



Public Works Department

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January 14, 2019

Brandie Dalton
Multi-Tech Engineering Services Inc.
1155 13th Street SE
Salem OR 97302

Delivered by email to:
bdalton@mtengineering.net

**SUBJECT: Public Works Recommendations
Pre-App No. 18-120 (18-123359-PA)
3290 Boone Road SE
PLA/SUB for Multi-family and Commercial Development**

Dear Ms. Dalton:

Below are the Public Works Department's comments in regard to the pre-application submittal referenced above.

PROPOSAL

A pre-application conference to discuss a seven lot subdivision and development of attached single-family and multi-family development for property approximately 80 acres in size, zoned IC (Industrial Commercial), and located at 3290 Boone Road SE (Marion County Assessor Map and Tax Lot Numbers: 083W13A00300, 083W13A00200, and 083W13A00100).

SUMMARY OF FINDINGS

1. The subject property is located outside the Urban Service Area; therefore, an Urban Growth Area (UGA) Development permit shall be required as prescribed in *Salem Revised Code* (SRC) 200.010. A UGA permit requires an applicant to provide linking and boundary facilities to their property under the standards and requirements of SRC Chapter 200. The UGA requirements may be phased in conjunction with the subdivision or site plan review process. Anticipated UGA requirements are as follows:
 - a. Along the entire frontage of abutting streets, the applicant shall dedicate right-of-way on the development side of the centerline to equal a half-width of 36 feet on 36th Avenue SE and a half-width of 30 feet on Boone Road SE. Additional right-of-way dedication may be required for improvements generated from the Traffic Impact Analysis.

**Transportation and Utility
Operations**

1410 20th Street SE / Building 2
Salem OR 97302-1209
Phone 503-588-6063
Fax 503-588-6480

Parks Operations

1460 20th Street SE / Building 14
Salem OR 97302-1209
Phone 503-588-6336
Fax 503-588-6305

**Willow Lake Water Pollution
Control Facility**

5915 Windsor Island Road N
Kelzer OR 97303-6179
Phone 503-588-6380
Fax 503-588-6387

❖ ADA Accommodations Will Be Provided Upon Request ❖
Servicios razonables de accesibilidad se facilitarán por petición

- b. Along the entire frontage of 36th Avenue SE, the applicant shall construct a minimum 23-foot-wide half-street improvement on the development side and a 12-foot-wide pavement widening on the opposite side of centerline to Minor Arterial street standards. The applicant is advised that the street improvement may conflict with existing waterways abutting the west and east sides of the street, and relocation of the waterways may be needed to complete the improvement. The applicant is advised to contact Public Works Development Services staff to coordinate the scope of street improvements.
- c. Along the entire frontage of Boone Road SE, the applicant shall construct a minimum 15-foot-wide half-street improvement on the development side and a 15-foot-wide turnpike improvement on the opposite side of the centerline. These improvements shall include streetlights and sidewalks on the development side, consistent with the provisions of SRC Chapter 803. The applicant is advised that the street improvement may conflict with the existing waterway abutting the south side of the street, and relocation of the waterway may be needed to complete the improvement. The applicant is advised to contact Public Works Development Services staff to coordinate the scope of street improvements.
- d. A downstream stormwater analysis may be required pursuant to *Public Works Design Standards* (PWDS) 4.2k to evaluate the adequacy of the stormwater linking facilities. The applicant is advised to contact Public Works Development Services staff to coordinate the scope of downstream stormwater analysis and improvements.
- e. As a condition of development in the S-1 water service level, the applicant shall:
 - I. Construct *Water System Master Plan* S-1 facilities needed to serve the development, which include Coburn S-1 Reservoir, Boone Road Pump Station, and transmission mains connecting the facilities; or
 - II. Pay a temporary access fee and connect to the existing S-1 water system as a temporary facility pursuant to SRC 200.080(a).
- f. Construct an 18-inch S-1 water main in 36th Avenue SE from Boone Road SE to the south line of the subject property.
- g. Construct a 27-inch sewer main in 36th Avenue SE from Kuebler Boulevard SE to Boone Road SE and an 18-inch sewer main in 36th Avenue SE from Boone Road SE to the south line of the subject property. The applicant is advised that sewer main construction may be significantly affected by existing utility conflicts, specifically at the intersection of Boone Road SE and 36th Avenue SE.
- h. Construct an 8-inch sewer main in Boone Road SE from 36th Avenue SE to the west line of the subject property. The applicant is advised that the location of this main may need to be adjusted because of utility conflicts in Boone Road SE.
- i. As a condition of residential use, the applicant has two options for providing park

facilities to serve the subject property:

- I. Convey or acquire property for dedication of neighborhood park facility NP-29 or equivalent; or
 - II. Pay a temporary access fee pursuant to SRC 200.080(a).
2. The traffic impacts from future development on the subject property are limited to a maximum of 12,916 average daily trips generated by the proposed use or uses, as required by land use decision CPC-ZC17-02.
 3. Provide a Transportation Impact Analysis (TIA) to identify the impacts of this proposed development on the public transportation system and construct any necessary mitigation measures identified in the TIA.
 4. The subject property is located in the Bonaventure Reimbursement District. A reimbursement district fee is due for reimbursement of an 18-inch water main in Boone Road SE. Transportation Systems Development Charges (TSDC) collected from the proposed development will be collected as a reimbursement district fee, but not exceeding the TSDCs that would normally be collected for properties outside the district.
 5. The applicant shall be required to design and construct a storm drainage system at the time of development for areas of replaced and new impervious surface. The tentative plan application shall include findings that demonstrate how the proposed development will comply with PWDS Appendix 4E related to green stormwater infrastructure.
 6. City records show the proposed development has a moderate landslide hazard risk. The applicant shall be required to submit a geological assessment from a licensed engineering geologist pursuant to SRC chapter 810.
 7. There are Salem-Keizer Local Wetland Inventory linear channel wetlands mapped on the subject property. The applicant shall contact the Oregon Department of State Lands to verify if any permits are required for future development. The applicant is required to verify mapped wetland area(s).
 8. Several intermittent creeks flow through and abutting the subject property. The applicant's engineer shall determine the 100-year water surface elevation along the existing waterways to ensure that flood damage is minimized for all proposed buildings. Open channel drainage easements shall be dedicated along the creeks allowing for access and maintenance. The easement width shall be either the 100-year floodway, 15 feet from the channel centerline, or ten feet from the top of the recognized bank, whichever is greatest. The applicant is advised to contact applicable regulatory agencies if considering modification to the waterways, including but not limited to the Army Corps of Engineers, Oregon Department of State Lands, and Santiam Water Control District.

9. The applicant is advised that an existing 36-inch water main is located within the subject property. This main is an aging pipe that requires special protection to prevent damage. The applicant's engineer is advised to contact Public Works Development Services staff to coordinate requirements for protecting the existing main. Pursuant to PWDS, the applicant shall dedicate a minimum 20-foot-wide water easement where the additional easement does not equal 20 feet wide.

FACTS AND FINDINGS

Water

1. Existing Conditions

- a. The subject property is located within the G-0 and S-1 water service levels. The applicant is authorized and encouraged to serve the entire property from S-1 facilities.
 - b. A 36-inch water G-0 water transmission main is located in Boone Road SE. Individual service connections are not permitted to connect to transmission mains per PWDS 5.3(d)(2).
 - c. A 36-inch G-0 water transmission main traverses through the eastern half of the project boundary. Individual service connections are not permitted to connect to transmission mains per PWDS 5.3(d)(2).
 - d. An 18-inch water S-2 water main is located in Boone Road SE. This main is reduced in pressure to an S-1 water main approximately 270 feet west of the intersection of 36th Avenue SE and Boone Road SE.
 - e. The applicant is advised that an existing 36-inch water main is located within the subject property. This main is an aging pipe that requires special protection to prevent damage. The applicant's engineer is advised to contact Public Works Development Services staff to coordinate requirements for protecting the existing main. Pursuant to PWDS, the applicant shall dedicate a minimum 20-foot-wide water easement where the additional easement does not equal 20 feet wide.
 - f. The subject property is located in the Bonaventure Reimbursement District. A reimbursement district fee is due for reimbursement of an 18-inch water main in Boone Road SE.
2. At the time of development the subject property shall be linked to adequate facilities by the construction of water distribution lines, reservoirs, and pumping stations that connect to such existing water service facilities (SRC 200.070). The applicant shall provide linking water mains consistent with the *Water System Master Plan* adequate to convey fire flows to serve the proposed development as specified in the *Water Distribution Design Standards*. UGA water requirements are described below.

3. Water meters shall be placed along the right-of-way of streets adjacent to the subject property (PWDS Water 5.9(b)).

Sanitary Sewer

1. Existing Conditions

- a. A 24-inch sewer line is located in 36th Avenue SE at Kuebler Boulevard SE.
 - b. The nearest available sewer facility appears to be located in 36th Avenue SE at the intersection of Kuebler Boulevard SE.
2. The proposed development shall be linked to adequate facilities by the construction of sewer lines and pumping stations, which are necessary to connect to such existing sewer facilities (SRC 200.060). The nearest available sewer facility appears to be located in 36th Avenue SE at the intersection of Kuebler Boulevard SE. The applicant shall construct the *Salem Wastewater Management Master Plan* improvements and link the site to existing facilities that are defined as adequate under SRC 200.005. UGA sewer requirements are described below.

Storm Drainage

1. Existing Conditions

- a. An 18-inch storm line is located in Boone Road SE.
 - b. A public drainage ditch is located along the south side of Boone Road SE.
 - c. The subject property is within the Pringle Creek Drainage Basin.
2. The proposed development shall be linked to existing adequate facilities by the construction of storm drain lines, open channels, and detention facilities, which are necessary to connect to such existing drainage facilities. The nearest available public storm system appears to be located in Boone Road SE along the northern boundary of the subject property. The applicant shall link the on-site system to existing facilities that are defined as adequate under SRC 200.005. UGA stormwater requirements are described below.
 3. At the time of development, the applicant shall be required to design and construct a storm drainage system for areas of new and replaced impervious surfaces. The tentative plan application shall include findings that demonstrate how the proposed development will comply with PWDS Appendix 4E related to green stormwater infrastructure (GSI). Alternatively, if the development proposal meets the definition of a large project, as defined in SRC 70.005(q), the applicant shall provide a storm drainage system that provides treatment and flow control as required by the 2014 PWDS, by one of three means:

- a. Runoff from the new and replaced impervious surfaces flows into one or more locations that have been set aside for installation of GSI and the locations have a total area of at least ten percent of the total new plus replaced impervious surface area; or
- b. GSI is used to mitigate the impacts of stormwater runoff from at least 80 percent, but less than 100 percent, of the total new plus replaced impervious surfaces; or
- c. Under a design exception from the City Engineer, GSI is used to mitigate the impacts of stormwater runoff from less than 80 percent of the total new plus replaced impervious surfaces and the factor(s) limiting implementation (SRC 71.095).

Parks

No existing parks facilities are available within ½ mile of the subject property. *The Comprehensive Parks System Master Plan* shows that a future Neighborhood Park (NP 29) is planned on or near the subject property. The applicant shall reserve for dedication, prior to development approval, that property within the development site that is necessary for an adequate neighborhood park, access to such park, and recreation routes, or similar uninterrupted linkages, based upon the *Salem Comprehensive Parks System Master Plan*. UGA parks requirements are described below.

Environmental Pre-Treatment

The applicant is advised to contact Jim VanHouten, Environmental Compliance Specialist, at 503-588-6063 for more information regarding possible pre-treatment requirements.

Natural Resources

1. For projects greater than one acre, a National Pollutant Discharge Elimination System permit from the Oregon Department of Environmental Quality is required for all construction activities that disturb one acre or more. Proof of a valid permit must be submitted at the time of plans submission. City construction permits will not be issued without a valid National Pollutant Discharge Elimination System permit. City permits will not be issued without a valid National Pollutant Discharge Elimination System erosion control plan approval letter or written certification by the applicant that a permit is not required for this project.
2. City records show there are category 2 and 3 landslide hazard areas mapped on the site. A partition is assigned 2 and a subdivision is assigned 3 activity points, for a total range of 4-6 activity points indicating a low to moderate landslide risk per SRC Chapter 810. The applicant shall submit a geological assessment from a licensed engineering geologist.
3. Several intermittent creeks flow through and abutting the subject property. The applicant's engineer shall determine the 100-year water surface elevation along the existing waterways to ensure that flood damage is minimized for all proposed buildings. Open channel drainage

easements shall be dedicated along the creeks allowing for access and maintenance. The easement width shall be either the 100-year floodway, 15 feet from the channel centerline, or ten feet from the top of the recognized bank, whichever is greatest (PWDS-General 1.8(d)). The applicant is advised to contact applicable regulatory agencies if considering modification to the waterways, including but not limited to the Army Corps of Engineers, Oregon Department of State Lands (DSL), and Santiam Water Control District.

4. The Salem-Keizer Local Wetland Inventory shows there are hydric soils and/or linear wetland area(s) mapped on the property. The applicant should contact the DSL to verify if any permits are required for development or construction in the vicinity of the mapped wetland area(s). A wetland delineation may be required by DSL. The applicant shall contact DSL to verify if permits are required for future development.

Traffic

Transportation Planning Rule—As part of the land use application for CPC-ZC17-02, the applicant submitted a Transportation Planning Rule (TPR) Analysis in consideration of the requirements of the TPR (OAR 660-012-0060). The land use decision for CPC-ZC17-02 included the following condition:

At the time of development review for any proposed use on the subject property, the proposed development's average daily trips shall be calculated pursuant to the then current Institute of Transportation Engineers Trip Generation Manual. Traffic impacts from future development on the subject property are limited to a maximum of 12,916 average daily trips generated by the proposed use or uses.

Trip Generation Estimate—The City Traffic Engineer will determine through a Trip Generation Estimate the number of new vehicle trips this development will generate. Requirements for street improvements, traffic impact analysis, and right-of-way dedication are often based on the findings of the Trip Generation Estimate.

Traffic Impact Analysis—As a requirement of development, the applicant may be required to provide a Traffic Impact Analysis (TIA) to identify the impacts of this proposed development on the public transportation system in the area, and construct any necessary mitigation measures identified in that report (SRC 803.015). The City Traffic Engineer will determine the need for a TIA based on the development proposed for the site, and review and approve the TIA for conformance with City Standards. Construction plans for the development will not be reviewed without an approved TIA or a waiver from the City Traffic Engineer.

Bonaventure Reimbursement District—The subject property is located in the Bonaventure Reimbursement District. TSDCs collected from the proposed development will be collected as a reimbursement district fee, but not exceeding the TSDC that would normally be collected for properties outside the district.

Streets

1. Boone Road SE

- a. Standard—This street is designated as a Local street in the *Salem Transportation System Plan*. The standard for this street classification is a 30-foot-wide improvement within a 60-foot-wide right-of-way.
- b. Existing Condition—This street has an approximate 20- to 24-foot improvement within a 40-foot-wide right-of-way abutting the subject property.
- c. Right-of-Way—The applicant shall convey land for dedication to equal a half-width right-of-way of up to 30 feet on the development side of Boone Road SE (SRC 803.025) based on a rational nexus calculation.
- d. Special Setback—The proposed development is subject to a special setback equal to 30 feet from centerline of Boone Road SE.
- e. Improvements—Where the existing street condition along the frontage of Boone Road SE is under-improved, as defined in SRC 803.005(j), construct a minimum 15-foot-wide half-street improvement on the development side and a 15-foot-wide turnpike improvement on the opposite side of the centerline. These improvements shall include streetlights and sidewalks on the development side, consistent with the provisions of SRC Chapter 803. The applicant is advised that the street improvement may conflict with the existing waterway abutting the south side of the street, and relocation of the waterway may be needed to complete the improvement. The applicant is advised to contact Public Works Development Services staff to coordinate the scope of street improvements.

2. 36th Avenue SE

- a. Standard—This street is designated as a Minor Arterial street in the *Salem Transportation System Plan*. The standard for this street classification is a 46-foot-wide improvement within a 72-foot-wide right-of-way.
- b. Existing Condition—This street has an approximate 22-foot turnpike improvement within a 40- to 55-foot-wide right-of-way abutting the subject property.
- c. Right-of-Way—The applicant shall convey land for dedication to equal a half-width right-of-way of up to 36 feet on the development side of 36th Avenue SE (SRC 803.025) based on a rational nexus calculation.
- d. Special Setback—The proposed development is subject to a special setback equal to 36 feet from centerline of 36th Avenue SE.

- e. Improvements—Where the existing street condition along the frontage of 36th Avenue SE is under-improved, as defined in SRC 803.005(j), construct a 23-foot-wide half-street improvement on the development side and a 12-foot wide pavement widening on the opposite side of centerline to Minor Arterial street standards. The applicant is advised that the street improvement may conflict with existing waterways abutting the west and east sides of the street, and relocation of the waterways may be needed to complete the improvement. The applicant is advised to contact Public Works Development Services staff to coordinate the scope of street improvements.
3. Access Control—Driveway spacing is subject to the requirements described in SRC Chapter 804. All driveways to non-single family properties require a Class 2 driveway permit.
4. Vision Clearance—Requirements shall be observed at all street and driveway intersections as provided for in SRC Chapter 805.
5. Internal Streets—At the time of development, the applicant shall be required to comply with the Street Standards for connectivity (SRC 803.035(a)). All internal streets shall be designed and constructed to meet the requirements of SRC Chapter 803 and PWDS.
6. Linking Streets—The subject property is required to be linked to an adequate linking street. An adequate linking street is defined as the nearest point on a street that has a minimum 60-foot-wide right-of-way with a minimum 30-foot improvement for Local streets or a minimum 34-foot improvement for Major Arterial streets (SRC 200.055(b)). The nearest adequate facility is located at 36th Avenue SE, north of the subject property. Linking street(s) configuration shall be based on findings in the Traffic Impact Analysis (TIA), if applicable.

Urban Growth Area Development Permit

The subject property is located outside the Urban Service Area; therefore, an Urban Growth Area (UGA) Development permit shall be required as prescribed in SRC 200.010. An Urban Growth Area permit requires an applicant to provide linking and boundary facilities to their property under the standards and requirements of SRC Chapter 200. The UGA requirements may be phased in conjunction with the subdivision or site plan review process. Anticipated UGA requirements are as follows:

1. Along the entire frontage of abutting streets, the applicant shall dedicate right-of-way on the development side of the centerline to equal a half-width of 36 feet on 36th Avenue SE and a half-width of 30 feet on Boone Road SE. Additional right-of-way dedication may be required for improvement requirements generated from the Traffic Impact Analysis.
2. Along the entire frontage of 36th Avenue SE, the applicant shall construct a minimum 23-foot-wide half-street improvement on the development side and a 12-foot-wide pavement widening on the opposite side of centerline to Minor Arterial street standards. The applicant

is advised that the street improvement may conflict with existing waterways abutting the west and east sides of the street, and relocation of the waterways may be needed to complete the improvement. The applicant is advised to contact Public Works Development Services staff to coordinate the scope of street improvements.

3. Along the entire frontage of Boone Road SE, the applicant shall construct a minimum 15-foot-wide half-street improvement on the development side and a 15-foot-wide turnpike improvement on the opposite side of the centerline. These improvements shall include streetlights and sidewalks on the development side, consistent with the provisions of SRC Chapter 803. The applicant is advised that the street improvement may conflict with the existing waterway abutting the south side of the street, and relocation of the waterway may be needed to complete the improvement. The applicant is advised to contact Public Works Development Services staff to coordinate the scope of street improvements.
4. A downstream stormwater analysis may be required pursuant to PWDS 4.2k to evaluate the adequacy of the stormwater linking facilities. The applicant is advised to contact Public Works Development Services staff to coordinate the scope of downstream stormwater analysis and improvements.
5. As a condition of development in the S-1 water service level, the applicant shall:
 - a. Construct *Water System Master Plan* S-1 facilities needed to serve the development, which include Coburn S-1 Reservoir, Boone Road Pump Station, and transmission mains connecting the facilities; or
 - b. Pay a temporary access fee and connect to the existing S-1 water system as a temporary facility pursuant to SRC 200.080(a).
6. Construct an 18-inch S-1 water main in 36th Avenue SE from Boone Road SE to the south line of the subject property.
7. Construct a 27-inch sewer main in 36th Avenue SE from Kuebler Boulevard SE to Boone Road SE and an 18-inch sewer main in 36th Avenue SE from Boone Road SE to the south line of the subject property. The applicant is advised that sewer main construction may be significantly affected by existing utility conflicts, specifically at the intersection of Boone Road SE and 36th Avenue SE.
8. Construct an 8-inch sewer main in Boone Road SE from 36th Avenue SE to the west line of the subject property. The applicant is advised that the location of this main may need to be adjusted because of utility conflicts in Boone Road SE.
9. As a condition of residential use, the applicant has two options for providing park facilities to serve the subject property:
 - a. Convey or acquire property for dedication of neighborhood park facility NP-29 or


equivalent; or

- b. Pay a temporary access fee pursuant to SRC 200.080(a).

General Comments

1. All development activity will require building and/or construction permits in accordance with the SRC, the PWDS, and *Standard Construction Specifications*. Permits will not be issued by the City of Salem Permit Application Center until all construction plans have been approved by the Public Works Department.
2. All utilities and roadway facilities shall be designed and constructed to meet the requirements of the City of Salem PWDS and *Standard Construction Specifications*.
3. The applicant shall be required to obtain a clearing and grading permit prior to conducting any clearing and grading operations on parcels within the city limits (SRC 82.030).

Sincerely,



Glenn J. Davis, PE, CFM
Chief Development Engineer

Prepared by: Jennifer Scott, Program Manager
cc: File