



# City of Tualatin

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March 7, 2018

## CITY ENGINEER’S REVIEW FINDING AND DECISION FOR AR17-0011, TUALATIN HIGH SCHOOL

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## I. RECOMMENDATION

Based on the findings presented, the City Engineer approves AR17-0011, Tualatin High School with the following conditions:

### A. PRIOR TO ISSUANCE OF EROSION CONTROL, PUBLIC WORKS, AND WATER QUALITY PERMITS:

*Note: In the event the applicant chooses to separate field improvements from the structure, separate permits may be obtained with the same requirements PFR-1 through PFR-11 prior to construction.*

- PFR-1 Obtain a City of Tualatin erosion control permit in accordance with code section TMC 3-5-060.
- PFR-2 Submit plans for a 1200C NPDES Erosion Control Permit.
- PFR-3 Submit final stormwater calculations that include conveyance and detention up to the 25-year storm event that include confirmation that the remainder of this lot's impervious areas are treated and detained to current standards or show how the required additional treatment and detention for three times the modified area will occur per Clean Water Services modification of impervious surface code.
- PFR-4 Submit final stormwater plans that show no proposed trees within a public easement and 10 foot long, 2 foot deep root barriers at the edge of public easements centered on proposed trees adjacent to public easements. If any are to be removed within a public easement, TV the lines to determine if repairs are needed and obtain a Public Works Permit to perform the repairs.
- PFR-5 Submit plans that meet the requirements of TVF&R.
- PFR-6 Submit plans that are sufficient to obtain a Stormwater Connection Permit Authorization Letter that complies with the submitted Service Provider Letter conditions and obtain an Amended Service Provider Letter as determined by Clean Water Services for any revisions to the proposed plans.
- PFR-7 Submit plans that minimize the impact of stormwater from the development to adjacent properties.
- PFR-8 Submit plans that show Public Right-of-Way Accessibility Guidelines compliance for the sidewalk and driveway accesses within SW Boones Ferry Road indicating replacement as needed.
- PFR-9 Submit plans that show street lights near the site accesses to SW Boones Ferry Road that meet Public Works Construction Code standards.

### B. PRIOR TO ISSUANCE OF A BUILDING PERMIT:

- PFR-10 Obtain an Erosion Control, Public Works, and Water Quality Permit.
- PFR-11 Complete all the public improvements, shown on submitted plans and corrected by conditions of approval, and have them accepted by the City or provide financial assurance.

### C. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY:

- PFR-12 Construct all private and public improvements shown on submitted plans and corrected by conditions of approval.

## II. APPEAL

Requests for review of this decision must be received by the Engineering Division within the 14-day appeal period ending on **March 21, 2018 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 review must be submitted on the form provided by the City, as detailed in TDC 36.161, and signed by the appellant.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tony Doran". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Tony Doran, EIT  
Engineering Associate

### **III. STANDARDS AND APPLICABLE CRITERIA**

#### Tualatin Municipal Code (TMC)

Title 03: Utilities and Water Quality

Title 04: Building

#### Tualatin Development Code (TDC)

Chapter 73: Community Design Standards

Chapter 74: Public Improvement Requirements

Chapter 75: Access Management

### **IV. CONCLUSIONS**

#### **A. TMC TITLE 03: UTILITIES AND WATER QUALITY**

##### **I. TMC 3-5 ADDITIONAL SURFACE WATER MANAGEMENT STANDARDS**

###### **1. TMC 3-5-010 POLICY.**

It is the policy of the City to require temporary and permanent measures for all construction projects to lessen the adverse effects of construction on the environment. The contractor shall properly install, operate and maintain both temporary and permanent works as provided in this chapter or in an approved plan, to protect the environment during the term of the project. In addition, these erosion control rules apply to all properties within the City, regardless of whether that property is involved in a construction or development activity. Nothing in this chapter shall relieve any person from the obligation to comply with the regulations or permits of any federal, state, or local authority...

###### **2. 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...

###### **3. 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, prepared by an Oregon registered professional 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.

**FINDING:**

The applicant has provided a preliminary Erosion Control and Grading Plan as part of the plan set for purposes of preliminary review by Engineering. The development area is indicated as 20.5 acres on the fact sheet which requires a 1200C erosion control permit. The applicant will obtain a 1200C Construction Erosion Control and erosion control permit from the City of Tualatin prior to issuance of Public Works, Water Quality, and Building permits. This criterion is satisfied with conditions of approval PFR-1 and PFR-2.

**4. 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: Construction of permanent on-site stormwater quantity detention facilities designed in accordance with this title;...

**5. 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.**

**6. 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...**

**FINDING:**

There is an existing, permanent on-site stormwater quantity detention facility, designed in accordance with this title, located at the front of the site between the existing building and SW Boones Ferry Road. This facility qualifies as a technique that satisfies the requirement for mitigating the impacts of development upon the public storm water quantity system for the new impervious area.

This site is located within the Hedges Creek drainage basin which is identified as requiring detention up to the 25-year storm event. The existing facility is proposed to be regraded and planted to meet current standards.

When development occurs the lot needs to be brought up to code when the amount of modification of impervious area on the site exceeds 1,000 square feet. The amount of modification proposed on the lot exceeds 1,000 square feet. Modification on a lot requires compliance with current Clean Water Standards to bring the remainder of the development up to current code for three times the impervious area modified. Communication with the developer included statement that the remainder of the lot includes adequate treatment and 25-year detention per current code. The submitted stormwater calculations do not include this assurance. The applicant will submit final stormwater plans and calculations that include confirmation that the remainder of this lot's impervious areas are treated and detained to

current standards or show how the required additional treatment and detention for three times the modified area will occur. This criterion is satisfied with conditions of approval PFR-3.

## **II. TMC 3-5 PERMANENT ON-SITE WATER QUALITY FACILITIES**

### **1. 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.**

#### **FINDING:**

The site's proposed water quality facility is not located in wetlands or associated buffers. This criterion is met.

### **2. TMC 3-5-290 PURPOSE OF TITLE.**

**The purpose of this title is to require new development and other activities which create impervious surfaces to construct or fund on-site or off-site permanent water quality facilities to reduce the amount of phosphorous entering the storm and surface water system.**

### **3. TMC 3-5-300 APPLICATION OF TITLE.**

**Title III of this Chapter shall apply to all activities which create new or additional impervious surfaces, except as provided in TMC 3-5.310.**

### **4. TMC 3-5-310 EXCEPTIONS.**

**(1) Those developments with application dates prior to July 1, 1990, are exempt from the requirements of Title III.**

**The application date shall be defined as the date on which a complete application for development approval is accepted by the City in accordance with City regulations.**

**(2) Construction of one and two family (duplex) dwellings are exempt from the requirements of Title III.**

**(3) Sewer lines, water lines, utilities or other land development that will not directly increase the amount of storm water run-off or pollution leaving the site once construction has been completed and the site is either restored to or not altered from its approximate original condition are exempt from the requirements of Title III.**



## **5. TMC 3-5-320 DEFINITIONS.**

(1) "Stormwater Quality Control Facility" refers to any structure or drainage way that is designed, constructed and maintained to collect and filter, retain, or detain surface water run-off during and after a storm event for the purpose of water quality improvement. It may also include, but is not limited to, existing features such as constructed wetlands, water quality swales, low impact development approaches ("LIDA"), and ponds which are maintained as stormwater quality control facilities.

(2) "Low impact development approaches" or "LIDA: means stormwater facilities constructed utilizing low impact development approaches used to temporarily store, route or filter run-off for the purpose of improving water quality. Examples include; but are not limited to, Porous Pavement, Green Roofs, Infiltration Planters/Rain Gardens, Flow-Through Planters, LIDA Swales, Vegetated Filter Strips, Vegetated Swales, Extended Dry Basins, Constructed Water Quality Wetland, Conveyance and Stormwater Art, and Planting Design and Habitats.

(3) "Water Quality Swale" means a vegetated natural depression, wide shallow ditch, or constructed facility used to temporarily store, route or filter run-off for the purpose of improving water quality.

(4) "Existing Wetlands" means those areas identified and delineated as set forth in the Federal Manual for Identifying the Delineating Jurisdictional Wetlands, January, 1989, or as amended, by a qualified wetlands specialist.

(5) "Created Wetlands" means those wetlands developed in an area previously identified as a non-wetland to replace, or mitigate wetland destruction or displacement.

(6) "Constructed Wetlands" means those wetlands developed as a water quality or quantity facility, subject to change and maintenance as such. These areas must be clearly defined and/or separated from existing or created wetlands. This separation shall preclude a free and open connection to such other wetlands.

## **6. 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.

## **7. TMC 3-5-340 FACILITIES REQUIRED.**

For new development, subject to the exemptions of TMC 3-5-310, no permit for construction, or land development, or plat or site plan shall be approved unless the conditions of the plat,

**plan or permit approval require permanent stormwater quality control facilities in accordance with this Title III.**

**8. TMC 3-5-345 INSPECTION REPORTS.**

**The property owner or person in control of the property shall submit inspection reports annually to the City for the purpose of ensuring maintenance activities occur according to the operation and maintenance plan submitted for an approved permit or architectural review.**

**9. 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.**

**10. 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.**

**11. TMC 3-5-370 DESIGN REQUIREMENTS.**

**The removal efficiency in TDC Chapter 35 specifies only the design requirements and are not intended as a basis for performance evaluation or compliance determination of the stormwater quality control facility installed or constructed pursuant to this Title III.**

**12. 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.**

**13. TMC 3-5-340 FACILITIES REQUIRED.**

**For new development, subject to the exemptions of TMC 3-5-310, no permit for construction, or land development, or plat or site plan shall be approved unless the conditions of the plat, plan or permit approval require permanent stormwater quality control facilities in accordance with this Title III.**

#### **14. 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.**

#### **FINDING:**

This site is located within the Hedges Creek drainage basin which is identified as requiring detention up to the 25-year storm event. The existing facility is proposed to be regraded and planted to meet current standards.

Clean Water Services requires a downstream analysis to evaluate downstream capacity. In the event of a capacity issue, on-site detention is required up to the specific range of storms where the downstream capacity issue is present. Because the site is within the Hedges Creek Sub-basin, the impacted area will be adequately detained, such that the post-developed 2-year, 10-year, and 25-year flows are less than or equal to the corresponding pre-developed 2-year, 10-year, and 25-year flows. This proposed detention complies with Tualatin Municipal Code 3-5-210 by way of 3-5-220(4). The proposed detention also complies with Clean Water Services Design and Construction Standards for Sanitary Sewer and Surface Water Management Section 4.03.4(b). Due to the fact that detention is already required, no effort was made for a downstream analysis, as the design is already complies with what is required by CWS in the event of a downstream deficiency.

When development occurs the lot needs to be brought up to code when the amount of modification of impervious area on the site exceeds 1,000 square feet. The amount of modification proposed on the lot exceeds 1,000 square feet. Modification on a lot requires compliance with current Clean Water Standards to bring the remainder of the development up to current code for three times the impervious area modified. Communication with the developer included statement that the remainder of the lot includes adequate treatment and 25-year detention per current code. The submitted stormwater calculations do not include this

assurance. The applicant will submit final stormwater plans and calculations that include confirmation that the remainder of this lot's impervious areas are treated and detained to current standards or show how the required additional treatment and detention for three times the modified area will occur.

Trees are potentially proposed near or within the vicinity of public easements. Tree roots can adversely affect the integrity and ability to access the lines for repair or replacements. Trees will be located outside of public easements as noted on sheet L2.01. Trees adjacent to public easements will have a root barrier installed at the edge of the easement centered on the tree. These root barriers will be 10 feet long and 2 feet deep.

Any existing trees within public easements that are proposed to be removed may have or cause damage to the public lines. As needed, TV the lines to determine if repairs are needed. Obtain a Public Works Permit for any repairs needed.

This criterion is satisfied with conditions of approval PFR-3 and PFR-4.

## **B. CHAPTER 04-02: FIRE HYDRANT LOCATIONS AND RATES OF FLOW**

### **I. TMC 4-2-010 HYDRANTS AND WATER SUPPLY FOR FIRE PROTECTION.**

**(1) Every application for a building permit and accompanying plans shall be submitted to the Building Division for review of water used for fire protection, the approximate location and size of hydrants to be connected, and the provisions for access and egress for firefighting equipment. If upon such review it is determined that the fire protection facilities are not required or that they are adequately provided for in the plans, the Fire and Life Safety Reviewer shall recommend approval to the City Building Official.**

**(2) If adequate provisions for such facilities are not made, the Fire and Life Safety Reviewer shall either recommend against approval of the plans or indicate to the applicant in writing where the plans are deficient or recommend approval of plans subject to conditions.**

#### **FINDING:**

The applicant has coordinated with City staff Building Division, as well as representatives from Tualatin Valley Fire and Rescue. The coordination has focused on fire/life/safety issues related to the school property overall, with the intent to insure the adequacy of facilities that will provide water supply intended for fire protection. This includes identification of existing and proposed fire hydrants, as well as existing and proposed access ways for fire trucks and other emergency vehicles. Details for both fire hydrants and emergency access is indicated on various sheets within the Plan Set.

The submitted site plan and accompanying letter from TVF&R show compliance to their requirements for apparatus maneuvering. TVF&R has submitted an attached letter dated January 31, 2018 regarding their requirements. The applicant will need to address these

requirements in the final plans. This criterion is satisfied with conditions of approval PFR-5.

### **C. TDC CHAPTER 73: COMMUNITY DESIGN STANDARDS**

#### **I. TDC SECTION 73.270 GRADING.**

- (1) After completion of site grading, top-soil is to be restored to exposed cut and fill areas to provide a suitable base for seeding and planting.**
- (2) All planting areas shall be graded to provide positive drainage.**
- (3) Neither soil, water, plant materials nor mulching materials shall be allowed to wash across roadways or walkways.**
- (4) Impervious surface drainage shall be directed away from pedestrian walkways, dwelling units, buildings, outdoor private and shared areas and landscape areas except where the landscape area is a water quality facility.**

#### **FINDING:**

The applicant has provided a preliminary Erosion Control and Grading Plan as part of the plan set for purposes of preliminary review by Engineering. The plans show collection and conveyance of stormwater to private stormwater lines prior to release to the public system. The fact sheet indicates that 20.5 acres will be disturbed which requires a 1200C permit. The applicant will obtain a 1200C Construction Erosion Control permit and obtain a grading and erosion control permit from the City of Tualatin prior to issuance of Public Works, Water Quality, and Building permits. The applicant will submit final grading plans. This criterion is satisfied with conditions of approval PFR-1 and PFR-2.

#### **II. TDC SECTION 73.400 ACCESS.**

- (1) The provision and maintenance of vehicular and pedestrian ingress and egress from private property to the public streets as stipulated in this Code are continuing requirements for the use of any structure or parcel of real property in the City of Tualatin. Access management and spacing standards are provided in this section of the TDC and TDC Chapter 75. No building or other permit shall be issued until scale plans are presented that show how the ingress and egress requirement is to be fulfilled. If the owner or occupant of a lot or building changes the use to which the lot or building is put, thereby increasing ingress and egress requirements, it shall be unlawful and a violation of this code to begin or maintain such altered use until the required increase in ingress and egress is provided.**
- (2) Owners of two or more uses, structures, or parcels of land may agree to utilize jointly the same ingress and egress when the combined ingress and egress of both uses, structures, or parcels of land satisfies their combined requirements as designated in this code; provided that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases or contracts to establish joint use. Copies of said deeds, easements, leases or contracts shall be placed on permanent file with the City Recorder.**

**(3) Joint and Cross Access.**

**(b) A system of joint use driveways and cross access easements may be required and may incorporate the following:**

**(i) a continuous service drive or cross access corridor extending the entire length of each block served to provide for driveway separation consistent with the access management classification system and standards.**

**(ii) a design speed of 10 mph and a maximum width of 24 feet to accommodate two-way travel aisles designated to accommodate automobiles, service vehicles, and loading vehicles;**

**(iii) stub-outs and other design features to make it visually obvious that the abutting properties may be tied in to provide cross access via a service drive;**

**(iv) a unified access and circulation system plan for coordinated or shared parking areas.**

**(c) Pursuant to this section, property owners may be required to:**

**(i) Record an easement with the deed allowing cross access to and from other properties served by the joint use driveways and cross access or service drive;**

**(ii) Record an agreement with the deed that remaining access rights along the roadway will be dedicated to the city and pre-existing driveways will be closed and eliminated after construction of the joint-use driveway;**

**(iii) Record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners;**

**(4) Requirements for Development on Less than the Entire Site.**

**(a) To promote unified access and circulation systems, lots and parcels under the same ownership or consolidated for the purposes of development and comprised of more than one building site shall be reviewed as one unit in relation to the access standards. The number of access points permitted shall be the minimum number necessary to provide reasonable access to these properties, not the maximum available for that frontage. All necessary easements, agreements, and stipulations shall be met. This shall also apply to phased development plans. The owner and all lessees within the affected area shall comply with the access requirements.**

**(b) All access must be internalized using the shared circulation system of the principal commercial development or retail center. Driveways should be designed to avoid queuing across surrounding parking and driving aisles.**

**(5) Lots that front on more than one street may be required to locate motor vehicle accesses on the street with the lower functional classification as determined by the City Engineer.**

**(6) Except as provided in TDC 53.100, all ingress and egress shall connect directly with public streets.**

**(7) Vehicular access for residential uses shall be brought to within 50 feet of the ground floor entrances or the ground floor landing of a stairway, ramp or elevator leading to dwelling units.**

**(8) To afford safe pedestrian access and egress for properties within the City, a sidewalk shall be constructed along all street frontage, prior to use or occupancy of the building or structure proposed for said property. The sidewalks required by this section shall be constructed to City standards, except in the case of streets with inadequate right-of-way width or where the final street design and grade have not been established, in which case the sidewalks shall be constructed to a design and in a manner approved by the City Engineer. Sidewalks approved by the City Engineer may include temporary sidewalks and sidewalks constructed on private property; provided, however, that such sidewalks shall provide continuity with sidewalks of adjoining commercial developments existing or proposed. When a sidewalk is to adjoin a future street improvement, the sidewalk construction shall include construction of the curb and gutter section to grades and alignment established by the City Engineer.**

**(9) The standards set forth in this Code are minimum standards for access and egress, and may be increased through the Architectural Review process in any particular instance where the standards provided herein are deemed insufficient to protect the public health, safety, and general welfare.**

**(12) Minimum Access Requirements for Industrial Uses.**

**Ingress and egress for industrial uses shall not be less than the following:**

Required Parking Spaces	Minimum Number Required	Minimum Pavement Width	Minimum Pavement Walkways, Etc.
1-250	1	36 feet for first 50' from ROW, 24' thereafter	No curbs or walkway required

**FINDINGS:**

There are two existing two-way access driveways fronting on SW Boones Ferry Road. Both north and south access driveways are 36 feet wide, provide two-way access, and are proposed to be retained. Improvements to these two driveways include replacement of existing non-compliant ADA/Public Right-of-Way Accessibility Guidelines ramps and measures to improve lighting to help with safety and wayfinding. No additional access driveway or closures of existing access driveways has been required by the City Engineer. This criterion is satisfied with conditions of approval PFR-8.

**(14) Maximum Driveway Widths and Other Requirements.**

**(a) Unless otherwise provided in this chapter, maximum driveway widths shall not exceed 40 feet.**

**(b) Except for townhouse lots, no driveways shall be constructed within 5 feet of an adjacent property line, except when two adjacent property owners elect to provide joint access to their respective properties, as provided by Subsection (2).**

**(c) There shall be a minimum distance of 40 feet between any two adjacent driveways on a single property unless a lesser distance is approved by the City Engineer.**

**FINDINGS:**

The existing access drives are 36-feet in width and will remain unchanged. This standard is met.

**(15) Distance between Driveways and Intersections**

**Except for single-family dwellings, the minimum distance between driveways and intersections shall be as provided below. Distances listed shall be measured from the stop bar at the intersection.**

**(a) At the intersection of collector or arterial streets, driveways shall be located a minimum of 150 feet from the intersection.**

**FINDINGS:**

All driveways are located more than 150 feet from the intersection of collector or arterial streets and will remain unchanged. This standard is met.

**(16) Vision Clearance Area.**

**(a) Local Streets - A vision clearance area for all local street intersections, local street and driveway intersections, and local street or driveway and railroad intersections shall be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 10 feet from the intersection point of the right-of-way lines, as measured along such lines (see Figure 73-2 for illustration).**

**(b) Collector Streets - A vision clearance area for all collector/arterial street intersections, collector/arterial street and local street intersections, and collector/arterial street and railroad intersections shall be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 25 feet from the intersection point of the right-of-way lines, as measured along such lines. Where a driveway intersects with a collector/arterial street, the distance measured along the driveway line for the triangular area shall be 10 feet (see Figure 73-2 for illustration).**

**(c) Vertical Height Restriction - Except for items associated with utilities or publicly owned structures such as poles and signs and existing street trees, no vehicular parking, hedge, planting, fence, wall structure, or temporary or permanent physical obstruction shall be permitted between 30 inches and 8 feet above the established height of the curb in the clear vision area (see Figure 73-2 for illustration).**

**FINDINGS:**

Vision clearance for both driveways comply with the required distances, per Figure 73-2. There are no vertical restrictions. This standard is met.



## **D. TDC CHAPTER 74: PUBLIC IMPROVEMENT REQUIREMENTS**

### **I. TDC SECTION 74.120 PUBLIC IMPROVEMENTS.**

**(1) Except as specially provided, all public improvements shall be installed at the expense of the applicant. All public improvements installed by the applicant shall be constructed and guaranteed as to workmanship and material as required by the Public Works Construction Code prior to acceptance by the City. No work shall be undertaken on any public improvement until after the construction plans have been approved by the City Engineer and a Public Works Permit issued and the required fees paid.**

#### **FINDINGS:**

The public improvements include new stormwater laterals connecting to public lines plus frontage improvements to street lights and sidewalks within SW Boones Ferry Road right-of-way. This criterion is satisfied with conditions of approval PFR-10, PFR-11, and PFR-12.

### **TDC Section 74.130 Private Improvements.**

**All private improvements shall be in-stalled at the expense of the applicant. The property owner shall retain maintenance responsibilities over all private improvements.**

#### **FINDINGS:**

Onsite improvements include stormwater treatment and detention facilities which are private improvements. This criterion is satisfied with conditions of approval PFR-12.

### **II. TDC SECTION 74.140 CONSTRUCTION TIMING.**

**(1) All the public improvements required under this chapter shall 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 shall 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:**

Private and public improvements will be completed prior to a certificate of occupancy. This criterion is satisfied with conditions of approval PFR-12.

### **III. TDC SECTION 74.210 MINIMUM STREET RIGHT-OF-WAY WIDTHS.**

**The width of streets in feet shall not be less than the width required to accommodate a street improvement needed to mitigate the impact of a proposed development. In cases where a**

**street is required to be improved according to the standards of the TDC, the width of the right-of-way shall not be less than the minimums indicated in TDC Chapter 74, Public Improvement Requirements, Figures 74-2A through 74-2G.**

**(1) For subdivision and partition applications, wherever existing or future streets adjacent to property proposed for development are of inadequate right-of-way width the additional right-of-way necessary to comply with TDC Chapter 74, Public Improvement Requirements, Figures 74-2A through 74-2G shall be shown on the final subdivision or partition plat prior to approval of the plat by the City. This right-of-way dedication shall be for the full width of the property abutting the roadway and, if required by the City Engineer, additional dedications shall be provided for slope and utility easements if deemed necessary.**

**(6) When a proposed development is adjacent to or bisected by a street proposed in TDC Chapter 11, Transportation Plan (Figure 11-3) and no street right-of-way exists at the time the development is proposed, the entire right-of-way as shown in TDC Chapter 74, Public Improvement Requirements, Figures 74-2A through 74-2G shall be dedicated by the applicant. The dedication of right-of-way required in this subsection shall be along the route of the road as determined by the City.**

**FINDINGS:**

There is only one right-of-way adjacent to the subject property that provides access to the site, which is SW Boones Ferry Road. SW Boones Ferry Road is considered a Major Arterial under TDC Chapter 74, Public Improvement Requirements, and within Figures 74-2A through 74-2G of the Tualatin Community Plan. The minimum and preferred right-of-way cross sections are identified in these figures. The minimum right-of-way cross section width is 70 feet and the preferred width is 98 feet. The current cross section configuration for the school site frontage along SW Boones Ferry Road includes a 75 foot-wide right-of-way, including 45 feet on the Applicants side. This exceeds the minimum right-of-way cross section standard for a Major Arterial.

Adjacent streets are existing and a traffic study was prepared and submitted to the City that supports that they are of adequate width not requiring additional improvements. This criterion is satisfied.

**IV. 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 shall 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.**

**(3) The required improvements may include the construction or rebuilding of off-site improvements which are identified to mitigate the impact of the development.**

**(4) Where development abuts an existing street, the improvement required shall apply only to that portion of the street right-of-way located between the property line of the parcel proposed for development and the centerline of the right-of-way, plus any additional pavement beyond the centerline deemed necessary by the City Engineer to ensure a smooth transition between a new improvement and the existing roadway (half-street improvement). Additional right-of-way and street improvements and off-site right-of-way and street improvements may be required by the City to mitigate the impact of the development. The new pavement shall connect to the existing pavement at the ends of the section being improved by tapering in accordance with the Public Works Construction Code.**

**(5) If additional improvements are required as part of the Access Management Plan of the City, TDC Chapter 75, the improvements shall be required in the same manner as the half-street improvement requirements.**

**(6) All required street improvements shall include curbs, sidewalks with appropriate buffering, storm drainage, street lights, street signs, street trees, and, where designated, bikeways and transit facilities.**

**(11) Existing streets which abut the pro-posed development site shall be graded, constructed, reconstructed, surfaced or repaired as necessary in accordance with the Public Works Construction Code and TDC Chapter 11, Transportation Plan, and TDC 74.425 (Street Design Standards).**

**(12) Sidewalks with appropriate buffering shall be constructed along both sides of each internal street and at a minimum along the development side of each external street in accordance with the Public Works Construction Code.**

**(13) The applicant shall comply with the requirements of the Oregon Department of Transportation (ODOT), Tri-Met, Washington County and Clackamas County when a proposed development site is adjacent to a roadway under any of their jurisdictions, in addition to the requirements of this chapter.**

**(14) The applicant shall construct any required street improvements adjacent to parcels excluded from development, as set forth in TDC 74.220 of this chapter.**

**(15) Except as provided in TDC 74.430, whenever an applicant proposes to develop land with frontage on certain arterial streets and, due to the access management provisions of TDC Chapter 75, is not allowed direct access onto the arterial, but instead must take access from another existing or future public street thereby providing an alternate to direct arterial access, the applicant shall be required to construct and place at a minimum street signage, a sidewalk, street trees and street lights along that portion of the arterial street adjacent to the applicant's property. The three certain arterial streets are S.W. Tualatin-Sherwood Road, S.W. Pacific Highway (99W) and S.W. 124th Avenue. In addition, the applicant may be required to construct and place on the arterial at the intersection of the arterial and an existing or future public non-arterial street warranted traffic control devices (in accordance with the Manual on Uniform Traffic Control Devices, latest edition), pavement markings, street tapers and turning lanes, in accordance with the Public Works Construction Code.**

**(16) The City Engineer may determine that, although concurrent construction and placement of the improvements in (14) and (15) of this section, either individually or collectively, are impractical at the time of development, the improvements will be necessary at some future date. In such a case, the applicant shall sign a written agreement guaranteeing future performance by the applicant and any successors in interest of the property being developed. The agreement shall be subject to the City's approval.**

**(17) Intersections should be improved to operate at a level of service of at least D and E for signalized and unsignalized intersections, respectively.**

**(18) Pursuant to requirements for off-site improvements as conditions of development approval in TDC 73.055(2)(e) and TDC 36.160(8), proposed multi-family residential, commercial, or institutional uses that are adjacent to a major transit stop will be required to comply with the City's Mid-Block Crossing Policy.**

#### **FINDINGS:**

The applicant is proposing redevelopment of an existing school site that does not include additional students or staff. Therefore, there is no generation of additional traffic associated with this proposal. In the Traffic Impact Analysis by Kittelson dated October 24, 2017, the study concludes that, 'the proposed school project will have no measurable impact at the existing school driveways off of SW Boones Ferry Road because 1) no increase in current student enrollment capacity is accommodated by the proposed changes and 2) no changes to the site access, circulation, or parking are proposed. Further, because the existing school driveways operate in accordance with City standards, no capacity-based transportation mitigation measures are needed to support the proposed project.' However, driveway improvements will be completed as part of this project including replacement of ADA/Public Right-of-Way Accessibility Guidelines ramps and improved street lighting.

The plans show that the applicant will evaluate public sidewalks adjacent to their development to confirm the locations that will be reconstructed to meet Public Right-of-Way Accessibility Guidelines. Final plans will show Public Right-of-Way Accessibility Guidelines compliance for the sidewalk and driveway accesses within SW Boones Ferry Road indicating replacement as needed. This criterion is met with conditions of approval PFR-8, PFR-10, and PFR-12.

## **V. TDC SECTION 74.425 STREET DESIGN STANDARDS.**

**(1) Street design standards are based on the functional and operational characteristics of streets such as travel volume, capacity, operating speed, and safety. They are necessary to ensure that the system of streets, as it develops, will be capable of safely and efficiently serving the traveling public while also accommodating the orderly development of adjacent lands.**

**(2) The proposed street design standards are shown in Figures 72A through 72G. The typical roadway cross sections comprise the following elements: right-of-way, number of travel lanes, bicycle and pedestrian facilities, and other amenities such as landscape strips. These figures are intended for planning purposes for new road construction, as well as for those locations where it is physically and economically feasible to improve existing streets**

**(3) In accordance with the Tualatin Basin Program for fish and wildlife habitat it is the intent of Figures 74-2A through 74-2G to allow for modifications to the standards when deemed appropriate by the City Engineer to address fish and wildlife habitat.**

**(4) All streets shall be designed and constructed according to the preferred standard. The City Engineer may reduce the requirements of the preferred standard based on specific site conditions, but in no event will the requirement be less than the minimum standard. The City Engineer shall take into consideration the following factors when deciding whether the site conditions warrant a reduction of the preferred standard:**

**(a) Arterials:**

- (i) Whether adequate right-of-way exists**
- (ii) Impacts to properties adjacent to right-of-way**
- (iii) Current and future vehicle traffic at the location**
- (iv) Amount of heavy vehicles (buses and trucks).**

**(b) Collectors:**

- (i) Whether adequate right-of-way exists**
- (ii) Impacts to properties adjacent to right-of-way**
- (iii) Amount of heavy vehicles (buses and trucks)**
- (iv) Proximity to property zoned manufacturing or industrial.**

**(c) Local Streets:**

**(i) Local streets proposed within areas which have environmental constraints and/or sensitive areas and will not have direct residential access may utilize the minimum design standard. When the minimum design standard is allowed, the City Engineer may determine that no parking signs are required on one or both sides of the street.**

### **FINDINGS:**

There is only one right-of-way adjacent to the subject property that provides access to the site, which is SW Boones Ferry Road. SW Boones Ferry Road is considered a Major Arterial under TDC Chapter 74, Public Improvement Requirements, and within Figures 74-2A through 74-2G of the Tualatin Community Plan. The minimum and preferred right-of-way cross sections are identified in these figures. The minimum right-of-way cross section width is 70 feet and the preferred width is 98 feet. The current cross section configuration for the school site frontage

along SW Boones Ferry Road includes a 75 foot-wide right-of-way, including 45 feet of right-of-way on the applicant side. This meets the minimum right-of-way cross section standard for a Major Arterial. As part of the existing cross-section, there are 3 motor vehicle travel lanes, sidewalk and striped bike lanes, which provide design elements that substantially comply with the Major Arterial minimum standards indicated in Figures 74-2A through 74-2G of the Tualatin Community Plan.

Per the Kittelson traffic impact analysis, though the preferred right-of-way cross section does not currently exist, the applicant is proposing redevelopment of an existing school site that does not include additional students or staff. Therefore, there is no generation of additional traffic. Since there is no generation of additional traffic, there are no substantial off-site impacts on the adjacent right-of-way and transportation system associated with the proposed development. This criterion is met.

#### **VI. SECTION 74.430 STREETS, MODIFICATIONS OF REQUIREMENTS IN CASES OF UNUSUAL CONDITIONS.**

**(1) When, in the opinion of the City Engineer, the construction of street improvements in accordance with TDC 74.420 would result in the creation of a hazard, or would be impractical, or would be detrimental to the City, the City Engineer may modify the scope of the required improvement to eliminate such hazardous, impractical, or detrimental results. Examples of conditions requiring modifications to improvement requirements include but are not limited to horizontal alignment, vertical alignment, significant stands of trees, fish and wildlife habitat areas, the amount of traffic generated by the proposed development, timing of the development or other conditions creating hazards for pedestrian, bicycle or motor vehicle traffic. The City Engineer may determine that, although an improvement may be impractical at the time of development, it will be necessary at some future date. In such cases, a written agreement guaranteeing future performance by the applicant in installing the required improvements must be signed by the applicant and approved by the City.**

**(2) When the City Engineer determines that modification of the street improvement requirements in TDC 74.420 is warranted pursuant to subsection (1) of this section, the City Engineer shall prepare written findings of modification. The City Engineer shall forward a copy of said findings and description of modification to the applicant, or his authorized agent, as part of the Utility Facilities Review for the proposed development, as provided by TDC 31.072. The decision of the City Engineer may be appealed to the City Council in accordance with TDC 31.076 and 31.077.**

**(3) To accommodate bicyclists on streets prior to those streets being upgraded to the full standards, an interim standard may be implemented by the City. These interim standards include reduction in motor vehicle lane width to 10 feet [the minimum specified in AASHTO's A Policy on Geo-metric Design of Highways and Streets (1990)], a reduction of bike lane width to 4-feet (as measured from the longitudinal gutter joint to the centerline of the bike lane stripe), and a paint-striped separation 2 to 4 feet wide in lieu of a center turn lane. Where available roadway width does not provide for these minimums, the roadway can be signed**

**for shared use by bicycle and motor vehicle travel. When width constraints occur at an intersection, bike lanes should terminate 50 feet from the intersection with appropriate signing.**

**FINDINGS:**

The Kittelson traffic impact analysis has not identified any unusual circumstances that would warrant modification of any required street improvements. Again, though the preferred right-of-way cross section does not currently exist, the applicant is proposing redevelopment of an existing school site that does not include additional students or staff. Therefore, there is no generation of additional traffic. Since there is no generation of additional traffic, there are no substantial off-site impacts on the adjacent right-of-way and transportation system associated with the proposed development. This criterion is met.

**VII. SECTION 74.470 STREET LIGHTS.**

**(1) Street light poles and luminaries shall be installed in accordance with the Public Works Construction Code.**

**(2) The applicant shall submit a street lighting plan for all interior and exterior streets on the proposed development site prior to issuance of a Public Works Permit**

**FINDINGS:**

The street lights on SW Boones Ferry Road near both site accesses have been identified as having inadequate illumination. The applicant will submit plans that show improving the street lights to meet current code requirements. This criterion is met through conditions of approval PFR-9.

**VIII. TDC SECTION 74.610 WATER SERVICE.**

**(1) Water lines shall be installed to serve each property in accordance with the Public Works Construction Code. Water line construction plans shall be submitted to the City Engineer for review and approval prior to construction.**

**(2) If there are undeveloped properties adjacent to the subject site, public water lines shall be extended by the applicant to the common boundary line of these properties. The lines shall be sized to provide service to future development, in accordance with the City's Water System Master Plan, TDC Chapter 12.**

**(3) As set forth in TDC Chapter 12, Water Service, the City has three water service levels. All development applicants shall be required to connect the proposed development site to the service level in which the development site is located. If the development site is located on a boundary line between two service levels the applicant shall be required to connect to the service level with the higher reservoir elevation. The applicant may also be required to install**

**or provide pressure reducing valves to supply appropriate water pressure to the properties in the proposed development site.**

**FINDINGS:**

All adjacent lots have access to public water lines. This criterion is met.

**IX. TDC SECTION 74.620 SANITARY SEWER SERVICE.**

**(1) Sanitary sewer lines shall be installed to serve each property in accordance with the Public Works Construction Code. Sanitary sewer construction plans and calculations shall be submitted to the City Engineer for review and approval prior to construction.**

**(2) If there are undeveloped properties adjacent to the proposed development site which can be served by the gravity sewer system on the proposed development site, the applicant shall extend public sanitary sewer lines to the common boundary line with these properties. The lines shall be sized to convey flows to include all future development from all up stream areas that can be expected to drain through the lines on the site, in accordance with the City's Sanitary Sewer System Master Plan, TDC Chapter 13.**

**FINDINGS:**

All adjacent lots have access to public sanitary sewer lines. This criterion is met.

**X. TDC SECTION 74.630 STORM DRAINAGE SYSTEM.**

**(1) Storm drainage lines shall be installed to serve each property in accordance with City standards. Storm drainage construction plans and calculations shall be submitted to the City Engineer for review and approval prior to construction.**

**(2) The storm drainage calculations shall confirm that adequate capacity exists to serve the site. The discharge from the development shall be analyzed in accordance with the City's Storm and Surface Water Regulations.**

**(3) If there are undeveloped properties adjacent to the proposed development site which can be served by the storm drainage system on the proposed development site, the applicant shall extend storm drainage lines to the common boundary line with these properties. The lines shall be sized to convey expected flows to include all future development from all up stream areas that will drain through the lines on the site, in accordance with the Tualatin Drainage Plan in TDC Chapter 14.**

**FINDINGS:**

There is an existing, permanent on-site stormwater quantity detention facility, designed in accordance with this title, located at the front of the site between the existing building and SW Boones Ferry Road. This facility qualifies as a technique that satisfies the requirement for



mitigating the impacts of development upon the public storm water quantity system for the new impervious area. All adjacent lots have access to public stormwater lines.

This site is located within the Hedges Creek drainage basin which is identified as requiring detention up to the 25-year storm event. The existing facility is proposed to be regraded and planted to meet current standards.

When development occurs the lot needs to be brought up to code when the amount of modification of impervious area on the site exceeds 1,000 square feet. The amount of modification proposed on the lot exceeds 1,000 square feet. Modification on a lot requires compliance with current Clean Water Standards to bring the remainder of the development up to current code for three times the impervious area modified. Communication with the developer included statement that the remainder of the lot includes adequate treatment and 25-year detention per current code. The submitted stormwater calculations do not include this assurance. The applicant will submit final stormwater plans and calculations that include confirmation that the remainder of this lot's impervious areas are treated and detained to current standards or show how the required additional treatment and detention for three times the modified area will occur. This criterion is met with conditions of approval PFR-3, PFR-10, and PFR-12.

#### **XI. TDC SECTION 74.640 GRADING.**

**(1) Development sites shall 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 shall 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 Engineer may require the applicant to remove all excess material from the development site.**

#### **FINDINGS:**

A Grading Plan has been provided as part of this application and is part of the overall Plan Set. Site grading is such that no site runoff is directed to adjacent sites. There is no evidence that adjacent sites drain toward the development site, therefore there is no impact to drainage on adjacent sites. This criterion is satisfied with conditions of approval PFR-1, PFR-2, PFR-7, PFR-10, and PFR-12.

#### **XII. TDC SECTION 74.650 WATER QUALITY, STORM WATER DETENTION AND EROSION CONTROL.**

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

**(3) For on-site private and regional non-residential public facilities, the applicant shall 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 shall submit an erosion control plan prior to issuance of a Public Works Permit. No construction or disturbing of the site shall occur until the erosion control plan is approved by the City and the required measures are in place and approved by the City.**

**FINDINGS:**

There is an existing, permanent on-site stormwater quantity detention facility, designed in accordance with this title, located at the front of the site between the existing building and SW Boones Ferry Road. This facility qualifies as a technique that satisfies the requirement for mitigating the impacts of development upon the public storm water quantity system for the new impervious area.

Modification on a lot requires compliance with current Clean Water Standards to bring the remainder of the development up to current code for three times the impervious area modified. Communication with the developer included statement that the remainder of the lot includes adequate treatment and 25-year detention per current code. The submitted stormwater calculations do not include this assurance. The applicant will submit final stormwater plans and calculations that include confirmation that the remainder of this lot's impervious areas are treated and detained to current standards or show how the required additional treatment and detention for three times the modified area will occur.

The fact sheet indicates 20.5 acres will be disturbed which requires a 1200C permit. The applicant shall obtain a 1200C Construction Erosion Control permit and obtain a grading and erosion control permit from the City of Tualatin prior to issuance of building permits.

The applicant has submitted a Service Provider Letter from Clean Water Services indicating that Sensitive Areas do not exist on-site. A CWS Memorandum was received dated January 30, 2018 for development on this site. The applicant will need to submit plans that are sufficient to obtain a Stormwater Connection Permit Authorization Letter that complies with the submitted Service Provider Letter conditions, for review and approval. This criterion is satisfied with conditions of approval PFR-6.

**E. TDC CHAPTER 75: ACCESS MANAGEMENT**

**I. TDC SECTION 75.010 PURPOSE.**

**The purpose of this chapter is to promote the development of safe, convenient and economic transportation systems and to preserve the safety and capacity of the street system by limiting conflicts resulting from uncontrolled driveway access, street intersections, and turning movements while providing for appropriate access for all properties.**

**Section 75.060 Existing Driveways and Street Intersections.**

**(1) Existing driveways with access onto arterials on the date this chapter was originally adopted shall be allowed to remain. If additional development occurs on properties with existing driveways with access onto arterials then this chapter applies and the entire site shall be made to conform with the requirements of this chapter.**

**FINDINGS:**

The existing driveways to SW Boones Ferry Road conform to the requirements of this chapter and will remain. This criterion is satisfied.

**II. SECTION 75.120 EXISTING STREETS.**

The following list describes in detail the freeways and arterials as defined in TDC 75.030 with respect to access. Recommendations are made for future changes in accesses and location of future accesses. These recommendations are examples of possible solutions and shall not be construed as limiting the City's authority to change or impose different conditions if additional studies result in different recommendations from those listed below.

**(8) BOONES FERRY ROAD**

**(g) Ibach Street to Norwood Road:**

Development of these residential properties shall result in no more than two driveway accesses for Tualatin High School, one emergency access with no curb cut for Grahams Landing Townhomes Condos (Tax Lot 2S1 35BA 90000) and only street intersections for other properties. All street intersections on Boones Ferry Road between Ibach and Norwood shall be spaced a minimum of 500 feet apart.

**FINDINGS:**

There are two existing driveway accesses serving the site and no new driveway accesses are proposed. This criterion is satisfied.