔ 25M	SC	SC	SC	SC
405	-	-	-	-

### PHOTOMETRICS

115 155 R3 FG

115 155 R3 FG HP

115 255 R3 SG

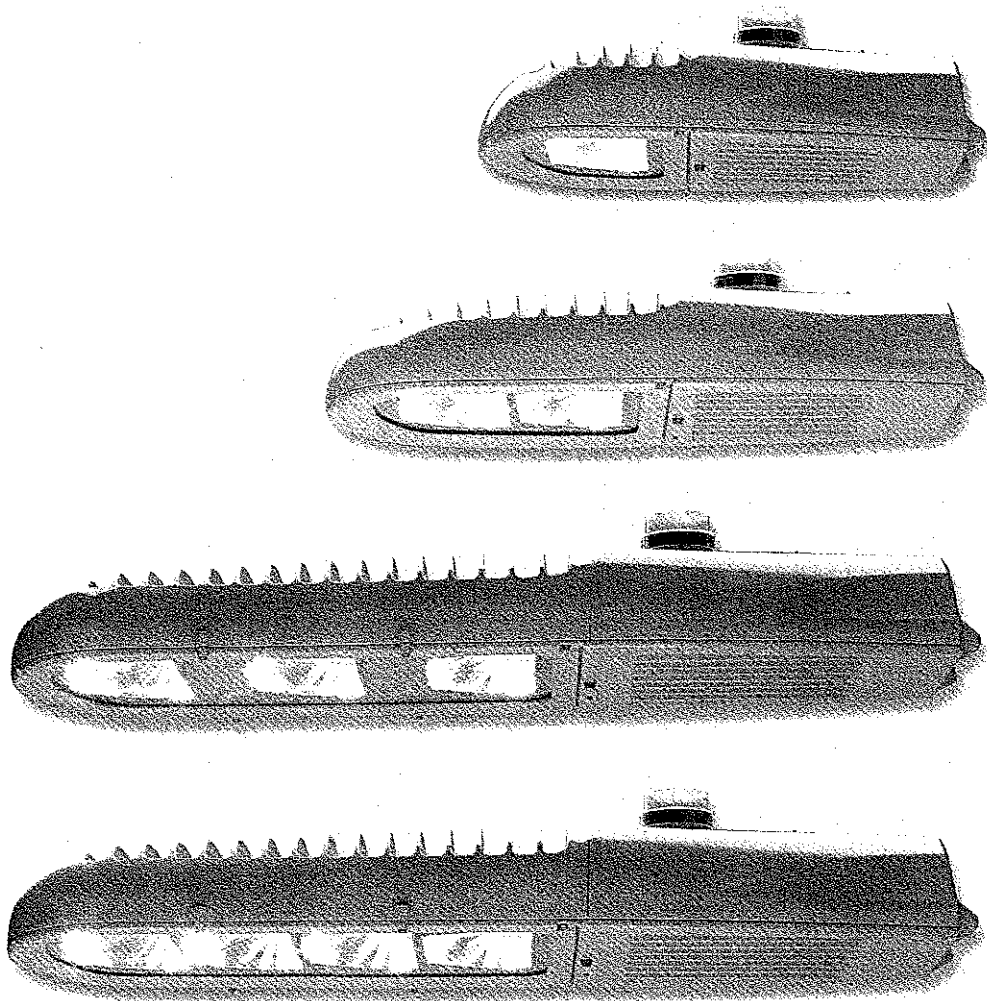


X Maximum Intensity  
--- 1/2 Maximum Intensity

GE  
Lighting Solutions

# Evolve™ LED Roadway Lighting

Scalable Cobrahead (ERS1, ERS2, ERS3 & ERS4)



imagination at work

## Product Features

From local to major roadways, the GE Evolve™ LED Roadway Scalable Cobrahead fixtures are changing the way you light your lanes. Preserving the aesthetic look of traditional roadway Cobrahead fixtures, GE balances the technical needs of a sophisticated LED system with the functional demands of an outdoor fixture facing extreme weather hazards. GE's advanced LED optical design offers hundreds of photometric options to meet your precise lighting requirements, while delivering reduced glare and improved light control. The refined thermal management system incorporates a sleek and robust heat sink directly into the fixture to ensure maximum heat transfer and long LED life.

The GE Evolve LED Roadway Scalable Cobrahead offers more than 11 years of reliable service life to significantly reduce maintenance frequency and expense, based on a 50,000 hour life and 12 hours of operation per day. This efficient fixture can yield up to a 50-percent reduction in system energy compared with standard HID systems, depending on roadway applications, and can also be paired with programmable dimming options for even greater savings and control.

### Applications

- Designed to meet recommended luminance and illuminance requirements for local to major roadway / street classifications.

### Housing

- Die cast aluminum housing.
- A modern design preserving the aesthetic look of traditional roadway Cobrahead fixtures incorporates the heat sink directly into the unit ensuring maximum heat transfer and long LED life.
- Meets 2G vibration per C136.31-2010 For 3G rating contact manufacturer.
- Power door assembly with removable retention latch.



### LED & Optical Assembly

- Structured LED array for optimized roadway photometric distribution.
- Evolve light engine consisting of scalable reflective technology designed to optimize application efficiency and minimize glare.
- Reverse facing light engine options available.
- Utilizes high brightness LEDs, 70 CRI at 4000K & 5700K typical.
- LM-79 tests and reports are performed in accordance with IESNA standards.

### Lumen Maintenance

- System rating is L85 at 50,000 hours. Contact manufacturer for Lxx rating (Lumen Depreciation) beyond 50,000 hours.

### Ratings

- /  listed, suitable for wet locations per UL 1598.
- IP65 rated optical enclosure per ANSI C136.25-2009.
- Temperature rated at -40° to 50°C (-40° to 45°C for ERS4 347-480V fixtures).
- Upward Light Output Ratio (ULOR) = 0.
- RoHS compliant.

### Mounting

- Slipfitter with +/- 5 degree of adjustment for leveling.
- Integral die cast mounting pipe stop feature.
- Wildlife intrusion protection at mounting pipe entry.
- Adjustable for 1.25 in. or 2 in. mounting pipe.

### Finish

- Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
- Standard colors: Black and Gray.
- RAL & custom colors available.

### Electrical

- 120-277 volt and 347-480 volt available.
- System power factor is >90% and THD <20%.\*
- Class "A" audible sound rating.
- Integral surge protection:
  - For 120-277VAC per IEEE/ANSI C62.41.-1991, 6kV/3kA Location Category B3 (120 Events).
- Optional high capability surge protection per IEEE/ANSI C62.41.2-2002.
  - Rating 1 - 10kV/5kA Location Category (120 events).
  - Rating 2 - 6kV/3kA Location Category C-Low (5000 events).
- EMI: Title 47 CFR Part 15 Class A.
- Photo electric sensors (PE) available for all voltages.

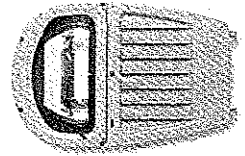
*\* System power factor and THD is tested and specified at 120V input and maximum load conditions.*

### Warranty

- 5-year limited system warranty standard.

# Ordering Number Logic

## Scalable Cobrahead (ERS1)



ERS1

5

PRCID ID	VOLTAGE	OPTICAL CODE	PHOTOMETRIC TYPE	DRIVE CURRENT	LED COLOR TEMP.	PE FUNCTION	COLOR	OPTIONS
E = Evolve	0 = 120 - 277 H = 347 - 480	↓	AX = Extra Narrow Asymmetric (Medium)	5 = 525mA*	40 = 4000K	1 = None	BLCK = Black	E = GE Level
R = Roadway	1 = 120*		BX = Narrow Asymmetric (Medium)	*Standard drive current is 525mA. 350mA and 700mA drive currents designated with a "3" or "7" respectively are available and set at the factory.	57 = 5700K	2 = PE Rec.	GRAY = Gray	F = Fusing
S = Scalable	2 = 208*		CX = Asymmetric (Short)			4 = PE Rec. with Shorting Cap	Contact manufacturer for other colors.	L = Tool-Less Entry
1 = Optical Assembly	3 = 240*		DX = Asymmetric Forward (Very Short)			5 = PE Rec. with Control		P = Programmable Dimming (includes DALI)
	4 = 277*		EX = Asymmetric (Medium)			7 = Dimming PE Receptacle *†		T = Extra Surge Protection*
	5 = 480*				9 = Dimming PE Receptacle with Shorting Cap †		XXX = Special Options	
	D = 347*					PE control not available for multi-volt 346-480V. Must be a discrete voltage (347V or 480V).		* Contact manufacturer for details and availability.
	*Specify single voltage only if fuse option is selected.							
		CX	CX	30' Mount Ht.		* Order dimming control PE as a separate item		
		AX	CX	24' Mount Ht.		† When ordering PE function socket 7 or 9, a programmable dimming option "P" must also be ordered under the "OPTIONS" column		

OPTICAL CODE	PHOTOMETRIC TYPE	TYPICAL INITIAL BURNS		TYPICAL SYSTEM WATTAGE		IES FILE NUMBER	
		4000K	5700K	320-277V	346-480V	4000K	5700K
AX	AX	3100	3300	43	47	454886	454889
BX		4100	4400	54	59	454887	454890
CX		5100	5500	67	74	454888	454891
AX	BX	3300	3400	43	47	454669	454668
BX		4300	4600	54	59	454670	454667
CX		5300	5700	67	74	454659	454666
AX	CX	3200	3400	43	47	454662	454663
BX		4200	4500	54	59	454661	464664
CX		5200	5600	67	74	454660	454665
AX	DX	3300	3500	43	47	454892	454895
BX		4300	4600	54	59	454893	464896
CX		5300	5700	67	74	454894	454897
AX	EX	3000	3200	43	47	454653	454644
BX		4000	4300	54	59	454652	454645
CX		5000	5400	67	74	454651	454646

# Photometrics

## Scalable Cobrahead (ERS1)

ISO Plot

Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade

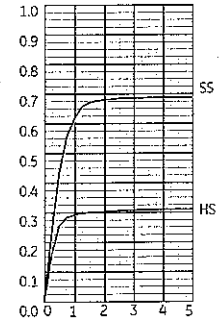
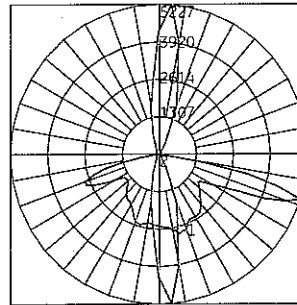
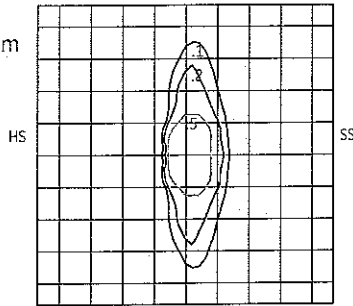
Polar Curve

Polar Trace Vertical and Horizontal Plane through Horizontal Angle of Maximum Candlepower

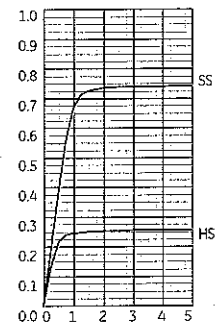
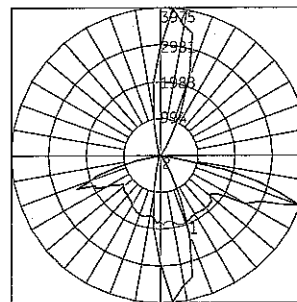
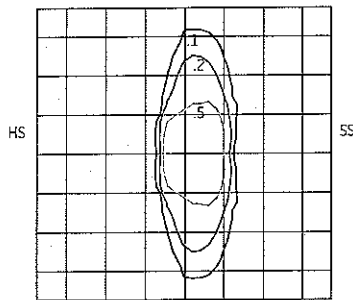
CU Graph

Coefficients of Utilization Street Width / Mounting Height

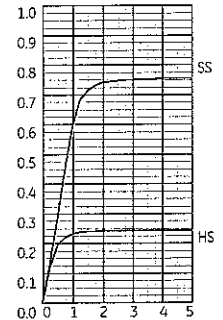
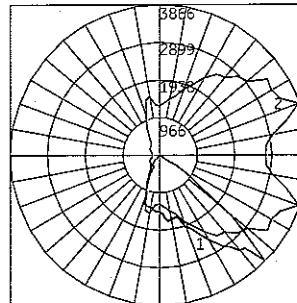
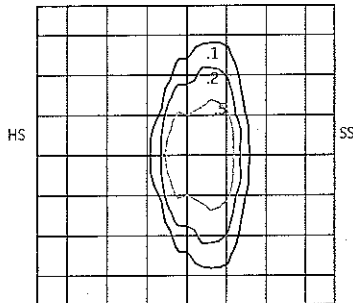
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5,500 Lumens  
5700K  
GE454891.ies



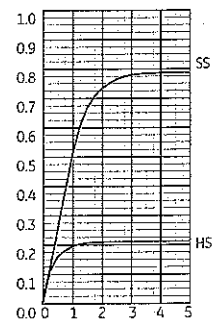
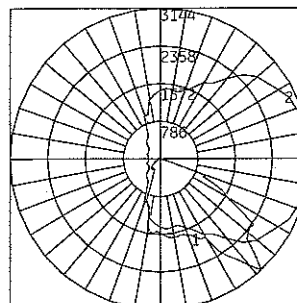
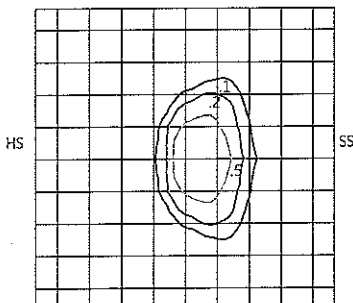
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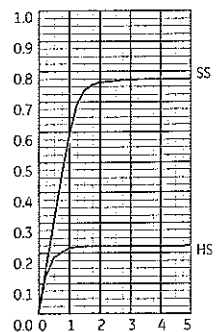
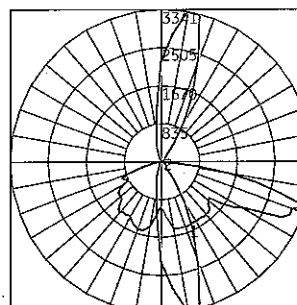
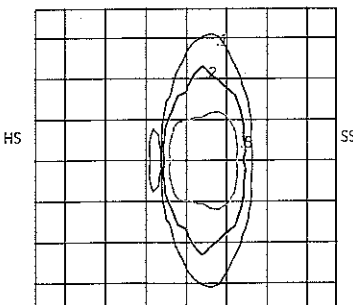
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ERS1  
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5,700 Lumens  
5700K  
GE454897.ies



ERS1  
Asymmetric Medium (CXEX)  
5,400 Lumens  
5700K  
GE454646.ies





## Angeline Lehnert

---

**From:** Patrick Sisul <PatSisul@sisulengineering.com>  
**Sent:** Tuesday, April 08, 2014 12:28 PM  
**To:** Angeline Lehnert  
**Cc:** tomscott@scott-investments.com; Bryan Brown  
**Subject:** FW: Street Lighting  
**Attachments:** Americian Electric Lighting-Roadway Seris 115.pdf; GE Evolve Roadway Lighting-LED.pdf; Sheet 3 Street Profiles revised 4-08-14.pdf

Angie,

Attached are cut sheets of light fixtures currently being used in Canby given to me by Gary Stockwell. The American Electric Lighting fixtures are High Pressure Sodium, while the GE Evolve fixtures are LED's.

Also, when I sent you our revised profile sheet (Sheet 3) earlier that contained the typical section information, the typical local street section had an error. The planter strip was dimensioned being 6 feet wide, when it is planned to be 4.5 feet wide. As discussed in our narrative, this subdivision is using a hybrid of old street standards and new street standards. The local streets in this subdivision will have streets 1' narrower on each side than Tofte Farms and Dinsmore Estates 1, while the sidewalks will be 1' wider. It is intended that the planter strip stay a consistent width from one subdivision to the next, leaving the back of the sidewalk remaining in a straight line from the old to new subdivisions.

Once Tom Scott has the wall information to us, we will add it to the 13<sup>th</sup> Avenue typical section on this plan and send you another update of Sheet 3.

Thanks,  
Pat

**Patrick A. Sisul, P.E., Vice President**  
Sisul Enterprises, Inc.  
[www.sisulengineering.com](http://www.sisulengineering.com)  
[www.etcEnvironmental.net](http://www.etcEnvironmental.net)

### **SISUL ENGINEERING**

Gladstone: 503-657-0188 Medford: 541-227-6719 Vancouver: 360-696-3664 John Day: 541-575-3777

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**From:** Gary Stockwell [<mailto:gstockwell@CANBYUTILITY.ORG>]  
**Sent:** Monday, March 31, 2014 4:10 PM  
**To:** Patrick Sisul  
**Cc:** Jerry Nelzen ([nelzenj@ci.canby.or.us](mailto:nelzenj@ci.canby.or.us))  
**Subject:** FW: Street Lighting

Sorry guys, here are the attachments

Gary Stockwell  
Line Foreman



PO Box1070  
Canby, OR. 97013  
Direct: 503 263 4307  
Cell: 971 563 6307  
Email:[gstockwell@canbyutility.org](mailto:gstockwell@canbyutility.org)

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**From:** Gary Stockwell  
**Sent:** Monday, March 31, 2014 4:04 PM  
**To:** Pat Sisul  
**Cc:** Jerry Nelzen ([nelzenj@ci.canby.or.us](mailto:nelzenj@ci.canby.or.us))  
**Subject:** Street Lighting

Pat,

Attached are some cut sheets of the lights currently being used here in Canby. We are still waiting for a useable Street Lighting Standard from the City, however in the meantime here is what we are doing.

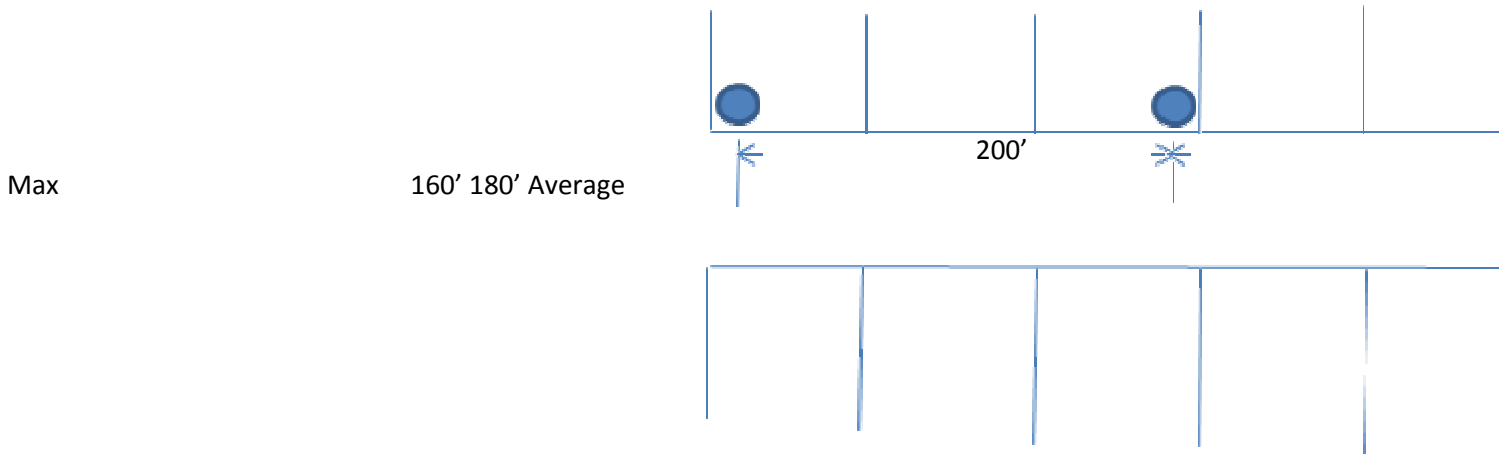
I can't require a developer to pay for LED lighting if he doesn't want to, so we utilize the following:

American Lighting Roadway Series fixture (Attached) HPS

GE Evolve Roadway Lighting Optical and Photo metric Code AX-CX ( Equivalent Cree Fixtures are acceptable)

Residential: 24' Mounting Height

150' to 200' Spacing dependent on curves, intersections, lot spacing dictates design, average spacing usually 160'to 180'



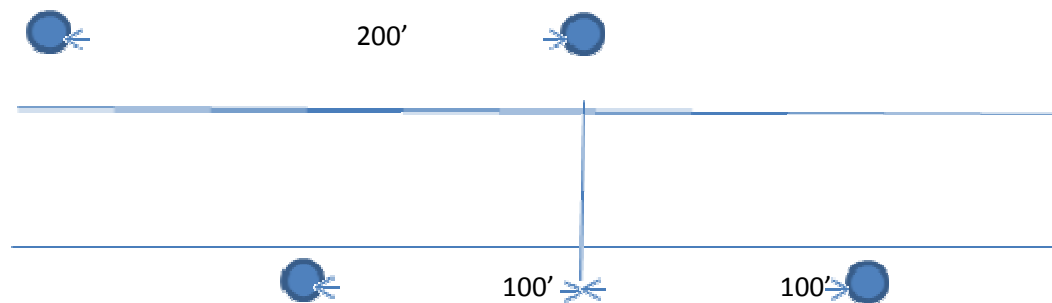
American Lighting Roadway Series fixture (Attached) HPS

GE Evolve Roadway Lighting Optical and Photo metric Code CX-CX ( Equivalent Cree Fixtures are acceptable)

Industrial/Commercial

Collector/Arterial: 30' Mounting Height

100' Staggered Spacing



Please let me know if I can be of any further assistance

Gary Stockwell  
Line Foreman



PO Box1070

Canby, OR. 97013  
Direct: 503 263 4307  
Cell: 971 563 6307  
Email: [gstockwell@canbyutility.org](mailto:gstockwell@canbyutility.org)

DEVELOPMENT AGREEMENT  
Road & Utility Work

RECITALS:

1. 4700 Development LLC, an Oregon Limited Liability Company, hereinafter referred to as “Scott”, own real property know as Ref Parcel Number 41E04DA4700, Canby, OR 97013 more particularly described in the attached Exhibit A.
2. Travis and Katie McRobbie, Husband and Wife, hereinafter referred to as “McRobbie”, own real property known as 1550 S. Ivy St, Canby, OR 97013 more particularly described in the attached Exhibit B.
3. The properties described in both Exhibit A & B are located within the boundaries of the City of Canby.
4. Both Scott & McRobbie intend to individually subdivide their properties into residential developments in such a way that will require the improvement and extension of South Juniper Street shown in Exhibit C.
5. The purpose of this Development Agreement is to facilitate the future dedication of right-of-way and the construction of public improvements, as required by Canby Municipal Code, for the extension of South Juniper Street, North to SE 15<sup>th</sup> Ave. See Exhibit C.

NOW, THEREFORE, it is hereby agreed as follows:

Upon the commencement of development by either Scott and/or McRobbie,

Dedication of land for future public facilities including road and utility work

Scott & McRobbie agree that when necessary for development of either property, each will dedicate right-of-way to the City of Canby for the improvement and extension of South Juniper Street as shown in Exhibit C. Both Scott & McRobbie agree to this dedication of right-of-way at no cost to either party.

Construction of public improvements.

At the time of subdivision development by either Scott or McRobbie, developer-required public improvements will be built to City of Canby code specifications.

Specifically, Scott & McRobbie agree to:

1. Construct street improvements as needed to complete logical extensions of South Juniper Street to the satisfaction of The City of Canby's Public Works Director.
2. Construct utility improvements as needed to facilitate the adequate development of both Scott & McRobbie land.
3. Required improvements that will benefit both parties equally shall be shared 50% by Scott and 50% by McRobbie.
4. Whichever party shall develop first will be responsible for the upfront cost of the improvements that benefit both parties. The 2<sup>nd</sup> party, upon the commencement of their development shall repay their 50% share of the expenses for improvements made. A detailed cost

sheet shall be kept and supplied to both parties.

- 5. If improvements are required that benefit only one of the parties then the benefiting party shall be responsible, at the time of installation for the cost of such improvement.

OTHER CONSIDERATIONS.

Modification. This Agreement may be modified or amended upon the mutual consent of Scott and McRobbie.

Ratification. This Agreement and the rights, duties and obligations set forth herein shall be binding upon and shall insure to the benefit of the respective parties, their successors and assigns.

IN WITNESS WHEREOF, the parties have executed this DEVELOPMENT AGREEMENT the day and year first written below.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2009.

4700 Development, LLC

\_\_\_\_\_  
Thomas AW Scott – Member

\_\_\_\_\_  
Travis McRobbie

\_\_\_\_\_  
Katie McRobbie

STATE OF OREGON        )  
  ) ss.  
County of Clackamas     ) \_\_\_\_\_, 2009

Personally appeared before me, Thomas AW Scott, and acknowledged the foregoing instrument to be his voluntary act and deed.

\_\_\_\_\_  
Notary Public for Oregon  
My Commission Expires: \_\_\_\_\_

STATE OF OREGON        )  
  ) ss.  
County of Clackamas     ) \_\_\_\_\_, 2009

Personally appeared before me, Travis McRobbie & Katie McRobbie, and acknowledged the foregoing instrument to be her voluntary act and deed.

\_\_\_\_\_  
Notary Public for Oregon  
My Commission Expires: \_\_\_\_\_





# City of Canby

## PLANNED UNIT DEVELOPMENT & SUBDIVISION STAFF REPORT

FILE #: PUD 14-01/SUB 14-01

Prepared for Monday, April 28, 2014 Planning Commission Meeting



**LOCATION:** 458 NE 3<sup>rd</sup> and 433 NE 4<sup>th</sup> Avenues

**ZONING:** R-2 High Density Residential

**TAX LOTS:** 31E33DB01900 & 31E33DB00700

(Properties bordered in red in map at left.)

**LOT SIZE:** 0.76 acre site

**OWNER:** Jason Bristol

**APPLICANT:** Jason Bristol

**APPLICATION TYPE:** Planned Unit Development (Type III)  
Subdivision (Type III)

**CITY FILE NUMBER:** PUD 14-01/SUB 14-01

### I. PROJECT OVERVIEW & EXISTING CONDITIONS

The applicant is proposing to consolidate and develop two existing tax lots 0.76 acres in size through Planned Unit Development and Subdivision applications into 15 townhomes on individual platted lots. The property is located between NE 3<sup>rd</sup> and NE 4<sup>th</sup> Avenues, east of but not fronting Locust Street. The property is zoned R-2 High Density Residential and recently contained two single family residences on two separate lots. One home remains facing NE 4<sup>th</sup> Avenue at this time. The remaining residence will be demolished and the lots combined and re-platted as part of the development.

The site will consist of five identical buildings with three attached homes each, for a total of 15 units. A new, one-way private driveway will run through the site from NE 3<sup>rd</sup> Avenue to NE 4<sup>th</sup> Avenue, providing vehicular access to the double unit garages as well as serving as the primary run for utilities. In addition to the double car garages attached to each townhome, 11 common/visitor parking spaces will be provided on site. Pedestrian access to 12 of the 15

townhomes will be provided on the east and west sides of the lot, connecting to 3rd Avenue. Three of the units front 4th Avenue with pedestrian access coming directly off of the public sidewalk. Mail delivery will be centrally located onsite and multiple common outdoor areas will be provided.

Each townhome unit will include three stories and an approximate total size of 1,650 square feet. The main level will include the garages and small living space with primary living space above to include three bedrooms and two and one half bathrooms. The buildings will be wood framed with trussed roofs and fire rated and sound isolated unit demising walls. Exteriors shall be finished with a combination of beveled siding with board and batt accent areas. Roofs will be composition shingles.

## **II.** ATTACHMENTS

- A. Application forms
- B. Application narrative
- C. Architectural Renderings and Drawings, Landscape Plan and Civil Site Plans including Tentative Subdivision Plat, Utility Plan, Street & Drainage Plan, Grading & Erosion Plan, Existing Conditions Map, and Photometric Lighting Plan
- D. Traffic Study Memorandum from DKS
- E. GeoPacific Engineering Infiltration Test Results
- F. Neighborhood meeting minutes
- G. Pre-application meeting minutes
- H. Agency comments including: City Engineer – Hassan Ibrahim; County Building Codes ADA Interpretation – Ray VanLieu and Richard Carlson; Dan Kizer – NW Natural
- I. Citizen Written Testimony including: Ron & Cherrol Pacholl; Cole Unger

## **III.** APPLICABLE CRITERIA & FINDINGS

Major approval criteria used in evaluating this application are the following chapters from the *City of Canby's Land Development and Planning Ordinance (Zoning Code)*:

- 16.08 General Provisions
- 16.10 Off-street Parking and Loading
- 16.20 R-2 Zone
- 16.36 Planned Unit Development Overlay Zone (PUD)
- 16.43 Outdoor Lighting Standards
- 16.46 Access Limitations on Project Density
- 16.49 Site & Design Review (Determined to not be required for residential units on individual platted lots)
- 16.56 Land Division General Provisions
- 16.62 Subdivisions-Applications
- 16.64 Subdivisions-Design Standards
- 16.89 Application and Review Procedures
- 16.120 Parks, Open Space, and Recreation Land General Provisions

Excerpts from the code are highlighted below in **gray**, with findings and discussion after the citations. If not discussed below, other standards from the Code are either met fully, not applicable, and/or do not warrant discussion.



#### **IV. MAJOR ISSUES FOR PLANNING COMMISSION CONSIDERATION**

The following is a list of staff interpretations and potential conditions of approval that the Planning Commission may want to discuss/comment on and/or use as a basis to apply additional conditions of approval:

- A. Site and structure ADA accessibility. There are aspects of this development that are similar to that of condominiums and multi-family developments with a common private access road, shared open space and mail box area, and the high density and attached nature of the units served by an internal private access road. But from a building code applicability basis this development is considered single-family units on individual platted lots for which individual structure ADA accessibility is not required. This has been confirmed with input from Clackamas building codes officials which is attached to this report. The site itself addresses accessibility in terms of sidewalk accessibility from the public sidewalks on-site to the units. Staff has concluded that unit accessibility is not required.
- B. Demolition of existing home at 433 NE 4<sup>th</sup> Avenue. The development plans will cause the need to demolish the existing home on the site. A demolition permit through the County and City is required and has been made a condition of approval. Capping of the existing water and sewer service will be required. NW Natural has requested that the applicant contact them with a request for a cut and abandonment of existing service so the gas service riser and meter are not damaged.
- C. New Subdivision Final Plat. This development site consists of two existing tax lots. The submitted tentative plat identifies how the property will be subdivided or platted. If approved, the applicant will be required to submit a Final Plat application to the City for our review and approval and to the County Surveyor's office for review for conformance with platting requirements and recording before the lots can be sold. This has been made a condition of approval.
- D. Perimeter of Development Must Be Designed to Mitigate Conflict with Adjoining Properties. Section 16.76.030(E) of the PUD ordinance indicates that the Planning Commission may establish special conditions for the perimeter of the development to minimize or mitigate potential conflicts. This review criterion presents the most challenging aspect for the proposed development. Evaluation of how well it meets this standard must be cognizant of the transitional nature of the neighborhood which is influenced greatly by the assigned R-2 high density residential zoning, the mostly low density single family detached housing stock, the adjacent collector street classifications which also serve as a designated truck route for nearby industrial uses on the south side of NE 3<sup>rd</sup> Avenue, and the high land value to structure value ratio which encourages the replacement of the existing housing stock with something more intense in the area. The proposed development is different primarily in that the lot orientation and home front doors are presented faces into the interior of the adjacent properties rather than facing onto the public street which is more typical. When combined with the allowed 3-story height, privacy in the immediately adjacent rear yards is diminished. The development however does present its most attractive side to the neighboring properties, providing an 8-foot wide common open space buffer along the interior sidewalk with the front of the buildings set back 14.5' from the adjacent property line, more than is typical. It is expected that 2 or even 3 story building are bound to be proposed in the City's highest density zone. Windows will

typically occur on all sides of homes or apartment units. Although the impact on loss of privacy to the adjacent homes is real, it is to be expected with most any type of new development that is required to obtain a minimum of 14 units per acre per the existing R-2 zone. Staff is not certain that additional vegetative screening is likely to be effective considering the permitted 3-story height of the proposed structures. Staff encouraged the applicant to take advantage of the PUD flexibility to try something unique that can vary normal setback standards when the development is deemed to present a unified and organized arrangement of buildings and service facilities. Staff is satisfied that this project meets this criterion.

- E. Landscaping Plan Suitability. Nearby property owner – Cherrol Pacholl – has questioned whether there is room to plant the trees shown along the interior adjacent properties. The landscape plan indicates that along the east boundary, columnar Birch trees which are very narrow and upright will be planted right next to the black chain link fence which will be built along the property line. The west side uses 7 Red Maple trees which will result in half-this spreading tree hanging over onto the neighboring property as they grow and mature. Sometimes this tree limb overhang can cause future conflicts with neighbors.
- F. Air-conditioning Units along the NE 3<sup>rd</sup> Avenue Frontage. Two groupings of shrubs appear to do a good job of hiding the two air-conditioning units that are placed along the NE 3<sup>rd</sup> Avenue frontage. The air-conditioning units on the interior units are located in the private patio areas. This is not ideal for the residents but certainly would keep the end units away from view along the public street frontage. Staff is satisfied that the ample plantings will screen these units from the street view.
- G. Playground versus Common Open Space Area. PUD's are required to provide a minimum 15% of the gross area of the development in open space or common area. Twenty-one percent of the PUD is proposed as open area that will either be landscaping, sidewalks, or screening. This appears to provide a reasonable level of amenity which is above what we would otherwise likely obtain from a more traditional development project – a review criterion for a quality PUD.
- H. Traffic Impact Study. This development was not considered to generate enough traffic to warrant an off-site impact analysis. The total average daily trip rate to be generated from this development is 87 divided equally between trips in and out. The highest peak hour trip rate is 5 in both am trips out and the pm trips in. Adequate sight distance has been improved by trimming limbs up by the applicant as identified as needed in the study. Driveway spacing onto the adjacent public streets were evaluated and a deviation to the minimum access spacing standards on NE 4<sup>th</sup> Avenue is recommended to be granted. The existing accesses to the east and west along the south side of the roadway would not allow for the minimum access spacing to be met. By code, a tax lot is permitted an access point along NW 4<sup>th</sup> Avenue and the proposed access is located directly between the two existing access points. Use of a shared driveway is not possible since the other existing driveways are not located adjacent to this development.
- I. PUD Exceptions Allowed. Approval of a PUD may involve modifications in the regulations and requirements of the zoning district in which the project is located. Modification of the lot size, lot width, and yard setback requirements may be approved by the Planning Commission at the time of approval of the tentative subdivision. The rear yard setback faces the access drive and has thus been modified

from the normal 20' standard for a two or more story structure. The applicant is requesting that lot frontage to the proposed private drive be allowed in place of the usual frontage requirement for each lot to front on a public street. The PUD is intended to allow flexibility in design standards to encourage unique development projects that are laid out well. Staff supports the exceptions requested as suitable to this unique housing plan.

## **Chapter 16.08 General Provisions**

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### **16.08.090 Sidewalks required.**

- B.** *The Planning Commission may impose appropriate sidewalk and curbing requirements as a condition of approving any discretionary application it reviews.*

#### **Findings:**

The adjacent public streets were recently improved with curbs and sidewalks as part of a CBDG city project. No other public street improvements have been identified as needed.

### **16.08.110 A-H Fences**

**Findings:** The applicant proposes the construction of a black vinyl coated chain link perimeter fencing along the east and west interior property boundary adjacent to the neighboring properties. Fencing along the street frontages will not be permitted.

### **16.08.150 Traffic Impact Study (TIS).**

*Contains standards pertaining to traffic studies including purpose, scoping, determination, submittal requirements, content, methodology, neighborhood and through-trip studies, mitigation, conditions of approval, and rough proportionality determination.*

**Findings:** The applicant was required to conduct a traffic study. A copy of the study is included in the Planning Commission packet. An access road driveway spacing exception is discussed under Major Planning Issue H.

### **16.08.160 Safety and Functionality Standards**

*The City will not issue any development permits unless the proposed development complies with the city's basic transportation safety and functionality standards, the purpose of which is to ensure that development does not occur in areas where the surrounding public facilities are inadequate. Upon submission of a development permit application, an applicant shall demonstrate that the development property has or will have the following:*

- A.** *Adequate street drainage, as determined by the city.*
- B.** *Safe access and clear vision at intersections, as determined by the city.*
- C.** *Adequate public utilities, as determined by the city.*
- D.** *Access onto a public street with the minimum paved widths as stated in Subsection E below.*
- E.** *Adequate frontage improvements as follows:*
  - 1.** *For local streets and neighborhood connectors, a minimum paved width of 16 feet*

- along the site's frontage.
2. For collector and arterial streets, a minimum paved width of 20 feet along the site's frontage.
  3. For all streets, a minimum horizontal right-of-way clearance of 20 feet along the site's frontage.
  4. Compliance with mobility standards identified in the TSP. If a mobility deficiency already exists, the development shall not create further deficiencies.

**Findings:** A drainage plan has been submitted (Sheet C 1.3). It consists of 4 private catch basins leading to a sedimentation manhole which then directs the storm runoff to a single private drywell. An engineering drainage analysis detailing the quantity of post development stormwater runoff and infiltration capacity of the drywell should be submitted for verification by our City Engineer with the construction plans. This has been made a condition of approval. The Traffic Study evaluated the safety of the private drive connection with NE 3<sup>rd</sup> and NE 4<sup>th</sup> Avenue. It recommended approval of the driveway locations even though spacing from existing driveways was not able to meet collector street standards since the existing driveways cannot be moved and every property is allowed a means of access. The study also identified the need to trim tree limbs on nearby properties for proper sight distance and the applicant indicated that the tree trimming has been done. A utility plan has been submitted (Sheet C 1.2). Adequate utility services are provided in accordance with agency needs. All needed street improvements were made with the recent CDBG grant funded City street improvement project. With installation of a commercial driveway standard, this project will meet necessary street and access standards. The development has been determined to comply with the mobility standards identified by the Transportation System Plan.

## ***Chapter 16.10 Off-Street Parking & Loading***

### ***16.10.010 Off-Street Parking & Loading***

**Findings:** The parking requirement of for two spaces per unit is met within the provided double garage for each unit. An eleven extra or quest parking spaces have been provided. The minimum code requirement has been exceeded. If each unit is occupied by residents with more than 2 cars each, obviously the amount of parking available will quickly be depleted. This becomes a marketing issues related to sale of these units as parallel on-street parking is very limited along the adjacent streets.

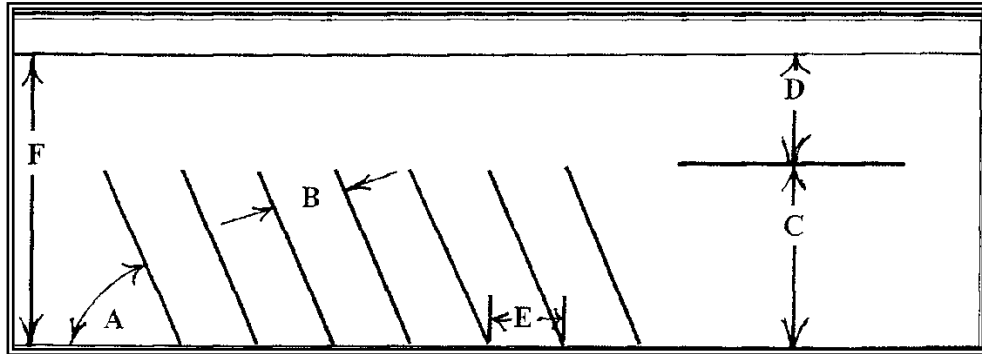
### ***16.10.040 Prohibited near intersections.***

*In no case will off-street parking be allowed within a vision clearance area of an intersection.*

**Findings:** The Traffic Study noted a somewhat limited sight distance created by a parked car just to the right of the NE 3<sup>rd</sup> Avenue driveway access. This designated parking space appears to be outside of the required 10-foot sight distance from a driveway to a street connection but can be eliminated if it is found to be in violation or considered to be a safety hazard. This has been made a condition of approval.



45	8'6"	18'9"	12'6"	12'0"	31'3"
60	8'6"	19'10"	18'0"	9'10"	37'10"
90	8'6"	18'0"	24'0"	8'6"	42'0"



**Findings:** Parking spaces must meet the dimensional requirements of Table 16.10.070; parking dimensions will be verified on the construction plans and during the building permit process.

6. Groups of more than four (4) parking spaces shall be so located and served by driveways that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.
8. Parking bumpers or wheel stops shall be provided to prevent cars from encroaching on the street right-of-way, adjacent landscaped areas, or adjacent pedestrian walkways.

**Findings:** These standards are shown to be met except for the 4 parking spaces between Lots 3 & 4 where the use of wheel stops could be required to prevent car bumpers from reducing the available useable sidewalk width in front of the parking space to only 3-feet in width. This is considered to be an optional conditional of approval since it is a private sidewalk meeting minimal ADA passage standard of 36 inches although not subject to ADA accessibility standards as a single-family development.

**16.10.070 Parking Lots and Access**

**B. Access.**

1. The provision and maintenance of vehicular and pedestrian ingress and egress from private property to the public streets as stipulated in this ordinance are continuing requirements for the use of any structure or parcel of real property in the City of Canby. No building permit or other permits shall be issued until scale plans are presented that show how the ingress and egress requirement is to be fulfilled. Should the owner or occupant of a lot or building change the use to which the lot or building is put, thereby increasing ingress and egress requirements, it shall be unlawful and a

violation of this ordinance to begin or maintain such altered use until the required increase in ingress and egress is provided.

**Findings:** The development demonstrates compliance with all applicable access requirements, including the provision of public street sidewalks which already exist, and the provision of sidewalk connections to the building units from the public street sidewalk.

<b>Minimum Access Requirements</b>			
<b>16.10.070(B)(8): Minimum access requirements for residential uses - ingress and egress for residential uses shall not be less than the following (except that in the case of flag lots, section 16.64.0400) shall apply):</b>			
<i>Dwelling units</i>	<i>Minimum number of accesses required</i>	<i>Minimum access width</i>	<i>Sidewalks &amp; Curbs (in addition to driveways)</i>
3-19	1	20 feet	Minimum of one sidewalk connection to residences and parking areas; curb required if sidewalk adjacent to driveway.

**Findings:** The above access requirements are exceeded by this development with 2 access points for 15 dwelling units and lots.

9. *Maximum driveway widths and other requirements except for single-family dwellings [see subsection (d) below]:*
- b. No driveways shall be constructed within five (5) feet of an adjacent property line, except when two (2) adjacent property owners elect to provide joint access to their respective properties as provided by subsection 2.*

**Findings:** Canby's Public Works Design Standards require a minimum driveway width of 12' and a maximum width of 24'. The access drive is 20-foot in width so the driveway width meets standards.

### ***16.20 R-2 High Density Residential Zone***

#### ***16.20.010 Uses permitted outright***

Uses permitted outright in the R-2 zone shall be as follows:

- A. Single-family dwellings having common wall construction;***

**Findings:** The applicant proposes to construct 15 new lots for attached single family townhomes constructed in 5 groups of 3 attached dwellings created by this PUD/Subdivision. This is an outright permitted use.

#### ***16.16.030 Development standards***

The following subsections indicate the required development standards of the R-2 zone:

- A. Minimum residential density: New development shall achieve a minimum density of 14***

units per acre.

**Findings:** The 0.76 acre R-2 zoned property requires a minimum of 11 dwelling units and with the proposed 15 units is found to be in compliance with the minimum residential density for the R-2 zone.

**B. Minimum width and frontage:** twenty feet, except that the Planning Commission may approve lots having less frontage subject to special conditions to assure adequate access.

**Findings:** A lot must have a minimum width of 20 feet and frontage on a private roadway or a public street of 20 feet. This criterion is met.

**C. Minimum yard requirements:**

1. Street yard: twenty feet on side with driveway; fifteen feet for all other street sides; except that street yards may be reduced to ten feet for covered porches only;
2. Rear yard: 20 two-story; all other lots, fifteen feet single story or twenty feet two-story. One story building components must meet the single story setback requirements; two story building components must meet the two-story setback requirements;
3. Interior yard: Seven feet, except as otherwise provided for zero-lot line housing.

**Findings:** The PUD exceptions provisions allow the Planning Commission to vary the minimum yard or setback standards. The other street yards along the public street are met at 15 feet with a 12-foot setback to the porches on NE 4<sup>th</sup> Avenue which are allowed to be reduced to a 10-foot yard. This criterion may be determined to be met if the Planning Commission accepts that the usual 20-foot rear yard which lies within a private drive is a unique aspect with this PUD and can be considered to be met as shown.

**D. Maximum building height:**

1. Principal building: 35 feet

**Findings:** The proposed maximum height of 33 feet is within the allowed 35 foot maximum height allowed.

**E. The maximum amount of impervious surface allowed in the R-2 zone shall be 70 percent of the lot area**

**Findings:** The above maximum impervious surface requirement is met both for the overall site when considering it as similar to a multi-family development and also for each individual lot when considering the development as single-family subdivision. This criterion is met.

**F. Other regulations:**

1. Vision clearance distance shall be ten feet from a street to an alley or a street to a driveway, and thirty feet from a street to any other street.
2. All setbacks to be measured from the foundation line of the building; overhangs shall not exceed two feet; mechanical units, used for the heating/cooling of residential units are exempt from interior and/or rear yard setback requirements.



3. Required yards on southern and western exposures may be reduced by not more than five feet for eaves or canopies to provide shade.
4. Accessory buildings shall not have a larger footprint than the primary building, unless lot area exceeds twelve thousand square feet.

**Findings:** The above requirements have either been met or discussed elsewhere.

**16.21 Residential Design Standards**

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**Findings:** The residential design standards of Chapter 16.21 have been determined to not be applicable to this PUD project.

**16.36 Planned Unit Development Overlay Zone (PUD)**

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**16.36.10 Purpose**

The Planned Unit Development Overlay Zone is intended to be used in conjunction with any of the city's underlying base zones (example: R-1/PUD, M-1/PUD, etc.) to assure that the ultimate development of the site will meet the requirements of a planned unit development.

**Findings:** Single-family attached residences are permitted in the R-2 zone, and are therefore permitted to be developed with a PUD zoning.

**16.43 Outdoor Lighting Standards**

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**16.43.030 Applicability.**

The outdoor lighting standards in this section apply to the following:

- A. New uses, buildings, and major additions or modifications:
  1. For all proposed new land uses, developments, buildings, and structures that require a building permit, all outdoor lighting fixtures shall meet the requirements of this Code.

**Findings:** The code's language above states that all new "developments" are subject to 16.43. Staff interprets a subdivision and PUD as a development; therefore the standards of 16.43 are applicable to this proposal. The applicant has supplied a Site lighting schedule as shown on Sheet A 1.1 and a Photometric Plan on Sheet LT1.

**16.43.040 Lighting Zones.**

- A. Zoning districts designated for residential uses (R-1, R-1.5 and R-2) are designated Lighting Zone One (LZ 1).
- B. The designated Lighting Zone of a parcel or project shall determine the limitations for lighting as specified in this ordinance.

**Table 16.43.040 Lighting Zone descriptions**

Zone	Ambient Illumination	Representative Locations

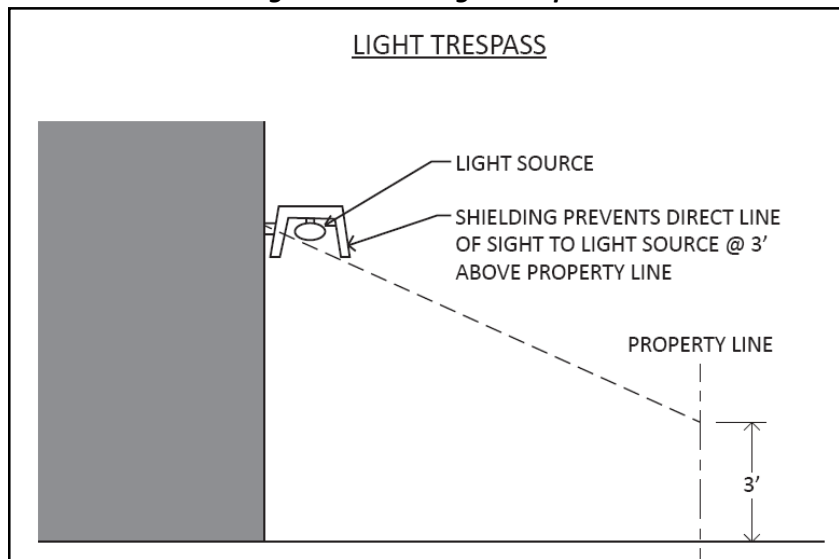
LZ 1	Low	Rural areas, low-density urban neighborhoods and districts, residential historic districts. This zone is intended to be the default for residential areas.
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**Findings:** LZ 1 is applicable to this proposal.

**16.43.060 Prohibited Light and Lighting.**

A. All outdoor light sources, except street lights, shall be shielded or installed so that there is no direct line of sight between the light source and its reflection at a point 3 feet or higher above the ground at the property line of the source. Light that does not meet this requirement constitutes light trespass. Streetlights shall be fully shielded. However, the applicant is permitted to have some unshielded lighting if lumens are within the limits of Table 16.43.070 below.

**Figure 16.43.1: Light Trespass**



**Findings:** The proposed “B” bollard pathway LED lights adjacent to the sidewalk leading to the front doors should comply with the “light trespass” code provisions if the ballards are near or below 3-foot in height. The construction drawings should confirm the ballard heights and provide a cut sheet showing the shielded nature of the lighting direction away from the neighboring properties. This is made a condition of approval. The definitions of shielding are provided below to clarify the meaning of “shielded lighting:

16.43.020(M) Definitions:

“Shielding. A device or technique for controlling the distribution of light. Four levels of shielding are defined as follows:

1. Fully Shielded. A luminaire emitting no luminous flux above the horizontal plane;
2. Shielded. A luminaire emitting less than 2.0 percent of its luminous flux above the horizontal plane;
3. Partly Shielded. A luminaire emitting less than 10 percent of its luminous flux above the horizontal plane;
4. Unshielded. A luminaire that may emit its flux in any direction.”

**16.43.070 Luminaire Lamp Lumens, Shielding, and Installation Requirements.**

- A. All outdoor lighting shall comply with the limits to lamp wattage and the shielding requirements in Table 16.43.070 per the applicable Lighting Zone. These limits are the upper limits. Good lighting design will usually result in lower limits.
- B. The city may accept a photometric test report, lighting plan, demonstration or sample, or other satisfactory confirmation that the luminaire meets the requirements of the shielding classification.
- C. Such shielded fixtures must be constructed and installed in such a manner that all light emitted by the fixture complies with the specification given. This includes all the light emitted by the fixture, either directly from the lamp or by a diffusing element, or indirectly by reflection or refraction from any part of the fixture. Any structural part of the fixture providing this shielding must be permanently affixed.

**Table 16.43.070 – Luminaire Maximum Lumens and Required Shielding**

Lighting Zone	Fully Shielded	Shielded	Partly Shielded	Unshielded (Shielding is highly encouraged. Light trespass is prohibited.)
LZ 1	2600 lumens or less	800 lumens or less	None Permitted	Low voltage landscape lighting and temporary holiday lighting.

**Findings:** Staff must confirm with Northern Illumination Company representative David Wray how the Photometric Plan translates to demonstration of meeting the maximum lumen output by shielding amount with the actual light output levels shown distributed across the site. With a condition of approval to conform to the lumen output standard, this criterion is met.

**16.43.080 Height Limits.**

Pole and surface-mounted luminaires under this section must conform to Section 16.43.070.

- A. Lighting mounted onto poles or any structures intended primarily for mounting of lighting shall not exceed a mounting height of 40% of the horizontal distance of the light pole from the property line, nor a maximum height according to Table 16.43.080, whichever is lower. The following exceptions apply:
  - 5. Street and bicycle path lights.

**Findings:** The two type “C” lighting poles are indicated to consist of a pole and mounting arm 16-feet in height. This complies with the 18 foot maximum allowed for walkways, plazas and other pedestrian areas. This criterion is met.

**16.43.110 Lighting Plan Required**

A lighting plan shall be submitted with the development or building permit application and shall include:

- A. A site plan showing the location of all buildings and building heights, parking, and pedestrian areas.
- B. The location and height (above grade) of all proposed and existing luminaires on the subject property.

- C. Luminaire details including type and lumens of each lamp, shielding and cutoff information, and a copy of the manufacturer’s specification sheet for each luminaire.
- D. Control descriptions including type of control (time, motion sensor, etc.), the luminaire to be controlled by each control type, and the control schedule when applicable.
- E. Any additional information necessary to demonstrate compliance with the standards in this section.

**Findings:** The standards of 16.43 are applicable to new single family homes; the code’s language above states that all new “developments” are subject to 16.43. Staff interprets a single-family subdivision and PUD as a development; therefore the standards of 16.43 are applicable to this proposal. The site lighting plan and photometric plan are provided to compare to the ordinance lighting standard. The height of the proposed pathway ballard lighting is needed to confirm that no light trespass will occur and that the lumens emitted are either considered low voltage landscape lighting or are less than the maximum indicated as allowed in Table 16.43.070. With a condition of approval to conform to the lighting standard, this criterion will be met.

***16.46 Access Limitations on Project Density***

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***16.46.010 Number of units in residential development.***

*A major factor in determining the appropriate density of residential development, particularly in higher density areas, is vehicular access. In order to assure that sufficient access is provided for emergency response as well as the convenience of residents, the following special limitations shall be placed on the allowable number of units in a residential development:*

- B. Single ownership developments (condominiums, townhouses, manufactured homes, multi-family developments, etc.).
  - 1. Two lane access roads/drives shall be a minimum width of 20 feet with no parking permitted, or 28 feet with parking restricted to one side only, or 36 feet with no parking restrictions. Three lane access roads/drives shall be a minimum width of 32 feet with no parking permitted, or 40 feet with parking restricted to one side.

**Findings:** This criterion is met.

***2. The number of units permitted is as follows:***

*One access: 30 units*  
*Two accesses: 165 units*  
*Three accesses: 258 units*

**Findings:** This criterion is met as the number of access points exceeds the minimum required.

- D. All turnaround systems shall meet or exceed the requirements of the parking provisions of Chapter 16.10.

**Findings:** The two-way through private access and associated parking areas meet all access standards except for the driveway spacing standard from existing driveways along the public streets for which a driveway spacing exception is requested and has been recommended to be

approved through the Traffic Study analysis. With approval of the exception, this criterion is met.

*E. All on-site private roads and drives shall be designed and constructed to provide safe intersections and travel surfaces which will not result in hazards for motorists, bicyclists or pedestrians.*

**Findings:** These standards have been determined to have been met.

*G. Public roads accessing any development shall be a minimum of two travel lanes (twenty-four (24) feet of paved width) to the nearest improved collector or arterial street...*

**Findings:** The proposed access road is private so this standard is not applicable.

**16.46.020 Ingress and egress.**  
*Ingress and egress to any lot or parcel, the creation of which has been approved by the Planning Commission, shall be taken along that portion fronting on a public street unless otherwise approved by the Planning Commission.*

**Findings:** The access to this development will be from a public street. This criterion is met.

**16.46.030 Access connection.**  
*A. Spacing of accesses on City streets. The number and spacing of accesses on City streets shall be as specified in Table 16.46.030. Proposed developments or land use actions that do not comply with these standards will be required to obtain an access spacing exception and address the joint and cross access requirements of this Chapter.*

**TABLE 16.46.030**

**Access Management Guidelines for City Streets\***

<b>Street Facility</b>	<b>Maximum spacing** of roadways</b>	<b>Minimum spacing** of roadways</b>	<b>Minimum spacing** of roadway to driveway***</b>	<b>Minimum Spacing** driveway to driveway***</b>
Neighborhood/Local	600 feet	150 feet	50 feet****	10 feet

\*\* Measured centerline on both sides of the street

\*\*\* Private access to arterial roadways shall only be granted through a requested variance of access spacing policies when access to a lower classification facility is not feasible (which shall include an access management plan evaluation).

\*\*\*\* Not applicable for single-family residential driveways; refer to section 16.10.070(B) (10) for single-family residential access standards

Note: Spacing shall be measured between access points on both sides of the street.

**Findings:** An access spacing exception is requested by the applicant and has been recommended by the Traffic Study.

## **16.56 Land Division Regulation**

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**Findings:** Conformance with all provisions of Section IV is demonstrated in the subsequent provisions of the Land Division Regulations. Staff is satisfied that this development project is designed and executed in a manner that properly ensures the public health, safety, convenience and general welfare in consideration of the listed purpose of these regulations. The City Council has properly delegated the approval decision to the Planning Commission for these applications except to accept land for dedication to the public and to apply all portions of these regulations to the development proposal.

## **16.62 Subdivisions-Applications**

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### **16.62.020 Standards and criteria.**

*Applications for a subdivision shall be evaluated based upon the following standards and criteria:*

- A. Conformance with other applicable requirements of the Land Development and Planning Ordinance;*
- B. The overall design and arrangement of lots shall be functional and shall adequately provide building sites, utility easements, and access facilities deemed necessary for the development of the subject property without unduly hindering the use or development of adjacent properties;*
- C. Subdivision design and layout shall incorporate Low Impact Development techniques where possible to achieve the following:*
  - 1. Manage stormwater through a land development strategy that emphasizes conservation and use of onsite natural features integrated with engineered stormwater controls to more closely mimic predevelopment hydrologic conditions.*
  - 2. Encourage creative and coordinated site planning, the conservation of natural conditions and features, the use of appropriate new technologies and techniques, and the efficient layout of open space, streets, utility networks and other public improvements.*
  - 3. Minimize impervious surfaces.*
  - 4. Encourage the creation or preservation of native vegetation and permanent open space.*
  - 5. Clustering of residential dwellings where appropriate to achieve (1-4) above. The arrangement of clustered dwellings shall be designed to avoid linear development patterns.*

**Findings:** Staff accepts the findings of the applicant and agrees that this application shows conformance with the above standards.

- D. It must be demonstrated that all required public facilities and services are available, or will become available through the development, to adequately meet the needs of the proposed land division.*

**Findings:** Staff accepts the findings of the applicant as indicated in other sections of their

narrative and plan submittal that all public facilities will be made available to adequately meet the needs of this PUD/subdivision.

*E. The layout of subdivision streets, sidewalks, and pedestrian ways supports the objectives of the Safe Routes to Schools Program by providing safe and efficient walking and bicycling routes within the subdivision and between the subdivision and all schools within a one-mile radius. During review of a subdivision application, city staff will coordinate with the appropriate school district representative to ensure safe routes to schools are incorporated into the subdivision design to the greatest extent possible.*

**Findings:** Adequate connectivity within and to the area local streets is provided. This criterion is met.

## **16.64 Subdivisions-Design Standards**

### **16.64.010 Streets A - O.**

**Findings:** Staff accepts the findings of the applicant and considers the standards of this section met.

### **16.64.020 Blocks.**

*A. Generally. The lengths, widths and shapes of blocks shall be designed with due regard to providing adequate building sites suitable to the special needs of the type of use contemplated, needs for access, circulation, control and safety of street traffic and limitations and opportunities of topography. Block length shall be limited 300 feet in the C-1 zone, 400 feet in residential zones, 600 feet in all other zones, except for 1,000 feet on arterials. Exceptions to this prescribed block standard shall be permitted where topography, barriers such as railroads or arterial roads or environmental constraints prevent street extension. The block depth shall be sufficient to provide two lot depths appropriate to the sizes required by Division III.*

**Findings:** Staff accepts the applicant findings as to why the proposed development cannot include a public street; therefore blocks with desired spacing from other public streets and that adequate access and connections to the community exist.

### **16.64.030 Easements**

*A. Utility Lines. Easements for electric lines or other public utilities are required, subject to the recommendations of the utility providing agency. Utility easements twelve feet in width shall be required along all street lot lines unless specifically waived. The commission may also require utility easements alongside or rear lot lines when required for utility provision. The construction of buildings or other improvements on such easements shall not be permitted unless specifically allowed by the affected utility providing agency.*

**Findings:** Easements are provided to satisfy all agency requirements.

*C. Pedestrian Ways. In any block over six hundred feet in length, a pedestrian way or combination pedestrian way and utility easement shall be provided through the middle of*

*the block. If unusual conditions require blocks longer than one thousand two hundred feet, two pedestrian ways may be required. When essential for public convenience, such ways may be required to connect to cul-de-sacs, or between streets and other public or semipublic lands or through green way systems. Sidewalks to city standards may be required in easements where insufficient right-of-way exists for the full street surface and the sidewalk. All pedestrian ways shall address the following standards to provide for the safety of users:*

**Findings:** This development does not propose nor is it required to provide public access ways but allows access through the property by way of the private drive.

**16.64.040 Lots**

**A. Size and Shape.** *The lot size, width, shape and orientation shall be appropriate for the location of the subdivision and for the type of development and use contemplated. To provide for proper site design and prevent the creation of irregularly shaped parcels, the depth of any lot or parcel shall not exceed three times its width (or four times its width in rural areas) unless there is a topographical or environmental constraint or an existing man-made feature such as a railroad line.*

**Findings:** The Planning Commission has the authority to allow unique designs for lots upon findings that access and building areas will be adequate. The fronting of 20-foot wide lots on a 20-foot wide private access road is considered to provide adequate access and building area.

**16.64.050 Parks and recreation.**

*Subdivisions shall meet the requirements for park, open space and recreation as specified in Division VI.*

**Findings:** Refer to Section 16.129.

**16.64.060 Grading of building sites.**

*The commission may impose bonding requirements, similar to those described in section 16.64.070, for the purpose of ensuring that grading work will create no public hazard nor endanger public facilities where either steep slopes or unstable soil conditions are known to exist.*

**Findings:** A grading plan is submitted and shown on drawing sheet C 1.4. The site is relatively flat with no steep slopes so the proposed grading will not endanger the public or public facilities.

**16.64.070 Improvements**

**A. Improvement Procedures.** *In addition to other requirements, improvements installed by a land divider either as a requirement of these regulations, or at his own option, shall conform to the requirements of these regulations and improvement standards and specifications followed by the city, and shall be installed in accordance with the following procedure:*

- 1.** *Improvement work shall not be commenced until plans have been checked for adequacy and approved by the city. To the extent necessary for evaluation of the proposal, the*



plans may be required before approval of the tentative plat of a subdivision or partition. No work shall commence until the developer has signed the necessary certificates and paid the subdivision development fees specified elsewhere in this division.

2. Improvement work shall not commence until after the city is notified and if work is discontinued for any reason it shall not be resumed until after the city is notified.
3. Improvements shall be constructed under the inspection and to the satisfaction of the City. The city may require changes in typical sections and details in the public interest if unusual conditions arise during construction which warrants the change.
4. Underground utilities, 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 to a length obviating the necessity for disturbing the street improvements when service connections are made.
5. A map showing public improvements "as built" shall be filed with the city engineer within sixty days of the completion of the improvements.

**Findings:** The applicant shall be required to follow the improvement procedures. This criterion will be met.

**B.** The following improvements shall be installed at the expense of the sub divider unless specifically exempted by the Planning Commission:

1. Streets, including drainage and street trees;
2. Complete sanitary sewer system;
3. Water distribution lines and fire hydrants;
4. Sidewalks and any special pedestrian ways;
5. Street name and traffic-control signs;
6. Streetlights;
7. Lot, street and perimeter monumentation;
8. Underground power lines and related facilities;
9. Underground telephone lines, CATV lines, natural gas lines, and related facilities;
10. Where dedicated or undedicated open space is proposed or provided, it shall be the sub divider's responsibility to provide standard public improvements to and through that open space.
11. If fencing is being proposed as part of subdivision development, the sub divider shall be responsible for installing fencing along public streets and pedestrian ways. Fencing shall be constructed in accordance with the standards in Section 16.08.10

**Findings:** Plans indicate that these will be constructed as needed and detailed construction plans will be submitted following approval of these preliminary plans.

**C. Streets.**

**Findings:** Public and private streets shall be constructed to city standards for permanent street and alley construction. This is assured with a condition of approval. Street trees shall be provided consistent with the provisions of Chapter 12.32 which would essential add a street

tree adjacent to Lots 6 and 7 along the NE 3<sup>rd</sup> Avenue frontage. Trees are indicated in the front yard for the NE 4<sup>th</sup> Avenue frontage that can serve as the street tree requirement. A fee for the two street trees shall be collected and the City shall contract for their installation along the NE 3<sup>rd</sup> Avenue frontage as indicated. This is made a condition of approval.

**D. Surface Drainage and Storm Sewer System.**

1. Drainage facilities shall be provided within the subdivision and to connect the subdivision to drainage ways or storm sewers outside the subdivision, if necessary, as determined by the City.
2. Stormwater Management through Low Impact Development (LID). Low impact development is a stormwater management approach aimed at emulating predevelopment hydrologic conditions using a combination of site design and stormwater integrated management practices. This approach focuses on minimizing impervious surfaces, promoting rainfall evaporation and uptake by plants, and maximizing stormwater infiltration. Specific LID strategies and integrated management practices include:
  - a. Protection and restoration of native vegetation and soils,
  - b. **Minimizing** impervious surface area through use of pervious materials (e.g. pavers and pervious concrete).
  - c. Vegetated roofs,
  - d. Rainfall reuse,
  - e. Stormwater dispersion and bio retention (recharge).
3. All new subdivisions in Canby are required to treat stormwater on site. Stormwater management using LID practices is required where feasible, pursuant to requirements of this chapter and other applicable sections of this code. LID facilities shall be constructed in accordance with Canby Public Works Design Standards.
4. A conceptual stormwater management report must be submitted with the subdivision application. The report must demonstrate how and where stormwater will be managed on site at the subdivision. Where LID practices are not used, the applicant must demonstrate why LID is not feasible. The report will be reviewed by the Canby Public Works Department and shall be consistent with the Public Works Design Standards. Generally, the stormwater management plan must include the following:
  - a. A description of existing conditions including a map;
  - b. A description of the proposed stormwater system including a map;
  - c. An estimate of existing storm water runoff;
  - d. An estimate of proposed storm water runoff;
  - e. The detention/retention requirements; and
  - f. The discharge location, treatment method and sizing, and if discharging to the ground, the expected infiltration rates based upon soils mapping data.

**Findings:** This development proposes to treat all stormwater drainage on site through a new drywell. The City Engineer has given preliminary approval of the proposed stormwater management concept plan. With submittal of an engineered drainage plan with analysis for City Engineer review and approval this criterion is expected to be met.

- E. Sanitary Sewers.** Sanitary sewers shall be installed to serve the subdivision and to connect the subdivision to existing mains. In the event it is impractical to connect the subdivision to

*the city sewer system, the commission may authorize the use of septic tanks if lot areas are adequate, considering the physical characteristics of the area. The commission may require the sub divider to install and seal sewer lines to allow for future connection to the city system.*

**Findings:** The applicant will be connecting to the public sanitary sewer system. Sanitary plans must be approved by the city and DEQ prior to their construction.

**F. Water System.** *Water lines and fire hydrants serving the subdivision and connecting the subdivision to city mains shall be installed to the satisfaction of the supervisor of the water department and the Fire Marshal.*

**Findings:** Canby Utility has approved the preliminary water utility plans as submitted.

**G. Sidewalks.** *Sidewalks shall be required on both sides of a public street and in any special pedestrian way within the subdivision, except that in the case of identified arterials, or industrial districts, the commission may approve a subdivision without sidewalks if alternative pedestrian routes are available. Sidewalk construction may be postponed until the actual construction of buildings on the lots, provided that adequate assurance is given that such sidewalks will be installed. Where LID practices are implemented in subdivision street design, alternative sidewalk design may be permitted with the approval from the city. Alternative sidewalk design resulting from LID best management practices may include, but are not limited to: flat curbs, LID bio retention areas incorporated in conjunction with required landscaping, and alternative sidewalk widths. LID best management practices shall be designed in accordance with the Canby Public Works Design Standards.*

**Findings:** The public sidewalks already exist.

**H. Bicycle Routes.** *If appropriate to the extension of a system of bicycle routes, existing or planned, the commission may require the installation of bicycle lanes within streets or the construction of separate bicycle paths.*

**Findings:** Bicycle routes are designated on the adjacent collector road system.

**I. Street Name & Signs.**

**Findings:** The applicant has a choice of naming the private road with associated addressing or utilizing existing public street addressing. To date the developer has indicated plans to utilize NE 4<sup>th</sup> Avenue addresses for the 3 lots fronting that street while the remaining lots would obtain NE 3<sup>rd</sup> Avenue addresses. This decision must be finalized with the filing of the final plat. A new private street name would require a new street sign paid for by the developer.

**M. Survey Accuracy and Requirements.** *In addition to meeting the requirements as set forth in Oregon Revised Statutes relative to required lot, street and perimeter monumentation, the following shall be required:*

1. An accuracy ratio of subdivision plat boundary line closure of one in ten thousand (.0001) feet as found in the field.
2. Two primary perimeter monuments (one of which can be the initial point) having the same physical characteristics as the initial point. The monuments are to be on a common line visible, if possible, one to the other at time of approval and preferably at angle points in the perimeter. They shall be points as far apart as practicable. A survey monument witness sign of a design acceptable to the city engineer shall be placed within eighteen inches of both monuments. The position for the initial point and other primary perimeter monuments shall be selected with due consideration to possible damage during construction and desirability of witness sign location.
3. Street centerline monumentation shall consist of a two-inch diameter brass cap set in a concrete base within and separate from a standard monument box with cover (standard city details applicable) at locations specified by the city engineer (generally at intersections with centerline of arterial or collector streets and within streets proposed to be greatly extended into adjacent future subdivisions). All other street centerline points (intersections, points of tangent intersections, cul-de-sac center lines, and cul-de-sac off-set points) shall be monumented with a five-eighths-inch diameter steel rod thirty inches long with an approved metal cap driven over the rod and set visible just below the finish surface of the street. If any points of tangent intersection fall outside of a paved section street, the above monumentation will be required at point of curvature and point of tangency of the curve. All centerline monuments are to be accurately placed after street construction is complete.

**Findings:** The development must comply with the lot, street, and perimeter monumentation required by State Statute, utilize two primary perimeter monuments points as survey references, and establish street centerline monumentation in accordance with this ordinance section.

**N. Agreement for Improvements.** Before commission approval of a subdivision plat or partition map, the land divider shall either install required improvements and repair existing streets and other public facilities damaged in the development of the property, or execute and file with the city engineer, an agreement specifying the period within which required improvements and repairs shall be completed and provided that, if the work is not completed within the period specified, the city may complete the work and recover the full cost and expense, together with court costs and reasonable attorney fees necessary to collect the amounts from the land divider. The agreement shall also provide for reimbursement to the city for the cost of inspection by the city which shall not exceed ten percent of the improvements to be installed.

**O. Bond.**

1. The land divider shall file with the agreement, to assure his full and faithful performance thereof, one of the following:
  - a. A surety bond executed by a surety company authorized to transact business in the state in a form approved by the City Attorney;
  - b. A personal bond cosigned by at least one additional person, together with evidence of financial responsibility and resources of those signing the bond, sufficient to provide reasonable assurance of ability to proceed in accordance with the agreement;

**c. Cash.**

**2.** Such assurance of full and faithful performance shall be for a sum approved by the city engineer as sufficient to cover the cost of the improvements and repairs, including related engineering and incidental expenses, and to cover the cost of the city inspection.

**3.** If the land divider fails to carry out provisions of the agreement and the city has unreimbursed costs or expenses resulting from such failure, the city shall call on the bond or cash deposit for reimbursement. If the cost of expense incurred by the city exceeds the amount of the bond or cash deposit, the land divider shall be liable to the city for the difference.

**P. Guarantee.** All improvements installed by the sub divider shall be guaranteed as to workmanship and materials for a period of one year following written notice of acceptance by the city to the developer.

**Findings:** The intended method of assuring that all necessary improvements are installed shall be discussed with approval of the construction plans with any necessary agreement pertaining to the timing of the improvement installation or bonding provided prior to filing the plat of record.

**R.** No fence/wall shall be constructed throughout a subdivision where the effect or purpose is to wall said project off from the rest of the community unless reviewed and approved by the Planning Commission.

**Findings:** No fences or walls are proposed which would block this development off from the rest of the community.

**16.64.80 Low Impact Development Incentives**

The purpose of this section is to encourage the use of certain low impact development (LID) practices in subdivision development beyond the minimum requirements of this code. The provisions in this section are voluntary and are not required of new subdivisions. These provisions are applicable only when an applicant elects to utilize the incentives provided in this section. Only one incentive is permitted at a time. For example, an applicant cannot utilize a height bonus and density bonus in the same subdivision application.

**Findings:** No LID solutions are proposed nor incentives utilized with this development.

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**16.68.020 Submittal of subdivision plat.**

Within one year after approval of the tentative plat, the sub divider shall cause the subdivision or any part thereof to be surveyed and a plat prepared in conformance with the tentative plat, as approved. The sub divider shall submit the original hardboard drawing, a Mylar copy, and any supplementary information to the city. If the sub divider wishes to proceed with the subdivision after the expiration of the one-year period following the approval of the tentative plat, he must formally request an extension of time, in writing, stating the reasons therefore. The City shall review such requests and may, upon finding of good cause, allow a time extension of not more than six additional months, provided that the request for the time extension is properly filed before the end of the one-year approval period.

**Findings:** Clackamas County Surveying reviews pending subdivision plat documents for Oregon statutes and county requirements. The subdivision plat must be recorded at Clackamas County within one year of approval of the tentative plan or the applicant must request that the Planning Director approve a six month extension for recordation of the approved final plat.

## **16.70 PUD General Provisions**

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### **16.70.010**

A. *Planned unit developments may constitute a subdivision involving unique design methods or the development of a single tract without property divisions. Where proposed as a subdivision, the regulations of Division IV as well as the requirements of this division shall apply. Where proposed as an overall development of a single tract without property division, a planned unit development shall be considered a conditional use in any zoning district. Planned unit development regulations shall not be used for, or apply to, partitions.*

B. *It is therefore the purpose of a planned unit development, as the term is employed in this title, of permitting the development of land in a manner which would be as good as, or better than, that resulting from the traditional lot-by-lot development while generally maintaining the same population density and area coverage permitted in the zone in which the project is located. A planned unit development of open spaces, circulation facilities, off-street parking areas and the best utilization of site potentials characterized by special features of geography, topography, size, location or shape. (Ord. 740 section 10.5.10(A), 1984)*

C. *Planned unit developments are also intended to preserve the natural environment and water quality through the use of Low Impact Development (LID) techniques when feasible and practical. (Ord. 1338, 2010)*

**Findings:** Staff accepts the applicant's findings as to why use of a PUD is appropriate with this development and considers this criterion met.

### **16.72 Application for PUD**

**Findings:** Staff accepts the applicant's findings that this application complies with application procedures.

### **16.74 Uses Permitted with PUD**

**Findings:** Staff accepts the applicants findings that attached single-family homes is a permitted use at a density no greater than the underlying zone for which this development complies.

### **16.76 PUD Requirements**

**Findings:** Staff accepts the applicant's findings in their entirety for this section. Staff suggested that the applicant utilize the PUD approach, believing that this location and the particular shape

and nature of the site along with the type of development desired makes it well suited for a PUD type application.

### ***16.89 Application and Review Procedures***

**Findings:** This application is being processed in accordance with Chapter 16.89. Notice of the public hearing was mailed to owners and residents of lots within 500 feet of the subject development and to applicable agencies. Notice of the meeting was posted at the Development Services Building and City Hall and was published in the *Canby Herald* and signage posted on the site. This chapter requires a Type III process for planned unit developments and subdivisions. A neighborhood meeting is required and was held; minutes and a sign-in sheet from the meeting are part of the Planning Commission packet. In addition, a pre-application conference was held and the minutes of the pre-application meeting are part of the Planning Commission packet. The processing requirements have been met.

### ***16.120 Parks, Open Space, and Recreation Land-General Provision***

#### ***16.120.020 Minimum standard for park, open space and recreation land***

**A. Parkland Dedication:** All new residential, commercial and industrial developments shall be required to provide park, open space and recreation sites to serve existing and future residents and employees of those developments... The City shall require land dedication or payment of the system development charge (SDC) in lieu of land dedication.

**Findings:** The dedication of park land for this 0.76 acre development would be 0.41 acres which is more than 50% of the site, and park dedications for PUD's should generally be at least 2 acres in size. Staff ask that fee in lieu of dedication apply to this development.

#### ***16.120.040 Cash in lieu of dedication of land***

In no case shall land dedication requirements be in excess of 15 percent of the gross land area of the development without the agreement of the developer. The decision of whether land is acceptable for use by the public for park and recreation purposes is to be made by the City Planning Commission based on the findings and planning set forth in the *Canby Park and Recreation Master Plan and Acquisition Plan*. Formal acceptance of parks and recreation lands required to be dedicated shall be by the City Council following any land use hearing and recommendation by the City Planning Commission. In all cases, except for PUD's, actual dedication of land shall occur prior to final plat sign-off. Dedication of land in the case of a PUD shall occur, by separate instrument, prior to commencement of construction of the project.

If land proposed for dedication to the public does not meet the criteria set forth in the *Canby Park and Open Space Acquisition Plan*, then at the option of the city, a park system development charge shall be required. Once calculated, the dedication of land shall remain the same, and not change, unless the original plans are altered.

**Findings:** See previous finding asking for fee in lieu for this development.

## **V. PUBLIC TESTIMONY**

Notice of this application and opportunity to provide comment was mailed to owners and residents of lots within 500 feet of the subject properties and to all applicable public agencies. All citizen and agency comments/written testimony will be presented to the Planning Commission and have been attached to this report.

## **VI.**

### **CONDITIONS OF APPROVAL**

Staff concludes, with conditions, that the application will meet the requirements for approval. Staff has concluded the following conditions of approval are necessary to assure conformance:

1. Approval of this application is based on submitted application materials and public testimony. Approval is strictly limited to the submitted proposal and is not extended to any other development of the properties. Any modification of development plans not in conformance with the approval of application file #PUD 14-01 and SUB 14-01, including all conditions of approval, shall first require an approved modification in conformance with the relevant sections of this *Canby Land Development and Planning Ordinance*. Approval of this application is based on the following:
  - a. The PUD and Subdivision application forms
  - b. The Emerald Garden Townhomes information and narrative submittal and associated Plan set dated 2/14/2014 consisting of drawings A1-1 to A2.2, L1-1, and C1.1 to C1.5
  - c. Declaration of Covenants, Conditions, and Restrictions for Emerald Gardens
  - d. GeoPacific Engineering, Inc. Infiltration Testing Results
  - e. DKS Canby Garden Home Residential Traffic Impact Analysis – dated 10.25.13
  - f. Notes from neighborhood meeting held dated 1.18.14
  - g. Minutes from Pre-application conference held dated 9.04.13

### **Prior to Construction Conditions:**

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2. Prior to the start of any construction, the applicant must schedule a pre-construction conference with the city and obtain construction plan sign-off from:
  - a. City of Canby Planning: Reviews plans for depiction of the conditions of approval determined by the Planning Commission
  - b. City of Canby Engineer
  - c. Canby Public Works
  - d. Canby Fire District
  - e. Canby Utility
  - f. Northwest Natural Gas
  - g. Canby Telcom
  - h. Wave Broadband
  - i. Oregon Department of Environmental Quality (DEQ)
3. The applicant shall submit engineered plans of any applicable public improvements for review at the pre-construction conference, including:
  - a. Curbing, sidewalk, and planter plans
  - b. Street lighting plans
  - c. Stormwater system plans, including pervious pavement plans
  - d. Sewer system plans
  - e. Electric plans
  - f. Water/fire hydrants plans



- g. Cable/broadband plans
  - h. Underground telephone plans
  - i. CATV plans
  - j. Natural gas plans
4. The applicant shall address all comments made in the consulting engineer review of this proposal as indicated in memorandum dated 4.11.14.
  5. The development shall comply with all applicable City of Canby Public Works Design Standards.
  6. A 1200c erosion control permit shall be obtained by DEQ; if DEQ does not require a 1200c permit the applicant shall submit documentation from DEQ stating that a 1200c permit is not required.
  7. The applicant must obtain a City Street Opening Permit when installing the commercial access driveway connection to the public streets so the city may inspect to verify compliance with construction standards.
  8. The applicant shall secure a demolition permit from the City and Clackamas County prior to construction for removal of the existing home at 433 NE 4<sup>th</sup> Avenue which will assure capping of water and sewer laterals and protection of gas riser and meter.
  9. Wheel stop use shall be verified for use in front of the four visitor parking spaces located between Lots 3 & 4 to maintain more than a 3-foot useable sidewalk width in front of the parking spaces.
  10. The applicant shall confirm conformance with the light trespass provision of Figure 16.43.1 by including a detail of the ballard pathway lighting height, and that lighting lumen output of all fixtures meets the lighting standard of Table 16.43.070.
  11. The private street (access drive) shall be constructed to city standards for permanent street and alley construction.
  12. The applicant must pay the city Master Fee authorized engineering plan review fee equal to 0.4% of public improvement costs prior to the construction of any public improvements.
  13. The applicant shall submit a soil erosion application and fee equal to 5 individual applications – separate fee for each structure – to cover anticipated erosion control inspections per public works department.

**Assurances Prior to Platting:**

14. A fee for two street trees shall be collected and the City shall ensure their installation along the NE 3<sup>rd</sup> Avenue frontage.
15. All public improvements must be installed prior to the recordation of the final plat. If the applicant wishes to forgo construction of public improvements until after the recordation of the final plat, then the applicant shall pay a bond in accordance with 16.64.070(N-P) to the city as assurance for their later installation.
16. If the applicant chooses to pay a bond for some or all of the required public improvements, then the applicant shall obtain a certificate from the designated city engineer for this proposal that states:
  - a. The applicant has complied with the requirements for bonding or otherwise assured completion of required public improvements.
  - b. The total cost or estimate of the total cost for the development of the subdivision. This is to be accompanied by a final bid estimate of the sub divider's contractor, if there is a contractor engaged to perform the work, and the certificate of the total

cost estimate must be first approved by the city engineer.

17. The applicant must guarantee all public improvement work with a 1-year maintenance bond in accordance with 16.64.070(P).
18. The subdivision shall comply with the lot, street, and perimeter monumentation required by State Statute and utilize two primary perimeter monument points as survey references, and establish street centerline monumentation in accordance with CMC Section 16.64.070(M).
19. The associated subdivision Final Plat shall be recorded within one year of approval of the approval of the Tentative Plat or apply for and receive a 6-month extension from the Planning Director.

**Sewer:**

20. Sanitary sewer system plans shall be approved by DEQ prior to the construction of public improvements; the applicant shall provide the city with a letter from DEQ stating their approval of sanitary sewer system plans.

**Stormwater:**

21. Stormwater systems shall be designed in compliance with the Canby Public Works Design Standards with a drainage analysis submitted to the City Engineer for approval prior to construction plan signoff.
22. Storm drainage plans shall be approved by DEQ prior to the construction of public improvements; the applicant shall provide the city with a letter from DEQ stating their approval of stormwater system plans. (Revisions in the storm water management plan may increase flow to previously rule authorized UIC's).

**Final plat conditions:**

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23. The applicant shall apply for a final plat at the city and pay any applicable city fees to gain approval of the final subdivision plat. Prior to the recordation of the final plat at Clackamas County, it must be approved by the city and all other applicable agencies. The city will distribute the final plat to applicable agencies for comment prior to signing off on the final plat. Applicable agencies may include:
  - c. City of Canby Planning: Reviews plans for depiction of the conditions of approval determined by the Planning Commission
  - d. City of Canby Engineer assigned to review this proposal
  - e. Canby Public Works
  - f. Canby Fire District
  - g. Canby Utility
  - h. Northwest Natural Gas
  - i. Canby Telcom
  - j. Wave Broadband
  - k. Oregon Department of Environmental Quality (DEQ)
24. All public improvements or assurances shall be made prior to the approval of the final plat.
25. The final plat must contain the information required in 16.68.030, 16.68.040(B), and 16.68.050. The county surveyor shall verify that these standards are met prior to the recordation of the subdivision plat.
26. All "as built" of public improvements, including: curbing and sidewalks; planter strips; streets; street lighting; street signage; street striping; park improvements; storm; sewer; electric; water/fire hydrants; cable; underground telephone lines; CATV lines; and natural gas lines,

shall be filed with Canby Public Works within sixty days of the completion of improvements and prior to the recordation of the final plat if not bonded.

27. Clackamas County Surveying reviews pending subdivision plat documents for Oregon Statutes and county requirements. The subdivision plat must be recorded at Clackamas County within one year of approval of the tentative plat or the applicant must request that the Planning Director approve a six-month extension for recordation of the approved final plat.
28. The applicant shall record the final plat at the county within 6 months after the final plat is approved by the City and shall provide the city with a copy of the final plat in a timely manner after is recorded at Clackamas County.

#### **Easements**

29. A vehicle access easement and 15-wide public sanitary sewer easement as indicated on the tentative subdivision plan shall be noted on the final plat.
30. The final plat shall show a 12 foot street tree easement along both street frontages.
31. The applicant shall pay the city street fee for city installation of 2 street trees per the Tree Regulation standards in Chapter 12.32 of the Canby Municipal Code. All street tree fees shall be paid prior to the recordation of the final plat.

#### **Monumentation/Survey Accuracy Conditions**

32. Lot and perimeter monumentation shall be approved by the County Surveyor and/or the city engineer assigned to review this project.
33. The County Surveyor and/or the city engineer assigned to review this project shall verify that the standards of 16.64.070(M) are met prior to the recordation of the final plat.
34. Monuments shall be reestablished and protected in monument boxes at every street intersection and all points of curvature and points of tangency of street centerlines as required by Oregon Revised Statutes Chapter 92. The city engineer assigned to review this subdivision or county surveyor prior to the recordation of the subdivision plat.
35. Installation of the front lot monumentation (along and within street rights-of-way) shall be guaranteed. Any monuments destroyed during improvement installation shall be replaced at the developer's expense. The city engineer assigned to review this subdivision or county surveyor shall confirm required monuments prior to the recordation of the subdivision plat.

#### **Residential Building Permits Conditions:**

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36. Construction of all required public improvements and recordation of the final subdivision plat must be completed prior to the construction of any homes.
37. The homebuilder shall apply for a City of Canby Site Plan Permit and County Building Permit for each 3 unit structure which will be considered as individual single-family homes for fee and SDC fee purposes.
38. The homebuilder shall apply for a City of Canby Erosion Control Permit paying fees equal to 5 separate erosion control plans – one for each structure.
39. All residential construction shall be in accordance with applicable Public Works Design Standards.
40. On-site stormwater management shall be designed in compliance with the Canby Public Works Design Standards.
41. Prior to the issuance of a City Site Plan Review permit, final construction plans must be approved by the city. This includes, but is not limited to, approval by:





City of Canby  
 Planning Department  
 111 NW 2<sup>nd</sup> Avenue  
 PO Box 930  
 Canby, OR 97013  
 (503) 266-7001

# LAND USE APPLICATION

## PUD/Condominium AND SUB-DIVISION Type III

**APPLICANT INFORMATION:** (Check ONE box below for designated contact person regarding this application)

Applicant Name: JASON BRISTOL Phone: 503-803-2920  
 Address: 21733 S HWY 99 E Email: JBRISTOL@WEB-STER.COM  
 City/State: CANBY, OR Zip: 97013

Representative Name: TODD ISELIN/ISELIN ARCH Phone: 503-656-1942  
 Address: 1307 SEVENTH ST Email: TODD@ISELINARCH.COM  
 City/State: OREGON CITY, OR Zip: 97045

Property Owner Name: JASON BRISTOL Phone: 503-803-2920  
 Signature: Jason Bristol  
 Address: 21733 S. HWY 99 E Email: JBRISTOL@WEB-STER.COM  
 City/State: CANBY, OR Zip: 97013

Property Owner Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Address: \_\_\_\_\_ Email: \_\_\_\_\_  
 City/State: \_\_\_\_\_ Zip: \_\_\_\_\_

NOTE: Property owners or contract purchasers are required to authorize the filing of this application and must sign above

- ① All property owners represent they have full legal capacity to and hereby do authorize the filing of this application and certify that the information and exhibits herewith submitted are true and correct.
- ② All property owners understand that they must meet all applicable Canby Municipal Code (CMC) regulations, including but not limited to CMC Chapter 16.49 Site and Design Review standards.
- ③ All property owners hereby grant consent to the City of Canby and its officers, agents, employees, and/or independent contractors to enter the property identified herein to conduct any and all inspections that are considered appropriate by the City to process this application.

**PROPERTY & PROJECT INFORMATION:**

N.E. 3RD & 4TH AVE, NEAR LOCUST ST 33,236 SF TL 700, 1900, T25, R1E, 33 DB  
 Street Address or Location of Subject Property Total Size of Property Assessor Tax Lot Numbers

SINGLE FAMILY RESIDENCES R-2 HIGH DENSITY RES  
 Existing Use, Structures, Other Improvements on Site Zoning Comp Plan Designation

SUBDIVISION AND CONSTRUCTION OF 15 NEW TOWNHOMES  
 Describe the Proposed Development or Use of Subject Property

STAFF USE ONLY				
FILE #	DATE RECEIVED	RECEIVED BY	RECEIPT #	DATE APP COMPLETE

## INSTRUCTIONS

**All required application submittals detailed below must also be submitted in electronic format on a CD, flash drive or via email. Required application submittals include the following:**

Applicant Check	City Check
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- |                                     |                          |  |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | One (1) copy of this application packet. The City may request further information at any time before deeming the application complete. |
|-------------------------------------|--------------------------|--|
- |                                     |                          |   |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Payment of appropriate fees – cash or check only. Refer to the city’s Master Fee Schedule for current fees. Checks should be made out to the <i>City of Canby</i> . |
|-------------------------------------|--------------------------|---|
- |                                     |                          |   |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Mailing labels (1" x 2-5/8") for all property owners and all residents within 500 feet of the subject property. <b>If the address of a property owner is different from the address of a site, a label for each unit on the site must also be prepared and addressed to “occupant.”</b> A list of property owners may be obtained from a title insurance company or from the County Assessor. |
|-------------------------------------|--------------------------|---|
- |                                     |                          |  |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | One (1) copy of a written, narrative statement describing the proposed development and detailing how it conforms with the Municipal Code and to the approval criteria, including the applicable Design Review Matrix, and availability and adequacy of public facilities and services. <b><u>Ask staff for applicable Municipal Code chapters and approval criteria.</u></b><br>Applicable Code Criteria for this application includes:<br><br>_____<br><br>_____<br><br>_____ |
|-------------------------------------|--------------------------|--|
- |                                     |                          |  |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Three (3) copies of a Traffic Impact Study (TIS), conducted or reviewed by a traffic engineer that is contracted by the City and paid for by the applicant<br><b><u>(payment must be received by the City before the traffic engineer will conduct or review a traffic impact study.</u></b><br>Ask staff to determine if a TIS is required. |
|-------------------------------------|--------------------------|--|
- |                                     |                          |   |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | One (1) copy in written format of the minutes of the neighborhood meeting as required by Municipal Code 16.89.020 and 16.89.070. The minutes shall include the date of the meeting and a list of attendees. |
|-------------------------------------|--------------------------|---|
- |                                     |                          |  |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | One (1) copy in written format of the minutes of the pre-application meeting |
|-------------------------------------|--------------------------|--|
- |                                     |                          |  |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | One copy of either the recorded plat or the recorded deeds or land sales contracts that demonstrates how and when legal property lines were established and where the boundaries of the legal lot(s) of record are located. If the property is a lot or parcel created by plat, a copy of the recorded plat may be obtained from the Clackamas County Surveyor’s office. If the property is a legal lot of record created by recorded deed or land sales contract at a time when it was legal to configure property lines by deed or contract, then those recorded deeds may be obtained from the Clackamas County Office of the Clerk, or a Title Company can also assist you in researching and obtaining deeds. |
|-------------------------------------|--------------------------|--|
- |                                     |                          |   |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | If the development is located in a Hazard (“H”) Overlay Zone, submit one (1) copy of an affidavit signed by a licensed professional engineer that the proposed development will not result in significant impacts to fish, wildlife and open space resources of the community. If major site grading is proposed, or removal of any trees having trunks greater than six inches in diameter is proposed, then submit one (1) copy of a grading plan and/or tree-cutting plan. |
|-------------------------------------|--------------------------|---|

Applicant City  
Check Check

Ten (10) paper copies of the proposed plans, printed to scale no smaller than 1"=50'. The plans shall include the following information:

- Vicinity Map. Vicinity map at a scale of 1"=400' showing the relationship of the project site to the existing street or road pattern.
- Site Plan-the following general information shall be included on the site plan:
  - Date, north arrow, and scale of drawing;
  - Name and address of the developer, engineer, architect, or other individual(s) who prepared the site plan;
  - Property lines (legal lot of record boundaries);
  - Location, width, and names of all existing or planned streets, other public ways, and easements within or adjacent to the property, and other important features;
  - Location of all jurisdictional wetlands or watercourses on or abutting the property;
  - Finished grading contour lines of site and abutting public ways;
  - Location of all existing structures, and whether or not they are to be retained with the proposed development;
  - Layout of all proposed structures, such as buildings, fences, signs, solid waste collection containers, mailboxes, exterior storage areas, and exterior mechanical and utility equipment;
  - Location of all proposed hardscape, including driveways, parking lots, compact cars and handicapped spaces, loading areas, bicycle paths, bicycle parking, sidewalks, and pedestrian ways;
  - Callouts to identify dimensions and distances between structures and other significant features, including property lines, yards and setbacks, building area, building height, lot area, impervious surface area, lot densities and parking areas;
  - Location of vision clearance areas at all proposed driveways and streets.
- Landscape Plan, with the following general information:
  - Layout and dimensions of all proposed areas of landscaping;
  - Proposed irrigation system;
  - Types, sizes, and location of all plants to be used in the landscaping (can be a "palette" of possible plants to be used in specific areas for landscaping);
  - Identification of any non-vegetative ground cover proposed, and dimensions of non-vegetative landscaped areas;
  - Location and description of all existing trees on-site, and identification of each tree proposed for preservation and each tree proposed for removal;
  - Location and description of all existing street trees in the street right-of-way abutting the property, and identification of each street tree proposed for preservation and each tree proposed for removal.
- Elevations Plan  
The following general information shall be included on the elevations plan:
  - Profile elevations of all buildings and other proposed structures;
  - Profile of proposed screening for garbage containers and exterior storage areas;
  - Profile of proposed fencing.
- Sign Plan.
  - Location and profile drawings of all proposed exterior signage.
- Color and Materials Plan.
  - Colors and materials proposed for all buildings and other significant structures.

## **Project Information:**

### **Project Summary:**

The proposed development includes the construction of 15 townhomes on approximately three fourths of an acre of land. The property is located between N.E. 3<sup>rd</sup> Avenue and N.E. 4<sup>th</sup> Avenue, east of but not fronting Locust Street. The property is zoned R-2 and currently contains two single family residences on two separate lots. Both residences will be demolished and the lots combined and re-platted as part of the development.

The site will consist of five identical buildings with three homes each, for a total of 15 units. A new, one-way private driveway will run through the site from 3<sup>rd</sup> Avenue to 4<sup>th</sup> Avenue, providing vehicular access to the unit garages as well as primary runs of utilities. In addition to the double car garages attached to each townhome, 11 common/visitor parking spaces will be provided on site. Pedestrian access to 12 of the 15 townhomes will be provided on the east and west sides of the lot, connecting to 3<sup>rd</sup> Avenue. Three of the units front 4<sup>th</sup> Avenue with pedestrian access coming directly off of the public sidewalk. Mail delivery will be centrally located onsite and multiple common outdoor areas will be provided.

Each townhome unit will include three stories and an approximate total size of 1,650 square feet. The main level will include the garages and small living space with primary living space above to include three bedrooms and two and one half bathrooms. The buildings will be wood framed with trussed roofs and fire rated and sound isolated unit demising walls. Exteriors shall be finished with a combination of beveled siding with board and batt accent areas. Roofs will be composition shingles.



**Conformance with Planning and Zoning Requirements:**

**1. Subdivision, Partition, and Planned Unit Development**

*Chapter 16.10 Off-Street Parking and Loading*

The parking requirement for single family dwellings is two spaces per dwelling unit (Table 16.10.050). The parking requirement for multi-family dwellings in complexes with private internal roadways is two spaces per dwelling unit with one additional guest parking space for every five units. The project is single family, but it will look and feel much like a multi-family development. The proposed parking will be satisfied by two-car garages for every unit and eleven extra or guest parking spaces thereby exceeding the number of required parking stalls for a single or multi-family development of this size.

*Chapter 16.20 R-2 High Density Residential Zone*

The zoning designation for the site and surrounding properties is R-2, High Density Residential Zone. The proposal is for a subdivision/PUD to fit within the requirements of that district.

The proposal for subdivision/PUD involves the creation of 15 new lots for attached single family dwellings constructed in 5 groups of 3 attached dwellings. These proposed residential uses are allowed outright in the zone (Sec. 16.20.010.B). New lots in the R-2 Zone are required to meet the development standards specified in Section 16.20.030. Development standards can be verified when plans for building permits are submitted for each lot. The following table lists requirements and how the application proposes to satisfy each standard:

*Section 16.20.030 R-2 Zone Dimensional Standards*

Requirement	Proposed
16.20.030.A Minimum Residential Density: 14 dwellings per acre	Total Site Area = 33,236 sq. ft. Minimum Density (R-2) = 14 units per acre Minimum number of units allowed = 10.7 => 11  Lots proposed = 15
16.20.030.B Minimum width and frontage: 20 feet	All lots have a minimum width of 20 feet and frontage on a private roadway or a public street of 20 feet.
16.20.030.C Minimum yard requirements: Street yard, 20 feet for the side with driveway Other street yards, 15 feet  Rear yard, 20 feet for two story building (no mention of requirement for 3 story building)	Street yard side with driveway: There are no street side yards with a driveway. All units will be accessed from an interior private roadway.  Street yards on side with no driveway: Street yards along NE 3 <sup>rd</sup> & 4 <sup>th</sup> Avenues will be 15 feet to the building, 12 feet to the covered porches on NE 4 <sup>th</sup> Avenue.  The front doors of each unit are located opposite the garage doors. Therefore, the “rear yards” are the sides of the buildings that face the private roadway.  Lots 1-12: Rear yards will measure 12 feet from the

Interior yard: seven feet, or zero lot line	<p>first floor, 10 feet from the second floor and 9 feet from the third floor.</p> <p>Lots 13-15: Rear yards will measure 3 feet from the first floor, 1 foot from the second floor and zero from the third floor.</p> <p>The rear yard requirement will be modified for the PUD.</p> <p>Interior yard: The applicant requests zero lot line sides for all lots.</p>
16.20.030.D Maximum building height: 35 feet	Buildings will be three stories in height, or approximately 33 feet in height.
16.20.030.E Maximum amount of impervious surface in the R-2 Zone shall be 70% of the lot area.	<p>Impervious coverage percentages are as follows:</p> <p>Overall Site: 55.4%</p> <p>Lots 1-12: 69.3%</p> <p>Lots 13-15: 69.9%</p>

*Chapter 16.36 Planned Unit Development Overlay Zone (PUD)*

Uses permitted in the PUD Overlay Zone are the same as permitted in the base zone, when developed in conformance with requirements and procedures for PUD's. Development standards are specified in Chapters 16.70 through 16.76.

Single family attached residences are permitted in the R-2 Zone, and are therefore permitted to be developed with PUD zoning.

*Chapter 16.46 Access Limitations*

This section specifies limitations to density based upon access. Portions of the private roadway will be located in a common area tract and portions will be located within an easement on the lots, but the entire private roadway will be maintained by the homeowners association for the development. This arrangement of common maintenance by a single entity is similar to single ownership developments such as condominiums and multi-family developments. For these types of developments, two lane access roads/drives with no parking located along the driveway shall have a 20 foot minimum width. The maximum number of dwellings that may access a two lane access road with two points of access is 165 (16.46.010B.2). The application proposes to provide a 20 foot wide private driveway with no parking within the 20 foot width.

The private roadway will access NE 3<sup>rd</sup> Avenue and NE 4<sup>th</sup> Avenue, both of which are collectors. The minimum allowable driveway to driveway spacing on collectors is limited to not less than 100 feet, including driveways on both sides of the street. An access spacing exception is requested for the proposed development, as it is not possible to meet the 100-foot standard given existing driveways locations near the site on NE 3<sup>rd</sup> and 4<sup>th</sup> Avenues.

Along NE 3<sup>rd</sup> Avenue the driveway spacing on the north side of the street will measure approximately 105 feet and 93 feet respectively to adjacent existing driveways located to the west and east. Across the street from the proposed development, on the south side of NE 3<sup>rd</sup> Avenue, Mighty Mite Industries has a driveway approach that measures nearly 150 feet wide, that extends almost the entire width of their parcel and all but roughly the western 20 feet of the proposed development parcel. Much of Mighty Mite Industries driveway approach is used for "front in/back out" parking stalls. Two main points of access are

located along the Mighty Mite frontage, a 32-foot wide opening in their fence near the middle of their site and a 13-foot wide opening in their fence adjacent to their eastern property line. The center of the 32-foot wide access opening will be located approximately 11 feet east of the center of the proposed private roadway for the development. The center of the 13-foot wide opening is located approximately 100 feet east of the center of the proposed private roadway.

Along NE 4<sup>th</sup> Avenue the driveway spacing on the south side of the street will measure approximately 65 feet and 110 feet respectively to adjacent existing driveways located to the east and west. Across the street from the proposed development, on the north side of NE 4<sup>th</sup> Avenue, Clackamas County Fairgrounds has a driveway approach measuring approximately 40 feet wide that is used to access a parking area near the rodeo arena. The centers of the 40-foot wide driveway and the proposed private roadway for the development will be offset by approximately 30 feet.

The applicant requests that the access spacing exception be reviewed as a part of the traffic study being performed for the developed. Typically, when driveways do not meet the access spacing limitations restricted access movements are usually the solution. Restricted access movements are already in place along NE 3<sup>rd</sup> and 4<sup>th</sup> Avenues as both streets are one-way access only (3<sup>rd</sup> Avenue eastbound only & 4<sup>th</sup> Avenue westbound only).

### **Division III. Zoning, R-2 High Density Residential**

- A. Minimum residential density: The proposed development contains 15 units on a three quarter acre lot, exceeding the minimum requirement of 14 units per acre.
- B. Minimum width and frontage: The frontage along 4<sup>th</sup> Avenue is 99' and the frontage on 3<sup>rd</sup> Avenue is 123'.
- C. Minimum yard requirements:
  - a. Front yard (no driveway): 17.7' to building, 14.5' to covered porch.
  - b. Rear yard: Not applicable
  - c. Side yard: 7' at building fronting 4<sup>th</sup> Avenue; 14.5' at buildings facing side property lines.
- D. Maximum building height and length: The typical building height is 33' and the maximum length is 60'.
- E. Maximum amount of impervious surface: 18,280 sq. ft. (55% of total site area)
- F. Other regulations: A total of approximately 5,650 square feet (376 s.f. per unit) of outdoor, common/recreation space is provided on the site. The largest, central common area is over 2,000 s.f. in area.

## Division IV. Land use Regulations, Subdivisions

### Chapter 16.62, Applications

#### Standards and criteria:

Standards and criteria for approval of a subdivision are set forth in Sec. 16.62.020, as follows:

*A. Conformance with other applicable requirements of the Land Development and Planning Ordinance;*

As addressed in the drawings and narrative, the proposed development meets the requirements of the base, R-2 zone as well as for Planned Unit Developments. This application satisfies the filing procedures and information required in Section 16.62.010.

*B. The overall design and arrangement of lots shall be functional and shall adequately provide building sites, utility easements, and access facilities deemed necessary for the development of the subject property without unduly hindering the use or development of adjacent properties;*

The overall design and layout of the site is functional and provides adequate building sites, as demonstrated by the dwelling footprints shown for each proposed lot. Access for each lot is provided by a private roadway which has access to NE 3<sup>rd</sup> and 4<sup>th</sup> Avenues. Neighboring properties are residential and will be compatible with the higher density residential development being proposed in the same way that multi-family developments are compatible with surrounding lower density residential properties in other areas of the City. Development of adjacent properties will not be hindered, as neighboring properties are similarly zoned R-2 and will eventually be redeveloped in a denser manner, similar as to what is being proposed with this application. High density zoning near the downtown core will help support retail businesses in downtown area where people can walk to shop, bank or to take in a movie.

*C. Subdivision design and layout shall incorporate Low Impact Development techniques where possible to achieve the following:*

- 1. Manage stormwater through a land development strategy that emphasizes conservation and use of onsite natural features integrated with engineered stormwater controls to more closely mimic predevelopment hydrologic conditions.*
- 2. Encourage creative and coordinated site planning, the conservation of natural conditions and features, the use of appropriate new technologies and techniques, and the efficient layout of open space, streets, utility networks and other public improvements.*
- 3. Minimize impervious surfaces.*
- 4. Encourage the creation or preservation of native vegetation and permanent open space.*
- 5. Clustering of residential dwellings where appropriate to achieve (1-4) above. The arrangement of clustered dwellings shall be designed to avoid linear development patterns.*

The proposed subdivision has been planned to make effective use of the 0.76 acre space through effective clustering of dwelling units around a central roadway. Impervious surfaces have been minimized through the use of permeable surfaces and three story tall buildings having two car

garages. Providing two car garages on the bottom floor of the units eliminates large impervious parking areas that are typically placed in front of the homes.

Stormwater will be disposed of through a variety of retention and infiltration techniques and no stormwater will be discharged from the site. Although little existing vegetation can be preserved, the applicant is creating an Open Space Tract featuring 1,770 sf of permanent vegetated open space adjacent to Lot 12, while other vegetated open space areas are being created around the perimeter of the development.

*D. It must be demonstrated that all required public facilities and services are available, or will become available through the development, to adequately meet the needs of the proposed land division.*

All necessary public facilities and services are available to the site, as discussed in other sections of this narrative and as shown on the plans and maps included with the application.

*E. The layout of subdivision streets, sidewalks, and pedestrian ways supports the objectives of the Safe Routes to Schools Program by providing safe and efficient walking and bicycling routes within the subdivision and between the subdivision and all schools within a one-mile radius. During review of a subdivision application, city staff will coordinate with the appropriate school district representative to ensure safe routes to schools are incorporated into the subdivision design to the greatest extent possible.*

The proposed layout provides connectivity to local streets through internal walkways and a driveway that bisects the site from NE 3<sup>rd</sup> Avenue to NE 4<sup>th</sup> Avenue. Convenient and efficient access to local streets is provided with the proposed layout.

*F. A Traffic Impact Study (TIS) may be required in accordance with Section 16.08.150.*

A Traffic Impact Study has been commissioned through the City of Canby. The applicant requests that an access spacing exception to both NE 3<sup>rd</sup> and 4<sup>th</sup> Avenues be reviewed as a part of the Traffic Impact Study.

## *Chapter 16.64 Subdivisions Design Standards*

### *Section 16.64.010 Streets*

No new public streets are being created. A private road/street will connect NE 3<sup>rd</sup> Avenue to NE 4<sup>th</sup> Avenue and it will provide access for the proposed lots. The private road will be maintained by a homeowners association. The proposed project will not limit or preclude future use of neighboring sites as adjacent properties can develop by taking access from NE 3<sup>rd</sup> Avenue, NE 4<sup>th</sup> Avenue or N Locust Street. The development is proposed as a self-contained community; however it is possible that other neighboring properties could be developed into the community in the future.

NE 3<sup>rd</sup> Avenue and NE 4<sup>th</sup> Avenue have recently been improved to full City standards complete with curbs and sidewalks. Improvements to the NE 3<sup>rd</sup> and 4<sup>th</sup> Avenue street frontages will include removal and replacement of some curb and sidewalk in order to remove old driveway approaches and to create new driveway approaches in the appropriate location for the development.

### *Section 16.64.015 Access*

The site does not propose access to a state highway; this section does not apply.

### *Section 16.64.020 Blocks*

The City requires subdivisions to be designed to accommodate blocks that provide lots of suitable size and access in multiple directions. However, this project does not include blocks due to the unusual shape of the site, the high density zoning, and the location of the site in relation to existing intersections.

The site itself is an irregular shaped parcel located in an irregular shaped block between NE 3<sup>rd</sup> and NE 4<sup>th</sup> Avenues. NE 3<sup>rd</sup> Avenue is a one way street allowing for eastbound traffic and NE 4<sup>th</sup> Avenue is a one way street allowing for westbound traffic. If a new 40-foot wide north-south street paralleling N Locust Street was cut through the site, the maximum distance that the new street could be located away from N Locust Street would be 168 feet along NE 4<sup>th</sup> Avenue frontage of the site. This is less than the required intersection spacing of 250-feet along a collector street (Table 16.46.30 Access Management Guidelines for City Streets). Therefore, a new public street is not a permitted design for this site and it is why the project cannot include blocks.

Although the design has not been arranged in a typical block, the site plan aims to provide a development that allows for access and connections through the project and to adjacent transportation facilities.

### *Section 16.64.030 Easements*

Easements will be provided as necessary to satisfy requirements of the City of Canby and to provide for necessary and appropriate access within the development. The private roadway will be a combination of common ownership areas and easement areas and utility easements will be required for public and private utilities.

### *Section 16.64.040 Lots*

Lots will be twenty feet wide with zero-lot line side yards. Units will be single family attached constructed in groups of three-dwelling units. Three lots (Lots 13-15) will front upon a public street, the other twelve lots will front on a private roadway that will connect to NE 3<sup>rd</sup> and 4<sup>th</sup> Avenues. The Planning Commission has the authority to allow unique designs for lots upon findings that access and building areas will be adequate. With the site being located between two collectors and close to their intersection with N Locust Street, driveway access along the fronting public streets is limited; therefore the project has to look inward for access into the units.

For the reasons stated under Section 16.64.020 Blocks, the site does not easily or effectively allow for a public street connection from NE 3<sup>rd</sup> Avenue to NE 4<sup>th</sup> Avenue. A private roadway is the most efficient way to access the site and having the majority of lots facing the private roadway is the most efficient design. The proposed design will create building lots and a roadway that will look and feel similar to multi-family construction such as condominiums and apartments, however, each unit will be located on its own lot.

### *Section 16.64.060 Grading of Building Sites*

Grading will be accomplished on the site according to a plan approved by the City.

### *Section 16.64.070 Improvements*

Improvements for the subdivision/PUD will be accomplished as required by this section. Plans have been submitted as part of this application to show the arrangement of the roadway, sidewalks/pathways, public utilities, and other improvements necessary to provide for the convenience, health, and safety of

future residents of this community and of the City. Please refer to specific plans for details; more detailed construction plans will be filed with the City following approval of the preliminary plan.

## **Division V. Planned Unit Development and Condominium Regulations**

### *Chapter 16.70 General Provisions*

The Land Development and Planning Ordinance provides the Planned Unit Development review process as a means to allow flexibility in the design of a project and location of buildings, open spaces, circulation facilities, parking, and utilization of special features which may include the location or shape of a site.

The subject site is irregular in shape, constrained by limited access to the collector streets of NE 3<sup>rd</sup> Avenue and NE 4<sup>th</sup> Avenue that border it. The site is located near the fairgrounds in an irregular shaped block along one-way streets. However, the site is also near the downtown Canby, providing excellent access and proximity to developed commercial areas, nearby schools, churches and parks. The site is surrounded by similarly zoned High Density Residential properties, of which most have not yet been redeveloped from older lower density uses to higher density uses. The site is designed to focus vehicular traffic and the light and noise associated with vehicular traffic into the center of the site with the front doors and covered porches for each unit/lot located around the site perimeter. The location and peculiar shape of the site make it particularly well suited for a PUD type development.

### *Chapter 16.72 Applications*

The application complies with requirements of this section.

### *Chapter 16.74 Uses Permitted*

Permitted uses include residential units, detached or multiple type dwellings, at a density no greater than the underlying zone unless a density bonus is approved (Sec. 16.76.010 or Chapter 16.80).

Density complies with requirements of the R-2 zone, as previously discussed.

### *Section 16.76.010 Minimum requirements*

A minimum of 15% of the gross area of the development is to be devoted to open space or shall be located in a common area (Sec. 16.76.010.A). The PUD site area is 33,236 square feet; common areas will account for 17,277 square feet (52.0% of the site area). Parking and driveways will account for 7,168 square feet of the common area (21.6% of the site area) while the remainder 10,109 square feet (30.4% of the site) is proposed as open area that will either be landscaping, sidewalks, or screening.

The required average area per dwelling shall not be less than allowed in the R-2 zone (Sec. 16.76.010.B), however, no average lot size or maximum density is specified in the R-2 zone. The minimum density is 14 dwellings per acre, or 11 dwellings for the gross PUD site area. The PUD proposes to create lots for 15 dwellings. The average lot area is 1,064 square feet. No density bonus is requested.

The buildings are proposed to be clustered into 5 buildings of three attached dwelling units located along a common roadway that will connect NE 3<sup>rd</sup> Avenue to NE 4<sup>th</sup> Avenue (Sec. 16.76.010.C). Two car garages will be provided for each unit in order to limit the impervious area being dedicated for driveway and parking areas. The buildings are proposed to be three-story units with the garage making up the

majority of the ground floor in an effort to limit impervious area. Reducing impervious area is an LID approach identified in the Canby Public Works Design Standards (Sec 16.76.010.D).

#### *Section 16.76.020 General Requirements*

An application has been submitted with narrative and plans that provide information requested in this section.

#### *Section 16.76.030 Standards and criteria*

The development expects to be approved as a binding site plan, with recorded covenants to guarantee compliance with all requirements (Sec's 16.76.030.A-C). This provides certainty for the applicant and for the City.

The development plan is organized in a manner that creates a small community. The perimeter of the site has front doors with covered porches facing shared pedestrian walkways. A private road is centered in the site to reduce creation of impervious area and to reduce sound and light around the perimeter of the site. Neighboring residential properties near the southern portion of the site (where the front doors will face neighboring properties) have dwellings located more than 35 feet away from the property line shared with this site, which provides for adequate separation between structures. In the northern portion of the property, Units 13-15 will face NE 4<sup>th</sup> Avenue. Vegetative screening will be provided around the perimeter of the site. Buildings and landscaping will be tended to maintain the special qualities of the development (Sec. 16.76.030.D-E).

The PUD will have a private road, an integrated network of sidewalks, and other pertinent facilities. Maintenance of landscaping, open space and on site facilities, including the roadway and sidewalks, will be the responsibility of a homeowners association. Requirements will be detailed in covenants recorded with the subdivision/PUD a copy of which has been submitted with the development application (Sec. 16.76.030.F-H).

Each lot/unit will have separate utilities including its own electric, gas and water meters and its own sewer lateral. Each lot/unit will also have its own garbage and recycling bin that will be stored in the garage of each unit (Sec. 16.76.030.I).

Building facades are proposed to give the appearance of separate dwellings, while maintaining an overall design concept. Colors proposed for the exterior will be similar to colors used in adjacent developments. Individual units may have board and batten, shingle, or lap siding as the exterior covering. An architectural plan with "typical facade" is included with the application.

The landscaping plan incorporates features to provide privacy and buffering. Storm water quality swales are incorporated into the landscaped area and are intended to provide water quality treatment prior to infiltration. These features will occasionally carry small amounts of run-off.

Fencing will be limited in order to maintain an overall feeling of openness and spaciousness in the development. Black, vinyl coated chain link perimeter fencing will be installed along the east and west property lines to separate the property from the neighboring properties. Interior fences will be restricted to a fence between Lot 1 and the property line to the north and Lot 15 and the property line to the west in order to eliminate "cut-through traffic" in these areas. Fences along the public streets will not be permitted (Sec. 16.76.030.L).

The exteriors of buildings and all landscaped areas will be maintained by a professional service hired by the homeowners' association. All homeowners will be required to pay a fee to support ongoing maintenance of the development. Details will be specified in the CC&R's. (Sec's 16.76.030.D-H).



The applicant believes that this narrative and plans demonstrate that all requirements of Section 16.76.030 are satisfied by the proposal.

*Section 16.76.040 Exceptions*

The applicant requests several exceptions, which are permitted by Section 16.76.040.A.

1. Rear yards are to be modified by the PUD. Rear yards will be opposite the front doors and will be the side of the lot facing the common driveway. For Lots 1-12 rear yards will measure 12 feet from the first floor, 10 feet from the second floor and 9 feet from the third floor. For Lots 13-15 rear yards will measure 3 feet from the first floor, 1 foot from the second floor and zero from the third floor.
2. Lot Frontage on a Private Roadway. Both public streets adjacent to the site are collectors. The existing driveways on these two streets do not currently meet the driveway spacing requirements of the Code and an access exception is to be reviewed as a part of the traffic study commissioned for the development. Driveway access to existing collector streets is limited and driveways either have to be consolidated or a new public street has to be created through the site. However, a public street through the site is not an option, since the street could not meet the 250-foot intersection spacing distance needed from the existing NE 4<sup>th</sup> Avenue / N Locust Street intersection. Therefore, the project has to consolidate driveways and look internally for lot access. The applicant requests that 20 feet of frontage on a private roadway be deemed to be acceptable frontage. The proposed roadway will have a pavement width of 20 feet with no parking allowed.
3. Access Exception. Although not a part of the PUD exceptions, the applicant requests that an access spacing exception be reviewed as a part of the traffic study being performed for the developed as is allowed per Sec. 16.46.030.A.

No modification is requested for building height or total number of required number of off-street parking spaces, which must conform to applicable requirements (Section 16.76.040.B-C).

*Chapter 16.120 Parks, Open Space and Recreation Land*

The City of Canby shall require park land dedication or a fee in lieu of park land dedication in the form of a system development charge. The City has indicated that it would prefer that lots in the subdivision pay a system development charge, as the subdivision would require the dedication of 0.41 acres if the City would require park land dedication. Since the site only measures 0.76 acres total, the required park land dedication would amount to more than 50% of the site.

**CONCLUSION**

The foregoing narrative and accompanying plans and documents, together demonstrate that the proposed subdivision, PUD and Site and Design Review application is generally in conformance with applicable criteria and standards identified.

Therefore, the applicant requests that the Planning Commission, also acting in its capacity as Design Review Board, approve the proposal.

**APPENDIX:**

- A. Reduced Drawings and Renderings
- B. Pre-Application Meeting Minutes
- B. Neighborhood Meeting Minutes
- C. Traffic Impact Study
- D. Infiltration Study
- E. Title Report

**DRAWING INDEX**

- A1.1 SITE PLAN & COVER SHEET
- A1.2 LOWER LEVEL FLOOR PLAN & KEYNOTES
- A1.3 MAIN LEVEL FLOOR PLAN, SCHEDULES
- A1.4 UPPER LEVEL FLOOR PLAN
- A2.1 ELEVATIONS
- A2.2 ELEVATIONS
- L1.1 LANDSCAPE PLAN
- C1.1 SUB-DIVISION PLAN
- C1.2 UTILITY PLAN
- C1.3 STREET AND DRAINAGE PLAN
- C1.4 GRADING / EROSION CONTROL PLAN
- C1.5 EXISTING CONDITIONS PLAN

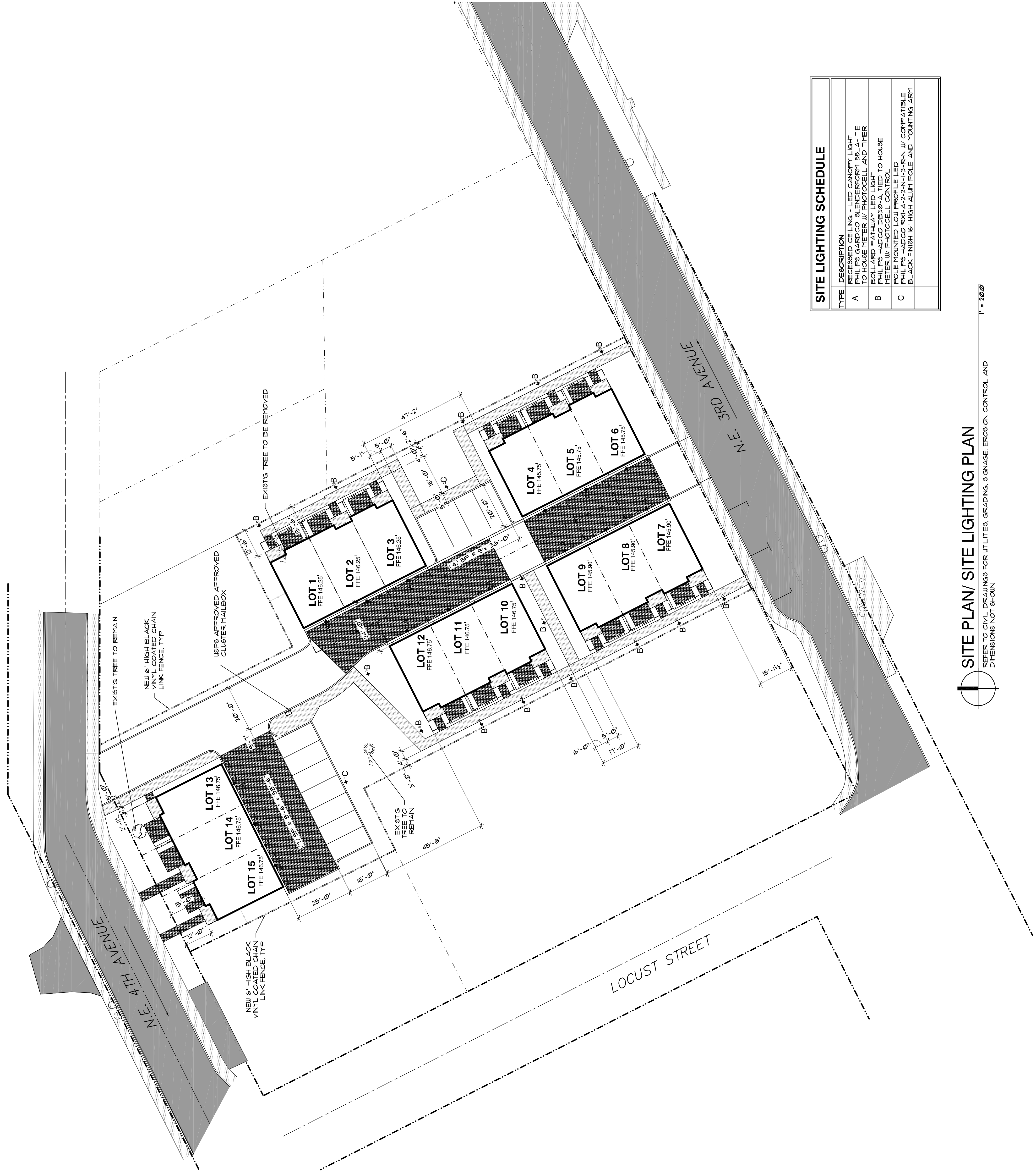
**EMERALD GARDEN TOWNHOMES**  
 NW 3rd and NW 4th Ave  
 CANBY, OR, 97013

PROJ. NO.: 1371  
 FILE: A-SIT-DR  
 DATE: 2/14/2014

SHEET #

**A1.1**

SITE PLAN / COVER SHEET



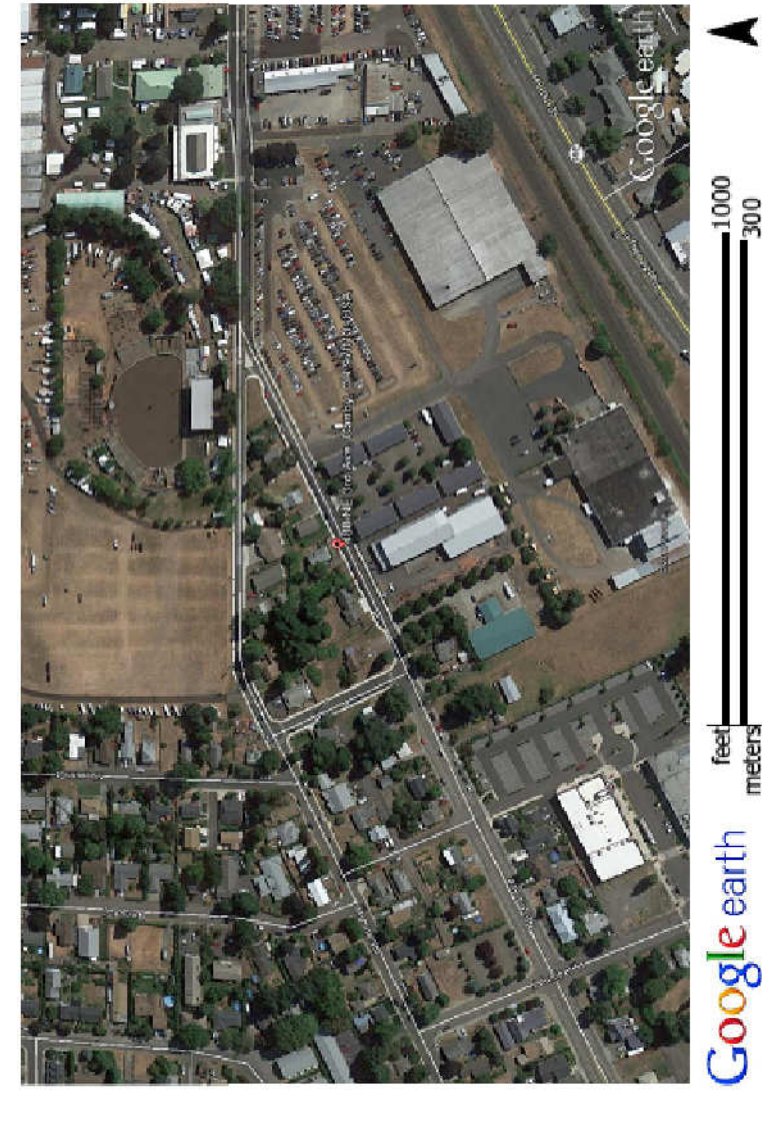
**PROJECT INFORMATION**

PROJECT DESCRIPTION (15) TOWNHOME DEVELOPMENT BUILDING A  
 PROPERTY LOCATION PORTION OF SEC 33 T3S, R1E, W.M., NE 3RD AND NE 4TH AVE, CANBY, OR  
 ADDRESS  
 COUNTY CLACKAMAS  
 ZONE PLANNED UNIT DEVELOPMENT (PUD)  
 ELEVATION 145-147'  
 SITE AREA .76 ACRES  
 OCCUPANCY SINGLE FAMILY  
 CONSTRUCTION TYPE V-B W/ NFPA 13R SPRINKLERS

BUILDING SQUARE FOOTAGE  
 UNIT 1 264 S.F. UNIT 2 264 S.F. UNIT 3 264 S.F.  
 LOWER LEVEL 699 S.F. 699 S.F. 699 S.F.  
 MAIN LEVEL FLOOR AREA 747 S.F. 784 S.F. 747 S.F.  
 UPPER LEVEL FLOOR AREA 1,710 S.F. 1,747 S.F. 1,710 S.F.  
 TOTAL LIVING AREA 395 S.F. 395 S.F. 395 S.F.  
 GARAGE

IMPERVIOUS AREA COVERAGE 55.4%

PARKING REQUIRED (2) SPACES / UNIT = 30 SPACES  
 PROVIDED (30) COVERED + (11) OPEN = 41 SPACES



**VICINITY MAP**

**SITE LIGHTING SCHEDULE**

TYPE	DESCRIPTION
A	RECESSED CEILING LED CANOPY LIGHT PHILIPS HADCO SENSORY 150-4-TIE TO 150-4-TIE PHILIPS HADCO TO 150-4-TIE PHILIPS HADCO TO 150-4-TIE PHILIPS HADCO
B	BOLLARD PATHWAY LED LIGHT PHILIPS HADCO DB30-A TIED TO HOUSE METER W/ PHOTOCELL CONTROL
C	POLE MOUNTED LOW PROFILE LED PHILIPS HADCO BX1-A-2-2-N-1-3-R-N W/ COMPATIBLE BLACK FINISH 16' HIGH ALUM POLE AND MOUNTING ARM

**SITE PLAN / SITE LIGHTING PLAN**

REFER TO CIVIL DRAWINGS FOR UTILITIES, GRADING, SIGNAGE, EROSION CONTROL, AND DIMENSIONS NOT SHOWN

1" = 20'



**ISELIN ARCHITECTS P.C.**

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503-656-0658 fax  
www.iselinarchitects.com

NOT FOR  
PRELIMINARY  
CONSTRUCTION

EMERALD GARDEN TOWNHOMES  
NW 3rd and NW 4th Ave  
CANBY, OR, 97013

PROJ. NO.: 1371  
FILE: A-FP  
DATE: 2/14/2014

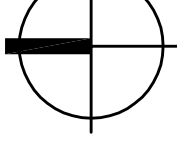
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**A1.2**

LOWER FLOOR PLAN



LOWER LEVEL FLOOR PLAN



1/4" = 1'-0"



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NOT FOR  
PRELIMINARY  
CONSTRUCTION

**BRISTOL TOWNHOMES**

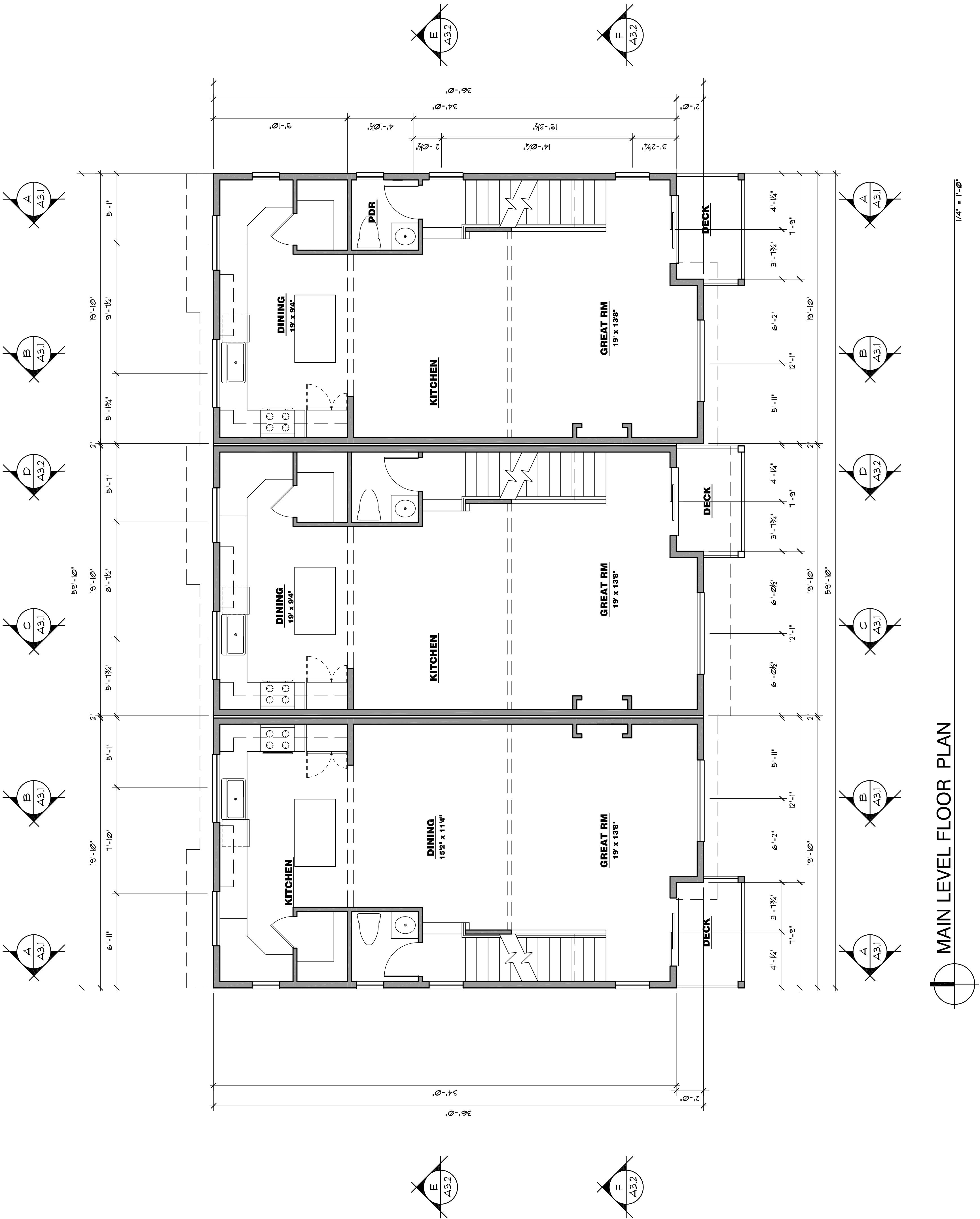
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DATE: 1/2/2014

SHEET #

**A1.3**

MAIN LEVEL PLAN



MAIN LEVEL FLOOR PLAN

1/4" = 1'-0"



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NOT FOR  
PRELIMINARY  
CONSTRUCTION

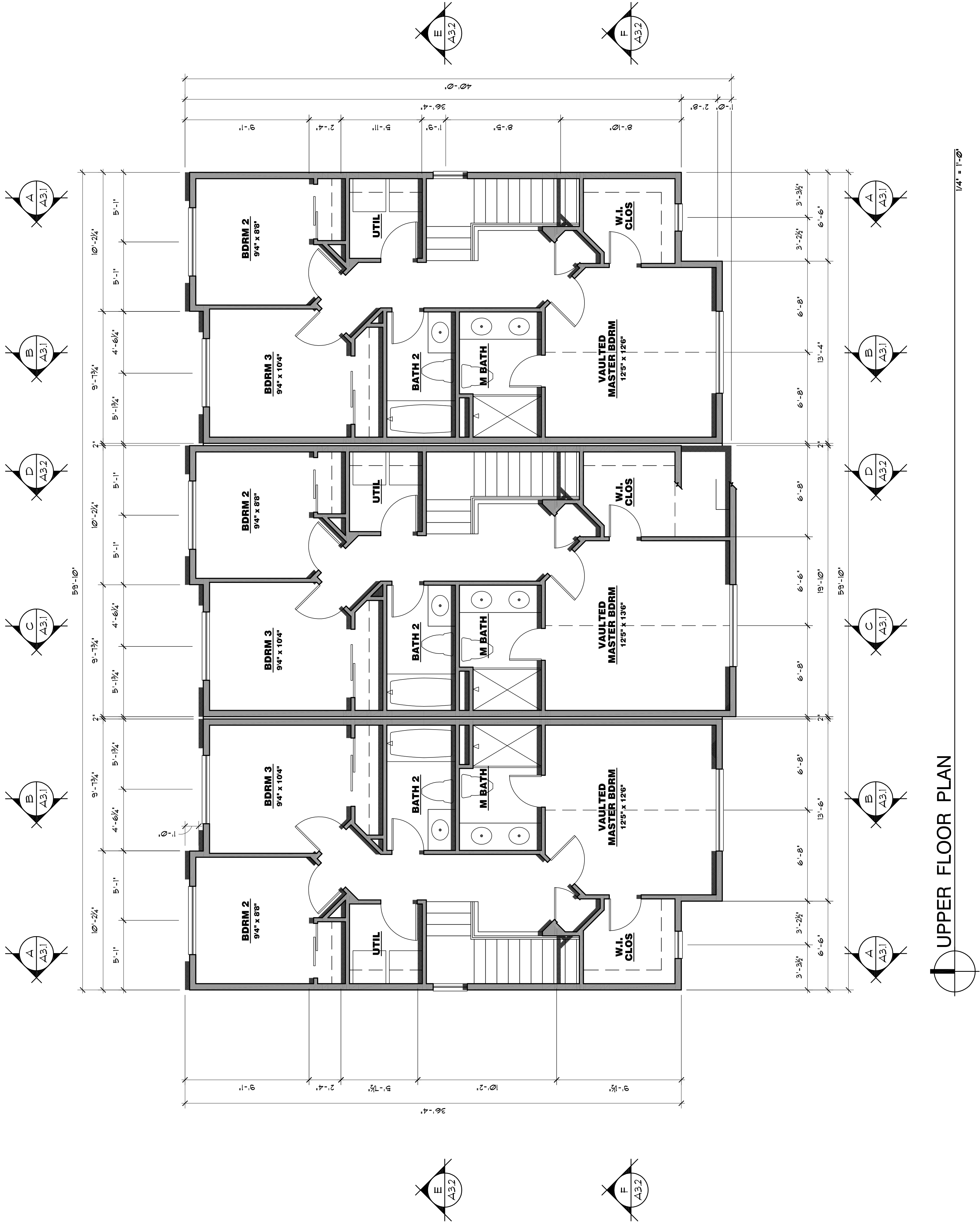
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CANBY, OR, 97013

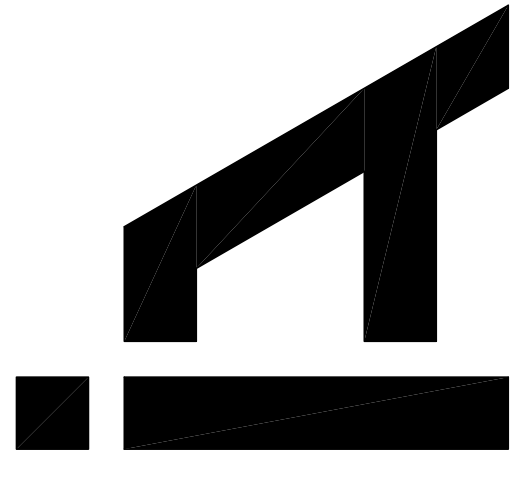
PROJ. NO.: 1371  
FILE: A-FF  
DATE: 2/14/2014

SHEET #

**A1.4**

UPPER LEVEL PLAN





**ISELIN  
ARCHITECTS  
P.C.**

1307 Seventh Street  
Oregon City, OR 97045  
503-656-1942 ph  
503-656-0658 fax  
www.iselinarchitects.com

NOT FOR  
PRELIMINARY  
CONSTRUCTION

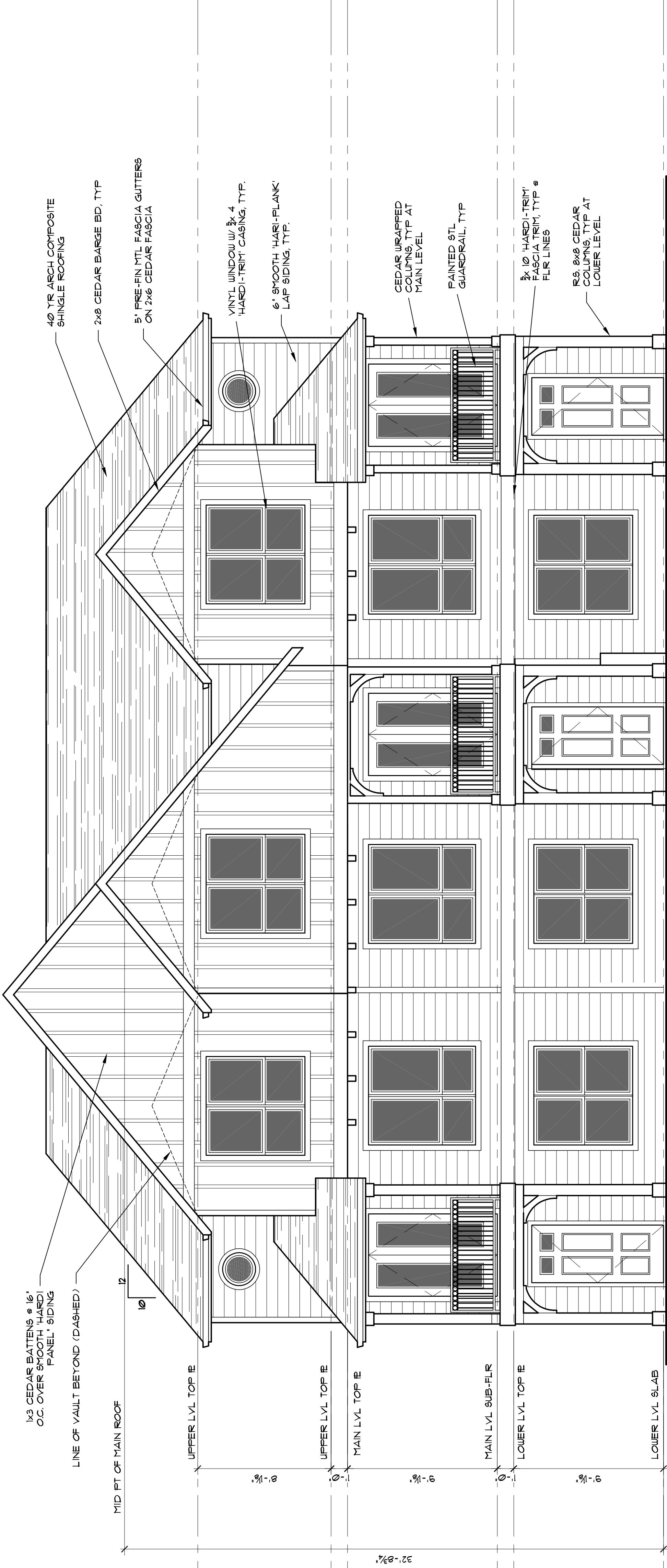
EMERALD GARDEN TOWNHOMES  
NW 3rd and NW 4th Ave  
CANBY, OR, 97013

PROJ. NO.: 1371  
FILE: X-XX  
DATE: 2/14/2014

SHEET #

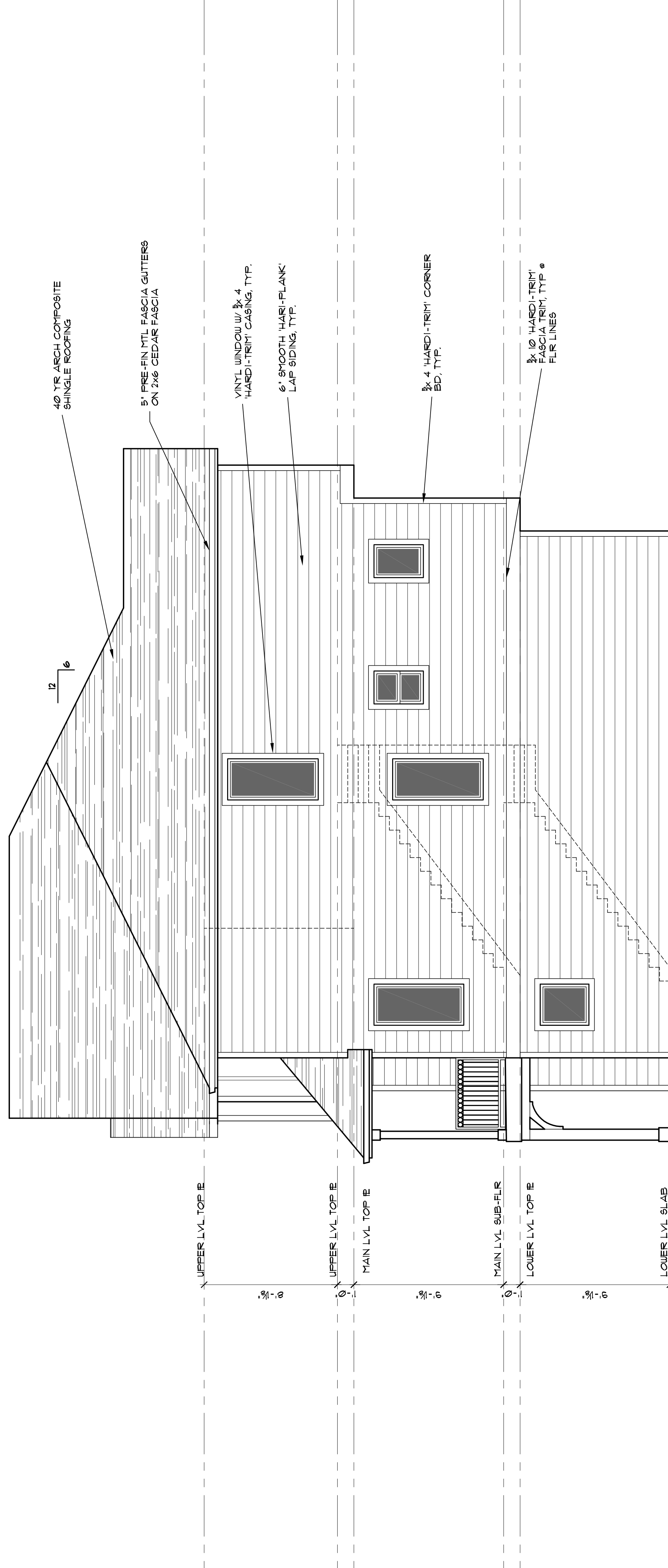
**A2.1**

ELEVATIONS



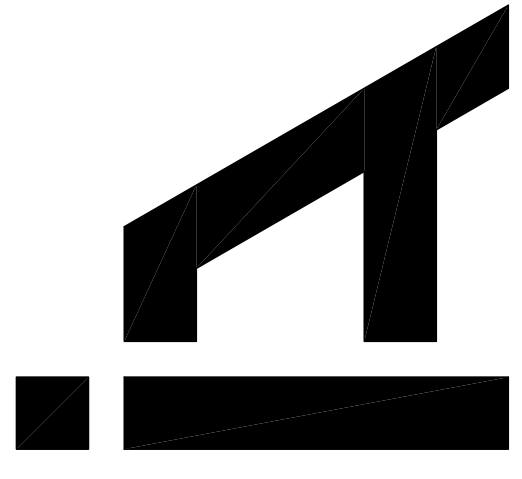
FRONT ELEVATION

1/4" = 1'-0"



RIGHT SIDE ELEVATION

1/4" = 1'-0"



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ARCHITECTS  
P.C.**

1307 Seventh Street  
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PRELIMINARY  
CONSTRUCTION

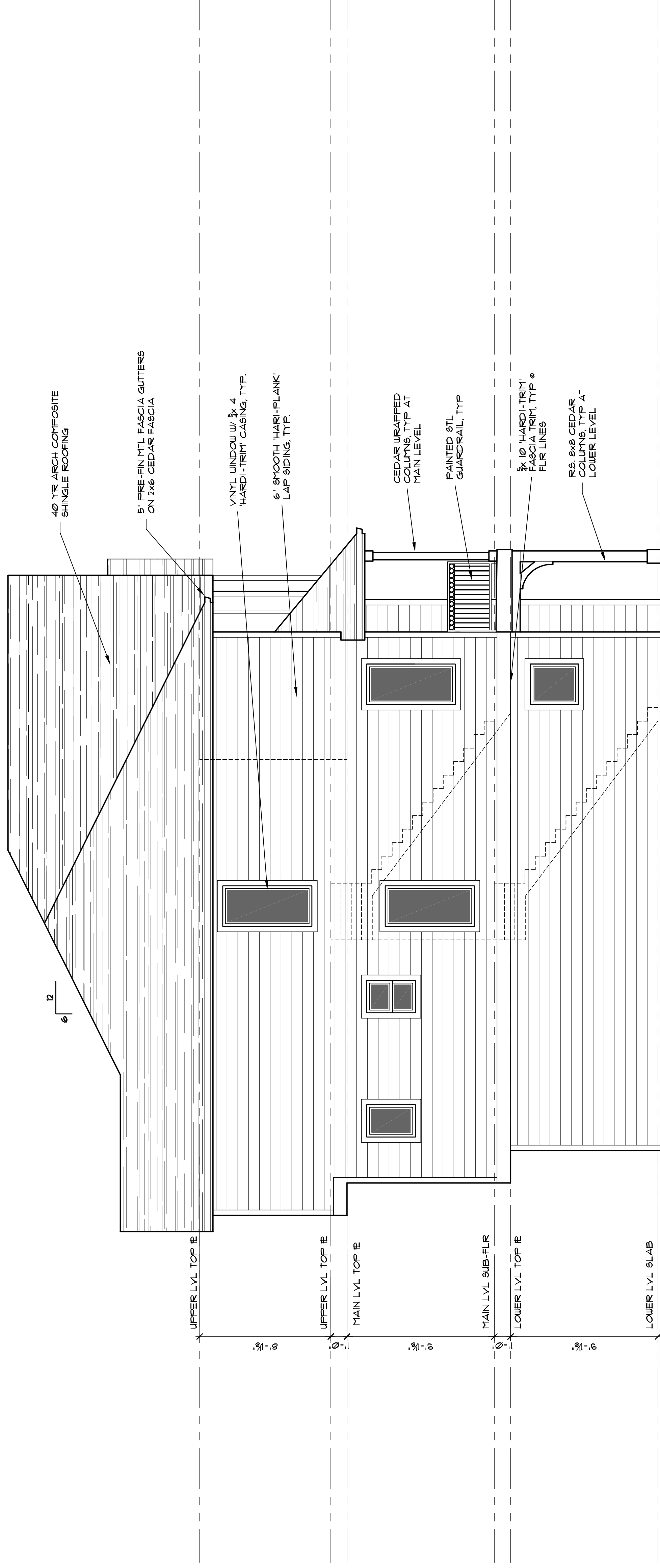
EMERALD GARDEN TOWNHOMES  
NW 3rd and NW 4th Ave  
CANBY, OR, 97013

PROJ. NO.: 1371  
FILE: X-XX  
DATE: 2/14/2014

SHEET #

**A2.2**

ELEVATIONS





# Emerald Garden Townhomes

Jason Bristol

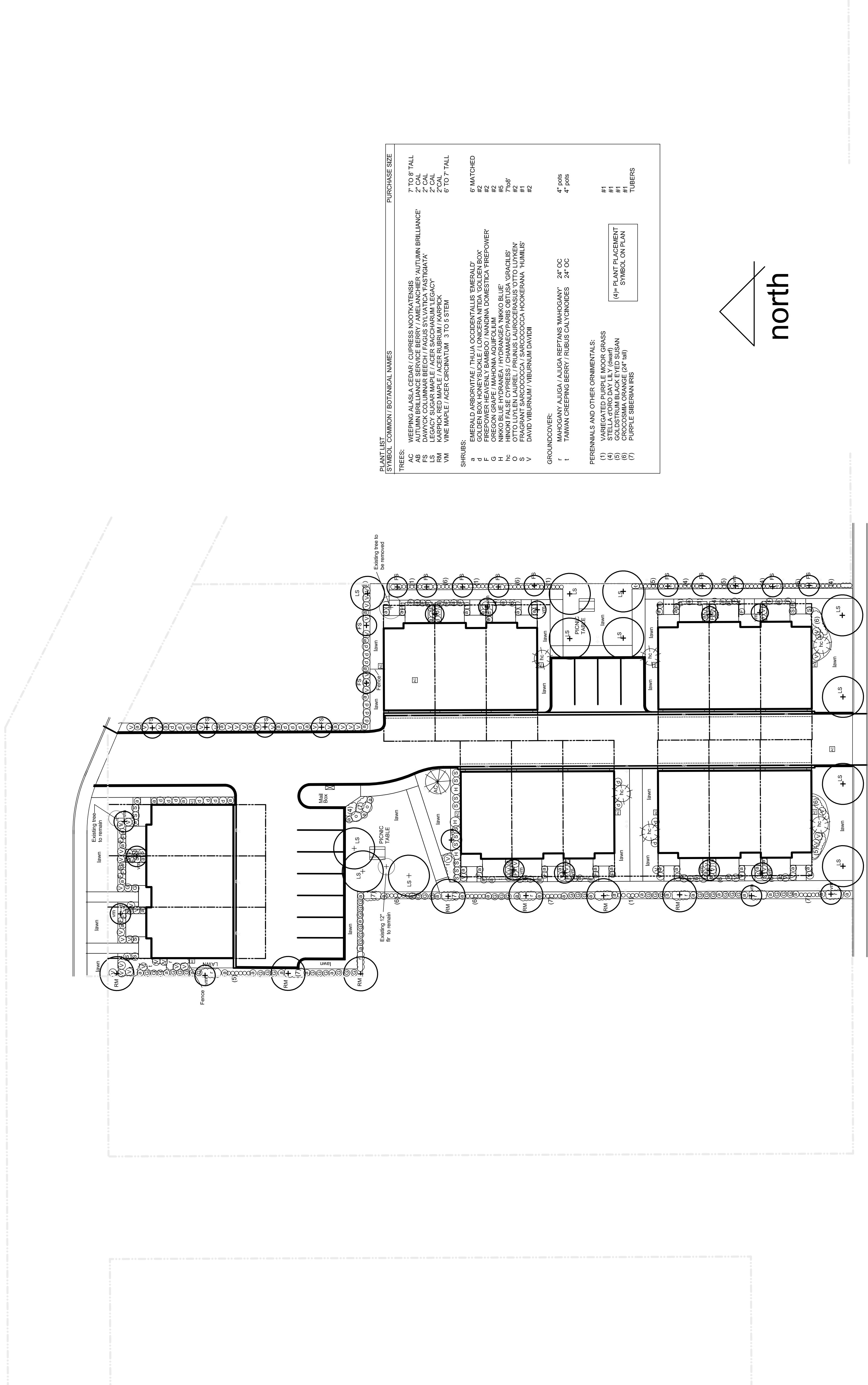
**John F. Lee**  
 LANDSCAPE ARCHITECT  
 8500 SW CECILIA TERR  
 PORTLAND, OR  
 503-936-4808

Scale: 1"=20'-0"

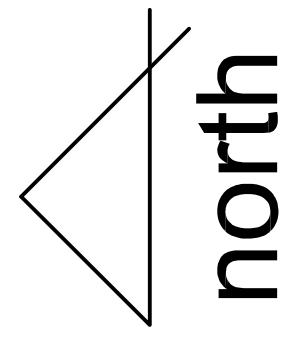
Date: 2-20-14

Planting Plan

# L-1



SYMBOL	COMMON / BOTANICAL NAMES	PURCHASE SIZE
<b>TREES:</b>		
AC	WEeping ALASIA CEDAR / CUPRESS NODKATENSIS	7 TO 8' TALL
AB	AUTUMN BRILLIANCE SERVICE BERRY / AMELANCHIER/AUTUMN BRILLIANCE	2" CAL
LS	LEWISIA CLARK / L. CLARK	2" CAL
LS	LEGACY SUGAR MAPLE / ACER SACCARINUM 'LEGACY'	2" CAL
RM	KARPICK RED MAPLE / ACER RUBRUM / KARPICK	2" CAL
VM	VINE MAPLE / ACER CIRCINATUM 3 TO 5 STEM	6 TO 7' TALL
<b>SHRUBS:</b>		
a	EMERALD ARBORVITAE / TAXUS OCCIDENTALIS 'EMERALD'	6" MATCHED
b	GOLDEN FOX HONEY SUCKLE / LONICERA NITIDA 'GOLDEN BOX'	#2
f	FIREPOWER HEAVENLY BAMBOO / NANDINA DOMESTICA 'FIREPOWER'	#2
g	OREGON GRAPE / MAHONIA AQUIFOLIUM	#2
h	HINOKI FALSE CYPRESS / TAXUS HINOKI BLUE	#2
hc	HINOKI FALSE CYPRESS / TAXUS HINOKI BLUE	7 to 8'
o	OTTO LUYKEN LAUREL / PRUNUS LAUROCESTRASUS 'OTTO LUYKEN'	#2
s	FRAGRANT SARCOCCOA / SARCOCCOA HOOKERIANA 'HUMILIS'	#1
v	DAVID VIBURNUM / VIBURNUM DAVIDI	#2
<b>GROUNDCOVER:</b>		
t	TAWNY CREEPING BERRY / RIBUS CALYCHOIDES 24" OC	4" pots
t	TAWNY CREEPING BERRY / RIBUS CALYCHOIDES 24" OC	4" pots
<b>PERENNIALS AND OTHER ORNAMENTALS:</b>		
(1)	VAREGATED PURPLE MOOR GRASS	#1
(4)	STELLA GORO DAY LILY (6/40/1)	#1
(5)	STELLA GORO DAY LILY (6/40/1)	#1
(6)	CRUCISSIMA ORANGE (24" 60)	TUBERS
(7)	PURPLE SIBERIAN IRE	TUBERS



Third Street





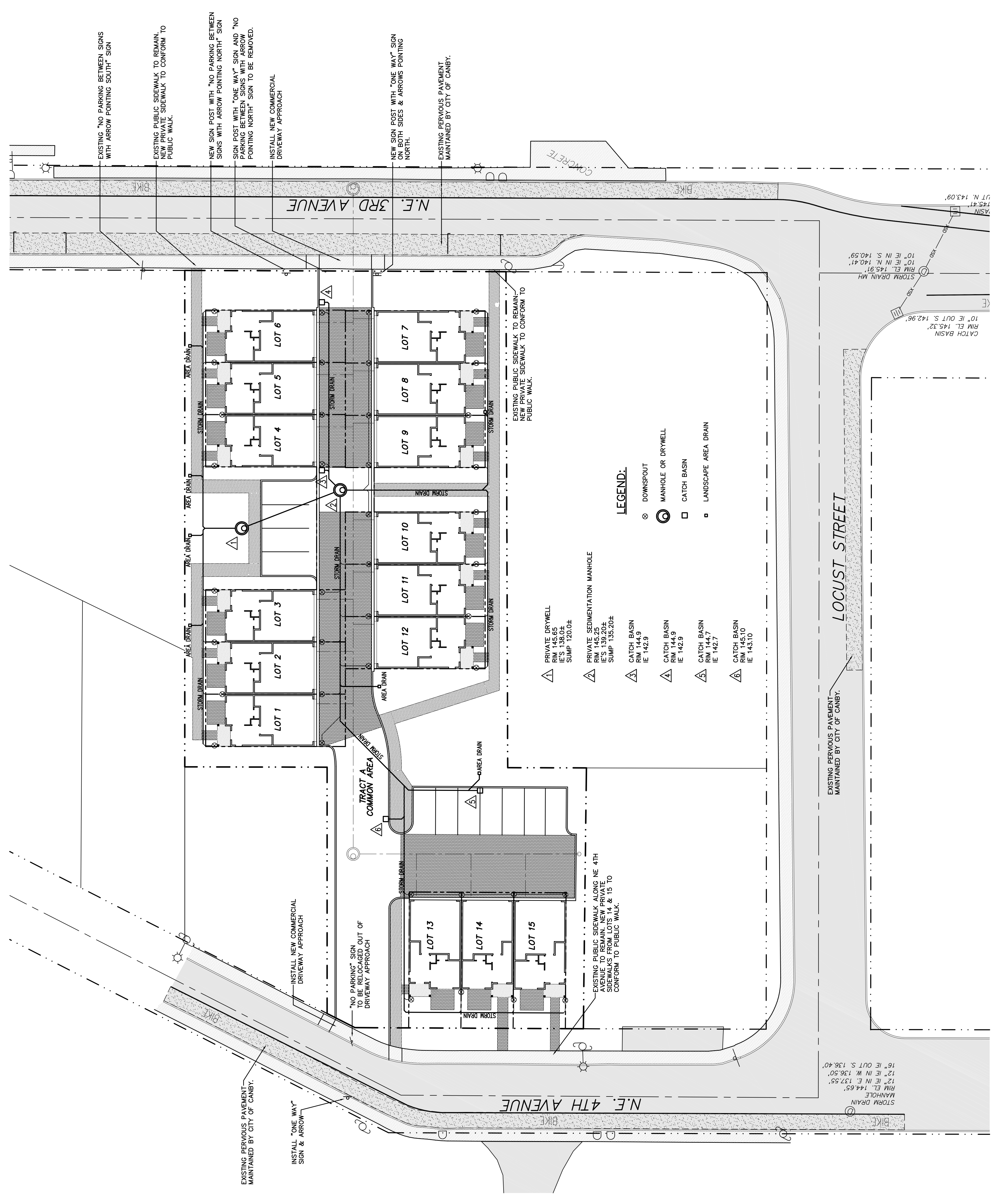
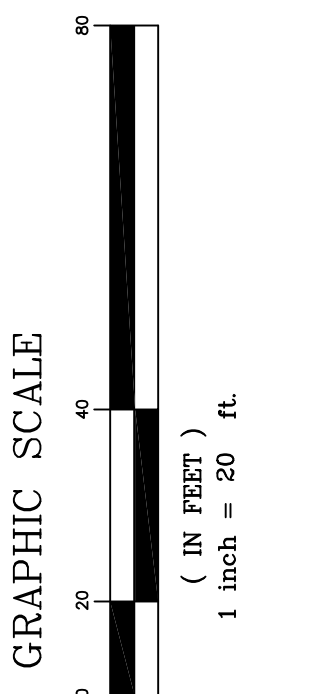
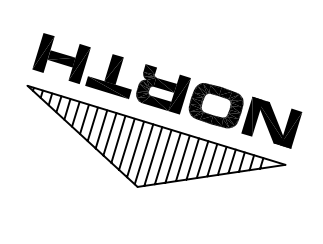
REVISIONS	BY

EMERALD GARDENS, Canby, OR  
 Jason Bristol - Developer

Street & Drainage Plan

**SISUL ENGINEERING**  
 376 PORTLAND AVENUE  
 GLADSTONE, OREGON 97027  
 (503) 657-0188  
 DRAWN PS  
 DATE FEB. 2014  
 SCALE 1" = 20'  
 SGL13-042  
 SHEET  
 OF 4

TENTATIVE PLAN



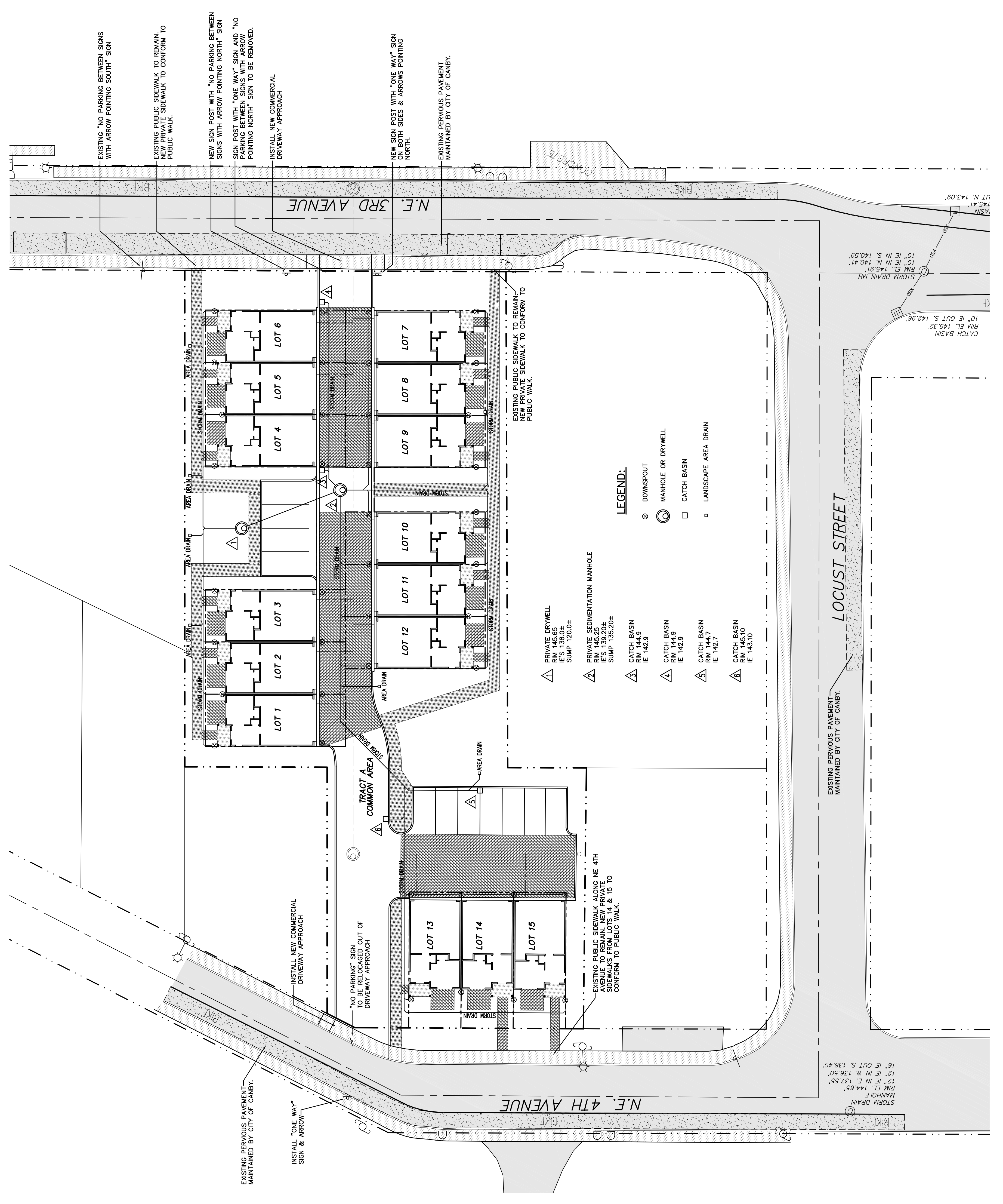
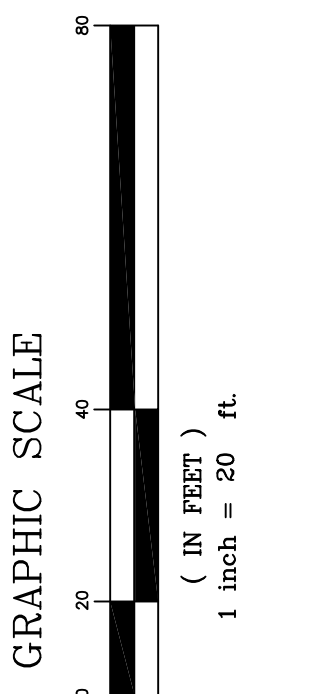
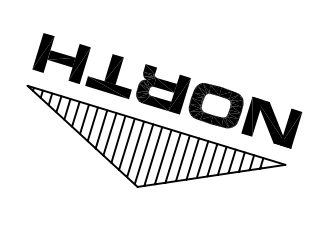
REVISIONS	BY

EMERALD GARDENS, Canby, OR  
 Jason Bristol - Developer

Street & Drainage Plan

**SISUL ENGINEERING**  
 376 PORTLAND AVENUE  
 GLADSTONE, OREGON 97027  
 (503) 657-0188  
 DRAWN PS  
 DATE FEB. 2014  
 SCALE 1" = 20'  
 SGL13-042  
 SHEET  
 OF 5

TENTATIVE PLAN



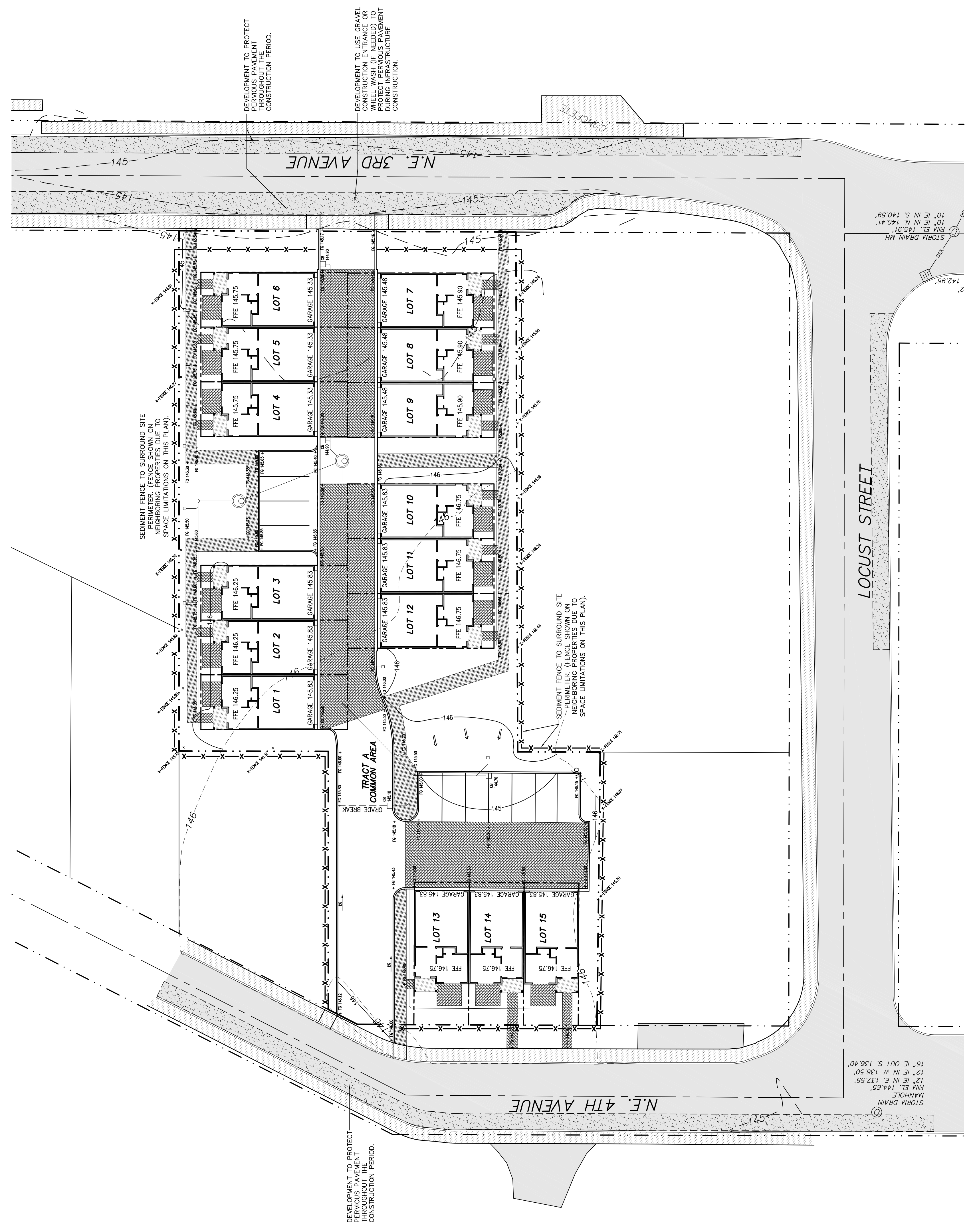
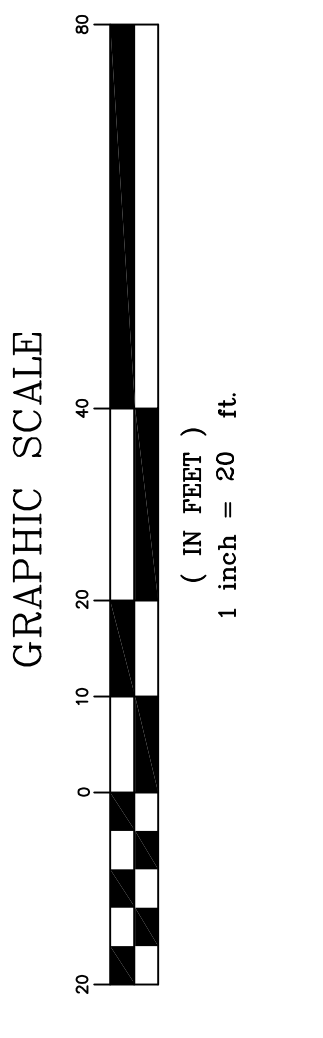
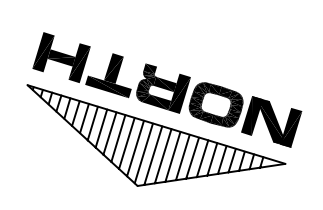
REVISIONS	BY

EMERALD GARDENS, Canby, OR  
 Jason Bristol - Developer

# Grading & Erosion Control Plan

**SISUL ENGINEERING**  
 376 PORTLAND AVENUE  
 GLADSTONE, OREGON 97027  
 (503) 657-0188  
 DRAFTER: [Name]  
 DATE: FEB. 2014  
 SCALE: 1" = 20'  
 DRAWN: PS  
 JOB: SGL13-042  
 SHEET: C14  
 OF 5 SHEETS

TENTATIVE PLAN



REVISIONS	BY

EMERALD GARDENS, Canby, OR  
 Jason Bristol - Developer

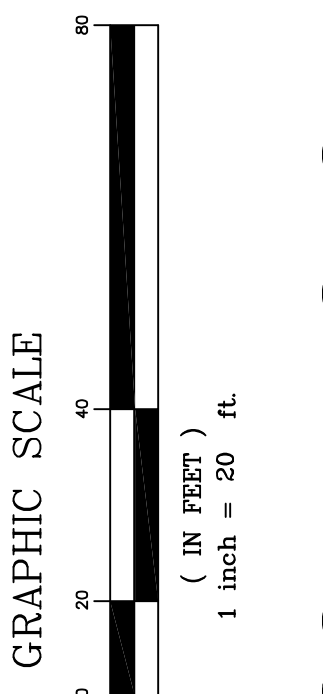
# Existing Conditions Map

**CENTERLINE CONCEPTS**  
 LAND SURVEYING, INC.  
 729 MOULANA AVE., SUITE 1 & 2  
 OREGON CITY, OREGON 97045  
 PHONE 503.650.0188 FAX 503.650.0189

DATE	FEB. 2014
SCALE	1" = 20'
DRAWN	PS
JOB	SGL13-042
SHEET	5

**C1.5**  
 SHEETS

TENTATIVE PLAN



## EXISTING CONDITIONS MAP

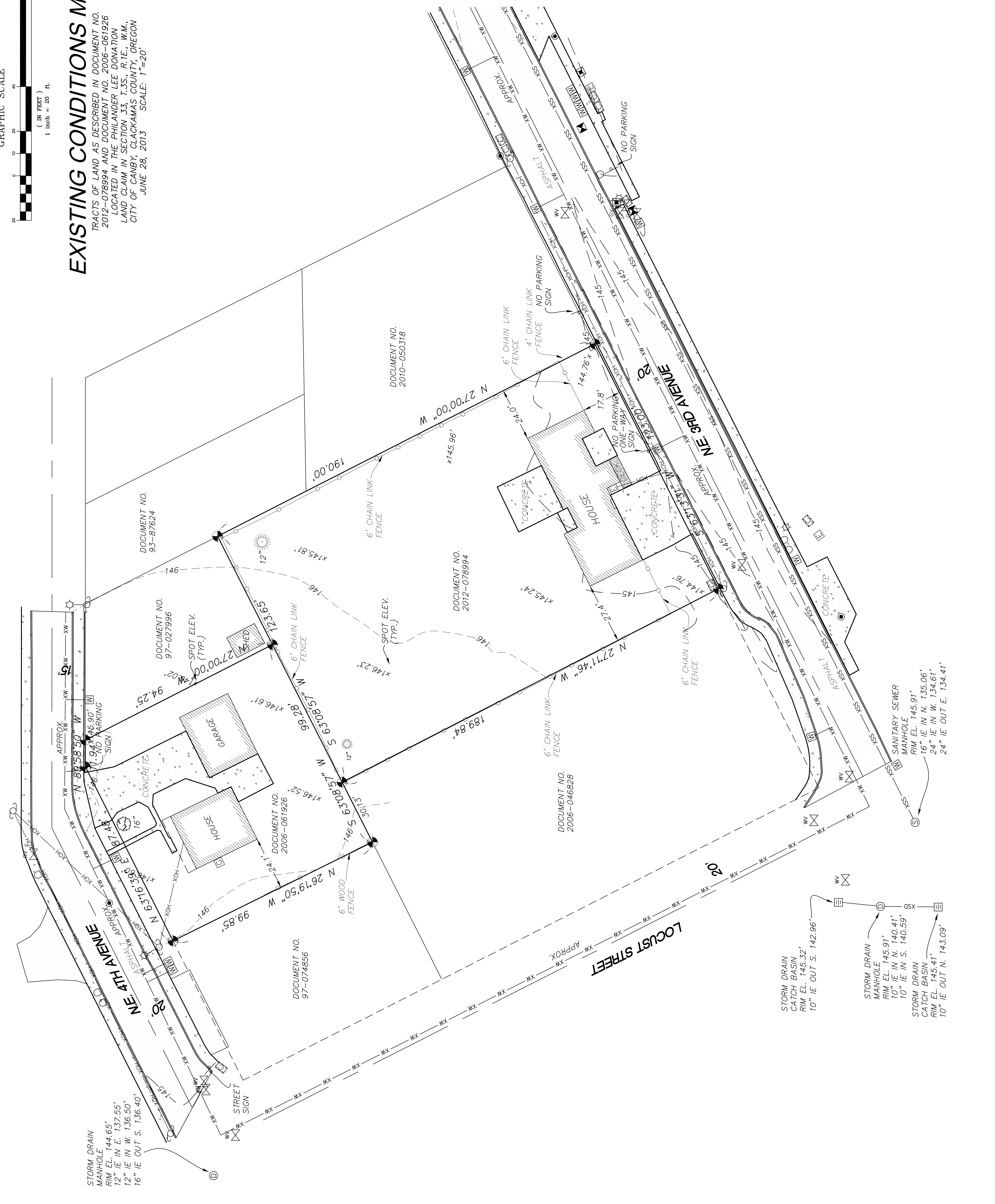
TRACTS OF LAND AS DESCRIBED IN DOCUMENT NO. 2012-078994 AND DOCUMENT NO. 2006-061926 LOCATED IN THE PHILANDER LEE DONATION LAND CLAIM IN SECTION 33, T.3S., R.1E., W.M., CITY OF CANBY, CLACKAMAS COUNTY, OREGON  
 JUNE 28, 2013 SCALE: 1"=20'

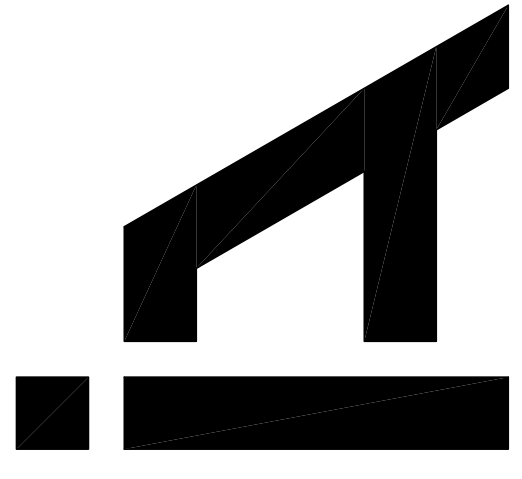
**SURVEY NOTES:**  
 THE DATA FOR THIS SURVEY IS BASED UPON CITY OF CANBY M.A.L. RECORDS AND THE INTERSECTION OF N. LOCUST STREET AND N.E. 3RD STREET.  
 A TRIMBLE SP-SERIES ROBOTIC INSTRUMENT WAS USED TO COMPLETE A CLOSED LOOP FIELD TRAVERSE.  
 AREA OF SUBJECT PARCEL: 33.28 S.F. OR 0.76 ACRES  
 THE BASIS OF RECORDS FOR THIS SURVEY IS PER MOVEMENTS FROM NUMBER 462 RECORDS OF CLACKAMAS COUNTY.  
 THE PURPOSE OF THIS SURVEY IS TO RESOLVE AND DETERMINE THE PERTINENT BOUNDARY ISSUES AND ENCROACHMENTS. NO PROPERTY CORNERS WERE SET IN THIS SURVEY.  
 THIS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE STANDARDS OF AN OREGON PROFESSIONAL SURVEYOR. (SPECIAL LICENSES, ETC.)

- LEGEND:**  
 Some symbols shown may not be used on map
- RECORDING TREE
  - EXPOSED TREE
  - UTILITY AND LIGHT POLE
  - GUY WIRE
  - TRAFFIC SIGNAL POLE
  - STORM SEWER MANHOLE
  - SAINTARY SEWER CLEANOUT
  - ELECTRIC METER
  - CATCH BASIN
  - SAINTARY SEWER MANHOLE
  - OVERHEAD POWER LINE
  - WATER VALVE
  - WATER METER
  - FIRE HYDRANT
  - ELECTRICAL LINE
  - COMMUNICATIONS LINE
  - SAINTARY SEWER LINE
  - STORM DRAIN LINE
  - GAS VALVE
  - GAS METER
  - WATER LINE
  - FENCELINE
  - SOIL
  - MAILBOX
  - UTILITY POLE
  - LIGHT POLE
  - ELECTRICAL POWER PEDestal
  - COMMUNICATIONS PEDestal
  - PROPERTY CORNER
  - IRRIGATION VALVE

**REGISTERED PROFESSIONAL LAND SURVEYOR**  
 OREGON 2007  
 JAMES BURTON BROWN  
 60379  
 VALID THROUGH DECEMBER 31, 2013

**CENTERLINE CONCEPTS**  
 LAND SURVEYING, INC.  
 729 MOULANA AVE., SUITE 1 & 2  
 OREGON CITY, OREGON 97045  
 PHONE 503.650.0188 FAX 503.650.0189





**ISELIN ARCHITECTS P.C.**

1307 Seventh Street  
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503-656-0658 fax  
www.iselinarchitects.com

NOT FOR  
PRELIMINARY  
CONSTRUCTION

**EMERALD GARDEN TOWNHOMES**  
NW 3rd and NW 4th Ave  
CANBY, OR, 97013

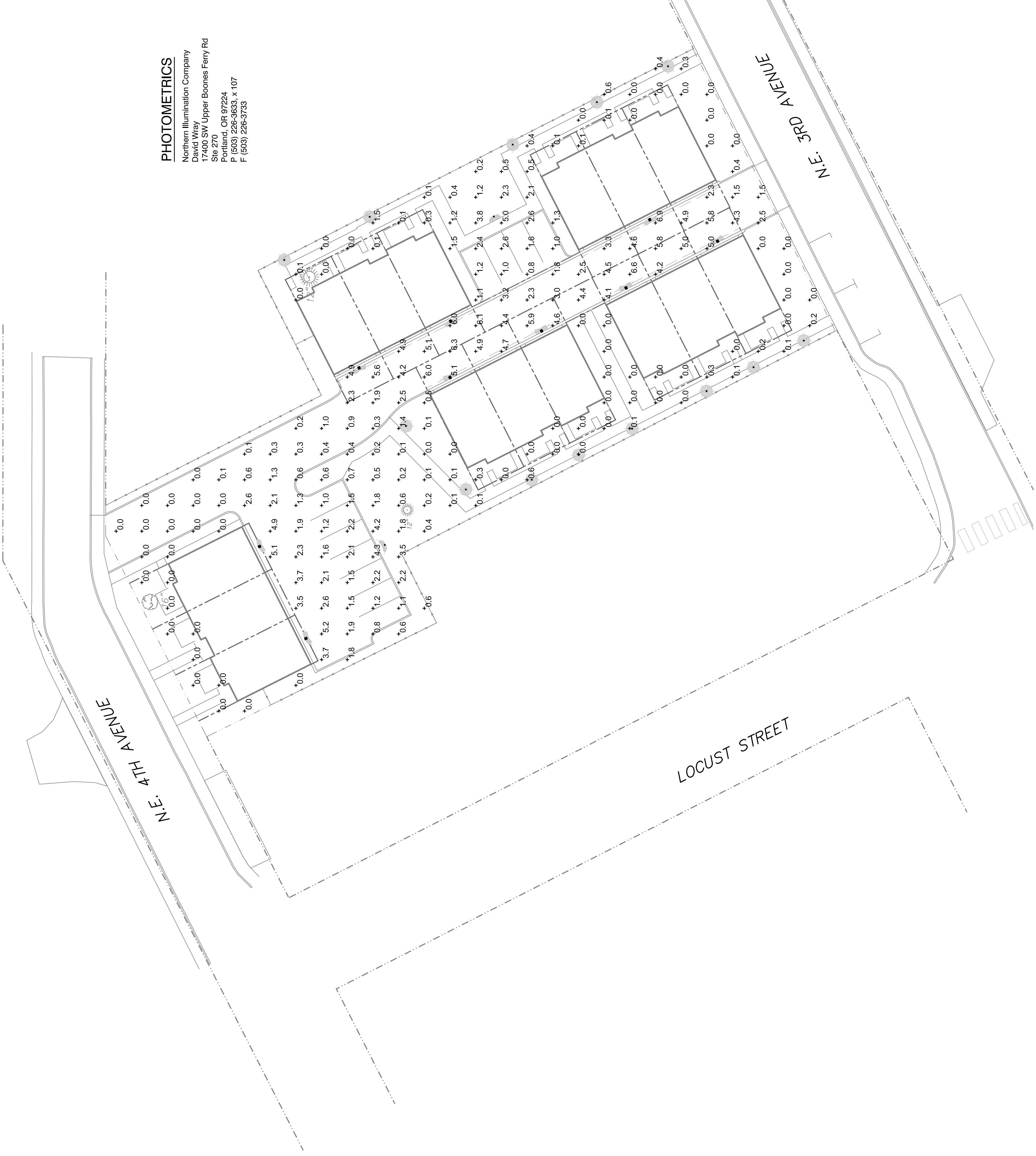
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FILE: A-SIT-PHOT  
DATE: 2/14/2014

SHEET #

**LT1**

PHOTOMETRICS

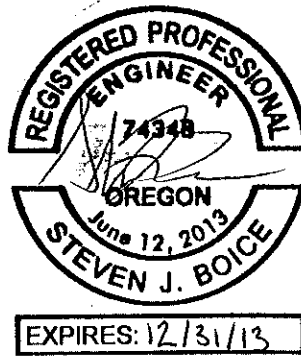
**PHOTOMETRICS**  
Northern Illumination Company  
David Way  
17400 SW Upper Boones Ferry Rd  
Ste 270  
Portland, OR 97224  
P (503) 226-3633, x 107  
F (503) 226-3733



**SITE PHOTOMETRICS PLAN**  
REFER TO CIVIL DRAWINGS FOR DIMENSIONS, UTILITIES, GRADING, AND EROSION CONTROL  
1" = 20'0"



# MEMORANDUM



**DATE:** October 25, 2013  
**TO:** Bryan Brown, City of Canby  
**FROM:** Chris Maciejewski, PE, PTOE  
Randy Johnson, PE, PTOE  
Steve Boice, PE  
**SUBJECT:** Canby Garden Home Residential Traffic Impact Analysis P#11010-027-000

This memorandum summarizes the potential transportation impacts associated with the proposed Garden Home Residential Development in Canby, Oregon. This memorandum has been prepared through our on-call services contract.

The proposed development would consist of 15 individual dwelling units. The two tax lots that combine to form the project site are located at 433 NE 4th Avenue and 458 NE 3rd Avenue, near the Clackamas County Fair and Event Center. These two lots yield 33,190 square feet of property, of which 19,618 square feet would be utilized for building space (59 percent). The 15 unit lots would range from 1,030 to 1,660 square feet. The site is zoned R2 (High Density Residential) and the intended use is consistent with the land use zoning and comprehensive plan.

Each dwelling unit would be served by an internal 20 foot wide private drive with two-way flow between NE 3rd Avenue and NE 4th Avenue (see attached site plan). NE 3rd Avenue, NE 4th Avenue, and N Locust Street are all one-way and are classified as collector streets. It is our understanding that the dwelling units would share a common wall, be 3-stories in height, and feature 2-car garages accessed via the access drive. The front doors would be on the opposite end of the units which would provide pedestrian access to on site sidewalk and a shared common space (7,136 square feet). A total of seven visitor shared parking spaces are proposed on site.

It was determined that the proposed development would not generate enough traffic to warrant an off-site transportation impact analysis, however, estimated project trip generation and a review of site access and circulation are documented below.

## Project Trip Generation

The amount of new vehicle trips generated by the proposed residential development was estimated using trip generation estimates published in the ITE Trip Generation Manual for similar land use type<sup>1</sup>. Trip generation estimates for the proposed residential development are provided for daily, morning, and the evening peak hours and are summarized in Table 1.

<sup>1</sup> Trip Generation Manual, Institute of Transportation Engineers, 9th Edition.



**Table 1: Proposed Project Trip Generation Estimate**

Land Use/ ITE Code	Period	Trip Rate	Trips In	Trips Out	Total Trips
<b>15 Dwelling Units Residential Condo/Townhouse ITE Code 230</b>	Daily	5.81/DU	44	43	87
	AM Peak Hour	0.44/DU	1	5	6
	PM Peak Hour	0.52/DU	5	3	8

As listed, the project would add less than 10 vehicle trips to the transportation network during the morning and evening peak hours. This increase in vehicle trips would not significantly impact traffic operations along the surrounding transportation network.

**Site Access and Circulation Review**

Access to the site is proposed via a two-way private drive which would access both NE 3<sup>rd</sup> Avenue and NE 4<sup>th</sup> Avenue approximately 150 feet east of N Locust Street. A site visit was made to ensure that adequate sight distance would be provided and that all vision triangles would be clear from any obstructions at both access locations<sup>2</sup>. NE 3<sup>rd</sup> Avenue and NE 4<sup>th</sup> Avenue are both posted at 25 miles per hour (mph). Table 2 summarizes the required and available intersection sight distance at both proposed site accesses.

**Table 2: Intersection Sight Distance at Proposed Project Accesses**

Access	Posted Speed	Turning	Sight Distance Required <sup>3</sup>	Available Sight Distance	Sight Distance Adequate?
<b>Proposed Access at NE 3<sup>rd</sup> Avenue</b>	25 mph	Left (1-way)	240 ft.	240+ ft.	Yes
<b>Proposed Access at NE 4<sup>th</sup> Avenue</b>	25 mph	Left (1-way)	240 ft.	60 ft.	No

<sup>2</sup> Site visit conducted by DKS Associates on September 27, 2013.

<sup>3</sup> A Policy on Geometric Design of Highways and Streets, AASHTO, 2011, Intersection Sight Distance, based on posted speed of 25 mph.

As shown, only the proposed access at NE 3<sup>rd</sup> Avenue would meet sight distance requirements. The sight line looks under the branches of a large evergreen tree to the west as shown in Figure 1. It is recommended that no less than 7 feet of vertical clearance under this tree be maintained to preserve the available intersection sight distance. Also shown in Figure 1 is a single on-street parking space on NE 3<sup>rd</sup> Avenue located approximately 30 feet to the west from the centerline of the proposed access. Adequate sight distance is available beyond this parking space.



**Figure 1: NE 3<sup>rd</sup> Avenue Proposed Access Intersection Sight Distance**

The NE 4<sup>th</sup> proposed access location currently provides 60 feet of intersection sight distance due to existing trees to the east as shown in Figure 2. It is recommended that these trees be limbed up to 7 feet of vertical clearance in order to improve sight lines. Immediately east of these trees there is 280 feet of available intersection sight distance, which would be adequate under the site conditions. Sight distance is limited beyond 280 feet by a small evergreen tree, a utility pole and a birch tree that is in the sidewalk path as shown in figure 3.



**Figure 2: NE 4<sup>th</sup> Proposed Access Intersection Sight Distance**



**Figure 3 NE 4<sup>th</sup> Proposed Access Intersection Sight Distance East of Obstruction**



Per the City of Canby Public Works Design Standards (June 2012), the minimum spacing “driveway to driveway” as measured from centerline to centerline on both sides of the street is 100 feet for collector streets. There is an existing driveway at the proposed access on NE 3rd Avenue for a single family home. The proposed access location would be located 100 feet from existing residential driveways to the east and west along the north side of the roadway. There is an existing commercial driveway opposite the proposed driveway which spans a length of 170 feet.

There is also an existing driveway at the proposed access on NE 4th Avenue for a single family home. This proposed access would be located 60 feet east of an existing driveway on the north side of NE 4th Avenue which serves the fairgrounds and 75 feet west of an existing residential driveway on the south side of NE 4th Avenue. This proposed access would not meet City of Canby minimum access spacing requirements.

### Findings

- The increase in vehicle trips associated with the proposed project would not significantly impact traffic operations along the surrounding transportation network.
- The tree located on the northeast corner of NE 3<sup>rd</sup> Avenue/N Locust Street should be maintained to provide no less than 7 feet of vertical clearance above the sidewalk to preserve the available intersection sight distance. The applicant should coordinate with neighboring property owners to coordinate this effort.
- The trees located on the south side of NE 4th Avenue should be maintained to provide no less than 7 feet of vertical clearance above the sidewalk to improve the available intersection sight distance to that required (240 feet). The applicant should coordinate with neighboring property owners to coordinate this effort. Prior to occupation of the site, sight distance at the project access point will need to be verified, documented, and stamped by a registered professional Civil Engineer licensed in the State of Oregon.
- A deviation to the minimum access spacing requirement would be needed for the proposed access along NE 4<sup>th</sup> Avenue. Although the proposed access currently serves a single family home and does not currently meet access spacing requirements, the intended use and intensity of this access would change with the proposed application. Currently NE 4<sup>th</sup> Avenue is a one-way street westbound and the existing access spacing along the south side of NE 4<sup>th</sup> Avenue (185) would not allow for access spacing to be met. Additionally, the fairgrounds parking lot is gated and primarily used during events.
- It is recommended that a deviation to the access spacing along NW 4<sup>th</sup> Avenue be granted. The existing accesses to the east and west along the south side of the roadway would not allow for the minimum access spacing to be met. By code, the tax lot is permitted an access along NW 4<sup>th</sup> Avenue and the proposed access is located directly between these existing accesses.

If you have any questions, please feel free to call or email.



**Real-World Geotechnical Solutions**  
Investigation • Design • Construction Support

February 13, 2014  
Project No. 14-3297

**Jason Bristol**  
21733 S. Hwy 99E  
Canby, Oregon 97013

Via Email: Jason Bristol (jbristol@web-ster.com)

**SUBJECT: INFILTRATION TESTING RESULTS**  
**NE 3RD AVENUE CANBY INFILTRATION**  
**458 NE 3RD AVENUE & 433 NE 4TH AVENUE**  
**CANBY, OREGON**

This report presents the results of infiltration testing conducted by GeoPacific Engineering, Inc. (GeoPacific) for the above-referenced project. This work was performed in accordance with the client's authorization of GeoPacific's 'Agreement for Geotechnical Services.'

**SITE AND PROJECT DESCRIPTION**

The subject site consists of two properties, 458 NE 3rd Avenue and 433 NE 4th Avenue. The site is approximately 0.76 acres in size and is located north of NE 3rd Avenue and south of NE 4th Avenue in Canby, Oregon. Topography is relatively level to very gently sloping down to the south. Two single family residences exist on the site. Vegetation on the site consists primarily of short grasses, brush, and some small to large trees.

It is our understanding that the proposed development may include pervious pavers and/or storm water disposal facilities at depths of 3 to 5 feet for shallow systems such as swales or 8 to 10 feet below the ground surface for deeper systems such as dry wells.

**INFILTRATION TESTING**

On January 31, 2014, a representative of GeoPacific Engineering, Inc. (GeoPacific) performed five falling head infiltration tests on the site in 4 test pits, designated TP-1 through TP-4. Two open hole infiltration tests were performed in native sandy SILT (ML) at shallow depths of 2 to 2.5 feet for stormwater infiltration facilities such as pervious pavers. Two pushed-pipe infiltration tests were performed in native silty fine to medium SAND (SM) at depths of 4 to 5 feet for stormwater infiltration facilities such as swales or stormtech chambers. One open hole infiltration test was performed in native gravelly fine to coarse SAND with some silt (SP-SM) at a depth of 6.5 feet for stormwater infiltration facilities such as swales or stormtech chambers. Gravelly fine to coarse SAND with some silt (SP-SM) extended beyond the maximum depths of our explorations in test pits TP-1 and TP-4 (8.5 feet). Significant caving was observed at

depths below 4 feet in test pits TP-1 and TP-4. The soils encountered in the test pits are summarized in Table 1.

**Table 1 - Results of Infiltration Testing**

Depth (ft)	Soil Description
0 - 1.5	Dark brown, soft, sandy SILT (ML) with fine to medium roots throughout the upper 8 inches
1.5 - 6.5	Brown, loose, silty fine to medium SAND (SM)
6.5 - 8.5	Gray, medium dense, gravelly fine to medium SAND with some SILT (SP-SM)

The fine grained native soils were pre-saturated for a period of approximately 3 hours prior to performing the tests. During the tests, water levels were measured over 30 minute intervals with approximate head pressures ranging between 8 and 24 inches until three consecutive measurements showing a consistent infiltration rate were achieved. The infiltration tests were performed at the bottom of test pits, labeled TP-1 through TP-4, excavated with a trackhoe provided by the client. Table 2 presents a summary of our infiltration test measurement results.

**Table 2 - Results of Infiltration Testing**

Location	Depth (ft)	Infiltration Rate (in/hr)	Soil Description
TP-1	5	2.8	Silty fine to medium SAND (SM)
TP-2	2.5	1.7	Sandy SILT (ML)
TP-3	2	5.8	Sandy SILT (ML)
TP-4	4	8.3	Silty fine to medium SAND (SM)
TP-4	6.5	15	Gravelly fine to medium SAND with some SILT (SP-SM)

The test results indicate that infiltration rates at the site are low to moderate at depths less than 6.5 feet, and are moderate to high at depths beyond 6.5 feet. The measured rates reflect both horizontal and vertical pathways.

**CONCLUSIONS AND RECOMMENDATIONS**

We understand that plans for project development may include subsurface disposal of stormwater using pervious pavers and shallow infiltration facilities, such as swales or stormtech chambers. Infiltration test results indicate that infiltration rates are at least 1.7 inches per hour at depths of 1 to 2.5 feet, at least 2.8 inches per hour at depths of 2.5 to 6.5 feet, and at least 15 inches per hour at depths beyond 6.5 feet. We typically suggest a factor of safety ranging from 2 to 4 depending on many factors including the type and location of the facility, regulatory stipulations, and the ability to safely convey potential overflow to an appropriate discharge point. Systems should be constructed as specified by the designer and/or in accordance with the applicable stormwater design codes. Stormwater exceeding soil infiltration and/or soil storage capacities will need to be directed to a suitable surface discharge location.

## ENVIRONMENTAL CONSIDERATIONS AND LIMITATIONS

Subsurface stormwater disposal systems have the potential to affect groundwater quality, since they provide a more direct pathway for infiltrating surface water to reach groundwater aquifers. Consequently, disposal systems should be constructed and maintained in accordance with Oregon Department of Environmental Quality requirements for groundwater protection. Systems receiving runoff from pavement areas, should include water quality elements such as oil traps, filters or similar measures.

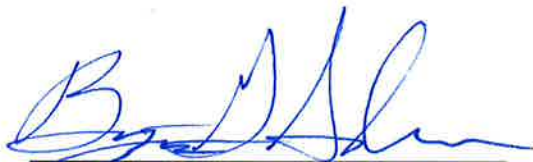
Infiltration test methods and procedures attempt to simulate the as-built conditions of the planned subsurface disposal system or systems. However, due to natural variations in soil properties, actual infiltration rates may vary from the measured and/or recommended design rates. Storm events in excess of the design event are inevitable. All systems should be constructed such that potential overflow is discharged in a controlled manner that will not endanger slopes or structures.

Within the limitations of scope, schedule and budget, GeoPacific attempted to execute these services in accordance with generally accepted professional principles and practices in the fields of geotechnical engineering and engineering geology at the time the report was prepared. No warranty, express or implied, is made. The scope of our work did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous or toxic substances in the soil, surface water, or groundwater at this site.

We appreciate this opportunity to be of service. Please call if you have any questions.

Sincerely,

**GEOPACIFIC ENGINEERING, INC.**



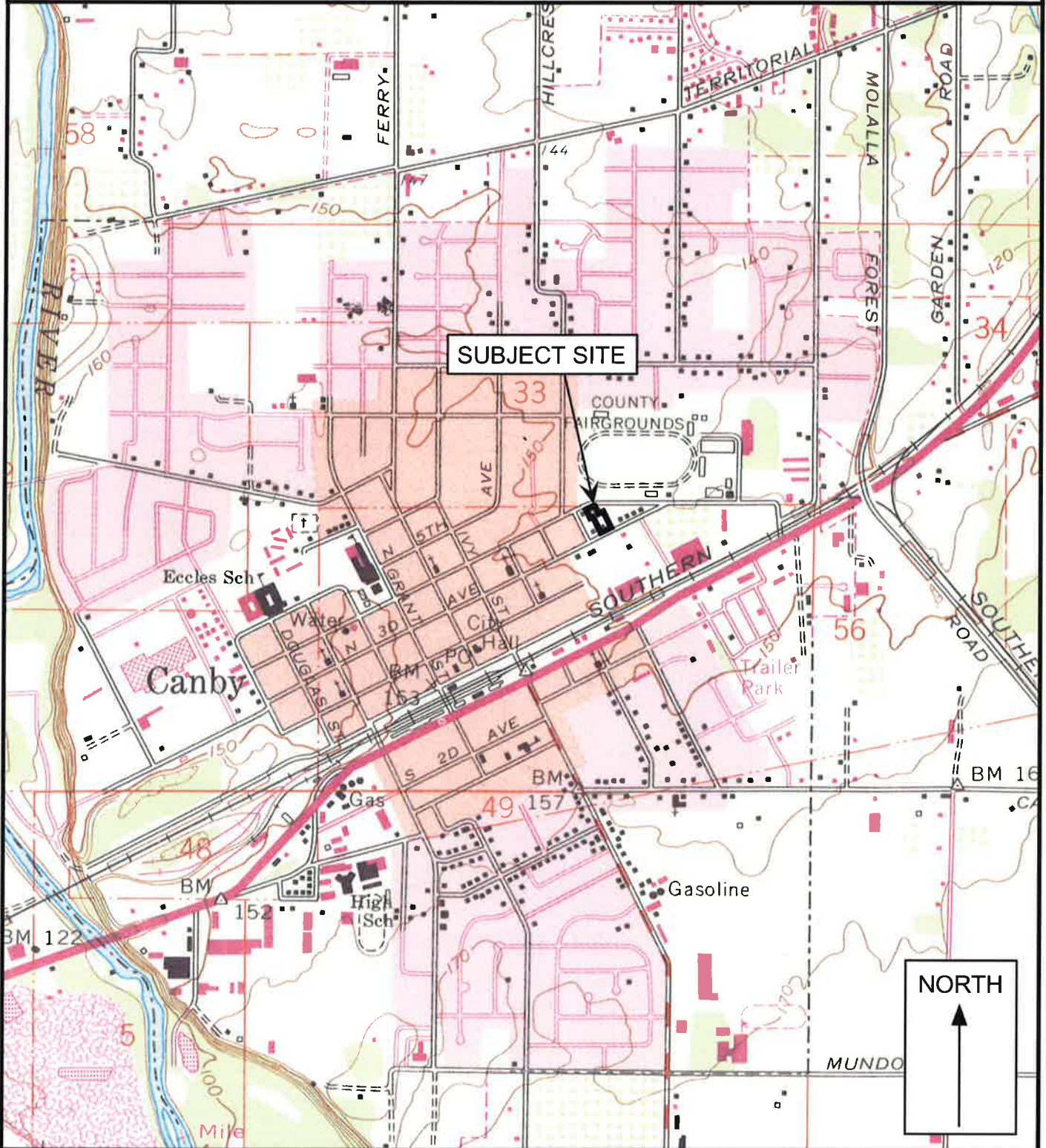
Benjamin G. Anderson, E.I.T.  
Geotechnical Staff



**EXPIRES: 06/30/2015**

James D. Imbrie, G.E., C.E.G.  
Principal Geotechnical Engineer

Attachments: Figure 1 - Vicinity Map  
Figure 2 - Site Plan and Exploration Locations



**Legend**

Approximate Scale 1 in = 3,000 ft

Date: 02/13/14

Drawn by: BGA

Base map: U.S. Geological Survey 7.5 minute Topographic Map Series, Canby, Oregon Quadrangle, 1961 (Photorevised 1985).

Project: NE 3rd Avenue Canby Infiltration  
Canby, Oregon

Project No. 14-3297

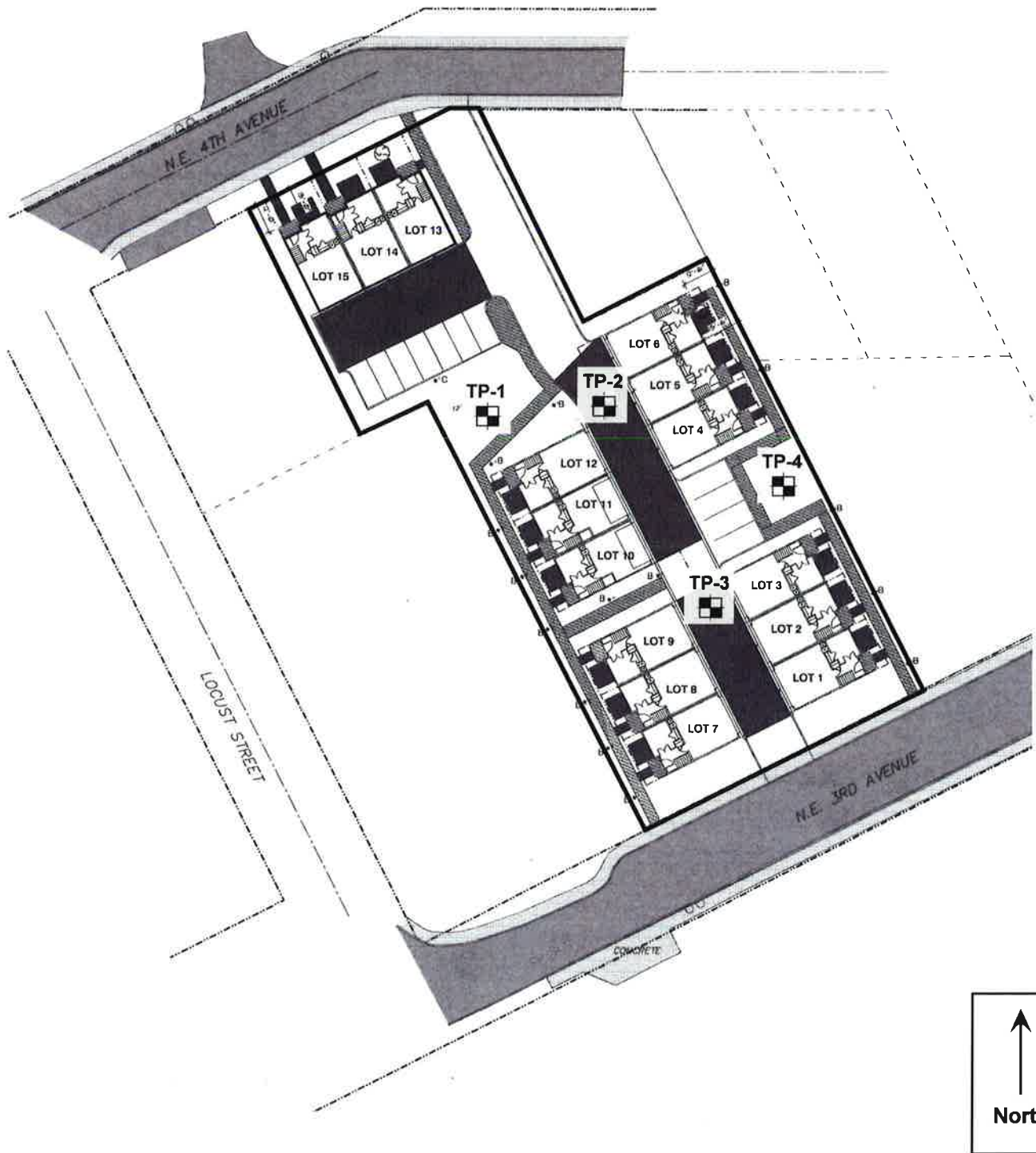
FIGURE 1






14835 SW 72nd Avenue  
 Portland, Oregon 97224  
 Tel: (503) 598-8445 Fax: (503) 941-9281

# SITE PLAN AND EXPLORATION LOCATIONS



### Legend

TP-1  
 Test Pit Designation and Approximate Location

0 60'  
 APPROXIMATE SCALE 1"=60'

Date: 02/12/14  
 Drawn by: BGA

Project: NE 3rd Avenue Canby Infiltration  
 Canby, Oregon

Project No. 14-3297

FIGURE 2

# MEMORANDUM

**TO:** Bryan Brown, Planning Director  
**FROM:** Jason Bristol  
**DATE:** January 18, 2014  
**RE:** Notes from neighborhood meeting – 458 N.E. 3<sup>Rd</sup> / 433 N.E. 4<sup>th</sup> PUD

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Yesterday, we held the neighborhood meeting to discuss development plans of 458 N.E. 3<sup>rd</sup> Ave. and 458 N.E. 4<sup>th</sup> Ave. I sent out numerous invitations and nine people participated in the meeting, two telephoned and two wrote letters.

The general consensus of the proposed development was positive and the improvements will help turn the predominately blighted area into a desirable neighborhood. In fact, we discussed how the proposed improvements would be a catalyst for future investment in the area.

One attendee was interested in knowing how surface water and rain drains would be handled. His older home is in the area, slab on grade, and experiences water issues. We let him know we were working with Pat Sisul, Civil Engineer, who has completed numerous projects in Canby and is familiar with the area soils and drainage. We also discussed swales and the extensive amount of pervious ground coverage, including pervious cement and pavers, helping to mitigate water issues.

Another attendee asked if the access road would be public or private and if speeding would be an issue. We let him know the access road would be private and we would look into the installation of speed bumps to slow traffic. Additionally, we will be posting the entrances as “Private Access – Owners and Guests Welcome.”

It was asked if we had done a Traffic Impact Study (TIS) and how the additional trips by the residents would affect the area. We stated a TIS was completed and the findings were the additional trips generated by the increased density were insignificant. Therefore, the impact of the proposed development would not significantly impact the traffic in the area.

The last concern from the meeting was where construction workers would park. We explained the buildings would be constructed in phases starting with the two internal buildings. This would reduce the number of construction workers on-site at any one time. The 11 parking spots would be available and one side of the private access could be used temporarily if necessary.

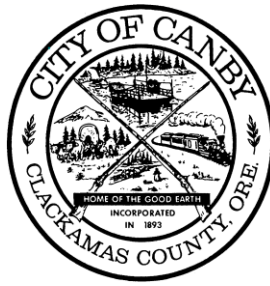
I received a call from Laurie Bothwell of the Clackamas County Event?Advent Center. She expressed a concern about the added traffic the development would generate during fair week. I pointed out that the residents could exit the development onto N.E. 4<sup>th</sup> Ave., travel to S. Ivy St., and proceed North on 99E, mitigating the need to pass by the fairgrounds. She was also interested in letting me know about the congestion during the

fair week. I let her know I was aware of the fair congestion and accepted it as an “existing condition.”

Another call was from Paul Snegirev, adjacent property owner approved for future building on his site. He was excited about the project and how it would “improve” the neighborhood.

A letter from Cherrol Pacholl expressed concern about the residents looking down into neighboring yards. While her property is not adjacent to the proposed development, this was the only instance where the concern was brought up. In reality, any structure greater than a single level will have this situation. Secondly, the Canby Municipal Code allows building height of 35 feet. However, to increase the privacy for all, we plan to install a variety of trees and vertical shrubs along both the East and West property lines per the landscape plan. She also expressed a concern that by building owner occupied three bedroom units, control over the number of people and vehicles might be diminished. While Oregon Law addresses occupancy, the Canby Municipal Code requires two parking spots per unit as well as one additional parking spot per five units. Use of the two car garage will be addressed in the CCRs as the primary location for vehicles. Additionally, we are proposing 11 parking spots, eight more or 267% more than three required. Residents buying into the project will know the conditions up front, ensuring compliance with the CCRs. Her last concern was “Where will the children play?” The marketing of this project will be towards families downsizing, wanting to be close to town to shop, dine and socialize. However, we are proposing two open areas where children could play. Additionally, recently installed sidewalks make it safe for children. In fact, sidewalks exist all the way to the City Library and Wait Park (five-six blocks away) where kids would surely thrive, play and get exercise.

The last letter I received was from Robert Lane of Three Phase Electric, an Industrial Park neighbor. He expressed support of the project and thought it would only improve the neighborhood. He also expressed the traffic impact would be insignificant.



## **Pre-Application Meeting**

**Townhome Subdivision (433 NE 4<sup>th</sup> & 458 NE 3<sup>rd</sup> Ave)  
September 4, 2013  
10:30 am**

### **Attended by:**

Dave Michaud, Wave Broadband, 971-338-3270  
Jerry Nelzen, Public Works Department, 503-266-0759  
Dan Mickelsen, Facilities, 503-266-0698  
Curt McLeod, Curran-McLeod Engineering, 503-684-3478  
Bryan Brown, Planning Department, 503-266-0702

Gary Stockwell, CU Electric Department, 503-263-4307  
Jason Bristol, Applicant, 503-803-2920  
Pat Sisul, Sisul Engineering, 503-657-0188  
Angie Lehnert, Planning Department 503-266-7001

*This document is for preliminary use only and is not a contractual document.*

### **SISUL ENGINEERING, Pat Sisul**

- Jason's proposal is to do a 15 lot Planned Unit Development (PUD), by going PUD it allows for some possible setbacks and the plan is to do five buildings of three units.
- The plan is to bring sewer in from NE 3<sup>rd</sup> Avenue and go with a public 8 inch sewer main and Curt and Jerry concurred it would be fine with the City.
- Water services will be individually metered for each unit and we would like to discuss it with Doug.
- On the storm drainage we have a variety of things we would like to discuss. We are going to put the roof drains in a drywell because if it is only roof drains it is easy to get permitted. To reduce some of the impervious area we will do porous pavement and have the rest of the driveway drain to a storm water planter along NE 3<sup>rd</sup> Avenue and by sloping the whole driveway going to the storm water planter going with an overflow to another drywell. I think the storm water planter as it is shown right now is a little bit undersized and we will have to do a little more porous pavement to make up for it. Curt said did you mention some high-capacity infiltration, is it the storm water planter as your theme in putting the infiltrators underground. Pat said in lieu of drywells we might do infiltrators and Curt said I am happy with what you have, but you might want to check with Darvin and see what the results of the Storm Drainage Master Plan or LID and coordinate with him to see if dry wells are acceptable in this area.
- We did a concept plan of the three units to show where the electric, gas, water and heat pumps will be located. We need to get Gary's input on the electric meter's location and whether there is enough wall space on the center unit to put it facing the alley.
- We would like a public sewer main with private laterals, but do not need to put a clean out for the short runs, is that what you want. Jerry said we will clean and locate the sewer main and nothing else or you can put in the laterals at 6 inch. I do not know what the advantage would be on that short of a run. What was your idea, 4 inch lines stubbed into the main? Pat said yes, 4 inch stubbed and put a clean out at the edge of the building. I am trying to avoid two clean outs in 15 feet, if we could do a 4 inch private lateral. Jerry said we would only

maintain the 8 inch main. Discussion ensued. Everyone concurred to have an 8 inch public main with 4 inch private laterals to the buildings. Pat asked how wide of an easement will you need, Curt said 15 feet and Jerry agreed.

- Pat asked if we came to a conclusion of the back out space. Bryan said back out or entrance I suppose, whether it is adequate or not, it meets code and I do not think there is a code issue here, but there is a potential practical problem, you do not want to get yourself into. That is why I want you to test or go look at one of these other developments because I have seen them function and they work. I mean there are numerous homes operating there and I do not know the width, all I know there are aprons at least 2 to 3 feet outside the garage not 1 foot like you are saying. Curt asked how deep the garages were and Jason said the plan shows about 20 feet. Curt said if you have a full sized truck you might not be able to back the truck out. Jason said they asked for a 32 foot depth of the lower floor and part of it on the next floor you have to have the staircase to get you from the ground up the next level. If you get too much into the garage it will start to interfere with what you can do in the garage, like one parking spot instead of two. What I wanted to do for today was ask for the 32 feet and draw it that way, I saw it out in the field and if we could tighten it up a bit I would like to step it in. I want to keep these walls out to the front but if the garage door in two feet, will this cause problems. The code states you can do a 2 foot overhang past your foundation line, but if your foundation line is back 2 feet you are basically shrinking it up for three stories. Curt asked if that applies to a private driveway and Jason said it does not talk about it. Bryan said roof overhangs can go but they require setbacks. Curt said you mean you cannot allow cantilever second stories beyond the foundations, I did not realize that. Jason said that is my understanding on the cantilever, am I reading it wrong and Curt said I think you have the ability to build a home with whatever cantilever you want on the home, if you are within the property and in your case you have a private driveway. I have not heard of that or familiar with it, but that is the concept if you can pull the garage facing 2 feet it might be well worth it, especially if you have a 20 foot garage. The door might be nice to be set in another 3 feet if you can get it in there, it is just a wasted space anyway. I can see you trying to walk around a car and navigate to get in the door. Jason said I was looking at the 32 feet being a worst case scenario and I have not sat down with a designer to figure it out. I would like to actually do 30 feet and kick this in a bit but the second story would kick it out and the third story would kick it out again. I do not want to push the building this direction because do not want to interfere with the private driveway. Curt said all the parking standards read 24 foot for two-way and 20 is probably marginally acceptable especially geared for smaller cars. Pat said we did 24 feet here and it is pretty clear that you need to provide 24 foot to back up and I did not see it say anything else. Bryan said it really is a practical concern. We are used to those types of complaints, who designed this and you do not want your tenant to back up into the garages.

**OWNER/APPLICANT, Jason Bristol**

- I think from an ascetic's point of view, I am looking at two car garages facing the alley, which is something unique for Canby. We have not really had a development like this in the past for Canby and I have seen this in quite few other places, one being over by the Nike Campus and in other states. I travel quite a bit with my work and it is an exceptional concept with the garages facing the alley and the front doors face a common area with patios for

residents to hang out and socialize. Pat did a great job on tying the two sides of the buildings together with walkways and two parking spots per unit built in. There are eleven parking spots for overflow and guests. Angie asked where around the Nike Campus are these types of townhomes. Jason said for the actual application I will have a designer draw the structures with a complete visual of the exterior. It will be part of the Site and Design review when we do the application and I also took pictures of the townhomes. Dan asked how wide the roadway is and Jason said 20 feet, curb to curb. I spoke with Todd Gary regarding the width requirement for the fire trucks and along with the garbage company and they said 20 feet is fine. At the top we have a 6 inch curb and a 6 inch set back to alleviate the elevation change for the building. We have an extra foot that is away from the main floor and after the second floor you can step it out over the 20 foot drive. Dan asked if it meets the requirements for you to back out of the garages, I do not remember the footage, but you have to have so much room once you back out of your driveway. Bryan said our Building Official used to request 24 feet for a car to back out and he was talking about the downtown and alleys. When someone built right up to the edge of the alley, which is allowed they could not make those turns with the width of the alley. I do not know if that was because they were not fully paved for the full 20 feet, which could have been part of his issues, he wanted them set back further from the edge of the alley. I know the code does not address it, but are you building right on the edge of the 20 foot and Jason said it was a foot off-set back. Pat said we figured the driveway would need to slope and we set the building back a foot for the grade. Dan asked if there was any apron type parking and Pat said no, it would be mountable curbs. We have located the trash and recyclable receptacles, shown on the plans, where the residents would wheel them out to the concrete pads next to the roadway. Jason said he talked to the garbage company and said it would be fine because the garbage cans are not directly in front of the doors or buildings. Bryan said it might be worth your while to go to Villebois in Wilsonville, they have the same kind of townhomes and I think they have 2 foot aprons outside of the garage door before you are in the road. I do not know how wide the road is, but the question is their road 20 feet, it might be less and so maybe, you would be fine. The issue would be if a pickup truck could get into a garage and try to back out, would they be poking the back of the garage door across the way.

#### **WAVE BROADBAND, Dave Michaud**

- All I need is a power trench design.

#### **CURRAN-MCLEOD ENGINEERING, Curt McLeod**

- Hassan left a few notes, which are the standard items like restoring the pervious pavement and pavement when you get out in the street.
- Is there a reason why you do not consolidate all the water services on NE 3<sup>rd</sup> Avenue? Pat said we did that once before in a large utility vault. Hassan thought it would be beneficial having it in one trench line. As an engineer, I like seeing this type of development happening this close to the downtown area, it will be a great improvement.
- Restore the curb and sidewalk, dense and open graded mix for both your impacts on 3<sup>rd</sup> and 4<sup>th</sup> Avenues.
- Commercial driveways at both accesses, Jerry concurred.
- I see on the plans the sewer main will be public and that is fine with us.

- Consider pervious asphalt surfacing as opposed to drywells. I think what you are proposing for on-site storm drainage is good and I do not have any problems.
- The only comment I would make is you need to place one-way signs at both driveways, people will need to know they cannot go opposite of the traffic. Jason said they could put left turn only and Curt said one-way would be fine.

**CITY OF CANBY, PUBLIC WORKS DEPARTMENT, Jerry Nelzen**

- You will be disconnecting both the sewers on NE 3<sup>rd</sup> and NE 4<sup>th</sup> Avenues? The answer was yes. Pat said we might be able to utilize the sewer on 4<sup>th</sup> Avenue and Jerry said he and Dan had talked about it and Dan said it was just a 6 inch lateral that went to the house. When they built the duplex on the adjacent lot they crushed the sewer lateral, which crossed the lot. We had to extend a 6 inch service from here (N Locust Street) and put a clean out to your existing house and capped the old line. Pat asked if the new sewer line was a PVC and Dan said yes, but it is a 6 inch and you can put only one house on it. Jerry inquired if they were wanting to go this route in 4<sup>th</sup> Avenue and Dan said it was not worth digging up the street, I think you want to go from 3<sup>rd</sup> Avenue. I would cap off the existing 6 inch sewer lateral and then you are done. Pat said I do not see a benefit to us to go that way and the extra cost to place a lateral here is next to nothing and you do not have to maintain it. Curt said do you want them to kill it on N Locust Street or at the property line. Dan said just plug it at the property line. Curt asked why you want to have the piece of line open from Locust Street. Discussion ensued. Dan mentioned the house to the east of this property has their sewer lateral going to 3<sup>rd</sup> Avenue and it follows the property line from NE 4<sup>th</sup> to NE 3<sup>rd</sup> Avenue.
- I will need a traffic control plan when you close NE 3<sup>rd</sup> Avenue for connecting to the sewer and Ronda will send out the notifications. She will need to know the date and how long you plan on having the street closed.
- Pat asked what Jerry would like for the sewer line extension and Jerry stated put a manhole in and do an outside drop. It will save on the depth of the trench and will be less likely to cave in and Curt said you will need to put in pea-gravel. I would prefer we stay shallow as possible.
- Protect the striping, the pervious asphalt and use commercial driveway approaches for both entrances. Pat asked about the break line for pervious and the paved roadway and Curt stated the parking on the north side was pervious, 8 feet and the south side is a 6 foot bike lane is pervious. Jerry said you will get into both of them. Curt said I do not believe it is pea-gravel, but it is 1 inch round drain rock. Jerry said it will be a concern when you start digging because it will start undermining and Curt told them they would have to cut their space a little longer, when you get back to restoring it, do it as quick as you can.
- Pat since Doug is not here today and if we are raising the sewer main I want to make sure there will be no problems with his water main. They are really cracking down on us on this issue of being the correct amount of feet away and I do not know the depth we will be yet. Pat said if you are at 11 feet in depth I do not see a problem, but we do not need to be at 11 feet and it can be raised and still not cause any problems for the water.

**CANBY UTILITY, ELECTRIC DEPARTMENT, Gary Stockwell**

- Jerry asked if the existing power pole with the street light was staying, which feeds this house. Gary said it was a question for the developer and if it is undesirable to have a wood pole and a large street light hanging off it, it can easily be incorporated into the subdivision. I would put a splice box where the pole used to reside and it will serve the two underground services that will remain from the splice box. As it appears it is behind the sidewalk and has no impact on the streets or the development. It is your choice is you want it gone or not. Discussion ensued. It was decided to get rid of the power pole and put in an aluminum street light pole in its stead.
- These little planned unit developments are usually difficult to serve electrically and the reason is everything is so tight to tuck in transformers or splice boxes. When you put in 90's it is hard to pull in wire through the conduit. I want to make sure the City is going to allow this configuration before I actually do a design. Pat, as soon as you know when this will be fine, let me know and I will do an electrical design.
- Easements will become an issue also, you will have wait until I see what I am serving before you can actually dedicate the easements. Pat said we are assuming this entire area along the backside on the front doors will be a common area tract. It could have an overriding easements for power, Gary said the driveway will be the spot because you are requesting the meters out to the garage sites and it is the most direct route. I could do meters on your common sides or I can do them on your garage sides. I need to know your preference, this drawing shows along the garages and Pat said that is the plan to have electric meters along the garages and the driveway will include multiple easements for all utilities. Gary said I want to make sure you can assure us you will draw in easements as needed.
- Canby Utility no longer offers leased lights like we used to for apartments and PUD's on a monthly billing cycle. If you desire site lighting it will be completely on your own and if you want a separate meter for the lighting we can discuss where a location for the meter can go.
- I will use pole #73, which is on the other side of NE 4<sup>th</sup> Avenue for my point of contact. It is not our desire to cut new streets, but it is what it is. Curt said the pervious is 6 feet wide on the north side of 4<sup>th</sup> Avenue, which is a bike lane.
- It is not a unit by unit cost anymore, it is an actual cost and as soon as I know the final layout I will serve all 15 units, we are more than happy to put a design together and a cost in place.
- Pat told Gary on sheet 3, the center unit we show the electric meter facing the driveway. Gary said I will serve it and I am not aware of any issues involving code, I think you will be alright. The issue you will run into, it will be a solid stem wall and you will probably have to mount the panel more to the interior wall, which is going to extend your service entrance cable and by code you will have to put a meter main on the meter base and it will make the meter base bigger, it may be something to look into. If it ends up there is not enough room for a meter base there, I am not sure whether you want to put it on a side wall on one of the side units and do an easement to the center unit. Jason asked if they could put the meters where the front doors are and Gary said if I was going to do that throughout the subdivision, I do not like it for access purposes, but with these new meters we have now we can read them from the street. You will have a meter right there, heat pump, gas meter and we have to have separation from the gas. It would be preferred to go into the alley.



**CITY OF CANBY, EROSION CONTROL, Dan Mickelsen**

- Are these going to be slab upgrades and Pat said no. Dan said it seems to be the rage when you go to build something, nobody wants to haul off any dirt and they incorporate it. I see your elevations are just about the same and it seems to pretty flat. I do not want to see this project to balloon up 3 feet because no one wanted to haul away any dirt.
- As part of your Erosion application and you will need two applications for each three unit. The way this works you will need 10 erosion applications as opposed to 15. This is covering the expense of inspections.
- I do not know when the storm water planter will be installed and I ask it be protected, by placing construction fencing or something of the like around it. Sheet rockers and painters love to use it as a washout and dumping area and it will fail this storm water planter.
- Jerry asked if John Meredith was planning on doing anything with his lot adjacent to yours. I would like to see if he would want to tie into the sewer main and alleviate some of your costs. Curt said it would be hard for him to tie into this subdivision when sewer is available to him from N Locust Street. Jerry wanted to see if they could get this done instead of cutting another street. Curt said he would talk to Bill Reif and have him coordinate with John. Curt asked who do you want John to talk to you or Pat and Jerry said Pat.

**CITY OF CANBY, PLANNING DEPARTMENT, Bryan Brown**

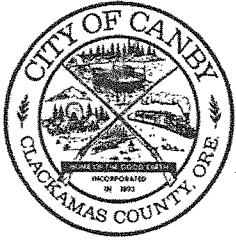
- Everybody knows this is a Planning and Development Application and a Subdivision Application and each of these will be done separately. You will be plating this so all the necessary utility easement can be done on the plat and part of the record.
- We are going to have a traffic study and we are already doing the scoping for it. I forgot what is said, it's been a while. Jason said it was the minimal amount of study, Bryan said it was on site flow or something, I do not remember and there is one other thing which has come up since the study was complete. We have your money and can go ahead and do the study, but I do not believe I have told him to go for it and Jason said correct, we were going to do this meeting first.
- Bryan said he was looking at the access location for your private drive onto 3<sup>rd</sup> and 4<sup>th</sup> and it says both 3<sup>rd</sup> and 4<sup>th</sup> Avenues are considered collector streets by the transportation plan. Therefore from driveway to driveway as measured from center line to center line on both sides of the street is supposed to be 100 feet apart. I do not know if your driveway is going to be 100 feet apart from other driveways. Jason stated it was part of the traffic study where we were not going to meet the requirement and we had to. Bryan said it is an exception process. The Planning Commission can either waive or modify joint access driveways, which is the first thing, we cannot beat those standards that is the first thing they will look at. Well you can state it is not going to be practical, it says a formal justification for an access exception may require an access management plan. That is part of the traffic study connection deals with, it provides analysis for an access management plan, where all available options are looked at. Whether any safety modifications are needed to grant the exception. I am assuming you are going to get approval of your driveway as it is and the question would be, make DKS analyze the fact it does not meet the driveway separations and is there any safety mitigation that could be needed or helpful and I cannot think of anything

myself but I am not a traffic engineer. Curt mentioned about the street sign stating a one-way street and that is a mitigation for safety would help with the access management plan. I think it is probably as simple as that, but technically it is a formal thing you have to recognize and you are not getting that ordinance standard therefore you need an access exception. Place it in your application that you are requesting it.

- It looks like we need to start thinking, because I am not good at addressing, but what are you going to name your private street and how are we going to address these things. Like are you going to use 3<sup>rd</sup> Avenue or 4<sup>th</sup> Avenue address or a combination? Do we ever address anything off a private road, I do not know, I am not adapt to check. Jason said on N Knott Street when we did the 10 units they were called Knott Court and they were numbers. Bryan said do you think they used a Knott Court address and Jason said I think they did. Bryan stated then it was a private road. Curt said those are dead ends and Jason said yes. Pat said like Hope Village and Gary stated 1441 S Ivy and then you have individual units. Bryan said what street do you pick, does it matter. Dan asked if it was up to the Post Master or Carla. Gary inquired if the County did the addresses. Bryan said we set the addresses as far as I know. The Post Office has the ability to approve or deny our proposed addresses. Pat said let us talk about if this road needs a name or do you want it to have a name. I do not know if it matters to you. Bryan said if you are not addressing off of the private road you may not need to worry about it. Pat said it is another cost for signage. Curt said if you address off of it and it is a private drive you can create problems for Google Earth to know where you are at because it is not a public street, it would seem simple to use 3<sup>rd</sup> Avenue address and no name on your driveway. You can use 4<sup>th</sup> Avenue addresses for the units facing it. Jason said he knew from the fire department they will ask for signage for the unit numbers. If we go off of NE 3<sup>rd</sup> Avenue it will read 333 thru 383 NE 3<sup>rd</sup> Avenue or something of the like. Bryan said they are going to want to see them posted and since they cannot be visible from the public street I would think they would want see an emergency access as your private road, they will want to see them posted at the garages. Will it be confusing when they see numbers in a sequence because these are off of 4<sup>th</sup> Avenue? Maybe that is who we should inquire with is the fire department. Jason said we should stick with these units being addressed from 3<sup>rd</sup> Avenue and these units being addressed from 4<sup>th</sup> Avenue. Pat said I can see that and putting the signage on ends of these two buildings and then if they are coming from this direction you can have the addresses here. Bryan said you will need to talk to them and get some idea of what they would like. We have done it both ways in Canby apparently there has been private streets and street signs, I do not know. Do you know of any streets that have "pvt" after them? The consensus was there were no streets in Canby having "pvt" on the signage. Bryan stated we did not necessarily solve this today, we will need to figure it out and the sooner the better probably. You will need to show it on the plat, Jason said you think the fire department will help and Bryan said yes, you should inquire with them because they are often very opinionated, they might have some good reasons why it should be one way or another. When I worked in West Linn they had private streets everywhere and it was made very clear the way they did things. I do not think it matters whether it went through it was just a private street and they gave them names.
- It indicates it has PUD regulations and you should provide us deed restrictions or CC&R's in draft form with your application. I do not know if you thought of that going that far, but it

appears to be a part of the application process and we can kind of see what you are thinking along those lines.

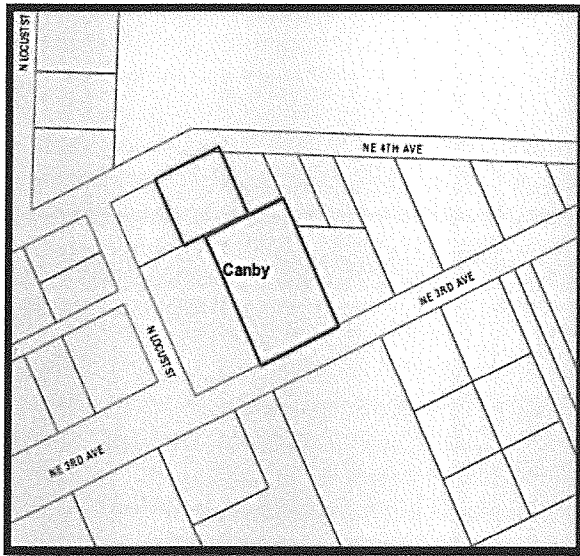
- I do not know whether I calculated or not but the R-2 district has a minimum density of 14 units per acre and I think you are, there is no maximum. Pat said the site is approximately 33,000 square feet and is less than 1 acre.
- Bryan said in our in-formal pre-application meeting we were talking about park land dedication requirements and technically you are supposed to have a 2 acre minimum and in fact if you were to dedicate parks land in this development it would be 0.041 acres but it would take most of your site. I am just assuming you will be taking advantage of the cash in lieu, which is an SDC payment for each unit. I think that is the way you need to go, do you have a problem with that? I do not think there is any public improvements except for the sewer main, is there a water main going through that is public? Pat said we are not showing that and Bryan said there will be a public sewer main on your property and there is an expense you need to be aware of and it is 0.4% of the total estimated cost of all public improvements. Whatever it will cost you to build the public sanitary sewer main to pay that, you can delay that collection to the pre-construction meeting if you like rather than at the application and at that point you will know for positive what it will cost. Pat said is that where I prepare an engineer's estimates of public improvements and send it to Curt and then Curt will give his approval. Bryan said yes.
- I put in the memorandum about the neighborhood meeting you will need to hold and you are in the NE Canby Neighborhood Association. Angie said the contact person is Leonard Walker and you can call or email him. Bryan said you are supposed to notify everyone within a 500 foot radius and the chair of the neighborhood association. You need to have this neighborhood meeting before you make out the application. We have occasionally asked people to be in the process of the neighborhood meeting.
- You will need to give me authorization to start the traffic study and I will wait for that.
- I have determined a residential design guidelines do not apply. The garage standards and all that kind of stuff, I cannot see that it applies to this and it is not an infill. You do not have to meet the residential design garage options or anything like that. It is intended for those properties facing the public streets and you are not doing that with these unit. Pat said we need to meet the design review and Bryan stated you do not have to that either because you are not doing a Site and Design Review application that is one of the advantages of your PUD, I do not think there is a design review matrix involved as far as I can remember, I think there is a loop hole and this is your way to avoid it. Jason asked on a PUD application is the fee \$1,500 and does it cover the part you just talked about. Bryan said the fee covers the PUD application and the Subdivision fee and I do not see any matrix involved with the PUD application. What is says in the PUD is you have to demonstrate to the satisfaction of the Planning Commission that this development is as good as or better than if you followed the standards procedures, this is not following the standard because it is using the PUD. I am not sure necessarily meeting the lot coverage requirements and all those things because you are doing a PUD. It is possible that maybe your meeting the 70% maximum lot coverage for each lot, I do not know, you just have to convince the Planning Commission your unique design is better and to do this is through your landscape plan design and your arguments in favor for this project.



# City of Canby

## NOTICE OF PUBLIC HEARING & REQUEST FOR COMMENTS

The purpose of this Notice is to invite you to a Public Hearing on the Monday, April 28, 2014 Planning Commission meeting starting at 7 pm in the City Council Chambers, 155 NW 2<sup>nd</sup> Avenue, and to comment on a proposed Planned Unit Development & Subdivision. The proposed development will include 5 identical buildings with three homes each on individually plated lots for a total of 15 townhomes on a .76 acre of land. The property is located on 458 N.E. 3rd Avenue and 433 N.E. 4th Avenue. The property is zoned R-2 and currently contains two single family residences on two separate lots. Both residences will be demolished and the lots combined and re-platted as part of the Emerald Gardens Townhomes development.



**Comments due**– If you would like your comments to be incorporated into the City’s Staff Report, please return the Comment Form by Wednesday, April 16, 2014.

**Location:** 458 N.E. 3rd Avenue and 433 N.E. 4th Avenues

**Tax Lots:** 31E33DB01900 & 31E33DB00700

**Lot Size and Zoning:** .54 & .22, R-2 High Density Residential

**Owner:** Jason Bristol

**Applicant:** Jason Bristol

**Application Type:** Planned Unit Development & Subdivision

**City File Number:** PUD 14-01 & SUB 14-01

**Contact:** Bryan Brown (503) 266-0702

**What is the Decision Process?** The Planning Commission will make a decision after the Public Hearing. The Planning Commission’s decision may be appealed to the City Council.

**Where can I send my comments?** Written comments can be submitted up to the time of the Public Hearing and may also be

delivered in person to the Planning Commission during the Public Hearing. (Please see *Comment Form*). Comments can be mailed to the Canby Planning Department, P O Box 930, Canby, OR 97013; delivered in person at 111 NW Second Avenue; or emailed to [brownb@ci.canby.or.us](mailto:brownb@ci.canby.or.us).

**How can I review the documents and staff report?** Weekdays from 8 AM to 5 PM at the Canby Planning Department. The staff report to the Planning Commission will be available for inspection starting Friday, April 4, 2014 and can be viewed on the City’s website: <http://www.ci.canby.or.us> Copies are available at \$0.25 per page or can be emailed to you upon request.

**Applicable Criteria:** Canby Municipal Code Chapters:

- 16.08 General Provisions
- 16.10 Off Street Parking & Loading
- 16.20 R-2 High Density Residential Zone
- 16.36 Planned Unit Development Overlay Zone (PUD)
- 16.43 Outdoor Lighting Standards
- 16.46 Access Limitations on Project Density
- 16.49 Site & Design Review
- 16.56 Land Division General Provisions
- 16.62 Subdivisions-Applications
- 16.64 Subdivisions-Design Standards
- 16.70 PUD General Provisions
- 16.72 PUD Applications
- 16.76 PUD Requirements
- 16.89 Application & Review Procedures
- 16.120 Parks, Open Space, & Recreation Land

*Note: Failure of an issue to be raised in a hearing, in person or by letter, or failure to provide statements or evidence sufficient to afford the decision maker an opportunity to respond to the issue precludes appeal to the board based on that issue.*

## CITY OF CANBY –COMMENT FORM

If you are unable to attend the Public Hearing, you may submit written comments on this form or in a letter addressing the Planning Commission. Please send comments to the City of Canby Planning Department:

**By mail:** Planning Department, PO Box 930, Canby, OR 97013  
**In person:** Planning Department at 111 NW Second Street  
**E-mail:** [lehnerta@ci.canby.or.us](mailto:lehnerta@ci.canby.or.us)

**Comments due**– If you would like your comments to be incorporated into the City’s Staff Report, please return this Comment Form by Wednesday, April 16, 2014. Written comments can also be submitted up to the time of the Public Hearing on Monday, April 28, 2014 and may also be delivered in person to the Planning Commission during the Public Hearing at 7 pm in the City Council Chambers, 155 NW 2<sup>nd</sup> Avenue.

**Application: PUD 14-01 & SUB 14-01 Emerald Gardens Townhomes**

**COMMENTS:**

SEE ATTACHED MEMORANDUM DATED APRIL 11, 2014  
FOR OUR COMMENTS.

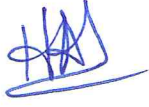
**YOUR NAME:** HASSAN IBRAHIM  
**EMAIL:** hai@curran-mcleod.com  
**ORGANIZATION or BUSINESS (if any):** Curran-McLeod Consulting Engineers  
**ADDRESS:** 6655 SW HAMPTON ST, SUITE 210 PORTLAND, OR 97223  
**PHONE # (optional):** 503-684-3478  
**DATE:** April 11, 2014

Thank you!

April 11, 2014

**MEMORANDUM**

**TO:** Ms. Angie Lehnert  
City of Canby

**FROM:** Hassan Ibrahim, P.E.   
Curran-McLeod, Inc.

**RE:** **CITY OF CANBY**  
**458 NE 3<sup>RD</sup> AVE & 433 NE 4<sup>TH</sup> AVE (PUD 14-01 & SUB 14-01)**

We have reviewed the submitted preliminary plans on the above mentioned project and have the following comments:

1. The access driveways on NE 3<sup>rd</sup> Avenue and NE 4<sup>th</sup> Avenue shall be have a “Commercial Driveway Approach” using 6” minimum concrete thickness with reinforcements over 4” min of crushed rock base. The driveway approaches shall be in compliance with the current ADA standards.
2. The developer will be required to restore all the disturbed curbs, sidewalks, base rock section and asphalt in kind to match the existing (open graded rock base and open graded asphalt and dense mix asphalt).
3. The existing pervious asphalt on NE 3<sup>rd</sup> Ave and NE 4<sup>th</sup> Ave shall be protected during the construction to prevent blockage.
4. The developer will also be required to restore all the disturbed pavement striping in kind to match existing. All striping shall be thermoplastic, non-profile, 120 mils, extruded.
5. The developer will be required to install one-way signs at each driveway access to ensure motorists leaving the property are heading in the right direction of traffic.
6. All private storm drainage discharge shall be disposed on-site, the design methodology shall be in conformance with the City of Canby, June 2012 Public Works Standards.

Ms. Angie Lehnert  
April 11, 2014  
Page 2

7. The proposed 8" sanitary sewer main can be public, the City will only maintain the main sewer line, service laterals maintenance will be the sole responsibility of the property owners.
8. The two sanitary sewer laterals to the existing houses (to be demolished) shall be caooed at the property line to avoid cutting the street.
9. A 15-foot public sanitary sewer easement centered over the pipe will be required and dedicated to the City of Canby. The private sanitary sewer system serving this development has been extended to this site as part of an earlier phase.
10. Prior to the start of construction or any on-site disturbance, the developer will be required to obtain from the City an erosion control permit.
11. NE 3<sup>rd</sup> Avenue and NE 4<sup>th</sup> Avenue are collector streets and a truck route, a traffic control plan will be needed to assure ingress and egress access is available to all the surrounding businesses. We recommend a meeting with the businesses owners be held so that their access concerns are addressed in the traffic control plan.

Should you have any questions or need additional information, please let me know.

## Laney Fouse

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**From:** Patrick Sisul <PatSisul@sisulengineering.com>  
**Sent:** Monday, April 07, 2014 1:56 PM  
**To:** Bryan Brown  
**Cc:** J Bristol; Todd Iselin  
**Subject:** FW: Building code interpretation

Hi Bryan,

I am following up on your question concerning whether an ADA parking space is needed on Jason Bristol's Emerald Gardens project, Todd Iselin, the project architect communicated with Ray Van Lieu and Richard Carlson, Plans Examiners with Clackamas County Building Codes Division. Their opinion on the matter is located below.

Please let me know if you have any other concerns.

Thank you,  
Pat

*Patrick A. Sisul, P.E., Vice President*  
*Sisul Enterprises, Inc.*  
[www.sisulengineering.com](http://www.sisulengineering.com)  
[www.etcEnvironmental.net](http://www.etcEnvironmental.net)

### **SISUL ENGINEERING**

Gladstone: 503-657-0188 Medford: 541-227-6719 Vancouver: 360-696-3664 John Day: 541-575-3777

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**From:** Todd Iselin [mailto:todd@iselinarch.com]  
**Sent:** Monday, April 07, 2014 12:04 PM  
**To:** Patrick Sisul  
**Cc:** 'J Bristol'  
**Subject:** FW: Building code interpretation

See attached opinion from Ray and confirmed by Richard.

Todd Iselin

ISELIN ARCHITECTS, P.C.  
1307 SEVENTH STREET, OREGON CITY, OR 97045  
PH. (503) 656-1942 / FAX (503) 656-0658  
[www.iselinarchitects.com](http://www.iselinarchitects.com)

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**From:** Carlson, Richard [mailto:richardcar@co.clackamas.or.us]  
**Sent:** Monday, April 7, 2014 11:19 AM  
**To:** 'Todd Iselin'  
**Subject:** FW: Building code interpretation

I agree with what Ray said.

Thank you,



Richard Carlson  
Plans Examiner  
Clackamas County Building Codes Division  
Phone: (503) 742-4769  
Fax: (503) 742-4741  
[richardcar@co.clackamas.or.us](mailto:richardcar@co.clackamas.or.us)

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**From:** VanLieu, Ray  
**Sent:** Monday, March 31, 2014 3:27 PM  
**To:** [todd@iselinarch.com](mailto:todd@iselinarch.com)  
**Cc:** Carlson, Richard  
**Subject:** RE: Building code interpretation

Hi Todd,

If they are town homes on individual tax lots, they will be reviewed out of the Oregon Residential Specialty Code. The ORSC does not have accessibility provisions, so accessible parking would not be required by the ORSC. Maybe the City has an ordinance that would require accessible parking above and beyond code requirements.

Should probably verify with Richard Carlson, I have copied him on this email.

*Ray Van Lieu*

Plans Examiner,  
Clackamas County Building Codes  
Phone 503-742-4787  
Fax 503-742-4741  
[rayvan@co.clackamas.or.us](mailto:rayvan@co.clackamas.or.us)

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**From:** Todd Iselin [<mailto:todd@iselinarch.com>]  
**Sent:** Monday, March 31, 2014 2:20 PM  
**To:** VanLieu, Ray  
**Subject:** Building code interpretation

Hi Ray,

We have a townhome project in Canby that the planning department is requiring that we provide ADA parking for. We have done hundreds of similar townhomes and never provided accessibility other than what would be required for a single family sub-division. Can you verify that these three story townhomes on individual tax lots will be reviewed by building as single family residences and that no ADA parking is required.

Thank you,

Todd Iselin

**ISELIN ARCHITECTS, P.C.**  
1307 SEVENTH STREET, OREGON CITY, OR 97045  
PH. (503) 656-1942 / FAX (503) 656-0658  
[www.iselinarchitects.com](http://www.iselinarchitects.com)

Dan Kizer  
Field Engineer  
3123 Broadway, NE  
Salem, OR 97303  
Telephone: (503) 226-4211 x8166  
Email: daniel.kizer@nwnatural.com



April 16, 2014

Laney Fouse  
Planning Dept.  
City of Canby  
PO Box 930  
Canby, OR 97013

Re: Public Hearing Notice Request for Comments  
Emerald Garden Townhomes Subdivision Land Use Application Review

There is a natural gas distribution system adjacent to the subject property in NE 3<sup>rd</sup> Avenue and NE 4<sup>th</sup> Avenue that is capable of serving the proposed townhome development.

The Applicant will need to contact NW Natural to request cut and abandonment of the existing service prior to demolishing the buildings on the site at 433 NE 4<sup>th</sup> Ave. so that the gas service riser and meter are not damaged. Our website address below can be used to initiate the process.

If the Applicant is interested in natural gas please contact NW Natural online at [www.nwnatural.com/Business/Partners/BuilderServices](http://www.nwnatural.com/Business/Partners/BuilderServices) to initiate the process to install natural gas within the PUD.

Civil plans for the subdivision will need to be submitted to [ncproj@nwnatural.com](mailto:ncproj@nwnatural.com) before NW Natural can process the gas service application request.

We appreciate being included in the planning process. Please contact me if you have any questions or require more information.

Sincerely,



Dan Kizer  
Salem Resource Center Field Engineer

## CITY OF CANBY-COMMENT FORM

**Application: PU 14-01 & SUB 14-01 Emerald Gardens Townhomes**

First we would like to say the proposal is not without some merit; but in addition to our previous submitted letter (copy attached) we find the following to be of concern to us:

\*Some of the buildings will have cantilevered second and third levels, exceeding the required set-backs, placing the decks even closer to adjoining properties. Second and third levels will allow easy viewing into others homes and properties.

\*The existing structures on adjoining properties may presently be located far from the property line, but if there is future development on these properties (as projected), their development would be hindered by the close proximity of Emerald Garden Townhomes.

\*There are trees indicated in the colored drawings that appear to be impossible to locate between properties. They appear to be meant to obscure views between properties, but doubt there is room. Even if planted, after development is complete, there is no control to keep any sight obscuring landscape in place. The chain link fencing should have slats at least, but the fence will do nothing for second and third level view obscuring.

\* A PUD should have a place on site for the residents (children) to play. Paying a system's development charge, won't eliminate the need.

\* Three bedroom units will undoubtedly have more than 2 drivers per household. Even though the development meets the criteria for parking, where will the overflow go?

\*Rear yard requirements for 3 story buildings have not been set in the code. A logical progression would be to set ~~30~~<sup>25</sup> feet since single story and two story progress in 5' increments.

When these units are complete and for sale, will they be desirable, sell quickly and remain owner occupied? Prior developments have ended up rentals, so questioning if something is in C C & R's restricting non-owner occupied and how will HOA maintenance of the complex be ensured. If they become rentals, what about ADA standards?

If three story units become the norm in this small area, the remaining single levels will be living in the shadows of these tall structures with no privacy at all. And, although we realize there no longer is an ordinance that prohibits new construction blocking the sun/solar from neighboring properties, it does not seem right that it should be allowed.

Ron and Cherrol Pacholl-P.O. Box 396, Canby OR 503-266-4943, email [realty@canby.com](mailto:realty@canby.com)  
property owners of Single Family residence at 496 N. E. Third and Duplex at 491 and 493 N.E. Fourth, Canby OR 97013

Cherrol Pacholl  
P.O. Box 396  
Canby Or 97013

January 9, 2014

Jason Bristol  
21733 S. Hwy. 99  
Canby OR 97013

Dear Jason:

As you are aware, my husband and I own the single family residence located at 496 N.E. 3<sup>rd</sup> and the duplex as part of the same tax lot 491 and 493 N.E. 4<sup>th</sup>, Canby OR.

We will not be available to attend your neighborhood meeting, so are asking the following be taken into consideration for your final plans for your properties located at 458 N.E. 3<sup>rd</sup> and 433 N.E. 4<sup>th</sup> Ave., Canby OR :

\*Three story units will result in numerous properties in the area having residents of the proposed units looking down into the yards and homes of current occupants.

\*As owner occupied units, there is limited control of how many occupants each unit might have and how many vehicles per unit there might be. 3<sup>rd</sup> Ave. did not have any on-street parking prior to the road improvements and there is no on-street parking on 4<sup>th</sup> Ave. We all **know** the neighborhoods with multiple families living in single family homes, as the streets are lined with cars morning and evening. This area is also a truck route into businesses on 3<sup>rd</sup> and additional vehicle traffic and parking on 3<sup>rd</sup> Avenue will not be conducive for deliveries.

\*The neighborhood currently has **3** duplexes and **3** single family homes on 4<sup>th</sup> Ave.; 3<sup>rd</sup> Ave. has **6** single family homes: for a total of **9** single family homes and **3** duplexes. You propose to add **12**, three bedroom units on 3<sup>rd</sup> Ave. and **3** three bedroom units on 4<sup>th</sup> Ave.; increasing the total number of single family residences to **22** after the removal of the current two single family residences at 458 NE 3<sup>rd</sup> and 433 NE 4<sup>th</sup>.

\*An estimate of current number of residents in the pie shaped area of 3<sup>rd</sup> and 4<sup>th</sup> is **26** based on our knowledge of the occupants at this time of these properties. Fifteen, three bedroom units could add as many as **90** additional occupants (**or more**) to this small area.

**We believe this is too much!**

If all remaining existing units were filled to capacity there could be approximately 38 residents on 4<sup>th</sup> and 22 on 3<sup>rd</sup> equaling approximately 60; add in the approximate 90 for your proposed units and this small area could be home to **150** people or more!

\*Where will the children play? Light Industrial and the Event Center surround this area, so traffic, both auto and trucks, will be a safety concern.

It is not that we are not in favor of improvements to this area. We are, but 3 story, 3 bedrooms and 15 units are not what best serves the neighborhood and adjoining properties. Please rethink this project with more consideration of the property owners and occupants of the neighborhood.

Sincerely,

Cherrol Pacholl

cc: Planning Dept.

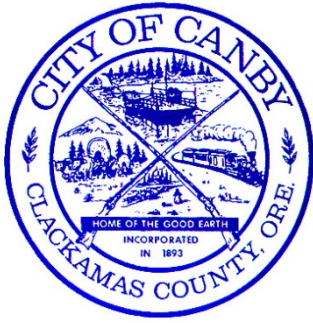
## Laney Fouse

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**From:** cole unger <coleunge\_r@yahoo.com>  
**Sent:** Sunday, April 13, 2014 8:12 PM  
**To:** Bryan Brown  
**Subject:** ne 4th and locust

hello my name is cole unger. I recently saw this letter come in the mail and thought not again. why must we continue to bring down the property value of canby by building more and more town homes? i was born in this city back in 1993 and have seen this city grow in just a short 21 years. Sure we added tofte farms and feist addition, but why do we keep adding town homes? They are a type of building that just loses value to all around except to those who own the whole thing. I would hate to see these go up and even over populate canby even more than it already is. It is a sad thing to see keep happening and no one saying anything. I understand town homes are the "new thing" but why do we all of a sudden have to follow the trend? I would hate to see canby turn into nothing but town homes. It truly is a very sad thing to see.

Thank you for your time,  
Cole Unger



# City of Canby

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## TEXT AMENDMENT STAFF REPORT

FILE #: TA 14-01

Prepared for the April 28, 2014 Planning Commission Meeting

**APPLICANT:** City of Canby

**APPLICATION TYPE:** Text Amendment (Type IV)

**CITY FILE NUMBER:** TA 14-01

### I. **Overview:**

City Staff is requesting consideration of a text amendment to streamline, clarify, and update the development review process for industrially zoned land in the Canby Pioneer Industrial Park. This would include extending the existing Type II process procedures already in place in the Canby Downtown Overlay District to the Pioneer Industrial Park/I-O Industrial Overlay Zone. A Type II process allows a project to be approved by the Planning Director in lieu of the Planning Commission. Currently all industrial projects must come to the Planning Commission for approval – a process that can take several months if meetings are full with other projects.

- The Canby Pioneer Industrial Park is the economic engine of the community, providing well-paying jobs, high assessed value, and locations for traded sector companies that bring back wealth and investment to Canby. It now is home to thirteen companies, providing 750 jobs and over \$78 million in investment. As the economy picks up and more activity will be coming, staff is looking for ways to have the development review process be business friendly, predictable, and expeditious. We know that industrial siting decisions are very competitive between communities and states. They tell us that certainty and speed can make a dramatic difference in their choosing Canby over other sites.
- After reviewing existing processes and best practices, staff recommends making the Type II review process for developments in the Canby Pioneer Industrial Park (in the I-O Overlay Zone) an option. This would allow projects that clearly meet the zoning code and overlay requirements to apply for approval by decision of the Planning Director. This simple change has the potential to save significant process time and staff resources for approving projects. Any development proposals that do not fully meet code standards, present alternative standards, or proposals considered to otherwise meet the intent of the city standards would continue to be reviewed by the Planning Commission. This process allows the Planning Commission to use their judgment in approving alternative solutions for projects that meet the intent of the code without forcing the applicant to use the expensive, time consuming, and staff intensive variance process.

### II. **ATTACHMENTS**

- A. Proposed text amendments

III. **Summary of Proposed Changes:**

- **Chapter 16.30 C-M Heavy Commercial Manufacturing Zone** – Tighter screening requirements
- **Chapter 16.32 M-1 Light industrial Zone** – Tighter screening requirements
- **Chapter 16.34 M-2 Heavy Industrial Zone** – Tighter screening requirements and edits to the Conditional Use Review Matrix
- **Chapter 16.35 Canby Industrial Area Overlay (I-O) Zone** – Clarify location of zone, reduce job creation requirements, make freestanding warehouses a conditional use process, allow planning director approval of metal elements, allow for drought tolerant plants, design review matrix cleanup, and various language revisions
- **Chapter 16.49 Application for Site and Design Review** - Add the I-O Overlay to the Type II option and minor grammatical revision

IV. **APPLICABLE CRITERIA & FINDINGS**

Major approval criteria used in evaluating this application were the following Chapters from the *City of Canby's Land Development and Planning Ordinance* (Zoning Code):

- 16.88 General Standards & Procedures
- 16.89 Application and Review Procedures

Excerpts from the code are highlighted below in **gray**, with findings and discussion after the citations in **red**. If not discussed below, other standards from the Code are either met fully, not applicable, and/or do not warrant discussion.

***16.88 General Standards and Procedures***

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**16.88.160 Amendments to text of title.**

**A. Authorization to Initiate Amendments.** *An amendment to the text of this title may be initiated by the City Council, by the Planning Commission or by the application of a property owner or his authorized agent. The Planning Commission shall, within forty days after closing the hearing, recommend to the City Council, approval, disapproval, or modification of the proposed amendment.*

**Findings:** City staff has initiated amendments to the text of the *Canby Land Development and Planning Ordinance*. The intent of the proposed amendment is to implement an expedited development review option for new developments within the Canby Industrial Overlay Zone and to make other minor revisions and clarifications. This proposal is considered to be a means to help meet the City Council and City Vision aspiration goal to “Promote Industrial and Business Growth Affording Economic Prosperity and Quality Job Creation While Maintaining Quality of Life and Improving the Overall Tax Base for the Community”. The Planning Commission shall make a recommendation to approve or deny this application to the Canby City Council after holding a public hearing. The City Council shall also conduct a public hearing before making a final decision on these proposed text amendments.

**D. Standards and Criteria.** *In judging whether or not this title should be amended or changed, the Planning Commission and City Council shall consider:*



1. *The Comprehensive Plan of the city, and the plans and policies of the county, state, and local districts, in order to preserve functions and local aspects of land conservation and development;*

*Applicable Comprehensive plan Elements and goals:*

**Urban Growth Element**

*Goals:*

1) *To preserve and maintain designated agricultural and forest lands by protecting them from urbanization.*

2) *To provide adequate urbanizable area for the growth of the city, within the framework of an efficient system for the transition from rural to urban land use.*

**Land use element**

*Goal: to guide the development and uses of land so that they are orderly, efficient, aesthetically pleasing, and suitably related to one another.*

**Environmental concerns element**

*Goals:*

*To protect identified natural and historical resources.*

*To prevent air, water, land, and noise pollution.*

*To protect lives and property from natural hazards.*

**Transportation element**

*Goal: To develop and maintain a transportation system which is safe, convenient and economical.*

**Public facilities and services element**

*Like other cities, Canby must be able to provide adequate public facilities and services to support the community's growth and quality of life*

**Economic element**

*Goal: to diversify and improve the economy of the city of Canby*

**Housing element**

*Goal: to provide for the housing needs of the citizens of Canby*

**Energy conservation element**

*Goal: to conserve energy and encourage the use of renewable resources in place of non-renewable resources.*

**Findings:** The proposed text amendment does not conflict with the policies of the Comprehensive Plan, including the elements and goals listed above.

2. *A public need for the change;*
3. *Whether the proposed change will serve the public need better than any other change which might be expected to be made;*
4. *Whether the change will preserve and protect the health, safety and general welfare of the residents in the community;*

**Findings:** The proposed edits are considered to be a viable and desirable option toward improving the development process in the Canby Pioneer Industrial Park and will clarify additional provisions and requirements of the code within the industrial zoned districts. The proposed changes therefore serve the public need and do not affect the code's protection of Canby's health, safety, and general welfare.

5. Statewide planning goals.

**Findings:** This proposal is not in conflict with statewide planning goals. The Oregon Department of Land Conservation and Development (DLCD) has been notified of this proposal.

**16.88.190 Conformance with Transportation System Plan and Transportation Planning Rule**

A. A proposed comprehensive plan amendment, zone change or land use regulation change, whether initiated by the city or by a private interest, shall be reviewed to determine whether it significantly affects a transportation facility, in accordance with the Transportation Planning Rule (OAR 660-012-0060). A plan or land use regulation amendment significantly affects a transportation facility if it:

1. Changes the functional classification of an existing or planned transportation facility;
2. Changes standards implementing a functional classification system;
3. As measured at the end of the planning period identified in the adopted plan:
  - a. Allows types or levels of land use that would result in levels of travel or access that are inconsistent with the functional classification of a transportation facility; or
  - b. Would reduce the performance of the facility below the minimum acceptable performance standard identified in the Transportation System Plan;
  - c. Would worsen the performance of a facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the Transportation System Plan.

**Findings:** The proposed text amendments do not conflict with the above standards.

**16.89 Application and Review Procedures**

**Findings:** This text amendment is following a Type IV process which requires final approval by City Council Ordinance. Therefore, the Planning Commission will make a recommendation of approval or denial of this application to City Council. Notice of this application has forwarded to applicable agencies and notice of public hearings will also be posted at the Development Services Building, City Hall, and published in the *Canby Herald*. All public hearing, application requirements, and Type IV application procedures will be met.

V. **Decision**

Based on the application submitted and the facts, findings, and conclusions of this report, Staff recommends that the Planning Commission recommend City Council **approval** of Text Amendment File #TA 14-01.

**Sample motion:** I move to recommend City Council approval of Text Amendment #DR 14-01.

## Chapter 16.30

### C-M HEAVY COMMERCIAL MANUFACTURING ZONE

#### Sections:

- 16.30.010** Uses permitted outright.
- 16.30.020** Conditional uses.
- 16.30.030** Development standards.

#### **16.30.010** Uses permitted outright.

Uses permitted outright in the C-M zone shall be as follows:

- A.** A use permitted outright in a C-2 zone, other than dwelling units;
- B.** Contractor's equipment yard;
- C.** Dwelling for watchman or caretaker working on premises;
- D.** Fuel distribution, wholesale;
- E.** Laundry or Laundromat, with or without dry cleaning operation;
- F.** Motor or rail freight terminal;
- G.** Railroad trackage and related facilities;
- H.** Stone cutting and sales;
- I.** Tire retreading, recapping and sales;
- J.** Transfer or storage;
- K.** Utility storage or service yard;
- L.** Similar heavy commercial, storage, or light manufacturing uses as determined by the Planning Commission.
- M.** Attached WTS facilities (see 16.08.120).
- N.** Detached WTS facilities (monopole), less than 100 feet in height (see 16.08.120). (Ord. 890 section 30, 1993; Ord. 740 section 10.3.29(A), 1984; Ord. 981 section 27, 1997; Ord. 1237, 2007)

#### **16.30.020** Conditional uses.

Conditional uses in the C-M zone shall be as follows:

- A.** A use permitted outright in an M-1 zone and not listed in section 16.30.010 or below;
- B.** A use permitted conditionally in a C-1 or C-2 zone, other than dwelling units, and not listed in section 16.30.010 or below;
- C.** Other light industrial uses as determined by the Planning Commission;
- D.** Detached WTS facilities (monopole), equal to or over 100 feet in height (see 16.08.120); (Ord. 740 section 10.3.29(B), 1984; Ord. 981 section 28 & 29, 1997; Ord. 1237, 2007)

**16.30.030 Development standards.**

The following subsections indicate the required development standards of the C-M zone:

- A.** Minimum lot area: none.
- B.** Minimum width and frontage: none.
- C.** Minimum yard requirements:
  - 1.** Street yard: twenty feet where abutting Highway 99-E and S. Ivy Street. Gas station canopies shall be exempted from the twenty foot setback requirements. Remaining property none, except ten feet where abutting a residential zone. Sign setbacks along Highway 99-E and S. Ivy Street are to be measured from the face of the curb rather than the lot line. Where no curb exists, the setback shall be measured from the property line. Other than signs which are nonconforming structures and street banners which have been approved per the requirements of the Uniform Sign Code, no signs will be allowed to be located within, or to project over, a street right-of-way.
  - 2.** Interior yard: none, except ten feet where abutting a residential zone.
- D.** Maximum building height:
  - 1.** Freestanding signs: thirty feet;
  - 2.** All other structures: forty-five feet.
- E.** Maximum lot coverage: sixty percent.
- F.** Other regulations:
  - 1.** Vision clearance distances shall be fifteen feet from any alley or driveway and thirty feet from any other street or railroad.
  - 2.** Except in cases where existing building locations or street width necessitate a more narrow design, sidewalks eight feet in width shall be required:

- a. In those locations where angle parking is permitted abutting the curb, and
- b. For property frontage along Highway 99-E.

3. ~~3.~~ All setbacks to be measured from the foundation line of the building. Overhangs shall not exceed two feet. (Ord 830 section 9, 10, 1989; Ord. 802 section 7 [part], 1987; Ord. 740 section 10.3.29(C), 1984; Ord. 981 section 50, 1997; Ord. 1237, 2007)

4. Outside storage abutting a public road or a residential zone shall be screened from view by a site-blocking fence, landscaping, or berm.

5. Customer and employee parking must be located at the front or side of the building. Areas that accommodate large vehicles, busses, freight maneuvering, and parking/loading areas shall be screened from view by a site-blocking fence, landscaping, or berm.

## Chapter 16.32

### M-1 LIGHT INDUSTRIAL ZONE

#### Sections:

- 16.32.010** Uses permitted outright.
- 16.32.020** Conditional uses.
- 16.32.030** Development standards.

#### **16.32.010** Uses permitted outright.

Uses permitted outright in the M-1 zone shall be as follows:

- A.** Manufacturing, fabricating, processing, compounding, assembling or packaging of products made from previously prepared materials such as cloth, plastic, paper, metal, wood (but not including sawmills or lumber mills), the operation of which will not result in
  1. The dissemination of dusts, gas, smoke, fumes, odors, atmospheric pollutants or noise which exceed Oregon Department of Environmental Quality standards
  2. Danger by reason of fire, explosion or other physical hazard;
  3. Unusual traffic hazards;
- B.** Automobile body shop, or heavy repair shop;
- C.** Contractor's equipment or storage yard;
- D.** Dwelling for watchman or caretaker working on the property;
- E.** Food processing plant;
- F.** Fuel distribution, wholesale or retail;
- G.** Ice or cold storage plant;
- H.** Laundry or dry-cleaning plant;
- I.** Lumber yard;
- J.** Machinery, farm equipment or implement sales, service or rent;
- K.** Motor or rail freight terminal;

- L.** Railroad trackage and related facilities;
- M.** Restaurant, when related and incidental to primary industrial uses of the area;
- N.** Service station, when related and incidental to primary industrial uses of the area;
- O.** Stone, marble, or granite cutting;
- P.** Tire retreading or recapping;
- Q.** Transfer and storage company;
- R.** Utility storage or service yard;
- S.** Veterinarian's office or animal hospital;
- T.** Warehouse
- U.** Wholesale distribution, including warehousing and storage;
- V.** Wireless or cellular communications facility/tower;
- W.** Other light industrial uses as determined by the Planning Commission;
- X.** Business or professional office, when related and incidental to primary industrial uses of the area;
- Y.** Public building or uses such as fire station, or park or playground.
- Z.** Attached WTS facilities (see 16.08.120).
- AA.** Detached WTS facilities (monopole or lattice tower), under 150 feet in height and at least 660 feet from the nearest land zoned or planned for residential use or Highway 99E (see 16.08.120).
- BB.** Detached WTS facilities (monopole), under 100 feet in height and less than 660 feet from the nearest land zoned or planned for residential use or Highway 99E (see 16.08.120).
- CC.** Detached WTS facilities (monopole), equal to or over 150 feet in height and at least 660 feet from the nearest land zoned or planned for residential use or Highway 99E (see 16.08.120).
- DD.** Minor public facility. (Ord. 890 section 31, 1993; Ored. 749 section 1(A), 1984, Ord. 740 section 10.3.31(A), 1984; Ord. 995 section 10 & 11, 1996; Ord. 981 section 30 & 31, 1997; Ord. 1019 section 10, 1999; Ord 1237, 2007)

**16.32.020 Conditional uses.**

Conditional uses in the M-1 zone shall be as follows:

- A. Commercial recreation uses;
- B. Motels, hotels and similar accommodations;
- C. Other heavy commercial or light industrial uses as determined by the Planning Commission;
- D. Waste and/or recycling transfer operations.
- E. Detached WTS facilities (monopole), equal to or over 100 feet in height and less than 660 feet from the nearest land zoned or planned for residential use or Highway 99E (see 16.08.120).
- F. Detached WTS facilities (lattice tower), equal to or over 150 feet in height and at least 660 feet from the nearest land zoned or planned for residential use or Highway 99E (see 16.08.120).
- G. Major public facility, except as modified by Section 16.32.010. (Ord. 960, section 2, 12/18/96; Ord. 890, section 32, 1993; Ord. 740 section 10.3.31(B), 1984; Ord. 981 section 32, 1997; Ord 1237, 2007)

**16.32.030 Development standards.**

The following subsections indicate the required development standards of the M-1 zone:

- A. Minimum lot area: five thousand square feet;
- B. Minimum width and frontage: fifty feet;
- C. Minimum yard requirements:
  - 1. Street yard: twenty feet where abutting Highway 99-E and S. Ivy Street. Gas station canopies shall be exempted from the twenty foot setback requirements. Remaining property none, except ten feet where abutting a residential zone. Sign setbacks along Highway 99-E and S. Ivy Street are to be measured from the face of the curb rather than the lot line. Where no curb exists, the setback shall be measured from the property line. Other than signs which are nonconforming structures and street banners which have been approved per the requirements of the Uniform Sign Code, no signs will be allowed to be located within, or to project over, a street right-of-way.
  - 2. Interior yard: none, except ten feet where abutting a residential zone.
- D. Maximum building height:
  - 1. Freestanding signs: thirty feet;
  - 2. All other structures: forty-five feet.



E. Maximum lot coverage: no limit.

F. Other regulations:

1. Vision clearance distances shall be fifteen feet from any alley or driveway and thirty feet from any other street or railroad.

2. Outside storage abutting a public road or ~~facing a lot in~~ a residential zone shall be screened from view ~~enclosed~~ by a site-blocking fence, landscaping, ~~or~~ berm. ~~The fence or berm shall be so designed as to screen the storage from view from the residential zone and shall be of such material and design as will not detract from adjacent residences.~~

3. All setbacks to be measured from the foundation line of the building. Overhangs shall not exceed two feet.

4. Prior to issuance of a building permit, wireless/cellular towers require written certification of approval/compliance from the Federal Communications Commission, Federal Aviation Administration and the Oregon Department of Transportation (Department of Aeronautics). (Ord 890 section 33, 1993; Ord. 830 section 11, 12, 1989; Ord. 740 section 10.3.31(C), 1984; Ord. 955 section 12, 1996; Ord. 981 section 51, 1997; Ord. 1237, 2007)

4.5. Customer and employee parking must be located at the front or side of the building. Areas that accommodate large vehicles, busses, freight maneuvering, and parking/loading areas shall be screened from view by a site-blocking fence, landscaping, or berm.

## Chapter 16.34

### M-2 HEAVY INDUSTRIAL ZONE

#### Sections:

- 16.34.010 Uses permitted outright.**
- 16.34.020 Conditional uses.**
- 16.34.030 Development standards.**

#### **16.34.010 Uses permitted outright.**

Uses permitted outright in the M-2 zone shall be as follows:

- A.** A use permitted outright in an M-1 zone. (Ord. 740 section 10.3.33(A), 1984)

#### **16.34.020 Conditional uses.**

Conditional uses in the M-2 zone shall be as follows:

- A.** Aggregate removal operations;
- B.** All other uses when evaluated on the standards and criteria specified in Chapter 16.50 and the point system set out in Table 16.34.020 for evaluating heavy industrial development proposals.
- C.** Detached WTS facilities (monopole), equal to or over 100 feet in height and less than 660 feet from the nearest land zoned or planned for residential use or Highway 99E (see 16.08.120).
- D.** Detached WTS facilities (lattice tower), equal to or over 150 feet in height and at least 660 feet from the nearest land zoned or planned for residential use or Highway 99E (see 16.08.120). (Ord. 740 section 10.3.33(B), 1984; Ord. 981 section 33, 1997)

#### **16.34.030 Development standards.**

The following subsections indicate the required development standards of the M-2 zone:

- A.** Minimum lot area: five thousand square feet;
- B.** Minimum width and frontage: fifty feet.
- C.** Minimum yard requirements:
  - 1.** Street yard: none, except twenty feet where abutting a residential zone;
  - 2.** Interior yard: none, except twenty feet where abutting a residential zone.
- D.** Maximum building height:
  - 1.** Freestanding signs: thirty feet;

2. All other structures: forty-five feet.

E. Maximum lot coverage: no limit.

F. Other regulations:

1. Vision clearance distances shall be fifteen feet from any alley or driveway and thirty feet from any other street or railroad;

~~2. ——— 2.~~ Outside storage abutting a public road or ~~facing a lot in~~ a residential zone ~~\_~~ shall be screened from view ~~enclosed~~ by a site-blocking fence, landscaping, or berm. ~~The fence or berm shall be so designed as to screen the storage from view from the residential zone and shall be of such material and design as will not detract from adjacent residences.~~ (Ord. 890 section 34, 1993; Ord. 740 section 10.3.33(C), 1984; Ord 1237, 2007)

3. Customer and employee parking must be located at the front or side of the building. Areas that accommodate large vehicles, busses, freight maneuvering, and parking/loading areas shall be screened from view by a site-blocking fence, landscaping, or berm.

### M-2 Conditional Use Review Matrix Table 16.34.020

Explanation: When considering conditional use applications for the M-2 Zone, ~~E~~each of the following characteristics will be evaluated by the Planning Commission and assigned a certain number of points (positive and negative). A net point total of "0" will be considered to be the prerequisite for approval of an ~~industrial-~~ M-2 conditional use. In entering its findings of fact for its decision, the ~~C~~ommission shall indicate its findings regarding the following:

CRITERIA	POINTS
Traffic impacts, particularly heavy truck traffic and its impact on non-industrial areas and streets	-10 – 0
Noise impacts, especially loud and high-pitched noise and noise expected to occur at night	-10 – 0
Air pollution, including odors as well as measurable pollutants	-10 – 0
Water pollution, including impacts on groundwater and surface water as well as any unusual or hazardous discharges to the city sewage treatment facility	-10 – 0
Water consumption, especially where city water is utilized rather than a private source	-10 – 0
Electrical consumption	-10 – 0
Other adverse impacts, which may include factors not listed above or may be used to add more negative point to any of the items already listed, where extreme adverse impacts are expected	-40 – 0
Tax benefits to the community, particularly for property taxes beyond the costs of providing public services	0 - +20
Total number of persons to be employed	0 - +10
Number of local persons who can expect to be employed, based upon	0 - +10

percentages of skilled, semi-skilled and unskilled positions	
Reliance <del>on industry</del> on locally produced resources and locally processed materials	0 - +10
Export characteristics and residual benefits to other local industries	0 - +10
Other community benefits, including particularly advantageous design characteristics, etc. May also be used to add more positive points to each of the factors listed above where extremely beneficial impacts are expected	0 - +40
<u>Low Impact Design and sustainability Features</u>	<u>0 - +20</u>

## Chapter 16.35

### CANBY INDUSTRIAL AREA OVERLAY (I-O) ZONE

#### Sections:

- 16.35.010 Purpose.
- 16.35.020 Applicability.
- 16.35.025 Pre-application review and conditions of approval.
- 16.35.030 Uses permitted outright.
- 16.35.040 Conditional uses.
- 16.35.045 Prohibited uses.
- 16.35.050 Development standards.
- 16.35.060 Design guidelines.
- 16.35.070 I-O design review matrix.

#### 16.35.010 Purpose.

The purpose of the Canby Industrial Area Overlay (I-O) zone is to implement the design guidelines and standards of the Canby Industrial Area Master Plan (Master Plan):

- A. Provide efficient circulation and access;
- B. Allow flexibility in siting development, including a range of industrial and commercial/industrial land uses;
- C. Provide visual continuity for streetscapes and developments;
- D. Encourage durable, high quality building materials.

The zone is intended to ensure high-quality industrial development with a mix of employment types and uses. (Ord. 1008 section 1 [part], 1998; Ord. 1057 section 2 [part], 2000)

#### 16.35.020 Applicability.

It is the policy of the City of Canby to apply the I-O zone to all lands within the [Canby Pioneer Industrial Park](#) Master Plan area and other areas determined by the City, ~~upon annexation or prior to application for development permit~~ [as defined in the Industrial Area Master Plan](#). The Master Plan area generally includes the area bound by Highway 99E and 1<sup>st</sup> Avenue to the north, Mulino Road to the east, SE 13<sup>th</sup> Avenue to the south, and ~~Molalla Western Railroad~~ [the Molalla Forest Logging Road Trail](#) to the west. The I-O zone has the following affect with regard to other chapters of this ordinance:

- A. Incorporates the Canby Industrial Area Master Plan into Title 16. The Master Plans design guidelines, standards, and plan maps are hereby incorporated by reference.

- B.** Permits land uses which are permitted by the underlying zone districts (C-M, M-1, M-2), with some exceptions.
- C.** Replaces selected development standards contained in the C-M, M-1, and M-2 zones, for continuity and quality of site design within the Master Plan area.
- D.** Utilizes the City's processes for development review, including land divisions, conditional uses, and design reviews. Provides a design review matrix (i.e., replacing the table in Chapter 16.49) which is tailored to the Master Plan area.
- E.** Provides additional conditional use standards to ensure development compatibility.
- F.** Lists uses that are prohibited outright due to incompatibility with the goals for the area. (Ord. 1008 section 1 [part], 1998; Ord. 1057 section 2 [part], 2000)

**16.35.25 Pre-application review and conditions of approval**

- A.** A pre-application meeting with utility and service providers is required prior to any land use application, building permit application, or business license application in the I-O zone, unless this requirement is waived by the City Planner. The City Planner shall provide application forms for this purpose indicating all required information. The pre-application meeting shall allow utility and service providers to make a detailed assessment of the proposed use prior to forming a recommendation on approval. In addition, this meeting will allow the City to evaluate whether a Conditional Use Permit will be required.
- B.** At the pre-application meeting, the City shall determine the need for a Hazardous Materials Management Plan. If required by the City, the applicant shall prepare a plan meeting the relevant sections of the Oregon Fire Code as determined by the City. The Plan shall allow utility and service providers to review the health and safety impacts of any proposed use and ensure an adequate plan will be in place to address those impacts prior to forming a recommendation on approval.
- C.** The Planning Commission or City Council may impose conditions to protect public health and safety on any discretionary land use application. (Ord. 1057 section 2 [part], 2000; Ord. 1237, 2007)

**16.35.030 Uses permitted outright.**

Unless limited by sections 16.35.040 or 16.35.045, uses permitted outright in the C-M zone, M-1 zone, and M-2 zone are permitted outright in the I-O zone, subject to the respective zone district boundaries. (Ord. 1008 section 1 [part], 1998; Ord. 1057 section 2 [part], 2000)

**16.35.040 Conditional uses.**

Unless limited by subsection A below or section 16.35.045, conditional uses permitted in the C-M zone, M-1 zone, and M-2 zone are permitted as conditional uses in the I-O zone, subject to the respective zone district boundaries.

- A.** Any proposed site development, change in use, land division, or other action that

results in any of the following requires conditional use approval in the I-O zone:

1. Less than ~~642~~ employees per developed acre. For the purposes of this section only, “developed” means all areas used for buildings, landscaping, vehicle maneuvering and parking areas, outdoor storage, and other areas occupied by the use. For the purposes of this section only, employees means full-time equivalents unless the City specifically allows other interpretations;
2. More than 60 acres total in I-O zoning that is occupied by a single use or business. For the purposes of this section, businesses classified in the same NAICS industry group (four-digit code) are considered to be in the same use. This section is intended to apply cumulatively to all properties in the zone;
3. Utilization of any public service or utility to such an extent that the utility would not be able to supply all other uses projected in its current long-range plans;
4. Uses requiring an H occupancy under the Oregon Structural Specialty Code;
5. In any C-M zoning overlain by I-O zoning, any retail or commercial use with a building footprint exceeding 50,000 square feet;
6. In any M-1 or M-2 zoning overlain by I-O zoning, any retail or commercial use not related to or supportive of the primary industrial use of the park; or
7. In any M-1 or M-2 zoning overlain by I-O zoning, retail areas occupying more than 15% of the building footprint. ~~or more than 3,000 square feet.~~
- 7.8. In the Canby Pioneer Industrial Park, a proposed freestanding warehouse that is not associated with an outright permitted use on the same property must go through the conditional use process.

**B.** To approve a conditional use in the I-O zone, the Planning Commission shall find that each of the following additional criteria are either met, or can be met by observance of conditions, unless it is not applicable:

1. The proposed use is compatible with the industrial nature of the park and will have minimal negative impact on the development and use of surrounding properties;
2. The proposed use does not pose a threat to public health or safety; and
3. The proposed use is beneficial to the overall economic diversity and vitality of the City.

These criteria are in addition to those provided in Section 16.50.010. In all other aspects, the conditional use process shall be as specified in Chapter 16.50. (Ord 1008 section 1 [part], 1998, Ord. 1057 section 2 [part], 2000; Ord. 1237, 2007).

**16.35.045 Prohibited uses.**

The following uses are prohibited in the I-O zone:

- A. Slaughter house;
- B. Rendering, reduction, or distillation of, or manufacturing from, animals, fish and their by-products;
- C. Auto, truck or motorcycle race track;
- D. Auto, truck, or motorcycle wrecking or salvage yard;
- E. Scrap metal storage and sales;
- F. Reclamation or manufacturing of steel barrels or drums;
- G. Dump or landfill, including rubbish, slag, organic materials, offal, or garbage in general;
- H. Livestock feeding pen, other than those associated with existing agricultural uses;
- I. Fireworks manufacturing or the manufacturing of ammunition or explosives;
- J. Nuclear power plant or similar use;
- K. Curing and storage of hides;
- L. Incinerator, smelter, blast furnace, or coke oven;
- M. Manufacture of oils, gasoline, or products made directly from petroleum, other oils, or tar products;
- N. Fertilizer production;
- O. Creosote production;
- P. Insecticide production;
- Q. Tire manufacturing;
- R. Saw, shingle, or lumber mill; and
- S. In any M-1 or M-2 zoning overlain by I-O zoning, commercial or retail uses over 50,000 square feet are prohibited.

This list should not be used to imply that any other use is permitted. (Ord. 1057 section 2 [part], 2000)



**16.35.050 Development standards.**

The following subsections indicate the required development standards of the I-O zone. These standards replace the standards of the C-M zone, M-1 zone, and M-2 zone, as follows:

**A.** Minimum lot area: none.

**B.** Minimum lot width and frontage: none.

**C.** Minimum yard requirements (measured from building foundation to right-of-way line):

1. Street yards(s): 20 feet for buildings up to 25 feet in height; 35 feet for buildings between 25 feet and 45 feet in height. Parking and internal drives (except curb cuts and entrance drives) are prohibited within the required 20 foot street yard.

2. Interior yard: 10 feet, except 20 feet where abutting a residential zone. Common-wall lot lines (attached buildings), and development which provide shared parking and circulation with abutting developments, are exempt from interior yard standards.

**D.** Maximum building height: 45 feet.

**E.** Maximum lot coverage: 60 percent in the C-M zone; none in the M-1 and M-2 zones.

**F.** Street access (curb cuts) spacing shall be a minimum of 200 feet on designated parkway and collector streets.

**G.** Street right-of-way improvements shall be made in accordance with the [Canby Transportation System Plan \(TSP\)](#), ~~circulation plan, and streetscape/street section standards of the Industrial Area Master Plan.~~

**H.** Building orientation standards. The following standards are intended to ensure direct, clear, and convenient pedestrian access:

1. Development in the M-1 zone and M-2 zone shall provide at least one public entrance facing the street. A direct pedestrian connection shall be provided between the primary building entrance and public sidewalk.

2. Developments within the C-M zone shall provide continuous, straight-line pedestrian connections between the street(s), buildings, and parking areas.

**I.** Right-of-way plantings: Street trees and ground cover plantings shall be installed with development, as approved by the City. Shrubs are prohibited within the public right-of-way.

**J.** Metal building exteriors are prohibited, except that the Planning ~~Commission~~

Director may approve architectural metal elements that accent and enhance the aesthetics of building entrances and office areas; when approving a Type II Application, or the Planning Commission when approving a Type III Application.

**K.** Lighting shall be required for all streets, sidewalks, and pedestrian ways. Applications for land division approval and site plan review shall include photometric plans.

**L.** Shared access: The City may require the provision of shared access drives through the land division review process. Shared access drives are intended to maintain adequate driveway spacing and circulation along the designated Parkway and Collector streets.

**M.** All landscaped areas shall be irrigated; unless drought tolerant plants are installed and watered until well established and replaced in event of failure.

**N.** Other regulations: The C-M zone, M-1 zone, and M-2 zone provide other applicable regulations related to vision clearance, Highway 99E sidewalk width, setback measurement, outside storage, and wireless/cellular tower certification. (Ord. 1008 section 1[part], 1998; Ord. 1237, 2007; Ord. 1299, 2008)

#### **16.35.060 Design guidelines.**

The Industrial Area Master Plan provides design guidelines for reviewing development applications. The guidelines, which are incorporated into Table 16.35.040~~000~~, encourage:

**A.** Flexibility to align local streets based on parcelization and development requirements;

**B.** Tree retention, planting of large (3-inch) caliper trees, and use of lawn/ground cover planting in front yard setbacks;

**C.** Placement of buildings at or near the setback line;

**D.** Placement of parking areas to the side or rear of buildings;

**E.** Placement of smaller commercial buildings at or near the street;

**F.** Building entries visible from the street with direct pedestrian connections;

**G.** Use of quality building materials;

**H.** Architectural detail to break up and articulate large surfaces and volumes, and to accentuate building entries; and

**I.** Open space retention and trail connections, as designated by the Master Plan. (Ord. 1008, section 1[part], 1998)

#### **16.35.070 I-O Design review matrix.**

The City uses the following matrix to evaluate compliance with the I-O design guidelines. The matrix substitutes for the general design review matrix provided in Chapter 16.49. Design review applications must comply with all other applicable provisions of Chapter 16.49, and achieve scores equal to or greater than the minimum acceptable scores in the matrix. (See Master Plan for illustrations.)

A. Exception: The City may reduce the minimum acceptable score(s) upon finding that certain provisions do not apply to a proposed development.

[Industrial Overlay Design Review Matrix](#)

**Table 16.35.040**

CRITERIA	Possible Scores
<b>Parking</b>	
Parking areas located to the side or rear of buildings as viewed from public right of way: <50% of parking spaces=0; 50%-75%=1; <del>75%</del> , 100%=2;	<del>0</del> 1 2
Increase minimum interior parking lot landscape over the base 15%: 15%-18%=0; 18%-22%=1; >22%=2.	0 1 2
Increase the <u>base</u> number of trees <u>required by 16.49.120 (all landscape islands must contain 1 tree, 1 tree for every 40' along the required setback); planted within buffers and/or within the parking area:</u> 100%-105% of base requirement*=0; 105%-110% of base requirement=1;>110%=2. <del>*The base requirement is determined based on total parking area/number of spaces, and parking setback perimeter, see Chapter 16.49.120.;</del> (# of trees proposed/# of trees required x100=% of base requirement)	0 1 2
Number of parking spaces <u>provided</u> : (% of required minimum)-: >110%=0; 110%-105%=1; 105%-100%=2. <u>See Table 16.10.050 for required parking.</u> (# of spaces proposed/# of spaces required x100=% of required minimum)	0 1 2
<b>Minimum Acceptable Score</b>	<b><del>3</del> 4 points</b>

Comment [d1]: Now a requirement for CM, M1, & M2 Zones

<b>Transportation/Circulation</b>	
<del>Proposed local street alignments: Street not proposed = 0; Street(s) proposed with some modification to master plane = 1; proposed street(s) approximate recommended alignments = 2. Note: the Planned Parkway and collector streets are required elements, except as indicated by the Industrial Area Master Plan</del>	<del>0</del> 1 2
<del>Design of all pedestrian ways (private, on-site pedestrian pathways): 6' painted ways=0; 6' brick/paver ways=1; 6' brick/paver &amp; raised concrete ways=2 six-foot wide, raised concrete with painted crosswalks (standard) = 0; standard with brick or similar pavers for pathways and crosswalks = 1; greater than 6-foot wide (inclusive of curb) and use of brick or similar pavers for pathways and crosswalks = 2</del>	0 1 2
Number of pedestrian connections between the street sidewalk and internal circulation system: One connection = 0 Two <u>or more</u> connections = 1	0 1 2

Comment [d2]: No streets really left to build in the IO Zone

**Minimum Acceptable Score (some provisions may not apply) ~~2-3~~ points**

<b>Tree Retention, Open Space conservation and Trail Connections</b>	
Preserves trees as recommended by arborist or City Planning Department: <50% of recommended trees preserved=0; 50%-75%=1; 75%-100%=2	<del>0 1 2</del>
Replaces trees that were recommended for retention: No=0; Yes=1. Mitigation based on reasonable tree replacement ratio.	<del>0 1</del>
When site includes designated open space, park or trail connection: proposal does not dedicate or establish easement for designated open space/park or trail connection=0; dedicated or establishes easement=1; dedicated land/right-of-way and constructs improvements=2.	<del>0 1 2</del>
<b>Minimum Acceptable Score (some provisions may not apply) 3 points</b>	

**Comment [d3]:** No trees left to retain. If trail connections are desired they can be required as a condition with park dedications per 16.120 or just as a general condition per 16.49

<b>Landscaping</b>	
Trees installed at 3 inch caliper: <25% of trees=0; 25%-50%=1; 50%-100%=2.	<del>0 1 2</del>
Usable outdoor amenity provided with development (e.g., water features, plazas, seating areas, and similar features): no=0; yes=1; yes and for public use access provided (i.e., through an easement)=2.	<del>0 1 2</del>
Amount of grass (less grass is better) (% of total landscaped area) >50%=0; 25%-50%=1; <25%=2. Amount of grass or other plantings used for ground cover treatment: <75%=0; 75%-90%=1; 90%-100%=2.	<del>0 1 2</del>
<b>Minimum Acceptable Score</b>	<b>3 points</b>

<b>Building Appearance and Orientation</b>	
Building orientation at or near the street: parking or drive separates building from street=0; at least 20% of elevation within 5 feet of minimum setback=1; at least 20% of elevation is at minimum setback=2.	<del>0 1 2</del>
Building entrances visible from the street: no=0; yes=1.	<del>0 1</del>
Buildings use quality materials: concrete, wood, or wood siding=0; concrete masonry, stucco, or similar material=1; brick or stone similar appearance=2.	<del>0 1 2</del>
Articulation and/or detailing to break up large building surfaces and accentuate the building entrance(s): no=0; yes=2.	<del>0 2</del>
<b>Minimum Acceptable Score</b>	<b>4 points</b>

<a href="#">Low Impact Design</a>	
	<a href="#">0</a> <a href="#">1</a> <a href="#">2</a>

**Comment [d4]:** Consider adding points for xeriscaping or LID sustainable measures. What would these be? What would the point values be? Do we want to copy from 16.49 matrix?

## Chapter 16.49

### SITE AND DESIGN REVIEW

#### Sections:

- 16.49.010 Findings and objectives.
- 16.49.020 Establishment of the Site and Design Review Board.
- 16.49.025 Establishment of a site and design review committee.
- 16.49.030 Site and design review plan approval requirements.
- 16.49.035 Application for Site and Design Review.
- 16.49.040 Criteria and standards.
- 16.49.050 Conditions placed on site and design review approvals.
- 16.49.060 Time limit on approvals.
- 16.49.065 Bicycle and pedestrian facilities.
- 16.49.070 Authority and intent.
- 16.49.080 General provisions for landscaping.
- 16.49.090 Specifications for tree and plant materials.
- 16.49.100 Landscaping installation and maintenance.
- 16.49.110 Landscape area credit for preservation of existing trees and tree groves.
- 16.49.120 Parking lot landscaping standards.
- 16.49.130 Revegetation in unlandscaped areas.
- 16.49.140 Minor revisions to approved landscaped plans.
- 16.49.150 Parking lots or paving projects.

#### 16.49.010 Findings and objectives.

A. The City Council finds that excessive uniformity, dissimilarity, inappropriateness, or poor quality of design in the exterior appearance of structures and signs, and the lack of proper attention to site development and landscaping, in the business, commercial, industrial and certain residential areas of the city hinders the harmonious development of the city; impairs the desirability of residence, investment or occupation in the city; limits the opportunity to attain the optimum use and value of land and improvements; adversely affects the stability and value of property; produces degeneration of property in such areas with attendant deterioration of conditions affecting the peace, health and welfare of the city; and destroys a proper relationship between the taxable value of property and the cost of municipal services thereof.

B. The City Council declares that the purpose and objectives of site development requirements and the design review procedures are to:

1. Encourage originality, flexibility and innovation in site planning and development, including the architecture, landscaping and graphic design of said development.

3. Temporary public structures which will be removed within two (2) years of placement.
4. Commercial and industrial accessory structures under 500 square feet.
5. Temporary commercial tent/canopy structures, which meet the Uniform building or Fire Code, and which will be removed within thirty (30) days of placement.
6. Temporary Vendor activity permitted pursuant to Section 16.08.140.
7. Parking lot or paving projects. If no buildings or structures are involved, paving or parking lot development in excess of 2,500 square feet of impervious surface is exempted from a Type III site and design review. However, parking lot and paving projects in excess of 2,500 square feet of impervious surface require Type I site plan review. All new paved areas and parking lots in excess of 2,500 square feet must meet the requirements of Section 16.49.150.
8. Single family or two-family dwellings and their accessory structures, and any alterations or remodeling thereof.
9. Minor public facilities.
10. Approved Public Art Murals as defined in CMC Chapter 2.80.020.

**C.** Construction, site development and landscaping shall be carried out in substantial accord with the approved site and design review plan. Review of the proposed site and design review plan and any changes thereto shall be conducted in accordance with site and design review procedures.

**D.** No fence/wall shall be constructed throughout a project that is/was subject to site and design review approval where the effect or purpose is to wall said project off from the rest of the community unless reviewed and approved by the Planning Commission. (Ord. 1315, 2009; Ord. 1237, 2007; Ord. 1080, 2001; Ord. 1019 section 2, 1999; Ord. 981 sections 52&53, 1997; Ord. 955 section 23, 1996; Ord. 890 section 43, 1993; Ord. 848, Part III, section 1, 1991; Ord. 1341, 2011)

#### **16.49.035 Application for Site and Design Review**

**A.** For site and design review projects in the Downtown Canby Overlay Zone ([DCO](#)) or in the Canby Industrial Area Overlay Zone ([CIAO](#)), applicants may choose one of the following two processes:

1. Type II – If the applicant meets all applicable site and design review standards set forth in Chapters 16.41 ([Downtown Canby Overlay Zone](#)) and 16.49; or Chapter 16.35 ([Canby Industrial Area Overlay Zone](#)) and 16.49, the applicant shall submit a Type II application for approval pursuant to the approval criteria set forth in 16.49.040 [A](#); or

2. Type III – If the applicant proposes the use of alternative methods or materials to meet the intent of the site and design review standards set forth in Chapter 16.41.070, the applicant shall submit a Type III application for approval pursuant to the approval criteria set forth in 16.49.040.B.3. The applicant must still meet all applicable requirements of Chapter 16.49.

B. All other projects subject to site and design review approval pursuant to Section 16.49.030 are subject to the Type III procedural requirements set forth in Chapter 16.89. The applicant shall submit a Type III application for approval pursuant to the approval criteria set forth in 16.49.040. (Ord 1296, 2008)

#### **16.49.040 Criteria and standards.**

A. ——— In review of a Type II Site and Design Review Application described in Section 16.49.035.A.1, the Planning Director shall, in exercising his powers, duties or functions, determine whether there is compliance with the DCO, and CIAO site and design review standards.

**B.A.** In review of a Type III Site and Design Review Application, the Board shall, in exercising or performing its powers, duties or functions, determine whether there is compliance with the following:

1. The proposed site development, including the site plan, architecture, landscaping and graphic design, is in conformance with the standards of this and other applicable city ordinances insofar as the location, height and appearance of the proposed development are involved; and

2. The proposed design of the development is compatible with the design of other developments in the same general vicinity; and

3. The location, design, size, color and materials of the exterior of all structures and signs are compatible with the proposed development and appropriate to the design character of other structures in the same vicinity.

4. The proposed development incorporates the use of LID best management practices whenever feasible based on site and soil conditions. LID best management practices include, but are not limited to, minimizing impervious surfaces, designing on-site LID stormwater management facilities, and retaining native vegetation.

5. The Board shall, in making its determination of compliance with this Ordinance, shall use the matrix in Table 16.49.040 to determine compatibility unless this matrix is superseded by another matrix applicable to a specific zone or zones under this title. An application is considered to be compatible with the standards of Table 16.49.040 if the following conditions are met:

a. The development accumulates a minimum of 60 percent of the total possible number of points from the list of design criteria in Table 16.49.040; and



b. At least 10 percent of the points used to comply with (a) above must be from the list of LID Elements in Table 16.49.040. (Ord. 1338, 2010).

**C.B.** In review of a Type II Site and Design Review Application described in Section 16.49.035.A.1, the Planning Director shall, in exercising his powers, duties or functions, determine whether there is compliance with the DCO site and design review standards.

**D.C.** In review of a Type III Site and Design Review Application, the Board shall, in exercising or performing its powers, duties or functions, determine whether there is compliance with the INTENT of the design review standards set forth in this Ordinance.

**E.D.** The Board shall, in making its determination of compliance with the above requirements, be guided by the objectives and standards set forth in this Ordinance. It must be demonstrated that all required public facilities and services are available, or will become available through the development, to adequately meet the needs of the proposed development. If the site and design review plan includes utility facilities or public utility facility, then the City Planner shall determine whether those aspects of the proposed plan comply with applicable standards.

**F.E.** The Board shall, in making its determination of compliance with the requirements set forth, consider the effect of its action on the availability and cost of needed housing. The Board shall not use the requirements of this section to exclude needed housing types. However, consideration of these factors shall not prevent the Board from imposing conditions of approval necessary to meet the requirements of this section. The costs of such conditions shall not unduly increase the cost of housing beyond the minimum necessary to achieve the purposes of this ordinance.

**G.F.** As part of the site and design review, the property owner may apply for approval to cut trees in addition to those allowed in Chapter 12.32, the city Tree Ordinance. The granting or denial of said application will be based on the criteria in Chapter 12.32. The cutting of trees does not in and of itself constitute change in the appearance of the property which would necessitate application for site and design review. (Ord. 848, Part III, section 2, 1991; Ord. 955 section 24 & 25, 1996; Ord 1237, 2007, Ord 1296, 2008)