

September 9, 2024

City of Tualatin - Engineering Department
18880 SW Martinazzi Ave. Tualatin, OR 97062



RE: Norwood Townhome Project Utility Availability Report

The purpose of this letter is to identify possible connections to existing public facilities for sanitary sewer, water, and stormwater systems and to demonstrate how the site can be served by gravity sanitary sewer and stormwater. The 1-acre lot that was annexed into the City of Tualatin per Ordinance No. 1472-23 is anticipated to be developed with the 8.3-acre portion of the Horizon Church & School Property (Tax Lot 106 of Washington County Assessor's Map 2S135D).

The proposed public sanitary sewer line will connect to an existing manhole in Southwest Boones Ferry Road. The new line will run south until the intersection of Southwest Boones Ferry Road and Southwest Norwood Road, where it then will run east along Southwest Norwood Road until the subject property's frontage. Another sanitary sewer line will be connected to the new manhole at the intersection and stubbed south for future extension. A new public sanitary sewer main will extend into the property from the new manhole installed near the northwest corner of the property, with sufficient depth to serve all proposed structures. The public sanitary sewer line will have a minimum slope of 0.004 ft/ft, which will offer the most reasonable opportunity for a gravity connection for future re-development/extension. Refer to the attached Exhibit A for additional information regarding proposed slopes, elevations, and service locations.

A new water main for the subject site will tie into the existing public water main in Southwest Norwood Road. The approximate location of the proposed main, is shown in the attached Exhibit A. Per the Water System Capacity Analysis memorandum prepared by Murraysmith (Exhibit C), upon completion of planned capital improvement projects and developer-constructed improvements, adequate water service will be available for this project.

A new public stormwater service for the subject site will connect to the existing public stormwater main in Southwest Boones Ferry Road via a new public storm manhole installed over the main. The service will run east from the new manhole via a new public stormwater easement to the subject site and provide points of connection. Refer to the attached Exhibit B for additional information regarding proposed slopes, elevations, and service locations.

Sincerely,

AKS ENGINEERING & FORESTRY, LLC

A handwritten signature in black ink that reads 'Austin Cole'.

Austin Cole, PE
12965 SW Herman Road, Suite 100
Tualatin, OR 97062
(503) 563-6151 | colea@aks-eng.com

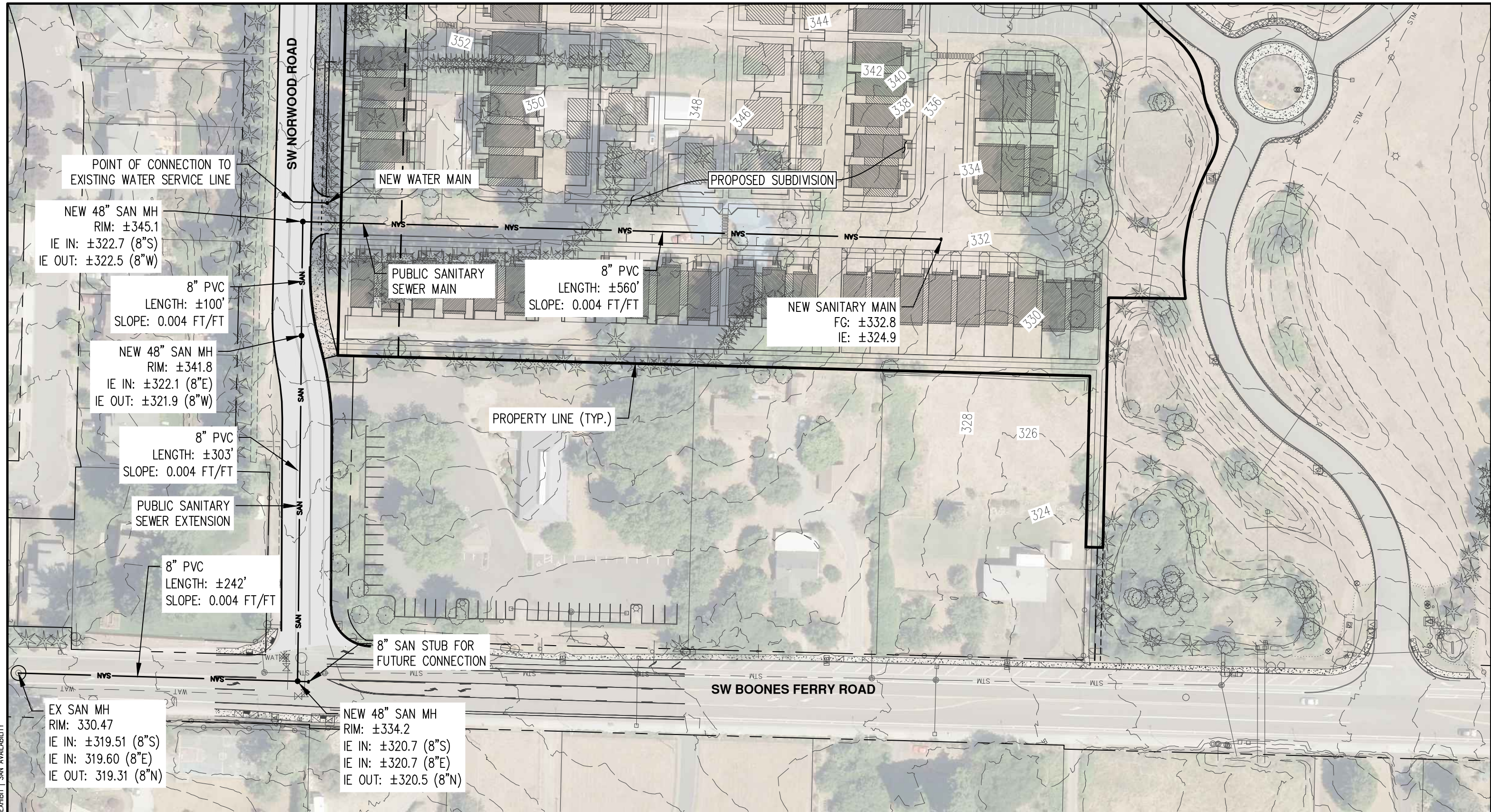


RENEWS: DECEMBER 31, 2023

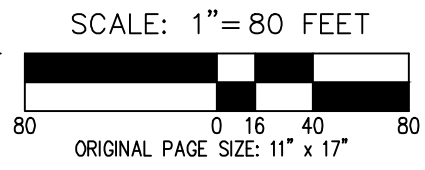
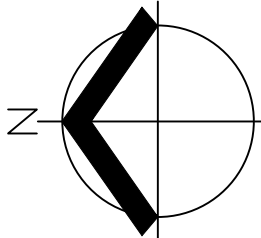
Attachments

- (Exhibit A) Water and Sanitary Sewer Availability Exhibit
- (Exhibit B) Stormwater Availability Exhibit
- (Exhibit C) Murraysmith Water Capacity Memorandum

DWG: 8723_20220908_SANITARY_AVAILABILITY_EXHIBIT | SAN AVAILABILITY



DATE: 09/05/2024



WATER AND SANITARY SEWER AVAILABILITY EXHIBIT		EXHIBIT
NORWOOD TOWNHOME PROJECT		A
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD #100 TUALATIN, OR 97062 503.563.6151 WWW.AKS-ENG.COM		DRWN: JAM CHKD: CAK AKS JOB: 8723



DWG: 8723 20220908 STORM AVAILABILITY EXHIBIT | AVAILABILITY

SW BOONES FERRY ROAD

NEW PUBLIC 15.0' STORM DRAINAGE EASEMENT

12" PUBLIC STORM SEWER
LENGTH: ±125'
SLOPE: 0.005 FT/FT

12" PUBLIC STORM SEWER
LENGTH: ±150'
SLOPE: 0.005 FT/FT

PUBLIC STORM MAIN CONNECTION
FG: ±328.0
IE: ±320.3

NEW PUBLIC STORM MANHOLE
IE: ±318.8

PUBLIC STORM MANHOLE
IE: ±319.4

PUBLIC STORM MANHOLE
IE: ±320.2

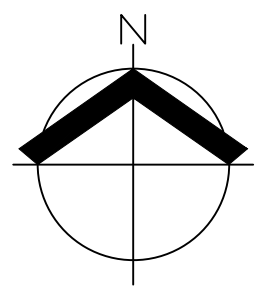
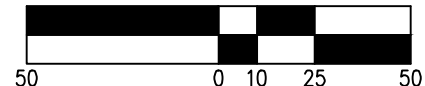
VEGETATED CORRIDOR

PROPERTY LINE (TYP.)

PROPOSED SUBDIVISION

VEGETATED CORRIDOR

SCALE: 1" = 50 FEET



DATE: 09/05/2024

STORMWATER AVAILABILITY EXHIBIT		EXHIBIT
NORWOOD TOWNHOME PROJECT		B
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD #100 TUALATIN, OR 97062 503.563.6151 WWW.AKS-ENG.COM		DRWN: JAM CHKD: CAK AKS JOB: 8723



Memorandum

Date: September 11, 2022

Project: 20-2737, On-Call Water System Analysis

To: Ms. Kim McMillan, PE – Community Development Director
Mr. Tony Doran – Engineering Associate
City of Tualatin

From: Brian Ginter, PE

Re: 9300 SW Norwood – Water System Capacity Analysis

Introduction

As requested, this memorandum has been prepared to present the findings of our analysis of the water service to the proposed multi-family development located at 9300 SW Norwood Road, southeast of the intersection of Boones Ferry Road and Norwood Road. This memorandum presents the findings of this analysis for the City's use in determining the water system improvements necessary to meet fire flow and pressure requirements.

Analysis and Conclusions

Murraysmith performed a review of the water service requirements associated with this development, and confirmed that the proposed multi-family develop does not require further analysis since prior analyses of proposed developments in the vicinity (Autumn Sunrise Subdivision and the Community Partners for Affordable Housing – Plambeck Gardens), have already defined water service availability and required water system improvements.

With the completion of the following planned improvements, a combination of City capital improvement projects and developer-constructed improvements, adequate water service for domestic and fire suppression is available at the proposed development.

- An 18-inch diameter B-level water line in Boones Ferry Road (to Norwood) being designed by AKS as a City CIP. The line extends east on Norwood to the B Level Reservoir/C Level Pump Station site.
- Lennar will upsize additional lines for the C-level, either by adding a new line across the Norwood frontage of the Autumn Sunrise development or upsizing the internal lines (following the street layout).

- CPAH is required by COAs to extend a 12-inch diameter C-level water line down Boones Ferry Road, from Norwood Road to their south property line.
- Autumn Sunrise will be installing upsized C-level lines from Norwood Road, through the development, out to BFR via Mahogany/Salinan, and then north to connect to the line CPAH will be installing in BFR.

If the proposed development at 9300 SW Norwood Road occurs prior to the completion of these improvements, it may impact the availability of water service.