

CITY OF SHERWOOD
Notice of Decision
Mandel Farms Subdivision (SUB 15-01)

February 24, 2016

On Tuesday, February 23, 2016 the Sherwood Planning Commission conducted a public hearing on the following proposal. The Commission considered the applicant's materials, comments from the public related primarily to access and traffic, and the staff report. The Planning Commission deliberated and decided to conditionally approve the proposal after considering the public testimony and evidence, and based their decision to approve the development on the following findings of fact. The proposal is approved subject to compliance with the conditions contained in this notice.



Jean Simson, Planning Commission Chair

Proposal: The applicant is requesting preliminary subdivision approval for an 86-lot subdivision for single-family dwellings on a 22.35 acre site comprised of two tax lots divided by SW Copper Terrace.

I. BACKGROUND

A. Applicant:

Venture Properties
4230 Galewood Street, Suite 100
Lake Oswego, OR 97034
Contact: Kelly Ritz

Owner:

2007 Mandel Family Trust
David Mandel and Randy Kieling
13990 SW Hall Blvd
Tigard, OR 97223

- B. Location: Washington County Tax Map 2S130CB00250 and 2S130CB00251. The property is located at the southeast corner of the intersection of SW Elwert and SW Edy roads at 21340 SW Elwert Road.
- C. Parcel Size: The subject property is approximately 22.35 gross acres.
- D. Existing Development and Site Characteristics: The subject site is in active farming with nursery stock and field crops and has an existing single-family residence and associated outbuilding and is part of a larger undeveloped parcel that is in active farm use with nursery stock and field crops. The site is bisected by a perennial tributary to Chicken Creek bisects from south to north in an arched manner on the west side of the property. The site is also bisected by SW Copper Terrace which created a smaller 1.19 acre parcel at the northeast corner of the site. The land has a gently sloping topography with high points in the northeast, southeast and southwest corners. The site is bounded by SW Edy Road on the north, SW Elwert Road on the west, and by the perennial tributary and associated vegetated corridor on the north and south, and extends 130 feet east.
- E. Site History: The site was brought into the Urban Growth Boundary by Metro in 2002 as part of Area 59. The Area 59 Concept Plan, adopted by the City Council in 2007, applied a mix of land use designations on the parcel, including Medium Density Residential Low (MDRL), Medium Density Residential High (MDRH), and Neighborhood Commercial (NC). Additionally, the waterway that bisects the property is identified as Open Space and/or Natural Area. The implementing codes were adopted at the same time as the

concept plan. The City Council approved a request to rezone the 3-acre NC zoned portion to MDRL on January 5, 2016.

- F. Zoning Classification and Comprehensive Plan Designation: The existing zone for 12.54 acres of the site is Medium Density Residential Low (MDRL) and Medium Density Residential High (MDRH) for 5.82 acres. Per section 16.12, the purpose of the MDRL zone is to provide for single-family and two-family housing, manufactured housing and other related uses with a density of 5.6 to 8 dwelling units per acre and the purpose of the MDRH zone is to provide for a variety of medium density housing and related uses at a density of 5.5 to 11 dwelling units per acre. Approximately 4 acres have an Open Space designation, to reflect the desire to preserve the natural area and habitat of the Chicken Creek tributary that bisects the property.
- G. Adjacent Zoning and Land Use: The properties north and west of the subject site are located in Washington County, outside the City's Urban Growth Boundary, and are zoned Exclusive Agriculture and Forest (AF-20), which is intended to provide an exclusive farm use zone within the County which recognizes that certain lands therein may be marginal, and Agriculture and Forest (AF-10), the purpose of which is to promote agricultural and forest uses on small parcels in the rural area, while recognizing the need to retain the character and economic viability of agricultural and forest lands, as well as recognizing that existing parcelization and diverse ownerships and uses exist within the farm and forest area. The land is largely undeveloped with the exception of a few rural residences and is vacant or utilized for agricultural purposes. The properties south and east of the site are located within the City limits and are zoned MDRL, MDRH, and Institutional and Public (IP). The Daybreak single-family subdivision has been developed immediately south of the site. The Laurel Ridge Middle School campus has been developed east of the site, on the east side of Copper Terrace Road. A 5.09 acre lot zoned MDRL is located adjacent to the northeast portion of the site. This parcel is developed with a residential home and associated out buildings with much of the land in active farm use.
- H. Review Type: The subdivision requires a Type IV review and decision made by the Planning Commission per Section 16.72.010.A.4 of the Sherwood Zoning and Community Development Code (SZCDC). An appeal would be heard by the Sherwood City Council.
- I. Public Notice and Hearing: Public notice of the application was provided in accordance with Section 16.72.020 of the SZCDC. Notice of the application was posted in five locations throughout the City on January 27, 2016. Notice was mailed to property owners within 1,000 feet of the site and posted on the property on January 29, 2016. Notice was published in The Times on February 4, 2016 and again on February 18, 2016.
- J. Review Criteria: Review of the application is based on the following chapters and applicable sections of the SZCDC, §16.12 (Residential Land Uses), §16.58 (Clear Vision and Fence), §16.60 (Yard Requirements), §16.72 (Procedures for Processing Development Permits), §16.94 (Off-Street Parking), §16.106 (Transportation Facilities); §16.110 (Sanitary Sewers); §16.112 (Water Supply); §16.114 (Storm Water); §16.116 (Fire Protection); §16.118 (Public and Private Utilities), §16.120 (Subdivisions), §16.128 (Land Division Design Standards), §16.142 (Parks, Trees and Open Space), §16.144 (Wetland, Habitat, and Natural Areas); and §16.156 (Energy Conservation).

II. PUBLIC COMMENTS

Public notice was posted in five locations throughout the City on January 27, 2016 and mailed to property owners within 1,000 feet of the site and posted on the property on January 29, 2016. Staff has not received any public comments as of the date of this report.

III. AGENCY COMMENTS

Staff sent e-notice to affected agencies on January 21, 2016. The following is a summary of the comments received. Copies of full comments are included in the record unless otherwise noted.

Sherwood Engineering Department: Craig Christensen, PE with the City Engineering Division provided written comments dated February 15, 2016 that have been incorporated throughout this report. Mr. Christensen's comments are attached to this report as Exhibit B.

Clean Water Services: Jackie Sue Humphreys, of Clean Water Services provided comments dated February 3, 2016 on the proposal that require a Storm Water Connection Permit Authorization. Their comments are attached to this report as Exhibit C.

Tualatin Valley Fire and Rescue: Tualatin Valley Fire and Rescue provided comments listing the minimum requirements for fire protection. Their comments have been incorporated into the record, and the applicant will be required to satisfy their minimum standards for fire protection in designing and constructing the subdivision. Their comments are attached to this report as Exhibit D.

Washington County Engineering: Naomi Vogel, Associate Planner with Washington County provided comments dated February 8, 2016. Ms. Vogels comments have been incorporated into this report where appropriate, and are attached to this report as Exhibit E.

Portland General Electric, Pride Disposal, Bonneville Power Administration, Kinder Morgan Energy, ODOT, METRO, NW Natural Gas, Sherwood School District, Tri-Met, U.S. Fish and Wildlife Services, and Washington County were all provided with an opportunity to comment, but provided no comments as of the date of this staff report.

IV. PRELIMINARY PLAT- REQUIRED FINDINGS (SECTION 16.120)

16.120.030 - Approval Procedure-Preliminary Plat

A. Approval Authority

1. The approving authority for preliminary and final plats of subdivisions shall be in accordance with Section 16.72.010 of this Code.
 - a. A subdivision application for 4-10 lots will follow a Type II review process.
 - b. A subdivision application for 11-50 lots will follow a Type III review process.
 - c. A subdivision application for over 50 lots will follow a Type IV review process.
2. Approval of subdivisions is required in accordance with this Code before a plat for any such subdivision may be filed or recorded with County. Appeals to a decision may be filed pursuant to Chapter 16.76.

B. Phased Development

- 1. The Approval Authority may approve a time schedule for developing a subdivision in phases, but in no case shall the actual construction time period for any phase be greater than two years without reapplying for a preliminary plat.**
- 2. The criteria for approving a phased subdivision review proposal are:**
 - a. The public facilities shall be scheduled to be constructed in conjunction with or prior to each phase to ensure provision of public facilities prior to building occupancy;**
 - b. The development and occupancy of any phase shall not be dependent on the use of temporary public facilities:**
 - (1) For purposes of this subsection, a temporary public facility is an interim facility not constructed to the applicable City or district standard; and**
 - (2) The phased development shall not result in requiring the City or other property owners to construct public facilities that were required as a part of the approval of the preliminary plat.**
- 3. The application for phased development approval shall be reviewed concurrently with the preliminary plat application and the decision may be appealed in the same manner as the preliminary plat.**

ANALYSIS: The proposed development is a subdivision for 86 single-family lots. The code requires that it be reviewed as a type IV application. In addition, the applicant is proposing to four phases over a six year period. Sheet P04 illustrates the proposed phasing of the development. A discussion of the phasing plan can be found on page 41 of the applicant's narrative.

FINDING: The application is for 86 single-family lots and is therefore subject to a Type IV application process. The application is being processed as a Type IV application consistent with this process. The applicant is also proposing to phase the subdivision over a period of six years, meaning that the construction of each phase must not exceed two years. The applicant is not proposing any temporary or interim facilities, and is not asking that the City construct any facilities on its behalf. Given the current real estate market and high demand for housing, it is feasible for the developer to satisfy the requirements for a phased development. These criteria are satisfied.

16.120.040 - Approval Criteria: Preliminary Plat

- A. Streets and roads conform to plats approved for adjoining properties as to widths, alignments, grades, and other standards, unless the City determines that the public interest is served by modifying streets or road patterns.**

FINDING: As proposed, the development is provided with sewer, water, stromwater, access, and can feasibly be served by franchise utilities. The only street that has been stubbed to this site is SW Yorkshire Way from the south. All other internal streets are newly proposed and have been designed to acceptable public standards. The applicant has requested modifications that have been considered and approved by the County Engineer and the City Engineer in order to allow the most efficient development of this property as zoned. A thorough discussion of how these services are provided have been

reviewed and evaluated by Washington County, the City of Sherwood Public Works Department, and the City Engineer to ensure that they will function as proposed. The analysis and discussion of these services can be found in Division VI (Public Infrastructure) below. As discussed and conditioned throughout the report, the proposed development can satisfy this criterion.

B. Streets and roads held for private use are clearly indicated on the plat and all reservations or restrictions relating to such private roads and streets are set forth thereon.

FINDING: All streets within and adjacent to the proposed development are public. The applicant also proposes a public alley to serve proposed lots 76-78 at staff's recommendation early in their design. The code requires access to more than two lots to be public. In this particular instance, the applicant has proposed a public alley to overcome this requirement. After discussing this particular issue with the Public Works department, who would be required to maintain the proposed alley, and the City Engineer who reviews and analyzes access to public streets, they are requesting that the public alley be constructed to a public standard, but maintained as a private alley. Because of the location of proposed lot 78 at the intersection of SW Elwert Road and the newly proposed SW 'C' Terrace, any location of a driveway could be problematic unless access is provided off of the proposed alley. For these reasons, the City is requesting that the Planning Commission require this proposed public alley to be private, and limit access to lot 78 from that alley.

CONDITION: The proposed public alley off of SW 'C' Terrace shall be constructed to a public standard, but be maintained as private by the homeowners association for the Mandel Farms subdivision. Any future access to proposed lots 76-78 shall be provided via the private alley off of SW 'C' Terrace. There shall be no access to any of the lots within the subdivision from SW Elwert Road.

C. The plat complies with applicable zoning district standards and design standards in Division II, and all provisions of Divisions IV, VI, VIII and IX. The subdivision complies with Chapter 16.128 (Land Division Design Standards).

FINDING: Where applicable, this standard is or can be met as discussed in Divisions IV (Planning Procedures), VI (Public Infrastructure) and VIII (Environmental Resources) of this report. Section IX (Historic Resources) is not addressed as it is not applicable.

D. Adequate water, sanitary sewer, and other public facilities exist to support the use of land proposed in the plat.

FINDING: As discussed, analyzed, and conditioned in Division VI (Public Infrastructure) of this report there are adequate services to support the proposed subdivision. This standard is met.

E. Development of additional, contiguous property under the same ownership can be accomplished in accordance with this Code.

FINDING: There is no additional, contiguous property under the same ownership. This standard is not applicable.

F. Adjoining land can either be developed independently or is provided access that will allow development in accordance with this Code.

FINDING: The 5.09-acre lot property adjacent to the northeast portion of the site will have the opportunity to develop independently with access from SW Edy Road or SW Nursery Way. This standard is met.

G. Tree and woodland inventories have been submitted and approved as per Section 16.142.060.

FINDING: As discussed in Division VIII (Environmental Resources) below, a tree and woodland inventory was submitted. This standard can be met as conditioned in Division VIII (Environmental Resources) below.

H. The plat clearly shows the proposed lot numbers, setbacks, dedications and easements.

ANALYSIS: The proposed subdivision plat clearly illustrates the proposed lot numbers, setbacks, dedications and easements.

FINDING: This standard is satisfied.

I. A minimum of five percent (5%) open space has been provided per § 16.44.B.8 (Townhome- Standards) or §16.142.020 (Parks, Open Spaces and Trees-Single-Family Residential Subdivisions), if applicable.

FINDING: The standard requires that a minimum of 5% of the net buildable site (after exclusion of public right-of-way and environmentally constrained areas) shall be maintained as "open space". Open space must include usable areas such as public parks, swimming and wading pools, grass areas for picnics and recreational play, walking paths, and other like space. Required yards or setbacks, required visual corridors, required sensitive areas and buffers, and any area required to meet a standard found elsewhere in the code may not be used to calculate open space. As proposed, the applicant is proposing to provide open space within proposed Tracts 'A', 'B', 'D', 'F', and 'H'. The total area of these tracts is 48,029 SF, which represents approximately 8.6% of the net developable area for the site. A more comprehensive discussion of open space is detailed under 16.142 later in this report. This standard is met.

V. APPLICABLE CODE PROVISIONS

A. Division II - Land Use and Development

The applicable provisions of Division II include: 16.12 (Medium Density Residential Low, Medium Density Residential High); 16.58 (Visual Clearance); and 16.60 (Yard Requirements) Compliance with the standards in these sections is discussed below:

16.12.010 Purpose and Density Requirements

Zoning district description

C. Medium Density Residential Low (MDRL)

The MDRL zoning district provides for single-family and two family

housing, manufactured housing, and other related uses with a density of 5.6 to 8 dwelling units per acre.

- D. **Medium Density Residential High (MDRLH)**
The MDRH zoning district provides for single-family and two family housing, manufactured housing, multi-family housing and other related uses with a density of 5.5 to 11 dwelling units per acre.

ANALYSIS: The gross site area is 22.35 acres. After street right-of-way, wetlands and vegetated corridor dedications, the net acreage is 12.81 acres. The proposed density for this subdivision is 6.71 dwelling units per acre which falls within the allowable range for the MDRL and MDRH zones.

FINDING: This standard is met.

**16.12.020 Allowed Residential Land Uses
Single Family Attached or Detached Dwellings**

ANALYSIS: The applicant is proposing an 86-lot subdivision for detached, single family dwellings which is a permitted use in both the MDRL and MDRH zones.

FINDING: This standard is met.

16.12.030 Residential Land Use Development Standards

16.12.030.A Generally

No lot area, setback, yard, landscaped area, open space, off-street parking or loading area, or other site dimension or requirement, existing on, or after, the effective date of this Code shall be reduced below the minimum required by this Code. Nor shall the conveyance of any portion of a lot, for other than a public use or right-of-way, leave a lot or structure on the remainder of said lot with less than minimum Code dimensions, area, setbacks or other requirements, except as permitted by Chapter 16.84. (Variances and Adjustments)

16.12.030.B Development Standards

Except as modified under Chapter 16.68 (Infill Development), Section 16.144.030 (Wetland, Habitat and Natural Areas), Chapter 16.44 (Townhomes), or as otherwise provided, required minimum lot areas, dimensions and setbacks shall be provided in the following table.

16.12.030.C Lot Dimensions

	MDRL	MDRH
Minimum Lot area (in square ft); Single-Family Detached:	5,000	5,000
Minimum Lot width at front property line:	25 feet	25 feet
Minimum Lot width at building line; Single-Family:	50 feet	50 feet
Lot Depth:	80 feet	80 feet

FINDING: The lot dimension criterion are the same for both the MDRL and MDRH zones. The preliminary subdivision plat proposes 86 lots ranging in size from 5,000 square feet to 8,846 square feet, meeting or exceeding the minimum lot size criteria (Exhibit A, Sheet P04). As proposed, all 86 lots meet the minimum width at the front property line of 25 feet, with lot widths ranging from 27.38 feet (Lot 24) to 96.68 feet (Lot 19). All lots meet or exceed the minimum 50-foot width at the building line and 80-foot depth requirements, ranging in width from 50 feet to 80 feet and in depth from 80.6 to 153 feet.

FINDING: These standards are met.

16.12.030.C Setbacks

	MDRL	MDRH
Front yard:	14 feet	14 feet
Face of garage	20 feet	20 feet
Interior side yard; Single-Family Detached:	5 feet	5 feet
Corner lot side yard; Single Family or Two Family:	15 feet	15 feet
Rear yard:	20 feet	20 feet

ANALYSIS: Building plans are not included with the proposal. However, the building envelopes shown on the Preliminary Building Setbacks Plan (Exhibit A, Sheet P05) demonstrate that lots are large enough for structures to meet the setbacks. With the exception of the rear yard setback on lots 28-31, 36, 37, and 53, it appears that these standards can be met. For those lots listed above, the applicant has requested an exception to the rear yard setbacks under the provisions of section 16.144.030. In exchange for a reduced rear yard setback, the applicant has set aside additional area adjacent to the vegetated corridor. A more detailed discussion of this requirement can be found later in this report. The actual building envelopes will be reviewed when the lots are individually reviewed prior to issuance of building permits.

FINDING: These standards can be met as conditioned below.

CONDITION: Prior to issuance of building permits, submit plot plans showing that the structures meet minimum front, face of garage, rear, side, and corner side yard setback requirements.

16.12.030.C. Height

	MDRL	MDRH
Maximum Height (in feet):	30 or 2 stories	35 or 2.5 stories

ANALYSIS: At this time it is unclear how tall the homes will be. The actual height of the homes will be reviewed when the lots are individually reviewed prior to issuance of building permits.

FINDING: This standard can be met as conditioned below.

CONDITION: Prior to issuance of building permits submit plot plans showing that the height of the dwellings do not exceed two (2) stories or thirty feet, whichever is less, in the MDRL zoned areas and 2.5 stories or 35 feet, whichever is less, in the MDRH zoned areas.

16.58.010 Clear Vision Areas

- A. A clear vision area shall be maintained on the corners of all property at the intersection of two (2) streets, intersection of a street with a railroad, or intersection of a street with an alley or private driveway.
- B. A clear vision area shall consist of a triangular area, two (2) sides of which are lot lines measured from the corner intersection of the street lot lines for a distance specified in this regulation; or, where the lot lines have rounded corners, the lot lines extended in a straight line to a point of intersection, and so measured, and the third side of which is a line across the corner of the lot joining the non-intersecting ends of the other two (2) sides.
- C. A clear vision area shall contain no planting, sight obscuring fence, wall, structure, or temporary or permanent obstruction exceeding two and one-half (2 1/2) feet in height, measured from the top of the curb, or where no curb exists, from the established street center line grade, except that trees exceeding this height may be located in this area, provided all branches and foliage are removed to the height of seven (7) feet above the ground on the sidewalk side and ten (10) feet on the street side.

The following requirements shall govern clear vision areas:

- 1. In all zones, the minimum distance shall be twenty (20) feet.
- 2. In all zones, the minimum distance from corner curb to any driveway shall be twenty-five (25) feet.
- 3. Where no setbacks are required, buildings may be constructed within the clear vision area.

ANALYSIS: The Preliminary Building Setback Plan (Attachment A, Sheet P05) shows proposed building envelopes that show that the proposed development can comply with this standard. Clear vision areas will be verified at the time of plot plan review prior to issuance of building permits.

The Preliminary Street Tree and Open Space Plan (Attachment A, Sheet P21) appears to include proposed street trees at the intersection of SW 'C' Terrace and SW Elwert Road and SW Yorkshire Way and SW Copper Terrace that could interfere with the Clear Vision areas.

FINDING: As proposed, this standard is not met, but can be met as conditioned below.

CONDITION: Prior to approval of the Final Plat, submit a revised tree plan demonstrating compliance with the Clear Vision requirements of Section 16.16.58.

16.60 Yard Requirements

16.60.010 Through Lots

On a through lot the front yard requirements of the zone in which such a lot is located shall apply to the street frontage where the lot receives vehicle access, except where access is from an alley, the front yard requirements shall apply to the street opposite the alley.

ANALYSIS: The applicant has proposed a number of through lots, lots 12-14, 55-64, and 76-86. All through lots will take access from a new internal street, with the exception of lots 76-78 which will be accessed from a new internal alley. The applicant's narrative acknowledges that the front yard setback for lots 76-78 will be measured from SW Elwert Road, while the remaining lots will front onto the new proposed internal street, consistent with this standard.

FINDING: Generally, this standard is met, but, within the narrative, the applicant indicates that the front setback will be measured from Elwert; however, within Plan sheet P05 the front setbacks are shown from proposed public alley. The front setback for these three lots are required to be measured from SW Elwert pursuant to this standard; therefore, the following condition is warranted.

CONDITION: The front yard setbacks for lots 76-78 shall be measured from SW Elwert Road pursuant to section 16.60.010.

16.60.020 - Corner Lots

On a corner lot, or a reversed corner lot of a block oblong in shape, the short street side may be used as the front of the lot provided:

- A. The front yard setback shall not be less than twenty-five (25) feet; except where otherwise allowed by the applicable zoning district and subject to vision clearance requirements.**
- B. The side yard requirements on the long street side shall conform to the front yard requirement of the zone in which the building is located.**

ANALYSIS: As proposed, lots 1, 8, 11, 12, 18, 20, 21, 27, 48, 53, 54, 64, 69, 70, 78, and 79 are corner lots. The MDRL and MDRH zones require a 14-foot front yard and 15-foot street side yard setback, which supersedes these standards. The applicant's Preliminary Building Setback Plan (Attachment A, Sheet P05) demonstrates that the front and street side yard setbacks required by the MDRL and MDRH zones in Section 16.12.030 can be met.

FINDING: These standards are not applicable as they are superseded by the standards of Section 16.12.030.

16.60.030 - Yards

- A. Except for landscaping, every part of a required yard (also referred to as minimum setback) shall be open and unobstructed from its lowest point to the sky, except that architectural features such as awnings, fire escapes, open stairways, chimneys, or accessory structures permitted in accordance with Chapter 16.50 (Accessory Structures) may be permitted when so placed as not to obstruct light and ventilation.**
- B. Where a side or rear yard is not required, and a primary structure is not erected directly on the property line, a primary structure must be set back at least three (3) feet.**

ANALYSIS: No structures are proposed at this time. Compliance with yard requirements will be verified prior to issuance of building permits.

FINDING: This criteria is not applicable.

16.60.040 - Lot Sizes and Dimensions

- A. If a lot or parcel, or the aggregate of contiguous lots or parcels, recorded or platted prior to the effective date of this Code, has an area or dimension which does not meet the requirements of this Code, the lot or aggregate lots may be put to a use permitted outright, subject to the other requirements of the zone in which the property is located.**
- B. Exceptions**
 - 1. Residential uses are limited to a single-family dwelling, or to the number of dwelling units consistent with the density requirements of the zone. However, a dwelling cannot be built on a lot with less area than thirty-two hundred (3,200) square feet, except as provided in Chapter 16.68.**
 - 2. Yard requirements of the underlying zone may be modified for infill developments as provided in Chapter 16.68 (Infill Development).**

ANALYSIS: As proposed, all lots meet the minimum size and dimension requirements of the MDRL and MDRH zones.

FINDING: This standard is not applicable.

B. Division III – Administrative Procedures

16.72.010.A. Generally

Except for Final Development Plans for Planned Unit Developments, which are reviewed per Section 16.40.030, all quasi-judicial development permit applications and legislative land use actions shall be classified as one of the following:

16.72.010.A.4 Type IV

16.72.010.A.4.f. Subdivisions – over 50 lots

ANALYSIS: Section 16.72.010.A.4.f requires that applications for subdivisions over 50 lots be reviewed as a Type IV project which is subject to consideration by the by the Planning Commission. Appeals are heard by the Sherwood City Council. These are not actual approval criteria, but rather directions to staff on how to process the application.

FINDING: The application has been processed as a Type IV land use application. All procedures have been followed consistent with this Chapter.

C. Division V – Community Design

The applicable provision of Division V include Section 16.94.020.A (Off-Street Parking Standards).

16.94.020 Off-Street Parking Standards

16.94.020.A Generally

Where square feet are specified, the area measured shall be the gross building floor area primary to the functioning of the proposed use. Where employees are specified, persons counted shall be those working on the premises, including proprietors, during the largest shift at peak season. Fractional space requirements shall be counted as a whole space. The Review Authority may determine alternate off-street parking and loading requirements for a use not specifically listed in this Section based upon the requirements of comparable uses.

**Minimum and Maximum Parking Standards
(Metro spaces are based on 1 per 1,000 sq ft of gross leasable area)**

	Minimum Parking Standard	Maximum Permitted Parking Zone A¹	Maximum Permitted Parking Zone B²
Single, two-family and manufactured home on lot³	1 per dwelling unit	None	None

³ If the street on which the house has direct access is less than twenty-eight (28) feet wide, two (2) off-street parking spaces are required per single-family residential unit. (includes single-family detached or attached, two-family dwelling or a manufactured home on an individual lot) If the abutting street is twenty-eight (28) feet or wider, one (1) standard (9 ft. x 20 ft.) parking space is required.

ANALYSIS: Building plans and plot plans are not included in the application. The applicant's narrative does not address this standard. However, the Preliminary Building Setback Plan (Attachment A, Sheet P05) demonstrates that each lot is at least 25 feet wide at the front property line and can accommodate a building setback of 20 feet, which is adequate in size for a driveway to park at least one vehicle.

FINDING: This standard is not met, but can be met as conditioned below.

CONDITION: Prior to issuance of a building permit, submit plot plans showing the provision of one (1) off-street parking space per dwelling unit.

16.96.020. Minimum Residential Standards

16.96.020.A. Driveways

- 1. Single-Family: One (1) driveway improved with hard surface pavement with a minimum width of ten (10) feet, not to exceed a grade of 14%. Permeable surfaces and planting strips between driveway ramps are encouraged in order to reduce stormwater runoff.**

ANALYSIS: It appears that each lot will be able to meet this standard when each lot is reviewed for building permits.

FINDING: This standard applies citywide and will be verified prior to issuance of building permits.

D. Division VI - Public Infrastructure

The applicable provision of Division VI include: 16.106 (Transportation Facilities); 16.110 (Sanitary Sewers); 16.112 (Water Supply); 16.114 (Storm Water); 16.116 (Fire Protection); and 16.118 (Public and Private Utilities).

16.106 Transportation Facilities

16.106.020 Required Improvements

A. Generally

Except as otherwise provided, all developments containing or abutting an existing or proposed street, that is either unimproved or substandard in right-of-way width or improvement, shall dedicate the necessary right-of-way prior to the issuance of building permits and/or complete acceptable improvements

prior to issuance of occupancy permits. The following figure provides the depiction of the functional classification of the street network as found in the Transportation System Plan, Figure 8-1.

ANALYSIS: The applicant is proposing four new local streets and an extension of SW Yorkshire Way to the north from the Daybreak Subdivision. The proposed development is surrounded on three sides, by three existing public streets. The applicant has indicated within the narrative and on the plan sets that they are willing to dedicate the right-of-way necessary to bring the streets up to current standards consistent with discussions that have occurred between the City Engineer, the County Engineer, and the applicant's engineer. In addition to the required dedication, the applicant is required to construct street improvements including street lighting, street signs, pavement markings, etc.

The local streets that will be constructed with the development are proposed to be 52-foot wide consistent with the standard residential street within the City's Transportation system Plan (TSP). Copper Terrace is designated as a neighborhood street. The minimum dimensions for this street is a 64-foot right-of-way. The applicant is proposing to provide an 11-foot wide dedication along the sites frontage to bring the right-of-way width up to City standard. In addition to the dedication, the developer will be required to construct street widening improvements along the west side of SW Copper Terrace along the length of the property to match improvements on east side of street (19 feet centerline to face of curb with 5-foot wide landscape strip and 8-foot wide sidewalk. Bulb-outs shall be 13 feet from centerline to face of curb with 11-foot wide landscape strip and 8-foot wide sidewalk.

SW Edy Road and SW Elwert Roads are County roads. According to the comments received from the County, SW Elwert Road is designated an "Enhanced Major Street Bikeway" and an Arterial (3 lanes). The applicant will be required to ensure that there is 45 feet of right-of-way from the centerline of SW Elwert Road along the site's frontage. The applicant is proposing to dedicate additional 15-feet of right-of-way along SW Elwert as required. SW Edy Road is designated a "Major Street Bikeway" and a Collector (3 lanes). The applicant is required to ensure that the street along the site's frontage is provided with 37 feet from the centerline of SW Edy Road. As proposed, the applicant is proposing to dedicate an additional 10-feet of right-of-way along the south side of SW Edy Road. With this amount of dedication, it appears that the right-of-way along SW Edy Road will be deficient per the County standards. Finally, corner radius at both street connections the County roads, (SW Copper Terrace and SW 'C' Terrace are required to meet County standards.

FINDING: As discussed in the analysis above, the applicant has proposed to provide dedications for all public streets within and adjacent to the development. All of the proposed dedications appear to meet the City and County standards except for the proposed dedication along SW Edy Road. In order to ensure that all streets within and adjacent to the proposed subdivision meet this standard, the following conditions are warranted.

CONDITION: Prior to final plat approval, the developer shall dedicate a 64-foot full width right-of-way section along the site's frontage for SW Copper Terrace. The dedication can be provided on the final plat.

CONDITION: Prior to final plat approval, the following shall be represented on the plat and recorded with Washington County:

- a) Dedication of additional right-of-way to provide for 45 feet from the centerline of SW Elwert Road.
- b) Dedication of additional right-of-way to provide for 37 feet from the centerline of SW Edy Road.
- c) Dedication of additional right-of-way to provide adequate corner radius at all intersections with County-maintained roads.
- d) Provision of a non-access reservation along SW Edy Road and SW Elwert Road frontages with the exception of the two public street connections approved as part of this development review.

B. Existing Streets

Except as otherwise provided, when a development abuts an existing street, the improvements requirement shall apply to that portion of the street right-of-way located between the centerline of the right-of-way and the property line of the lot proposed for development. In no event shall a required street improvement for an existing street exceed a pavement width of thirty (30) feet.

ANALYSIS: Prior to making an application to the City, the applicant, the City Engineer, and the County Engineer discussed the improvements that would be required to accommodate the proposed subdivision based upon the respective Transportation System Plans, and the forecasted trips within the development. The applicant's plans and narrative indicate a willingness to make the half-street improvements along all property frontages consistent with Washington County Standards (for SW Edy and SW Elwert Roads) and the City's design standards for all internal rights-of-way and along the site's frontage with SW Copper Terrace. Because of the extensive and comprehensive intersection improvements needed at the intersection of SW Elwert and SW Edy Roads, the applicant has proposed, and the City and County Engineers have agreed that the dedications along the entire frontage are required, but that full improvements would not be proportional to the impacts of this development. This agreement does not relieve the applicant of the requirement to pay their fair share towards the future improvement of the intersection. The County has asked that the applicant pay a fee in lieu of the street improvements along the SW Edy and Elwert frontages that are adjacent to the vegetated corridor.

FINDING: The applicant has proposed to construct half-street improvements along the sites frontage with SW Copper Terrace and partially along the site's frontages with SW Edy and SW Elwert Roads consistent with Washington County Standards and the City's design standards. To the extent reasonable and proportionate to the impacts of the proposed subdivision, the applicant is required to contribute their fair share towards future improvements to the intersection of SW Edy and SW Elwert Roads. To ensure that this standard is satisfied, the following conditions are warranted.

CONDITION: Prior to final plat approval, the applicant shall construct street widening improvements along west side of SW Copper Terrace (Neighborhood Street) along the length of the property to match improvements on the east side of the street (19 feet centerline to face of curb with 5-foot wide landscape strip and 8-foot wide sidewalk. Bulb-outs shall be 13 feet from centerline to face of curb with 11-foot wide landscape strip and 8-foot wide sidewalk.

CONDITION: Prior to the issuance of any building permits for each phase, the required improvements for that phase must be completed and accepted by the City Engineering Department.

CONDITION: All city street infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department prior to issuance of an Engineering Compliance Agreement.

CONDITION: SW Elwert Road and SW Edy Road are county streets. All county street infrastructure shall meet Washington County standards and be reviewed and approved by the Washington County Transportation Department prior to issuance of an Engineering Compliance Agreement.

CONDITION: Prior to the approval of public improvement plans, obtain a Washington County Facility Permit that includes a financial assurance for the construction of the Public Improvements listed in condition I.A.5 of the letter from Washington County dated February 8, 2016 and attached as exhibit E. to this report.

CONDITION: Provide an engineer's cost estimate and pay a fee in-lieu of constructing the remaining half-street improvement along the frontage of SW Elwert Road and SW Edy Road to Washington County.

A. Generally

The location, width and grade of streets shall be considered in their relation to existing and planned streets, topographical conditions, and proposed land uses. The proposed street system shall provide adequate, convenient and safe traffic and pedestrian circulation, and intersection angles, grades, tangents, and curves shall be adequate for expected traffic volumes. Street alignments shall be consistent with solar access requirements as per Chapter 16.156, and topographical considerations.

B. Street Connectivity and Future Street Systems

- 1. Future Street Systems. The arrangement of public streets shall provide for the continuation and establishment of future street systems as shown on the Local Street Connectivity Map contained in the adopted Transportation System Plan (Figure 16).**
- 2. Connectivity Map Required. New residential, commercial, and mixed use development involving the construction of new streets shall be submitted with a site plan that implements, responds to and expands on the Local Street Connectivity map contained in the TSP.**

- a. A project is deemed to be consistent with the Local Street Connectivity map when it provides a street connection in the general vicinity of the connection(s) shown on the map, or where such connection is not practicable due to topography or other physical constraints; it shall provide an alternate connection approved by the decision-maker.
- b. Where a developer does not control all of the land that is necessary to complete a planned street connection, the development shall provide for as much of the designated connection as practicable and not prevent the street from continuing in the future.
- c. Where a development is disproportionately impacted by a required street connection, or it provides more than its proportionate share of street improvements along property line (i.e., by building more than 3/4 width street), the developer shall be entitled to System Development charge credits, as determined by the City Engineer.
- d. Driveways that are more than 24 feet in width shall align with existing streets or planned streets as shown in the Local Street Connectivity Map in the adopted Transportation System Plan (Figure 17), except where prevented by topography, rail lines, freeways, pre-existing development, or leases, easements, or covenants.

ANALYSIS: The TSP shows a proposed local street connection between SW Copper Terrace and SW Elwert Road, however, it was never expected that a single development would incur the cost of bridging the natural resource that bisects the site. The cost of this improvement, if borne by the development, would not be proportionate to the impacts created by the development on the system. Spanning the natural area would be impractical and according to a cost estimate from the City Engineer in the rezone of a portion of the site cost approximately \$2,000,000 for a 700 foot vehicular connection. It was further determined by the City Engineer that a full street connection between SW Copper Terrace and SW Elwert Road would be more practical south of the Daybreak Subdivision as opposed to this location. For these purposes, it was determined that the local street connection across the natural area would not be made for vehicular traffic. However, as discussed below, the applicant would be required to provide a pedestrian connection to satisfy the minimum block length requirements. The applicant's proposal also includes the extension of SW Yorkshire Way from the Daybreak subdivision south of this site consistent with local street connectivity requirements.

FINDING: As discussed in the analysis above, the standard is satisfied to the extent practical by the proposed development.

- 3. **Block Length.** For new streets except arterials, block length shall not exceed 530 feet. The length of blocks adjacent to arterials shall not exceed 1,800 feet.
- 4. **Where streets must cross water features identified in Title 3 of the Urban Growth Management Functional Plan (UGMFP), provide crossings at an average spacing of 800 to 1,200 feet, unless habitat quality or length of crossing prevents a full street connection.**

5. Where full street connections over water features identified in Title 3 of the UGMFP cannot be constructed in centers, main streets and station communities (including direct connections from adjacent neighborhoods), or spacing of full street crossings exceeds 1,200 feet, provide bicycle and pedestrian crossings at an average spacing of 530 feet, unless exceptional habitat quality or length of crossing prevents a connection.
6. **Pedestrian and Bicycle Connectivity.** Paved bike and pedestrian accessways consistent with cross section standards in Figure 8-6 of the TSP shall be provided on public easements or right-of-way when full street connections are not possible, with spacing between connections of no more than 300 feet. Multi-use paths shall be built according to the Pedestrian and Bike Master Plans in the adopted TSP.
7. **Exceptions.** Streets, bike, and pedestrian connections need not be constructed when any of the following conditions exists:
 - a. Physical or topographic conditions make a street or accessway connection impracticable. Such conditions include but are not limited to freeways, railroads, steep slopes, wetlands or other bodies of water where a connection could not reasonably be provided.
 - b. Buildings or other existing development on adjacent lands physically preclude a connection now or in the future considering the potential for redevelopment; or
 - c. Where streets or accessways would violate provisions of leases, easements, covenants, restrictions or other agreements existing as of May 1, 1995, which preclude a required street or accessway connection.

ANALYSIS: The site is bisected by a natural resource, and as discussed above, a full street connection would be too expensive to construct. The cost of the construction would not be proportionate to the impacts of the proposed development and there is a more practical alternative to make the same street connection south of the Daybreak subdivision as larger and underdeveloped properties are redeveloped. Consistent with the provisions above, the applicant is proposing to construct a pedestrian and bicycle bridge.

FINDING: The proposed development is adjacent to SW Elwert Road, a designated arterial within both the City and County TSP's. The site is also adjacent to SW Edy Road, a designated collector street. In both instances, full street connections are limited by site distance and access standards. Finally, the site is bisected by a major drainage way that is identified as a Title 3 resource in the Metro Urban Growth Management Functional Plan. The combination of these factors makes it impractical to construct a development that meets a traditional residential block pattern. For these reasons, and as discussed in the analysis above, the applicant has provided a block pattern that is the most practical for this location and acceptable under the standards above.

C. Underground Utilities

All public and private underground utilities, including sanitary sewers and storm water drains, shall be constructed prior to the surfacing of streets. Stubs for service

connections shall be long enough to avoid disturbing the street improvements when service connections are made.

ANALYSIS: The applicant has indicated within the narrative that all public and private utilities will be constructed prior to the surfacing of any streets within the development.

FINDING: The applicant has indicated that all public and private utilities will be constructed underground consistent with this provision. Therefore, this criterion is satisfied.

D. Additional Setbacks

Generally additional setbacks apply when the width of a street right-of-way abutting a development is less than the standard width under the functional classifications in Section VI of the Community Development Plan. Additional setbacks are intended to provide unobstructed area for future street right-of-way dedication and improvements, in conformance with Section VI. Additional setbacks shall be measured at right angles from the centerline of the street.

ANALYSIS: This provision applies to any street that would be substandard. As discussed earlier in this report, the applicant has proposed to dedicate right-of-way for streets adjacent to and within the development that would negate the need for these additional setbacks.

FINDING: The proposed development provides enough new right-of-way dedication to ensure that none of the abutting streets are less than the standard widths prescribed by the respective City and County TSP's; therefore, there is no need to apply any special or additional setbacks that this criterion calls for. This standard is not applicable to the proposed development.

16.106.040.K Traffic Controls

- 1. An application for a proposed residential development that will generate more than an estimated 200 average daily vehicle trips (ADT) must include a traffic impact analysis to determine the number and types of traffic controls necessary to accommodate anticipated traffic flows.**

ANALYSIS: The applicant has provided a traffic impact study by Michael Ard, PE, of Lancaster Engineering, a licensed and professional engineer, that indicates the proposed 86-lot single-family subdivision would generate an estimated 818 average daily trips based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 9th Edition*. The study shows that the proposed subdivision is projected to generate a net increase of 65 trips during the morning peak hour and 86 trips during the evening peak hour.

FINDING: Both the County and City Engineering departments have reviewed the traffic study, analyzed the results on the existing system, and provided comments and conditions to ensure that the traffic generated by the proposal is mitigated as called for in their respective TSP. The Engineering comments have been incorporated throughout this report, and where warranted, conditions have been imposed. Please see Exhibits B and E. This standard is satisfied.

16.106.040.M Vehicular Access Management

All developments shall have legal access to a public road. Access onto public

streets shall be permitted upon demonstration of compliance with the provisions of adopted street standards in the Engineering Design Manual.

2. Roadway Access

No use will be permitted to have direct access to a street or road except as specified below. Access spacing shall be measured No use will be permitted to have direct access to a street or road except as specified below. Access spacing shall be measured from existing or approved accesses on either side of a street or road. The lowest functional classification street available to the legal lot, including alleys within a public easement, shall take precedence for new access points.

d. Arterials and Highway 99W - Points of ingress or egress to and from Highway 99W and arterials designated on the Transportation Plan Map, attached as Figure 17 of the TSP, Volume 1, shall be limited as follows:

(1) Single and two-family uses and manufactured homes on individual residential lots developed after the effective date of this Code shall not be granted permanent driveway ingress or egress from Highway 99W or arterials. If alternative public access is not available at the time of development, provisions shall be made for temporary access which shall be discontinued upon the availability of alternative access.

(2) Other private ingress or egress from Highway 99W and arterial roadways shall be minimized. Where alternatives to Highway 99W or arterials exist or are proposed, any new or altered uses developed after the effective date of this Code shall be required to use the alternative ingress and egress. Alternatives include shared or crossover access agreement between properties, consolidated access points, or frontage or backage roads. When alternatives do not exist, access shall comply with the following standards:

(a) Access to Highway 99W shall be consistent with ODOT standards and policies per OAR 734, Division 51, as follows: Direct access to an arterial or principal arterial will be permitted provided that Point 'A' of such access is more than six hundred (600) feet from any intersection Point 'A' or other access to that arterial (Point 'C').

(b) The access to Highway 99W will be considered temporary until an alternative access to public right-of-ways is created. When the alternative access is available the temporary access to Highway 99W shall be closed.

(3) All site plans for new development submitted to the City for approval after the effective date of this Code shall show ingress and egress from existing or planned local, neighborhood route or collector streets, including frontage or backage roads, consistent with the Transportation Plan Map and Chapter 6 of the Community Development Plan.

3. Exceptions to Access Criteria for City-Owned Streets

a. Alternate points of access may be allowed if an access management plan which maintains the classified function and integrity of the applicable facility is submitted to and approved by the City Engineer as the access management plan must be included as part of the land use submittal or an application for modification as described in Section 16.106.020.E (Transportation Facilities Modifications).

b. Access in the Old Town (OT) Overlay Zone

Access points in the OT Overlay Zone shown in an adopted plan such as the Transportation System Plan, are not subject to the access spacing standards and do not need a variance. However, the applicant shall submit a partial access management plan for approval by the City Engineer. The approved plan shall be implemented as a condition of development approval.

ANALYSIS: The proposed subdivision is not adjacent to Highway 99W or located within the Old Town Overlay zone, so those standards do not apply to this development. The development is located adjacent to SW Elwert Road, a designated arterial, SW Edy Road, a designated collector, and SW Copper Terrace, a designated neighborhood route. Both the City and County Engineering divisions have reviewed and commented on the proposed access. According to their comments, tracts and lots adjacent to SW Elwert Road or SW Edy road shall not have direct access to those roads with the exception of the Tract containing the public treatment facilities which may have a maintenance access onto SW Elwert Road. Further, the County has indicated that the proposed access (SW 'C' Terrace) to SW Elwert Road does not meet the access standards. However, the applicant has submitted a request for an exception to the spacing standard for the proposed access. Based on the analysis included in the Traffic Impact Analysis and Design Exception request, the proposed public street connection has been approved by Washington County Engineer. His approval letter and the associated comments have been attached to this report as Exhibit E. Before the County will permit access to SW Edy Road and SW Elwert Road, the applicant will be required to provide certification from a registered professional engineer that adequate sight distance exists in both directions (or can be obtained pursuant to specific improvements) prior to commencing onsite construction activities. (Note: Sight distance measurements should account for ROW dedication.)

FINDING: Because the subdivision is proposing revised access onto SW Edy Road from SW Copper Terrace, proposing a new street access to SW Elwert Road and new access points onto SW Copper Terrace, it is subject to access review and limitations imposed by both Washington County and the City of Sherwood. Although the new access points have been reviewed and preliminarily approved by these agencies, the following conditions are warranted to ensure that they meet each respective jurisdictions design standards for access.

CONDITION: Tracts and lots adjacent to SW Elwert Road or SW Edy road shall not have direct access to those roads with the exception of the Tract containing the public treatment facilities which may have a maintenance access onto SW Elwert Road.

CONDITION: Due to the proximity of Lot 1 to the SW Edy Road/SW Copper Terrace intersection, Lots 1 and 2 shall have joint driveway access.

CONDITION: Access for Lots 76-78 shall be via a private tract with a public utility easement over its entirety.

CONDITION: Preliminary certification of adequate sight distance for each access point to SW Edy Road and SW Elwert Road in accordance with County Code, prepared and stamped by a registered professional engineer, including (sight distance measurements should account for ROW dedication):

- a. A detailed list of improvements necessary to produce adequate intersection sight distance (refer to the following webpage for sight distance certification submittal requirements).

<http://www.co.washington.or.us/LUT/Divisions/CurrentPlanning/development-application-forms.cfm>

16.110 Sanitary Sewers

Sanitary sewers shall be installed to serve all new developments and shall connect to existing sanitary sewer mains. Sanitary Sewers shall be constructed, located, sized and installed at standards consistent 16.110.

ANALYSIS: The applicant is proposing to extend existing public sewer from SW Yorkshire Way and SW Copper Terrace. As proposed, the applicant would be providing an 8-inch service through the site with individual laterals to each lot.

FINDING: The code requires that sanitary sewer be extended through the development to serve future developable areas. The engineering division has provided comments that indicate the sanitary sewer will be required to be extended through the development to SW Elwert Road for the future development of properties to the west. The property to the east of the subject property, north of SW Nursery Way has sanitary sewer available from the east. Therefore, no sanitary sewer extension within SW Nursery way is required. The properties to the east of the subject property (Edy Ridge School) and south of the subject property (Daybreak Terrace Subdivision) are already developed with sanitary service. Therefore, no extension of the sanitary sewer is necessary for these properties. In order to ensure that the proposed sewer system meets the Sherwood construction and design standards the following conditions are warranted.

CONDITION: All public sanitary sewer outside of the public right-of-way/public property shall be located within a dedicated public easement.

CONDITION: All sanitary sewer infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department prior to issuance of an Engineering Compliance Agreement.

16.112 Water Supply

Water lines and fire hydrants conforming to City and Fire District standards shall be installed to serve all building sites in a proposed development in compliance with 16.112.

ANALYSIS: As proposed, the developer would extend the water mains from existing mains located within both Elwert Road and SW Copper Terrace. The applicant proposes to provide water service from each of these lines to each individual lot. A water main exists within SW Copper Terrace and SW Nursery Way, therefore no water main extensions are required within these streets. The code requires that water mains be through the development to SW Elwert Road. A new 12-inch water main is proposed to be installed within SW Elwert Road from the new intersection southward connecting to an existing 12-inch water main.

FINDING: The proposed development can be served through the extension of existing lines in SW Copper Terrace and SW Elwert Road. Based on the results of water

modeling by a consulting engineer to the City looping of the system may be required; therefore, the following conditions are warranted.

CONDITION: All water infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Water Department (Public Works Department) prior to issuance of an Engineering Compliance Agreement.

CONDITION: A water main shall be extended northward within SW Elwert Road from the new intersection to the north end of Tract 'I' for future development unless otherwise approved by the city.

CONDITION: A water main shall be extended westward within SW Edy Road from the SW Edy Road/SW Copper Terrace intersection to the west end of Tract 'D' for future development unless otherwise approved by the city.

16.114 Storm Water

Storm water facilities, including appropriate source control and conveyance facilities, shall be installed in new developments and shall connect to the existing downstream drainage system consistent with the Comprehensive Plan, the requirements of the Clean Water Services water quality regulations and section 16.114.

ANALYSIS: The applicant has provided storm sewer lines throughout the shall site, and is proposing to convey the new stormwater to two separate tracts. Tract 'A' is an existing stormwater facility that belongs to the City, and was conveyed with the intention of treating water from this site. Stormwater from the east side of the resource will be conveyed and treated within the City owned stormwater facility. Stormwater collected on the west side of the tributary to Chicken Creek will be conveyed to a new stormwater facility proposed to be constructed within proposed tract 'I'. The applicant is required to extend services to the west property edge for future development consistent with City design standards. There is existing storm sewer within SW Copper Terrace and SW Nursery Way, therefore no storm sewer extensions are required within these streets.

FINDING: The applicant has provided a preliminary stormwater report attached to the application as (exhibit L). As proposed, the applicant is proposing to convey and treat new stormwater in one of two tracts on the site. However, according to the City Engineering department, there are potential locations where it is not practical to convey stormwater for the development to one of the two tracts, and it will be necessary for the applicant to seek approval from the City of Sherwood Engineering Department and Clean Water Services of non-treatment options. (treating existing non-treated impervious area in-lieu, payment in lieu, etc.) is required. Therefore, the following conditions are warranted to ensure that stormwater from the new development is captured, conveyed, and appropriately treated consistent with City and CWS standards.

CONDITION: New water quality facilities shall be within a separate tract dedicated to the City of Sherwood.

CONDITION: The capacity of the existing storm sewer receiving runoff from the subject development shall be verified. If undersized, the existing storm sewer shall be upsized or detention shall be provided to accommodate the subject property.

CONDITION: The existing culvert beneath the SW Elwert Road/SW Edy Road intersection is near capacity. Runoff from the development shall not result in violation of the 1-foot minimum freeboard standard.

CONDITION: Public storm sewer outside of the public right-of-way/public property will be located within a dedicated public easement.

CONDITION: All storm sewer infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department prior to issuance of an Engineering Compliance Agreement.

16.116.010 Fire Protection

When land is developed so that any commercial or industrial structure is further than 250 feet or any residential structure is further than 500 feet from an adequate water supply for fire protection, as determined by the Fire District, the developer shall provide fire protection facilities necessary to provide adequate water supply and fire safety. In addition capacity, fire flow, access to facilities and number of hydrants shall be consistent with 16.116.020 and fire district standards.

16.116.020 Standards

A. Capacity

All fire protection facilities shall be approved by and meet the specifications of the Fire District, and shall be sized, constructed, located, and installed consistent with this Code, Chapter 7 of the Community Development Plan, and other applicable City standards, in order to adequately protect life and property in the proposed development.

B. Fire Flow

Standards published by the Insurance Services Office, entitled "Guide for Determination of Required Fire Flows" shall determine the capacity of facilities required to furnish an adequate fire flow. Fire protection facilities shall be adequate to convey quantities of water, as determined by ISO standards, to any outlet in the system, at no less than twenty (20) pounds per square inch residual pressure. Water supply for fire protection purposes shall be restricted to that available from the City water system. The location of hydrants shall be taken into account in determining whether an adequate water supply exists.

C. Access to Facilities

Whenever any hydrant or other appurtenance for use by the Fire District is required by this Chapter, adequate ingress and egress shall be provided. Access shall be in the form of an improved, permanently maintained roadway or open paved area, or any combination thereof, designed, constructed, and at all times maintained, to be clear and unobstructed. Widths, height clearances, ingress and egress shall be adequate for District firefighting equipment. The Fire District, may further prohibit vehicular parking along private accessways in order to keep them clear and unobstructed, and cause notice to that effect to be posted.

D. Hydrants

Hydrants located along private, accessways shall either have curbs painted yellow or otherwise marked prohibiting parking for a distance of at least fifteen (15) feet in either direction, or where curbs do not exist, markings shall be painted on the pavement, or signs erected, or both, given notice

that parking is prohibited for at least fifteen (15) feet in either direction.

ANALYSIS: The proposed development provides for water service, and Sheet P19 (Composite Utility Plan) shows the location of proposed fire hydrants to provide fire protection for the development. John Wolff, Deputy Fire Marshal for Tualatin Valley Fire and Rescue (TVFR), provided comments via a letter dated February 5, 2016 and attached as exhibit D to this report. Generally, Mr. Wolff has indicated that the district is supportive of the proposed development, but has indicated that, because “SW “D” Lane exceeds the 150’ maximum distance allowed from the fire apparatus access, the applicant will need to consider decreasing the distance or applying to provide an Alternate Material and Method in lieu of meeting this requirement. He suggests that the provision of residential automatic sprinklers may be a viable alternative or the provision of an additional fire hydrant near the corner of “C” Terrace and “D” Lane.

FINDING: The applicant has provided enough evidence within the record to suggest that meeting the standards for fire protection is feasible with the proposed development. However, the Fire Marshall from TVFR has indicated that some of the subdivision design, specifically, street lengths and widths, may require additional mitigation to ensure that they fire district can readily provide service. Therefore, the following condition is warranted.

CONDITION: Prior to the issuance of any building permits for the proposed subdivision, the applicant shall provide the Planning Department with a letter or e-mail from the TVFR District Fire Marshal that indicates that the concerns within his letter, attached as exhibit D to this report, have been addressed and mitigated to the districts satisfaction.

16.118.020 Public and Private Utilities Standard

- A. Installation of utilities shall be provided in public utility easements and shall be sized, constructed, located and installed consistent with this Code, Chapter 7 of the Community Development Code, and applicable utility company and City standards.**
- B. Public utility easements shall be a minimum of eight feet in width unless a reduced width is specifically exempted by the City Engineer.**
- C. Where necessary, in the judgment of the City Manager or his designee, to provide for orderly development of adjacent properties, public and franchise utilities shall be extended through the site to the edge of adjacent property (ies).**
- D. Franchise utility conduits shall be installed per the utility design and specification standards of the utility agency.**
- E. Public Telecommunication conduits and appurtenances shall be installed per the City of Sherwood telecommunication design standards.**
- F. Exceptions: Installation shall not be required if the development does not require any other street improvements. In those instances, the developer shall pay a fee in lieu that will finance installation when street or utility improvements in that location occur.**

ANALYSIS: The applicant has provided a preliminary utility plan, attached as sheet P19. The utility plan simply shows public water, sewer, and storm sewer. While the plan does not illustrate the location and placement of franchise utilities, the applicant does show a public utility easement along all street frontages, and indicates within the narrative that all public utilities will be placed underground prior to paving.

FINDING: The placement of utilities within the development is conducive to future extensions beyond this property, and the developer has illustrated an 8-foot public utility easement along the street frontages of all lots. The City Engineering division has provided comments responding to the preliminary development plans provided by the applicant. Therefore, it is feasible for the proposed development to satisfy these standards provided the applicant complies with following conditions. Finally, this property is one of several properties within the area that benefitted from earlier construction of street improvements and utility extensions into the area as a result of the two new schools that were constructed on SW Copper Terrace. Sherwood Resolution 2014-073 requires that the property owner pays for an equitable share for public facilities that were constructed for the benefit of this subject property prior to development of the property.

CONDITION: Prior to final plat approval, the applicant shall provide construction plans that demonstrate compliance with City of Sherwood standards for review and approval by the Sherwood Engineering Department. The applicant will have met this condition with the issuance of an Engineering Compliance Agreement from the City of Sherwood.

CONDITION: Payment in full for improvements constructed by the Sherwood School District, In accordance with Sherwood Resolution 2014-073 and Sherwood Municipal Code section 13.24.100 must be received by the City prior to issuance of an Engineering Compliance Agreement.

E. Division VII – Land Divisions, Subdivisions, Partitions, Lot Line Adjustments and Modifications

The applicable provision of Division VII include: 16.120 (Subdivisions) which is addressed above in Section IV and 16.128 (Land Division Design Standards).

16.128.010 Blocks

A. Connectivity

1. Block Size

The length, width, and shape of blocks shall be designed to provide adequate building sites for the uses proposed, and for convenient access, circulation, traffic control and safety.

2. Block Length

Block length standards shall be in accordance with Section 16.108.040. Generally, blocks shall not exceed five-hundred thirty (530) feet in length, except blocks adjacent to principal arterial, which shall not exceed one thousand eight hundred (1,800) feet. The extension of streets and the formation of blocks shall conform to the Local Street Network map contained in the Transportation System Plan.

3. Pedestrian and Bicycle Connectivity. Paved bike and pedestrian accessways shall be provided on public easements or right-of-way consistent with Figure 7.401.

ANALYSIS: As indicated previously in this report, the site is bisected by a natural resource, and a full street connection would be too expensive to construct. The cost of the construction would not be proportionate to the impacts of the proposed development and there is a more practical alternative to make the same street connection south of the Daybreak subdivision as larger and underdeveloped properties

are redeveloped. Consistent with the provisions above, the applicant is proposing to construct a pedestrian and bicycle bridge.

FINDING: A combination of factors including access controls, natural resources, and existing development makes it impractical to construct a development that meets a traditional residential block pattern. For these reasons, and as discussed in the analysis above, the applicant has provided a block pattern that is the most practical for this location. This criterion is satisfied.

B. Utilities Easements for sewers, drainage, water mains, electric lines, or other utilities shall be dedicated or provided for by deed. Easements shall be a minimum of ten (10) feet in width and centered on rear or side lot lines; except for tie-back easements, which shall be six (6) feet wide by twenty (20) feet long on side lot lines at the change of direction.

FINDING: Utilities have been discussed more comprehensively earlier in this report. As proposed, and conditioned previously in this report, it is feasible for the applicant to satisfy this standard. To ensure that all easements are in place as required, the following condition is warranted.

CONDITION: Prior to the issuance of any building permits for any phase of the subdivision, all easements (public or private) associated with that phase of the development shall be recorded with the County prior to City approval of the public improvements.

C. Drainages

Where a subdivision is traversed by a watercourse, drainage way, channel or street, drainage easements or rights-of-way shall be provided conforming substantially to the alignment and size of the drainage.

ANALYSIS: The proposed subdivision is traversed by a tributary of Chicken Creek. Within the applicant's plan, the vegetated corridor is identified as Tracts E and G. While the applicant has identified the areas, they have not indicated how the tracts will be managed within the narrative or on the plans.

FINDING: The proposed development is traversed by a drainage way and associated watercourse subject to this provision. The applicant has set the area aside in proposed tracts E and G. The delineation of the area is supported by a natural resource assessment and a CWS service provider letter. To ensure that this standard is satisfied, the following condition is warranted.

CONDITION: The vegetated corridor shall be in a separate tract dedicated to the City of Sherwood. The vegetated corridor tract shall have a "Storm sewer, surface water, drainage and detention easement" dedicated to CWS over its entirety.

16.128.020 Pedestrian and Bicycle Ways

Pedestrian or bicycle ways may be required to connect cul-de-sacs, divide through an unusually long or oddly shaped block, or to otherwise provide adequate circulation.

ANALYSIS: There are a combination of factors within this development that have been discussed previously that do not allow for full vehicular access throughout the site; however, the applicant has proposed a network of trails and paths to connect the homes to the on-site open space including a multi-modal crossing of the drainage way.

FINDING: Because of the topography, surrounding development, and the large drainage way that bisects the parent parcel, the resulting development is within blocks that are unusually long and oddly shaped. The applicant is proposing a network of pedestrian and bikeways that satisfy this requirement. This criterion is met.

16.128.030 Lots

A. Size and Shape

Lot size, width, shape, and orientation shall be appropriate for the location and topography of the subdivision or partition, and shall comply with applicable zoning district requirements, with the following exception:

- 1. Lots in areas not served by public sewer or water supply shall conform to any special County Health Department standards.**

ANALYSIS: The proposed subdivision provides for 86 lots that either meet or exceed the minimum dimensional requirements of the underlying zone.

FINDING: As discussed previously in this report, this criterion is satisfied by the proposed development.

B. Access

All lots in a subdivision shall abut a public street, except as allowed for infill development under Chapter 16.68.

ANALYSIS: All lots within the development abut at least one of four existing streets or five new streets.

FINDING: This criterion is satisfied by the fact that all new lots will have frontage onto a public street.

C. Double Frontage

Double frontage and reversed frontage lots are prohibited except where essential to provide separation of residential development from railroads, traffic arteries, adjacent nonresidential uses, or to overcome specific topographical or orientation problems. A five (5) foot wide or greater easement for planting and screening may be required.

ANALYSIS: Proposed lots 11-14, 55-64, and 76-86 are considered double frontage lots; however, given that this is a single-family development surrounded on three sides by either an arterial, collector, or neighborhood road, and there is a large drainage way bisecting the site, the proposed layout is the most efficient manner in which to develop the property and maintain minimum prescribed densities.

FINDING: There are double frontage lots within the development, but given the shape of the site, surrounding streets pattern and an existing drainage way that breaks up the site, the proposed layout is an efficient layout. It would be difficult, if not impossible, for the applicant to eliminate the need for double frontage lots in a

single family subdivision and satisfy all of the other standards. This criterion is satisfied.

D. Side lot lines shall, as far as practicable, run at right angles to the street upon which the lots face, except that on curved streets side lot lines shall be radial to the curve of the street.

ANALYSIS: The proposed subdivision provides side lot lines that, as far as practicable, run at right angles to the streets within the development.

FINDING: This criterion is satisfied.

E. Grading

Grading of building sites shall conform to the following standards, except when topography of physical conditions warrants special exceptions:

- 1. Cut slopes shall not exceed one (1) and one-half (1 1/2) feet horizontally to one (1) foot vertically.**
- 2. Fill slopes shall not exceed two (2) feet horizontally to one (1) foot vertically.**

FINDING: The applicant has provided a preliminary grading, erosion, and sediment control plan (Sheet P10). The plan does not appear to show any cut or fill slopes that exceed these standards, but there are a couple of locations where it is not clear that the standard is satisfied. Given the amount of land available, it is feasible that the developer could meet this standard with the construction of retaining walls. Further, City policy requires that prior to any grading, a permit shall be obtained from the Building Department for all grading on the private portion of the site. Given that the proposed grading plan is preliminary, the following conditions are warranted to ensure that the standard is satisfied.

CONDITION: Prior to the issuance of any building permits for the site, the applicant shall provide a final grading permit that demonstrates compliance with section 16.128.030.

CONDITION: Prior any on-site grading, an approved grading and erosion control plan is required. The applicant shall also obtain a Storm Water Connection Permit from Clean Water Services (CWS).

CONDITION: Since the site disturbance will be in excess of 5 acres, the developer shall obtain a DEQ NPDES 1200-C permit from CWS prior to issuance of an Engineering Compliance Agreement.

E. Division VIII – Environmental Resources

16.142 Parks and Open Space

16.142.030 Single-Family or Duplex Residential Subdivisions

- A. A minimum of five percent (5%) of the net buildable site (after exclusion of public right-of-way and environmentally constrained areas) shall be maintained as "open space". Open space must include usable areas such as public parks, swimming and wading pools, grass areas for picnics and recreational play, walking paths, and other like space. The following may**

not be used to calculate open space:

1. Required yards or setbacks.
 2. Required visual corridors.
 3. Required sensitive areas and buffers.
 4. Any area required to meet a standard found elsewhere in this code.
- B. Enhanced streetscapes such as "boulevard treatments" in excess of the minimum public street requirements may count toward a maximum of 10,000 square feet of the open space requirement.
1. Example: if a 52-foot-wide right-of-way [ROW] is required for a 1,000 foot-long street and a 62-foot wide ROW with 5-foot additional plantings/meandering pathway is provided on each side of the street, the additional 10-foot-wide area x 1,000 linear feet, or 10,000 square feet, counts toward the open space requirement.
- C. The open space shall be conveyed in accordance with one of the following methods:
1. By dedication to the City as public open space (if acceptable to the City). Open space proposed for dedication to the City must be acceptable to the City Manager or the Manager's designee with regard to the size, shape, location, improvement, environmental condition, and budgetary and maintenance abilities;
 2. By leasing or conveying title (including beneficial ownership) to a corporation, homeowners' association or other legal entity, with the City retaining the development rights to the open space. The terms of such lease or other instrument of conveyance must include provisions (e.g., maintenance, property tax payment, etc.) suitable to the City.
- D. The density of a single-family residential subdivision shall be calculated based on the net buildable site prior to exclusion of open space per this Section.
1. Example: a 40,000 square foot net buildable site would be required to maintain 2,000 square feet (5%) of open space but would calculate density based on 40,000 square feet.
- E. If a proposed residential subdivision contains or is adjacent to a site identified as "parks" on the Acquisition Map of the Parks Master Plan (2006) or has been identified for acquisition by the Sherwood Parks and Recreation Board, establishment of open space shall occur in the designated areas if the subdivision contains the park site, or immediately adjacent to the parks site if the subdivision is adjacent to it.
- F. If the proposed residential subdivision does not contain or is not adjacent to a site identified on the Parks Master Plan map or otherwise identified for acquisition by the Parks and Recreation Board, the applicant may elect to convey off-site park/open space.
- G. This standard does not apply to a residential partition provided that a development may not use phasing or series partitions to avoid the minimum open space requirement. A partition of land that was part of an approved partition within the previous five (5) years shall be required to provide the minimum five percent (5%) open space in accordance with subsection (A) above.
- H. The value of the open space conveyed under Subsection (A) above may be eligible for Parks System Development Charges (SDCs) credits based on the methodology identified in the most current *Parks and Recreation*

System Development Charges Methodology Report.

ANALYSIS: The net developable area of the site is approximately 560,183 square feet after excluding the public right of way and environmentally constrained areas. A subdivision is required to include at least 5% of the remaining net developable site area for open space or in this case, 28,009 square feet of open space area. The applicant's proposal includes 48,029 square feet of open space in five tracts that are identified in the table below. (Tracts A, B, D, F and H).

Tract	Size	Description
<u>Tract A</u>	6,252 sq. ft.	Covered picnic area, benches and adjacent to SW Copper Terrace pedestrian access to
<u>Tract B</u>	1987 sq. ft.	Pedestrian path between Lots 41 and 42
<u>Tract D</u>	5965 sq. ft.	Picnic area, bench and path Adjacent to lot 55, vegetated corridor/ Edy Rd.
<u>Tract F</u>	2953 sq. ft.	Pedestrian bridge over vegetated corridor
<u>Tract H</u>	30,872 sq. ft.	Pathway, bench, picnic table west side adjacent to the Vegetated corridor
Total	48,029 sq. ft. 8.5 % of net dev. area	

Tract A includes picnic shelter, tables, benches and a lawn play area and a pathway between lots 15 and 16 for pedestrian access between SW Yorkshire Way and Tract A. Ultimately, this helps to minimize the length of this block for improved pedestrian and bicycle circulation. This tract is close and visible to the schools and may serve as an opportunity to pick up and drop off children adjacent to the school crossing.

Tract B is the pedestrian access between lots 41 and 42 with direct access to the pedestrian bridge (Tract F). **Tract D** is another smaller open space area near lot 55 with a pedestrian pathway through the open space area to SW Edy Road. It is also adjacent to Tract D. **Tract F** is the pedestrian bridge that extends over the vegetated corridor.

Tract H is the largest open space area in the development and taken alone, satisfies minimum required area of open space for this development. It is located just west of the vegetated corridor and runs along the rim of the natural resource area between SW Elwert Road and SW D Lane. The applicant proposes a lawn, picnic tables, and a hard surface pathway that will connect the sidewalk along SW Elwert Road to SW Copper Terrace via a new pedestrian bridge spanning the vegetated corridor.

The applicant proposes several pedestrian pathways comprised of a mix of hard and soft surfaces throughout the development to connect the various “pocket” neighborhoods on the east and west sides that are divided by the vegetated corridor (Tracts E and G). The pedestrian bridge connects the open space tracts via the hard surface path along the west rim of the vegetated corridor and the soft surface path which extends north to Tract D and Edy Road. The soft surface trail, approximately 3 feet wide connects Tract D on the northern edge of the development south along the vegetated corridor toward the pedestrian bridge. (Tract F). These trails and pathways serve as connections around and through the neighborhood due in part to adjust for the lack of sidewalks on segments of SW Edy and Elwert around the development. To ensure pedestrian connectivity around the development, staff is recommending that public pedestrian access easements are added over all pathways and defined on the final plat. This will make the entire site accessible along the pathways for the public.

The applicant's program for the open space area does not include any active play elements or amenities. Staff is concerned that the applicant does not propose any play structures, active play courts or exercise equipment within the development, limiting the recreation opportunities available to this large development.

The Mandel subdivision is not near a designated park within the Sherwood Parks Master Plan nor designated by the Parks Board. The applicant proposes that the development retain ownership and maintenance of the open space tracts by an established Home Owner's Association.

FINDING: Based on the above discussion, this standard can be met as conditioned below.

CONDITION: Prior to final plat approval, provide documentation, to be recorded with the plat, dedicating the tracts of open space to the Homeowner's Association.

CONDITION: Prior to final plat approval provide public pedestrian access easements over all soft and hard surface pathways throughout the subdivision.

16.142.040.A Visual Corridors

A. Corridors Required

New developments located outside of the Old Town Overlay with frontage on Highway 99W, or arterial or collector streets designated on Figure 8-1 of the Transportation System Plan shall be required to establish a landscaped visual corridor according to the following standards:

	Category	Width
2.	Arterial	15 feet
3.	Collector	10 feet

In residential developments where fences are typically desired adjoining the above described major street the corridor may be placed in the road right-of-way between the property line and the sidewalk. In all other developments, the visual corridor shall be on private property adjacent to the right-of-way.

B. Landscape Materials

The required visual corridor areas shall be planted as specified by the review authority to provide a continuous visual and/or acoustical buffer between major streets and developed uses. Except as provided for above, fences and walls shall not be substituted for landscaping within the visual corridor. Uniformly planted, drought resistant street trees and ground cover, as specified in Section 16.142.060, shall be planted in the corridor by the developer. The improvements shall be included in the compliance agreement.

C. Establishment and Maintenance

Designated visual corridors shall be established as a portion of landscaping requirements pursuant to Chapter 16.92. To assure continuous maintenance of the visual corridors, the review authority may require that the development rights to the corridor areas be dedicated to the City or that restrictive covenants be recorded prior to the issuance of a building permit.

D. Required Yard

Visual corridors may be established in required yards, except that where the required visual corridor width exceeds the required yard width, the visual corridor requirement shall take precedence. In no case shall buildings be sited within the required visual corridor, with the exception of front porches on townhomes, as permitted in Section 16.44.010(E)(4)(c).

ANALYSIS:

The Mandel Subdivision is adjacent to SW Copper Terrace, SW Elwert and SW Edy Road. SW Elwert is designated as an arterial road which requires a 10 ft. visual corridor. SW Edy is a collector roadway, requiring a 15 ft. visual corridor. The applicant provides plans that shows the appropriate visual corridors widths along these streets (Applicant's Materials Sheet P21).

The applicant proposes a six foot visual corridor easement on SW Elwert and a ten foot visual corridor easement on SW Edy. The property owners may have fencing within the easement but cannot construct any structures.

The applicant identifies October Glory Maple trees to be planted in the visual corridor along both streets along with shrubs and ground cover. The applicant provided a preliminary planting, maintenance, and irrigation plans for this area (Sheet P21). However, the applicant has not provided with enough specificity the other landscaping materials beside the trees. It appears that the applicant may be able to meet this criterion, but will need to provide a cross-section and landscape plan that illustrates the types of plantings to be used within the visual corridor.

FINDING: Based on the above discussion, the applicant does not fully comply with the standard, but can do so with the following conditions.

CONDITION: Prior to final plat approval provide plans that show the cross section and landscape plans including the specific planting materials to be installed within the visual corridors along SW Edy and SW Elwert Road.

CONDITION: Prior to final plat approval, provide plans that show the visual corridor easements along SW Edy and SW Elwert Road.

16.142.060 Street Trees

A. Installation of Street Trees on New or Redeveloped Property.

Trees are required to be planted to the following specifications along public streets abutting or within any new development or re-development. Planting of such trees shall be a condition of development approval. The City shall be subject to the same standards for any developments involving City-owned property, or when constructing or reconstructing City streets. After installing street trees, the property owner shall be responsible for maintaining the street trees on the owner's property or within the right-of-way adjacent to the owner's property.

1. **Location:** Trees shall be planted within the planter strip along a newly created or improved streets. In the event that a planter strip is not required or available, the trees shall be planted on private property within the front yard setback area or within public street right-of-way

between front property lines and street curb lines or as required by the City.

2. **Size:** Trees shall have a minimum trunk diameter of two (2) caliper inches, which is measured six inches above the soil line, and a minimum height of six (6) feet when planted.
3. **Types:** Developments shall include a variety of street trees. The trees planted shall be chosen from those listed in [16.142.080](#) of this Code.
4. **Required Street Trees and Spacing:**
 - a. The minimum spacing is based on the maximum canopy spread identified in the recommended street tree list in [section 16.142.080](#) with the intent of providing a continuous canopy without openings between the trees. For example, if a tree has a canopy of forty (40) feet, the spacing between trees is forty (40) feet. If the tree is not on the list, the mature canopy width must be provided to the planning department by a certified arborist.
 - b. All new developments shall provide adequate tree planting along all public streets. The number and spacing of trees shall be determined based on the type of tree and the spacing standards described in a. above and considering driveways, street light locations and utility connections. Unless exempt per c. below, trees shall not be spaced more than forty (40) feet apart in any development.
 - c. A new development may exceed the forty-foot spacing requirement under section b. above, under the following circumstances:
 - (1) Installing the tree would interfere with existing utility lines and no substitute tree is appropriate for the site; or
 - (2) There is not adequate space in which to plant a street tree due to driveway or street light locations, vision clearance or utility connections, provided the driveways, street light or utilities could not be reasonably located elsewhere so as to accommodate adequate room for street trees; and
 - (3) The street trees are spaced as close as possible given the site limitations in (1) and (2) above.
 - (4) The location of street trees in an ODOT or Washington County right-of-way may require approval, respectively, by ODOT or Washington County and are subject to the relevant state or county standards.
 - (5) For arterial and collector streets, the City may require planted medians in lieu of paved twelve-foot wide center turning lanes, planted with trees to the specifications of this subsection.

ANALYSIS: The applicant propose Red Sunset Maples along SW A Lane, SW Edy and SW Elwert. This tree is not on the City's recommended street tree list. Over time, staff has received many requests for the removal of this type of street tree because of problems with the roots impacting the infrastructure and lifting sidewalks. Staff recommends that this tree be replaced with a more suitable type of tree.

The applicant proposes to remove 16 street trees to accommodate construction of the eight lots on the east side of SW Copper Terrace. The applicant proposes to replace and plant Chancellor Linden trees along the entirety of this roadway. The applicant proposes Raywood Ash along the remaining interior streets of the development. Because the

street tree removal is due to proposed subdivision development, a street tree removal permit is not necessary.

This is a preliminary plan, the type and number of trees could change as the site design is further refined. A revised plan is needed to ensure compliance with this criterion.

FINDING: Based on the above discussion, the applicant does not fully comply with the standard, but can do so with the following condition.

CONDITION: Prior to final plat approval, revise the tree and landscape plan that shows spacing in relation to the driveways and selection of suitable street trees.

16.142.070 Trees on Property Subject to Certain Land Use Applications

A. Generally

The purpose of this Section is to establish processes and standards which will minimize cutting or destruction of trees and woodlands within the City. This Section is intended to help protect the scenic beauty of the City; to retain a livable environment through the beneficial effect of trees on air pollution, heat and glare, sound, water quality, and surface water and erosion control; to encourage the retention and planting of tree species native to the Willamette Valley and Western Oregon; to provide an attractive visual contrast to the urban environment, and to sustain a wide variety and distribution of viable trees and woodlands in the community over time.

B. Applicability

All applications including a Type II - IV land use review, shall be required to preserve trees or woodlands, as defined by this Section to the maximum extent feasible within the context of the proposed land use plan and relative to other codes, policies, and standards of the City Comprehensive Plan.

C. Inventory

1. To assist the City in making its determinations on the retention of trees and woodlands, land use applications including Type II - IV development shall include a tree and woodland inventory and report. The report shall be prepared by a qualified professional and must contain the following information:
 - a. Tree size (in DBH and canopy area)
 - b. Tree species
 - c. The condition of the tree with notes as applicable explaining the assessment
 - d. The location of the tree on the site
 - e. The location of the tree relative to the planned improvements
 - f. Assessment of whether the tree must be removed to accommodate the development
 - g. Recommendations on measures that must be taken to preserve trees during the construction that are not proposed to be removed.
2. In addition to the general requirements of this Section, the tree and woodland inventory's mapping and report shall also include, but is not limited to, the specific information outlined in the appropriate land use application materials packet.
3. Definitions for the inventory purposes of this Section

- a. A tree is a living woody plant having a trunk diameter as specified below at Diameter at Breast Height (DBH). Trees planted for commercial agricultural purposes, and/or those subject to farm forest deferral, such as nut and fruit orchards and Christmas tree farms, are excluded from this definition and from regulation under this Section, as are any living woody plants under six (6) inches at DBH. All trees six (6) inches or greater shall be inventoried.
- b. A woodland is a biological community dominated by trees covering a land area of 20,000 square feet or greater at a density of at least fifty (50) trees per every 20,000 square feet with at least fifty percent (50%) of those trees of any species having a six (6) inches or greater at DBH. Woodlands planted for commercial agricultural purposes and/or subject to farm forest deferral, such as nut and fruit orchards and Christmas tree farms, are excluded from this definition, and from regulation under this Section.
- c. A large stature tree is over 20 feet tall and wide with a minimum trunk diameter of 30 inches at DBH.

D. Retention requirements

- 1. Trees may be considered for removal to accommodate the development including buildings, parking, walkways, grading etc., provided the development satisfies of D.2 or D.3, below.
- 2. Required Tree Canopy - Residential Developments (Single Family Attached, Single Family Detached and Two - Family)

Each net development site shall provide a variety of trees to achieve a minimum total tree canopy of 40 percent. The canopy percentage is based on the expected mature canopy of each tree by using the equation πr^2 to calculate the expected square footage of canopy for each tree. The expected mature canopy is counted for each tree regardless of an overlap of multiple tree canopies.

The canopy requirement can be achieved by retaining existing trees or planting new trees. Required street trees can be used toward the total on site canopy required to meet this standard. The expected mature canopy spread of the new trees will be counted toward the needed canopy cover. A certified arborist or other qualified professional shall provide the estimated tree canopy of the proposed trees to the planning department for review.

ANALYSIS: The applicant provided a tree inventory with this application showing that 52 trees are slated for removal. The applicant proposes to retain over 106 trees on the site, mostly within the natural resource area. The applicant indicates that the 52 trees need to be removed in order to develop the site and accommodate the right of way and building footprints proposed. Sixteen street trees will be replaced with seven street trees.

The applicant proposes to meet the 40% tree canopy requirement with a combination of new trees in the open space and the 2x credit for existing trees. As a result there will be a 59% tree canopy covering this subdivision. See sheets P06 and P07 for specific locations of the trees that are on site, and proposed to be removed. See sheet P22 for the tree canopy area calculations.

FINDING: Based on the above discussion, the applicant meets this criteria.

16.144 Wetland, Habitat, and Natural Areas

16.144.020 - Standards

- A. The applicant shall identify and describe the significance and functional value of wetlands on the site and protect those wetlands from adverse effects of the development. A facility complies with this standard if it complies with the criteria of subsections A.1.a and A.1.b, below:**
- 1. The facility will not reduce the area of wetlands on the site, and development will be separated from such wetlands by an area determined by the Clean Water Services Design and Construction Standards R&O 00-7 or its replacement provided Section 16.140.090 does not require more than the requested setback.**
 - a. A natural condition such as topography, soil, vegetation or other feature isolates the area of development from the wetland.**
 - b. Impact mitigation measures will be designed, implemented, and monitored to provide effective protection against harm to the wetland from sedimentation, erosion, loss of surface or ground water supply, or physical trespass.**
 - c. A lesser setback complies with federal and state permits, or standards that will apply to state and federal permits, if required.**
 - 2. If existing wetlands are proposed to be eliminated by the facility, the applicant shall demonstrate that the project can, and will develop or enhance an area of wetland on the site or in the same drainage basin that is at least equal to the area and functional value of wetlands eliminated.**
- B. The applicant shall provide appropriate plans and text that identify and describe the significance and functional value of natural features on the site (if identified in the Community Development Plan, Part 2) and protect those features from impacts of the development or mitigate adverse effects that will occur. A facility complies with this standard if:**
- 1. The site does not contain an endangered or threatened plant or animal species or a critical habitat for such species identified by Federal or State government (and does not contain significant natural features identified in the Community Development Plan, Part 2, Natural Resources and Recreation Plan).**
 - 2. The facility will comply with applicable requirements of the zone.**
 - 3. The applicant will excavate and store topsoil separate from subsurface soil, and shall replace the topsoil over disturbed areas of the site not covered by buildings or pavement or provide other appropriate medium for re-vegetation of those areas, such as yard debris compost.**
 - 4. The applicant will retain significant vegetation in areas that will not be covered by buildings or pavement or disturbed by excavation for the facility; will replant areas disturbed by the development and not covered by buildings or pavement with native species vegetation unless other vegetation is needed to buffer the facility; will protect disturbed areas and**

adjoining habitat from potential erosion until replanted vegetation is established; and will provide a plan or plans identifying each area and its proposed use.

5. Development associated with the facility will be set back from the edge of a significant natural area by an area determined by the Clean Water Services Design and Construction standards R&O 00-7 or its replacement, provided Section 16.140.090A does not require more than the requested setback. Lack of adverse effect can be demonstrated by showing the same sort of evidence as in subsection A.1 above.
- C. When the Regionally Significant Fish and Wildlife Habitat map indicates there are resources on the site or within 50 feet of the site, the applicant shall provide plans that show the location of resources on the property. If resources are determined to be located on the property, the plans shall show the value of environmentally sensitive areas using the methodologies described in Sections 1 and 2 below.

The Metro Regionally Significant Fish and Wildlife Habitat map shall be the basis for determining the location and value of environmentally sensitive habitat areas. In order to specify the exact locations on site, the following methodology shall be used to determine the appropriate boundaries and habitat values:

1. Verifying boundaries of inventoried riparian habitat. Locating habitat and determining its riparian habitat class is a four-step process:
 - a. Located the Water Feature that is the basis for identifying riparian habitat.
 1. Locate the top of bank of all streams, rivers, and open water within 200 feet of the property.
 2. Locate all flood areas within 100 feet of the property.
 3. Locate all wetlands within 150 feet of the property based on the Local Wetland Inventory map and on the Metro 2002 Wetland Inventory map (available from the Metro Data Resource Center, 600 NE Grand Ave., Portland, OR 97232). Identified wetlands shall be further delineated consistent with methods currently accepted by the Oregon Division of State Lands and the US Army Corps of Engineers.
 - b. Identify the vegetative cover status of all areas on the property that are within 200 feet of the top of bank of streams, rivers, and open water, are wetlands or are within 150 feet of wetlands, and are flood areas or are within 100 feet of flood areas. Vegetative cover status shall be as identified on the Metro Vegetative Cover map. In the event of a discrepancy between the Metro Vegetative Cover map and the existing site conditions, document the actual vegetative cover based on the following definitions along with a 2002 aerial photograph of the property;
 1. Low structure vegetation or open soils — Areas that are part of a contiguous area one acre or larger of grass, meadow, crop-lands, or areas of open soils located within 300 feet of a surface stream (low structure vegetation areas may include areas of shrub vegetation less than one acre in size if they are contiguous with areas of grass, meadow, crop-lands, orchards, Christmas tree farms, holly farms, or

areas of open soils located within 300 feet of a surface stream and together form an area of one acre in size or larger).

2. **Woody vegetation** — Areas that are part of a contiguous area one acre or larger of shrub or open or scattered forest canopy (less than 60% crown-closure) located within 300 feet of a surface stream.

3. **Forest canopy** — Areas that are part of a contiguous grove of trees of one acre or larger in area with approximately 60% or greater crown closure, irrespective of whether the entire grove is within 200 feet of the relevant water feature.

c. Determine whether the degree that the land slopes upward from all streams, rivers, and open water within 200 feet of the property is greater than or less than 25% (using the Clean Water Services Vegetated Corridor methodology); and

d. Identify the riparian habitat classes applicable to all areas on the property using Table 8-1.

2. **Verifying boundaries of inventoried upland habitat.** Upland habitat was identified based on the existence of contiguous patches of forest canopy, with limited canopy openings. The "forest canopy" designation is made based on analysis of aerial photographs, as part of determining the vegetative cover status of land within the region. Upland habitat shall be as identified on the HCA map. The perimeter of an area delineated as "forest canopy" on the Metro Vegetative Cover map may be adjusted to more precisely indicate the drip line of the trees within the canopied area.

ANALYSIS: The applicant has attached a CWS service provider letter (see exhibit H to the applicant's packet) dated November 24, 2015. The overall condition of the vegetated corridor is primarily "degraded" but there are locations identified within the report that range from "good" to "moderate." The CWS service provider letter responds to the Natural Resource Assessment attached exhibit E to the applicant's packet by Lindsey Obermiller, a Natural Resource Specialist, and Stacey Reed, a Senior Wetland Scientist with AKS Engineering and Forestry.

As indicated in their assessment, the proposed development will result in permanent vegetated corridor encroachment for a pedestrian crossing, stormwater infrastructure, and retaining walls. The proposed encroachments will result in a total of 8,387 square feet, and are the minimum necessary to ensure that the development can satisfy other standards related to connectivity, the provision of utilities, and frontage improvements including sidewalks and street improvements. The proposed impacts represents approximately 3% of the overall area vegetated corridor, and less than .08% of the gross site. There are also temporary impacts totaling approximately 5,330 square feet associated with construction of the development. Within the assessment, the applicant's consultants have included a series of maps that identify wetlands and associated vegetated corridor, the condition of the corridor, and an identification of the impacts to the resource. The maps also show areas of mitigation and enhancement.

FINDING: The applicant has provided a natural resource assessment from two qualified individuals. Although the proposed development does not propose any impacts to the on-site wetlands, there are impacts to the vegetated corridor along the drainage way. Consistent with CWS requirements, the applicant has conducted a Tier 1 analysis of the natural resource and is proposing required mitigation. The conditions of mitigation are discussed in detail within attachment H, the CWS service provider letter. Given that there are impacts and required mitigation associated with the proposal, the following conditions are warranted.

CONDITION: Prior to final plat approval for any phase, the applicant shall provide the City Engineering department with a copy of the Storm Water Connection Permit from CWS.

CONDITION: The developer shall continually comply with the standards of Clean Water Services and the requirements of the Service Provider Letter 15-003302, dated November 24, 2015.

CONDITION: Prior to any on-site construction, the developer shall ensure that the vegetated corridor is clearly marked and delineated to ensure that there are no unauthorized encroachments by any contractors into the area for any reason.

16.144.030 - Exceptions to Standards

In order to protect environmentally sensitive areas that are not also governed by floodplain, wetland and Clean Water Services vegetated corridor regulations, the City allows flexibility of the specific standards in exchange for the specified amount of protection inventoried environmentally sensitive areas as defined in this code.

A. Process

The flexibility of standards is only applicable when reviewed and approved as part of a land use application and shall require no additional fee or permit provided criteria is addressed. In the absence of a land use application, review may be processed as a Type 1 administrative interpretation.

B. Standards modified

- 1. Lot size — Notwithstanding density transfers permitted through Chapter 16.40, when a development contains inventoried regionally significant fish and wildlife habitats as defined in Section 16.144.020 above, lot sizes may be reduced up to ten percent (10%) below the minimum lot size of the zone when an equal amount of inventoried resource above and beyond that already required to be protected is held in a public or private open space tract or otherwise protected from further development.**
- 2. Setbacks — For residential zones, the setback may be reduced up to thirty percent (30%) for all setbacks except the garage setback provided the following criteria are satisfied:**

- a. The setback reduction must result in an equal or greater amount of significant fish and/or wildlife habitat protection. Protection shall be guaranteed with deed restrictions or public or private tracts.
 - b. In no case shall the setback reduction supersede building code and/or Tualatin Valley Fire and Rescue separation requirements.
 - c. In no case shall the setback be reduced to less than five feet unless otherwise provided for by the underlying zone.
3. **Density** — per Section 16.10.020 (Net Buildable Acre definition), properties with environmentally sensitive areas on site may opt to exclude the environmentally sensitive areas from the minimum density requirements provided the sensitive areas are protected via tract or restrictive easement. A proposal to remove said area from the density calculation must include: a delineation of the resource in accordance with Section 16.144.020C, the acreage being protected, and the net reduction below the normally required minimum for accurate reporting to Metro.
 4. **Parking** — Per Section 16.94.020.B.6, 10-25% of the required parking spaces may be reduced in order to protect inventoried regionally significant fish and wildlife habitat areas, provided these resources are protected via deed restrictions or held in public or private tracts.
 5. **Landscaping** — Per Section 16.92.030.B.6, exceptions may be granted to the landscaping standards in certain circumstances as outlined in that section.

STAFF ANALYSIS: The applicant is not proposing to vary any of the standards on site with the exception of a reduction in setbacks. Specifically, the applicant is proposing to reduce the rear yard setback for proposed lots 28-31, 36, 37, and 53. The proposed reductions are illustrated on sheet P05 of the applicant's submittal. The standard requires that flexibility in the reduction of any of these standards be off-set by the provision and protection of an amount of resource lands that are greater than or equal to the amount of reduction that is proposed. In this instance, the reduced setback area is approximately 2,034 square feet. The applicant is proposing to offset this impact by providing mitigation in the amount of approximately 2,155 square feet within proposed Tract 'C' which is located at the end of the hammerhead along SW 'A' Lane. The amount of mitigation is approximately 121 square feet more than the amount of impact.

FINDING: The applicant is proposing to modify the rear yard setbacks for lots 28-31, 36, 37, and 53. In exchange, the applicant is proposing to set aside tract 'C', the amount of mitigation would be greater than the reduced setback, and the reduced setback does not encroach into the vegetated corridor. These criteria are either not applicable, or in the case of the setback reduction, has been satisfied.

16.156.020 Energy Conservation

- A. **Building Orientation** - The maximum number of buildings feasible shall receive sunlight sufficient for using solar energy systems for space, water or industrial process heating or cooling. Buildings and vegetation shall be sited with respect to each other and the topography of the site so that unobstructed sunlight reaches the south wall of the greatest possible

number of buildings between the hours of 9:00 AM and 3:00 PM, Pacific Standard Time on December 21st.

- B. Wind - The cooling effects of prevailing summer breezes and shading vegetation shall be accounted for in site design. The extent solar access to adjacent sites is not impaired vegetation shall be used to moderate prevailing winter wind on the site.

FINDING: The existing development and street patterns determine the orientation of the buildings on the proposed lots. The proposed lots, and the majority of the existing residential lots surrounding the property are oriented in an east/west direction. This standard is met.

STAFF RECOMMENDATION

Based upon review of the applicant's submittal information, review of the code, and public and agency comments, staff finds that the proposed subdivision does not fully comply with the standards but can be conditioned, as follows, to comply. Therefore, staff recommends **approval of the Mandel Farms Subdivision application, SUB 15-01, subject to the following conditions.**

VI. CONDITIONS OF APPROVAL

A. General Conditions

1. Compliance with the Conditions of Approval is the responsibility of the developer or its successor in interest.
2. Development and construction on the site shall conform substantially to the preliminary plat development plans submitted by and dated January 8, 2016 except as modified in the conditions below, (and shall conform specifically to final construction plans reviewed and approved by the City Engineer, the Building Official, Clean Water Services, and Tualatin Valley Fire and Rescue, and Washington County). All plans shall comply with the applicable building, planning, engineering and fire protection codes of the City of Sherwood.
3. The developer is responsible for all costs associated with any remaining public facility improvements and shall assure the construction of all public streets and utilities within and adjacent to the plat as required by these conditions of approval, to the plans, standards, and specifications of the City of Sherwood. The developer shall also provide to the City financial guarantees for construction of all public streets and utilities within and adjacent to the plat, as required by the engineering compliance agreement.
4. **The approval for each phase is valid for a period of two (2) years from the date of the signed engineering compliance agreement for that phase. The final plat for the first phase shall be recorded within two years of the date of this decision.** Extensions may be granted by the City as afforded by the Sherwood Zoning and Community Development Code.
5. Placement of construction trailers or temporary storage containers on the subject property shall require a Temporary Use Permit per Section 16.86 of the SZCDC.

6. This approval does not negate the need to obtain permits, as appropriate from other local, state or federal agencies, even if not specifically required by this decision.
7. Retaining walls within public easements or the public right-of-way shall require engineering approval. Retaining walls located on private property that support a surcharge or are over four feet in height measured from the bottom of the footing will require a permit from the Building Department.

B. Prior to issuance of grading or erosion control permits from the Building Department:

8. Obtain Building Department permits and approval for erosion control and grading on private property and Engineering Department permits and approval for all grading in the public right of way.
9. A demolition permit shall be obtained from the Sherwood Building Department prior to demolishing or moving any structures.
10. Submit a geotechnical report to the Building Department if required by the Building Official.
11. Prior to the issuance of any building permits for the site, the applicant shall provide a final grading permit that demonstrates compliance with section 16.128.030.
12. Prior any on-site grading, an approved grading and erosion control plan is required. The applicant shall also obtain a Storm Water Connection Permit from Clean Water Services (CWS).
13. Since the site disturbance will be in excess of 5 acres, the developer shall obtain a DEQ NPDES 1200-C permit from CWS prior to issuance of an Engineering Compliance Agreement.
14. Prior to any on-site construction, the developer shall ensure that the vegetated corridor is clearly marked and delineated to ensure that there are no unauthorized encroachments by any contractors into the area for any reason.

C. Prior to approval of the public improvement plans:

15. Submit engineering plans for all public improvements and/or connections to public utilities (water, sewer, storm water, and streets) to the Sherwood Engineering Department. The engineering plans shall conform to the design standards of the City of Engineering Design and Standard Details Manual and Clean Water Services (CWS) Design and Construction Standards Manual and other applicable requirements and standards.
16. All city street infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department prior to issuance of an Engineering Compliance Agreement.
17. SW Elwert Road and SW Edy Road are county streets. All county street infrastructure shall meet Washington County standards and be reviewed and approved by the Washington

County Transportation Department prior to issuance of an Engineering Compliance Agreement.

18. Prior to the approval of public improvement plans, obtain a Washington County Facility Permit that includes a financial assurance for the construction of the Public Improvements listed in condition I.A.5 of the letter from Washington County dated February 8, 2016 and attached as exhibit E. to this report.
19. Provide an engineer's cost estimate and pay a fee in-lieu of constructing the remaining half-street improvement along the frontage of SW Elwert Road and SW Edy Road to Washington County.
20. All public sanitary sewer outside of the public right-of-way/public property shall be located within a dedicated public easement.
21. All sanitary sewer infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department prior to issuance of an Engineering Compliance Agreement.
22. All water infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Water Department (Public Works Department) prior to issuance of an Engineering Compliance Agreement.
23. The capacity of the existing storm sewer receiving runoff from the subject development shall be verified. If undersized, the existing storm sewer shall be upsized or detention shall be provided to accommodate the subject property.
24. The existing culvert beneath the SW Elwert Road/SW Edy Road intersection is near capacity. Runoff from the development shall not result in violation of the 1-foot minimum freeboard standard.
25. All storm sewer infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department prior to issuance of an Engineering Compliance Agreement.
26. Payment in full for improvements constructed by the Sherwood School District, In accordance with Sherwood Resolution 2014-073 and Sherwood Municipal Code section 13.24.100 must be received by the City prior to issuance of an Engineering Compliance Agreement.

D. Prior to Approval of the Final Plat:

27. The submittal by the applicant for final plat review and approval shall include but not be limited to the following: a final plat application; final plat review fee; narrative identifying how the required conditions of approval have or will be met; three copies of the final plat; and any other materials required to demonstrate compliance with the conditions of approval.
28. The final plat shall show the following:
 - a. The Community Development Director as the City's approving authority within the signature block of the final plat.

- b. Show the required public right-of-way dedications.
 - c. Provide an 8-foot public utility easement (PUE) dedication adjacent and parallel to the dedicated right-of-way, noted above, for the length of the street right-of-way fronting the subject property.
27. Prior to approval of the Final Plat, submit verification of perpetual maintenance of the landscaped visual corridor.
28. Prior to approval of the Final Plat, submit a revised tree plan demonstrating compliance with the Clear Vision requirements of Section 16.16.58.
29. The proposed public alley off of SW 'C' Terrace shall be constructed to a public standard, but be maintained as private by the homeowners association for the Mandel Farms subdivision. Any future access to proposed lots 76-78 shall be provided via the private alley off of SW 'C' Terrace. There shall be no access to any of the lots within the subdivision from SW Elwert Road.
30. Prior to final plat approval, the developer shall dedicate a 64-foot full width right-of-way section along the site's frontage for SW Copper Terrace. The dedication can be provided on the final plat.
31. Prior to final plat approval, the following shall be represented on the plat and recorded with Washington County:
- a) Dedication of additional right-of-way to provide for 45 feet from the centerline of SW Elwert Road.
 - b) Dedication of additional right-of-way to provide for 37 feet from the centerline of SW Edy Road.
 - c) Dedication of additional right-of-way to provide adequate corner radius at all intersections with County-maintained roads.
 - d) Provision of a non-access reservation along SW Edy Road and SW Elwert Road frontages with the exception of the two public street connections approved as part of this development review.
32. Prior to final plat approval, the applicant shall construct street widening improvements along west side of SW Copper Terrace (Neighborhood Street) along the length of the property to match improvements on the east side of the street (19 feet centerline to face of curb with 5-foot wide landscape strip and 8-foot wide sidewalk. Bulb-outs shall be 13 feet from centerline to face of curb with 11-foot wide landscape strip and 8-foot wide sidewalk.
33. A water main shall be extended northward within SW Elwert Road from the new intersection to the north end of Tract 'I' for future development unless otherwise approved by the city.

34. A water main shall be extended westward within SW Edy Road from the SW Edy Road/SW Copper Terrace intersection to the west end of Tract 'D' for future development unless otherwise approved by the city.
35. New water quality facilities shall be within a separate tract dedicated to the City of Sherwood.
36. Public storm sewer outside of the public right-of-way/public property will be located within a dedicated public easement.
37. Prior to final plat approval, the applicant shall provide construction plans that demonstrate compliance with City of Sherwood standards for review and approval by the Sherwood Engineering Department. The applicant will have met this condition with the issuance of an Engineering Compliance Agreement from the City of Sherwood.
38. The vegetated corridor shall be in a separate tract dedicated to the City of Sherwood. The vegetated corridor tract shall have a "Storm sewer, surface water, drainage and detention easement" dedicated to CWS over its entirety.
39. Prior to final plat approval for any phase, the applicant shall provide the City Engineering department with a copy of the Storm Water Connection Permit from CWS.
40. Prior to final plat approval, provide documentation, to be recorded with the plat, dedicating the tracts of open space to the Homeowner's Association.
41. Prior to final plat approval provide public pedestrian access easements over all soft and hard surface pathways throughout the subdivision.
42. Prior to final plat approval provide plans that show the cross section and landscape plans including the specific planting materials to be installed within the visual corridors along SW Edy and SW Elwert Road.
43. Prior to final plat approval, provide plans that show the visual corridor easements along SW Edy and SW Elwert Road.
44. Prior to final plat approval, revise the tree and landscape plan that shows spacing in relation to the driveways and selection of suitable street trees.

E. Prior to Issuance of a Building Permit:

45. Prior to issuance of any building permits, the public improvements must be complete and accepted by the City Engineer, and the final plat(s) must be recorded. An approval letter shall be issued from the Engineering Department, accepting all public improvements.
46. Prior to issuance of building permits, submit plot plans showing that the structures meet minimum front, face of garage, rear, side, and corner sideyard setback requirements.
47. The front yard setbacks for lots 76-78 shall be measured from SW Elwert Road pursuant to section 16.60.010.

48. Prior to issuance of building permits submit plot plans showing that the height of the dwellings do not exceed two (2) stories or thirty feet, whichever is less, in the MDRL zoned areas and 2.5 stories or 35 feet, whichever is less, in the MDRH zoned areas.
49. Prior to issuance of a building permit, submit plot plans showing the provision of one (1) off-street parking spaces per dwelling unit.
50. Prior to issuance of building permits submit plot plans showing that the clear vision areas are unobstructed.
51. Prior to the issuance of any building permits for each phase, the required improvements for that phase must be completed and accepted by the City Engineering Department.
52. Tracts and lots adjacent to SW Elwert Road or SW Edy road shall not have direct access to those roads with the exception of the Tract containing the public treatment facilities which may have a maintenance access onto SW Elwert Road.
53. Due to the proximity of Lot 1 to the SW Edy Road/SW Copper Terrace intersection, Lots 1 and 2 shall have joint driveway access.
54. Access for Lots 76-78 shall be via a private tract with a public utility easement over its entirety.
55. Preliminary certification of adequate sight distance for each access point to SW Edy Road and SW Elwert Road in accordance with County Code, prepared and stamped by a registered professional engineer, including (sight distance measurements should account for ROW dedication):
 - a. A detailed list of improvements necessary to produce adequate intersection sight distance (refer to the following webpage for sight distance certification submittal requirements).
<http://www.co.washington.or.us/LUT/Divisions/CurrentPlanning/development-application-forms.cfm>
56. All existing and proposed lots shall obtain approval from the Engineering Department and connect to storm, sanitary sewer and water.
57. All agreements required as conditions of this approval must be signed and recorded.
58. Sherwood Broadband utilities shall be installed as per requirements set forth in City Ordinances 2005-017 and 2005-074.
59. Prior to issuance of building permits, all public and private utilities shall be underground unless the utility provider has determined that the lines are too large to place underground.
60. Prior to the issuance of any building permits for the proposed subdivision, the applicant shall provide the Planning Department with a letter or e-mail from the TVFR District Fire Marshal that indicates that the concerns within his letter, attached as exhibit D to this report, have been addressed and mitigated to the districts satisfaction.

61. Prior to the issuance of any building permits for any phase of the subdivision, all easements (public or private) associated with that phase of the development shall be recorded with the County prior to City approval of the public improvements.

F. Prior to Final Occupancy:

62. All public improvements shall be completed, inspected and approved, as applicable, by the City, CWS, TVF & R, TVWD and other applicable agencies.

63. Obtain a Final Washington County Facility Permit contingent upon the following:

- a. The road improvements required in condition I.A.5 of the Washington County comments dated February 8, 2016
- b. Submission of a final certification of adequate sight distance in accordance with County Code, prepared and stamped by a registered professional engineer.

G. On-going Conditions

64. All rain, storm, and other surface water runoff from roofs, exposed stairways, light wells, courts, courtyards, and exterior paved areas shall be disposed of in compliance with local ordinances and state rules and regulations, in a manner that will not increase runoff to adjacent properties. The approved points of disposal include storm sewer laterals to a public system or other storm sewer system as approved by the City Engineer.

65. Joint mailbox facilities shall be installed prior to the City signing the Letter of Acceptance for the development. Joint mailbox facilities must be installed per U.S. Postal Service's "*Developers' Guide to Centralized Box Units*". The Developer shall provide a signed copy of the U.S. Postal Services "*Mode of Delivery Agreement*". Submittal of this agreement shall be required prior to a pre-construction meeting taking place.

66. The developer shall coordinate location of garbage and recycling receptacles with Pride Disposal.

67. The continual operation of the property shall comply with the applicable requirements of the Sherwood Zoning and Community Development Code.

68. Decks, fences, sheds, building additions and other site improvements shall not be located within any public easement unless otherwise authorized in writing by the City Engineer.

69. The developer shall continually comply with the standards of Clean Water Services and the requirements of the Service Provider Letter 15-003302, dated November 24, 2015.

70. Dust shall be controlled within the development during construction and shall not be permitted to drift onto adjacent properties.

71. Noise shall be kept at the minimum level possible during construction. The developer shall agree to aggressively ensure that all vehicles working in the development shall have adequate and fully functioning sound suppression devices installed and maintained at all times.

VII. Exhibits

- A. Applicant's submittal with narrative and supporting documents
- B. Letter from Engineering Department dated February 23, 2016
- C. Letter from CWS dated February 3, 2016
- D. Letter from TVF&R dated February 5, 2016
- E. Letter from Washington County dated February 8, 2016

VIII. Appeal

Pursuant to Section 16.76.020 of the Sherwood Zoning and Community Development Code (SZCDC), the Planning Commission decision detailed above will become final unless an appeal is received by the Planning Department within 14 days after this decision is mailed. Any person with standing that wishes to appeal this decision must file their appeal with the City no later than 5:00 PM on March 9, 2016.

I, Brad Kilby, Planning Manager, certify that this Notice of Decision for Case No. SUB 15-01 was placed in a U.S. Postal receptacle on February 24, 2016.

Brad Kilby, AICP
Planning Manager
City of Sherwood