CITY OF SHERWOOD
June 2, 2020

Staff Report **T-S Corporate Park**
LU 2020-001 SP, CUP, VAR, SUB

		Pre-App. Meetings:	August 16, 2018 and July 18, 2019
		App. Submitted:	January 17, 2020
TO:	**Planning Commission**	App. Complete:	April 13, 2020
		120-Day Deadline:	October 10, 2020
		Initial Hearing Date:	May 26, 2020
		Hearing Continued to:	June 9, 2020

FROM: Joy L. Chang, Senior Planner

Proposal: The applicant proposes to construct five industrial buildings, approximately 535,000 square feet, for future warehousing and industrial uses. The property will be subdivided into five lots and five tracts and includes the construction of SW Cipole Place. The site is zoned Employment Industrial (EI) and the EI has restrictions which limit the size of standalone warehousing and distribution uses to 150,000 square feet unless a Conditional Use Permit is obtained, this application requests a Conditional Use Permit to authorize Building C to have an area of 183,292 square feet. The project also requests a variance to the Sherwood Zoning and Community Development Code Section 16.106.040.E.1 to allow a cul-de-sac over 200 feet long.

I. BACKGROUND

A. Applicant: Trammell Crow Company, Attn: Kirk Olsen
1300 SW 5th Avenue, Suite 3050
Portland, OR 97201
KOlsen@trammellcrow.com

Owner: Willamette Water Supply System Commission (WWSSC)
Attn: David Kraska
1500 NW Bethany Boulevard, Suite 305
Beaverton, OR 97006
david.kraska@tvwd.org

Applicant's Representative: Mackenzie, Attn: Brian Varricchione
1515 SE Water Avenue, Suite 100
Portland, OR 97214
(503) 224-9560 bvarricchione@mcknze.com

B. Assessor's Information: Tax Map and Lot 2S128D001100

C. Address and Location: 12822 SW Tualatin-Sherwood Road, Sherwood
Southwest corner of Tualatin-Sherwood Road and 124th Avenue

D. Parcel Size: The site is approximately 46.53 acres in area.

E. Existing Development and Site Characteristics: The site slopes south to north with steeper grades near the south property line. Blackberries and trees exist on the southern and western portions of the site. A wetland delineation by Pacific Habitat Services has identified three wetlands on the site. Several structures were previously on-site and have since been demolished. The rest of the site remains undeveloped.

F. Site History: The project site is 46.53 acres of private property and lies adjacent to the northeastern edge of the City, within the Tonquin Employment Area (TEA) Concept Plan.

WWSSC, representing the property ownership by the City of Hillsboro, City of Beaverton, and Tualatin Valley Water District, recently partitioned Tax Lot 2S128D000100 into two separate parcels as approved by Washington County Case File 18-276-P/M. This proposal is Parcel 1 of Partition Plat 2019-029 (recorded as document 2019-064346).

The Tonquin Employment Area (previously referred to as Study Area 48) was brought into the Sherwood Urban Growth Boundary in 2004 via Metro Ordinance 04-1040B to provide for needed industrial land. The entire TEA is comprised of approximately 300 acres. In October 2010, the City approved the concept plan and associated implementing Comprehensive Plan and Map Amendments via Ordinance 2010-014.

Even though the TEA was not in the City of Sherwood boundary, in 2012 under Measure No. 34-202, residents of Sherwood voted to support annexation when property owners choose to submit requests to the City Council.

A TEA Market Analysis, Business Recruitment Strategy and Implementation Plan was completed in June 2015, and formally accepted by the City Council under Resolution 2015-051. The implementation plan provides in-depth analysis of issues and opportunities along with specific recommendations that the City could consider to help provide incentives or remove obstacles to encourage development in the area.

In 2016, Senate Bill 1573 changed the requirements for areas where 100% of the owners petition the City. A public vote is no longer required or permitted in annexation requests assuming certain criteria laid out in SB1573 are satisfied.

The site was annexed into the City of Sherwood on December 3, 2019, under Ordinance 2019-016, Case File AN 19-02.

F. Zoning Classification and Comprehensive Plan Designation: The property is zoned Employment Industrial (EI) according to the Sherwood Plan and Zone Map. Per Section 16.31.010.A, the EI zoning district provides employment areas that are suitable for, and attractive to, key industries and industry clusters that have been identified by the State of Oregon and the City's economic development strategy as important to the state and local economy. The following are preferred industry sectors for areas zoned EI: Clean Technology; Technology and Advanced Manufacturing; and Outdoor Gear and Active Wear.

Land zoned EI shall provide for large and medium-sized parcels for industrial campuses and other industrial sites that can accommodate a variety of industrial companies and related businesses. Areas zoned EI are also intended to provide the opportunity for flex building space within small- and medium-sized industrial campuses and business parks to accommodate research and development companies, incubator/emerging technology

businesses, related materials and equipment suppliers, and/or spin-off companies and other businesses that derive from, or are extensions of, larger campus users and developments. Retail and commercial uses are allowed only when directly supporting area employers and employees.

Industrial establishments and support services shall not have objectionable external features and shall feature well-landscaped sites and attractive architectural design, as determined by the Hearing Authority. Any future development would not be approved unless an applicant submits a formal land use proposal to develop the site that is consistent with the Sherwood Zoning and Community Development Code.

H. **Adjacent Zoning and Land Use:** The properties north and south of the site are within the city boundary. The other parcels surrounding the site are either in Unincorporated Washington County or in the City of Tualatin.

I. **Review Type**: Proposed Site Plans greater than 40,000 square feet of floor area, parking or seating capacity are quasi-judicial actions and reviewed through a Type IV procedure. Type IV procedures are decided by the Planning Commission with appeals to the City Council. All other requested reviews (Conditional Use, Variance, and Subdivision) will be processed concurrently through the Type IV procedure.

J. **Public Notice and Hearing:** Notice of the application was mailed to property owners within 1,000 feet, posted on the property, and distributed in five locations throughout the City on May 6, 2020, in accordance with § 16.72.020 of the SZCDC. The notice was published in the *Times* (a newspaper of general circulation) on May 7, 2020, and May 21, 2020, in accordance with §16.72.020 of the SZCDC.

K. **Review Criteria:** Sherwood Zoning and Community Development Code (SZCDC): Division II: §16.31 - Industrial Land Use Districts; §16.58 - Clear Vision and Fence Standard; Division III: §16.72 - Procedures for Processing Development Permits; Division IV: §16.82 – Conditional Uses; §16.84 – Variances; Division V: §16.90 - Site Planning; §16.92 - Landscaping; §16.94 - Off-Street Parking and Loading; §16.96 - On-Site Circulation; §16.98 - On-Site Storage; Division VI: §16.106 - Transportation Facilities; §16.108 - Improvement Plan Review; §16.110 - Sanitary Sewers; §16.112 - Water Supply; §16.114 - Storm Water; §16.116 - Fire Protection; §16.118 – Public and Private Utilities; Division VII: §16.120 – Subdivisions; §16.128 – Land Division Design Standards; Division VIII: §16.142 - Parks, Trees and Open Spaces; §16.144 - Wetland, Habitat and Natural Areas; §16.146 - Noise; §16.148 - Vibrations; §16.150 - Air Quality; §16.152 - Odors; §16.154 - Heat and Glare; and §16.156 - Energy Conservation.

II. PUBLIC COMMENTS

Public notice was mailed, posted on the property, and posted in five locations throughout the City on May 6, 2020. Staff has received general inquiries but no formal comments as of the date of this report. Additional comments from the community are welcome up to the 24 hours before the public hearing pursuant to Executive Order 20-16.

III. AGENCY COMMENTS

Staff sent an electronic notice to affected agencies on April 6, 2020. The following is a summary of the comments received. Copies of full comments are included in the record unless otherwise noted.

Sherwood Engineering Department: The Sherwood Engineering Department has provided comments and conditions of approvals that are incorporated in this report and attached as **Exhibit B.1.** Comments address transportation including the cul-de-sac length, sanitary sewer, environmental, stormwater, water, and grading and erosion sediment control. Comments were also provided that address variances to cul-de-sac length and through road, **Exhibit B.3**. These are discussed in Section 16.84 Variances.

Washington County Land Use & Transportation: Naomi Vogel, Associate Planner, provided comments dated April 24, 2020 (**Exhibit C.1)**. She stated the proposed private access on SW Tualatin-Sherwood Road, does not meet the County's standard for access to an Arterial because the private access is not classified as an Arterial or Collector. However, the applicant has requested a Design Exception (November 25, 2019) to the County's access standard for Arterials and has received approval by the County Engineer based on the safety analysis submitted by the applicant (January 9, 2019).

A Traffic Impact Analysis and supplemental information by Kittelson & Associates (January 15, 2020) were also submitted in accordance with Washington County R&O 86-95, "Determining Traffic Safety Improvements" for developments. County staff has reviewed the TIA and concurs with the findings/recommendations provided on page 44 of the analysis.

She also addresses rights-of-way dedication and public improvements along SW Tualatin-Sherwood Road and 124th Avenue.

Washingotn County provided amended comments dated May 29, 2020 (**Exhibit C.2**) that reflects phasing of the required improvements.

These requirements are further discussed in Section 16.106 Transportation Facilities below.

Tualatin Valley Fire and Rescue (TVF&R): Tom Mooney, Deputy Fire Marshall, provided comments in a letter dated April 8, 2020, attached as **Exhibit D**. He states that TFV&R will endorse the proposal predicated meeting criteria and conditions of approval. He addressed fire apparatus access, firefighting water supplies, fire hydrants, and building access and fire service features. These are further discussed in Chapter 16.116 of this report.

Clean Water Services (CWS): Jackie Humphries, CWS, provided comments dated May 1, 2020, stating states that a storm water connection permit authorization would be required prior to plat approval and recordation. These items will be discussed and conditioned further within this report. Her comments are attached as **Exhibit E.1.** Additionally, a CWS Service Provider Letter (CWS 20-000203) dated April 13, 2020, was received and approved with conditions. This will be further discussed in this report. See attached **Exhibit E.2.**

Oregon Department of State Lands: A wetland land use notice was sent to the Oregon Department of State Lands on April 7, 2020. Chris Stevenson, from the state, provided the following comments in response to the notice (**Exhibit F.1**):

- There are/may be wetlands, waterways, or other water features on the property that are subject to the State Removal-Fill Law based upon a review of wetland maps, the county soil survey, and other available information.
- The National Wetlands Inventory shows wetlands, waterways, or other water features on the property.
- The county soil survey shows hydric (wet) soils on the property. Hydric soils indicate that there may be wetlands.
- A state permit is required for 50-cubic yards or more of fill removal or other ground alteration in wetlands, below ordinary high water of waterways, within other waters of the state, or below highest measured tide.
- A Federal permit may be required by the Army Corps of Engineers.

The applicant's materials also included a Department of State Lands Wetland Delineation Approval Letter, WD#2020-0015, attached as **Exhibit F.2**. It states that the DSL has reviewed the wetland delineation report prepared by Pacific Habitat Services and based upon the information presented they concur with the wetland and waterway boundaries as mapped.

PRIDE DISPOSAL: Kristen Tabscott from Pride Disposal provided comments dated May 15, 2020 (**Exhibit G**). She states that the site plan shows five enclosures by each individual building, each measure 10-feet deep and 20-feet wide which allows for straight-on access. However other details are not shown and will be conditioned in Section 16.98.020 Solid Waste and Recycling Storage.

Portland General Electric (PGE): Email correspondence from Travis Smallwood, Service and Design Project Manager, was received on April 6, 2020. He states that PGE is aware of the planned Trammell Crow project and have already provided them with a very rough preliminary design for them to work with. The work order was canceled in early March until they are further along in their process and then a new design work order will be created at that time **(Exhibit H)**.

Bonneville Power Administration (BPA): Email correspondence dated April 7, 2020, from Jim Clark, Realty Specialist with BPA, states that BPA has reviewed this request with no additional comments to add. **Exhibit I**

Oregon Department of Transportation (ODOT): ODOT has reviewed the proposal and does not have any comments at this time. **Exhibit J**

ODOT Outdoor Advertising Signs: Jill Hendrickson, Program Coordinator, for ODOT Outdoor Advertising Sign Program provided comments dated April 7, 2020. She states that the proposal does not include outdoor advertising signs (i.e. no signs that will be posted for compensation or will contain compensated messages). Therefore, no permits will be required from the Outdoor Advertising Sign Program, but any signs will still need to meet the basic safety requirements in statute and rule for signs that are on private property, and visible to a state highway or any other roadway that falls under the National Highway System. The requirements are in ORS 377.715 and 377.720. **Exhibit K**

City of Sherwood Police: The Police Department has reviewed the proposal and has no concerns. **Exhibit L**

Kinder Morgan Energy, METRO, and NW Natural Gas did not respond to the request for agency comments by the date of this report.

IV. SITE PLAN REVIEW REQUIRED FINDINGS (16.90 Site Planning)

16.90.020 - Site Plan Review
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D. Required Findings
No site plan approval shall be granted unless each of the following is found:

1. **The proposed development meets applicable zoning district standards and design standards in Division II, and all provisions of Divisions V, VI, VIII, and IX.**

FINDING: The proposed development meets the applicable zoning district standards as discussed below under the "Division II- Land Use and Development" section, and the applicable provisions of Divisions V, VI, VIII, and IX as discussed in detail below.

2. **The proposed development can be adequately served by services conforming to the Community Development Plan, including but not limited to water, sanitary facilities, storm water, solid waste, parks and open space, public safety, electric power, and communications.**

FINDING: As discussed in detail in the Public Infrastructure section, water, sanitary sewer, and storm sewer are either available or can be extended to serve the site. The subject site has access to SW Tualatin-Sherwood Road, an Arterial status roadway, through the proposed SW Cipole Place, a Local status roadway. The nearest park is Murdock Park located, west of SW Murdock Road and south of SW Upper Roy Street, in a residential neighborhood. Solid waste services, communication, and public safety are all available to this development. All new utilities for the site will be required to be underground. Sherwood Broadband utilities are required to be installed. This criterion can be met as discussed and conditioned in the Public Infrastructure Section below.

3. **Covenants, agreements, and other specific documents are adequate, in the City's determination, to assure an acceptable method of ownership, management, and maintenance of structures, landscaping, and other on-site features.**

FINDING: Any required covenants or restrictions imposed by the City will be required to be satisfied as an ongoing condition of the original land use decision and subsequent land use approvals on this parcel of land. The City does not monitor or enforce private covenants and restrictions. This is discussed and conditioned further in this report, covenants, conditions and restrictions (CC&Rs) for the project, as well as shared access easements, will be recorded with the final plat, providing for ownership, management, and maintenance of on-site features, as necessary. Per the applicant's narrative, on-going maintenance of the structures, landscaping, etc. will be provided by the property owner, lessee, or another appropriate party. This criterion is met.

4. **The proposed development preserves significant natural features to the maximum extent feasible, including but not limited to natural drainage ways, wetlands, trees, vegetation (including but not limited to environmentally sensitive lands), scenic views, and topographical features, and conforms to the applicable provisions of Division VIII of this Code and Chapter 5 of the Community Development Code.**

FINDING: The significant natural features that have been documented at the site are existing trees and wetlands. The preliminary plans show that wetland vegetated corridor and trees are preserved to the maximum extent feasible and consistent with applicable city standards. The applicable criteria are met.

5. **For developments that are likely to generate more than 400 average daily trips (ADTs), or at the discretion of the City Engineer, the applicant must provide adequate information, such as a traffic impact analysis (TIA) or traffic counts, to demonstrate the level of impact to the surrounding transportation system. The developer is required to mitigate for impacts attributable to the project, pursuant to TIA requirements in Section 16.106.080 and rough proportionality requirements in Section 16.106.090. The determination of impact or effect and the scope of the impact study must be coordinated with the provider of the affected transportation facility.**

FINDING: This project is expected to generate more than 400 ADT. Kittelson & Associates have prepared a detailed traffic impact analysis that was submitted as part of the application packet (Attachment 11 of the applicant's materials). Engineering and Washington County staff reviewed the TIA for the proposed development and conclusions presented are accepted by City and County staff. This criterion is met.

6. **The proposed commercial, multi-family, institutional or mixed-use development is oriented to the pedestrian and bicycle, and to existing and planned transit facilities. Urban design standards include the following:**
   a. **Primary, front entrances are located and oriented to the street, and have significant articulation and treatment, via facades, porticos, arcades, porches, portal, forecourt, or stoop to identify the entrance for pedestrians. Additional entrance/exit points for buildings, such as a postern, are allowed from secondary streets or parking areas.**
   b. **Buildings are located adjacent to and flush to the street, subject to landscape corridor and setback standards of the underlying zone.**
   c. **The architecture of buildings are oriented to the pedestrian and designed for the long term and be adaptable to other uses. Aluminum, vinyl, and T-111 siding are prohibited. Street facing elevations have windows, transparent fenestration, and divisions to break up the mass of any window. Roll up and sliding doors are acceptable. Awnings that provide a minimum 3 feet of shelter from rain are required unless other architectural elements are provided for similar protection, such as an arcade.**
   d. **As an alternative to the standards in Section 16.90.020.D.6.a—c, the following Commercial Design Review Matrix may be applied to any commercial, multi-family, institutional or mixed use development (this matrix may not be utilized for developments within the Old Town Overlay). A development must propose a minimum of 60 percent of the total possible points to be eligible for exemption from the standards in Section 16.90.020.D.6.a—c. In addition, a development proposing between 15,001 and 40,000 square feet of floor area, parking or seating capacity and proposing a minimum of 80 percent of the total possible points from the matrix below may be reviewed as a Type II administrative review, per the standards of Section 16.72.010.A.2.**
   e. **As an alternative to the standards in Sections 16.90.020.D.6.a—c, the Old Town Design Standards (Chapter 16.162) may be applied to achieve this performance measure.**
   f. **As an alternative to the standards in Sections 16.90.020.D.6.a.—e, an applicant may opt to have a design review hearing before the Planning Commission to demonstrate how the proposed development meets or exceeds the objectives in Section 16.90.010.B of this Code. This design review hearing will be processed as a Type IV review with public notice and a public hearing.**

FINDING: The applicant is proposing industrial development on a site zoned Employment Industrial (EI). Therefore, these commercial design guidelines are not applicable.

7. Industrial developments provide employment opportunities for citizens of Sherwood and the region as a whole. The proposed industrial development is designed to enhance areas visible from arterial and collector streets by reducing the "bulk" appearance of large buildings. Industrial design standards include the following (a. and b.).

a. Portions of the proposed industrial development within 200 feet of an arterial or collector street and visible to the arterial or collector (i.e. not behind another building) must meet any four of the following six design criteria:

ANALYSIS: The project site has street frontages on SW Tualatin-Sherwood Road and SW 124th Avenue, both designated as Arterial roadways. Furthermore, SW Blake Street will be constructed in the near future and has a designation of a Collector roadway. The proposal must meet four of the six design criteria along these frontages.

(1) A minimum 15% window glazing for all frontages facing an arterial or collector.

APPLICANT'S RESPONSE: The applicant provided additional narrative dated May 29, 2020, attached as Exhibit A.2. and states the following:

Section 16.90.020.D.7.a of the Community Development Code requires industrial developments within 200 feet of an arterial or collector street and visible to the arterial or collector to meet four (4) design criteria (out of a possible six (6) criteria). One of the criteria selected by the applicant was to satisfy criterion one (1), which specifies a minimum 15% window glazing for all frontages facing an arterial or collector. This criterion is not applicable to the southern façade of Building D because (a) any windows on the southern façade would not be visible from Blake Road and (b) Blake Road does not yet exist.

- As illustrated on Sheet C4.2, Building D will have a finished floor elevation of 206.5 feet, and Blake Road will be considerably higher, separated from the building by a 12- to 15-foot wall and up to 2:1 slope of varying height. Based on the preliminary Blake Road grading shown on Sheet C4.2 (provided by the Willamette Water Supply System Commission), the roadway south of Building D will slope upward from approximately elevation 227 to approximately elevation 243, or approximately 22.5 to 36.5 feet higher than the finished floor elevation. Since the glazing criterion only applies to portions "visible to the arterial or collector" and glazing is typically located within the lowest portion of the building, the grade difference precludes visibility and thus this standard is not applicable.

- In regard to evaluation of land use applications, the "Goal Post Rule," codified at ORS 227.178(3)(a), states that:
  If the application was complete when first submitted or the applicant submits the requested additional information within 180 days of the date the application was first submitted and the city has a comprehensive plan and land use regulations acknowledged under ORS 197.251 (Compliance acknowledgment), approval or denial of the application shall be based upon the standards and criteria that were applicable at the time the application was first submitted. (emphasis added)

Based on this statute, the glazing requirement would only apply to arterials and collectors in existence at the time the land use application was submitted (January 17, 2020). Figure 17 of the 2014 Sherwood Transportation System Plan (TSP) illustrates a "Proposed Collector" for Blake Road, but the roadway has been neither constructed nor dedicated as public right-of-way, and may or may not be constructed to collector standards. Accordingly, the glazing requirement does not apply to façades facing the future roadway location.[1]

ANALYSIS: Four of the five buildings proposed are within 200 feet of an arterial or collector street and visible to the arterial or collector.

Building	Proposed Glazing	Roadway & Elevation	Plan Sheet
Building A	15.6%	T-S Rd / North Elevation	AA2.10
Building B	16.2%	T-S Rd / North Elevation	AB2.10
Building D	10.1% 0.6%	124th / East Elevation & Blake / South Elevation	DA2.10
Building E	15.7%	124th / East Elevation	EA2.10
Building C	Not Applicable	Not Applicable	Not Applicable

The required minimum window glazing is 15%. As reflected in the table above, Building D does not meet the minimum. As proposed Building D will only have 10.1% glazing on the east elevation fronting of SW 124th Avenue and 0.6% glazing on the south elevation fronting SW Blake Street.

Per the applicant's narrative, in Exhibit A.2 and stated above, the south elelvation of Building D fronting SW Blake Street would not be visible from SW Blake Street due to grade drifference.

FINDING: Staff concurs with the applicant's statement that due to the grade difference of SW Blake Street and the south elevation of Building D, glazing standards along the south elevation are not applicable. Based on the analysis above, this condition is not met, but can be satisfied as conditioned below.

RECOMMENDED CONDITION: B.1 Prior to Final Site Plan Approval, Buildings A, B, D and E shall meet the 15% window glazing standard of Section 16.90.020.D.7.a.1. for elevations facing and visible from SW Tualatin-Sherwood Road and SW 124th Avenue.

(2) A minimum of two (2) building materials used to break up vertical facade street facing frontages (no T-111 or aluminum siding).

ANALYSIS: The building elevations of the architectural plan set shows the utilization of two building materials (architectural metal and painted concrete). T-111 or aluminum siding is not proposed. This standard is satisfied.

(3) Maximum thirty-five (35) foot setback for all parts of the building from the property line separating the site from all arterial or collector streets (required visual corridor falls within this maximum setback area).

ANALYSIS: As proposed, the application does not meet this standard.

(4) Parking is located to the side or rear of the building when viewed from the arterial or collector.

ANALYSIS: As proposed, the application does not meet this standard.

(5) Loading areas are located to the side or rear of the building when viewed from the arterial or collector. If a loading area is visible from an arterial or collector, it must be screened with vegetation or a screen made of materials matching the building materials.

ANALYSIS: Per Sheet A0.10, all loading areas are located to the side or rear of the proposed buildings when viewed from the arterial or collector roadway.

(6) All roof-mounted equipment is screened with materials complimentary to the building design materials.

ANALYSIS: Per the applicant's narrative, all roof-mounted equipment is screened with parapets constructed of the same materials as the adjoining portions of the buildings.

FINDING: As discussed and conditioned above, the application can meet four of the six criteria (1,2,5, and 6). These design elements enhance the overall building façade visible from the public rights-of-way and reduce the "bulk" appearance of the large buildings. Therefore, these criteria are met as conditioned above.

b. As an alternative to Section 16.90.020.D.7.a, an applicant may opt to have a design review hearing before the Planning Commission to demonstrate how the proposed development meets or exceeds the applicable industrial design objectives below (this design review hearing will be processed as a Type IV review):

(1) Provide high-value industrial projects that result in benefits to the community, consumers and developers.

(2) Provide diversified and innovative working environments that take into consideration community needs and activity patterns.

(3) Support the City's goals of economic development.

(4) Complement and enhance projects previously developed under the industrial design standards identified in Section 16.90.020.D.7.

(5) Enhance the appearance of industrial developments visible from arterials and collectors, particularly those considered "entrances" to Sherwood, including but not limited to: Highway 99W, Tualatin-Sherwood Road and Oregon Street.

(6) Reduce the "bulk" appearance of large industrial buildings as viewed from the public street by applying exterior features such as architectural articulation, windows and landscaping.

(7) Protect natural resources and encourage integration of natural resources into site design (including access to natural resources and open space amenities by the employees of the site and the community as a whole).

FINDING: Per the applicant's narrative, the proposed development will meet the provisions of Section 16.90.020.D.7.a above. The applicant is not seeking approval under the provisions of subsection b. Therefore, these criteria do not apply.

8. Driveways that are more than twenty-four (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.

FINDING: One new local roadway, SW Cipole Place, will be created that will have direct access to SW Tualatin-Sherwood Road. SW Cipole Place ends with a cul-de-sac where all proposed lots will obtain access from. Three driveway access points from the end of the cul-de-sac are proposed and all are more than 24-feet in width. These driveway access points align with the planned SW Cipole Place street. Access to SW 124th Avenue and to the future SW Blake Street is not proposed. This criterion is met.

E. Approvals

The application is reviewed pursuant to Chapter 16.72 and action taken to approve, approve with conditions, or deny the application for site plan review. Conditions may be imposed by the Review Authority if necessary to fulfill the requirements of the adopted Comprehensive Plan, Transportation System Plan or the Zoning and Community Development Code. The action must include appropriate findings of fact as required by Section 16.90.020. The action may be appealed to the Council in accordance with Chapter 16.76.

F. Time Limits

Site plan approvals are void after two (2) years unless construction on the site has begun, as determined by the City. The City may extend site plan approvals for an additional period not to exceed one (1) year, upon written request from the applicant showing adequate cause for such extension, and payment of an extension application fee as per Section 16.74.010. A site plan approval granted on or after January 1, 2007 through December 31, 2009, is extended until December 31, 2013.

FINDING: Per the applicant's narrative, the submittal will meet the provisions of the section above. These standards are met.

V. SUBDIVISION REVIEW REQUIRED FINDINGS (16.120 Subdivisions and 16.128 Land Division Design Standards)

16.120.040- Approval Criteria: Preliminary Plat

No preliminary plat shall be approved unless:

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: The proposed project abuts SW Tualatin-Sherwood Road and SW 124th Avenue, both Arterial streets. Additional right-of-way dedication for both streets will be required through this proposal. A new public street ending in a cul-de-sac, SW Cipole Place, is also proposed. The location of SW Cipole Place utilizes the existing alignment of the Tualatin-Sherwood and Cipole Road intersection. The southern boundary of the site, county Partition Plat 2019-029, established the location and alignment of the future SW Blake Street. This criterion is met.

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: This criterion is not applicable as the applicant has not proposed any private roads or streets. Per the applicant's narrative, if the applicant does not proceed with the final plat, Cipole Place would be a shared private driveway. Staff has reviewed the proposed SW Cipole Place and determined it to be a public local roadway. If the applicant decides not to proceed with the final plat, SW Cipole Place public right-of-way dedication must still be recorded.

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 met and 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 in Division VI (Public Infrastructure) of this report there are adequate services to support the proposed industrial subdivision. The applicant's exhibits, Sheets C5.0-C6.6, demonstrate that adequate water, sanitary sewer, and other public facilities capacities exist, and facilities will be installed to support the site; and that the proposed public improvements will adequately serve each proposed lot. This standard is met.

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

FINDING: This parcel and the parcel to the south are in the same ownership, both under Willamette Water Supply System Commission. Through the county Partition Plat 2019-029, two parcels were created. Parcel 1, of this site, is being developed as proposed. Parcel 2 can independently develop in the near future with a proposed water treatment facility. Access for Parcel 2 will be through the creation of the new street, SW Blake Street. A public utility easement is proposed from the southern terminus of Cipole Place to the future alignment of SW Blake Street. This criterion is met.

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

FINDING: As stated above, this parcel and the parcel to the south are in the same ownership, both under the Willamette Water Supply System Commission. Through the county Partition Plat 2019-029, two parcels were created. Parcel 1, this site, is being developed as proposed. Parcel 2 can independently develop in the near future with a proposed water treatment facility. Access for Parcel 2 will be through the creation of the new street, SW Blake Street. A public utility easement is proposed from the southern terminus of Cipole Place to the future alignment of SW Blake Street. Properties to the north, west, and east have access to existing roadways. This criterion is met.

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

FINDING: The applicant provided an existing conditions plan (Sheet C2.0, Exhibit A.1) that provides an inventory of the existing trees on site. The tree canopy limits shown in the plan identify the location of the woodlands. The arborist report, by Teragan & Associates, provides a tree inventory along with tree removal and protection recommendations. Based on the analysis identified in Section 16.142 Landscaping, these standards are met.

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

FINDING: Proposed lot numbers, dimensions, easements, and setbacks are shown on Sheet C8.0 and A0.11-A0.12 in Exhibit A.1. This standard is met.

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: Neither of these sections applies to the proposed Employment Industrial zone subdivision. This standard does not apply.

Chapter 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.

FINDING: As reflected in the preliminary plans, the site can accommodate the proposed industrial development. The block length of the site frontage has been established by the existing street network and by the future Blake Street alignment. The site fronts on two

arterials, SW Tualatin Sherwood Road and SW 124th Avenue, allowing the 1,800-foot block length. Per the applicant's narrative, the block length from Tualatin-Sherwood Road to 124th Avenue is approximately 1,100 feet; the block length from SW 124th Avenue to SW Cipole Road is approximately 825 feet and the block length from SW Cipole Road to SW Oregon Street is approximately 1,800 feet. The proposal does not affect the ability of surrounding areas to comply with block length requirements. These standards are met.

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. Figure 7.401 — Block Connectivity

FINDING: The proposal allows for pedestrian and bicycle connectivity through the paved bike and pedestrian accessways on SW Tualatin-Sherwood Road, SW 124th Avenue, and SW Cipole Place. The applicant also proposes on-site private pedestrian connections between building entrances and the public right-of-way. This criterion is met.

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: The proposed public utility easements are shown on the Preliminary Plat, Sheet C8.0 of Exhibit A.1. This criterion is met.

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.

FINDING: There are no watercourses that need to be accommodated on site. This criterion is met.

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.

FINDING: An on-site private system of pedestrian walkways extends throughout the project and connects to buildings, outdoor spaces, parking, and the public boundary streets. No additional pedestrian or bicycle ways are necessary or required. The site includes a cul-de-sac and the applicant has submitted a variance request to waive the standard for a paved bicycle and pedestrian path south of the cul-de-sac. The variance request is further discussed in Section 16.84. With the approval of the variance request, 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.

FINDING: The Preliminary Subdivision Plat, Sheet C8.0 of Exhibit A.1, shows five lots that will comply with the applicable requirements. All lots can be served by the extension of public sewer and water facilities within SW Tualatin Sherwood Road and SW Cipole Place. This criterion is met.

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

FINDING: With the creation of SW Cipole Place, ultimately a public local roadway, all lots except Lot 1 will have frontage along the proposed cul-de-sac. Lot 1 has frontage of along SW Tualatin-Sherwood Road and Lots 4 and 5 have additional frontage along SW 124th Avenue. This criterion is met.

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.

FINDING: No double frontage lots are not proposed. Lots 4 and 5 each have frontage on SW 124th Avenue and SW Cipole Place, the frontage on SW Cipole Place is limited to driveway access from the cul-de-sac bulb. This criterion is met.

D. Side Lot Lines 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.

FINDING: The preliminary plat shows that side lot lines run at right angles to the abutting street frontage as far as practicable. This criterion is met.

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.**

ANALYSIS: The preliminary grading, erosion and sediment control plan shows the project will comply with the applicable grading standards. City policy requires that a Grading and Erosion Control t permit is obtained from the Building Department prior to grading on the private portion of the site. The Engineering Department requires a grading permit for all areas graded as part of the public improvements. The Engineering permit for grading of the public improvements is reviewed, approved, and released as part of the public improvement plans.

An erosion control plan and permit are required from the City of Sherwood Engineering Department for all public and private improvements. The erosion control permit is

reviewed, approved, and released as part of the public improvement plans. The proposed disturbance area for the subject development is greater than 5 acres in area therefore a DEQ NPDES 1200-C permit is required for this project.

It has been presented that site grading will include significant site blasting processes. The applicant will need to obtain a Blasting Permit from TVF&R and include it with the submittal to obtain a City Blasting permit. The City Blasting Permit only covers the blasting process and does not replace the need to obtain a site grading permit.

CWS standards call for a phased mass grading plan for projects where clearing and mass grading activities are proposed during the wet weather period.

FINDING: These standards have not been met, but can be met as conditioned below.

RECOMMENDED CONDITION: **D.1** Prior to Grading Permit, the subject development shall submit a phased mass grading plan/erosion control plan meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: D.2 Prior to Grading Permit, the subject development shall obtain a DEQ NPDES 1200-C permit.

RECOMMENDED CONDITION: **D.3** Prior to Issuance of a Site Grading Permit (if blasting is desired), the applicant shall obtain a Blasting Permit from TVF&R and include it with any submittal to obtain a City issued Blasting Permit. The City Blasting Permit only covers the blasting process and does not replace the need to obtain a site grading permit.

V. CONDITION USE PERMIT REVIEW REQUIRED FINDINGS (Chapter 16.82 – CONDITIONAL USES)

Chapter 16.82 - CONDITIONAL USES

16.82.010 - Generally

A. Authorization

Uses permitted in zoning districts as conditional uses may be established, enlarged, or altered by authorization of the Commission in accordance with the standards and procedures established in this Chapter. If the site or other conditions are found to be inappropriate for the use requested, the Commission or Hearings Officer (cited below as Hearing Authority) may deny the conditional use.

B. Changes in Conditional Uses

Changes in use or expansion of a legal non-conforming use, structure or site, or alteration of structures or uses classified as conditional uses, that either existed prior to the effective date of this Code or were established pursuant to this Chapter shall require the filing of a new application for review conforming to the requirements of this Chapter if the proposed changes would increase the size, square footage, seating capacity or parking of existing permitted improvements by twenty percent (20%) or more.

C. Application and Fee

An application for a Conditional Use Permit (CUP) shall be filed with the City and accompanied by the appropriate fee pursuant to Section 16.74.010. The

applicant is responsible for submitting a complete application which addresses all criteria of this Chapter and other applicable sections of this Code.

FINDING: Based on the Chapter 16.31.020 Industrial Land Use District, Use Table, the standalone distribution, and warehousing up to 150,000 square feet is an allowed use within the Employment Industrial zone. However, the applicant is proposing distribution and warehousing greater than 150,000 square feet provided product(s) are stored within an enclosed building on Building C, Lot 3. This requires a Conditional Use Permit approval. Subsection B is not applicable since the proposal is a new CUP request and not a change to an existing use. The applicant has submitted the required application and associated fee as noted in Subsection C.

16.82.020 – Permit Approval

C. Use Criteria

No conditional use shall be granted unless each of the following is found:

1. All public facilities and services to the proposed use, including but not limited to sanitary sewers, water, transportation facilities, and services, storm drains, electrical distribution, park and open space and public safety are adequate; or that the construction of improvements needed to provide adequate services and facilities is guaranteed by binding agreement between the applicant and the City.

ANALYSIS: As discussed in detail in the Public Infrastructure section, water, sanitary sewer, and storm sewer can be extended or located in SW Tualatin-Sherwood Road and SW Cipole Place and are available to serve the site. The property is located within the service districts of the Sherwood Police Department, Tualatin Valley Fire and Rescue, and Pride Waste Disposal. The application has been routed to these service districts and no service shortfalls were indicated. The site is located in an industrial zone and public parks and open space are not proposed or required as part of this application.

FINDING: As described in this section and the Sherwood Zoning and Community Development Code Division VI Public Infrastructure, this standard is met.

2. Proposed use conforms to other standards of the applicable zone and is compatible with abutting land uses in regard to noise generation and public safety.

ANALYSIS: The proposed uses complies with or is conditioned to comply with the applicable standards of the Employment Industrial zone as described in this report. Per the applicant's narrative, all five proposed buildings are designed to accommodate a range of light industrial, manufacturing, or warehousing/distribution tenants, similar to the many that exist in the vicinity of the subject property. The site is surrounded by General Industrial (north) or Employment Industrial zoning (south and west) in the City of Sherwood and General Manufacturing (northeast) or Manufacturing Business Park (east) zoning in the City of Tualatin. The proposed industrial use is compatible with adjacent properties in terms of noise generation and public safety.

FINDING: This standard is met.

3. The granting of the proposal will provide for a facility or use that meets the overall needs of the community and achievement of the goals and/or policies of the Comprehensive Plan, the adopted City of Sherwood Transportation System Plan and this Code.

APPLICANT'S RESPONSE: All of the buildings are proposed for a range of light industrial, manufacturing, or warehousing/distribution use, which is consistent with the purpose of the EI zone and comprehensive planning for the Tonquin Employment Area in which the subject property is located. Building C is in alignment with the overall proposal for development and use of the property consistent with its comprehensive plan designation and zoning; however, a standalone warehouse/distribution uses that exceeds 150,000 square feet would require CUP approval to locate there. The applicant has provided a traffic impact analysis for the development as a whole, demonstrating the capacity of the transportation system to accommodate resulting traffic assuming full occupancy of all proposed buildings, including Building C.

ANALYSIS: Staff concurs with the applicant's response.

FINDING: Based on the above discussion, this standard has been met.

4. Surrounding property will not be adversely affected by the use, or that the adverse effects of the use on the surrounding uses, the neighborhood, or the City as a whole are sufficiently mitigated by the conditions proposed.

ANALYSIS: The surrounding zoning in all directions is industrial and the proposed industrial use for Building C, distribution, and warehousing greater than 150,000 square, is not anticipated to have adverse effects on the surrounding uses, the neighborhood, or the City as a whole. No impacts requiring mitigation actions are anticipated.

FINDING: This standard is met.

5. The impacts of the proposed use of the site can be accommodated considering size, shape, location, topography and natural features.

ANALYSIS: The proposed warehouse/distribution use and development are consistent with and compatible with the uses surrounding the site in the Tualatin-Sherwood Road industrial corridor, as well as the planning for the development of the Tonquin Employment Area.

FINDING: This standard is met.

6. The use as proposed does not pose likely significant adverse impacts to sensitive wildlife species or the natural environment.

ANALYSIS: The site does contain three wetlands that have not been designated as a significant habitat resource area. Pacific Habitat Services prepared a Natural Resource Assessment for the site, Attachment 15 of Exhibit A.1, and made recommendations for resource conservations. As a result, the applicant proposes development in the upland areas of the site and will not adversely affect sensitive wildlife species or significant wetland natural resource features. The southern portion of the site has been designated

by Metro as upland habitat. Per the applicant's narrative, the proposed tree removal in some of this habitat area will be performed in full compliance with the City's tree preservation standards to maintain the ecological functions of the habitat areas.

FINDING: This standard is met.

7. For wireless communication facilities, no Conditional Use Permit…

FINDING: The proposed use is not a wireless communication facility. Therefore, this standard is not applicable.

8. The following additional criteria apply to transportation facilities…

FINDING: The proposed use is not a Transportation Facility nor Improvement as defined per Chapter 16.66. Therefore, this section is not applicable.

D. Additional Conditions

In permitting a conditional use or modification of an existing conditional use, additional conditions may be applied to protect the best interests of the surrounding properties and neighborhoods, the City as a whole, and the intent of this Chapter. These conditions may include but are not limited to the following:

1. **Mitigation of air, land, or water degradation, noise, glare, heat, vibration, or other conditions which may be injurious to public health, safety or welfare in accordance with environmental performance standards.**
2. **Provisions for improvement of public facilities including sanitary sewers, storm drainage, water lines, fire hydrants, street improvements, including curb and sidewalks, and other above and underground utilities.**
3. **Increased required lot sizes, yard dimensions, street widths, and off-street parking and loading facilities.**
4. **Requirements for the location, number, type, size or area of vehicular access points, signs, lighting, landscaping, fencing or screening, building height and coverage, and building security.**
5. **Submittal of final site plans, land dedications or money-in-lieu of parks or other improvements, and suitable security guaranteeing conditional use requirements.**
6. **Limiting the number, size, location, height and lighting of signs.**
7. **Requirements for the protection and preservation of existing trees, soils, vegetation, watercourses, habitat areas and drainage areas.**
8. **Requirements for design features which minimize potentially harmful environmental impacts such as noise, vibration, air pollution, glare, odor and dust.**

ANALYSIS: The surrounding zoning in all directions is industrial and no adverse impacts to the surrounding properties or neighborhood are anticipated

FINDING: No additional conditions are recommended.

E. Time Limits

Unless approved under Section 16.82.020.A.2 for a larger development to include future tenants of such development, authorization of a conditional use shall be void after two (2) years or such lesser time as the approval may specify unless substantial construction, in the City's determination, has taken place. The Hearing Authority may extend authorization for an additional period, not to exceed one (1) year, upon a written request from the applicant showing adequate cause for such extension, and payment of an extension application fee as per Section 16.74.010.

F. Revocation

Any departure from approved plans not authorized by the Hearing Authority shall be cause for revocation of applicable building and occupancy permits. Furthermore, if, in the City's determination, a condition or conditions of CUP approval are not or cannot be satisfied, the CUP approval, or building and occupancy permits, shall be revoked.

VI. VARIANCE REVIEW REQUIRED FINDINGS (16.84 VARIANCES)

16.84.010 - Purpose

This Chapter provides standards and procedures for variances, which are modifications to land use or development standards that are not otherwise permitted elsewhere in this Code as exceptions to Code standards. This Chapter provides flexibility, while maintaining the purposes and intent of the Code. No variances shall be granted to allow the use of property for a purpose not authorized within the zone in which the proposed use is located. In granting a variance, conditions may be imposed when necessary to protect the best interests of surrounding properties and neighborhoods, and otherwise achieve the purposes of the adopted Comprehensive Plan, the Transportation System Plan, and other Code provisions.

ANALYSIS: The applicant is requesting the following variance and exceptions:

1. Variance to cul-de-sac length exceeding the 200-foot length standard in Section 16.106.040.E;
2. Exception to requiring connectivity of Cipole Road between Tualatin-Sherwood Road and Blake Street that also waive the standard for a paved bicycle and pedestrian path south of the cul-de-sac; and
3. Exception to requiring sidewalk along the eastern side of the proposed Cipole Road extension that abuts the existing wetlands.

The application a includes evidence responding to applicable approval criteria for the requested variance, which is addressed below in this staff report.

16.84.020 - Applicability

A. Exceptions and Modifications versus Variances

A code standard or approval criterion may be modified without approval of a variance if the applicable code section expressly allows exceptions or modifications. If the code provision does not expressly provide for exceptions or modifications then a variance is required to modify that code section and the provisions of Chapter 16.84 apply.

FINDING: The existing cul-de-sac standards in Section16.106.040.E allows for 200-feet cul-de-sac length and not provide access to more than 25 residential dwelling units. The proposal is for

an industrial subdivision and is not expressly listed as allowable exceptions or modifications. The applicant is requesting a variance approval to exceed the cul-de-sac length for industrial development; waiving road connectivity standards including bicycle and pedestrian connection south of the cul-de-sac; and exception to requiring sidewalk along the eastern side of the proposed Cipole Road extension that abuts the existing wetlands. This criterion is met.

B. Combining Variances with Other Approvals; Permit Approvals by Other Agencies. Variance requests may be combined with and reviewed concurrently by the City approval body with other land use and development applications (e.g., development review, site plan review, subdivision, conditional use, etc.); however, some variances may be subject to approval by other permitting agencies, such as ODOT in the case of State Highway access.

FINDING: In addition to the variance requests, the applicant has submitted concurrent Site Plan, Subdivision, and Condition Use Permit reviews. This criterion is met.

C. Adjustments and variances cannot be applied to change any existing Planned Unit Development (PUD).

FINDING: The site is not within an existing PUD. Therefore, this criterion does not apply.

16.84.030.C- Class A Variances

1. Generally

- **a. The Class A variance procedure may be used to modify a standard for three (3) or fewer lots, including lots yet to be created through a partition process.**
- **b. An applicant who proposes to vary a standard for lots yet to be created through a subdivision process may not utilize the Class A variance procedure. Approval of a Planned Unit Development shall be required to vary a standard for lots yet to be created through a subdivision process, where a specific code section does not otherwise permit exceptions.**
- **c. A Class A Variance shall not be approved that would vary the "permitted, conditional or prohibited uses" of a land use district.**

ANALYSIS: The Class A variance is appropriate. The proposed variance is to vary cul-de-sac length from the 200-foot maximum limit to allow the proposed 550-foot length for SW Cipole Place, to waive the road connectivity standards that includes bicycle and pedestrian connection south of the cul-de-sac, and exception to the sidewalk on the eastern side of SW Cipole Place due to existing wetlands. The proposed variance exceeds the 20% threshold listed in the Class B variance requirements, thus necessitating a Class A variance. Variance to lot standards and uses are not proposed.

FINDING: Based on the discussion above, these criteria are met.

2. Approval Process:

- **a. Class A Variances shall be processed using a Type IV procedure, as governed by Chapter 16.84, using the approval criteria in subsection 3, below.**
- **b. In addition to the application requirements contained in Chapter 16.72.010, the applicant shall provide a written narrative describing the reason for the variance, why it is required, alternatives considered, and compliance with the criteria in subsection 3.**

APPLICANT'S RESPONSE: This section provides the rationale for the SW Cipole Place cul-de-sac variance request and a description of the multiple alternative designs for the site and the roadway examined by the applicant. Compliance with subsection 3 is provided in the responses to that section below.

Background

As discussed in the narrative introduction, the applicant is proposing a subdivision for the sole reason of being able to offer buildings for sale or lease to potential users in a one building-per-lot final configuration. Trammell Crow Company's experience with industrial development in the Tualatin-Sherwood Road corridor reveals that many users prefer to own their own sites and that by doing so, they make a greater investment in the community and increase the likelihood of manufacturing jobs. If market demand did not call for the flexibility for users to purchase their own lots, then all five proposed buildings could be constructed on a single lot, with no associated subdivision. In this scenario, a public street would not be needed to provide access, and the development could be constructed with a single private internal drive from SW Tualatin-Sherwood Road and no vehicle or pedestrian/bicycle connection to SW Blake Road.

Since neither the City of Sherwood 2014 Transportation Plan (TSP) nor applicable industrial development standards require a vehicular or pedestrian connection through the property, the applicant proposes a single point of access across from Cipole Road, the only location that is feasible and approved by Washington County. Washington County has approved a Design Exception (Attachment 12) for non-arterial/non-collector access to SW Tualatin-Sherwood Road at the existing signalized Cipole Road intersection, as this provides a safe protected location for large trucks, employees, and customers of the site and does not create a new intersection on an existing arterial. The County is not permitting driveway connections to 124th Avenue since this is an access-controlled roadway with grades that would not accommodate connections at locations other than Blake Road. Access cannot be obtained from the west due to the location of the existing municipal water reservoir, the unimproved/substandard condition of existing roadways (e.g., Dahlke Lane and the access to the reservoir), and the close proximity of the Dahlke Lane/Oregon Street intersection to the signal at the Oregon Street/Tualatin-Sherwood Road intersection.

Assessment of Cul-de-Sac vs. Through Street

Prior transportation planning efforts for the City in general and the Tonquin Employment Area have not identified the need for a public street extending southward from the SW Cipole Road/SW Tualatin-Sherwood Road intersection. As detailed in the supporting materials in Attachment 12, Figure 18 in the TSP depicts the south approach of this intersection with an arrow, indicating it is a conceptual street connection, not a proposed roadway. Significantly, the 2015 Tonquin Employment Area Market Analysis, Business Recruitment Strategy, and Implementation Plan (the TEA Implementation Plan) notes that "…we are assuming an internal drive will be located here instead" of an extension of Cipole Road south of Tualatin-Sherwood Road.

As further detailed in the supporting materials in Attachment 12, neither the City TSP, the TEA Implementation Plan, nor the Washington County TSP Functional Classification Urban Area Map 6 illustrate an existing or proposed street at this location, or anywhere south of Tualatin-Sherwood Road between Oregon Street and SW 124th Avenue.

The Traffic Impact Analysis (Attachment 11) compared the resulting roadway operations for a cul-de-sac and a through street to Blake Road, concluding the following:

> *Traffic Operations: Regardless of whether or not SW Cipole Road is extended through the site, the adjacent study intersections are all anticipated to meet the jurisdictional mobility standard. While the extension of SW Cipole Road results in slightly improved operations at the SW Cipole Road / SW Tualatin-Sherwood Road intersection, operations remain the same or slightly deteriorate at the SW 124th Avenue / SW Tualatin-Sherwood Road, SW Cipole Road/Blake Road and SW 124th Avenue / Blake Road intersections. Therefore, there appears to be no significant system-wide benefit to extending SW Cipole Road through the site to connect with the future Blake Road.*
>
> *Traffic Safety: A connection to Blake Road would add an access point to the roadway network, introducing conflict. Limiting SW Cipole Road to a cul-de-sac ending would result in fewer unprotected left-turn conflict points on the surrounding roadway network, especially those involving large trucks.*

In addition to not being necessary or advantageous for traffic operations, the potential extension of Cipole Place to Blake Road would also increase street maintenance costs for the City and increase the potential for conflicts between trucks and passenger vehicles that may opt to cut through Cipole Place rather than use SW 124th Avenue for north-south travel. An extension of Cipole Road to Blake Road would connect to Blake on a horizontal roadway curve which presents several concerns since curves can pose sight distance problems; if a perpendicular intersection were instead created then it may result in steeper road grades and would increase site impacts due to additional right-of-way and fill slope requirements.

Importantly, the Fire Marshal from Tualatin Valley Fire & Rescue has indicated that, from the perspective of emergency service, "The proposed cul-de-sac is allowed and secondary access would not be required if all buildings are fully sprinklered." The applicant does plan to construct buildings with sprinkler systems for fire suppression. As illustrated on Sheet C3.3 in Attachment 6, the proposed cul-de-sac terminates in a bulb with a paved radius of 54 feet to allow for fire truck turnarounds.

Roadway grades over 3% (which would be required if the road extended south to Blake Road) affect intersection sight distance needs. If a relatively flat grade is not provided at the Cipole/Blake intersection, additional intersection sight distance will be needed, which exacerbates the intersection design.

Assessment of Cul-de-Sac Length

The City's 200-foot standard is primarily geared toward residential development rather than large-lot industrial development. The site size, configuration, dimensions, and locations of wetlands make a 200-foot cul-de-sac infeasible for an industrial park. At 200 feet, the cul-de-sac would be too far north to provide access to Building E without impacting wetlands. Additionally, a length of 200 feet or less may provide inadequate space for trucks to queue during peak operations, potentially leading to conflicts if southbound vehicles spill back onto SW Tualatin-Sherwood Road. Accordingly, the applicant is requesting a longer cul-de-sac to provide for safe operations by alleviating queuing concerns and to reduce resource impacts by allowing driveways to be routed around wetlands. The proposed site layout extends the cul-de-sac south and west away from the wetlands, with the resulting access point to Building E being situated on the cul-de-sac bulb 550 feet south of Tualatin-Sherwood Road. This is the shortest length possible

without causing wetland impacts. The applicant has also submitted an associated Engineering Design Modification request (Attachment 20).

Economic Development Opportunity

The site is a designated Industrial area in Metro's Urban Growth Management Functional Plan (UGMFP) Title 4 Industrial and Other Employment Areas map (October 2014). Section 3.07.410 of the UGMFP stipulates in part that "To improve the economy, Title 4 seeks to provide and protect a supply of sites for employment…" Accordingly, after the Tonquin Employment Area (TEA) was brought into the urban growth boundary, the City of Sherwood designated the TEA for industrial development and established the EI zone with limits on the size and scope of non-industrial uses. Now that the property has been annexed into the City and zoned EI, the applicant seeks to maximize opportunities for industrial development and employment.

Alternatives Analysis

The proposal to construct a cul-de-sac itself was not a design decision that was approached casually, but rather reflected extensive alternatives analysis that examined the feasibility of the street southward to connect to the future alignment of Blake Road. The steep slope and configuration of the site pose development constraints for the large footprint industrial buildings envisioned for the TEA and allowed in the EI zone. To address the requirement for large, flat sites, there are two basic approach options for designing the site and the roadway. The first focuses on the site with the primary objective of accommodating the property's industrial Comprehensive Plan designation, with roadway design subordinate to site planning. The second approach's objective is to create a street design that falls within engineering standards and best practices, subordinating site design. To advance the City's and Metro's economic development goals for the TEA, the applicant is implementing the first approach.

The site slopes downward steeply from south to north, with an elevation drop of approximately 45 feet3 from the future Blake Road location to SW Tualatin-Sherwood Road. The majority of the site has slopes over 7%, which is generally the upper limit for accommodating large-footprint industrial structures, as steeper slopes do not accommodate large, rectangular buildings, truck courts, and associated parking areas without significant grading efforts and associated development costs. The localized areas of lesser slopes contain existing wetlands that the applicant proposes to preserve. Without significant site grading, the site would provide space for only one large industrial building with much less capacity than the proposed plan.

In keeping with the first approach outlined above, the applicant proposes to maximize the building area and achieve efficient cross-lot circulation by grading the site as depicted in Attachment 6, Sheets C4.0-C4.2. This layout establishes the buildings' finished floor elevations at approximately the same level, with only a three-foot difference among buildings. Much of the existing hillside will be excavated to accommodate the building footprints and parking areas, with site walls present around most of the site perimeter (some of these would be engineered retaining walls, while others would be cut faces in rock areas). In general, Lots 3 and 4 and the western portion of Lot 1 will be lower than off-site abutting land, while Lots 2 and 5 and the northern portion of Lot 1 will be higher than off-site abutting land. The resulting SW Cipole Place roadway design utilizes a 3% slope (Attachment 6, Sheet C3.3), which is appropriate for a street with significant truck

traffic.4 The elevation of the cul-de-sac bulb would remain approximately 30 feet lower than Blake Road.

As part of the alternatives analysis, for Option 1 the design team examined the implications of utilizing the same Cipole Place profile as shown in Attachment 6, Sheet C3.3, but then extending the roadway southward to connect to the future Blake Road (Attachment 13, pages 1-3). Key points about the Option 1 design are:

- The road was designed with a design speed of 25 miles per hour, per standards for local streets.
- The road grade from SW Tualatin-Sherwood Road to the main vehicle entries in the cul-de-sac bulb was set at 3% to facilitate truck operations and allow reasonable access to the northeast portion of the site without crossing the wetlands.
- This option minimizes wall height for Cipole Place (north of the cul-de-sac bulb) and minimizes impact to the vegetated corridor.
- The roadway vertical curves were designed to minimum K values as specified in the Engineering Design Manual, requiring street lighting to meet the American Association of State Highway and Transportation Officials (AASHTO) and City of Sherwood standards.
- The resulting roadway profile (Attachment 13, page 2) illustrates that a portion of the street would need to be constructed at a 14.9% slope, thus necessitating City Engineer approval (City engineering standards dictate that road slopes may not exceed 15%, and any slopes over 12% require special approval by the City Engineer).
- Any vehicle turning onto Cipole Place from Blake Road will not be able to see the driveway entries until after they have crested the vertical curve and are descending down the 14.9% slope, creating a hazardous traffic condition.
- The resulting cross-section fill slopes extend into the site by up to 100 feet (Attachment 13, page 1), impacting the vegetated corridor and reducing the developable area.

Option 1 reduces the size of Building D by more than 38,600 SF compared to the applicant's proposal (Attachment 13, page 3), and requiring placement of a significant volume of fill that would impact existing wetland features. Based on the reduction in the building area, the applicant would expect an associated reduction of 64 jobs, using an average rate of 600 SF per employee based on Appendix 6 of Metro's 2014 Urban Growth Report. Furthermore, assuming a property tax rate of $1.25 per SF per year, growing at 3% per year, this reduction in building area would result in lost property tax revenue of over $5.4 million over the expected life of a building (50 years). Finally, the associated cost of extending the roadway using this road profile would be $610,000 greater than the applicant's proposal.

In keeping with the second approach outlined above, the design team examined a second alternative (Option 2) which would extend Cipole Place to Blake Road using a constant slope and then adjusting site grades to fit the roadway (Attachment 13, pages 4-6). Key points about the Option 2 design are:

- The road was designed with a design speed of 25 miles per hour, per standards for local streets.
- The roadway profile (Attachment 13, Sheet 5) utilizes a 6% slope from SW Tualatin-Sherwood Road to Blake Road. While this slope requires no special approval from the City Engineer, it is steeper than comfortable for trucks (3% would be preferable for trucks, and a maximum of 5% is recommended).

- The roadway vertical curves were designed to minimum K values as specified in the Engineering Design Manual, requiring street lighting to meet AASHTO and City of Sherwood standards.
- Wall heights along the east side of Cipole Place north of the cul-de-sac bulb are the same as in Option A, but due to the higher roadway slope, this results in additional grading at 3:1 side slopes, impacting the vegetated corridor and wetlands.
- Due to the higher roadway profile, the resulting cross-section fill slopes extend into the site by over 400 feet in some locations (Attachment 13, page 4), requiring fill in Wetland A and imposing additional vegetated corridor impacts while also reducing the developable area.
- Due to increased vegetated corridor and wetland impacts, a dedicated area for on-site mitigation is illustrated west of Cipole Place, using up valuable land.
- The wetland impacts would require state and Federal permitting, a time consuming, and unpredictable process.
- To provide tenant and truck access to buildings both east and west of Cipole Place, sloped drive aisles would need to be constructed at slopes of approximately 4-4.5%, which pushes buildings farther away from the street and results in smaller building footprints.
- These site slopes are higher than some industrial users are willing to accept due to impacts on truck operations, which then reduces the attractiveness of the site for potential tenants/purchasers. For instance, Amazon's standards stipulate a maximum slope of 3.5% in truck areas at their facilities.
- The longer truck aisles needed to access the site result in the complete elimination of an entire building since trucks can no longer access it and a shared truck court is no longer feasible.

The Option 2 alternative reduces the total building area by over 132,000 SF (Attachment 13, page 6) compared to the applicant's proposal. Based on the reduction in the building area, the applicant would expect an associated reduction of 220 jobs, using an average rate of 600 SF per employee based on Appendix 6 of Metro's 2014 Urban Growth Report. Furthermore, assuming a property tax rate of $1.25 per SF per year, growing at 3% per year, this reduction in building area would result in lost property tax revenue of over $18.6 million over the expected life of a building (50 years). Finally, the associated cost of extending the roadway using this road profile would be $1.2 million greater than the applicant's proposal.

Compared to the applicant's proposal, both alternatives decrease the building area, which yields a corresponding reduction in job opportunities for the community. Taken together, the resulting increased costs of extending the street farther south, the constrained circulation, and the reduced square footage yields would make industrial development infeasible. Furthermore, the TIA points out potential roadway conflicts that would occur if Cipole Road were extended south to Blake Road.

The analysis above provides evidence that the applicant has thoroughly evaluated multiple alternatives before arriving at the proposed site and roadway design, and that the proposed design is superior to the alternatives.

ANALYSIS: The proposed variances are being processed as a Type IV application and will be reviewed by the Planning Commission in accordance with Section 16.84. A written narrative describing the reason for the variance, why it is required, alternatives considered,

and compliance with the criteria in subsection 3 was provided. The criteria are further reviewed below.

FINDING: Based on the analysis and discussions above**,** this standard has been met.

3. Approval Criteria: The City shall approve, approve with conditions, or deny an application for a Class A Variance based on the following criteria:

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

APPLICANT'S RESPONSE: A Variance is requested to elements of Section 16.106.040.E, which would restrict cul-de-sac length to 200 feet and would require pedestrian/bicycle connections from the cul-de-sac bulb to other streets. As illustrated on Sheet C3.3, the applicant proposes a cul-de-sac length of approximately 550 feet for SW Cipole Place and proposes not to provide an impractically steep pedestrian/bike path to SW Blake Road.

The purposes of the Code are outlined in Section 16.02.020, which states that:

This Code is enacted to:

A. Encourage the most appropriate use of land.
B. Conserve and stabilize the value of property.
C. Preserve natural resources.
D. Facilitate fire and police protection.
E. Provide adequate open space for light and air.
F. Minimize congestion on streets.
G. Promote orderly growth of the City.
H. Prevent undue concentrations of population.
I. Facilitate adequate provision of community facilities.
J. Promote in other ways the public health, safety, convenience, and general welfare.
K. Enable implementation of the Sherwood Comprehensive Plan in compliance with State and Use Goals.

Lengthening the cul-de-sac from 200 feet to approximately 550 feet would not be detrimental to these purposes as it would result in orderly and efficient use of industrial land, lead to increased employment within city limits, and maintain acceptable traffic operations as detailed in Attachment 11.

As the cul-de-sac will be entirely self-contained within the limits of the Corporate Park, the additional roadway length does not negatively impact abutting properties or those in the vicinity. Extending the length of the cul-de-sac will provide adequate space for southbound trucks to queue in the cul-de-sac without spilling back into SW Tualatin-Sherwood Road, thereby decreasing the potential for unsafe traffic conditions at the intersection, which could occur if the roadway were limited to 200 feet. Furthermore, abutting properties do not need access to SW Cipole Place to develop, as properties to the north have access to SW Tualatin-Sherwood Road; properties to the east have access to SW 124th Avenue; properties to the south can take access to Blake Road when it gets constructed; properties to the west can take access from Dahlke Lane. As demonstrated in Attachment 11, traffic operations are not negatively affected by utilizing a cul-de-sac rather than a through street.

The proposed variance will have a greater positive impact on the surrounding area than the alternatives, by allowing for increased building sizes as compared to constructing a

through street to Blake Road. Because usable square footage will be higher, employment opportunities and tax base growth will also increase.

Based on the factors described above, a 550-foot industrial cul-de-sac rather than a through street or a 200-foot cul-de-sac will not result in a materially detrimental impact on surroundings properties or roadways, or on employees, customers, and guests who will be working at and visiting the site.

Allowing the 550-foot cul-de-sac, as proposed, will also enable development of the site in an efficient manner that is compatible with surrounding land uses. Construction of the street as proposed allows the balance of the site to be designed with efficient building placement and vehicle circulation pattern that respects the location and value of the onsite wetlands; by contrast, driveway alignments necessary with a 200-foot cul-de-sac length would cause significantly greater impacts. These characteristics are consistent with Industrial Land Use Policies 1 and 2 of Chapter 4 of the Sherwood Comprehensive Plan II, which states the following.

> *Policy 1 – Industrial uses will be located in areas where they will be compatible with adjoining uses, and where necessary services and natural amenities are favorable.*
>
> *Policy 2 – The City will encourage sound industrial development by all suitable means to provide employment and economic stability to the community.*

The degree of flexibility sought by the proposed Variance also aligns with Community Design Policy 4, as referenced below, through applying a flexible site design approach that effectively maintains transportation operational standards while allowing for a financially viable industrial development that does not allocate valuable land to roadway cross-section fill slopes which diminish the usability of the site.

> *Policy 4 – Promote creativity, innovation and flexibility in structural and site design*.

Approving the proposed variance would provide economic benefit to the City as it would accommodate larger buildings, leading to a corresponding increase in the number of jobs available for area residents, improving the City's jobs-housing balance.

Finally, with respect to providing a pedestrian/bicycle connection to a neighboring street, due to the elevation difference between the proposed SW Cipole Place cul-de-sac and SW Blake Road, a path between the two would need to be steeply sloped and traverse a steep cut/fill bank with high retaining walls. Even with safety railings, a path through this location could pose safety risks, especially in wet or icy/snowy conditions. Situated within an industrially zoned area, there is little reason to anticipate significant pedestrian or bike traffic. Routing by way of SW 124th Avenue, with sidewalks and bike lanes, when fully improved, will be much safer, so the applicant is proposing pedestrian connections from Buildings D and E to 124th Avenue.

Given these findings, the proposed Variance is consistent with the criterion cited above.

ANALYSIS: The City Engineer, Bob Galati, has reviewed the information provided for the project and related variance request. The following is an analysis, conclusion, and recommendation for each item of the variance requested as reflected in **Exhibit B.3**.

General Observations

The applicant has submitted for a Variance using Municipal Code Chapter 16.84 for modifications to land use or development standards that are not otherwise permitted elsewhere in this Code as exceptions to Code standards. This Chapter provides flexibility while maintaining the purposes and intent of the Code. No variances shall be granted to allow the use of the property for a purpose not authorized within the zone in which the proposed use is located. In granting a variance, conditions may be imposed when necessary to protect the best interests of surrounding properties and neighborhoods, and otherwise achieve the purposes of the adopted Comprehensive Plan, the Transportation System Plan, and other Code provisions.

Variance Item #1 – Cul-de-sac Length

One item for which a variance is being requested is the Cipole Road extension cul-de-sac length. Under MC Chapter 16.106.040.E (Cul-de-sacs), the MC provides the following language regarding the design provision of cul-de-sacs:

1. All cul-de-sacs shall be used only when exceptional topographical constraints, existing development patterns, or compliance with other standards in this code preclude a street extension and circulation. A cul-de-sac shall not be more than two hundred (200) feet in length and shall not provide access to more than 25 dwelling units.

2. All cul-de-sacs shall terminate with a turnaround in accordance with the specifications in the Engineering Design Manual. The radius of circular turnarounds may be larger when they contain a landscaped island, parking bay in their center, Tualatin Valley Fire and Rescue submits a written request, or an industrial use requires a larger turnaround for truck access.

3. Public easements, tracts, or right-of-way shall provide paved pedestrian and bicycle access ways at least 6 feet wide where a cul-de-sac or dead-end street is planned, to connect the ends of the streets together, connect to other streets, or connect to other existing or planned developments in accordance with the standards of this Chapter, the TSP, the Engineering Design Manual or other provisions identified in this Code for the preservation of trees.

The City's Engineering Design and Standard Details Manual provides the following criteria for the design of cul-de-sacs:

Cul-de-sacs shall not be more than 200 feet in length, except for the modified infill design cul-de-sac, which shall not be more than 150 feet in length. The length of a cul-de-sac shall be measured along the centerline of the cul-de-sac from the near side right-of-way of the nearest through traffic intersecting street to the farthest point of the cul-de-sac right-of-way. See the standard details for cul-de-sac right-of-way and pavement requirements.

Generally and historically, the use of cul-de-sacs within the City have been limited to residential subdivision development. There are only two instances within the City where a cul-de-sac has been installed within a commercial/industrial zone; 1) Olds Place (length 362', built 2008) and Wildrose Place (length 642', built 1995). Both of these developments pre-date the current MC Chapter (2011) and Manual (2009) standards used to define cul-de-sac design criteria.

From the existing residential development criteria, the Engineering staff has back calculated the basis for the establishment of the 200' maximum cul-de-sac length.

The City standard for Medium Density Residential (MDRL) which includes single-family residential units, is a maximum of 8 dwelling units per acre, or approximately 5,000 sf lots. Typically, the lots are 50' x 100' in size. With 4 lots per side of the street, this equates to a street length of 200 feet (50' lot width x 4 lots/side).

However, in researching how residential cul-de-sac length standards are technically established the following information was found:

Text: **Residential Streets, 3rd edition**

Published by: *Urban Land Institute, a collaboration between Association of Home Builders, American Association of Civil Engineers (ASCE), and the Institute of Transportation Engineers (ITE)*

The report indicates that the cul-de-sac length should be based on the maximum daily vehicle trip count setting the density of residential units accessing the cul-de-sac section of the road. The report suggests a maximum traffic volume of approximately 200 vehicles per day (vpd) using a trip count of between 8 and 10 vehicles per day (vpd) for each single-family residential (SFR) dwelling unit. Using this data, the maximum number of SFR dwelling units calculated at 20 SFR dwelling units (200 vpd/10 vpd/SFR).

By extension, this calculation indicates that the maximum length of a residential cul-de-sac based on this data and the MDRL classification is **500 feet** (50 feet/lot x 10 lots), which has been used recently on a subdivision which requested a design variation.

As can be noted, this information does not provide an equivalent analysis for the establishment of commercial/industrial cul-de-sac lengths.

The following chart provides cul-de-sac design information from adjacent local jurisdictions:

Municipality	Maximum Cul-de-Sac Length (ft.)	Residential (R), Commercial/Industrial (CI)
Beaverton	200	R, CI
Tigard	>150, no max. listed	R, CI
Tualatin	600	R, CI
Wilsonville	200	R, CI
Hillsboro	200	R

It becomes very apparent that nearly all local communities limit the length of cul-de-sacs to a residential 200 ft. maximum. It is also clear that the written standards for these communities allow greater lengths for commercial/industrial road on a case-by-case basis based on City Engineer approval of the technical design information provided by the applicant, which includes traffic counts and vehicle types.

The submitted plans (Sheet C3.3) indicates that the Cipole Road cul-de-sac length is approximately 560 feet (curbline intersection of T-S Road to the center of the cul-de-sac), which exceeds the residential standard calculated above.

A TIA prepared by Kittelson & Associates (dated January 25, 2020) provided the following information on the intersection traffic counts at the intersection of Cipole Road and T-S Road:

Year 2021 (Day of Opening)
Weekday Peak Hour Conditions (Vehicles)

	Northbound			Southbound			
Movement	Left	Thru	Right	Cipole Left	Thru	Right	Total*
AM Peak	22	2	20	49	9	31	133
PM Peak	95	10	84	68	2	135	394

* Calculated Values by City Engineering Staff

Year 2025 (Build-Out)
Weekday Peak Hour Conditions (Vehicles)

	Northbound			Southbound			
Movement	Left	Thru	Right	Left	Thru	Right	Total*
AM Peak	22	2	20	49	9	31	133
PM Peak	95	10	84	68	2	135	394

* Calculated Values by City Engineering Staff

The average percentage of heavy vehicles (trucks) is estimated to range from 8% (AM) to 14% (PM). The longest northbound queuing length noted is the PM left turn lane at 150'.

Please note that eastbound and westbound traffic data has been omitted as it does not relate to Cipole Road operation, but to T-S Road operation.

So, the question now becomes what design criteria will be established to allow the use of cul-de-sacs on commercial/industrial site public access roads?

Length of Cul-de-sac for Residential and Commercial/Industrial Roads

1) Limit the length of the cul-de-sac to no more than 500 feet for residential streets.
    a. Calculation of cul-de-sac length is based on criteria delineated in **Residential Streets, 3rd edition**, published by *Urban Land Institute, a collaboration between Association of Home Builders, American Association of Civil Engineers (ASCE), and the Institute of Transportation Engineers (ITE*)
    b. Compliance with City Engineering Design and Standards Detail Manual for Residential street cross-section standards will still be required.
    c. Length will be measured from the intersection of the intersecting street curb line to the center of the cul-de-sac (radius point).
2) Limit the length of the commercial/industrial cul-de-sac to no more than 1,000 feet, or as approved by the City Engineer after technical review of a TIA.
    a. Length will be measured from the intersection of the intersecting street curb line to the center of the cul-de-sac (radius point).
    b. Queuing lengths shall not exceed the cul-de-sac road centerline length as defined in 2(a) above, minus the cul-de-sac radius length.

c. If intersecting a collector or arterial road where a traffic control signal is anticipated, a traffic signal warrants study shall be included in the TIA.

3) The road classification that can be used for a Commercial/Industrial road cul-de-sac is the City's 40' standard Commercial/Industrial road section, modified as follows:
   a. Two 14-foot wide travel lanes and one 12-foot wide center turn lane.
   b. No on-street parking will be allowed.
   c. No on-street bike lanes will be provided.
   d. A 6-foot wide sidewalk will be provided on both sides of the street.
   e. A 5-foot wide planter strip will be provided on all sides of the street frontage between the sidewalk and face of curb.
   f. A 1-foot wide clear space will be provided between the back of the sidewalk and the street right-of-way line on all street frontages.
4) The AC pavement/rock base section for a Commercial/Industrial road cul-de-sac will at a minimum meet the City's standard for a collector status road, or as delineated by a Geotechnical Engineer if soils conditions warrant additional depth. The minimum design life for the road section is 25 years.

Variance Item #2 – Use of the Commercial/Industrial Cul-de-sac as defined in Item #1 above, in-lieu-of constructing the through road.

The second item the applicant has requested in the Variance is the replacement of the City's standard requirement for through roads (connectivity) with the cul-de-sac as defined in Item #1 recommendation above.

The applicant has submitted information as justification for this part of the Variance request.

The applicant states that the City's TSP and the Tonquin Employment Area (TEA) Concept Plan does not show a through road connection from T-S Road to the collector road (Blake Street).

The applicant suggests that the required street grades of the through road between the Cipole Road extension and Blake Street are impractical for use on an industrial park, and would;

a) Cause dangerous conditions for heavy trucks making turns to and from Blake Street.
b) Because of the desire to have a flat site, require the construction of retaining walls, and/or significant fill slopes which;
   i. Are difficult/expensive to build, increasing construction costs disproportionately to the benefit obtained.
   ii. Reduce the amount available area for building space which would;
      (1) Impact business viability
      (2) Reduce the number of employees hired by the businesses
      (3) Reduce the tax revenue to the City

First, the City's TSP Local Street Connectivity map provides the following note in the legend:

"Connections are conceptual only, additional studies should be completed for specific alignment. Additional local street connections may be developed consistent with City policies and standards at other locations. Access to 99W must be consistent with ODOT spacing standards."

The connectivity map intends to provide basic guidance on local road connections within larger undeveloped areas. The map does not identify all local road connections as the intent that local road connection requirements be part of the development process.

The TEA Concept Plan Did not identify local road connections between T-S Road and Blake Street (listed as a future collector street). The location of the collector road was shown future south in the TEA, with a single arrow indicating the extension of Cipole Road into the TEA.

The City's Engineering Design and Standard Details Manual (Manual) states the following:

Section 210.4.A(2) The standard grade for all streets is 10 percent for unrestricted length, and 12 percent for a maximum length of 200 feet. A request for a variation for street designs with grades exceeding 12 percent shall be submitted to the City Engineer for review. Approval of street grades in excess of 12 percent shall be at the discretion of the City Engineer on a case by case basis. Under no conditions shall grades exceeding 15 percent be approved for public streets.

What this section implies is that on all City streets, street centerline grades of up to 10% are common and acceptable without having to receive any special review by the City. Grades in excess of 10% would need to receive City Engineering review and approval.

The applicant has provided design analysis information in which shows the elevation gain between the proposed Cipole Road extension and the proposed Blake Street intersection as being approximately 45 feet, with a calculated centerline grade of between 10% and 13%. Although these street grades are within the approval criteria for City streets, the grades are not generally favorable for truck traffic which have large masses, large turning radii, and low ground clearances. Taken together, a steeply graded street in an industrial area is not necessarily a desired design outcome. In addition, the unresolved nature of the presentation of Cipole Road in the concept plan can be taken as a local access road to the TEA without connectivity.

Variance Item #3 – Elimination of the sidewalk along that portion of the cul-de-sac abuts wetlands.

The applicant has a street design which abuts a wetland. Based on topographic and environmental information, meeting the standard City road cross-section design criteria creates significant encroachment impacts to the wetlands. Removal of the sidewalk parameter along the eastern side of the Cipole Road extension will reduce the encroachment impacts to the wetlands, while the west side sidewalk will still provide pedestrian access to the site from T-S Road.

Recommendations

1) Grant a variance on the length of the cul-de-sac based on modifying City requirements as noted below:
    a. Criteria for establishment of Commercial/Industrial Cul-de-sac length.
        i. Approved use of a Commercial/Industrial Cul-de-sac to be allowed by City Engineer on a case-by-case basis.
        ii. Approval to be based on technical arguments provided in a TIA.

iii. Maximum length of commercial/industrial cul-de-sac is 1,000 feet, as measured from intersecting street curb line to the center of the cul-de-sac.
iv. The maximum calculated queuing length must be less than the length of cul-de-sac minus the radius distance of the cul-de-sac.
v. The TIA must include a truck turning analysis showing the radius is sufficient to handle the largest anticipated truck classification use for the site. Approval of the truck classification must be obtained from the City Engineer prior to finalized TIA analysis.
vi. Street cross-section modified as follows:
    a. Two 14-foot wide travel lanes and one 12-foot wide center turn lane/median.
    b. No on-street parking will be allowed.
    c. No on-street bike lanes will be provided.
    d. A 6-foot wide sidewalk will be provided on both sides of the street, except as noted in Variance Item 3) below.
    e. A 5-foot wide planter strip will be provided on all sides of the street frontage between the sidewalk and face of curb.
    f. A 1-foot wide clear space will be provided between the back of the sidewalk and the street right-of-way line on all street frontages.
vii. Street pavement section meeting requirements as follows:
    a. The AC pavement/rock base section for a Commercial / Industrial road cul-de-sac will at a minimum meet the City's standard for a collector status road, or as delineated by a Geotechnical Engineer if soils conditions warrant additional depth.
    b. The minimum design life for the road section is 25 years.

2) Grant an exception to requiring connectivity of Cipole Road between Tualatin-Sherwood Road and Blake Street.
3) Grant an exception to requiring sidewalk along the eastern side of the proposed Cipole Road extension that abuts the existing wetlands.

FINDING: Based on the applicant's response and staff's analysis, conclusion, and recommendations reflected above, this criterion has been met.

b. A hardship to development exists which is peculiar to the lot size or shape, topography, or other similar circumstances related to the property over which the applicant has no control, and which are not applicable to other properties in the vicinity (e.g., the same land use district);

APPLICANT'S RESPONSE: The site's developable area is constrained both by the locations of the wetlands (which the applicant wishes to preserve in their natural state), by the site size and shape (which differs from other sites in the TEA), and by the site topography. From south to north, the site has an elevation drop of approximately 45 feet from the future Blake Road location to SW Tualatin-Sherwood Road, which has the effect of making a through connection to Blake Road impracticable for the reasons discussed above. Since Washington County has indicated that no connections will be permitted to SW 124th Avenue, then the only remaining option for a street is a cul-de-sac extending southward from SW Tualatin-Sherwood Road. Limiting this cul-de-sac to 200 feet is not viable since it could cause truck queuing spillbacks onto Tualatin-Sherwood Road and would require the driveway for Lot 5 to pass through the wetlands,

negatively impacting their condition. The north-south dimension of the site necessitates a longer roadway to provide access to all the proposed Lots and buildings.

The site's topography, particularly the elevation difference between the proposed cul-de-sac and (future) SW Blake Road also makes the construction of a safe pedestrian/bike facility impractical at this location.

ANALYSIS: Staff concurs with the applicant's response above. Analysis conducted by the City Engineer, reflected in Exhibit B.3, also concurs that a hardship to development exists on this site.
FINDING: As discussed above and the evidence provided**,** this criterion has been met.

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

APPLICANT'S RESPONSE: Approval of the proposed Class A Variance will have no effect on the types of uses occurring at the site; the applicant proposes speculative industrial buildings which are consistent with allowed uses in the EI zone. Other than the cul-de-sac length, applicable development standards are proposed to be met with this development. Allowing a 550-foot cul-de-sac allows development of 535,000 SF of industrial space, which constitutes a significant boost to the local economy as intended by the Tonquin Employment Area plan. Allowing the variance and not requiring a through street to Blake Road results in a roadway that complies with engineering design standards for road grade, suitable for semi tractor-trailer trucks and fire trucks while remaining financially viable for the applicant. By contrast, due to the elevation difference from north to south, extending SW Cipole Place to Blake Road would have required side slopes that decreased developable area and resulted in less building area, at which point the project may no longer be viable.

ANALYSIS: The proposed variance will not change the use of the site. The site is zoned Employment Industrial and the proposed uses are also industrial. The City standards are maintained, as explained before, the proposed variances still meet the purpose.

FINDING: As discussed above, this criterion has been met.

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

APPLICANT'S RESPONSE: It will remain possible to construct all necessary transportation facilities along the SW Tualatin-Sherwood Road and SW 124th Avenue frontages, consistent with the applicable design standards for arterial roadways, as specified in the Sherwood Transportation System Plan and proposed through the corresponding Site Plan Review and Preliminary Subdivision application. In effect, as discussed above, the proposed cul-de-sac will be functionally equivalent to a single, central private drive serving all tenants within the industrial park, while allowing subdivision of the property to locate each building on its own lot.

The transportation impact study (Attachment 11) evaluates the effect of the proposed development on the transportation system and provides evidence in support of the

requested variance. Specifically, this analysis compares both network concepts and demonstrates no net benefit to the transportation system if SW Cipole Place were a through street. The TIA demonstrates that the development will have a negligible impact on the operations of nearby streets, and that the proposed cul-de-sac is appropriate given the trip generation and capacity of nearby roadways. Therefore, approving the variance is consistent with the general purpose of promoting safety and maintaining an efficient transportation network.

The preliminary storm report (Attachment 16) demonstrates that stormwater management will be performed in accordance with drainage best practices and Clean Water Services standards; the variance does not affect the ability to provide appropriate stormwater management.

Wetland Delineation Reports and Natural Resource Assessment Report (Attachments 14 and 15) provide evidence that the development avoids wetlands, which is achieved by curving the cul-de-sac alignment southwesterly from the SW Cipole Road/SW Tualatin-Sherwood Road intersection to minimize habitat and water quality impacts on the existing wetlands.

Allowing a cul-de-sac longer than 200 feet at this location will have no impact on parks since no parks are located on or near the site.

ANALYSIS: Staff concurs with the applicant's response.

FINDING: Based on the above factors and considerations, this criterion has been met.

e. The hardship is not self-imposed; and

APPLICANT'S RESPONSE: The presence of natural resources (wetlands) on-site, the significant elevation gain from north to south precluding a through street or pedestrian/bike path to Blake Road, and the lot depth, are all conditions beyond the control of the applicant. These conditions are existing and not "self-imposed," so the need for the variance was not created by the applicant. The elevation changes alone pose a significant design constraint for industrial development, as the grading required to achieve the large, flat sites needed for large industrial buildings results in a road profile that does not allow for safe or convenient access to Blake Road. This condition was exacerbated when the alignment of Blake Road was shifted northward approximately 550 feet (see supporting materials in Attachment 12) to accommodate the needs of the planned Willamette Water Supply Program water treatment facility; the northward shift shortened the horizontal distance between SW Tualatin-Sherwood Road and Blake Road without decreasing the elevation change. As a result, attempting to construct a through street to Blake Road results in a steeper roadway that is not conducive to industrial development.

ANALYSIS: Staff concurs with the applicant's response above. Analysis conducted by the City Engineer, reflected in Exhibit B.3, also concurs that a hardship to development exists on this site. Therefore, the hardship is not self-imposed.

FINDING: As discussed above, this criterion has been met.

f. The variance requested is the minimum variance that would alleviate the hardship.

APPLICANT'S RESPONSE: The proposed use of a 550-foot cul-de-sac rather than a 200-foot cul-de-sac or a through street to Blake Road represents the minimum reduction necessary to alleviate the site design constraints discussed above. If the property were flatter, then a roadway profile could be established that would accommodate large, flat industrial sites and still maintained traffic safety. Alternately, if the site was planned for non-industrial uses, the need for large, flat sites would be reduced, the roadway could be established with a continuous slope, and the site could be designed with smaller multi-family residential or commercial buildings built into the hillside. However, planning for the Tonquin Employment Area as well as current zoning does not support residential or commercial uses, and the applicant is not seeking authorization for them.

As noted, approving the Variance will enable efficient use of the site by accommodating large industrial buildings while still maintaining site access. At the scale of a 46.5-acre development site, authorizing a 550-foot cul-de-sac rather than a 200-foot cul-de-sac or a through street to Blake Road is a relatively small variance. Granting the variance allows for a financially viable development that will result in 535,000 SF of industrial building square footage, which will benefit the City as well as the region, consistent with the long term vision for the Tonquin Employment Area. This standard is met.

To provide a through connection to Blake Road or limit the cul-de-sac to 200 feet as specified in the code, the resulting building areas would have to be considerably smaller, thereby constraining the spectrum of potential industrial businesses that would otherwise be likely to occupy the site, while also decreasing the financial viability of the project for the developer. The proposed Variance is a reasonable and measured modification that serves to offset the hardship imposed by the strict application of the code standards.

ANALYSIS: Staff concurs with the applicant's response above. The variance requested is the minimum variance that would alleviate the hardship.

FINDING: As discussed above, this criterion has been met.

VIII. APPLICABLE CODE PROVISIONS

A. DIVISION II– Land Use and Development

Chapter 16.31 INDUSTRIAL LAND USE DISTRICTS

16.31.010 - Purpose

A. Employment Industrial (EI) - The EI zoning district provides employment areas that are suitable for, and attractive to, key industries and industry clusters that have been identified by the State of Oregon and the City's economic development strategy as important to the state and local economy. The following are preferred industry sectors for areas zoned EI: Clean Technology; Technology and Advanced Manufacturing; and Outdoor Gear and Active Wear.

Land zoned EI shall provide for large and medium-sized parcels for industrial campuses and other industrial sites that can accommodate a variety of industrial companies and related businesses. Areas zoned EI are also intended to provide the opportunity for flex building space within small- and medium-sized industrial campuses and business parks to accommodate research and development companies, incubator/emerging technology

businesses, related materials and equipment suppliers, and/or spin-off companies and other businesses that derive from, or are extensions of, larger campus users and developments. Retail and commercial uses are allowed only when directly supporting area employers and employees.

Industrial establishments and support services shall not have objectionable external features and shall feature well-landscaped sites and attractive architectural design, as determined by the Hearing Authority.
****

ANALYSIS: Per the applicant's narrative, the proposed development is speculative, so specific users are not known at this time. The applicant will seek users consistent with the City's economic development objectives and zoning regulations. Depending on market demand, users may include manufacturing, warehousing/distribution, or other permitted uses.

16.31.020- Uses

A. The table below identifies the land uses that are permitted outright (P), permitted conditionally (C) and not permitted (N) in the industrial zoning districts. The specific land use categories are described and defined in Chapter 16.88.

B. Uses listed in other sections of this Code, but not within this specific table are prohibited.

C. Any use not otherwise listed that can be shown to be consistent or associated with the uses permitted outright or conditionally in the industrial zones or contribute to the achievement of the objectives of the industrial zones may be permitted outright or conditionally, utilizing the provisions of Chapter 16.88.

D. Additional limitations for specific uses are identified in the footnotes of this table.

Uses	**EI [1]**
INDUSTRIAL	
• Manufacture, compounding, processing, assembling, packaging, treatment, fabrication of products contained wholly within an enclosed building provided exterior odor and noise is consistent with municipal code standards and there is no unscreened storage and not otherwise regulated elsewhere in the code	**P**
• Manufacture, compounding, processing, assembling, packaging, treatment, fabrication of products not otherwise prohibited elsewhere in the code provided other off-site impacts are compliant with local, state and federal regulations	**C**
• Distribution, warehousing and storage associated with a permitted use operating on the same site	**P**
• Distribution and warehousing up to 150,000 square feet, provided product(s) are stored within an enclosed building [9]	**P**
• Distribution and warehousing greater than 150,000 square feet provided product(s) are stored within an enclosed building [9]	**C**
• Medical or dental laboratories, including biomedical compounding	**P**
• Laboratories (not medical or dental)	**P**
• Research and development and associated manufacturing	**P**
• Contractors' storage and equipment yards	**C [4]**

Building, heating, plumbing or electrical contractors and suppliers, building maintenance services, and similar uses [10]	**P**

[1] See special criteria for the EI zone, 16.31.030 and the Tonquin Employment Area (TEA), 16.31.040.

[9] For standalone warehousing and distribution only. Warehousing and distribution associated with another approved use is ancillary and permitted without size limitations.

ANALYSIS: Per the applicant's narrative, the proposed development is speculative in nature, with no specific users at this time. Future uses of the development may include manufacturing, warehouse/distribution, or other allowed uses of the EI zone. This proposal included a request for a Conditional Use Permit that allows for a standalone warehouse/distribution use in Building C to be over 150,000 square feet. Staff is recommending approval of the Condition Use Permit as addressed in Section 16.82.

FINDING: Based on the above discussion, this criterion is met.

16.31.030 Development Standards
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).

B. Development Standards

Except as otherwise provided, required minimum lot areas and dimensions and setbacks shall be:

Development Standards	Employment Industrial (EI)
Lot area - Industrial Uses:	3 acres [9]
Lot area - Commercial Uses (subject to Section 16.31.050):	10,000 SF
Lot width at front property line:	100 feet
Lot width at building line:	100 feet
Front yard setback [11]	20 feet
Side yard setback [10]	None
Rear yard setback [11]	None
Corner lot street side [11]	20 feet
Height [11]	50 feet

FINDING: As reflected in Sheets C8.0 and A0.10-A0.12 in Exhibit A.1, the proposal meets the development standards of this EI zone. The proposed lot ranges in sizes from 3.71 acres to 8.93 acres and maintains lot widths in excess of 100 feet. Lot 1 will have over 100 feet of street frontage along SW Tualatin-Sherwood Road, Lots 2 and 3 will have sufficient frontage on SW Cipole Court, and Lots 4 and 5 will have sufficient frontage on SW 124th Avenue. All proposed buildings are under 50-feet in height. The site is not abutting a residential zone or public park and the structures are not located within 100-feet of a residential zone. These standards are met.

16.31.040 - Employment Industrial (EI) Restrictions

A. Use Restrictions

1. **Retail and professional services that cater to daily customers, such as restaurants and financial, insurance, real estate, legal, medical and dental offices, shall be limited in the EI zone.**
    a. **New buildings for stores, branches, agencies or other retail uses and services shall not occupy more than five thousand (5,000) square feet of sales or service area in a single outlet and no more than twenty thousand (20,000) square feet of sales or service area in multiple outlets in the same development project, and**
    b. **New buildings for stores, branches, agencies or other retail uses and services shall not be located on lots or parcels smaller than five (5) acres in size. A "development project" includes all improvements proposed through a site plan application.**
2. **Notwithstanding the provisions of Section 16.31.050 "Commercial Nodes Use Restrictions," commercial development permitted under 16.31.050(1)(a) may only be proposed concurrent with or after industrial development on the same parcel. Commercial development may not occur prior to industrial development on the same parcel.**

FINDING: Per the applicant's narrative, no retail or professional services that cater to daily customers are proposed. The nature of the site will be wholly industrial for speculative warehousing, manufacturing, and light industrial uses. These standards do not apply.

B. Land Division Restrictions

1. **Lots of record prior to October 5, 2010 that are smaller than the minimum lot size required in the EI zone may be developed if found consistent with other applicable requirements of Chapter 16.31 and this code. Further subdivision of lots smaller than three (3) acres shall be prohibited unless Section 16.31.050 applies.**
2. **Lots or parcels larger than fifty (50) acres may be divided into smaller lots and parcels pursuant to a Planned Unit Development approved by the city so long as the resulting division yields at least one (1) lot or parcel of at least 50 acres in size.**
3. **Lots or parcels fifty (50) acres or larger, including those created pursuant to subsection (2) above, may be divided into any number of smaller lots or parcels pursuant to a Planned Unit Development approved by the city so long as at least forty (40) percent of the area of the lot or parcel has been developed with industrial uses or uses accessory to industrial use.**

FINDING: The entire site is 46.5-acres in size and the standards listed above do not apply. The site is less than 50-acres and bigger than three acres. The proposed five lot subdivision will create lots that are all greater than three acres (Sheets C8.0 and A010 of Exhibit A.1).

16.31.050 - Tonquin Employment Area (TEA) Commercial Nodes Use Restrictions

A. Within the Tonquin Employment Area (TEA), only commercial uses that directly support industrial uses located within the TEA are permitted as conditional uses.

B. Commercial development, not to exceed a total of five (5) contiguous acres in size, may be permitted.

C. Commercial development may not be located within three hundred (300) feet of SW 124th Avenue or SW Oregon Street, and must be adjacent to the proposed east-west collector street.

FINDING: Per the applicant's narrative, commercial development or uses are not proposed at this time. The nature of the T-S Corporate Park is proposed to be wholly industrial; however, a future tenant could seek Condition Use Permit approval to locate within the T-S Corporate Park. These criteria are met.

16.31.060 - Community Design

For standards relating to off-street parking and loading, energy conservation, historic resources, environmental resources, landscaping, access and egress, signs, parks and open space, on-site storage, and site design, the applicable provisions of Divisions V, VIII and IX will apply.

FINDING: The proposed development meets the required community design standards as addressed elsewhere in this report. Division IX does not apply since there are no historic resources on site and the site is not in a Historic Overlay zone.

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 (2½) 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.**

Applicant's Response: Clear vision areas are illustrated on the plan sheets at street intersections and driveway locations. No buildings and no sight-obscuring obstructions are proposed within the clear vision areas. These standards are met.

ANALYSIS: Sheets L1.11 and L1.15 of Exhibit A.1 show clear vision sight triangles at the intersections and driveway locations. Staff concurs with the applicant's statement above.

FINDING: Based on the applicant's response and staff analysis above, these standards are met.

Chapter 16.70 General Provisions

16.70.010 Pre-Application Conference

Pre-application conferences are encouraged and shall be scheduled to provide applicants with the informational and procedural requirements of this Code; to exchange information regarding applicable policies, goals and standards of the Comprehensive Plan; to provide technical and design assistance; and to identify opportunities and constraints for a proposed land use action. An applicant may apply at one time for all permits or zone changes needed for a development project as determined in the pre-application conference.

ANALYSIS: Although not a requirement, the applicant requested and attended two pre-application conferences (PAC 18-09 and PAC 19-08) with City staff on August 16, 2018, and July 18, 2019. The pre-application conferences discussed annexation, site plan, conditional use permit, and variance review processes.

16.70.020 Neighborhood Meeting

A. **The purpose of the neighborhood meeting is to solicit input and exchange information about the proposed development.**
B. **Applicants of Type III, IV and V applications are required to hold a meeting, at a public location for with adjacent property owners and recognized neighborhood organizations that are within 1,000 feet of the subject application, prior to submitting their application to the City. Affidavits of mailing, sign-in sheets and a summary of the meeting notes shall be included with the application when submitted. Applicants for Type II land use action are encouraged, but not required to hold a neighborhood meeting.**

ANALYSIS: The applicant held a neighborhood meeting on December 4, 2019, at Marjorie Stewart Senior Community Center to discuss the proposed development of the site. One attendee signed the attendance roster, and the applicant has provided a summary of the meeting.

FINDING: The applicant held a neighborhood meeting on December 4, 2019, and provided the materials along with this application that demonstrates that they complied with the requirements for neighborhood meetings. This criterion is met.

B. Division V. Community Design

16.92-LANDSCAPING

16.92.010-Landscaping Plan Required

All proposed developments for which a site plan is required pursuant to Section 16.90.020 shall submit a landscaping plan that meets the standards of this Chapter. All areas not occupied by structures, paved roadways, walkways, or patios shall be landscaped or maintained according to an approved site plan.

FINDING: The proposed landscaping plans show planting areas on the site in areas that are not paved. The proposal includes the submission of very detailed landscape plans. This standard is met.

16.92.020 Landscaping Materials

A. Type of Landscaping

Required landscaped areas shall include an appropriate combination of native evergreen or deciduous trees and shrubs, evergreen ground cover, and perennial plantings. Trees to be planted in or adjacent to public rights-of-way shall meet the requirements of this Chapter. Plants may be selected from the City's "Suggested Plant Lists for Required Landscaping Manual" or suitable for the Pacific Northwest climate and verified by a landscape architect or certified landscape professional.

1. **Ground Cover Plants**
   a. **All of the landscape that is not planted with trees and shrubs must be planted in ground cover plants, which may include grasses. Mulch is not a substitute for ground cover, but is allowed in addition to the ground cover plants.**
   b. **Ground cover plants other than grasses must be at least the four-inch pot size and spaced at distances appropriate for the plant species. Ground cover plants must be planted at a density that will cover the entire area within three (3) years from the time of planting.**
2. **Shrubs**
   a. **All shrubs must be of sufficient size and number to be at full growth within three (3) years of planting.**
   b. **Shrubs must be at least the one-gallon container size at the time of planting.**
3. **Trees**
   a. **Trees at the time of planting must be fully branched and must be a minimum of two (2) caliper inches and at least six (6) feet in height.**
   b. **Existing trees may be used to meet the standards of this chapter, as described in Section 16.92.020.C.2.**

ANALYSIS: The landscaping plans (Sheets L1.10 - L1.21 of Exhibit A.1) show that all areas not devoted to other uses are landscaped. The plans illustrate a diverse mix of ground cover, shrubs, and trees.

FINDING: These standards are met.

B. Plant Material Selection and Preparation

1. **Required landscaping materials shall be established and maintained in a healthy condition and of a size sufficient to meet the intent of the approved landscaping plan. Specifications shall be submitted showing that adequate preparation of the topsoil and subsoil will be undertaken.**
2. **Landscape materials should be selected and sited to produce a hardy and drought-resistant landscape area. Selection of the plants should include**

consideration of soil type, and depth, the amount of maintenance required, spacing, exposure to sun and wind, the slope and contours of the site, and compatibility with existing native vegetation preserved on the site.

ANALYSIS: The proposed landscaping plans discusses plant spacing and states that all new landscape areas irrigated with a high efficiency permanent fully automatic underground irrigation system. The plans have been prepared by Brad E. Theurer, a licensed landscape architect in the state of Oregon. The plans demonstrate that it is feasible based on his prescribed spacing and irrigation method for the proposed landscape materials to be established and maintained in a healthy condition and sufficient size. Typically, the specifications and details for topsoil or subsoil preparation is completed with the construction documents for the project as this information is not needed to demonstrate that the plan can be feasibly implemented.

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

RECOMMENDED CONDITION: F.3 Prior to Issuance of a Building Permit, the applicant shall submit construction documents that provide additional information on the proposed plantings and maintenance of the plants to ensure that the landscaping will be appropriately maintained. The construction plans shall include specifications for the adequate preparation of the soils.

C. Existing Vegetation

1. **All developments subject to site plan review per Section 16.90.020 and required to submit landscaping plans per this section shall preserve existing trees, woodlands and vegetation on the site to the maximum extent possible, as determined by the Review Authority, in addition to complying with the provisions of Section 16.142.(Parks, Trees and Open Space) and Chapter 16.144 (Wetland, Habitat, and Natural Resources).**
2. **Existing vegetation, except those plants on the Nuisance Plants list as identified in the "Suggested Plant Lists for Required Landscaping Manual" may be used to meet the landscape standards, if protected and maintained during the construction phase of the development.**
    a. **If existing trees are used, each tree six (6) inches or less in diameter counts as one (1) medium tree.**
    b. **Each tree that is more than six (6) inches and up to nine (9) inches in diameter counts as two (2) medium trees.**
    c. **Each additional three (3) inch diameter increment above nine (9) inches counts as an additional medium tree.**

ANALYSIS: The applicant provided a Tree Plan report by Teragan & Associates (Attachment 18 of Exhibit A.1) and Sensitivity Plans (Sheets C7.0 – C7.6) that provides an inventory of the existing trees on site and those planned to be removed. The report states that 508 of the assessed trees will be removed and 505 trees will be retained. Majority of the retained trees are located along SW Tualatin-Sherwood Road or within the wetland areas, Tract A and D. Per the applicant's narrative, retention of additional trees is not possible due to the footprint and locations of the proposed buildings, as well as the need to provide adequate vehicular parking and circulation areas for the propose uses. The preliminary Landscape Plans reflects the applicable requirements in Section 16.142, which will be discussed later in this report.

FINDING: These criteria have been met.

D. Non-Vegetative Features

1. **Landscaped areas as required by this Chapter may include architectural features interspersed with planted areas, such as sculptures, benches, masonry or stone walls, fences, rock groupings, bark dust, semi-pervious decorative paving, and graveled areas.**
2. **Impervious paving shall not be counted toward the minimum landscaping requirements unless adjacent to at least one (1) landscape strip and serves as a pedestrian pathway.**
3. **Artificial plants are prohibited in any required landscaped area.**

FINDING: Per the applicant's narrative, landscaping coverage calculations presented by the applicant are exclusive of any of the features listed above. Due to the number of trees retained, pedestrian pathways are not proposed to be counted towards the minimum landscaping standards. Artificial plants are not proposed as part of the required landscaping to satisfy applicable development standards. This criterion is satisfied.

16.92.030 Site Area Landscaping and Perimeter Screening Standards

A. Perimeter Screening and Buffering

1. **Perimeter Screening Separating Residential Zones:**
   A minimum six-foot high sight-obscuring wooden fence, decorative masonry wall, or evergreen screen, shall be required along property lines separating single and two-family uses from multi- family uses, and along property lines separating residential zones from commercial, institutional/public or industrial zones subject to the provisions of Chapter 16.48.020 (Fences, Walls and Hedges).

FINDING: The site is not adjacent to residential zones or residential uses. These criteria do not apply.

2. **Perimeter Landscaping Buffer**
   a. **A minimum ten (10) foot wide landscaped strip comprised of trees, shrubs and ground cover shall be provided between off-street parking, loading, or vehicular use areas on separate, abutting, or adjacent properties.**

FINDING: The northern and eastern boundary streets (SW Tualatin-Sherwood Road and SW 124th Avenue) of the project site are both Arterial streets. As such, a 15-foot-wide landscaped visual corridor is required along both street frontages. The south boundary of the site is the future SW Blake Street, a Collector designated roadway. Frontage along SW Blake Street will require a 10-foot wide visual corridor that can also serve as the perimeter landscaping buffer. The preliminary landscape Plans (L1.10 – L1.21) shows the required perimeter landscaping buffer on the site. This criterion is met.

3. **Perimeter Landscape Buffer Reduction**
   If the separate, abutting property to the proposed development contains an existing perimeter landscape buffer of at least five (5) feet in width, the applicant may reduce the proposed site's required perimeter landscaping up to five (5) feet maximum, if the development is not adjacent to a residential zone. For example, if the separate abutting perimeter landscaping is five (5) feet, then applicant may reduce the perimeter landscaping to five (5) feet in width on their site so there is at least five (5) feet of landscaping on each lot.

FINDING: Per the applicant's narrative, no reductions to the perimeter landscape buffer width of 10-feet are proposed through this application. This standard does not apply.

16.92.030 Site Area Landscaping and Perimeter Screening Standards

B. Parking Area Landscaping

3. Required Landscaping

There shall be at least forty-five (45) square feet parking area landscaping for each parking space located on the site. The amount of required plant materials are based on the number of spaces as identified below.

FINDING: The preliminary plans identify 671 parking spaces, which requires 30,195 square feet (0.69 acres) of landscaping. The preliminary plans identify landscaped areas for Lots 1-5, excluding tracts, as 5.35 acres (233,046 square feet). This criterion is met.

4. Amount and Type of Required Parking Area Landscaping

a. Number of Trees required based on Canopy Factor

Small trees have a canopy factor of less than forty (40), medium trees have a canopy factor from forty (40) to ninety (90), and large trees have a canopy factor greater than ninety (90);

(1) Any combination of the following is required:

(i) One (1) large tree is required per four (4) parking spaces;

(ii) One (1) medium tree is required per three (3) parking spaces; or

(iii) One (1) small tree is required per two (2) parking spaces.

(iv) At least five (5) percent of the required trees must be evergreen.

(2) Street trees may be included in the calculation for the number of required trees in the parking area.

b. Shrubs:

(1) Two (2) shrubs are required per each space.

(2) For spaces where the front two (2) feet of parking spaces have been landscaped instead of paved, the standard requires one (1) shrub per space. Shrubs may be evergreen or deciduous.

c. Ground cover plants:

(1) Any remainder in the parking area must be planted with ground cover plants.

(2) The plants selected must be spaced to cover the area within three (3) years. Mulch does not count as ground cover.

FINDING: With 671 parking spaces the following minimums are required: 168 large trees, 206 medium trees, or 336 small trees; 1,342 shrubs; and ground cover plants for the remainder in the parking area. The preliminary landscape plans, Sheet L0.02 of Exhibit A.1, identify 170 medium and 332 small trees, an extensive amount of shrubs, and ground cover for the remainder of the parking area landscaping. Based on the standard listed above, 170 medium and 332 small trees would permit 1,174 parking spaces. The proposal is proving 671 spaces on site. The criteria are met.

5. Individual Landscape Islands Requirements

a. Individual landscaped areas (islands) shall be at least ninety (90) square feet in area and a minimum width of five (5) feet and shall be curbed to protect the landscaping.

b. Each landscape island shall be planted with at least one (1) tree.

c. Landscape islands shall be evenly spaced throughout the parking area.

d. Landscape islands shall be distributed according to the following:

(1) Residential uses in a residential zone: one (1) island for every eight (8) contiguous parking spaces.

(2) Multi or mixed-uses, institutional and commercial uses: one (1) island for every ten (10) contiguous parking spaces.

(3) Industrial uses: one (1) island for every twelve (12) contiguous parking spaces.

Finding: The preliminary landscape plan shows individual landscaped areas (islands) being at least 140 square feet in area and at least eight feet wide. All islands are sufficiently dimensioned to support at least one tree and are evenly spaced with no more than 8-9 parking spaces between them. The criteria are met.

e. Storm water bio-swales may be used in lieu of the parking landscape areas and may be included in the calculation of the required landscaping amount.

FINDING: There are three stormwater bio-swales proposed. The accumulated area of all three bio-swales has not been included within the parking landscape area calculations since sufficient parking area landscaping is provided without counting the stormwater facilities. This criterion is not applicable.

f. Exception to Landscape Requirement

Linear raised or marked sidewalks and walkways within the parking areas connecting the parking spaces to the on-site buildings may be included in the calculation of required site landscaping provide that it:

(1) Trees are spaced a maximum of thirty (30) feet on at least one (1) side of the sidewalk.

(2) The minimum unobstructed sidewalk width is at least six (6) feet wide.

(3) The sidewalk is separated from the parking areas by curbs, bollards, or other means on both sides.

FINDING: The project is not proposing any of the landscaping exception described above. This standard is not applicable.

6. Landscaping at Points of Access
When a private access-way intersects a public right-of-way or when a property abuts the intersection of two (2) or more public rights-of-way, landscaping shall be planted and maintained so that minimum sight distances shall be preserved pursuant to Section 16.58.010.

FINDING: The proposed plantings near the planned access points have been designed not to obstruct minimum sight distances. This criterion is met.

7. Exceptions
a. For properties with an environmentally sensitive area and/or trees or woodlands that merit protection per Chapters 16.142 (Parks, Trees and Open Space) and 16.144 (Wetland, Habitat and Natural Areas) the landscaping standards may be reduced, modified or "shifted" on-site where necessary in order to retain existing vegetation that would otherwise be removed to meet the above referenced landscaping requirements.
b. The maximum reduction in required landscaping buffer permitted through this exception process shall be no more than fifty (50) percent. The resulting landscaping buffer after reduction may not be less than five (5) feet in width unless otherwise permitted by the underlying zone. Exceptions to the

required landscaping may only be permitted when reviewed as part of a land use action application and do not require a separate variance permit.

FINDING: The applicant is not requesting any reduction to the site landscaping requirements. This standard is not applicable.

16.92.030 Site Area Landscaping and Perimeter Screening Standards

C. Screening of Mechanical Equipment, Outdoor Storage, Service and Delivery Areas
All mechanical equipment, outdoor storage and manufacturing, and service and delivery areas, shall be screened from view from all public streets and any adjacent residential zones. If unfeasible to fully screen due to policies and standards, the applicant shall make efforts to minimize the visual impact of the mechanical equipment.

ANALYSIS: Per the applicant's narrative, all new service and delivery areas will be screened from view from all public streets, and there are no adjacent residential zones. Trash enclosures are proposed in five areas of the site to satisfy refuse disposal needs of the future warehousing and light industrial needs. These enclosures will be screened by enclosures constructed with concrete walls and operable gates. Except for rooftop mechanical units, which will be screened by building parapets, no other mechanical equipment or outdoor storage is proposed at this time. However, the site use is speculative in nature and future tenants may require these features for their operations. The applicable approval process will be pursued if required to meet tenant needs.

FINDING: Based on the discussion above, this criterion is met.

D. Visual Corridors
Except as allowed by subsection 6. above, new developments shall be required to establish landscaped visual corridors along Highway 99W and other arterial and collector streets, consistent with the Natural Resources and Recreation Plan Map, Appendix C of the Community Development Plan, Part II, and the provisions of Chapter 16.142 (Parks, Trees, and Open Space). Properties within the Old Town Overlay are exempt from this standard.

FINDING: Per Section 16.142.040. a landscaped visual corridor is required along SW Tualatin-Sherwood Road and SW 124th Avenue (both arterial streets). The site southern property line abuts the future SW Blake Street (a collector street) and visual corridor standards would also be required along this street frontage. Per the applicant's narrative, the proposed landscaping plans have been designed to provide approximately 15-foot wide visual corridors along SW Tualatin-Sherwood Road and SW 124th Avenue. Section 16.142.040 is further discussed and conditioned in this report. This criterion is met.

16.92.040 Installation and Maintenance Standards

A. Installation
All required landscaping must be in-ground, except when in raised planters that are used to meet minimum Clean Water Services storm water management requirements. Plant materials must be installed to current nursery industry standards. Plant materials must be properly supported to ensure survival. Support devices such as guy wires or stakes must not interfere with vehicular or pedestrian movement.

B. Maintenance and Mitigation of Landscaped Areas
1. **Maintenance of existing non-invasive native vegetation is encouraged within a development and required for portions of the property not being developed.**
2. **All landscaping shall be maintained in a manner consistent with the intent of the approved landscaping plan.**

3. **Any required landscaping trees removed must be replanted consistent with the approved landscaping plan and comply with § 16.142, (Parks, Trees and Open Space).**

C. Irrigation

The intent of this standard is to ensure that plants will survive the critical establishment period when they are most vulnerable due to lack of watering. All landscaped areas must provide an irrigation system, as stated in Option 1, 2, or 3.

1. **Option 1: A permanent built-in irrigation system with an automatic controller installed.**
2. **Option 2: An irrigation system designed and certified by a licensed landscape architect or other qualified professional as part of the landscape plan, which provides sufficient water to ensure that the plants become established. The system does not have to be permanent if the plants chosen can survive independently once established.**
3. **Option 3: Irrigation by hand. If the applicant chooses this option, an inspection will be required one (1) year after final inspection to ensure that the landscaping has become established.**

FINDING: The proposed landscaping plans have been designed to ensure compliance with the standards cited above. Furthermore, condition of approval **F.3** requires the applicant to submit construction documents that provide additional information on the proposed plantings and maintenance of the plants to ensure that the landscaping will be appropriately maintained. The preliminary landscape plans also noted that all new landscape areas irrigated with a high efficiency permanent fully automatic underground irrigation system. These criteria are met as previously conditioned.

16.94 Off-Street Parking and Loading

16.94.010 General Requirements

A. Off-Street Parking Required

No site shall be used for the parking of vehicles until plans are approved providing for off-street parking and loading space as required by this Code. Any change in uses or structures that reduces the current off-street parking and loading spaces provided on site, or that increases the need for off-street parking or loading requirements shall be unlawful and a violation of this Code, unless additional off-street parking or loading areas are provided in accordance with Section 16.94.020, or unless a variance from the minimum or maximum parking standards is approved in accordance with Chapter 16.84 Variances.

FINDING: The applicant has submitted a Transportation Sheet plan (Sheet C3.0 of Exhibit A.1) that accommodate off-street parking as required by the Zoning and Community Development Code. This standard is met.

16.94.010 General Requirements

B. Deferral of Improvements

Off-street parking and loading spaces shall be completed prior to the issuance of occupancy permits, unless the City determines that weather conditions, lack of available surfacing materials, or other circumstances beyond the control of the applicant make completion impossible. In such circumstances, security equal to one hundred twenty five (125) percent of the cost of the parking and loading area is provided the City. "Security" may consist of a performance bond payable to the City, cash, certified check, or other assurance of completion approved by the City. If the

installation of the parking or loading area is not completed within one (1) year, the security may be used by the City to complete the installation.

FINDING: The applicant is not seeking to defer any required improvements at this time. Therefore, this standard is not applicable. Per the applicant's narrative, off-street parking and loading spaces are proposed for completion prior to issuance of occupancy permits. Should future circumstances necessitate a deferral, the required security will be provided.

16.94.010 General Requirements

C. Options for Reducing the Required Parking Spaces

1. Two (2) or more uses or, structures on multiple parcels of land may utilize jointly the same parking and loading spaces when the peak hours of operation do not substantially overlap, provided that satisfactory evidence is presented to the City, in the form of deeds, leases, or contracts, clearly establishing the joint use.

a. Within commercial, institutional and public, or industrial zones, shared parking may be provided on lots that are within five hundred (500) feet of the property line of the use to be served.

b. Shared parking is allowed if the application can show that the combined peak use is available by a parking study that demonstrates:

(1) There is a sufficient number of parking spaces to accommodate the requirements of the individual businesses; or

(2) That the peak hours of operation of such establishments do not overlap, and

(3) That an exclusive permanent easement over a delineated area has been granted for parking space use.

2. Mixed use projects are developments where a variety of uses occupies a development project or complex. For example, an eating establishment, professional office building and movie theater are all components of a mixed use site. It does not include a secondary use within a primary use such as an administrative office associated with a retail establishment. In mixed-use projects, the required minimum vehicle parking shall be determined using the following formula:

a. Primary use: i.e. that with the largest proportion of total floor area within the development at one hundred (100) percent of the minimum vehicle parking required for that use.

b. Secondary Use: i.e. that with the second largest percentage of total floor area within the development, at ninety (90) percent of the vehicle parking required for that use.

c. Subsequent use or uses, at eighty (80) percent of the vehicle parking required for that use.

ANALYSIS: The Transportation Sheet plan, Sheet C3.0 of Exhibit A.1, shows that required off-street parking for the planned industrial project can be accommodated entirely on-site. The applicant is not seeking to reduce required parking space requirements. Per the applicant's narrative, to be conservative, all parking calculations have been performed using 100% of the minimum vehicle parking standard. As the proposed project is speculative, the exact mixture of warehousing to industrial users is unknown. However, this standard will be applied at the time tenant improvements are submitted for building permit review.

FINDING: As discussed above, this standard is not applicable or can be met.

16.94.010 General Requirements

D. Prohibited Uses

Required parking, loading and maneuvering areas shall not be used for long-term storage or sale of vehicles or other materials, and shall not be rented, leased or assigned to any person or organization not using or occupying the building or use served.

FINDING: No long term storage, sale of vehicles or other materials, or rented or leased parking spaces are proposed. Per the applicant's narrative, parking will be restricted to use by employees, visitors, deliveries, and others who are occupying or serving an allowed user. This standard is met.

16.94.010 General Requirements

E. Location

1. Residential off-street parking spaces:

a. Shall be located on the same lot or development as the residential use.

b. Shall not include garages or enclosed buildings with the exception of a parking structure in multifamily developments where three (3) or more spaces are not individually enclosed. (Example: Underground or multi-level parking structures).

2. For other uses, required off-street parking spaces may include adjacent on-street parking spaces, nearby public parking and shared parking located within five hundred (500) feet of the use. The distance from the parking, area to the use shall be measured from the nearest parking space to a building entrance, following a sidewalk or other pedestrian route. The right to use private off-site parking must be evidenced by a recorded deed, lease, easement, or similar written notarized letter or instrument.

3. Vehicle parking is allowed only on improved parking shoulders that meet City standards for public streets, within garages, carports and other structures, or on driveways or parking lots that have been developed in conformance with this code. Specific locations and types of spaces (car pool, compact, etc.) for parking shall be indicated on submitted plans and located to the side or rear of buildings where feasible.

a. All new development with forty (40) employees or more shall include preferential spaces for carpool/vanpool designation. Carpool and vanpool parking spaces shall be located closer to the main employee entrance than all other parking spaces with the exception of ADA parking spaces. Carpool/vanpool spaces shall be clearly marked as reserved for carpool/vanpool only.

b. Existing development may redevelop portions of designated parking areas for multi-modal facilities (transit shelters, park and ride, and bicycle parking), subject to meeting all other applicable standards, including minimum space standards.

FINDING: The Transportation Sheet plan, Sheet C3.0 of Exhibit A.1, demonstrates that required off-street parking for the planned industrial project can be accommodated entirely on-site. Per the applicant's narrative, as future employee counts are unknown, carpool and vanpool spaces are proposed to be addressed at the time of tenant improvement permits in accordance with these requirements. Therefore, the applicable criterion can be met as conditioned below.

RECOMMENDED CONDITION: I.2 Prior to each Building Occupancy, the applicant shall provide documentation showing how off-street parking standards of Section 16.94.010.E.3.a is met.

16.94.010 General Requirements

F. Marking

All parking, loading or maneuvering areas shall be clearly marked and painted. All interior drives and access aisles shall be clearly marked and signed to show the direction of flow and maintain vehicular and pedestrian safety.

FINDING: The Transportation Sheet plan, Sheet C3.0 of Exhibit A.1, identifies marked and painted areas consisting of on-site parking, loading, and maneuvering spaces. The planned markings clearly show the direction of flow and maintain safety for vehicles and pedestrians. This criterion is met.

16.94.010 General Requirements

G. Surface and Drainage

1. **All parking and loading areas shall be improved with a permanent hard surface such as asphalt, concrete or a durable pervious surface. Use of pervious paving material is encouraged and preferred where appropriate considering soils, location, anticipated vehicle usage and other pertinent factors.**
2. **Parking and loading areas shall include storm water drainage facilities approved by the City Engineer or Building Official.**

ANALYSIS: All parking and loading areas will be improved with a permanent hard surface. As discussed in the Public Infrastructure section below, the City Engineering Department states that currently there is an existing water quality/hydromodification regional facility at the southwest corner of the SW Tualatin-Sherwood Road/SW 124th Avenue Intersection within an easement within the subject property. Storm runoff from the new impervious area within Washington County right-of-way shall be treated/managed in the existing regional facilities. The developer will need to show that the existing facility has the capacity to treat the additional runoff from the subject property public improvement activities within Washington County right-of-way. If the existing facilities do not have capacity for the additional impervious area, then the subject development shall expand the existing facility or install/combine with a new facility to provide the additional treatment/hydromodification required.

FINDING: This standard can be met as conditioned in the Public Infrastructure section below.

H. Repairs

Parking and loading areas shall be kept clean and in good repair. Breaks in paved surfaces shall be repaired. Broken or splintered wheel stops shall be replaced. Painted parking space boundaries and directional symbols shall be maintained in a readable condition.

FINDING: The property owner will be responsible for the proper maintenance of the parking and loading areas. Violations are subject to Code Enforcement action. This standard is met.

I. Parking and Loading Plan

An off-street parking and loading plan, drawn to scale, shall accompany requests for building permits or site plan approvals, except for single and two-family dwellings, and manufactured homes on residential lots. The plan shall show but not be limited to:

1. **Delineation of individual parking and loading spaces and dimensions.**
2. **Circulation areas necessary to serve parking and loading spaces.**
3. **Location of accesses to streets, alleys and properties to be served, and any curb cuts.**
4. **Landscaping as required by Chapter 16.92.**

5. **Grading and drainage facilities.**
6. **Signing and bumper guard specifications.**
7. **Bicycle parking facilities as specified in Section 16.94.020.C.**
8. **Parking lots more than one (1) acre in size shall provide street-like features including curbs, sidewalks, and street trees or planting strips.**

FINDING: Preliminary plans submitted provided all the information listed above. This standard is met.

16.94.010 General Requirements

J. Parking Districts

The City may establish a parking district (i.e., permits or signage) in residential areas in order to protect residential areas from spillover parking generated by adjacent commercial, employment or mixed-use areas, or other uses that generate a high demand for parking. The district request shall be made to the City Manager, who will forward a recommendation to the City Council for a decision.

I. Structured parking and on-street parking are exempt from the parking space maximums in Section 16.94.020.A.

FINDING: No parking districts or structured parking are proposed. This standard is not applicable.

16.94.020 Off-Street Parking Standards

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.

Table 1: 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 A [1]	Maximum Permitted Parking Zone B [2]
Industrial	**1.6**	**None**	**None**
Warehouse (gross square feet; parking ratios apply to warehouses 150,000 gsf or greater	**0.3**	**0.4**	**0.5**

[1] **Parking Zone A reflects the maximum number of permitted vehicle parking spaces allowed for each listed land use. Parking Zone A areas include those parcels that are located within one-quarter (¼) mile walking distance of bus transit stops, one-half (½) mile walking distance of light rail station platforms, or both, or that have a greater than twenty-minute peak hour transit service.**

[2] **Parking Zone B reflects the maximum number of permitted vehicle parking spaces allowed for each listed land use. Parking Zone B areas include those parcels that are located at a distance greater than one-quarter (¼) mile walking distance of bus transit stops, one-half (½) mile walking distance of light rail station platforms, or both.**

Applicant's Response: The site is in Parking Zone B because it is not located within 0.25 miles walking distance for bus transit where regular 20-minute peak hour transit service is available, or within 0.5 miles walking distance for high capacity transit where 20-minute peak hour transit service is available (Attachment 10).

Per Table 1 of Section 16.94.020(A), industrial users must provide a minimum of 1.6 stalls per 1,000 SF of gross floor area, with no maximum number of spaces. This parking ratio applies to all industrial users including standalone warehouses of 149,999 SF or smaller. Table 1 also indicates that standalone warehouse uses in excess of 150,000 SF and within Parking Zone B are subject to minimum and maximum parking ratios of 0.3 and 0.5 per 1,000 SF respectively. It appears that these lower warehouse parking ratios would most appropriately be applied to the increment of floor area that exceeds 150,000 SF, given that the rate for warehouses up to 149,000 SF is 1.6 spaces per 1,000 SF.

All minimum parking ratios have been reduced by 20% per the sensitive lands reduction factor in Section 16.94.020.B.6 (Reduction in Required Parking Spaces). As discussed in findings elsewhere in this report, to preserve Wetlands A, B, and C and the CWS vegetated corridor, the applicant proposes the creation of tracts that reduce the developable area by approximately 10.9 acres or 24% of the site area. This land area is sufficient to account for the additional parking spaces that would otherwise have been required for the development.

The buildings do not have specific users at this time but are anticipated to contain a mix of light industrial, manufacturing, and warehouse/distribution tenants. To examine whether sufficient parking is available to accommodate a range of uses, parking calculations have been performed under two scenarios. To be consistent with the Conditional Use Permit request to allow Building C to be a standalone warehouse over 150,000 SF, Scenario 1 analyzes parking demand for Building C as 100% warehouse and the remaining buildings as 100% industrial. By contrast, Scenario 2 analyzes parking demand assuming 100% industrial in all buildings, with no standalone warehouse 150,000 SF or larger.

SCENARIO 1 (BUILDING C AS STANDALONE WAREHOUSE) MINIMUM AND MAXIMUM PARKING REQUIREMENTS					
Use	**Building Area**	**Minimum Required Parking Stalls before sensitive lands reduction**	**Minimum Required Parking Stalls after 20% sensitive lands reduction**	**Maximum Permitted Parking Stalls (Zone B)**	**Proposed Parking Stalls**
Industrial (no standalone warehouse over 150,000 SF)	351,902 SF	563	451	N/A	490
Building C as standalone warehouse over 150,000 SF	183,292 SF	250 (240 for first 150,000 SF plus 10 for next 33,292 SF)	200 (192 for first 150,000 SF plus 8 for next 33,292 SF)	N/A (N/A for first 150,000 SF plus 16 for next 33,292 SF)	181
Total	***535,194 SF***	***814***	***651***	***N/A***	***671***

SCENARIO 2 (ALL BUILDINGS AS LIGHT INDUSTRIAL) MINIMUM AND MAXIMUM PARKING REQUIREMENTS					
Use	**Building Area**	**Minimum Required Parking Stalls before sensitive lands reduction**	**Minimum Required Parking Stalls after 20% sensitive lands reduction**	**Maximum Permitted Parking Stalls (Zone B)**	**Proposed Parking Stalls**
Industrial (no standalone warehouse over 150,000 SF)	535,194 SF	858	687	N/A	671

Under Scenario 1, a minimum of 651 parking spaces is required, while under Scenario 2, a minimum of 687 parking spaces is required. As illustrated on Sheets C3.0 and A0.10 in Attachment 6, the development will provide a total of 671 on-site parking spaces, and no on-street parking is available to serve the development. In Scenario 1, sufficient parking is available to serve a mix of industrial uses that includes a standalone warehouse and distribution use in Building C, if such a user should rent or purchase that building. In Scenario 2, the number of proposed parking spaces is approximately 2% below the nominal parking requirement for 100%

industrial buildings, which certainly meets the intent of the Development Code to encourage appropriate use of land and promote orderly growth as outlined in Section 16.02.020 (particularly since gross building areas will be refined as the project moves closer to building permits). Moreover, the proposed number of parking spaces equates to a parking ratio of 1.25 spaces per 1,000 SF, which is on par with market demand for industrial properties in the area. If needed, additional parking could be added during the final design.

Under both scenarios, there is no applicable maximum number of parking spaces since industrial uses have no maximum ratio per Table 1, and under Scenario 1, the maximum of 16 spaces for the increment of Building C that exceeds 150,000 SF does not in itself subject the use to a maximum. This standard is met.

ANALYSIS: Staff concurs with the applicant's response. However, the buildings do not have specific users at this time but are anticipated to contain a mix of light industrial, manufacturing, and warehouse/distribution tenants.

FINDING: Based on the applicant's response and staff analysis above, this standard can be met as conditioned below.

RECOMMENDED CONDITION: F.1 Prior to Issuance of Building Permit for each structure, the applicant shall provide documentation showing how off-street parking standards of Section 16.94.020.A are met.

16.94.020 Off-Street Parking Standards

B. Dimensional and General Configuration Standards

1. **Dimensions for the purpose of this Chapter, a "parking space" means a stall nine (9) feet in width and twenty (20) feet in length. Up to twenty five (25) percent of required parking spaces may have a minimum dimension of eight (8) feet in width and eighteen (18) feet in length so long as they are signed as compact car stalls.**

ANALYSIS: The applicant's narrative states that all parking spaces planned will meet the minimum stall dimension for standard parking and no compact parking is proposed. The dimensional standards for a standard parking stall is nine (9) feet in width and twenty (20) feet in length. However, reviewing the proposed plan, Sheet C3.0, identified the typical parking space to be 9-feet in width and 18-feet in length. A revised site plan must be submitted reflecting the correct standard parking stall dimension of 9-feet width and 20-feet length.

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

RECOMMENDED CONDITION: B.2 Prior to Final Site Plan approval, a revised site plan must be submitted showing the on-site parking space stalls meeting the standards of Section 16.94.020.

2. **Layout**
   Parking space configuration, stall and access aisle size shall be of sufficient width for all vehicle turning and maneuvering. Groups of more than four (4) parking spaces shall be served by a driveway so as to minimize backing movements or other maneuvering within a street, other than an alley. All parking areas shall meet the minimum standards shown in the following table and diagram.

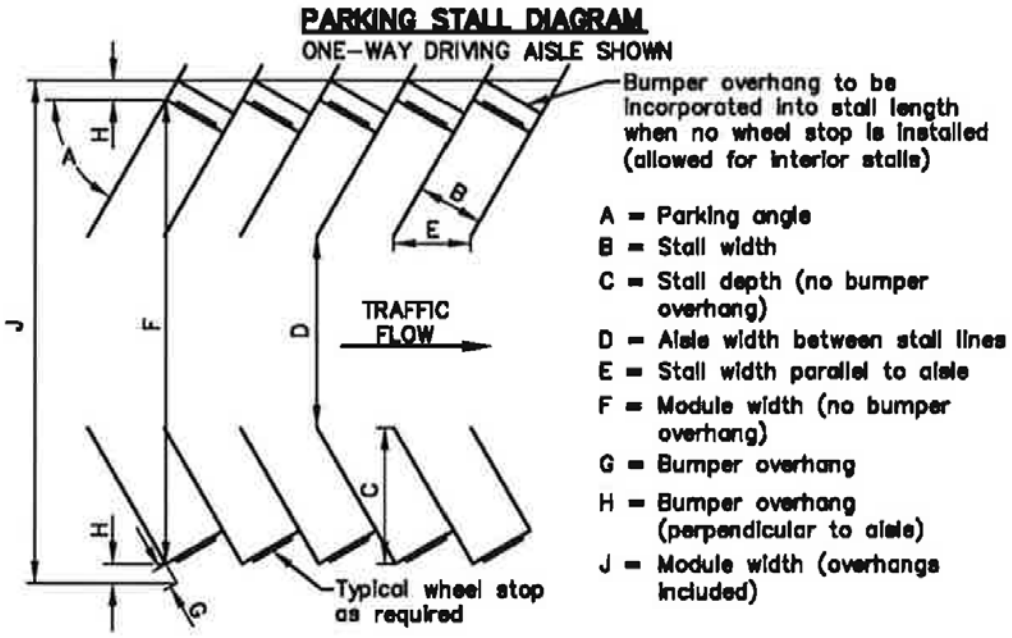

Table 3: Two-Way Driving Aisle
(Dimensions in Feet)

A	B	C	D	E	F	G	H	J
45º	8.0	16.5	24.0	11.3	57.0	3.0	2.5	62.0
	9.0	18.5	24.0	12.7	61.0	3.0	2.5	66.0
60º	8.0	17.0	24.0	9.2	58.0	3.0	2.5	63.0
	9.0	19.5	24.0	10.4	63.0	3.0	2.5	68.0
75º	8.0	16.5	26.0	8.3	59.0	3.0	3.0	65.0
	9.0	19.0	24.0	9.3	62.0	3.0	3.0	68.0
90º	8.0	18.0	26.0	8.0	56.0	3.0	3.0	62.0
	9.0	20.0	24.0	9.0	58.0	3.0	3.0	64.0

FINDING: As conditioned above in **B.2**, all spaces will meet the minimum standards identified above and will be accessed internally and served by on-site drive aisles. This standard is met as conditioned.

3. **Wheel Stops**
   a. **Parking spaces along the boundaries of a parking lot or adjacent to interior landscaped areas or sidewalks shall be provided with a wheel stop at least four (4) inches high, located three (3) feet back from the front of the parking stall as shown in the above diagram.**
   b. **Wheel stops adjacent to landscaping, bio-swales or water quality facilities shall be designed to allow storm water runoff.**
   c. **The paved portion of the parking stall length may be reduced by three (3) feet if replaced with three (3) feet of low lying landscape or hardscape in lieu of a wheel stop; however, a curb is still required. In other words, the traditional three-foot**

vehicle overhang from a wheel stop may be low-lying landscaping rather than an impervious surface.

APPLICANT'S RESPONSE: The applicant proposes to provide a vertical curb to prevent vehicles from traveling beyond the boundary of the parking areas. All stormwater from the development will be collected and directed to engineered extended dry basins for stormwater quality treatment. This standard is met.

ANALYSIS: Staff concurs with the applicant's response.

FINDING: Based on the applicant's response and staff analysis, the applicable standards are met.

***

6. **Reduction in Required Parking Spaces**
   Developments utilizing Engineered storm water bio-swales or those adjacent to environmentally constrained or sensitive areas may reduce the amount of required parking spaces by ten (10) percent when twenty-five (25) through forty-nine (49) parking spaces are required, fifteen (15) percent when fifty (50) and seventy-four (74) parking spaces are required and twenty (20) percent when more than seventy-five (75) parking spaces are required, provided the area that would have been used for parking is maintained as a habitat area or is generally adjacent to an environmentally sensitive or constrained area.

APPLICANT'S RESPONSE: As demonstrated on Sheets C5.0 in Attachment 6, the project site contains five tracts to mitigate environmental impacts on site. Two tracts are for wetland preservation and three tracts are for stormwater management facilities (bioswales or extended dry basins). The site and location of these wetlands constrain the site layout and removes a significant amount of land that could otherwise be used for parking. As all five buildings would be required to provide at least 75 parking stalls, all five buildings qualify for the 20% reduction. This standard is met.

ANALYSIS: Staff concurs with the applicant's response.

FINDING: Based on the applicant's response and staff analysis, the applicable standards are met.

7. **Parking Location and Shared Parking**
   Owners of off-street parking facilities may post a sign indicating that all parking on the site is available only for residents, customers and/or employees, as applicable.

APPLICANT'S RESPONSE: This standard is optional, provides permissive direction, and is noted as a future option by the owner and/or tenants of the project site.

16.94.020 Off-Street Parking Standards

C. Bicycle Parking Facilities

1. **General Provisions**
   a. **Applicability. Bicycle parking spaces shall be provided for new development, changes of use, and major renovations, defined as construction valued at twenty-five (25) percent or more of the assessed value of the existing structure.**
   b. **Types of Spaces. Bicycle parking facilities shall be provided in terms of short-term bicycle parking and long-term bicycle parking. Short-term bicycle parking**

is intended to encourage customers and other visitors to use bicycles by providing a convenient and readily accessible place to park bicycles. Long-term bicycle parking provides employees, students, residents, commuters, and others who generally stay at a site for at least several hours a weather-protected place to park bicycles.

c. Minimum Number of Spaces. The required total minimum number of bicycle parking spaces for each use category is shown in Table 4, Minimum Required Bicycle Parking Spaces.

d. Minimum Number of Long-term Spaces. If a development is required to provide eight (8) or more required bicycle parking spaces in Table 4, at least twenty-five (25) percent shall be provided as long-term bicycle with a minimum of one (1) long-term bicycle parking space.

e. Multiple Uses. When there are two or more primary uses on a site, the required bicycle parking for the site is the sum of the required bicycle parking for the individual primary uses.

Table 4: Minimum Required Bicycle Parking Spaces	
Use Categories	**Minimum Required Spaces**
Industrial	2 or 1 per 40 spaces, whichever is greater

Applicant's Response: Per Table 4 of 16.94.020(C), industrial users are required to provide a minimum of 2 bicycle parking spaces, or 1 per 40 parking spaces, whichever is greater. The following table summarizes the required and provided bicycle parking.

Minimum Bicycle Parking Requirements				
Lot & Building	**Proposed Vehicle Parking Stalls**	**Minimum Required Bicycle Spaces**	**Minimum Required Long-term Bicycle Spaces**	**Proposed Bicycle Parking Spaces**
Lot 1 / Building A	152	4	0	4
Lot 2 / Building B	124	4	0	4
Lot 3 / Building C	181	5	0	6
Lot 4 / Building D	127	4	0	4
Lot 5 / Building E	87	3	0	4
Total	**671**	**20**	**0**	**22**

As summarized in the table, the project will provide sufficient bicycle parking as required per Table 4. This standard is met.

ANALYSIS: Staff concurs with the applicant's response.

FINDING: Based on the applicant's response and staff analysis, the applicable criteria are met.

16.94.020 Off-Street Parking Standards

C. Bicycle Parking Facilities

2. Location and Design.

a. General Provisions

(1) Each space must be at least two (2) feet by six (6) feet in area, be accessible without moving another bicycle, and provide enough space between the rack and any obstructions to use the space properly.

(2) There must be an aisle at least five (5) feet wide behind all required bicycle parking to allow room for bicycle maneuvering. Where the bicycle parking is adjacent to a sidewalk, the maneuvering area may extend into the right-of-way.

(3) Lighting. Bicycle parking shall be at least as well lit as vehicle parking for security.

(4) Reserved Areas. Areas set aside for bicycle parking shall be clearly marked and reserved for bicycle parking only.

(5) Bicycle parking in the Old Town Overlay District can be located on the sidewalk within the right-of-way. A standard inverted "U shaped" or staple design is appropriate. Alternative, creative designs are strongly encouraged.

(6) Hazards. Bicycle parking shall not impede or create a hazard to pedestrians. Parking areas shall be located so as to not conflict with vision clearance standards.

FINDING: The proposed bicycle parking will be provided as interior spaces within each building. Plans show the bicycle parking space as two feet by six in area. The applicant's narrative states that bicycle parking will comply with the design standards listed above. Conceptual design for the proposed bicycle racks was not proposed. The applicable criteria are met are met as conditioned below.

RECOMMENDED CONDITION: F.2 Prior to Issuance of Building Permits, location and design of the proposed interior bicycle parking spaces shall meet Section 16.94.020.C.2.a – Bicycle Parking Facilities.

b. Short-term Bicycle Parking

(1) Provide lockers or racks that meet the standards of this section.

(2) Locate inside or outside the building within thirty (30) feet of the main entrance to the building or at least as close as the nearest vehicle parking space, whichever is closer.

FINDING: As reflected on Sheets A0.11-A0.12 of Exhibit A.1, all required short term bicycle parking will be provided as interior spaces within each building. The applicable criteria are met.

c. Long-term Bicycle Parking

(1) Provide racks, storage rooms, or lockers in areas that are secure or monitored (e.g., visible to employees or customers or monitored by security guards).

(2) Locate the outside bicycle parking spaces within one hundred (100) feet of the entrance that will be accessed by the intended users.

(3) All of the spaces shall be covered.

d. Covered Parking (Weather Protection)

(1) When required, covered bicycle parking shall be provided in one (1) of the following ways: inside buildings, under roof overhangs or awnings, in bicycle lockers, or within or under other structures.

(2) Where required covered bicycle parking is not within a building or locker, the cover must be permanent and designed to protect the bicycle from rainfall and provide seven-foot minimum overhead clearance.
(3) Where required bicycle parking is provided in lockers, the lockers shall be securely anchored.

FINDING: Long-term bicycle parking spaces are not proposed since no individual building requires more than eight bicycle spaces. The applicant is providing bicycle parking within the building rather than outdoors. The long-term and covered bicycle parking standards are met.

16.94.030 - Off-Street Loading Standards

A. Minimum Standards

1. **A driveway designed for continuous forward flow of passenger vehicles for the purpose of loading and unloading passengers shall be located on the site of any school, or other public meeting place, which is designed to accommodate more than twenty five (25) persons at one time.**
2. **The minimum loading area for non-residential uses shall not be less than ten (10) feet in width by twenty-five (25) feet in length and shall have an unobstructed height of fourteen (14) feet.**
3. **Multiple uses on the same parcel or adjacent parcels may utilize the same loading area if it is shown in the development application that the uses will not have substantially overlapping delivery times.**
4. **The following additional minimum loading space is required for buildings in excess of twenty thousand (20,000) square feet of gross floor area:**
   a. **Twenty thousand (20,000) to fifty (50,000) sq. ft. - five hundred (500) sq. ft.**
   b. **Fifty (50,000) sq. ft. or more - seven hundred fifty (750) sq. ft.**

APPLICANT'S RESPONSE: As demonstrated on the site plan and building elevations contained in Attachment 6, the proposed project does not include a school or other public meeting place. Each proposed building contains multiple loading areas well in excess of the 10-foot-wide, 25-foot-length, and 1,000 SF minimum for buildings larger than 50,000 SF. This standard is met.

ANALYSIS: Staff concurs with the applicant's response.

FINDING: Based on the applicant's response and staff analysis, the applicable criteria are met.

B. Separation of Areas

Any area to be used for the maneuvering of delivery vehicles and the unloading or loading of materials shall be separated from designated off-street parking areas and designed to prevent the encroachment of delivery vehicles onto off-street parking areas or public streets. Off-street parking areas used to fulfill the requirements of this Chapter shall not be used for loading and unloading operations.

FINDING: The preliminary site plan, Sheets C3.0 and A0.11-A0.12 of Exhibit A.1, shows the proposed project separation of off-street parking and off-street loading areas, and no encroachment will occur on public streets. This criterion is met.

16.96 ONSITE CIRCULATION

16.92.010 – On-Site Pedestrian and Bicycle Circulation

A. Purpose

On-site facilities shall be provided that accommodate safe and convenient pedestrian access within new subdivisions, multi-family developments, planned unit developments, shopping centers and commercial districts, and connecting to adjacent residential areas and neighborhood activity centers within one-half mile of the development. Neighborhood activity centers include but are not limited to existing or planned schools, parks, shopping areas, transit stops or employment centers. All new development, (except single-family detached housing), shall provide a continuous system of private pathways/sidewalks.

FINDING: The Transportation Sheet plan (Sheet C3.0 of Exhibit A.1) shows a continuous system of sidewalks. A network of private walkways is proposed throughout the site to enable safe and convenient pedestrian travel to each of the buildings from the public sidewalks along SW Cipole Place and SW 124th Avenue. The entrance of each building is connected to a public sidewalk by an internal private walkway. This standard is met.

****

C. Joint Access

Two (2) or more uses, structures, or parcels of land may utilize the same ingress and egress when the combined ingress and egress of all uses, structures, or parcels of land satisfied the other requirements of this Code, provided that satisfactory legal evidence is presented to the City in the form of deeds, easements, leases, or contracts to clearly establish the joint use.

APPLICANT'S RESPONSE: The applicant proposes to record reciprocal access and maintenance agreements for the site that will allow unrestricted use of the parking circulation areas. Compliance with this standard can be ensured through review of materials submitted for issuance of site development and building permits.

ANALYSIS: Staff concurs with the applicant's response.

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

RECOMMENDED CONDITION: B.3 If the applicant proceeds with a subdivision, prior to Final Plat approval, submit a copy of the covenants, conditions and restrictions (CC&Rs) for the project including reciprocal access easements and maintenance.

16.96 ONSITE CIRCULATION

D. Connection to Streets

1. **Except for joint access per this Section, all ingress and egress to a use or parcel shall connect directly to a public street, excepting alleyways with paved sidewalk.**
2. **Required private sidewalks shall extend from the ground floor entrances or the ground floor landing of stairs, ramps or elevators to the public sidewalk or curb of the public street which provides required ingress and egress.**

FINDING: Joint Access is address above and vehicular and pedestrian access will be provided to SW Tualatin-Sherwood Road and SW 124th Avenue. Internal private walkways will connect all buildings to the public sidewalks. A Variance, under Section 16.84, was approved for not requiring a street connection to the future SW Blake Street from SW Cipole Place. With no street connection, a bicycle and pedestrian connection to SW Blake Street will also not be required. Therefore, this standard is met.

***

F. Access to Major Roadways

Points of ingress or egress to and from Highway 99W and arterials designated on the Transportation Plan Map, attached as Appendix C of the Community Development Plan, Part II, 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 and arterial roadways. 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.**
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 or collector streets, consistent with the Transportation Plan Map and Section VI of the Community Development Plan.**

APPLICANT'S RESPONSE: The proposed site plan includes one point of access to SW Tualatin-Sherwood Road, forming a new south leg at the existing signalized intersection of SW Tualatin-Sherwood Road and SW Cipole Road that will enable full turn movements. An analysis of the proposed public cul-de-sac, SW Cipole Place, is presented in the Traffic Impact Analysis submitted with the application (Attachment 11). The applicant has obtained a Design Exception from Washington County to access SW Tualatin-Sherwood Road with a roadway that is not an arterial or a collector (Attachment 12). This standard is met

ANALYSIS: Staff concurs with the applicant's response.

FINDING: Based on the applicant's response and staff concurrence, this criterion is met.

G. Service Drives

Service drives shall be provided pursuant to Section 16.94.030.

FINDING: Section 16.94.030 is addressed above. This criterion is met.

16.96.030 - Minimum Non-Residential Standards

Minimum standards for private, on-site circulation improvements in non-residential developments:

A. Driveways

***

2. Industrial: Improved hard surfaced driveways are required as follows:

Required		Minimum Width	
Parking Spaces	# Driveways	One-Way Pair	Two-Way
1 - 249	1	15 feet	24 feet
250 & above	2	15 feet	24 feet

FINDING: The Transportation Sheet plan, Sheet C3.0 of Exhibit A.1, shows the proposed industrial driveways. All proposed five buildings will have fewer than 250 parking spaces so each building is required to have at least one driveway. The proposed plan shows Buildings A through D with two driveways and Building E with one driveway. All proposed driveways meet the minimum width requirement. This standard is met.

3. Surface materials are encouraged to be pervious when appropriate considering soils, anticipated vehicle usage and other pertinent factors.

FINDING: Per the applicant's narrative, all proposed driveways will be hard-surfaced with concrete and asphalt but pervious paving is neither proposed nor required. This standard does not apply

B. Sidewalks and Curbs

1. A private pathway/sidewalk system extending throughout the development site shall be required to connect to existing development, to public rights-of-way with or without improvements, to parking and storage areas, and to connect all building entrances to one another. The system shall also connect to transit facilities within five hundred (500) feet of the site, future phases of development, and whenever possible to parks and open spaces.

2. Curbs shall also be required at a standard approved by the Hearing Authority. Private pathways/sidewalks shall be connected to public rights-of-way along driveways but may be allowed other than along driveways if approved by the Hearing Authority.

3. Private Pathway/Sidewalk Design. Private pathway surfaces shall be concrete, asphalt, brick/masonry pavers, or other pervious durable surface. Primary pathways connecting front entrances to the right of way shall be at least 6 feet wide and conform to ADA standards. Secondary pathways between buildings and within parking areas shall be a minimum of four (4) feet wide and/or conform to ADA standards. Where the system crosses a parking area, driveway or street, it shall be clearly marked with contrasting paving materials or raised crosswalk (hump). At a minimum all crosswalks shall include painted striping.

4. Exceptions. Private pathways/sidewalks shall not be required where physical or topographic conditions make a connection impracticable, where buildings or other existing development on adjacent lands physically preclude a connection now or in the future considering the potential for redevelopment; or pathways would violate provisions of leases, restrictions or other agreements.

APPLICANT'S RESPONSE: As shown on Attachment 6, a network of internal walkways is proposed to connect each of the buildings with public sidewalks fronting the site, as well as to provide connectivity between buildings within the site. A transit stop, serving Tri-Met bus route 97, exists adjacent to the intersection of SW Tualatin-Sherwood Road and SW Cipole Road. The development will provide a pedestrian pathway along the proposed cul-de-sac, SW Cipole Place.

An additional connection from the private sidewalks to the public sidewalk network is provided to SW 124th Avenue.

Each of the proposed internal walkways will be vertically separated from abutting vehicular parking and circulation areas by a six-inch-tall curb, except where walkways cross through a parking area. Each of the proposed internal walkways will be constructed of concrete. Each of the proposed walkways, regardless of whether they provide a connection to a public sidewalk, is at least six feet wide, as shown on Attachment 6, Sheet C3.0.

No pathways/sidewalks are proposed southward from the cul-de-sac bulb to the future Blake Road due to the steep difference in elevation between the roadways and the fact that Blake Road has not yet been dedicated as a right-of-way or constructed.

ANALYSIS: Staff concurs with the applicant's response.

FINDING: Based on the applicant's response and staff concurrence, this criterion is satisfied.

16.98 ONSITE STORAGE
16.98.020 Solid Waste and Recycling Storage
All uses shall provide solid waste and recycling storage receptacles which are adequately sized to accommodate all solid waste generated on site. All solid waste and recycling storage areas and receptacles shall be located out of public view. Solid waste and recycling receptacles for multi-family, commercial, industrial and institutional uses shall be screened by six (6) foot high sight-obscuring fence or masonry wall and shall be easily accessible to collection vehicles.

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FINDING: Kristen Tabscott from Pride Disposal provided correspondence dated May 15, 2020 (**Exhibit G**). She states that the site plan shows five enclosures by each individual building, each measure 10-feet deep and 20-feet wide which allows for straight-on access. However other details on the site plan are not shown. These requirements will need to be met to ensure access:

- No center post at the gate access point.
- There must be 25-feet of overhead clearance.

FINDING: Based on the discussion above, these criteria can be satisfied as conditioned below.

RECOMMENDED CONDITION: B.4 Prior to Final Site Plan approval, provide a revised solid waste and recycling storage receptacles plan meeting Pride Disposal requirement.

RECOMMENDED CONDITION: I.1 Prior to Final Occupancy, solid waste and recycling storage receptacles must be constructed to Pride Disposal standard.

16.98.030 - Material Storage

A. Generally. Except as otherwise provided herein, external material storage is prohibited, except in commercial and industrial zones where storage areas are approved by the Review Authority as part of a site plan or per Section 16.98.040.

B. Standards. Except as per Section 16.98.040, all service, repair, storage, and merchandise display activities carried on in connection with any commercial or industrial activity, and not conducted within an enclosed building, shall be screened from the view of all adjacent properties and adjacent streets by a six (6) foot to eight (8) foot high, sight obscuring fence subject to chapter 16.58.020. In addition, unless adjacent parcels to the side and rear of the storage area have existing solid evergreen screening or sight-obscuring fencing in place, new evergreen screening no less than three (3) feet in height shall be planted along side and rear property lines. Where other provisions of this Code require evergreen screening, fencing, or a landscaped berm along side and rear property lines, the additional screening stipulated by this Section shall not be required.

C. Hazardous Materials. Storage of hazardous, corrosive, flammable, or explosive materials, if such storage is otherwise permitted by this Code, shall comply with all local fire codes, and Federal and State regulations.

FINDING: Per the applicant's narrative, while specific users are not known at this time, no material storage areas are proposed in conjunction with the T-S Corporate Park development. In the event future corporate park tenants or users require material storage, the necessary approval will be requested, and the provisions of this section will be met. Any hazardous materials storage will be permitted with the City and Fire District as required. This standard is met.

16.98.040 - Outdoor Sales and Merchandise Display

A. Sales Permitted

Outdoor sales and merchandise display activities, including sales and merchandise display that is located inside when the business is closed but otherwise located outside, shall be permitted when such activities are deemed by the Commission to be a customary and integral part of a permitted commercial or industrial use.

1. Permanent outdoor sales and merchandise display are in use year round or in excess of four (4) months per year and require the location to be reviewed through a site plan review. They will be reviewed as conditional uses in accordance with Chapter 16.82. Permanent outdoor and merchandise display are subject to the standards outlined in subsection B, below.

2. Temporary outdoor sales and merchandise display are seasonal and are not displayed year round and must meet the requirements of Chapter 16.86 (temporary uses). When the temporary use is not occurring the site shall return to its original state.

3. Food vendors including food carts, ice cream trucks, hotdog stands or similar uses are only permitted as a permanent outdoor sale use as described in A.1 above.

B. Standards

1. Outdoor sales and merchandise display areas shall be kept free of debris. Merchandise shall be stacked or arranged, or within a display structure. Display structures shall be secured and stable.

2. Outdoor sales and merchandise display shall not be located within required yard, building, or landscape setbacks, except where there is intervening right-of-way of a width equal to or greater than the required setback; and shall not interfere with on-site or off-site pedestrian or vehicular circulation.

3. **Outdoor retail sales and merchandise display areas for vehicles, boats, manufactured homes, farm equipment, and other similar uses shall be improved with asphalt surfacing, crushed rock, or other dust-free materials.**
4. **Additional standards may apply to outdoor sales and merchandise display dependent on specific restrictions in the zone.**

FINDINGS: Per the applicant's narrative, no outdoor sales areas or activities are proposed as part of this development. Sales and display activities by future tenants will be subject to compliance with these requirements. These conditions are not applicable.

C. Division VI – PUBLIC IMPROVEMENTS

Chapter 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: City Engineer, Bob Galati, reviewed the proposal and provided the following comments and analysis as reflected below and attached as Exhibit B2.

The subject property is located adjacent to Tualatin-Sherwood Road (north) and SW 124th Avenue (east). The proposed development consists of five industrial buildings totaling 535,000 square feet gross floor area. Undeveloped properties abut the site to the west and south of the subject site.

The subject site is proposed to be subdivided into five lots, one lot for each of the five buildings. Access to the site is proposed as a public road extension of SW Cipole Road. This extension is proposed as a City public local road ending in a cul-de-sac.

Washington County Department of Land Use and Transportation (WACO) is in the process of finishing the design on the Tualatin-Sherwood Road (T-S Road) widening project. The WACO project will widen T-S Road to five lanes from Teton Avenue (City of Tualatin) through to the western City limits (City of Sherwood) on Roy Rogers Road, with a planned construction date starting in 2021.

WACO (Naomi Vogel, Associate Planner, WACO DLUT) has submitted a letter dated April 24, 2020 (Exhibit C.1), which has listed conditions which are incorporated into the Engineering Conditions of Approval comments in their entirety, as shown in the attached Exhibit C.1. After further discussion with the applicant and the City, WACO provided amended comments dated May 29, 2020 (Exhibit C.2) and are incorporated within this report.

WACO and the applicant have agreed that frontage improvement along SW Tualatin-Sherwood Road should be constructed as part of the WACO MSTIP road widening project. The applicant

will be required to pay a proportionate fee in-lieu-of construction payment to WACO for those frontage improvements required for the proposed site development.

WACO is requiring half street improvements along SW 124th Avenue, in conformance with Item I.A.4.a of the WACO April 24, 2020 letter. The WACO frontage improvements do not include pedestrian improvements that fall under the City's jurisdictional control.

The City will be requiring frontage improvements along the SW 124th Avenue frontage, which will include the following items:

a) An 8-foot wide concrete sidewalk
b) A 5-foot wide planter strip, measured between street face of curb and street face edge of the sidewalk
c) Street trees, with approved root barriers
d) Planter strip ground cover plantings
e) Planter strip irrigation system (including controller, valves and sprinklers)
f) Street lighting system

The proposed site development plans show a public road extension (SW Cipole Place) which begins at the intersection of SW Tualatin-Sherwood Road and runs south into the development site ending in a cul-de-sac. This intersection will require an interim traffic addition on the north side of the SW Tualatin-Sherwood Road/SW Cipole Road intersection during construction and until such time as the WACO MSTIP road improvement project converts the intersection traffic signals into a permanent traffic control signalized system.

The non-standard length and configuration of the SW Cipole Place extension has received Planning Approval of a Land Use Variance for the non-conforming street design conditions. The length of the cul-de-sac can be accommodated with conditions. The plans indicate a 54-foot roundabout radius, which needs to be shown to allow the TVF&R apparatus turning radius.

Based on the Variance Approval, the applicant submitted four (4) Design Modification Request forms to the Engineering Department, for each non-conforming design element shown in the plans for review and approval by the City Engineer.

The applicant is seeking removal of the public sidewalk along the east side of the SW Cipole Place extension. Provided analysis indicates that by reducing the width of the ROW improvements the negative impacts to adjacent identified wetlands can be minimized.

Although SW Cipole Place is classified as a local road, the cross-section design is to meet the City standards for a 40-foot standard commercial/industrial road not exceeding 3,000 vehicles per day, excepting that no on-street parking will be allowed, and any design modification requests are approved. The pavement section for this road shall meet the maximum of either the City pavement section standard for a collector road or as recommended by a geotechnical pavement design based on local site soil conditions. The geotechnical pavement design report will be provided as part of the engineering plans review process. The design life of any geotechnical recommended pavement section shall be 25-years.

Street lighting for the SW Cipole Place extension shall be the City standard of PGE Option 'B', Cobra Head fixtures. A photometric analysis has been submitted but does not show the entire extent of the SW Cipole Place extension, including the intersection with SW Tualatin-Sherwood Road. The photometric analysis shall be provided for the full length of the SW Cipole Place extension.

Although the construction of SW Blake Street is assigned to the Willamette Water Supply Program project located adjacent and south of the subject site, the agreement between the two subject properties indicate that the Trammel-Crow site will be responsible for any slope easements and PUE along the north side of the SW Blake Street right-of-way.

FINDING: Based on the analysis above, the criteria can be satisfied as conditioned below.

RECOMMENDED CONDITION: D.5 Prior to Issuance of Site Grading Permit, the applicant shall comply with the Phase 1 requirements identified in the May 29, 2020 letter issued by WACO. A copy of the approved WACO Facility Permit (Phase 1) shall be included as part of the applicants submittal package for a City issued Grading Permit.

RECOMMENDED CONDITION: E.3 Prior to Approval of Engineering Public Improvement Plans, the applicant shall comply with the Phase 2 and Phase 3 requirements identified in the May 29, 2020 letter issued by WACO (Exhibit C.2). A copy of the approved WACO Facility Permit (Phases 2 and Phase 3) shall be included as part of the applicants submittal package for review and approval in the Approval of Engineering Public Improvement Plans process.

RECOMMENDED CONDITION: C.1 Prior to Issuance of an Engineering Compliance Agreement, items listed in Section I and Section II of the WACO April 24, 2020 letter shall be either shown on the approved engineering plans, or implemented as part of the construction process.

RECOMMENDED CONDITION: H.12 Prior to Acceptance of Constructed Public Improvements, the applicant shall have dedicated right-of-way along Tualatin-Sherwood Road in conformance with Item IV.A.2 of the Washington County letter dated May 29, 2020. Dedicate additional right-of-way to provide 76-feet of right-of-way from the centerline of SW Tualatin-Sherwood Road, including adequate corner radius at the intersection with SW 124th Avenue and SW Cipole Place. The right-of-way shall transition to 53-feet from the centerline to accommodate a 5-lane arterial configuration per WACO's MSTIP construction plans.

RECOMMENDED CONDITION: H.13 Prior to Acceptance of Constructed Public Improvements, the applicant shall have dedicated additional right-of-way along SW 124th Avenue in conformance with Item IV. A.1 of the Washington County letter dated May 29, 2020. Dedicate additional right-of-way to provide 65-feet of right-of-way from the centerline of SW 124th Avenue, including adequate corner radius at the intersection with SW Tualatin-Sherwood Road and SW Blake Street. The right-of-way shall transition to 53-feet from the centerline to accommodate a 5-lane arterial configuration per WACO's MSTIP construction plans for SW 124th Avenue.

RECOMMENDED CONDITION: H.2 Prior to Final Acceptance of Constructed Public Improvements, applicant shall record an 8-foot wide public utility easement (PUE) along all public street frontages, land shall be located adjacent to and outside the public street right-of-way.

RECOMMENDED CONDITION: C.2 Prior to Issuance of Engineering Compliance Agreement, applicant shall show proof of payment to Washington County of a proportionate share fee in-lieu-of construction cost for frontage improvements on SW Tualatin-Sherwood Road (only the improvements behind the curb), and the final traffic signal control system at the intersection of SW Tualatin-Sherwood Road & SW Cipole Road/SW Cipole Place. Applicant shall coordinate valuation of fee in-lieu payment directly with Washington County, and shall provide acceptance letter from Washington County to City staff for its records.

RECOMMENDED CONDITION: E.4 Prior to Approval of Engineering Public Improvement Plans, construction plans shall include frontage improvements along SW 124th Avenue consistent with City standards as follows:

a) An 8-foot wide concrete sidewalk
b) A 5-foot wide planter strip, measured between street side face of curb and street side edge of sidewalk.
c) Street trees, with approved root barrier
d) Planter strip ground cover plantings
e) Planter strip irrigation system, including controller, electronically controlled valves, piping and sprinkler heads
f) Street lighting system

These frontage improvements shall commence at the intersection of SW Tualatin-Sherwood Road and end at the south property line of the applicant's property.

RECOMMENDED CONDITION: E.5 Prior to Approval of Engineering Public Improvement Plans, the construction plans shall include the addition of an interim traffic control signal system on the northbound leg of the SW Cipole Road & Tualatin-Sherwood Road intersection. These traffic control signal system plans shall receive approval from WACO prior to approval of the overall public improvements construction plan set by City engineering.

RECOMMENDED CONDITION: H.10 Prior to Approval of Engineering Public Improvement Plans, the applicant shall have dedicated the necessary right-of-way to the City of Sherwood for the construction of SW Cipole Place, a public local road.

RECOMMENDED CONDITION: E.6 Prior to Approval of Engineering Public Improvement Plans, the applicant shall submit a separate design modification request form for any additional non-conforming public infrastructure design element(s) that were not submitted under the Land Use process, to the City Engineer for review and approval.

RECOMMENDED CONDITION: E.7 Prior to Approval of Engineering Public Improvement Plans, the applicant shall submit a turning movement analysis for the cul-de-sac, which shows the turn movements for the largest expected semi-truck traffic to use the facility.

RECOMMENDED CONDITION: E.8 Prior to Approval of Engineering Public Improvement Plans, engineering plans shall show a pavement section conforming to the City standard for a collector road, or as recommended by a geotechnical pavement design based on local site soils conditions which shall be submitted to the City as part of the plan review process. The design life of the geotechnical pavement design shall be 25-years.

RECOMMENDED CONDITION: E.9 Prior to Approval of the Engineering Public Improvement Plans, a photometric analysis shall be performed that encompasses the entire length of the SW Cipole Place extension, including the interim intersection with SW Tualatin-Sherwood Road.

RECOMMENDED CONDITION: E.10 Prior to Approval of Engineering Public Improvement Plans, the street lighting plans for the SW Cipole Place extension shall show PGE Option "B" Cobra Head street lighting systems.

RECOMMENDED CONDITION: H.3 Prior to Acceptance of Constructed Public Improvements, the applicant shall record an 8-foot wide PUE along the north side of the SW Blake Road alignment that lays within the subject site.

RECOMMENDED CONDITION: E.11 Prior to Approval of Engineering Public Improvement Plans, the applicant shall record any slopes easements necessary to support the SW Blake Street road section/alignment. Slope easements shall be based on a 2 horizontal to 1 vertical finish slope grade.

RECOMMENDED CONDITION: H.4 Prior Acceptance of Constructed Public Improvements, applicant shall provide a two (2) year maintenance warranty for deficient workmanship and/or materials associated with the public improvements.

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.

FINDING: This criterion is satisfied as discussed and conditioned above.

Chapter 16.106 TRANSPORTATION FACILITIES
16.106.040 - Design

Standard cross sections showing street design and pavement dimensions are located in the City of Sherwood's Engineering Design Manual.

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E. Cul-de-sacs

1. **All cul-de-sacs shall be used only when exceptional topographical constraints, existing development patterns, or compliance with other standards in this code preclude a street extension and circulation. A cul-de-sac shall not be more than two hundred (200) feet in length and shall not provide access to more than 25 dwelling units.**
2. **All cul-de-sacs shall terminate with a turnaround in accordance with the specifications in the Engineering Design Manual. The radius of circular turnarounds may be larger when they contain a landscaped island, parking bay in their center, Tualatin Valley Fire and Rescue submits a written request, or an industrial use requires a larger turnaround for truck access.**
3. **Public easements, tracts, or right-of-way shall provide paved pedestrian and bicycle access ways at least 6 feet wide where a cul-de-sac or dead-end street is planned, to connect the ends of the streets together, connect to other streets, or connect to other existing or planned developments in accordance with the standards of this Chapter, the TSP, the Engineering Design Manual or other provisions identified in this Code for the preservation of trees.**

APPLICANT'S RESPONSE: Cipole Place is proposed as a public cul-de-sac street solely to allow the division of the proposed industrial campus into five lots in a one-building-per-lot configuration. Making a public through street connection to (future) SW Blake Road is impractical primarily due to the site topography. If the applicant chooses not to proceed with the final plat (i.e., to keep the site as one parcel), then the cul-de-sac would be a private roadway with public utility easements. The applicant is requesting a variance to the standard in Subparagraph 1 to allow the proposed cul-de-sac length (approximately 550 feet) to exceed the 200-foot standard (Attachment 6, Sheet C3.3). The proposed cul-de-sac terminates in a bulb with a paved radius of 54 feet to allow for fire truck turnarounds, consistent with Subparagraph

2. The applicant has also submitted an associated Engineering Design Modification request for the cul-de-sac radius (Attachment 21). The applicant is providing private access and is also requesting a variance to the standard in Subparagraph 3 because the site's topography would require steeply sloped pedestrian/bike connections that would be impractical, costly, and potentially dangerous (though pedestrian access is provided from Buildings D and E to 124th Avenue). Justification for the variance request is found in the response to Chapter 16.84. With the approval of the variance request, this standard is met.

ANALYSIS: The variances requested for the cul-de-sac have been approved and addressed under Section 16.84. As previously conditioned, **H.10**, SW Cipole Place will be a local public roadway.

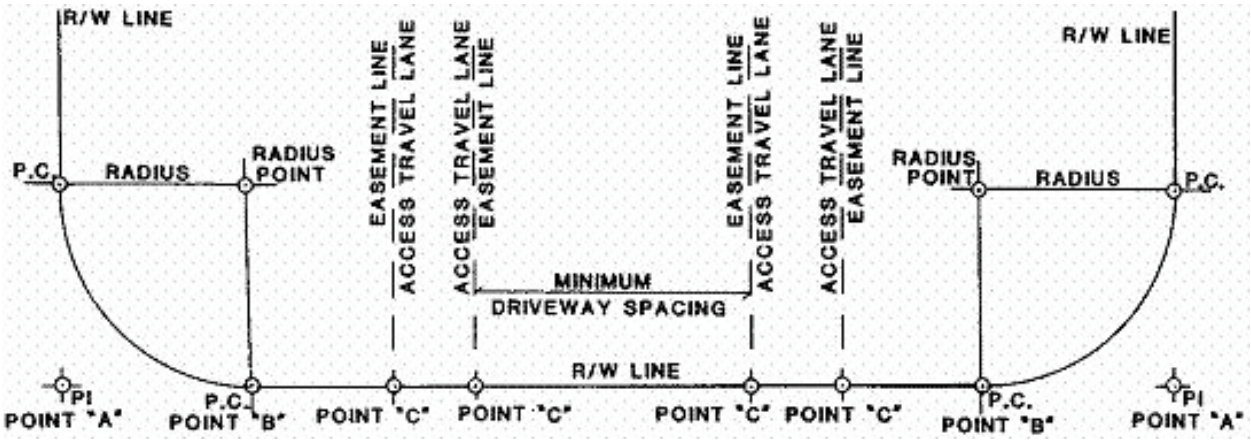
FINDING: Based on the applicant's response and staff analysis, these criteria are met.

****

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.

1. **Measurement: See the following access diagram where R/W = Right-of-Way; and P.I. = Point-of-Intersection where P.I. shall be located based upon a 90 degree angle of intersection between ultimate right-of-way lines.**
   a. **Minimum right-of-way radius at intersections shall conform to City standards.**
   b. **All minimum distances stated in the following sections shall be governed by sight distance requirements according to the Engineering Design Manual.**
   c. **All minimum distances stated in the following sections shall be measured to the nearest easement line of the access or edge of travel lane of the access on both sides of the road.**
   d. **All minimum distances between accesses shall be measured from existing or approved accesses on both sides of the road.**
   e. **Minimum spacing between driveways shall be measured from Point "C" to Point "C" as shown below:**



FINDING: The proposal has one access point to SW Tualatin-Sherwood Road by the creation of the SW Cipole Place, a local public roadway. Washington County has reviewed and approved a Design Exception (Attachment 12 of Exhibit A.1) for access of a local roadway to an arterial roadway. All building sites will have their driveway access from SW Cipole Place. The preliminary plans show driveways that conform to all applicable geometric requirements. The applicable standards are met.

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 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.

a. Local Streets:

Minimum right-of-way radius is fifteen (15) feet. Access will not be permitted within ten (10) feet of Point "B," if no radius exists, access will not be permitted within twenty-five (25) feet of Point "A." Access points near an intersection with a Neighborhood Route, Collector or Arterial shall be located beyond the influence of standing queues of the intersection in accordance with AASHTO standards. This requirement may result in access spacing greater than ten (10) feet.

FINDING: SW Cipole Place is a proposed local street. No driveway access points are proposed within 10-feet of the intersection radii or within the queuing areas identified the TIA, Attachment 11 of Exhibit A.1. This criterion is met.

c. Collectors:

All commercial, industrial and institutional uses with one-hundred-fifty (150) feet or more of frontage will be permitted direct access to a Collector. Uses with less than one-hundred-fifty (150) feet of frontage shall not be permitted direct access to Collectors unless no other alternative exists.

Where joint access is available it shall be used, provided that such use is consistent with Section 16.96.040, Joint Access. No use will be permitted direct access to a Collector within one- hundred (100) feet of any present Point "A." Minimum spacing between driveways (Point "C" to Point "C") shall be one-hundred (100) feet. In all instances, access points near an intersection with a Collector or Arterial shall be located beyond the influence of standing queues of the intersection in accordance with AASHTO standards. This requirement may result in access spacing greater than one hundred (100) feet.

FINDING: The southern boundary of the site is the proposed future SW Blake Street designated as a Collector status roadway. The proposed development is not proposing access from SW Blake Street. The criteria do not apply.

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 1 of the Community Development Plan, Part II, 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.

FINDING: Direct access to SW 124th Avenue is not proposed. Access to Tualatin-Sherwood Road will be through SW Cipole Place, a new public local roadway. Washington County has reviewed and approved a Design Exception that allows a local street to access an arterial roadway. These criteria are met.

Chapter 16.106 TRANSPORTATION FACILITIES

16.106.060 - Sidewalks

A. Required Improvements

1. Except as otherwise provided, sidewalks shall be installed on both sides of a public street and in any special pedestrian way within new development.

2. For Highway 99W, arterials, or in special industrial districts, the City Manager or designee may approve a development without sidewalks if alternative pedestrian routes are available.

3. In the case of approved cul-de-sacs serving less than fifteen (15) dwelling units, sidewalks on one side only may be approved by the City Manager or designee.

B. Design Standards

1. Arterial and Collector Streets

Arterial and collector streets shall have minimum eight (8) foot wide sidewalks/multi- use path, located as required by this Code.

2. Local Streets
Local streets shall have minimum five (5) foot wide sidewalks, located as required by this Code.

3. Handicapped Ramps
Sidewalk handicapped ramps shall be provided at all intersections.

C. Pedestrian and Bicycle Paths
Provide bike and pedestrian connections on public easements or right-of-way when full street connections are not possible, with spacing between connections of no more than 330 feet except where prevented by topography, barriers such as railroads or highways, or environmental constraints such as rivers and streams.

ANALYSIS: The subject property has street frontages along SW Tualatin-Sherwood Road and SW 124th Avenue, both Arterial Roadways. Tualatin-Sherwood Road is part of the Washington County capitol project that will include the construction of a sidewalk along the site frontage. The proposal will be required to construct an 8-foot wide sidewalk along SW 124th Avenue site frontage. The site also has street frontage along the future SW Blake Street that will be designed and built, including sidewalks, by Willamette Water Supply System Commission. The proposed local public street, SW Cipole Place, will also have a sidewalk along the western portion of the roadway. A variance has been granted in Section 16.84 for no sidewalk along the eastern side of SW Cipole Place due to environmental constraints.

FINDING: Based on the analysis above, the criteria are met.

Chapter 16.106 TRANSPORTATION FACILITIES
16.106.080 Traffic Impact Analysis (TIA)

C. Requirements
The following are typical requirements that may be modified in coordination with Engineering Staff based on the specific application.

1. **Pre-application Conference. The applicant shall meet with the City Engineer prior to submitting an application that requires a TIA. This meeting will be coordinated with Washington County and ODOT when an approach road to a County road or Highway 99W serves the property, so that the TIA will meet the requirements of all relevant agencies.**
2. **Preparation. The TIA shall be prepared by an Oregon Registered Professional Engineer qualified to perform traffic Engineering analysis and will be paid for by the applicant.**
3. **Typical Average Daily Trips and Peak Hour Trips. The latest edition of the Trip Generation Manual, published by the Institute of Transportation Engineers (ITE), shall be used to gauge PM peak hour vehicle trips, unless a specific trip generation study that is approved by the City Engineer indicates an alternative trip generation rate is appropriate.**
4. **Intersection-level Analysis. Intersection-level analysis shall occur at every intersection where the analysis shows that fifty (50) or more peak hour vehicle trips can be expected to result from the development.**
5. **Transportation Planning Rule Compliance. The requirements of OAR 660-012-0060 shall apply to those land use actions that significantly affect the transportation system, as defined by the Transportation Planning Rule.**

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F. Approval Criteria

When a TIA is required, a proposal is subject to the following criteria, in addition to all criteria otherwise applicable to the underlying land use proposal:

1. **The analysis complies with the requirements of 16.106.080.C;**
2. **The analysis demonstrates that adequate transportation facilities exist to serve the proposed development or identifies mitigation measures that resolve identified traffic safety problems in a manner that is satisfactory to the City Engineer and, when County or State highway facilities are affected, to Washington County and ODOT;**
3. **For affected non-highway facilities, the TIA demonstrates that mobility and other applicable performance standards established in the adopted City TSP have been met; and**
4. **Proposed public improvements are designed and will be constructed to the street standards specified in Section 16.106.010 and the Engineering Design Manual, and to the access standards in Section 16.106.040.**
5. **Proposed public improvements and mitigation measures will provide safe connections across adjacent right-of-way (e.g., protected crossings) when pedestrian or bicycle facilities are present or planned on the far side of the right-of-way.**

APPLICANT'S RESPONSE: Kittelson & Associates transportation engineers projected site trip generation (Attachment 11) based on Land Use Code 130 – Industrial Park within the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th edition. The report analyzed traffic operations in the vicinity in the years 2021 and 2025, both with and without the proposed development:

- In 2021, the SW Oregon Street/SW Tualatin-Sherwood Road intersection is expected to exceed mobility standards in the PM peak hour with or without the proposed development.
- In 2021, the proposed development would cause the SW Oregon Street/SW Tonquin Road intersection to exceed mobility standards in the PM peak hour.
- In 2021, all other intersections in the study area are anticipated to meet mobility standards in both the AM and PM peak hours.
- In 2025 (following Washington County's planned improvements to SW Tualatin-Sherwood Road), the SW Oregon Street/SW Tonquin Road intersection is expected to exceed mobility standards in the PM peak hour with or without the proposed development.
- In 2025, all other intersections in the study area are anticipated to meet mobility standards in both the AM and PM peak hours.

The TIA also analyzed traffic operations depending on whether Cipole Road is extended to Blake Road or not, concluding that "there appears to be no significant system-wide benefit to extending SW Cipole Road through the site to connect with the future Blake Road" and points out potential roadway conflicts if Cipole Road were extended south to Blake Road.

ANALYSIS: Staff concurs with the applicant's response.

FINDING: Based on the applicant's response and staff concurrence, the criteria are met.

Chapter 16.106 TRANSPORTATION FACILITIES
16.106.080 Traffic Impact Analysis (TIA)

G. Conditions of Approval

The City may deny, approve, or approve a development proposal with conditions needed to meet operations and safety standards and provide the necessary right-of-way and improvements to ensure consistency with the future planned transportation system. Improvements required as a condition of development approval, when not voluntarily provided by the applicant, shall be roughly proportional to the impact of the development on transportation facilities, pursuant to Section 16.106.090. Findings in the development approval shall indicate how the required improvements are directly related to and are roughly proportional to the impact of development.

ANALYSIS: Per City Engineering Department Comments dated May 14, 2020, the applicant has prepared and submitted a TIA (Kittelson & Associates, dated January 15, 2020) for the proposed development, which has been reviewed and the conclusions accepted by City and WACO staff.

The TIA recommends providing a proportionate cost-share allocation towards the future conversion of the SW Oregon Street / SW Tonquin Road intersection either to a roundabout or signalized intersection.

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

RECOMMENDED CONDITION: C.3 Prior to Issuance of Engineering Compliance Agreement, applicant shall provide payment to the City of the proportional share fee in-lieu-of construction for the intersection improvements for the Tonquin Road and Oregon Street intersection.

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: Per City Engineering Department Comments dated May 14, 2020, states that no public sanitary sewer currently exists along the subject property frontage of SW Tualatin-Sherwood Road or along the subject property frontage of SW 124th Avenue. The nearest public sanitary sewer available to provide public sanitary service for the subject property is located at the SW Tualatin-Sherwood Road/SW Oregon Street intersection. SW 124th Avenue south of SW Tualatin-Sherwood Road is the eastern limits of the City of Sherwood. Property east of SW 124th Avenue is within the City of Tualatin. Since the subject development is adjacent to the eastern city limits and all property north of SW T-S Road already has public sanitary sewer, the subject development will only need to extend the sanitary sewer eastward from SW Oregon Street along SW Tualatin-Sherwood Road to SW Cipole Road.

The subject property proposes constructing a new public street south of the SW Tualatin-Sherwood Road/SW Cipole Road intersection. This new street (labeled as SW Cipole Place on the preliminary plan) will extend southward into the subject property and ending in a cul-de-sac. South of the subject property (uphill) is another tax lot that currently has no public sanitary sewer access. The subject property will need to extend the public sanitary sewer southward through SW Cipole Place and through the subject property to the southern property line to provide service to the property to the south.

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

RECOMMENDED CONDITION: E.12 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to extend the public sanitary sewer within SW Tualatin-Sherwood Road from SW Oregon Street to SW Cipole Road meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.13 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to extend an appropriately sized public sanitary sewer within SW Cipole Place and through the subject property from SW Tualatin-Sherwood Road to the southern property line of the subject property accounting for the needs of the property south of the subject property meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.14 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for any public sanitary sewer beneath a retaining wall to be installed within a sleeve meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.15 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to provide public sanitary sewer to all lots of the subject development meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: G.1 Prior to Issuance of a Plumbing Permit, the proposed development shall design the private sanitary sewer to be in compliance with the current Oregon Plumbing Specialty Code.

RECOMMENDED CONDITION: H.5 Prior to Final Acceptance of the Constructed Public Improvements, any public sanitary sewer facilities located on private property shall have a recorded public sanitary sewer easement encompassing the related public sanitary sewer improvements meeting the approval of the Sherwood Engineering Department.

16.112– WATER SUPPLY
16.112.010 Required Improvements
Water lines and fire hydrants conforming to City and Fire District standards shall be installed to serve all building sites in a proposed development. All waterlines shall be connected to existing water mains or shall construct new mains appropriately sized and located in accordance with the Water System Master Plan.

ANALYSIS: Per City Engineering Department Comments dated May 14, 2020, states that a 24-inch diameter public water main currently exists within SW Tualatin-Sherwood Road along the western portion of the subject property frontage to SW Cipole Road. There is no public water main existing within SW 124th Avenue along the subject property frontage.

The subject property will be constructing a new public street south of the SW Tualatin-Sherwood Road/SW Cipole Road intersection. This new street (labeled as SW Cipole Place on the preliminary plan) will extend southward into the subject property and end in a cul-de-sac. South of the subject property is another tax lot that currently has no access to public water. The subject property will need to extend a 16-inch diameter public water line southward from the 24-inch diameter water main in SW Tualatin-Sherwood Road through SW Cipole Place and through the subject property to the southern property line to provide service to the property to the south. The size required of the subject property will be based upon the needed water flows for the subject

development. The 16-inch diameter size of the water line accounts for additional sizing to serve the property south of the subject property. Since this sizing is based upon the specific needs of the property to the south, it will not be subject to get SDC credits. The developer of the subject property will either need to work out payment of the construction cost with the owner of the property to the south or establish a reimbursement district to cover oversizing costs.

The subject property will need to install a new 12-inch diameter public water line within SW Tualatin-Sherwood Road from SW Cipole Road to SW 124th Avenue. The subject property will need to install a new 12-inch diameter public water line within SW 124th Avenue from SW Tualatin-Sherwood Road to the southern property line of the subject property line. The size required of the subject property will be based upon the needed water flows for the subject development.

On-site fire protection may be necessary depending on conditions by Tualatin Valley Fire & Rescue.

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

RECOMMENDED CONDITION: E.16 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to connect a new 16-inch diameter public water line to the 24-inch diameter public water line within SW Tualatin-Sherwood Road along with additional tie in points and valve alterations as required and extend the new 16-inch diameter public water line through SW Cipole Place and through the subject property to the southern property line of the subject property meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.17 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for any public water line beneath a retaining wall to be installed within a sleeve meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.18 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to install a 12-inch diameter public water line from the 24-inch diameter public water line at the SW Tualatin-Sherwood Road/SW Cipole Road within SW Tualatin-Sherwood Road eastward to the SW Tualatin-Sherwood Road/SW 124th Avenue intersection and within SW 124th Avenue to the southern property line of the subject development meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.19 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to provide water service to supply domestic, irrigation and fire water (if required) to all lots of the subject development at a location meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.20 Prior to Approval of the Engineering Public Improvement Plans, water flows calculations (domestic, irrigation and fire) shall be provided by the developer.

RECOMMENDED CONDITION: E.21 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for the installation of Reduced Pressure Backflow Assemblies meeting Sherwood Engineering Department standards.

RECOMMENDED CONDITION: E.22 Prior to Approval of the Engineering Public Improvement Plans, if on-site fire protection is to be installed, the proposed development shall design for the installation of backflow protection meeting Sherwood Engineering Department standards.

RECOMMENDED CONDITION: G.2 Prior to Issuance of a Plumbing Permit, the proposed development shall design for private water lines to be in compliance with the current Oregon Plumbing Specialty Code.

RECOMMENDED CONDITION: H.6 Prior to Final Acceptance of the Constructed Public Improvements, any public water facilities located on private property shall have a recorded public water line easement encompassing the related public water improvements meeting Sherwood Engineering standards.

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 systems consistent with the Comprehensive Plan and the requirements of the Clean Water Services water quality regulations contained in their Design and Construction Standards R&O 04-9, or its replacement.

ANALYSIS: City Engineering Department Comments dated May 14, 2020, states that a 24-inch diameter public storm sewer main currently exists beneath SW Tualatin-Sherwood Road that serves the western portion of the subject property. A 36-inch diameter culvert exists beneath SW Tualatin-Sherwood Road that serves the eastern portion of the subject property. There is another storm sewer within SW Tualatin-Sherwood Road for street drainage only. The southwestern portion of the property flows to an existing wetland in the southwest corner of the subject property.

The existing 24-inch diameter and 36-inch diameter storm sewers will provide public storm sewers to the subject property. The only other property that needs to be accounted for when it comes to drainage is the property south of the subject property (uphill). Therefore, the subject property will need to construct a storm sewer from the eastern wetland within the subject property (drained by the aforementioned 36-inch diameter pipe) through the subject development to its south property line. This storm sewer will be in the same proximity as the sanitary sewer and water line to create a utility corridor through the private property.

The development will be required to install water quality treatment and hydromodification for all new/modified impervious areas meeting Clean Water Services standards. Water quality/hydromodification facilities shall be within a separate tract(s) of land dedicated to the City of Sherwood.

Any requirements of Washington County on the subject development to construct/modify impervious areas within Washington County right-of-way will then cause the subject development to provide water quality treatment and hydromodification of storm water runoff meeting Clean Water Services standards. Currently, there is an existing water quality/hydromodification regional facility at the southwest corner of the SW Tualatin-Sherwood Road/SW 124th Avenue Intersection within an easement within the subject property. Storm runoff from new impervious areas within Washington County right-of-way shall be treated/managed in the existing regional facilities. The developer will need to show that the existing facility has the capacity to treat the additional runoff from the subject property public improvement activities within Washington County right-of-way. If the existing facilities do not have the capacity for the additional impervious area, then the subject development shall expand the existing facility or install/combine with a new facility to provide the additional treatment/hydromodification required.

The preliminary storm drainage report indicates that there are no deficiencies within the downstream conveyance system.

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

RECOMMENDED CONDITION: E.23 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to provide storm sewer for SW Cipole Place meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.24 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to extend an appropriately sized public storm sewer from the eastern wetland through the subject property to the southern property line of the subject property accounting for the needs of the property south of the subject property meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.25 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for any public storm sewer beneath a retaining wall to be installed within a sleeve meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.26 Prior to Approval of the Engineering Public Improvement Plans, a storm drainage report in compliance with Clean Water Service standards shall be submitted meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.27 Prior to Approval of the Engineering Public Improvement Plans, if the final storm drainage report indicates any downstream deficiencies, then the subject development shall either correct the downstream deficiencies or provide detention meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.28 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to supply storm sewer service to all lots of the subject development meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.29 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to provide storm water quality treatment and hydro-modification in compliance with Clean Water Services' standards meeting the approval of the Sherwood Engineering Department for all new impervious area constructed/modified by the subject development including any required improvements within Washington County right-of-way.

RECOMMENDED CONDITION: E.30 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for each water quality treatment/hydro-modification facility to be in a separate tract of land to be dedicated to the City of Sherwood upon plat recording.

RECOMMENDED CONDITION: G.3 Prior to Issuance of a Plumbing Permit, the proposed development shall design for private storm water runoff within the subject property to be collected and conveyed in accordance with the current Oregon Plumbing Specialty Code.

RECOMMENDED CONDITION: H.7 Prior to Final Acceptance of the Constructed Public Improvements, any public storm sewer located on private property shall have a recorded public storm sewer easement encompassing the related public storm sewer improvements meeting Sherwood Engineering standards.

16.116 FIRE PROTECTION
16.116.010 Required Improvements
When land is developed so that any commercial or industrial structure is further than two hundred and fifty (250) feet or any residential structure is further than five hundred (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.

ANALYSIS: Tom Mooney, Deputy Fire Marshall, provided a review letter dated April 8, 2020 (**Exhibit D**). He provided the following comments relating to signage, painted curbs, turning radius, fire flow availability documentation, fire hydrant placement, fire hydrant protection, Fire Department Connection (FDC) locations, emergency responder radio coverage, and blasting operations. A condition is proposed requiring compliance with the Fire Marshall's letter.

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

RECOMMENDED CONDITION: **B.5** Prior to Final Site Plan or Final Plat Approval, submit revised plans demonstrating compliance with the Fire Marshall's letter dated April 8, 2020.

16.118 PUBLIC AND PRIVATE UTILITIES
16.118.010 Purpose
Public telecommunication conduits as well as conduits for franchise utilities including, but not limited to, electric power, telephone, natural gas, lighting, and cable television shall be installed to serve all newly created lots and developments in Sherwood.

16.118.020 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 (8) feet in width unless a reduced width is specifically exempted by the City Engineer. An eight-foot wide public utility easement (PUE) shall be provided on private property along all public street frontages. This standard does not apply to developments within the Old Town Overlay.

ANALYSIS: Per City Engineering Department comments dated May 14, 2020 (**Exhibit B.1**), Sherwood Broadband does not exist along the subject property frontage of SW Tualatin-Sherwood Road nor along the subject property frontage of SW 124th Avenue.

FINDING: These standards are not met but can be met as conditioned below.

RECOMMENDED CONDITION: E.31 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for Sherwood Broadband conduits and vaults along the subject property frontage of SW Tualatin-Sherwood Road, SW 124th Avenue and along SW Cipole Place in areas where a PUE is dedicated meeting the approval of the Sherwood Engineering Department unless otherwise approved for a payment-in-lieu.

Division VIII. Environmental Resources
16.142 Parks, Trees and Open Space

16.142.040 - 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
1.	Highway 99W	25 feet
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.

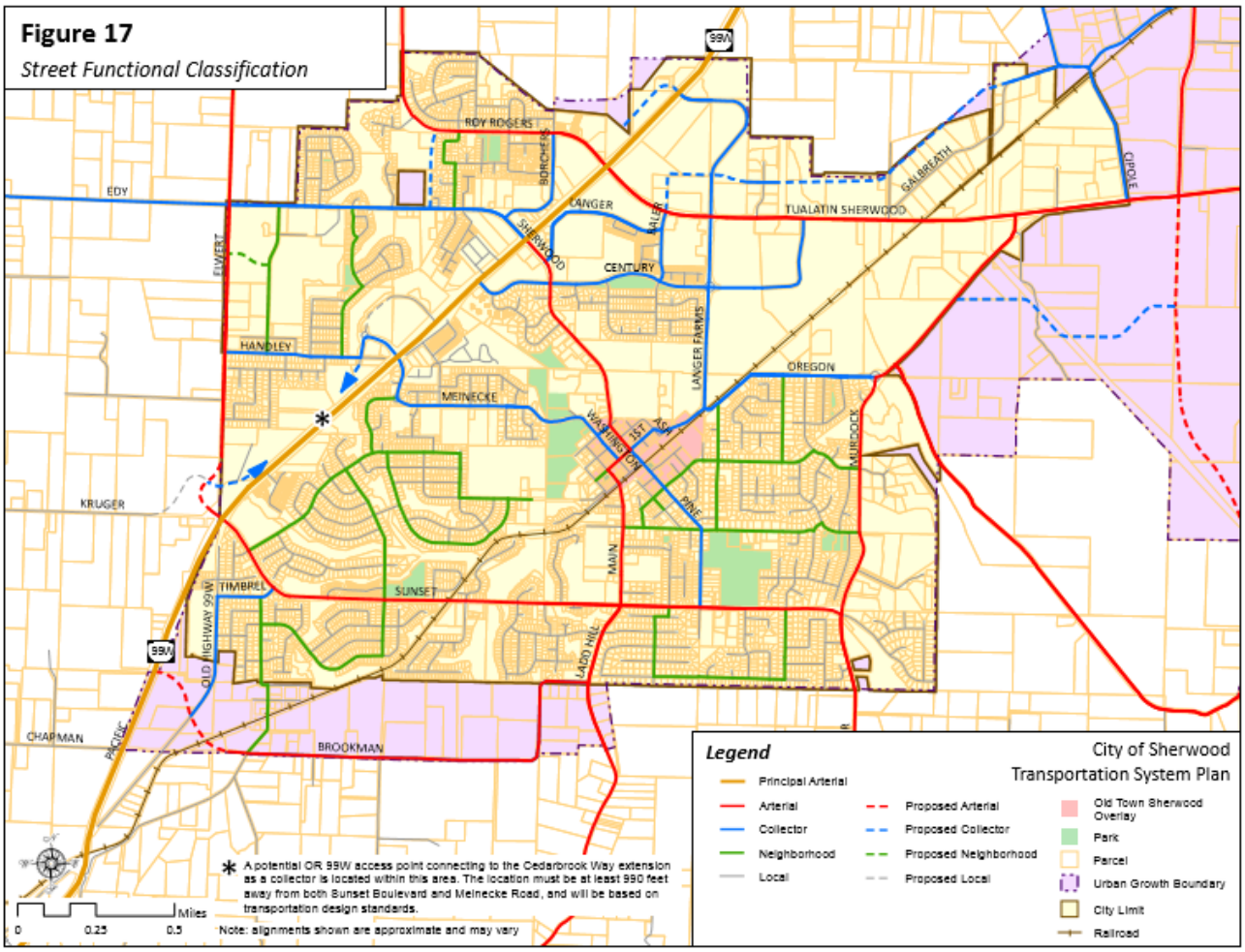
APPLICANT'S RESPONSE: The applicant provided additional narrative dated May 29, 2020, attached as Exhibit A.2, and states the following on visual corridors:

Section 16.92.030.D of the Community Development Code stipulates that "…new developments shall be required to establish landscaped visual corridors along Highway 99W and other arterial and collector streets, consistent with the Natural Resources and Recreation Plan Map,2 Appendix C of the Community Development Plan, Part II, and the provisions of Chapter 16.142 (Parks, Trees, and Open Space)." Similarly, Section 16.142.040 requires 10-foot landscape visual corridors for "New developments…with frontage on…arterial or collector streets designated on Figure 8-1 of the Transportation System Plan…"

- Using the same rationale noted above, the Goal Post Rule would limit application of the landscape visual corridor standard only to those collectors and arterials in existence as of the application submittal date (January 17, 2020). While Figure 17 of the 2014 TSP contemplates a "Proposed Collector" for Blake Road, since the roadway has been neither constructed nor dedicated and may or may not be constructed to collector standards, the visual corridor standard does not apply along the future roadway corridor since it does not presently exist.

ANALYSIS: SW Tualatin-Sherwood Road and SW 124th Avenue are both Arterial streets requiring a 15-foot-wide landscaped visual corridor along their frontages**.** The preliminary landscape plans show a 15-foot-wide landscaped visual corridor abutting both roadways within the boundaries of the site.

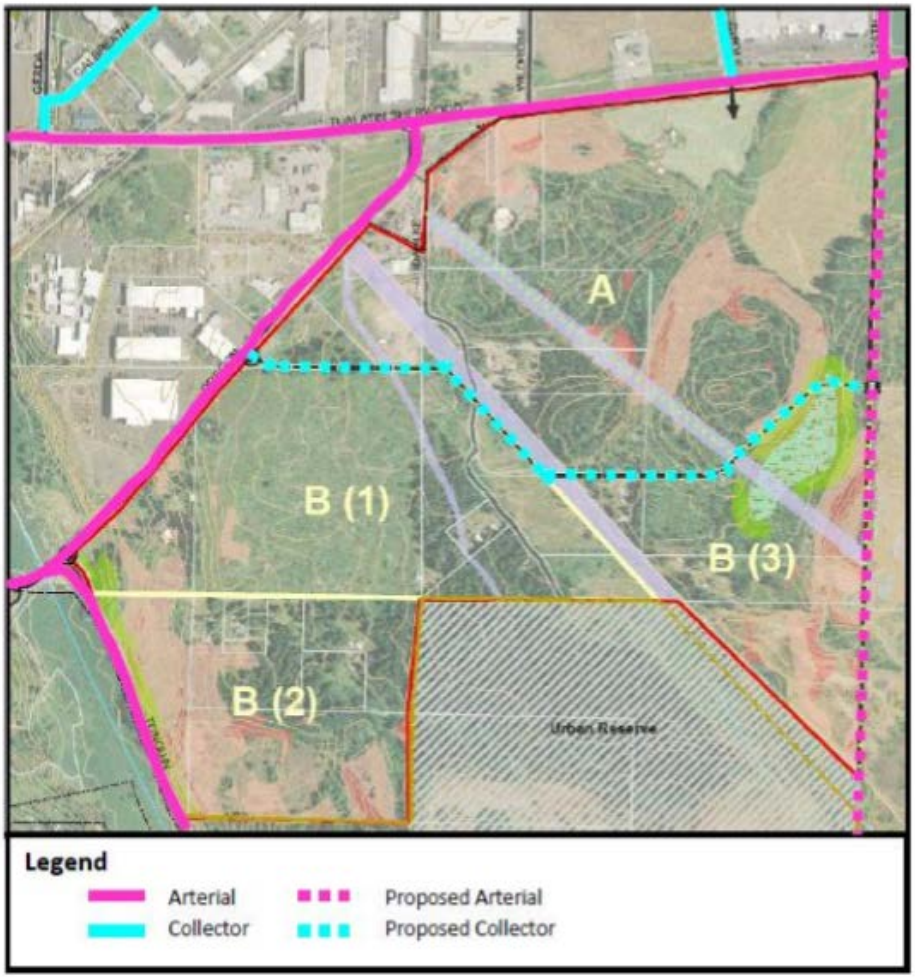
The southern boundary of the site is the future SW Blake Street which is classified as a Collector roadway based on Figure 17 of the Transporation System Plan.



Furthermore, the 2010 Tonquin Employment Area Concept Plan, Blake Street was addressed under Functional Class and states in part the following:

> *The proposed primary east-west connection is a collector roadway that would help to facilitate eastwest mobility through the Tonquin Employment Area and would serve as a parallel route to SW Tualatin-Sherwood Road by connecting to SW Blake Street in the Southwest Tualatin Concept Plan area. The exact location of the intersection of SW Blake Street and SW 124th will be determined through coordination between the cities of Sherwood and Tualatin when more indepth site analysis has been conducted. The existing and proposed functional classification of the roadways serving the future Tonquin Employment Area can be seen in Figure IV-3.*

Figure IV-3: Proposed Functional Classification



Since early 2020, starting with Pre-Application Conference PAC 18-18, the City has been working with the property owner, Willamette Water Supply System Commission, regarding the construction of SW Blake Street. The southern boundary of the site, county Partition Plat 2019-029, established the location and alignment of the future SW Blake Street. It is staff's understanding that the Willamette Water Supply System Commission will be constructing SW Blake Street in conjuction with the proposed Willamette Water Supply Treatment Plant, projected construction start of 2022 – 2025.

Design of SW Blake Street is currently being completed and will be constructed in the near future. Therfore, a 10-foot visual corridor is required along this frontage. No visual corridor landscaping is proposed along SW Blake Street frontage and the required visual corridor will be established in the near future, once SW Blake Street right-of-way is accepted by the Engineering Department. The Site Plan shows adequate space on private property to install these plantings.

FINDING: As discussed in the analysis above, this standard can be met as conditioned below.

RECOMMENDED CONDITION: A.15 Within 6 months of Engineering Acceptance of the SW Blake Street right-of-way, the applicant is required to install a 10 ft. wide landscaped visual corridor along the north side of the street in accordance with Section 16.142.040(B).

RECOMMENDED CONDITION: H.8 Prior to Acceptance of Public Improvements, the applicant shall bond 125% of the cost or provide cash assurance to the city for the future visual corridor plantings along SW Blake Street.

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. In no case shall trees be removed from the required visual corridor.

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).

FINDING: The preliminary landscape plans (Sheets L1.10 - L1.13, L1.17, and L1.21 of Exhibit A.1) identify multiple layers of trees, combined with shrubs and groundcover, providing a continuous visual and/or acoustical buffer between the arterial streets and the planned buildings and vehicle use area. A 15-foot-wide landscaped visual corridor is proposed abutting SW Tualatin-Sherwood Road and SW 124th Avenue. As previously discussed and conditioned, a 10-foot visual corridor along the north side of the future SW Blake Street will be required.

FINDING: As discussed in the analysis above, this standard can be met as conditioned below.

RECOMMENDED CONDITION: A.16 Maintenance of the required landscaped visual corridors along the south side of SW Tualatin-Sherwood Road, west side of SW 124th Avenue and north side of SW Blake Street are an ongoing responsibility of the developer and all future property owners.

16.142 Parks, Trees and Open Space
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 site has frontages along SW Tualatin-Sherwood Road and SW 124th Avenue. A proposed new local public street, SW Cipole Place, is also proposed. The preliminary plans identify installation of new street trees in these areas. Per the applicant's narrative, installation will occur either within new planter strips or behind the public sidewalk and within the front setback area.

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

RECOMMENDED CONDITION: E.32 Prior to Approval of Engineering Public Improvement plans, design for street trees consistent with the requirements of Section 16.142.060 or as approved by the City Engineer.

16.142 Parks, Trees and Open Space
16.142.070 Trees on Property Subject to Certain Land Use Applications

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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.

APPLICANT'S RESPONSE: The site has considerable tree coverage, as illustrated on Sheets C2.0 and C7.0-C7.6 in Attachment 6. The project surveyor and arborist identified the extents of the tree canopy and inventoried the majority of the trees. The submitted tree inventory and arborist report (Attachment 18) provide information on the location, species, size, canopy, and condition of existing trees located within the boundaries of the site, as well as trees located along the site's SW Tualatin-Sherwood Road and SW 124th Avenue frontages (Attachment 6). Some of the trees within the interior of the site were not individually inventoried, as they are located in areas where the buildings, parking areas, and truck courts are proposed so the trees will be removed to accommodate the proposed industrial development. The intent of this standard is met.

ANALYSIS: Staff concurs with the applicant's response.

FINDING: Based on the applicant's response and staff concurrence, these standards are met.

16.142.070 Trees on Property Subject to Certain Land Use Applications

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.

****

3. Required Tree Canopy - Non-Residential and Multi-Family Developments

Each net development site shall provide a variety of trees to achieve a minimum total tree canopy of 30 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 each tree. The expected mature canopy is counted for each tree even if there is an overlap of multiple tree canopies.

The canopy requirement can be achieved by retaining existing trees or planting new trees. Required landscaping 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 required canopy cover. A certified arborist or other qualified

professional shall provide an estimated tree canopy for all proposed trees to the planning department for review as a part of the land use review process.

	Residential (single family & two family developments)	Old Town & Infill developments	Commercial, Industrial, Institutional Public and Multi-family
Canopy Requirement	**40%**	**N/A**	**30%**
Counted Toward the Canopy Requirement			
Street trees included in canopy requirement	**Yes**	**N/A**	**No**
Landscaping requirements included in canopy requirement	**N/A**	**N/A**	**Yes**
Existing trees onsite	**Yes x2**	**N/A**	**Yes x2**
Planting new trees onsite	**Yes**	**N/A**	**Yes**
Mature Canopy in Square Feet Equation πr^2 or (3.14159*radius^2) (This is the calculation to measure the square footage of a circle. The Mature Canopy is given in diameter. In gardening and horticulture reference books, therefore to get the radius you must divide the diameter in half.			
Canopy Calculation Example: Pin Oak Mature canopy = 35' (3.14159* 17.5^2) = 962 square feet			

APPLICANT'S RESPONSE: As shown on Attachment 6, landscaping plans proposed for the T-S Corporate Park and portions of the site to be developed with warehouse, distribution, and light industrial uses will achieve a tree canopy coverage of 23 percent of the net site area through installation of 502 new deciduous and evergreen trees. These percentages are based on the calculated mature canopy of each selected tree species, as determined through the use of the equation stipulated above. These coverages comply with Section 16.142.070.D.3 and, by rule, will effectively mitigate the site's existing tree canopy. Furthermore, as evidenced in the arborist report (Attachment 18), the 505 existing trees being retained will provide a mature canopy of approximately 60.8 percent of the net site area. Combined, the existing and proposed trees will provide a canopy of 83.8 percent, which far exceeds the 30% requirement. This standard is met.
ANALYSIS: Staff concurs with the applicant's response above.

FINDING: Based on the discussion above and staff concurrence, this standard is met.

16.142.070 Trees on Property Subject to Certain Land Use Applications

G. Tree Protection During Development

The applicant shall prepare and submit a final Tree and Woodland Plan prior to issuance of any construction permits, illustrating how identified trees and woodlands will be retained, removed or protected as per the Notice of Decision. Such plan shall specify how trees and woodlands will be protected from damage or destruction by construction activities, including protective fencing, selective pruning and root treatments, excavation techniques, temporary drainage systems, and like methods. At a minimum, trees to be protected shall have the area within the drip line of the tree protected from grading, stockpiling, and all other construction related activity unless

specifically reviewed and recommended by a certified arborist or other qualified professional. Any work within the dripline of the tree shall be supervised by the project arborist or other qualified professional onsite during construction.

FINDING: The applicant provided a Tree Plan report by Teragan & Associates (Attachment 18 of Exhibit A.1) and Sensitivity Plans (Sheets C7.0 – C7.6) that provides an inventory of the existing trees on site and those planned to be removed. The report states that 508 of the assessed trees will be removed and 505 trees will be retained. The majority of the retained trees are located along SW Tualatin-Sherwood Road or within the wetland areas, Tract A and D.

FINDING: These standards are not met, but can be met as conditioned below.

RECOMMENDED CONDITION: D.4 Prior to issuance of a grading permit, a final tree preservation plans consistent with the requirements of Section 16.142.070.G. shall be submitted.

Chapter 16.144 - WETLAND, HABITAT AND NATURAL AREAS

16.144.010 - Generally

Unless otherwise permitted, residential, commercial, industrial, and institutional uses in the City shall comply with the following wetland, habitat and natural area standards if applicable to the site as identified on the City's Wetland Inventory, the Comprehensive Plan Natural Resource Inventory, the Regionally Significant Fish and Wildlife Habitat Area map adopted by Metro, and by reference into this Code and the Comprehensive Plan. Where the applicability of a standard overlaps, the more stringent regulation shall apply.

APPLICANT'S RESPONSE: The Comprehensive Plan's Natural Resources and Recreation Map does not include the subject site as the map pre-dates the inclusion of the site within the urban growth boundary or city limits. Three wetland areas, totaling approximately 3.66 acres, have been identified within the boundaries of the site and documented in the Wetland Delineation Report (Attachment 14) and the Natural Resource Assessment Report (Attachment 15). Per Metro's Regionally Significant Fish and Wildlife Habitat Area GIS data, Upland Class B habitat has been identified on the southern portion of the site (see Figure 2). However, based on Metro's Habitat Conservation Areas Map, the site property does not contain any land areas designated by Metro as Habitat Conservation Areas. See Figure 3.

Figure 2: Metro Regionally Significant Fish and Wildlife Habitat Area

Figure 3: Metro Habitat Conservation Areas

ANALYSIS: The applicant provided a Natural Resource Assessment prepared by Pacific Habitat Services (PHS), Attachment 15 of Exhibit A.1, that identifies and describes those significant resources located within the boundaries and within 50-feet of the site as described below.

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.

APPLICANT'S RESPONSE: Three wetlands have been identified within the boundaries of the site. Per the Pacific Habitat Services Natural Resource Assessment Report (Attachment 15), Wetland A, approximately 2.34 acres, is a broad seasonal swale that extends the northward to SW Tualatin-Sherwood Road in the northeastern portion of the site, while Wetland B is a small concave wetland on a gentle slope in the now fallow field of Wetland A. Slopes are generally quite gentle across the north end of the site but increase to the south. Wetland C is an approximate 1.29-acre depressional feature at the south end of the site that extends outside property boundaries with relatively steep slopes on the west and east sides. The northern edge is comparatively low in elevation, but topography rises several feet just to the north. In compliance with Clean Water Services Design and Construction Standards R&0 00-7 provisions, Pacific Habitat Services identified vegetated corridors (VCs) based on wetland size and the slopes adjacent to the sensitive areas, as summarized in the following table.

Summary of Vegetated Corridor Widths		
Sensitive Area	**VC Width**	**Justification**
Wetland A	50 feet	▪ >0.5 acres ▪ Slopes
Wetland B	25 feet	▪ ≤0.5 acres and isolated ▪ Slopes <25%
Wetland C	50 feet or greater	▪ >0.5 acres ▪ Slopes variable; > and 25%

No impacts or alterations are proposed to the wetlands on site. Approximately 10,699 SF of permanent VC encroachment will result from site development (Attachment 15, Figures 4-4C); to facilitate site development (e.g., roadway construction and grading). Individual encroachments are associated with Cipole Place, the site driveway to Building E, steep

bank slopes southwest of Building D, and a driveway behind (south of) Building C. The total area of permanent encroachment also includes 100 SF associated with each of three separate rip rap stilling basins related to the site's stormwater outfalls. As each is a minor encroachment associated with utility infrastructure, and not more than 100 SF in size, replacement mitigation is not necessary (per current CWS D&C Standards, Chapter 3, Section 3.05.5c and d). Temporary encroachments will be limited to a trio of stormwater outfall lines that lead to riprap stilling basins; one each to the west and east sides of Wetland A, just south of Tualatin-Sherwood Road, and one at the south end of Wetland A. The alignments of associated pipelines have been sited to facilitate proper drainage. The installation of these pipelines will require a combined area of temporary encroachment of 4,917 SF. The footprint of temporary encroachment is defined by a 20-foot wide construction corridor centered roughly along the proposed pipe alignments. Each of the three rip rap pads for the storm outfalls will require permanent encroachment of 100 SF, as described above.

VC encroachment of 10,699 SF for site development will be mitigated through the expansion of an equivalent area of VC east of Wetland A, north of Wetland B, and north of Wetland C (Attachment 15, Figures 4-4C). Though mitigation is not required for the 300 SF of rip rap stilling basins, mitigation will nonetheless be provided. In total, 35,654 SF of VC mitigation will be provided outside of the wetland and required VC. This includes a 1 to 1 replacement for proposed encroachments, as well as an additional 24,955 SF of mitigation; proposed as a water quality benefit to the project. VC expansion will occur within five individual areas. The largest is located east of Wetland A, with smaller areas west of Wetland A, north and south of stormwater Tract C. Two additional areas will expand existing VC north of Wetland C closer to the south end of the development footprint. Proposed expansions will widen existing VC by up to 85 feet. As enhancements will be required throughout the first 50 feet of existing VC, strengthening of the proposed mitigation and water quality benefit expansion areas will occur concurrently with other invasive species control and plant installation improvements. Pacific Habitat Services has submitted the Natural Resource Assessment report (Attachment 15) to Clean Water Services for its review. The applicant has revised the site design per Clean Water Services request before CWS would issue its service provider letter, enclosed as Attachment 19. With the concurrence of Clean Water Services, this standard is met.

FINDING: Staff concurs with the applicant's analysis above. This standard is met.

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.

ANALYSIS: As described in the Clean Water Services Service Provider Letter (20-000203, Exhibit E.2), the planned on-site improvements are subject to mitigation measures to protect water quality according to Clean Water Services standards.

c. A lesser setback complies with federal and state permits, or standards that will apply to state and federal permits, if required.

ANALYSIS: As described in the Service Provider letter from Clean Water Services (Exhibit E.2) Condition 3, authorization from the appropriate state and federal agencies is required.

1. **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.**

ANALYSIS: The Service Provider Letter from Clean Water Services (Exhibit E.2) outlines the planned encroachment areas and required mitigation.

16.144.020 - Standards

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:

ANALYSIS: The Tonquin Employment Area Plan, adopted in 2010, identified areas where natural resources are present. The applicant included a detailed Natural Resource Assessment prepared by PHS describing and delineating the significance and functional value of natural features on the site.

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.**

APPLICANT'S RESPONSE: The applicant is unaware of any endangered or threatened plant or animal species or critical habitat within the development site, and the site does not contain notable natural features as illustrated in the Community Development Plan, Part 2, Natural Resource and Recreation Plan. The site was recently annexed into the City of Sherwood from Washington County and was not accounted for within the Community Development Plan Natural Resource and Recreation Map (see Figure 2, above). Due to the existing conditions of the site a Wetland Delineation Report (Attachment 14) and Natural Resource Assessment (Attachment 15) were prepared as part of this application. The proposed five-building facility has been designed to

comply with applicable zoning standards and erosion and sedimentation control measures promulgated by the City, Clean Water Services, and the Oregon Department of Environmental Quality. The applicant proposes to minimize impact to the delineated wetlands by completely avoiding encroachments into the wetlands and by utilizing vegetated corridor and replanting mitigation as described in section 16.144.020.A and approved by Clean Water Services (Attachment 19). This standard is met.

FINDING: Staff concurs with the applicant's analysis above**.** Therefore, these standards are met.

16.144.020 - Standards

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.

APPLICANT'S RESPONSE: Riparian habitat or wetlands are not identified on-site per Metro's Regional Land Information GIS Map, the current documentation of Regionally Significant Fish and Wildlife Habitat information (see Figure 2, above). Riparian habitat exists approximately 750 feet south of the site, well beyond the identification thresholds listed above. However, identified wetlands were further delineated by Pacific Habitat Services in accordance with the methods currently accepted by the Oregon Division of State Lands and the US Army Corps of Engineers (Attachment 14). Based on Metro's Habitat Conservation Areas Map (Figure 3, above), the site property does not contain any land areas designated by Metro as Habitat Conservation Areas. This standard is met.

FINDING: Staff concurs with the applicant's analysis. Based on the discussion above these criteria are met.

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.**

APPLICANT'S RESPONSE: Figure 4 below illustrates the documented vegetation types throughout the development area, per Metro's GIS Vegetation data. Per the Pacific Habitat Services Natural Resource Assessment (Attachment 15), a summary of plant communities adjacent to the associated delineated wetlands has been prepared.

Figure 4: Metro Vegetative Cover

Summary of Plant Communities				
Corridor Conditions		Plant Communities		
		A	B	C
Good	>80% cover of native plants, and >50% tree canopy		82% native plants 83% tree canopy	52% tree canopy
Marginal	50% - 80% cover of native plants, and 26-50% tree canopy			
Degraded	<50% cover of native plants, and ≤ 25% tree canopy	3% native plants 6% tree canopy		27% native plants

The condition of VC is defined by the percentages of native species and canopy cover. Plant Community A is in degraded corridor condition, as the community lacks adequate tree canopy and is overwhelmingly dominated by non-native herbaceous species. Plant Community B has both a good native tree canopy and a high overall coverage of native species. As such, this community is in good corridor condition. Plant Community C is comprised of only 27 percent native species but has a variable tree canopy. As a result of this variability, the tree canopy is 53 percent, just enough to fall within the lower range of good condition. The variability of tree canopy relative to the lower percent cover of plants justifies a corridor condition of marginal for Community C. This standard has been met.

FINDING: Staff concurs with the applicant's analysis above. Based on the discussion above these criteria are met.

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

APPLICANT'S RESPONSE: Per Table One of the Pacific Habitat Natural Resource Assessment (Attachment 15) and the applicant's response to Section 16.144.020, slopes upward from the delineated wetlands have been documented. Slopes adjoining Wetland C are steeper, but generally still less than 25 percent. There is one narrow point where slopes exceed 25 percent over the first 50 feet but are less than over the next 25 feet. At this location, a break in slope has been identified and the full setback of 35 feet from the break has been identified in accordance with Clean Water Services Vegetated Corridor methodology.

FINDING: Staff concurs with the applicant's analysis. Based on the discussion above this criterion is met.

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

Distance in feet from Water Feature	Development/Vegetation Status			
	Developed areas not providing vegetative cover	Low structure vegetation or open soils	Woody vegetation (shrub and scatted forest canopy)	Forest Canopy (closed to open forest canopy)
Surface Streams				
0-50	Class II	Class I	Class I	Class I
50-100		Class II	Class I	Class I
100-150		Class II if slope >25%	Class II if slope >25%	Class II
150-200		Class II if slope >25%	Class II if slope >25%	Class II if slope >25%
Wetlands (Wetland feature itself is a Class I Riparian Area)				
0-100			Class I	Class I
100-150				Class II
Flood Areas (undeveloped portion of a flood area is a Class I Riparian area)				
0-100			Class II	Class II

APPLICANT'S RESPONSE: The site does not contain and is not adjacent to surface streams or flood areas, but does contain wetlands as identified in Attachments 14 and 15. Per the table, the wetlands themselves are Class I Riparian Areas. Based on the wetland locations and the vegetated Metro Vegetative Cover data above, the scrub and forested areas within the first 100 feet of all three wetland boundaries would be classified as Class I Riparian Habitat. Areas within 100-150 feet of Wetlands A and B would not qualify as Riparian Habitat, and the forested areas (but not scrub areas) within 100-150 feet of Wetland C would qualify as Class II Riparian Habitat. However, based on Metro's Habitat Conservation Areas Map (Figure 3, above), the site property does not contain any land areas designated by Metro as Habitat Conservation Areas.

FINDING: Staff concurs with the applicant's analysis. Based on the discussion above this criterion is met.

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.**

APPLICANT'S RESPONSE: As identified on Metro's Regional Land Information System data, Class B upland habitat exists on the southern portion of the site, upslope of the former agricultural fields. As described in the Pacific Habitat Services Wetland Delineation Report (Attachment 14) and Natural Resource Assessment (Attachment 15) the inventoried upland habitat encompasses a relatively young to mature overstory of Douglas fir, bigleaf maple, and Oregon White Oak. The existing conditions plan (Attachment 6, Sheet C2.0) illustrate the location of the tree canopy on-

site and identify individual trees which have been assessed by the project arborist (Attachment 18). This standard is met.

FINDING: Staff concurs with the applicant's analysis. Based on the discussion above this criterion is met.

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.

ANALYSIS: The on-site wetlands are regulated by the Oregon Department of State Lands and the U.S. Army Corps of Engineers, and the vegetated corridor is regulated by Clean Water Services. Per the applicant's narrative, the applicant proposes to comply with applicable standards and is seeking flexibility on the parking standard per standard B. 4 below.

FINDING: As discussed above, this standard is met.

B. Standards modified

1. **Lot size — Not withstanding 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.**

ANALYSIS: The applicant is not proposing any lot size reduction. This criterion does not apply.

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.

ANALYSIS: The site is not located within a residential zone. These criteria do not apply.

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.**

ANALYSIS: The applicant is seeking a 20 percent reduction to the required minimum parking due to the presence of wetlands per Section 16.94.020.B.6. The wetlands identified on-site have not been designated as regionally significant fish and wildlife habitat areas. Therefore, this criterion does not apply.

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.**

ANALYSIS: The applicant is not proposing the option of relief from the landscaping standards per the provisions of Section 16.92.030.B.6. Therefore, this criterion does not apply.

GENERAL WETLAND STAFF ANALYSIS: The proposed development has received a Wetland Delineation/Determination Concurrence Letter issued by the State of Oregon Department of State Lands (DSL), WD# 2020-0015 dated March 11, 2020, included in **Exhibit F.2**.

DLS also provided a Wetland Land Use Notice Response (WN2020-0259) dated April 8, 2020 (**Exhibit F.1**) that included two requirements; 1) That the proposed activity will impact wetlands and required a State Permit, and 2) a Federal permit may be required by US Army Corps of Engineers (USACE).

No permit or joint permits from USACE, DSL, NMSF, etc. have been submitted with this application. If needed, all necessary permit(s) from outside jurisdictional agencies will need to be obtained and submitted before an Engineering Compliance Agreement is issued for this project.

City of Sherwood Engineering Departments has determined that Open Space Tracts A and D would be owned and maintained by the City. The applicant is not proposing any trail system within these Open Space tracts. If and when trails are proposed, property owner(s) will be responsible for the maintenance of any trails constructed within those spaces.

Furthermore, Tracts B, C, and E (labeled as ponds) are all water quality facility tracts that will also be owned and maintained by the City.

FINDINGS: Based on the above discussion, the standards can be met as conditioned below.

RECOMMENDED CONDITION: E.33 Prior to Final Approval of Engineering Plans the applicant shall confirm and if necessary provide State of Oregon Division of State Lands (DSL) Permit as required by WN# 2020-259, Wetland Delineation/Determination Concurrence Letter (WD# 2020-00015), and United States Army Corp of Engineers (USACE) permit.

RECOMMENDED CONDITION: H.9 Prior to Acceptance of Public Improvements, the applicant shall have complied with all the requirements and conditions of permit(s) issued by City, CWS, DSL, USACE, and/or NMFS, as applicable.

RECOMMENDED CONDITION: E.34 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for vegetative corridor enhancements in compliance with the conditions imposed by Clean Water Services meeting the approval of the Sherwood Engineering Department.

RECOMMENDED CONDITION: E.35 Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for each natural resource area to be in a separate tract of land to be deeded or dedicated to the City of Sherwood upon plat recording.

RECOMMENDED CONDITION: A.17 Tracts A, B, C, D, and E shall be owned and maintained by the City of Sherwood.

RECOMMENDED CONDITION: H.11 Prior to Acceptance of Constructed Public Improvements, Tracts A, B, C, D, and E shall be dedicated or deeded to the City of Sherwood.

16.146. Noise

16.146.020 - Noise Sensitive Uses

When proposed commercial and industrial uses do not adjoin land exclusively in commercial or industrial zones, or when said uses adjoin special care, institutional, or parks and recreational facilities, or other uses that are, in the City's determination, sensitive to noise impacts, then:

A. The applicant shall submit to the City a noise level study prepared by a professional acoustical engineer. Said study shall define noise levels at the boundaries of the site in all directions.

B. The applicant shall show that the use will not exceed the noise standards contained in OAR 340-35-035, based on accepted noise modeling procedures and worst case assumptions when all noise sources on the site are operating simultaneously.

C. If the use exceeds applicable noise standards as per subsection B of this Section, then the applicant shall submit a noise mitigation program prepared by a professional acoustical engineer that shows how and when the use will come into compliance with said standards.

FINDING: Per the applicant's narrative, the applicant is aware of the statewide noise standards in OAR 340-35-035 and fully intends to comply as required by law. While specific users are not known at this time, the proposed buildings are likely to emit sounds at similar levels to other light industrial users in the area. The concrete construction type will assist in attenuation of indoor sounds, and no outdoor work activities other than vehicle circulation are proposed.

Adjoining zones are industrial to the north, east, and south, and Washington County Future Development, 20-acre (FD-20) to the south and west (which will be zoned Employment Industrial upon annexation to the City of Sherwood). The site does not abut special care, institutional, parks, and recreational facilities, or other sensitive users. Furthermore, while specific users are not known at this time, the proposed buildings are likely to emit sounds at similar levels to other light industrial users in the area. These standards are met.

16.148 Vibrations

16.148.010 - Vibrations

All otherwise permitted commercial, industrial, and institutional uses shall not cause discernible vibrations that exceed a peak of 0.002 gravity at the property line of the originating use, except for vibrations that last five (5) minutes or less per day, based on a certification by a professional engineer.

FINDING: Per the applicant's narrative, while specific users are not known at this time, the proposed industrial uses are not anticipated to generate detectable vibration at the property line based on light industrial, manufacturing, and warehouse/distribution uses typical of the Tualatin-Sherwood Road corridor. This standard is met.

16.150 Air Quality

16.150.010 – Air Quality

All otherwise permitted commercial, industrial, and institutional uses shall comply with applicable State air quality rules and statutes:

A. All such uses shall comply with standards for dust emissions as per OAR 340-21-060.
B. Incinerators, if otherwise permitted by Section 16.140.020, shall comply with the standards set forth in OAR 340-25-850 through 340-25-905.
C. Uses for which a State Air Contaminant Discharge Permit is required as per OAR 340-20-140 through 340-20-160 shall comply with the standards of OAR 340-220 through 340-20-276.

FINDING: Per the applicant's narrative, while specific users are not known at this time, the applicant intends to comply with applicable air quality standards as required by law. No incinerators are proposed. This standard is met.

16.152 Odors

16.152.010 - Odors

All otherwise permitted commercial, industrial, and institutional uses shall incorporate the best practicable design and operating measures so that odors produced by the use are not discernible at any point beyond the boundaries of the development site.

FINDING: Per the applicant's narrative, while specific users are not known at this time, it is not anticipated that the proposed light industrial operations will produce noxious odors discernable at the property line since all operations would occur indoors and any odor-producing activities would be mitigated by appropriate air quality measures. Each facility will have a trash enclosure to contain any odors from waste. This standard is met.

16.154 Heat and Glare

16.154.010 – Heat and Glare

Except for exterior lighting, all otherwise permitted commercial, industrial, and institutional uses shall conduct any operations producing excessive heat or glare entirely within enclosed buildings. Exterior lighting shall be directed away from adjoining properties, and the use shall not cause such glare or lights to shine off site in excess of one-half (0.5) foot candle when adjoining properties are zoned for residential uses.

FINDING: Per the applicant's narrative, all operations will be completed indoors and thus will not create heat or visible glare from high-temperature processes. No abutting properties are zoned for residential use. Photometric Plans (Sheets IL1.0 – IL2.0 of Exhibit A.1) has been submitted showing compliance with this standard. This standard is met.

Chapter 16.156 Energy Conservation

16.156.020 Standards

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.

Applicant's Response: All buildings are of the suitable size to accommodate solar energy systems, should the owner or tenant choose to implement such as system. Adequate clearance is provided among buildings so that buildings will not cast shade on adjoining structures. Buildings A through D are oriented on an east-west axis which would allow for south-facing solar panels, while Building E is oriented on a north-south axis which would allow for either south- or west-facing solar panels. This standard is met.

ANALYSIS: Staff concurs with the applicant's statement above.

FINDING: Based on the applicant's response and staff concurrence, this criterion is met.

STAFF RECOMMENDATION

Based upon the 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 T-S Corporate Park application, LU 2020-001 SP SUB CUP VAR, subject to the following conditions:**

IX. RECOMMENDATION

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 plans submitted by Mackenzie, date stamped April 3, 2020, 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 development 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 development, as required by the engineering compliance agreement.
4. **The approval is valid for a period of two (2) years from the date of the signed engineering compliance agreement. If the applicant proceeds with the subdivision, the**

final plat 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.
8. Sherwood Broadband utilities shall be installed as per requirements set forth in City Ordinance 2005-017 and Resolution 2005-074.
9. All fences within the subdivision shall meet the requirements in Sherwood Zoning and Community Development Code Chapter 16.58.020.
10. The developer shall coordinate the location of mailboxes with the Post Office.
11. Restrict and maintain on-site landscaping, utilities, and any other obstructions in the sight distance triangles to provide adequate sight distance at access locations.
12. The applicant shall adhere to all the requirements and conditions listed in the Service Provider Letter issued by CWS (File No. 20-000203).
13. All new utilities shall be placed underground unless covered by exceptions noted under Section 16.1183.040, and as approved by the City Engineer.
14. Prior to Building Permit application submittal, obtain address(es) for the site or parcels.
15. Within 6 months of Engineering Acceptance of the SW Blake Street right-of-way, the applicant is required to install a 10 ft. wide landscaped visual corridor along the north side of the street in accordance with Section 16.142.040(B).
16. Maintenance of the required landscaped visual corridors along the south side of SW Tualatin-Sherwood Road, west side of SW 124th Avenue and north side of SW Blake Street are an ongoing responsibility of the developer and all future property owners.
17. Tracts A, B, C, D and E shall be owned and maintained by the City of Sherwood.

B. **<u>Prior to Approval of Final Site Plan Approval and/or Final Plat Approval</u>**

1. Prior to Final Site Plan Approval, Buildings A, B, D, and E shall meet the 15% window glazing standard of Section 16.90.020.D.7.a.1 for elevations facing and visible from SW Tualaltin-Sherwood Road and SW 124th Avenue.
2. Prior to Final Site Plan approval, a revised site plan must be submitted showing the on-site parking space stalls meeting the standards of Section 16.94.020.
3. If the applicant proceeds with a subdivision, prior to Final Plat approval, submit a copy of the covenants, conditions and restrictions (CC&Rs) for the project including reciprocal access easements and maintenance.
4. Prior to Final Site Plan approval, provide a revised solid waste and recycling storage receptacles plan meeting Pride Disposal requirement.

5. Prior to Final Site Plan or Final Plat Approval, submit revised plans demonstrating compliance with the Fire Marshall's letter dated April 8, 2020.

C. Prior to Issuance of City of Sherwood Engineering Compliance Agreement

1. Prior to Issuance of an Engineering Compliance Agreement, items listed in Section II of the Washington County letter dated May 29, 2020 shall be either shown on the approved engineering plans, or implemented as part of the construction process.
2. Prior to Issuance of Engineering Compliance Agreement, applicant shall show proof of payment to Washington County of a proportionate share fee in-lieu-of construction cost for frontage improvements on SW Tualatin-Sherwood Road (only the portion behind the curb), and the final traffic signal control system at the intersection of SW Tualatin-Sherwood Road & SW Cipole Road/SW Cipole Place. Applicant shall coordinate valuation of fee in-lieu payment directly with Washington County, and shall provide acceptance letter from Washington County to City staff for its records.
3. Prior to Issuance of Engineering Compliance Agreement, applicant shall provide payment to the City of the proportional share fee in-lieu-of construction for the intersection improvements for the Tonquin Road and Oregon Street intersection.

D. Prior to Grading Permit

1. Prior to Grading Permit, the subject development shall submit a phased mass grading plan/erosion control plan meeting the approval of the Sherwood Engineering Department.
2. Prior to Grading Permit, the subject development shall obtain a DEQ NPDES 1200-C permit.
3. Prior to Issuance of a Site Grading Permit (if blasting is desired), the applicant shall obtain a Blasting Permit from TVF&R and include it with any submittal to obtain a City issued Blasting Permit. The City Blasting Permit only covers the blasting process and does not replace the need to obtain a site grading permit.
4. Prior to issuance of a grading permit, a final tree preservation plans consistent with the requirements of Section 16.142.070.G. shall be submitted.
5. Prior to Issuance of Site Grading Permit, the applicant shall comply with the Phase 1 requirements identified in the May 29, 2020 letter issued by WACO. A copy of the approved WACO Facility Permit (Phase 1) shall be included as part of the applicants submittal package for a City issued Grading Permit.

E. Prior to Approval of Engineering Public Improvement Plans

1. Prior to Approval of the Engineering Public Improvement Plans, a Storm Water Connection Permit Authorization from Clean Water Services shall be obtained.
2. Prior to Approval of the Engineering Public Improvement Plans or Issuance of Building Permits, an Engineering Compliance Agreement shall be obtained from the City of Sherwood Engineering Department.
3. Prior to Approval of Engineering Public Improvement Plans, the applicant shall comply with the Phase 2 and Phase 3 requirements identified in the May 29, 2020 letter issued by Washington County (Exhibit C.2). A copy of the approved Washington County Facility Permit

(Phases 2 and Phase 3) shall be included as part of the applicants submittal package for review and approval in the Approval of Engineering Public Improvement Plans process.

4. Prior to Approval of Engineering Public Improvement Plans, construction plans shall include frontage improvements along SW 124th Avenue consistent with City standards as follows:
   a) An 8-foot wide concrete sidewalk
   b) A 5-foot wide planter strip, measured between street side face of curb and street side edge of sidewalk.
   c) Street trees, with approved root barrier
   d) Planter strip ground cover plantings
   e) Planter strip irrigation system, including controller, electronically controlled valves, piping and sprinkler heads
   f) Street lighting system

   These frontage improvements shall commence at the intersection of SW Tualatin-Sherwood Road and end at the south property line of the applicant's property.

5. Prior to Approval of Engineering Public Improvement Plans, the construction plans shall include the addition of an interim traffic control signal system on the northbound leg of the SW Cipole Road & Tualatin-Sherwood Road intersection. These traffic control signal system plans shall receive approval from Washington County prior to approval of the overall public improvements construction plan set by City engineering.

6. Prior to Approval of Engineering Public Improvement Plans, the applicant shall submit a separate design modification request form for any additional non-conforming public infrastructure design element(s) that were not submitted under the Land Use process, to the City Engineer for review and approval.

7. Prior to Approval of Engineering Public Improvement Plans, the applicant shall submit a turning movement analysis for the cul-de-sac, which shows the turn movements for the largest expected semi-truck traffic to use the facility.

8. Prior to Approval of Engineering Public Improvement Plans, engineering plans shall show a pavement section conforming to the City standard for a collector road, or as recommended by a geotechnical pavement design based on local site soils conditions which shall be submitted to the City as part of the plan review process. The design life of the geotechnical pavement design shall be 25-years.

9. Prior to Approval of the Engineering Public Improvement Plans, a photometric analysis shall be performed that encompasses the entire length of the SW Cipole Place extension, including the interim intersection with SW Tualatin-Sherwood Road.

10. Prior to Approval of Engineering Public Improvement Plans, the street lighting plans for the SW Cipole Place extension shall show PGE Option "B" Cobra Head street lighting systems.

11. Prior to Approval of Engineering Public Improvement Plans, the applicant shall record any slopes easements necessary to support the SW Blake Street road section/alignment. Slope easements shall be based on a 2 horizontal to 1 vertical finish slope grade.

12. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to extend the public sanitary sewer within SW Tualatin-Sherwood Road from SW Oregon Street to SW Cipole Road meeting the approval of the Sherwood Engineering Department.

13. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to extend an appropriately sized public sanitary sewer within SW Cipole Place and through the subject property from SW Tualatin-Sherwood Road to the southern property line of the subject property accounting for the needs of the property south of the subject property meeting the approval of the Sherwood Engineering Department.

14. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for any public sanitary sewer beneath a retaining wall to be installed within a sleeve meeting the approval of the Sherwood Engineering Department.

15. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to provide public sanitary sewer to all lots of the subject development meeting the approval of the Sherwood Engineering Department.

16. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to connect a new 16-inch diameter public water line to the 24-inch diameter public water line within SW Tualatin-Sherwood Road along with additional tie in points and valve alterations as required and extend the new 16-inch diameter public water line through SW Cipole Place and through the subject property to the southern property line of the subject property meeting the approval of the Sherwood Engineering Department.

17. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for any public water line beneath a retaining wall to be installed within a sleeve meeting the approval of the Sherwood Engineering Department.

18. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to install a 12-inch diameter public water line from the 24-inch diameter public water line at the SW Tualatin-Sherwood Road/SW Cipole Road within SW Tualatin-Sherwood Road eastward to the SW Tualatin-Sherwood Road/SW 124th Avenue intersection and within SW 124th Avenue to the southern property line of the subject development meeting the approval of the Sherwood Engineering Department.

19. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to provide water service to supply domestic, irrigation and fire water (if required) to all lots of the subject development at a location meeting the approval of the Sherwood Engineering Department.

20. Prior to Approval of the Engineering Public Improvement Plans, water flows calculations (domestic, irrigation and fire) shall be provided by the developer.

21. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for the installation of Reduced Pressure Backflow Assemblies meeting Sherwood Engineering Department standards.

22. Prior to Approval of the Engineering Public Improvement Plans, if on-site fire protection is to be installed, the proposed development shall design for the installation of backflow protection meeting Sherwood Engineering Department standards.

23. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to provide storm sewer for SW Cipole Place meeting the approval of the Sherwood Engineering Department.

24. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to extend an appropriately sized public storm sewer from the eastern wetland through the subject property to the southern property line of the subject property accounting for the needs of the property south of the subject property meeting the approval of the Sherwood Engineering Department.

25. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for any public storm sewer beneath a retaining wall to be installed within a sleeve meeting the approval of the Sherwood Engineering Department.

26. Prior to Approval of the Engineering Public Improvement Plans, a storm drainage report in compliance with Clean Water Service standards shall be submitted meeting the approval of the Sherwood Engineering Department.

27. Prior to Approval of the Engineering Public Improvement Plans, if the final storm drainage report indicates any downstream deficiencies, then the subject development shall either correct the downstream deficiencies or provide detention meeting the approval of the Sherwood Engineering Department.

28. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to supply storm sewer service to all lots of the subject development meeting the approval of the Sherwood Engineering Department.

29. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design to provide storm water quality treatment and hydro-modification in compliance with Clean Water Services' standards meeting the approval of the Sherwood Engineering Department for all new impervious area constructed/modified by the subject development including any required improvements within Washington County right-of-way.

30. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for each water quality treatment/hydro-modification facility to be in a separate tract of land to be dedicated to the City of Sherwood upon plat recording.

31. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for Sherwood Broadband conduits and vaults along the subject property frontage of SW Tualatin-Sherwood Road, SW 124th Avenue and along SW Cipole Place in areas where a PUE is dedicated meeting the approval of the Sherwood Engineering Department unless otherwise approved for a payment-in-lieu.

32. Prior to Approval of Engineering Public Improvement plans, design for street trees consistent with the requirements of Section 16.142.060 or as approved by the City Engineer.

33. Prior to Final Approval of Engineering Plans the applicant shall confirm and if necessary provide State of Oregon Division of State Lands (DSL) Permit as required by WN# 2020-259, Wetland Delineation/Determination Concurrence Letter (WD# 2020-00015), and United States Army Corp of Engineers (USACE) permit.

34. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for vegetative corridor enhancements in compliance with the conditions imposed by Clean Water Services meeting the approval of the Sherwood Engineering Department.

35. Prior to Approval of the Engineering Public Improvement Plans, the proposed development shall design for each natural resource area to be in a separate tract of land to be deeded or dedicated to the City of Sherwood upon plat recording.

F. Prior to Issuance of Building Permits

1. Prior to Issuance of Building Permit for each structure, the applicant shall provide documentation showing how off-street parking standards of Section 16.94.020.A are met.

2. Prior to Issuance of Building Permits, location and design of the proposed interior bicycle parking spaces shall meet Section 16.94.020.C.2.a – Bicycle Parking Facilities.

3. Prior to Issuance of a Building Permit, the applicant shall submit construction documents that provide additional information on the proposed plantings and maintenance of the plants to ensure that the landscaping will be appropriately maintained. The construction plans shall include specifications for the adequate preparation of the soils.

G. Prior to Issuing a Plumbing Permit

1. Prior to Issuance of a Plumbing Permit, the proposed development shall design the private sanitary sewer to be in compliance with the current Oregon Plumbing Specialty Code.
2. Prior to Issuance of a Plumbing Permit, the proposed development shall design for private water lines to be in compliance with the current Oregon Plumbing Specialty Code.
3. Prior to Issuance of a Plumbing Permit, the proposed development shall design for private storm water runoff within the subject property to be collected and conveyed in accordance with the current Oregon Plumbing Specialty Code.

H. Prior to Acceptance of Constructed Public Improvements

1. Prior to Acceptance of Public Improvements, the proposed development shall set all monumentation and if applicable record the subdivision plat with the Washington County Surveyor's Office.

2. Prior to Final Acceptance of Constructed Public Improvements, applicant shall record an 8-foot wide public utility easement (PUE) along all public street frontages, land shall be located adjacent to and outside the public street right-of-way.

3. Prior to Acceptance of Constructed Public Improvements, the applicant shall record an 8-foot wide PUE along the north side of the SW Blake Road alignment that lays within the subject site.

4. Prior Acceptance of Constructed Public Improvements, applicant shall provide a two (2) year maintenance warranty for deficient workmanship and/or materials associated with the public improvements.

5. Prior to Final Acceptance of the Constructed Public Improvements, any public sanitary sewer facilities located on private property shall have a recorded public sanitary sewer easement encompassing the related public sanitary sewer improvements meeting the approval of the Sherwood Engineering Department.

6. Prior to Final Acceptance of the Constructed Public Improvements, any public water facilities located on private property shall have a recorded public water line easement encompassing the related public water improvements meeting Sherwood Engineering standards.

7. Prior to Final Acceptance of the Constructed Public Improvements, any public storm sewer located on private property shall have a recorded public storm sewer easement encompassing the related public storm sewer improvements meeting Sherwood Engineering standards.

8. Prior to Acceptance of Public Improvements, the applicant shall bond 125% of the cost or provide cash assurance to the city for the future visual corridor plantings along SW Blake Street.

9. Prior to Acceptance of Public Improvements, the applicant shall have complied with all the requirements and conditions of permit(s) issued by City, CWS, DSL, USACE, and/or NMFS, as applicable.

10. Prior to Final Acceptance of the Constructed Public Improvement Plans, the applicant shall have dedicated the necessary right-of-way to the City of Sherwood for the construction of SW Cipole Place, a public local road.

11. Prior to Acceptance of Constructed Public Improvements, Tracts A, B, C, D, and E shall be dedicated or deeded to the City of Sherwood.

12. Prior to Acceptance of Constructed Public Improvements, the applicant shall have dedicated right-of-way along Tualatin-Sherwood Road in conformance with Item IV.A.2 of the Washington County letter dated May 29, 2020. Dedicate additional right-of-way to provide 76-feet of right-of-way from the centerline of SW Tualatin-Sherwood Road, including adequate corner radius at the intersection with SW 124th Avenue and SW Cipole Place. The right-of-way shall transition to 53-feet from the centerline to accommodate a 5-lane arterial configuration per WACO's MSTIP construction plans.

13. Prior to Acceptance of Constructed Public Improvements, the applicant shall have dedicated additional right-of-way along SW 124th Avenue in conformance with Item IV.A.1 of the Washington County letter dated May 29, 2020. Dedicate additional right-of-way to provide 65-feet of right-of-way from the centerline of SW 124th Avenue, including adequate corner radius at the intersection with SW Tualatin-Sherwood Road and SW Blake Street. The right-of-way shall transition to 53-feet from the centerline to accommodate a 5-lane arterial configuration per Washington County's MSTIP construction plans for SW 124th Avenue.

I. Prior to Occupancy of Structures

1. Prior to Final Occupancy, solid waste and recycling storage receptacles must be constructed to Pride Disposal standard.

2. Prior to each Building Occupancy, the applicant shall provide documentation showing how off-street parking standards of Section 16.94.010.E.3.a is met.

3. Prior to Occupancy of any building, the road improvements required by Washington County, Exhibit C.2, shall be completed and approved by Washington County.

4. Prior to Ocuppany of any building, the road improvements required by City of Sherwood Engineering, Exhibit B.2, shall be completed and approved by City of Sherwood Engineering.

X. Exhibits

A.1 Applicant's submittal with narrative and supporting documents dated April 3, 2020
A.2 Applicant's submittal dated May 29, 2020
B.1 Engineering comments dated April 27, 2020
B.2 Engineering amended comments dated May 29, 2020
B.3. Engineering Variance comments dated April 15, 2020
C.1 Washington County LUT comments dated April 24, 2020
C.2 Washington County LUT amended comments dated May 29, 2020
D. Tualatin Valley Fire & Rescue comments dated April 8, 2020
E.1 Clean Water Services comments dated May 1, 2020
E.2 CWS Service Provider Letter (CWS 20-000203) dated April 13, 2020
F.1 Department of State Lands, Land Use Notice Response dated April 8, 2020
F.2. Department of State Lands, Wetland Delineation No. 2020-0015 dated March 11, 2020
G. Pride Disposal comments dated May 15, 2020
H. Portland General Electric comments dated April 6, 2020
I. Bonneville Power Administration comments dated April 7, 2020
J. ODOT Region 1 comments dated April 8, 2020
K. ODOT Outdoor Advertising Signs comments dated April 7, 2020
L. Police Department comments dated April 6, 2020

Site plan approvals are void after two (2) years unless construction on the site has begun, as determined by the City, per Section 16.90.020.

The preliminary subdivision approval is valid for a period of two (2) years from the date of the decision, per Section 16.120.050.

Unless approved under Section 16.82.020.A.2 for a larger development to include future tenants of such development, authorization of a conditional use shall be void after two (2) years or such lesser time as the approval may specify unless substantial construction, in the City's determination, has taken place.