Exhibit B

City of Tualatin

www.tualatinoregon.gov

March 21, 2019

CITY ENGINEER'S REVIEW, FINDINGs, AND DECISION FOR AR18-0008 (HEDGES C)

TABLE OF CONTENTS

I. RECOMMENDATION

Based on the findings made herein, the City Engineer approves AR18-0008 (Hedges C), subject to the below conditions. Unless otherwise noted, requirements indicated below for plans, documents, and permits must be submitted to the Engineering Division.

A. PRIOR TO ISSUANCE OF PUBLIC WORKS AND WATER QUALITY PERMITS:

PFR-1 The applicant must submit final sanitary sewer plans that show location of the lines, grade, materials, and other details including a clean out at the edge of public right of way. The plans must show a connection to the existing sanitary sewer lateral at the northeast corner of the lot within the private street to the north and include a clean out at the edge of the public easement.

PFR-2 The applicant must submit final water system plans that show location of the water lines, grade, materials, and other details. The plans must include a separate lateral with a valve at the main for domestic services and public easement from the public water line to and surrounding the fire vault. The plans must show a connection to the existing 10 inch water lateral within the private street for fire service. The plans must identify the placement of root barriers adjacent to public easements to protect public utilities within the private street; root barriers must be 10 feet wide, 24 inches deep, and centered on proposed private trees.

PFR-3 The applicant must submit final stormwater calculations and plans.

PFR-4 The applicant must submit final plans that include a six-foot wide sidewalk behind a four-foot wide planter strip on SW Amu Street surrounding the existing street to connect both east and west sides. The plans must demonstrate that the existing sidewalk adjacent to the development remains in conformance with current PWCC/ADA/PWROWAG standards or be shown to be repaired.

PFR-5 The applicant must submit a turning movement diagram for a WB-67 design vehicle including on-site routing signage demonstrating how the public, emergency services, trash collection and delivery vehicles will be able to circulate through the existing development to the east to SW 112th Avenue due to absence of a cul-de-sac. Record a public access easement to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

PFR-6 The applicant must submit plans that include street trees spaced 30 on center within the planter strip along the SW Amu Street property frontage.

PFR-7 The applicant must submit plans sufficient to obtain a Stormwater Connection Permit Authorization Letter consistent with the associated Clean Water Services' Service Provider Letter.

PFR-8 The applicant must submit plans demonstrating that the proposed development minimizes the impact of stormwater from the development to adjacent properties, consistent with the requirements of with TMC Chapter 3-5-060 Permit Process (1) and TDC Chapter 74.640 Grading (1).

PFR-9 The applicant must submit PDFs of final Engineering permit plans.

B. PRIOR TO ISSUANCE OF A BUILDING PERMIT:

PFR-10 The applicant must obtain a Public Works and Water Quality Permit from the City of Tualatin.

C. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY:

PFR-11 The applicant must construct all public improvements shown on final approved plans. The applicant must submit final as-built mylars of the public improvements and PDFs including all Engineering permits must be provided.

PFR-12 The applicant must submit a copy of a recorded public water line easement from the public water line to and surrounding the fire vault.

II. APPEAL

Appeals of this decision must be received by the Engineering Division within the 14-day appeal period ending on **April 4, 2019 at 5 PM**. Issues must have been described with adequate clarity and detail with identification of the associated Tualatin Municipal and/or Development Code section to afford a decision maker an opportunity to respond to the issue. An appeal must be submitted on the form provided by the City, as detailed in TDC 36.161, with the applicable appeal fee, and signed by the appellant.

Sincerely,

Tony Doran, EIT
Engineering Associate

III. STANDARDS AND APPLICABLE CRITERIA

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

Tualatin Development Code (TDC)
Chapter 73: Community Design Standards
Chapter 74: Public Improvement Requirements

IV. CONCLUSIONS

A. TMC TITLE 03: UTILITIES AND WATER QUALITY

I. TMC CHAPTER 03-02: SEWER REGULATIONS; RATES

1. TMC 3-2-020 APPLICATION, PERMIT AND INSPECTION PROCEDURE.

(1) No person shall connect to any part of the sanitary sewer system without first making an application and securing a permit from the City for such connection, nor may any person substantially increase the flow, or alter the character of sewage, without first obtaining an additional permit and paying such charges therefore as may be fixed by the City, including such charges as inspection charges, connection charges and monthly service charges.

FINDINGS:
Existing public sanitary sewer lines exist within SW Amu Street and the private drive to the north of this site. Adjacent undeveloped parcels have access to these lines. No additional extension of public lines is needed.

The plans show a proposed sanitary sewer service for the development via a new lateral from the southeast corner of the building to the east, connecting to the existing public sanitary manhole within SW Amu Street. An existing lateral extended from the public sanitary sewer in the private street to the north is approximately seven feet below finished floor which is sufficient to serve the site without the expense of a new connection to a manhole and repair of the street. The developer has confirmed the lateral can serve the property. The final plans will show connection to this existing lateral.

The applicant will submit sanitary sewer plans that show location of the lines, grade, materials, and other details prior to obtaining permits.

A clean out will be installed at the right of way. The applicant will provide final engineering drawings of this connection. Sanitary sewer line design will be in conformance with Public Works Construction Code.

This criterion is satisfied with conditions of approval PFR-1, PFR-10, and PFR-11.

2. TMC 3-2-030 MATERIALS AND MANNER OF CONSTRUCTION.

(1) All building sewers, side sewers and connections to the main sewer shall be so constructed as to conform to the requirements of the Oregon State Plumbing Laws and rules and regulations and specifications for sewerage construction of the City.

FINDINGS:
Existing public sanitary sewer lines exist within SW Amu Street and the private drive to the north of this site. Adjacent undeveloped parcels have access to these lines. No additional extension of public lines is needed.

The plans show a proposed sanitary sewer service for the development via a new lateral from the southeast corner of the building to the east, connecting to the existing public sanitary manhole within SW Amu Street. An existing lateral extended from the public sanitary sewer in the private street to the north is approximately seven feet below finished floor which is sufficient to serve the site without the expense of a new connection to a manhole and repair of the street. The developer has confirmed the lateral can serve the property. The final plans will show connection to this existing lateral.

The applicant will submit sanitary sewer plans that show location of the lines, grade, materials, and other details prior to obtaining permits.

A clean out will be installed at the right of way. The applicant will provide final engineering drawings of this connection. Sanitary sewer line design will be in conformance with Public Works Construction Code.

This criterion is satisfied with conditions of approval PFR-1, PFR-10, and PFR-11.

3. TMC 3-2-060 USE OF PUBLIC SEWERS REQUIRED.

(1) No person shall discharge to a natural outlet within the City of Tualatin, or in an area under the jurisdiction of the City, any sewage or polluted waters, except where suitable treatment has been provided in accordance with this ordinance.

FINDINGS:
A sewer connection will be made to the public sanitary sewer system.

This criterion is satisfied with conditions of approval PFR-1, PFR-10, and PFR-11.

4. TMC 3-2-160 CONSTRUCTION STANDARDS.

All sewer line construction and installation of services and equipment shall be in conformance with the City of Tualatin Public Works Construction Code. In addition, Whenever a property owner extends a sewer line, the extension shall be carried to the opposite property line or to such other point as determined by the Public Works Director.

FINDINGS:
Existing public sanitary sewer lines exist within SW Amu Street and the private drive to the north of this site. Adjacent undeveloped parcels have access to these lines. No additional extension of public lines is needed.

The plans show a proposed sanitary sewer service for the development via a new lateral from the southeast corner of the building to the east, connecting to the existing public sanitary manhole within SW Amu Street. An existing lateral extended from the public sanitary sewer in the private street to the north is approximately seven feet below finished floor which is sufficient to serve the site without the expense of a new connection to a manhole and repair of the street. The developer has confirmed the lateral can serve the property. The final plans will show connection to this existing lateral.

The applicant will submit sanitary sewer plans that show location of the lines, grade, materials, and other details prior to obtaining permits.

This criterion is satisfied with conditions of approval PFR-1, PFR-10, and PFR-11.

II. TMC CHAPTER 03-03: WATER SERVICE

1. TMC 3-3-030 APPLICATION FOR SERVICE.

(1) No water service will be provided without a signed application containing the following information…

FINDING:
Public fire hydrant spacing in commercial/industrial areas is 250 feet apart. There are two existing public fire hydrants along the private street within a public water line easement to the north and one public hydrant along SW Amu Street to the east that satisfy this requirement. The public fire hydrant near the northwest corner of the lot is proposed to be relocated approximately 25 feet east to accommodate a driveway.

This project consists of one (1) building. The plans show a proposed 8-inch lateral from the main will provide service to building fire supply, however there is an existing 10 inch water lateral approximately 40 east of the proposed connection that will be used as confirmed with the developer's engineer. A double check detector assembly (DCDA) for backflow protection will be provided on this service. The existing private fire hydrants provide sufficient building coverage per Fire Department requirements.
The City needs access to the double checks that include fire vaults. If they are located out of right-of-way, a public easement is needed for the water line from the public water line to and including the fire vault and include access from right-of-way in case of inspection or maintenance activity. The applicant will record any additional easement needed due to location of their vaults.

Final submittals will provide determination of fire flow requirements for the building.

This development proposes a 2-inch domestic service lateral to the building. The plans show a proposed service will branch off the new fire lateral described above, however separate laterals with valves at the main line are required. A separate 2-inch water lateral will be constructed to separate the domestic from fire services.

A 1.5-inch domestic meter and double check assembly with 2-inch service to building will also be provided. An irrigation stub will be installed behind the domestic water meter. The double check assemblies for fire and domestic water service are shown to be located near the public water line easement for inspection and maintenance access.

The applicant will submit water service that show location of the lines, grade, materials, and other details prior to obtaining a Building Permit. A public works construction permit for the domestic and fire connections will be obtained. The applicant has not applied for a public works permit for these improvements. The applicant will need to submit water system plans that show location of the water lines, grade, materials, and other details prior to obtaining a public works permit.

This criterion is satisfied with conditions of approval PFR-2, PFR-10, PFR-11, and PFR-13.

2. <u>TMC 3-3-040 SEPARATE SERVICES REQUIRED.</u>

(1) Except as authorized by the City Engineer, a separate service and meter to supply regular water service or fire protection service shall be required for each building, residential unit or structure served. For the purposes of this section, trailer parks and multi-family residences of more than four dwelling units shall constitute a single unit unless the City Engineer determines that separate services are required.

(2) For nonresidential uses, separate meters shall be provided for each structure. Separate meters shall also be provided to each buildable lot or parcel on which water service is or will be provided.

FINDING:

Public fire hydrant spacing in commercial/industrial areas is 250 feet apart. There are two existing public fire hydrants along the private street within a public water line easement to the north and one public hydrant along SW Amu Street to the east that satisfy this requirement. The public fire hydrant near the northwest corner of the lot is proposed to be relocated approximately 25 feet east to accommodate a driveway.

This project consists of one (1) building. The plans show a proposed 8-inch lateral from the main will provide service to building fire supply, however there is an existing 10 inch water lateral approximately 40 east of the proposed connection that will be used as confirmed with the developer's engineer. A double check detector assembly (DCDA) for backflow protection will be provided on this service. The existing private fire hydrants provide sufficient building coverage per Fire Department requirements.

The City needs access to the double checks that include fire vaults. If they are located out of right-of-way, a public easement is needed for the water line from the public water line to and

including the fire vault and include access from right-of-way in case of inspection or maintenance activity. The applicant will record any additional easement needed due to location of their vaults.

Final submittals will provide determination of fire flow requirements for the building.

This development proposes a 2-inch domestic service lateral to the building. The plans show a proposed service will branch off the new fire lateral described above, however separate laterals with valves at the main line are required. A separate 2-inch water lateral will be constructed to separate the domestic from fire services.

A 1.5-inch domestic meter and double check assembly with 2-inch service to building will also be provided. An irrigation stub will be installed behind the domestic water meter. The double check assemblies for fire and domestic water service are shown to be located near the public water line easement for inspection and maintenance access.

The applicant will submit water service that show location of the lines, grade, materials, and other details prior to obtaining a Building Permit. A public works construction permit for the domestic and fire connections will be obtained. The applicant has not applied for a public works permit for these improvements. The applicant will need to submit water system plans that show location of the water lines, grade, materials, and other details prior to obtaining a public works permit.

This criterion is satisfied with conditions of approval PFR-2, PFR-10, PFR-11, and PFR-13.

3. TMC 3-3-50 REGULAR SERVICE.

(1) Upon the application for water service, and payment of all charges, the City will install a service connection and meter of such size and location as approved by the City Engineer. Service connection and meters larger than two inches may be installed by the property owner after approval from the City Engineer.

FINDING:
Public fire hydrant spacing in commercial/industrial areas is 250 feet apart. There are two existing public fire hydrants along the private street within a public water line easement to the north and one public hydrant along SW Amu Street to the east that satisfy this requirement. The public fire hydrant near the northwest corner of the lot is proposed to be relocated approximately 25 feet east to accommodate a driveway.

This project consists of one (1) building. The plans show a proposed 8-inch lateral from the main will provide service to building fire supply, however there is an existing 10 inch water lateral approximately 40 east of the proposed connection that will be used as confirmed with the developer's engineer. A double check detector assembly (DCDA) for backflow protection will be provided on this service. The existing private fire hydrants provide sufficient building coverage per Fire Department requirements.

The City needs access to the double checks that include fire vaults. If they are located out of right-of-way, a public easement is needed for the water line from the public water line to and including the fire vault and include access from right-of-way in case of inspection or maintenance activity. The applicant will record any additional easement needed due to location of their vaults.

Final submittals will provide determination of fire flow requirements for the building.

This development proposes a 2-inch domestic service lateral to the building. The plans show a proposed service will branch off the new fire lateral described above, however separate laterals with valves at the main line are required. A separate 2-inch water lateral will be constructed to separate the domestic from fire services.

A 1.5-inch domestic meter and double check assembly with 2-inch service to building will also be provided. An irrigation stub will be installed behind the domestic water meter. The double check assemblies for fire and domestic water service are shown to be located near the public water line easement for inspection and maintenance access.

The applicant will submit water service that show location of the lines, grade, materials, and other details prior to obtaining a Building Permit. A public works construction permit for the domestic and fire connections will be obtained. The applicant has not applied for a public works permit for these improvements. The applicant will need to submit water system plans that show location of the water lines, grade, materials, and other details prior to obtaining a public works permit.

This criterion is satisfied with conditions of approval PFR-2, PFR-10, PFR-11, and PFR-13.

4. TMC 3-3-080 FIRE PROTECTION SERVICE.

Fire protection facilities will be allowed under the following conditions:
(2) When a building has a fire protection service which is separate from the regular water service to the building, an appropriate backflow device, but not less than a double check detector check, approved by the Operations Director, shall be used in place of a service meter. Water supplied through this service shall not be used for any purpose except for suppressing a fire or testing of the fire protection system. If registration of regular water usage is recorded on the detector check meter, the City may require installation of a service meter or removal of the fire protection service.

FINDING:
Public fire hydrant spacing in commercial/industrial areas is 250 feet apart. There are two existing public fire hydrants along the private street within a public water line easement to the north and one public hydrant along SW Amu Street to the east that satisfy this requirement. The public fire hydrant near the northwest corner of the lot is proposed to be relocated approximately 25 feet east to accommodate a driveway.

This project consists of one (1) building. The plans show a proposed 8-inch lateral from the main will provide service to building fire supply, however there is an existing 10 inch water lateral approximately 40 east of the proposed connection that will be used as confirmed with the developer's engineer. A double check detector assembly (DCDA) for backflow protection will be provided on this service. The existing private fire hydrants provide sufficient building coverage per Fire Department requirements.

The City needs access to the double checks that include fire vaults. If they are located out of right-of-way, a public easement is needed for the water line from the public water line to and including the fire vault and include access from right-of-way in case of inspection or maintenance activity. The applicant will record any additional easement needed due to location of their vaults.

Final submittals will provide determination of fire flow requirements for the building.

This development proposes a 2-inch domestic service lateral to the building. The plans show a proposed service will branch off the new fire lateral described above, however separate laterals with valves at the main line are required. A separate 2-inch water lateral will be constructed to separate the domestic from fire services.

A 1.5-inch domestic meter and double check assembly with 2-inch service to building will also be provided. An irrigation stub will be installed behind the domestic water meter. The double check assemblies for fire and domestic water service are shown to be located near the public water line easement for inspection and maintenance access.

The applicant will submit water service that show location of the lines, grade, materials, and other details prior to obtaining a Building Permit. A public works construction permit for the domestic and fire connections will be obtained. The applicant has not applied for a public works permit for these improvements. The applicant will need to submit water system plans that show location of the water lines, grade, materials, and other details prior to obtaining a public works permit.

This criterion is satisfied with conditions of approval PFR-2, PFR-10, PFR-11, and PFR-13.

5. <u>TMC 3-3-100 METERS.</u>

(1) Meters up to and including two inches will be furnished by the City. Meters larger than two inches may be furnished by the customer upon approval of the Operations Director.

FINDING:
Public fire hydrant spacing in commercial/industrial areas is 250 feet apart. There are two existing public fire hydrants along the private street within a public water line easement to the north and one public hydrant along SW Amu Street to the east that satisfy this requirement. The public fire hydrant near the northwest corner of the lot is proposed to be relocated approximately 25 feet east to accommodate a driveway.

This project consists of one (1) building. The plans show a proposed 8-inch lateral from the main will provide service to building fire supply, however there is an existing 10 inch water lateral approximately 40 east of the proposed connection that will be used as confirmed with the developer's engineer. A double check detector assembly (DCDA) for backflow protection will be provided on this service. The existing private fire hydrants provide sufficient building coverage per Fire Department requirements.

The City needs access to the double checks that include fire vaults. If they are located out of right-of-way, a public easement is needed for the water line from the public water line to and including the fire vault and include access from right-of-way in case of inspection or maintenance activity. The applicant will record any additional easement needed due to location of their vaults.

Final submittals will provide determination of fire flow requirements for the building.

This development proposes a 2-inch domestic service lateral to the building. The plans show a proposed service will branch off the new fire lateral described above, however separate laterals with valves at the main line are required. A separate 2-inch water lateral will be constructed to separate the domestic from fire services.

A 1.5-inch domestic meter and double check assembly with 2-inch service to building will also be provided. An irrigation stub will be installed behind the domestic water meter. The double check assemblies for fire and domestic water service are shown to be located near the public water line easement for inspection and maintenance access.

The applicant will submit water service that show location of the lines, grade, materials, and other details prior to obtaining a Building Permit. A public works construction permit for the domestic and fire connections will be obtained. The applicant has not applied for a public works permit for these improvements. The applicant will need to submit water system plans that show location of the water lines, grade, materials, and other details prior to obtaining a public works permit.

This criterion is satisfied with conditions of approval PFR-2, PFR-10, PFR-11, and PFR-13.

6. TMC 3-3-110 CONSTRUCTION STANDARDS.

All water line construction and installation of services and equipment shall be in conformance with the City of Tualatin Public Works Construction Code. In addition, whenever a property owner extends a water line, which upon completion, is intended to be dedicated to the City as part of the public water system, said extension shall be carried to the opposite property line or to such other point as determined by the City Engineer. Water line size shall be determined by the City Engineer in accordance with the City's Development Code or implementing ordinances and the Public Works Construction Code.

FINDING:
Public fire hydrant spacing in commercial/industrial areas is 250 feet apart. There are two existing public fire hydrants along the private street within a public water line easement to the north and one public hydrant along SW Amu Street to the east that satisfy this requirement. The public fire hydrant near the northwest corner of the lot is proposed to be relocated approximately 25 feet east to accommodate a driveway.

This project consists of one (1) building. The plans show a proposed 8-inch lateral from the main will provide service to building fire supply, however there is an existing 10 inch water lateral approximately 40 east of the proposed connection that will be used as confirmed with the developer's engineer. A double check detector assembly (DCDA) for backflow protection will be provided on this service. The existing private fire hydrants provide sufficient building coverage per Fire Department requirements.

The City needs access to the double checks that include fire vaults. If they are located out of right-of-way, a public easement is needed for the water line from the public water line to and including the fire vault and include access from right-of-way in case of inspection or maintenance activity. The applicant will record any additional easement needed due to location of their vaults.

Final submittals will provide determination of fire flow requirements for the building.

This development proposes a 2-inch domestic service lateral to the building. The plans show a proposed service will branch off the new fire lateral described above, however separate laterals with valves at the main line are required. A separate 2-inch water lateral will be constructed to separate the domestic from fire services.

A 1.5-inch domestic meter and double check assembly with 2-inch service to building will also be provided. An irrigation stub will be installed behind the domestic water meter. The double check assemblies for fire and domestic water service are shown to be located near the public water line easement for inspection and maintenance access.

The applicant will submit water service that show location of the lines, grade, materials, and other details prior to obtaining a Building Permit. A public works construction permit for the domestic and fire connections will be obtained. The applicant has not applied for a public works permit for these improvements. The applicant will need to submit water system plans that show location of the water lines, grade, materials, and other details prior to obtaining a public works permit.

This criterion is satisfied with conditions of approval PFR-2, PFR-10, PFR-11, and PFR-13.

7. <u>TMC 3-3-120 BACKFLOW PREVENTION DEVICES AND CROSS CONNECTIONS.</u>

(1) Except where this ordinance provides more stringent requirements, the definitions, standards, requirements and regulations set forth in the Oregon Administrative Rules pertaining to public water supply systems and specifically OAR 333 Division 61 in effect on

the date this ordinance becomes effective are hereby adopted and incorporated by reference.

(2) The owner of property to which City water is furnished for human consumption shall install in accordance with City standards an appropriate backflow prevention device on the premises where any of the following circumstances exist:

(a) Those circumstances identified in regulations adopted under subsection (1) of this section;

(b) Where there is a fire protection service, an irrigation service or a nonresidential service connection which is two inches (2") or larger in size;

(c) Where the potable water supply provided inside a structure is 32 feet or more, higher than the elevation of the water main at the point of service connection;

FINDING:

Public fire hydrant spacing in commercial/industrial areas is 250 feet apart. There are two existing public fire hydrants along the private street within a public water line easement to the north and one public hydrant along SW Amu Street to the east that satisfy this requirement. The public fire hydrant near the northwest corner of the lot is proposed to be relocated approximately 25 feet east to accommodate a driveway.

This project consists of one (1) building. The plans show a proposed 8-inch lateral from the main will provide service to building fire supply, however there is an existing 10 inch water lateral approximately 40 east of the proposed connection that will be used as confirmed with the developer's engineer. A double check detector assembly (DCDA) for backflow protection will be provided on this service. The existing private fire hydrants provide sufficient building coverage per Fire Department requirements.

The City needs access to the double checks that include fire vaults. If they are located out of right-of-way, a public easement is needed for the water line from the public water line to and including the fire vault and include access from right-of-way in case of inspection or maintenance activity. The applicant will record any additional easement needed due to location of their vaults.

Final submittals will provide determination of fire flow requirements for the building.

This development proposes a 2-inch domestic service lateral to the building. The plans show a proposed service will branch off the new fire lateral described above, however separate laterals with valves at the main line are required. A separate 2-inch water lateral will be constructed to separate the domestic from fire services.

A 1.5-inch domestic meter and double check assembly with 2-inch service to building will also be provided. An irrigation stub will be installed behind the domestic water meter. The double check assemblies for fire and domestic water service are shown to be located near the public water line easement for inspection and maintenance access.

The applicant will submit water service that show location of the lines, grade, materials, and other details prior to obtaining a Building Permit. A public works construction permit for the

domestic and fire connections will be obtained. The applicant has not applied for a public works permit for these improvements. The applicant will need to submit water system plans that show location of the water lines, grade, materials, and other details prior to obtaining a public works permit.

This criterion is satisfied with conditions of approval PFR-2, PFR-10, PFR-11, and PFR-13.

(4) Except as otherwise provided in this subsection, all irrigation systems shall be installed with a double check valve assembly. Irrigation system backflow prevention device assemblies installed before the effective date of this ordinance, which were approved at the time they were installed but are not on the current list of approved device assemblies maintained by the Oregon State Health Division, shall be permitted to remain in service provided they are properly maintained, are commensurate with the degree of hazard, are tested at least annually, and perform satisfactorily. When devices of this type are moved, or require more than minimum maintenance, they shall be replaced by device assemblies which are on the Health Division list of approved device assemblies.

FINDING:
Public fire hydrant spacing in commercial/industrial areas is 250 feet apart. There are two existing public fire hydrants along the private street within a public water line easement to the north and one public hydrant along SW Amu Street to the east that satisfy this requirement. The public fire hydrant near the northwest corner of the lot is proposed to be relocated approximately 25 feet east to accommodate a driveway.

This project consists of one (1) building. The plans show a proposed 8-inch lateral from the main will provide service to building fire supply, however there is an existing 10 inch water lateral approximately 40 east of the proposed connection that will be used as confirmed with the developer's engineer. A double check detector assembly (DCDA) for backflow protection will be provided on this service. The existing private fire hydrants provide sufficient building coverage per Fire Department requirements.

The City needs access to the double checks that include fire vaults. If they are located out of right-of-way, a public easement is needed for the water line from the public water line to and including the fire vault and include access from right-of-way in case of inspection or maintenance activity. The applicant will record any additional easement needed due to location of their vaults.

Final submittals will provide determination of fire flow requirements for the building.

This development proposes a 2-inch domestic service lateral to the building. The plans show a proposed service will branch off the new fire lateral described above, however separate laterals with valves at the main line are required. A separate 2-inch water lateral will be constructed to separate the domestic from fire services.

A 1.5-inch domestic meter and double check assembly with 2-inch service to building will also be provided. An irrigation stub will be installed behind the domestic water meter. The double

check assemblies for fire and domestic water service are shown to be located near the public water line easement for inspection and maintenance access.

The applicant will submit water service that show location of the lines, grade, materials, and other details prior to obtaining a Building Permit. A public works construction permit for the domestic and fire connections will be obtained. The applicant has not applied for a public works permit for these improvements. The applicant will need to submit water system plans that show location of the water lines, grade, materials, and other details prior to obtaining a public works permit.

This criterion is satisfied with conditions of approval PFR-2, PFR-10, PFR-11, and PFR-13.

8. <u>TMC 3-3-130 CONTROL VALVES.</u>

The customer shall install a suitable valve, as close to the meter location as practical, the operation of which will control the entire water supply from the service. The operation by the customer of the curb stop in the meter box is prohibited.

FINDING:
Public fire hydrant spacing in commercial/industrial areas is 250 feet apart. There are two existing public fire hydrants along the private street within a public water line easement to the north and one public hydrant along SW Amu Street to the east that satisfy this requirement. The public fire hydrant near the northwest corner of the lot is proposed to be relocated approximately 25 feet east to accommodate a driveway.

This project consists of one (1) building. The plans show a proposed 8-inch lateral from the main will provide service to building fire supply, however there is an existing 10 inch water lateral approximately 40 east of the proposed connection that will be used as confirmed with the developer's engineer. A double check detector assembly (DCDA) for backflow protection will be provided on this service. The existing private fire hydrants provide sufficient building coverage per Fire Department requirements.

The City needs access to the double checks that include fire vaults. If they are located out of right-of-way, a public easement is needed for the water line from the public water line to and including the fire vault and include access from right-of-way in case of inspection or maintenance activity. The applicant will record any additional easement needed due to location of their vaults.

Final submittals will provide determination of fire flow requirements for the building.

This development proposes a 2-inch domestic service lateral to the building. The plans show a proposed service will branch off the new fire lateral described above, however separate laterals with valves at the main line are required. A separate 2-inch water lateral will be constructed to separate the domestic from fire services.

A 1.5-inch domestic meter and double check assembly with 2-inch service to building will also be provided. An irrigation stub will be installed behind the domestic water meter. The double check assemblies for fire and domestic water service are shown to be located near the public water line easement for inspection and maintenance access.

The applicant will submit water service that show location of the lines, grade, materials, and other details prior to obtaining a Building Permit. A public works construction permit for the domestic and fire connections will be obtained. The applicant has not applied for a public works permit for these improvements. The applicant will need to submit water system plans that show location of the water lines, grade, materials, and other details prior to obtaining a public works permit.

This criterion is satisfied with conditions of approval PFR-2, PFR-10, PFR-11, and PFR-13.

III. 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…

3-5-040 Erosion Prohibited.
Visible or measurable erosion which enters, or is likely to enter, the public storm and surface water system or leaves the property on which it originates, is prohibited, and is a violation of this ordinance. The owner of the property from which erosion originates and any person whose activity on the property causes such erosion, shall be deemed responsible for causing such erosion and shall be responsible to stop erosion, cleanup past erosion, and prevent erosion from occurring in the future.

FINDING:
Topsoil will be stockpiled during excavation to be used for backfill of landscape areas. Additionally, amendments will be added to the topsoil at that time.

Per the attached grading plan (see Sheet C2.0), the proposed development is designed to provide positive drainage to the storm conveyance system. Planting areas will be graded consistently with the rest of the lots.

All soil, plant, and mulching materials will be contained in landscape areas and surrounded by curbing, and will not cross roadways or walkways. Stormwater on the proposed development's

impervious areas will drain directly to new storm inlets (see Site Grading Plan sheet C2.0 & Site Utility Plan sheet C3.0).

As shown on the attached grading plan (see Sheet C2.0), drainage from impervious surfaces will be directed to the proposed storm drain systems. Catch basins have been placed to minimize overland flow in areas of designated walkways.

The site disturbed area is approximately 3.3 acres. An approved City Erosion Control Permit and 1200-CN are already in place as they were submitted and approved as part of an early grading project (City Permit #EC1218-1373 approved on 8/10/18).

This criterion is satisfied.

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. 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.

FINDING:
Topsoil will be stockpiled during excavation to be used for backfill of landscape areas. Additionally, amendments will be added to the topsoil at that time.

Per the attached grading plan (see Sheet C2.0), the proposed development is designed to provide positive drainage to the storm conveyance system. Planting areas will be graded consistently with the rest of the lots.

All soil, plant, and mulching materials will be contained in landscape areas and surrounded by curbing, and will not cross roadways or walkways. Stormwater on the proposed development's impervious areas will drain directly to new storm inlets (see Site Grading Plan sheet C2.0 & Site Utility Plan sheet C3.0).

As shown on the attached grading plan (see Sheet C2.0), drainage from impervious surfaces will be directed to the proposed storm drain systems. Catch basins have been placed to minimize overland flow in areas of designated walkways.

The site disturbed area is approximately 3.3 acres. An approved City Erosion Control Permit and 1200-CN are already in place as they were submitted and approved as part of an early grading project (City Permit #EC1218-1373 approved on 8/10/18).

This criterion is satisfied.

(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.

FINDING:
Topsoil will be stockpiled during excavation to be used for backfill of landscape areas. Additionally, amendments will be added to the topsoil at that time.

Per the attached grading plan (see Sheet C2.0), the proposed development is designed to provide positive drainage to the storm conveyance system. Planting areas will be graded consistently with the rest of the lots.

All soil, plant, and mulching materials will be contained in landscape areas and surrounded by curbing, and will not cross roadways or walkways. Stormwater on the proposed development's impervious areas will drain directly to new storm inlets (see Site Grading Plan sheet C2.0 & Site Utility Plan sheet C3.0).

As shown on the attached grading plan (see Sheet C2.0), drainage from impervious surfaces will be directed to the proposed storm drain systems. Catch basins have been placed to minimize overland flow in areas of designated walkways.

The site disturbed area is approximately 3.3 acres. An approved City Erosion Control Permit and 1200-CN are already in place as they were submitted and approved as part of an early grading project (City Permit #EC1218-1373 approved on 8/10/18).

This criterion is satisfied.

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, 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.

FINDING:
Topsoil will be stockpiled during excavation to be used for backfill of landscape areas. Additionally, amendments will be added to the topsoil at that time.

Per the attached grading plan (see Sheet C2.0), the proposed development is designed to provide positive drainage to the storm conveyance system. Planting areas will be graded consistently with the rest of the lots.

All soil, plant, and mulching materials will be contained in landscape areas and surrounded by curbing, and will not cross roadways or walkways. Stormwater on the proposed development's impervious areas will drain directly to new storm inlets (see Site Grading Plan sheet C2.0 & Site Utility Plan sheet C3.0).

As shown on the attached grading plan (see Sheet C2.0), drainage from impervious surfaces will be directed to the proposed storm drain systems. Catch basins have been placed to minimize overland flow in areas of designated walkways.

The site disturbed area is approximately 3.3 acres. An approved City Erosion Control Permit and 1200-CN are already in place as they were submitted and approved as part of an early grading project (City Permit #EC1218-1373 approved on 8/10/18).

This criterion is satisfied.

4. <u>TMC 3-5-200 DOWNSTREAM PROTECTION REQUIREMENT.</u>

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;

FINDING:
On-site stormwater quantity control (detention) is provided because the City's stormwater master planning requires on-site detention at this location. The proposed system is designed such that the peak post-development run-off rates discharged from the site will not exceed the peak pre-development rates for the 2, 5, 10, and 25-year, 24-hour storm events. Preliminary stormwater calculations are included with the Architectural Review application (see Preliminary Stormwater Report).

No adverse effects on receiving waters in the basin or sub-basin are anticipated per the stormwater calculations included with the Architectural Review application.

The applicant will submit final stormwater calculations and plans prior to obtaining a permit.

This criterion is satisfied with conditions of approval PFR-3, PFR-10, and PFR-11.

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.

If the increase in surface waters leaving a development will cause or contribute to damage from flooding, then the identified capacity deficiency shall be corrected prior to development or the development must construct onsite detention. To determine if the runoff from the development will cause or contribute to damage from flooding the City Engineer will consider the following factors:

(1) The potential for or extent of flooding or other adverse impacts from the run-off of the development on downstream properties;

(2) The potential for or extent of possibility of inverse condemnation claims;

(3) Incremental impacts of runoff from the subject and other developments in the basin; and

(4) Other factors that may be relevant to the particular situation.

The purpose of the City Engineer's review is to protect the City and its inhabitants from the impacts or damage caused by runoff from development while recognizing all appropriate limitations on exactions from the development

FINDING:

On-site stormwater quantity control (detention) is provided because the City's stormwater master planning requires on-site detention at this location. The proposed system is designed such that the peak post-development run-off rates discharged from the site will not exceed the peak pre-development rates for the 2, 5, 10 and 25-year, 24-hour storm events. Preliminary

stormwater calculations are included with the Architectural Review application (see Preliminary Stormwater Report).

No adverse effects on receiving waters in the basin or sub-basin are anticipated per the stormwater calculations included with the Architectural Review application.

The applicant will submit final stormwater calculations and plans prior to obtaining a permit.

This criterion is satisfied with conditions of approval PFR-3, PFR-10, and PFR-11.

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…

(2) There is an identified regional detention site within the boundary of the development.

(3) There is a site within the boundary of the development which would qualify as a regional detention site under criteria or capital plan adopted by the Unified Sewerage Agency.

(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.

FINDING:

On-site stormwater quantity control (detention) is provided because the City's stormwater master planning requires on-site detention at this location. The proposed system is designed such that the peak post-development run-off rates discharged from the site will not exceed the peak pre-development rates for the 2, 5, 10 and 25-year, 24-hour storm events. Preliminary stormwater calculations are included with the Architectural Review application (see Preliminary Stormwater Report).

No adverse effects on receiving waters in the basin or sub-basin are anticipated per the stormwater calculations included with the Architectural Review application.

The applicant will submit final stormwater calculations and plans prior to obtaining a permit.

This criterion is satisfied with conditions of approval PFR-3, PFR-10, and PFR-11.

7. 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.

FINDING:

On-site stormwater quantity control (detention) is provided because the City's stormwater master planning requires on-site detention at this location. The proposed system is designed such that the peak post-development run-off rates discharged from the site will not exceed the peak pre-development rates for the 2, 5, 10 and 25-year, 24-hour storm events. Preliminary stormwater calculations are included with the Architectural Review application (see Preliminary Stormwater Report).

No adverse effects on receiving waters in the basin or sub-basin are anticipated per the stormwater calculations included with the Architectural Review application.

The applicant will submit final stormwater calculations and plans prior to obtaining a permit.

This criterion is satisfied with conditions of approval PFR-3, PFR-10, and PFR-11.

8. 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.

(2) For single family and duplex residential subdivisions, stormwater quantity detention facilities shall be sized for the impervious areas to be created by the subdivision, including all residences on individual lots at a rate of 2640 square feet of impervious surface area per dwelling unit, plus all roads which are assessed a surface water management monthly fee under Unified Sewerage Agency rules. Such facilities shall be constructed as a part of the subdivision public improvements. Construction of a single family or duplex residence on an existing lot of record is not required to construct stormwater quantity detention facilities.

(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.

FINDING:
On-site stormwater quantity control (detention) is provided because the City's stormwater master planning requires on-site detention at this location. The proposed system is designed such that the peak post-development run-off rates discharged from the site will not exceed the peak pre-development rates for the 2, 5, 10 and 25-year, 24-hour storm events. Preliminary stormwater calculations are included with the Architectural Review application (see Preliminary Stormwater Report).

No adverse effects on receiving waters in the basin or sub-basin are anticipated per the stormwater calculations included with the Architectural Review application.

The applicant will submit final stormwater calculations and plans prior to obtaining a permit.

This criterion is satisfied with conditions of approval PFR-3, PFR-10, and PFR-11.

IV. 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 sites proposed water quality system 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.

FINDING:
All impervious surfaces will be treated within the sites proposed water quality system which are designed in conformance with Clean Water Services Resolution and Order 17-05.

This criterion is satisfied with conditions of approval PFR-3, PFR-10, and PFR-11.

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.

FINDING:
The sites proposed water quality system is designed in conformance to Clean Water Services Resolution and Order 17-05.

This criterion is satisfied with conditions of approval PFR-3, PFR-10, and PFR-11.

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.

FINDING:

The sites proposed water quality system is designed in conformance to Clean Water Services Resolution and Order 17-05.

This criterion is satisfied with conditions of approval PFR-3, PFR-10, and PFR-11.

14. 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.

FINDING:

The sites proposed water quality system is designed to meet phosphorus removal standards in conformance to Clean Water Services Resolution and Order 17-05.

This criterion is satisfied with conditions of approval PFR-3, PFR-10, and PFR-11.

15. 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.

FINDING:

The sites proposed water quality system is designed to meet removal efficiency standards for a mean summertime storm event in conformance to Clean Water Services Resolution and Order 17-05.

This criterion is satisfied with conditions of approval PFR-3, PFR-10, and PFR-11.

16. 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:

On-site stormwater quantity control (detention) is provided because the City's stormwater master planning requires on-site detention at this location. The proposed system is designed such that the peak post-development run-off rates discharged from the site will not exceed the peak pre-development rates for the 2, 5, 10 and 25-year, 24-hour storm events. Preliminary stormwater calculations are included with the Architectural Review application (see Preliminary Stormwater Report).

No adverse effects on receiving waters in the basin or sub-basin are anticipated per the stormwater calculations included with the Architectural Review application.

The applicant will submit final stormwater calculations and plans prior to obtaining a permit. The applicant will submit final stormwater calculations and plans prior to obtaining a Building Permit. The applicant will obtain a permit from the City of Tualatin to install an approved runoff flow control and treatment facility on the subject site, provide a maintenance assurance, and record a maintenance and operation plan in conformance with City standards.

This criterion is satisfied with conditions of approval PFR-3, PFR-10, and PFR-11.

B. 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.

FINDING:
Topsoil will be stockpiled during excavation to be used for backfill of landscape areas. Additionally, amendments will be added to the topsoil at that time.

Per the attached grading plan (see Sheet C2.0), the proposed development is designed to provide positive drainage to the storm conveyance system. Planting areas will be graded consistently with the rest of the lots.

All soil, plant, and mulching materials will be contained in landscape areas and surrounded by curbing, and will not cross roadways or walkways. Stormwater on the proposed development's impervious areas will drain directly to new storm inlets (see Site Grading Plan sheet C2.0 & Site Utility Plan sheet C3.0).

As shown on the attached grading plan (see Sheet C2.0), drainage from impervious surfaces will be directed to the proposed storm drain systems. Catch basins have been placed to minimize overland flow in areas of designated walkways.

The site disturbed area is approximately 3.3 acres. An approved City Erosion Control Permit and 1200-CN are already in place as they were submitted and approved as part of an early grading project (City Permit #EC1218-1373 approved on 8/10/18).

This criterion is satisfied.

(2) All planting areas shall be graded to provide positive drainage.

FINDING:
Topsoil will be stockpiled during excavation to be used for backfill of landscape areas. Additionally, amendments will be added to the topsoil at that time.

Per the attached grading plan (see Sheet C2.0), the proposed development is designed to provide positive drainage to the storm conveyance system. Planting areas will be graded consistently with the rest of the lots.

All soil, plant, and mulching materials will be contained in landscape areas and surrounded by curbing, and will not cross roadways or walkways. Stormwater on the proposed development's

impervious areas will drain directly to new storm inlets (see Site Grading Plan sheet C2.0 & Site Utility Plan sheet C3.0).

As shown on the attached grading plan (see Sheet C2.0), drainage from impervious surfaces will be directed to the proposed storm drain systems. Catch basins have been placed to minimize overland flow in areas of designated walkways.

The site disturbed area is approximately 3.3 acres. An approved City Erosion Control Permit and 1200-CN are already in place as they were submitted and approved as part of an early grading project (City Permit #EC1218-1373 approved on 8/10/18).

This criterion is satisfied.

(3) Neither soil, water, plant materials nor mulching materials shall be allowed to wash across roadways or walkways.

FINDING:
Topsoil will be stockpiled during excavation to be used for backfill of landscape areas. Additionally, amendments will be added to the topsoil at that time.

Per the attached grading plan (see Sheet C2.0), the proposed development is designed to provide positive drainage to the storm conveyance system. Planting areas will be graded consistently with the rest of the lots.

All soil, plant, and mulching materials will be contained in landscape areas and surrounded by curbing, and will not cross roadways or walkways. Stormwater on the proposed development's impervious areas will drain directly to new storm inlets (see Site Grading Plan sheet C2.0 & Site Utility Plan sheet C3.0).

As shown on the attached grading plan (see Sheet C2.0), drainage from impervious surfaces will be directed to the proposed storm drain systems. Catch basins have been placed to minimize overland flow in areas of designated walkways.

The site disturbed area is approximately 3.3 acres. An approved City Erosion Control Permit and 1200-CN are already in place as they were submitted and approved as part of an early grading project (City Permit #EC1218-1373 approved on 8/10/18).

This criterion is satisfied.

(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:
Topsoil will be stockpiled during excavation to be used for backfill of landscape areas. Additionally, amendments will be added to the topsoil at that time.

Per the attached grading plan (see Sheet C2.0), the proposed development is designed to provide positive drainage to the storm conveyance system. Planting areas will be graded consistently with the rest of the lots.

All soil, plant, and mulching materials will be contained in landscape areas and surrounded by curbing and will not cross roadways or walkways. Stormwater on the proposed development's impervious areas will drain directly to new storm inlets (see Site Grading Plan sheet C2.0 & Site Utility Plan sheet C3.0).

As shown on the attached grading plan (see Sheet C2.0), drainage from impervious surfaces will be directed to the proposed storm drain systems. Catch basins have been placed to minimize overland flow in areas of designated walkways.

This criterion is satisfied.

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.

FINDINGS:
The site abuts rights-of-way on the east side. The number of proposed parking spaces is 171. This is less than 250 spaces, therefore only one access is required. Provision of vehicular and pedestrian ingress and egress is located off of an existing shared private street, at the northeast and northwest corners of the site and depicted on the attached plan (see Sheets C1.0), as consistent with the applicable TDC sections per the analysis provided in this narrative. The private street is 40 feet wide at its connection to SW Amu Street. The driveways on the site meet the driveway width plus onsite and intersection separation standards.

This criterion is satisfied.

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

FINDINGS:
The site abuts rights-of-way on the east side. The number of proposed parking spaces is 171. This is less than 250 spaces, therefore only one access is required. Provision of vehicular and pedestrian ingress and egress is located off of an existing shared private street, at the northeast

and northwest corners of the site and depicted on the plan (see Sheets C1.0), as consistent with the applicable TDC sections per the analysis provided in this narrative. The private street is 40 feet wide at its connection to SW Amu Street. The driveways on the site meet the driveway width plus onsite and intersection separation standards.

This criterion is satisfied.

(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.

FINDINGS:
The site abuts rights-of-way on the east side. The number of proposed parking spaces is 171. This is less than 250 spaces, therefore only one access is required. Provision of vehicular and pedestrian ingress and egress is located off of an existing shared private street, at the northeast and northwest corners of the site and depicted on the plan (see Sheets C1.0), as consistent with the applicable TDC sections per the analysis provided in this narrative. The private street is 40 feet wide at its connection to SW Amu Street. The driveways on the site meet the driveway width plus onsite and intersection separation standards.

This criterion is satisfied.

(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 feet from ROW, 24' thereafter	No curbs or walkway required

FINDINGS:
The site abuts rights-of-way on the east side. The number of proposed parking spaces is 171. This is less than 250 spaces, therefore only one access is required. Provision of vehicular and pedestrian ingress and egress is located off of an existing shared private street, at the northeast and northwest corners of the site and depicted on the plan (see Sheets C1.0), as consistent with

the applicable TDC sections per the analysis provided in this narrative. The private street is 40 feet wide at its connection to SW Amu Street. The driveways on the site meet the driveway width plus onsite and intersection separation standards.

This criterion is satisfied.

(14) Maximum Driveway Widths and Other Requirements.
(a) Unless otherwise provided in this chapter, maximum driveway widths shall not exceed 40 feet.

FINDINGS:
The site abuts rights-of-way on the east side. The number of proposed parking spaces is 171. This is less than 250 spaces, therefore only one access is required. Provision of vehicular and pedestrian ingress and egress is located off of an existing shared private street, at the northeast and northwest corners of the site and depicted on the plan (see Sheets C1.0), as consistent with the applicable TDC sections per the analysis provided in this narrative. The private street is 40 feet wide at its connection to SW Amu Street. The driveways on the site meet the driveway width plus onsite and intersection separation standards.

This criterion is satisfied.

(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).

FINDINGS:
The site abuts rights-of-way on the east side. The number of proposed parking spaces is 171. This is less than 250 spaces, therefore only one access is required. Provision of vehicular and pedestrian ingress and egress is located off of an existing shared private street, at the northeast and northwest corners of the site and depicted on the plan (see Sheets C1.0), as consistent with the applicable TDC sections per the analysis provided in this narrative. The private street is 40 feet wide at its connection to SW Amu Street. The driveways on the site meet the driveway width plus onsite and intersection separation standards.

This criterion is satisfied.

(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.
(b) At the intersection of two local streets, driveways shall be located a minimum of 30 feet from the intersection.

FINDINGS:
The site abuts rights-of-way on the east side. The number of proposed parking spaces is 171. This is less than 250 spaces, therefore only one access is required. Provision of vehicular and

pedestrian ingress and egress is located off of an existing shared private street, at the northeast and northwest corners of the site and depicted on the plan (see Sheets C1.0), as consistent with the applicable TDC sections per the analysis provided in this narrative. The private street is 40 feet wide at its connection to SW Amu Street. The driveways on the site meet the driveway width plus onsite and intersection separation standards.

This criterion is satisfied.

(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:
This proposed driveways are free of visual obstructions within the vision clearance area.

This criterion is satisfied.

C. 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:
All public improvements proposed as part of this project will be installed in accordance with the Public Works Construction Code.

This criterion is satisfied with conditions of approval PFR-10 and PFR-11.

II. 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:
The applicant will be responsible for proposed private utility facilities located within the subject property.

This criterion is satisfied with conditions of approval PFR-11.

III. 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:
All public and private improvements required will be complete prior to receiving a Certificate of Occupancy.

This criterion is satisfied with conditions of approval PFR-11.

IV. 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.

FINDINGS:
The majority of SW Amu Street has been improved within the existing full-width dedication of 60-ft of right-of-way. Due to Hedges Creek the City Engineer has approved the absence of the disproportionate construction of a bridge to the south. Due to the limited area of development,

the ability for circulation through existing development to SW 112th Avenue, and the absence of a bridge the City Engineer has approved the street ending without a cul-de-sac.

The existing sidewalk near the southeast corner of the site doesn't connect the east and west sides of SW Amu Street. The applicant must have a sidewalk adjacent to their site extend south to the end of the existing street crossing to the east and north to the existing sidewalk on the opposing side of the street.
The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

(2) For development applications other than subdivisions and partitions, 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 of the Tualatin Community Plan shall be dedicated to the City for use by the public prior to issuance of any building permit for the proposed development. 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.

FINDINGS:
The existing dedicated right-of-way for SW Amu meets the current classification. No additional dedication is required.

This criterion is satisfied.

V. TDC SECTION 74.330 UTILITY EASEMENTS.

(1) Utility easements for water, sanitary sewer and storm drainage facilities, telephone, television cable, gas, electric lines and other public utilities shall be granted to the City.

FINDINGS:
There is an existing Private Access Easement (Doc# 2011-047430) and Variable Width Public Utility Access Easement (Doc# 2008-158560) located along SW 115th Street. The applicant understands that if additional utility easements will be required, these easements will need to be submitted to the City in order to receive building permits.

This criterion is satisfied with conditions of approval PFR-12.

(4) For development applications other than subdivisions and partitions, and for both on-site and off-site easement areas, a utility easement shall be granted to the City; building permits shall not be issued for the development prior to acceptance of the easement by the City. The City may elect to exercise eminent domain and condemn necessary off-site public utility easements at the applicant's request and expense. The City Council shall determine when condemnation proceedings are to be used.

FINDINGS:
There is an existing Private Access Easement (Doc# 2011-047430) and Variable Width Public Utility Access Easement (Doc# 2008-158560) located along SW 115th Street. The applicant understands that if additional utility easements will be required, these easements will need to be submitted to the City in order to receive building permits.

This criterion is satisfied with conditions of approval PFR-12.

(5) The width of the public utility easement shall meet the requirements of the Public Works Construction Code.

FINDINGS:
There is an existing Private Access Easement (Doc# 2011-047430) and Variable Width Public Utility Access Easement (Doc# 2008-158560) located along SW 115th Street. The applicant understands that if additional utility easements will be required, these easements will need to be submitted to the City in order to receive building permits.

This criterion is satisfied with conditions of approval PFR-12.

VI. 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.

FINDINGS:
Per the 2018 update letter to the Transportation Impact Analysis prepared by Kittelson & Associates, no additional traffic impact analysis is needed.

This proposed development generates a volume of trips that is consistent with the previously analyzed full build-out of Franklin Business Park, and vested trips will remain for other future

site development assuming Hedges C is approved and constructed. As such, no additional traffic impact analysis is needed.

The majority of SW Amu Street has been improved within the existing full-width dedication of 60-ft of right-of-way. Due to Hedges Creek the City Engineer has approved the absence of the disproportionate construction of a bridge to the south. Due to the limited area of development, the ability for circulation through existing development to SW 112th Avenue, and the absence of a bridge the City Engineer has approved the street ending without a cul-de-sac.

The existing sidewalk near the southeast corner of the site doesn't connect the east and west sides of SW Amu Street. The applicant must have a sidewalk adjacent to their site extend south to the end of the existing street crossing to the east and north to the existing sidewalk on the opposing side of the street.
The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

(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.

FINDINGS:
The majority of SW Amu Street has been improved within the existing full-width dedication of 60-ft of right-of-way. Due to Hedges Creek the City Engineer has approved the absence of the disproportionate construction of a bridge to the south. Due to the limited area of development, the ability for circulation through existing development to SW 112th Avenue, and the absence of a bridge the City Engineer has approved the street ending without a cul-de-sac.

The existing sidewalk near the southeast corner of the site doesn't connect the east and west sides of SW Amu Street. The applicant must have a sidewalk adjacent to their site extend south to the end of the existing street crossing to the east and north to the existing sidewalk on the opposing side of the street.
The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

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

FINDINGS:
The majority of SW Amu Street has been improved within the existing full-width dedication of 60-ft of right-of-way. Due to Hedges Creek the City Engineer has approved the absence of the disproportionate construction of a bridge to the south. Due to the limited area of development, the ability for circulation through existing development to SW 112th Avenue, and the absence of a bridge the City Engineer has approved the street ending without a cul-de-sac.

The existing sidewalk near the southeast corner of the site doesn't connect the east and west sides of SW Amu Street. The applicant must have a sidewalk adjacent to their site extend south to the end of the existing street crossing to the east and north to the existing sidewalk on the opposing side of the street.
The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

(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.

FINDINGS:
The majority of SW Amu Street has been improved within the existing full-width dedication of 60-ft of right-of-way. Due to Hedges Creek the City Engineer has approved the absence of the disproportionate construction of a bridge to the south. Due to the limited area of development, the ability for circulation through existing development to SW 112th Avenue, and the absence of a bridge the City Engineer has approved the street ending without a cul-de-sac.

The existing sidewalk near the southeast corner of the site doesn't connect the east and west sides of SW Amu Street. The applicant must have a sidewalk adjacent to their site extend south

to the end of the existing street crossing to the east and north to the existing sidewalk on the opposing side of the street.
The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

(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.

FINDINGS:
The majority of SW Amu Street has been improved within the existing full-width dedication of 60-ft of right-of-way. Due to Hedges Creek the City Engineer has approved the absence of the disproportionate construction of a bridge to the south. Due to the limited area of development, the ability for circulation through existing development to SW 112th Avenue, and the absence of a bridge the City Engineer has approved the street ending without a cul-de-sac.

The existing sidewalk near the southeast corner of the site doesn't connect the east and west sides of SW Amu Street. The applicant must have a sidewalk adjacent to their site extend south to the end of the existing street crossing to the east and north to the existing sidewalk on the opposing side of the street.
The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

(8) For development applications other than subdivisions and partitions, all street improvements required by this section shall be completed and accepted by the City prior to the issuance of a Certificate of Occupancy.

FINDINGS:
All improvements will be completed prior to the issuance of a Certificate of Occupancy.

This criterion is satisfied with conditions of approval PFR-11.

(11) Existing streets which abut the proposed 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).

FINDINGS:
The majority of SW Amu Street has been improved within the existing full-width dedication of 60-ft of right-of-way. Due to Hedges Creek the City Engineer has approved the absence of the disproportionate construction of a bridge to the south. Due to the limited area of development, the ability for circulation through existing development to SW 112th Avenue, and the absence of a bridge the City Engineer has approved the street ending without a cul-de-sac.

The existing sidewalk near the southeast corner of the site doesn't connect the east and west sides of SW Amu Street. The applicant must have a sidewalk adjacent to their site extend south to the end of the existing street crossing to the east and north to the existing sidewalk on the opposing side of the street.
The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

(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.

FINDINGS:
The majority of SW Amu Street has been improved within the existing full-width dedication of 60-ft of right-of-way. Due to Hedges Creek the City Engineer has approved the absence of the disproportionate construction of a bridge to the south. Due to the limited area of development, the ability for circulation through existing development to SW 112th Avenue, and the absence of a bridge the City Engineer has approved the street ending without a cul-de-sac.

The existing sidewalk near the southeast corner of the site doesn't connect the east and west sides of SW Amu Street. The applicant must have a sidewalk adjacent to their site extend south to the end of the existing street crossing to the east and north to the existing sidewalk on the opposing side of the street.
The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of

a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

VII. 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

FINDINGS:
The majority of SW Amu Street has been improved within the existing full-width dedication of 60-ft of right-of-way. Due to Hedges Creek the City Engineer has approved the absence of the disproportionate construction of a bridge to the south. Due to the limited area of development, the ability for circulation through existing development to SW 112th Avenue, and the absence of a bridge the City Engineer has approved the street ending without a cul-de-sac.

The existing sidewalk near the southeast corner of the site doesn't connect the east and west sides of SW Amu Street. The applicant must have a sidewalk adjacent to their site extend south to the end of the existing street crossing to the east and north to the existing sidewalk on the opposing side of the street.
The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

(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:
The majority of SW Amu Street has been improved within the existing full-width dedication of 60-ft of right-of-way. Due to Hedges Creek the City Engineer has approved the absence of the disproportionate construction of a bridge to the south. Due to the limited area of development, the ability for circulation through existing development to SW 112th Avenue, and the absence of a bridge the City Engineer has approved the street ending without a cul-de-sac.

The existing sidewalk near the southeast corner of the site doesn't connect the east and west sides of SW Amu Street. The applicant must have a sidewalk adjacent to their site extend south to the end of the existing street crossing to the east and north to the existing sidewalk on the opposing side of the street.
The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

VIII. 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.

FINDINGS:
The majority of SW Amu Street has been improved within the existing full-width dedication of 60-ft of right-of-way. Due to Hedges Creek the City Engineer has approved the absence of the disproportionate construction of a bridge to the south. Due to the limited area of development, the ability for circulation through existing development to SW 112th Avenue, and the absence of a bridge the City Engineer has approved the street ending without a cul-de-sac.

The existing sidewalk near the southeast corner of the site doesn't connect the east and west sides of SW Amu Street. The applicant must have a sidewalk adjacent to their site extend south to the end of the existing street crossing to the east and north to the existing sidewalk on the opposing side of the street.
The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

IX. TDC 74.440 STREETS, TRAFFIC STUDY REQUIRED

(1) The City Engineer may require a traffic study to be provided by the applicant and furnished to the City as part of the development approval process as provided by this Code, when the City Engineer determines that such a study is necessary in connection with a proposed development project in order to:

(a) Assure that the existing or proposed transportation facilities in the vicinity of the proposed development are capable of accommodating the amount of traffic that is expected to be generated by the proposed development, and/or

(b) Assure that the internal traffic circulation of the proposed development will not result in conflicts between on-site parking movements and/or on-site loading movements and/or on-site traffic movements, or impact traffic on the adjacent streets.

FINDINGS:
Per the 2018 update letter to the Transportation Impact Analysis prepared by Kittelson & Associates, no additional traffic impact analysis is needed.

This proposed development generates a volume of trips that is consistent with the previously analyzed full build-out of Franklin Business Park, and vested trips will remain for other future site development assuming Hedges C is approved and constructed. As such, no additional traffic impact analysis is needed.

The majority of SW Amu Street has been improved within the existing full-width dedication of 60-ft of right-of-way. Due to Hedges Creek the City Engineer has approved the absence of the disproportionate construction of a bridge to the south. Due to the limited area of development, the ability for circulation through existing development to SW 112th Avenue, and the absence of a bridge the City Engineer has approved the street ending without a cul-de-sac.

The existing sidewalk near the southeast corner of the site doesn't connect the east and west sides of SW Amu Street. The applicant must have a sidewalk adjacent to their site extend south to the end of the existing street crossing to the east and north to the existing sidewalk on the opposing side of the street.
The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

(2) The required traffic study shall be completed prior to the approval of the development application.

FINDINGS:
Per the 2018 update letter to the Transportation Impact Analysis prepared by Kittelson & Associates, no additional traffic impact analysis is needed.

This proposed development generates a volume of trips that is consistent with the previously analyzed full build-out of Franklin Business Park, and vested trips will remain for other future site development assuming Hedges C is approved and constructed. As such, no additional traffic impact analysis is needed.

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This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

(3) The traffic study shall include, at a minimum:

(a) an analysis of the existing situation, including the level of service on adjacent and impacted facilities.

(b) an analysis of any existing safety deficiencies.

(c) proposed trip generation and distribution for the proposed development.

(d) projected levels of service on adjacent and impacted facilities.

(e) recommendation of necessary improvements to ensure an acceptable level of service for roadways and a level of service of at least D and E for signalized and unsignalized intersections respectively, after the future traffic impacts are considered.

(f) The City Engineer will determine which facilities are impacted and need to be included in the study.

(g) The study shall be conducted by a registered engineer.

FINDINGS:
Per the 2018 update letter to the Transportation Impact Analysis prepared by Kittelson & Associates, no additional traffic impact analysis is needed.

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The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

(4) The applicant shall implement all or a portion of the improvements called for in the traffic study as determined by the City Engineer.

FINDINGS:
Per the 2018 update letter to the Transportation Impact Analysis prepared by Kittelson & Associates, no additional traffic impact analysis is needed.

This proposed development generates a volume of trips that is consistent with the previously analyzed full build-out of Franklin Business Park, and vested trips will remain for other future site development assuming Hedges C is approved and constructed. As such, no additional traffic impact analysis is needed.

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The existing sidewalk adjacent to the development must be proven to remain in conformance with current PWCC/ADA/PWROWAG standards.

A turning movement diagram must demonstrate how the public will be able to circulate through the proposed development and the existing development to the east due to absence of a cul-de-sac. A public access easement will be recorded to allow traffic from SW Amu Street to circulate through to SW 112th Avenue over private property.

This criterion is satisfied with conditions of approval PFR-4, PFR-10, and PFR-11.

X. TDC 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:
Public street lights constructed to the City's Public Works standards are already existing along SW Amu Street. No additional street lighting is proposed as part of this application.

This criterion is satisfied.

XI. TDC SECTION 74.485 STREET TREES.

(2) In nonresidential subdivisions and partitions street trees shall be planted by the owners of the individual lots as development occurs.
(3) The Street Tree Ordinance specifies the species of tree which is to be planted and the spacing between trees.

FINDINGS:
Existing street trees along the SW Amu Street frontage are not to be disturbed as part of this project. Adjacent to the southeast corner of the site SW Amu Street missing street trees. The applicant will install street trees with appropriate spacing.

This criterion is satisfied with conditions of approval PFR-6, PFR-10, and PFR-11.

XII. 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.

FINDINGS:
Public fire hydrant spacing in commercial/industrial areas is 250 feet apart. There are two existing public fire hydrants along the private street within a public water line easement to the north and one public hydrant along SW Amu Street to the east that satisfy this requirement. The public fire hydrant near the northwest corner of the lot is proposed to be relocated approximately 25 feet east to accommodate a driveway.

This project consists of one (1) building. The plans show a proposed 8-inch lateral from the main will provide service to building fire supply, however there is an existing 10 inch water lateral approximately 40 east of the proposed connection that will be used as confirmed with the developer's engineer. A double check detector assembly (DCDA) for backflow protection will be provided on this service. The existing private fire hydrants provide sufficient building coverage per Fire Department requirements.

The City needs access to the double checks that include fire vaults. If they are located out of right-of-way, a public easement is needed for the water line from the public water line to and including the fire vault and include access from right-of-way in case of inspection or

maintenance activity. The applicant will record any additional easement needed due to location of their vaults.

Final submittals will provide determination of fire flow requirements for the building.

This development proposes a 2-inch domestic service lateral to the building. The plans show a proposed service will branch off the new fire lateral described above, however separate laterals with valves at the main line are required. A separate 2-inch water lateral will be constructed to separate the domestic from fire services.

A 1.5-inch domestic meter and double check assembly with 2-inch service to building will also be provided. An irrigation stub will be installed behind the domestic water meter. The double check assemblies for fire and domestic water service are shown to be located near the public water line easement for inspection and maintenance access.

The applicant will submit water service that show location of the lines, grade, materials, and other details prior to obtaining a Building Permit. A public works construction permit for the domestic and fire connections will be obtained. The applicant has not applied for a public works permit for these improvements. The applicant will need to submit water system plans that show location of the water lines, grade, materials, and other details prior to obtaining a public works permit.

To protect the public water system a root barrier will be installed adjacent to the public easement within the private street 10 feet wide, 24 inches deep, and centered on proposed private trees.

This criterion is satisfied with conditions of approval PFR-2, PFR-10, PFR-11, and PFR-13.

(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.

FINDINGS:
Existing public water lines are available to serve all adjacent properties that are undeveloped.

This criterion is satisfied.

(3) As set forth is 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:
The available public water lines within adjacent right-of-way are in the appropriate service level for this development.

This criterion is satisfied.

XIII. 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.

FINDINGS:
Existing public sanitary sewer lines exist within SW Amu Street and the private drive to the north of this site. Adjacent undeveloped parcels have access to these lines. No additional extension of public lines is needed.

The plans show a proposed sanitary sewer service for the development via a new lateral from the southeast corner of the building to the east, connecting to the existing public sanitary manhole within SW Amu Street. An existing lateral extended from the public sanitary sewer in the private street to the north is approximately seven feet below finished floor which is sufficient to serve the site without the expense of a new connection to a manhole and repair of the street. The developer has confirmed the lateral can serve the property. The final plans will show connection to this existing lateral.

The applicant will submit sanitary sewer plans that show location of the lines, grade, materials, and other details prior to obtaining permits.

This criterion is satisfied with conditions of approval PFR-1, PFR-10, and PFR-11.

(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:
Existing public sanitary sewer lines are available to serve all adjacent properties that are undeveloped.

This criterion is satisfied.

XIV. 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.

FINDINGS:
The plans show stormwater from the site captured and conveyed to a water quality treatment and detention facilities prior to release to a new outfall in Hedges Creek along the west side of the property. Stormwater Quality treatment will be provided using filtered catch basins located throughout the site. Stormwater Quantity Control will be provided using and underground chamber system and an outflow control structure. This system will discharge to a new outfall in Hedges Creek. Detention quantities were determined based on the Clean Water Services (CWS) Design and Construction Standards for Sanitary Sewer and Surface Water Management, and the preliminary stormwater calculations that are included with the Architectural Review application. The catch basins and stormwater quality and stormwater quantity control (detention) facilities have been designed to remove 65% of the phosphorous from impervious area runoff during a mean summertime storm event totaling 0.36 inches of precipitation falling within four hours with an average return period of 96 hours per the preliminary stormwater calculations that are included with the Architectural Review application.
The applicant will submit final stormwater calculations and plans prior to obtaining a Building Permit.

This criterion is satisfied with conditions of approval PFR-3, **Error! Reference source not found.**, REF _Ref516566882 \r \h * MERGEFORMAT PFR-10, and PFR-11.

(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.

FINDINGS:
On-site stormwater quantity control (detention) is provided because the City's stormwater master planning requires on-site detention at this location. The proposed system is designed such that the peak post-development run-off rates discharged from the site will not exceed the peak pre-development rates for the 2, 5, 10 and 25-year, 24-hour storm events. Preliminary stormwater calculations are included with the Architectural Review application (see Preliminary Stormwater Report).

No adverse effects on receiving waters in the basin or sub-basin are anticipated per the stormwater calculations included with the Architectural Review application.

The applicant will submit final stormwater calculations and plans prior to obtaining a permit. The applicant will submit final stormwater calculations and plans prior to obtaining a Building Permit. The applicant will obtain a permit from the City of Tualatin to install an approved runoff flow control and treatment facility on the subject site, provide a maintenance assurance, and record a maintenance and operation plan in conformance with City standards.

This criterion is satisfied with conditions of approval PFR-3, **Error! Reference source not found.**, REF _Ref516566882 \r \h * MERGEFORMAT PFR-10, and PFR-11.

(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:
The existing public stormwater system are available to serve all adjacent properties that are undeveloped.

This criterion is satisfied.

XV. 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.

FINDINGS:
The proposed grading plan minimizes the impact of stormwater runoff to adjacent properties and allows adjacent properties to drain as they did before the development. The site will be graded so that stormwater will be collected at catch basins that discharge to onsite stormwater quality and quantity control systems located on the west and east sides of the proposed building.

The applicant has obtained a 1200C Construction Erosion Control permit from Clean Water Services as agent for Oregon DEQ and obtained an early grading and erosion control permit from the City of Tualatin.

This criterion is satisfied.

(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:
All drainage will be via gravity drainage and no building crawl spaces will be created.

This criterion is satisfied.

XVI. 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:

(2) On all other development applications, prior to issuance of any building permit, the applicant shall 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.

FINDINGS:
Stormwater from the building and all impervious surfaces on-site will be collected at catch basins that discharge to onsite stormwater quality and quantity control facilities located on site (see Sheet C3.0). Preliminary stormwater calculations are included with the Architectural Review application.

The applicant has obtained a 1200C permit.

A stormwater facility Operations & Maintenance (O&M) agreement will be submitted for the on-site stormwater quality and detention facility prior to issuance of a Public Works Permit. The applicant will submit final stormwater calculations and plans.

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 July 30, 2018 for development on this site. The applicant will 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-3, PFR-10, and PFR-11.

(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:
A stormwater facility agreement that includes an operation and maintenance plan will be recorded.

The applicant has obtained a 1200C Construction Erosion Control permit from Clean Water Services as agent for Oregon DEQ and obtained an early grading and erosion control permit from the City of Tualatin.

This criterion is satisfied with conditions of approval PFR-3, PFR-10, and PFR-11.

XVII. TDC 74.660 UNDERGROUND

(1) All utility lines including, but not limited to, those required for gas, electric, communication, lighting and cable television services and related facilities shall be placed underground. Surface-mounted transformers, surface-mounted connection boxes and meter cabinets may be placed above ground. Temporary utility service facilities, high capacity electric and communication feeder lines, and utility transmission lines operating at 50,000 volts or above may be placed above ground. The applicant shall make all necessary arrangements with all utility companies to provide the underground services. The City reserves the right to approve the location of all surface-mounted transformers.

FINDINGS:
All proposed utilities will be placed underground in accordance with this requirement. Surface-mounted transformers will be screened from adjacent right-of-way.
There are no existing overhead utilities abutting the site.

This criterion is satisfied.

(2) Any existing overhead utilities may not be upgraded to serve any proposed development. If existing overhead utilities are not adequate to serve the proposed development, the applicant shall, at their own expense, provide an underground system. The applicant shall be responsible for obtaining any off-site deeds and/or easements necessary to provide utility service to this site; the deeds and/or easements shall be submitted to the City Engineer for acceptance by the City prior to issuance of the Public Works Permit.

FINDINGS:
No overhead utility lines currently exist and none are proposed.

This criterion is satisfied.

XVIII. TDC SECTION 74.670 EXISTING STRUCTURES.

(1) Any existing structures requested to be retained by the applicant on a proposed development site shall be connected to all available City utilities at the expense of the applicant.

FINDINGS:
No existing structures exist.

This criterion is satisfied.

(2) The applicant shall convert any existing overhead utilities serving existing structures to underground utilities, at the expense of the applicant.

FINDINGS:
No overhead utility lines currently exist and none are proposed.

This criterion is satisfied.

XIX. TDC SECTION 74.720 PROTECTION OF TREE DURING CONSTRUCTION.

(1) During the erection, repair, alteration or removal of a building or structure, it is unlawful for the person in charge of such erection, repair, or alteration or to leave a tree in or upon a public right-of-way in the vicinity of the building or structure without a good and sufficient guard or protectors to prevent injury to the tree arising out of or by reason of such erection, repair, alteration or removal.

FINDINGS:
Tree protection will be provided for street trees within right-of-way.

This criterion is satisfied with conditions of approval PFR-10.

(2) Excavations and driveways shall not be placed within six feet of a tree in or upon a public right-of-way without written permission from the City Engineer. During excavation or construction, the person shall guard the tree within six feet and all building material or other debris shall be kept at least four feet from any tree.

FINDINGS:
Tree protection will be provided for street trees within right-of-way.

This criterion is satisfied with conditions of approval PFR-10.

XX. TDC SECTION 74.765 STREET TREE SPECIES AND PLANTING LOCATIONS.

All trees, plants or shrubs planted in the right-of-way of the City shall conform in species and location and in accordance with the street tree plan in Schedule A. If the Operations Director determines that none of the species in Schedule A is appropriate or finds appropriate a species not listed, the Director may substitute an unlisted species.

FINDINGS:
New street trees will conform to City standards for spacing and type.

This criterion is satisfied with conditions of approval PFR-6 and PFR-10.