



**CITY ENGINEER'S REVIEW FINDINGS AND DECISION
JAE EXPANSION (AR 19-0007)**

December 18, 2019

Case #:	AR 19-0007
Project:	JAE Expansion
Location:	11555 SW Leveton Road; Tax ID: 2S122BA, Lots: 00200 & 00100
Applicant:	Tara Lund, CIDA, Inc.
Owner:	JAE Oregon

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I. APPLICABLE CRITERIA

Tualatin Municipal Code (TMC)
Title 03: Utilities and Water Quality

Tualatin Development Code (TDC)
Chapter 74: Public Improvement Requirements

II. CONDITIONS OF APPROVAL

Based on the Findings and Conclusions presented, AR19-0007 is **approved** subject to the following conditions:

PRIOR TO EROSION CONTROL, PUBLIC WORKS, AND WATER QUALITY PERMIT ISSUANCE:

- PFR-1 The applicant must submit final erosion control plans in accordance with code sections TMC 3-5-050 and -060 and TDC 74.650:
- For a City of Tualatin erosion control permit.
 - For a 1200CN NPDES erosion control permit.
 - Minimize the impact of stormwater from the development to adjacent properties.
- PFR-2 The applicant must submit final stormwater plans and calculations that:
- Are in accordance with TMC 3-5-200 to -430, TDC 74.650, and Clean Water Services Design and Construction Standards Chapter 4 Runoff Treatment and Control.
 - Include stormwater treatment and a minimum 25-year detention or greater per hydromodification evaluation.
 - Meet phosphorous removal and design storm requirements.
 - Are certified by an Oregon registered, professional engineer.
 - Include financial assurance.
 - Include a recorded private stormwater facility agreement identifying the responsible party of impervious areas on both lots for long-term compliance with the operation and maintenance plan.
 - Demonstrate compliance with the submitted Clean Water Services Service Provider Letter conditions to obtain a Stormwater Connection Permit Authorization Letter.
- PFR-3 The applicant must submit final public works plans that show the existing public sidewalks within SW Leveton Drive right-of-way meeting ADA standards or propose reconstruction that includes the private access ramps to meet Public Works Construction Code.
- PFR-4 The applicant must submit PDFs of final site and permit plans.

PRIOR TO BUILDING PERMIT ISSUANCE:

- PFR-5 The applicant must obtain Erosion Control, Public Works, and Water Quality Permits from the City of Tualatin.
- PFR-6 The applicant must financially secure all public improvements in accordance with PWCC 102.14.00.

PRIOR TO CERTIFICATE OF OCCUPANCY ISSUANCE:

- PFR-7 The applicant must complete all the private stormwater and public improvements as shown the approved plans. All improvements must also be accepted by the City in accordance with TDC 74.420.
- PFR-8 The applicant must submit paper and electronic PDF asbuilts of the Engineering permits.

III. ENGINEERING FINDINGS

EROSION CONTROL

TMC 3-5-050 Erosion Control Permits.

- (1) Except as noted in subsection (3) of this section, no person shall cause any change to improved or unimproved real property that causes, will cause, or is likely to cause a temporary or permanent increase in the rate of soil erosion from the site without first obtaining a permit from the City and paying prescribed fees. Such changes to land shall include, but are not limited to, grading, excavating, filling, working of land, or stripping of soil or vegetation from land.**
- (2) No construction, land development, grading, excavation, fill, or the clearing of land is allowed until the City has issued an Erosion Control Permit covering such work, or the City has determined that no such permit is required. No public agency or body shall undertake any public works project without first obtaining from the City an Erosion Control Permit covering such work, or receiving a determination from the City that none is required.**

TMC 3-5-060 Permit Process.

- (1) Applications for an Erosion Control Permit. Application for an Erosion Control Permit shall include an Erosion Control Plan which contains methods and interim facilities to be constructed or used concurrently and to be operated during construction to control erosion. The plan shall include either:
 - (a) A site specific plan outlining the protection techniques to control soil erosion and sediment transport from the site to less than one ton per acre per year as calculated using the Soil Conservation Service Universal Soil Loss Equation or other equivalent method approved by the City Engineer, or**
 - (b) Techniques and methods contained and prescribed in the Soil Erosion Control Matrix and Methods, outlined in TMC 3-5.190 or the Erosion Control Plans - Technical Guidance Handbook, City of Portland and Unified Sewerage Agency, January, 1991.****
- (2) Site Plan. A site specific plan, pre-pared by an Oregon registered profession-al engineer, shall be required when the site meets any of the following criteria:
 - (a) greater than five acres;**
 - (b) greater than one acre and has slopes greater than 20 percent;**
 - (c) contains or is within 100 feet of a City-identified wetland or a waterway identified on FEMA floodplain maps; or**
 - (d) greater than one acre and contains highly erodible soils.****

TDC Section 74.640 Grading.

- (1) Development sites must be graded to minimize the impact of storm water runoff onto adjacent properties and to allow adjacent properties to drain as they did before the new development.**
- (2) A development applicant must submit a grading plan showing that all lots in all portions of the development will be served by gravity drainage from the building crawl spaces; and that this development will not affect the drainage on adjacent properties. The City Manager may require the applicant to remove all excess material from the development site.**

FINDINGS:

The application materials indicate disturbance of approximately 1.31 acres. The submitted plans show all runoff from impervious surface areas collected by the private on-site storm conveyance system. The private stormwater system is designed to provide treatment and detention. The private system discharges to the public stormwater system within SW Leveton Drive. The proposed development will not negatively impact the drainage of adjacent parcels. The applicant must obtain a 1200CN

Construction Erosion Control permit and obtain a grading and erosion control permit from the City of Tualatin prior to issuance of permits allowing construction activities.

STORMWATER

TMC 3-5-200 Downstream Protection Requirement.

Each new development is responsible for mitigating the impacts of that development upon the public storm water quantity system. The development may satisfy this requirement through the use of any of the following techniques, subject to the limitations and requirements in TMC 3-5-210:

- (1) Construction of permanent on-site stormwater quantity detention facilities designed in accordance with this title;**
- (2) Enlargement of the downstream conveyance system in accordance with this title and the Public Works Construction Code;**
- (3) The payment of a Storm and Surface Water Management System Development Charge, which includes a water quantity component designated to meet these requirements.**

TMC 3-5-210 Review of Downstream System.

For new development other than the construction of a single family house or duplex, plans shall document review by the design engineer of the downstream capacity of any existing storm drainage facilities impacted by the proposed development. That review shall extend downstream to a point where the impacts to the water surface elevation from the development will be insignificant, or to a point where the conveyance system has adequate capacity, as determined by the City Engineer. To determine the point at which the downstream impacts are insignificant or the drainage system has adequate capacity, the design engineer shall submit an analysis using the following guidelines:

- (1) evaluate the downstream drainage system for at least ¼ mile;**
- (2) evaluate the downstream drainage system to a point at which the runoff from the development in a build out condition is less than 10 percent of the total runoff of the basin in its current development status. Developments in the basin that have been approved may be considered in place and their conditions of approval to exist if the work has started on those projects;**
- (3) evaluate the downstream drainage system throughout the following range of storms: 2, 5, 10, 25 year;**
- (4) The City Engineer may modify items 1, 2, 3 to require additional information to determine the impacts of the development or to delete the provision of unnecessary information.**

TMC 3-5-220 Criteria for Requiring On-Site Detention to be Constructed.

The City shall determine whether the onsite facility shall be constructed. If the onsite facility is constructed, the development shall be eligible for a credit against Storm and Surface Water System Development Charges, as provided in City ordinance.

On-site facilities shall be constructed when any of the following conditions exist:

- (1) There is an identified downstream deficiency, as defined in TMC 3-5-210, and detention rather than conveyance system enlargement is determined to be the more effective solution.**
- (4) The site is located in the Hedges Creek Subbasin as identified in the Tualatin Drainage Plan and surface water runoff from the site flows directly or indirectly into the Wetland Protected Area (WPA) as defined in TDC 71.020. Properties located within the Wetland Protection District as described in TDC 71.010, or within the portion of the subbasin east of SW Tualatin Road are excepted from the on-site detention facility requirement.**

TMC 3-5-230 On-Site Detention Design Criteria.

- (1) Unless designed to meet the requirements of an identified downstream deficiency as defined in TMC 3-5.210, stormwater quantity onsite detention facilities shall be designed to capture run-off so the run-off rates from the site after development do not exceed predevelopment conditions, based upon a 25-year, 24-hour return storm.**
- (2) When designed to meet the requirements of an identified downstream deficiency as defined in TMC 3-5.210, stormwater quantity on-site detention facilities shall be designed such that the peak runoff rates will not exceed predevelopment rates for the 2 through 100 year storms, as required by the determined downstream deficiency.**
- (3) Construction of on-site detention shall not be allowed as an option if such a detention facility would have an adverse effect upon receiving waters in the basin or subbasin in the event of flooding, or would increase the likelihood or severity of flooding problems downstream of the site.**

TMC 3-5-240 On-Site Detention Design Method.

- (1) The procedure for determining the detention quantities is set forth in Section 4.4 Retention/Detention Facility Analysis and Design, King County, Washington, Surface Water Design Manual, January, 1990, except subchapters 4.4.5 Tanks, 4.4.6 Vaults and Figure 4.4.4G Permanent Surface Water Control Pond Sign. This reference shall be used for procedure only. The design criteria shall be as noted herein. Engineers desiring to utilize a procedure other than that set forth herein shall obtain City approval prior to submitting calculations utilizing the proposed procedure.**
- (3) All developments other than single family and duplex, whether residential, multi-family, commercial, industrial, or other uses, the sizing of stormwater quantity detention facilities shall be based on the impervious area to be created by the development, including structures and all roads and impervious areas which are assessed a surface water management monthly fee under Unified Sewerage Agency rules. Impervious surfaces shall be determined based upon building permits, construction plans, site visits or other appropriate methods deemed reliable by City.**

WATER QUALITY FACILITIES

TMC 3-5-280 Placement of Water Quality Facilities.

Title III specifies that certain properties shall install water quality facilities for the purpose of removing phosphorous. No such water quality facilities shall be constructed within the defined area of existing or created wetlands unless a mitigation action, approved by the City, is constructed to replace the area used for the water quality facility.

TMC 3-5-330 Permit Required.

Except as provided in TMC 3-5-310, no person shall cause any change to improved or unimproved real property that will, or is likely to, increase the rate or quantity of run-off or pollution from the site without first obtaining a permit from the City and following the conditions of the permit.

TMC 3-5-350 Phosphorous Removal Standard.

The stormwater quality control facilities shall be designed to remove 65 percent of the phosphorous from the runoff from 100 percent of the newly constructed impervious surfaces. Impervious surfaces shall include pavement, buildings, public and private roadways, and all other surfaces with similar runoff characteristics.

TMC 3-5-360 Design Storm.

The stormwater quality control facilities shall be designed to meet the removal efficiency of TMC 3-5-350 for a mean summertime storm event totaling 0.36 inches of precipitation falling in four hours with an average return period of 96 hours.

TMC 3-5-390 Facility Permit Approval.

A stormwater quality control facility permit shall be approved only if the following are met:

- (1) The plat, site plan, or permit application includes plans and a certification prepared by an Oregon registered, professional engineer that the proposed stormwater quality control facilities have been designed in accordance with criteria expected to achieve removal efficiencies for total phosphorous required by this Title III. Clean Water Services Design and Construction Standards shall be used in preparing the plan for the water quality facility; and
- (2) The plat, site plan, or permit application shall be consistent with the areas used to determine the removal required in TMC 3-5-350; and
- (3) A financial assurance, or equivalent security acceptable to the City, is provided by the applicant which assures that the stormwater quality control facilities are constructed according to the plans established in the plat, site plan, or permit approval. The financial assurance may be combined with our financial assurance requirements imposed by the City; and
- (4) A stormwater facility agreement identifies who will be responsible for assuring the long term compliance with the operation and maintenance plan.

TMC 3-5-430 Placement of Water Quality Facilities.

No water quality facilities shall be constructed within the defined area of existing or created wetlands unless a mitigation action is approved by the City, and is constructed to replace the area used for water quality.

TDC Section 74.650 Water Quality, Storm Water Detention and Erosion Control.

The applicant must comply with the water quality, storm water detention and erosion control requirements in the Surface Water Management Ordinance. If required:

- (2) On all other development applications, prior to issuance of any building permit, the applicant must arrange to construct a permanent on-site water quality facility and storm water detention facility and submit a design and calculations indicating that the requirements of the Surface Water Management Ordinance will be met and obtain a Stormwater Connection Permit from Clean Water Services.
- (3) For on-site private and regional non-residential public facilities, the applicant must submit a stormwater facility agreement, which will include an operation and maintenance plan provided by the City, for the water quality facility for the City's review and approval. The applicant must submit an erosion control plan prior to issuance of a Public Works Permit. No construction or disturbing of the site must occur until the erosion control plan is approved by the City and the required measures are in place and approved by the City.

FINDINGS:

The plans show existing stormwater facilities providing treatment and detention for the existing impervious areas. The preliminary stormwater calculations and plans show a new private facility sized to treat the new impervious area of this project.

The applicant must submit final stormwater calculations and plans that prove impervious areas are treated and detained to current Clean Water Services standards with at least a minimum 25-year detention with more as required from hydromodification evaluation.

The applicant has submitted a Service Provider Letter from Clean Water Services indicating that no Sensitive Areas exist on-site. A CWS Memorandum was received dated November 22, 2019 for development on this site.

After land use decision issuance and City engineering plan reviews, final plans are provided by the City to Clean Water Services for their final review. On approval, Clean Water Services will provide the City authorization to issue construction permits. The applicant must submit final plans that are sufficient to obtain a Stormwater Connection Permit Authorization Letter that complies with the submitted Service Provider Letter conditions.

No preliminary stormwater facility agreement was provided. A stormwater facility agreement that includes an operation and maintenance plan must be submitted, approved, recorded. The proposed development includes an emergency vehicle turn-around that extends on the northern lot. The maintenance agreement must include all proposed impervious areas on both lots.

Erosion Control Permit plans have not been submitted. An erosion control permit must be obtained prior to approval of a Public Works Permit. The applicant must obtain a 1200CN Construction Erosion Control permit and obtain a grading and erosion control permit from the City of Tualatin prior to issuance of construction permits.

PUBLIC IMPROVEMENTS

TDC Section 74.120 Public Improvements.

(1) Except as specially provided, all public improvements must be installed at the expense of the applicant. All public improvements installed by the applicant must be constructed and guaranteed as to workmanship and material as required by the Public Works Construction Code prior to acceptance by the City. Work must not be undertaken on any public improvement until after the construction plans have been approved by the City Manager and a Public Works Permit issued and the required fees paid.

TDC Section 74.130 Private Improvements.

All private improvements must be installed at the expense of the applicant. The property owner must retain maintenance responsibilities over all private improvements.

TDC Section 74.140 Construction Timing.

(1) All the public improvements required under this chapter must be completed and accepted by the City prior to the issuance of a Certificate of Occupancy; or, for subdivision and partition applications, in accordance with the requirements of the Subdivision regulations.

(2) All private improvements required under this Chapter must be approved by the City prior to the issuance of a Certificate of Occupancy; or for subdivision and partition applications, in accordance with the requirements of the Subdivision regulations.

FINDINGS:

The applicant submitted narrative to improve existing private access driveway ramps within SW Leveton Drive right-of-way to comply with ADA standards. All SW Leveton Drive improvements must be constructed in accordance with the Public Works Construction Code. The applicant must obtain a public works permit prior to commencing work and complete construction to Public Works Construction Code standards prior to approval. The applicant must complete construction of SW Leveton Drive to Public Works Construction Code standards prior to acceptance by the City.

All public and private improvements proposed and modified by conditions of approval, including, but not limited to the stormwater systems and facilities, must be completed prior to receiving a Certificate of Occupancy.

TDC Section 74.420 Street Improvements.

When an applicant proposes to develop land adjacent to an existing or proposed street, including land which has been excluded under TDC 74.220, the applicant should be responsible for the improvements to the adjacent existing or proposed street that will bring the improvement of the street into conformance with the Transportation Plan (TDC Chapter 11), TDC 74.425 (Street Design Standards), and the City's Public Works Construction Code, subject to the following provisions:

- (1) For any development proposed within the City, roadway facilities within the right-of-way described in TDC 74.210 must be improved to standards as set out in the Public Works Construction Code.**
- (2) The required improvements may include the rebuilding or the reconstruction of any existing facilities located within the right-of-way adjacent to the proposed development to bring the facilities into compliance with the Public Works Construction Code.**
- (8) For development applications other than subdivisions and partitions, all street improvements required by this section must be completed and accepted by the City prior to the issuance of a Certificate of Occupancy.**

FINDINGS:

Narrative identifies that existing sidewalk ramps located at the private access drive off SW Leveton Drive do not meet ADA standards. These ramps must be replaced to meet current ADA and public works standards. No other public improvements were identified by the applicant. However, the applicant must submit final plans that show whether or not the sidewalk meets current ADA standards, using approved measurement methods, and must replace all sections of sidewalk within SW Leveton Drive that do not comply with ADA standards.

IV. APPEAL

Request for appeal of this decision must be received by the Engineering Division within the 14-day appeal period ending on **January 1, 2020 at 5 PM**. Issues must have been described with adequate clarity and detail with identification of the associated Tualatin Municipal or Development Code section to afford a decision maker an opportunity to respond to the issue. A request for appeal must be submitted on the forms provided by the City, signed by the appellant and include the applicable appeal fee.