

Engineering Department Land Use Application Review Comments & Conditions



Home of the Tualatin River National Wildlife Refuge

To: Joy Chang, Associate Planner, Planning Department
From: Bob Galati P.E., City Engineer, Engineering Department
Project: Middlebrook Subdivision (SUB 18-02)
Date: June 26, 2019

Engineering staff has reviewed the information provided for the above referenced private development project. Final construction plans will need to meet the standards established by the City of Sherwood Engineering Department and Public Works Department, Clean Water Services (CWS), Washington County Department of Land Use and Transportation (WACO DLUT) and Tualatin Valley Fire & Rescue (TVF&R), in addition to requirements established by other jurisdictional agencies providing land use comments. City of Sherwood Engineering Department comments are as follows:

General Observations

The proposed project is a 145 lot subdivision located on Tax Lot(s) 3S106B000100 and 3S106B000103, which are adjacent to and north of SW Brookman Road, and approximately 5,400 feet east of the intersection of SW Brookman Road with Hwy 99W.

The site area is approximately 39.95 acres in size, and is mostly undeveloped pasture and forested lands.

Transportation

The application packet includes an interior street layout plan and Brookman Road frontage improvement plan. The subdivision submittal provides a single public access road offset 100-feet from the existing SW Oberst Road intersection (a County Road). The SW Brookman Road frontage improvements extend approximately 360 feet along Brookman Road. A secondary limited improvement road is shown crossing the adjacent tax lot (3S106B000200), to be used for emergency access.

The internal street layout has provided for extension of internal streets to adjacent undeveloped properties (south, west and east of the subdivision). The proposed project does not provide for extension of internal streets to properties at the northwest corner of the development. The stated rationale is that a wetland exists to the west and would need to be crossed by some type of bridge, which is not proportional to the cost to construct such a structure.

SW Brookman Road

Frontage improvements along SW Brookman Road include the proportional dedication of land for right-of-way, and standard street improvements appropriate for an arterial road classification.

Realignment of the existing SW Brookman Road/Hwy 99W intersection was proposed as part of the original Brookman Area Concept Plan. The realigned intersection location was shown as being approximately 1,450 feet north of the current intersection location. Currently the Brookman Area Concept Plan is being updated to confirm the realignment recommendation and to present a concept level alignment which will be used to update the City's TSP.

Given the current transportation planning efforts for SW Brookman Road, ODOT, WACO and the City feel that conditioning full improvements to the intersection with Hwy 99W would not be

in the best interest of ODOT, WACO, the City or the applicant. If build-out intersection improvements were required to the SW Brookman Road/Hwy 99W, it is viewed that a fully signalized highway intersection would possibly be required by ODOT. The cost of this level of improvement would probably not be proportional to the impacts that the development would create.

The applicant's TIA indicates that the SW Brookman Road/Hwy 99W intersection currently fails to meet capacity and mobility requirements. The TIA notes that the additional trips generated by the proposed development does not significantly increase the deficit capacity issue. The TIA did identify that the addition of a right-turn lane would be an appropriate condition to correct the development's proportionate share of the mobility issue.

In light of these variables ODOT has conditioned that the applicant convert the SW Brookman Road/Hwy 99W intersection into a right-in/right-out configuration, which would satisfy a safety issue with the current intersection configuration. ODOT has also conditioned that the applicant pay a proportionate share fee in-lieu-of construction cost for the right-turn lane. These monies would be placed in a set aside fund to be used in the future signalized intersection of the realigned SW Brookman Road with Hwy 99W. This amount has been estimated by the applicants consulting engineers to be \$109,430.

SW Woodhaven Drive & SW Timbrel Lane and SW Sunset Boulevard Intersections

The TIA analysis also identified two other intersections which will have proportionate share impacts, 1) SW Sunset Boulevard and SW Woodhaven Drive, and 2) SW Sunset Boulevard and SW Timbrel Lane.

SW Woodhaven Drive is identified as having a \$43,548 (4.15%) proportionate share cost of a traffic signal installation with an estimated cost of \$1,050,000.

SW Timbrel Court is identified as having a \$33,451 (5.31%) proportionate share cost of a traffic roundabout installation with an estimated cost of \$630,000.

Site Development Access onto SW Brookman Drive

The initial submitted site street development plan included standard 52' ROW for residential streets, and a 60' ROW for the site main access road (SW Oberst Road) to SW Brookman Road. During the preliminary land use design phase it was found that a significant tree located on adjacent property created a sight distance issue that precluded the direct alignment of SW Oberst Road (north and south segments). The applicant and the adjacent property owner could not come to a reasonable agreement to have the tree removed, and WACO was not willing to issue a sight distance design exemption as the conditions were a major safety concern.

In response to WACO decision, the applicant revised the access location and submitted a design variation request which included an off-set intersection of 69-feet. This offset distance was significantly less than the City's MC allowance of 100-feet. This offset distance also created a left-turn turning movement conflict from each Oberst Road onto SW Brookman Road. The City reviewed the request and technical data and concluded that the existing and proposed conditions would not meet sight distance requirements and created a safety condition. The City issued a denial of the design variation request.

In response to the City decision, the applicant revised the access location which met the MC requirements, and also satisfied the previously identified left-turn turning movement safety issues. The proposed access road is now the extension of SW White Oak Terrace onto SW Brookman Road.

SW Oberst Court

SD Oberst Court is a proposed cul-de-sac with a length that exceeds 464-feet. MC Section 16.106.040.E.1 limits the length of any cul-de-sac to 200-feet. A design variation request analysis has been performed with the results granting the design variation request. The design variation request response is attached as Exhibit A.

SW Trillium Lane

SW Trillium Lane is designed as a $\frac{3}{4}$ -width street section, with a retaining wall and significant grade change to the existing grade of the adjacent property to the south (max height 7'). This height difference makes it infeasible and impracticable for a full width street section to be built by the adjacent development with a reasonable expectation of connectivity or minimal impact to any proposed lots.

For SW Trillium Lane to be built as a $\frac{3}{4}$ width street section such that future development widening is reasonably feasible, the design of the street must be adjusted vertically so that the differential height to the existing grade south of the development is less than 2-feet (cut or fill).

The proposed plans indicate a eastern leg of SW Wapato Lake Drive to be approximately 196-feet from the east curblin of SW White Oak Terrace Road to the street stub. This distance may exceed TVF&R standards, in which case a street hammerhead may be required.

Miscellaneous Street Items

Clear vision areas must be shown on the plans and recorded as easements on the plat. Clear vision easement areas shall conform to MC Section 16.58.010.

Street lighting shall conform with City standards. All internal streets to the subdivision shall have Westbrooke street lights, with Cobrahead street lighting along SW Brookman Road right-of-way. A photometric analysis report shall be included with the engineering design submittal for review and approval by City engineering.

Condition: Prior to Final Approval of Engineering Plans, applicant shall pay fee in-lieu-of construction amounts as follows:

- a. SW Brookman Road - \$109,430 for the right-turn lane onto Hwy 99W. Funds to be deposited into City TDT funds account and dedicated strictly for a future SW Brookman Road/Hwy 99W signalized intersection improvement project. This TDT fee in-lieu-of construction payment shall be treated as 100% credit eligible towards TDT fee assessments on the developments single family residential units.
- b. SW Woodhaven Drive & SW Sunset Boulevard - \$43,548 for proportionate share of signalized intersection improvements. Funds to be deposited into City funds account and dedicated strictly for a future SW Woodhaven Drive & SW Sunset Boulevard signalized intersection improvements project. This fee in-lieu-of construction payment shall be treated as 100% credit eligible towards City TDT or City Transportation SDC fee assessments on the developments single family residential units.
- c. SW Timbrel Lane & SW Sunset Boulevard - \$33,451 for proportionate share of traffic roundabout improvements. Funds to be deposited into City funds account and dedicated strictly for a suture SW Timbrel Lane & SW Sunset Boulevard traffic roundabout improvements project. This fee in-lieu-of construction payment shall be treated as 100% credit eligible towards City TDT or 54% credit eligible towards City Transportation SDC fee assessments on the developments single family residential units.

Condition: Prior to Final Approval of Engineering Plans, the street lighting design shall include a photometric analysis report for review and approval by City engineering. Lighting shall be Westbrook fixtures on all internal streets to the subdivision, with Cobrahead fixtures along the SW Brookman Road right-of-way.

Condition: Prior to Final Approval of Engineering Plans, the design of the emergency access road shall include a TVF&R approved locking gate system at both the north right-of-way line of SW Brookman Road and at the north property line of Tax Lot 3S106B000200.

Condition: Prior to Final Approval of Engineering Plans, the design of the east leg SW Wapato Lake Drive shall confirm that TVF&R standards which require when a hammerhead turnaround are met or not met.

Condition: Prior to Final Approval of Engineering Plans, the design of the south right-of-way line of the $\frac{3}{4}$ street section for SW Trillium Lane vertical alignment shall be such that the differential height (cut or fill) to existing grade south of the right-of-way line is not more than 2-feet.

Condition: Prior to Final Approval of Engineering Plans, the proposed development shall dedicate 33-feet of right-of-way to WACO County for right-of-way improvements associated with SW Brookman Road.

Condition: Prior to Final Approval of Engineering Plans, frontage improvements along the SW Brookman Road right-of-way, shall extend completely from the west property line to the east property line of the development frontage.

Condition: Prior to Final Approval of Plat, show clear vision easements on all corner lots. The clear vision easements shall be to the City of Sherwood and conform with MC Section 16.58.010.

Condition: Prior to Final Approval of Engineering Plans, the proposed development shall record a 14-foot wide visual corridor easement paralleling and north of the right-of-way dedication occurring along SW Brookman Road.

Condition: Prior to Final Approval of Engineering Plans, the applicant shall submit a separate design variation request form for each non-conforming public infrastructure design element, to the City Engineer for review and approval.

City Engineer's Comment: Discussion with City Transportation Engineering (DKS Associates) requesting feedback on any potential safety concerns for SW Brookman Road. Two potential safety concerns were identified are; 1) narrow roadway width, and 2) edge drop-off conditions. SW Brookman Road generally has a narrow paved width section (18 to 20 feet), much narrower than what is typically found on City residential streets. The drop-off edge condition is most concerning in that driver reaction to right side tires falling off the road, result in overcorrection, then driving off the left side of the road. The narrow road pavement section width does not allow for much maneuvering room. This is a physical condition of the road that the City identifies as a potential safety issue, and that the City does not have the funds to correct for in the near future, and that the City cannot condition the developer to correct for as the cost of the needed improvements are not proportional to the impacts generated by the development. It is recommended that at a minimum, pavement edgelines/foglines be re-established along SW Brookman Road prior to Grant of Occupancy.

City Transportation Engineer's Comments (based on February 5, 2019 TIA Analysis):

- Intersection vehicle queuing analysis - This was added in Appendix E, but there are two issues. 1) The high-level method may not be appropriate for some locations (especially the congested ones), and 2) Notwithstanding item #1, the narrative describes locations that are deficient but makes no findings about what should be done or if mitigation is required.
- Proportionate share - The methodology in Table 7 calculates the proportionate share based on an average, while the notes indicate that the average would only be used if considering two periods. The location is only deficient during the AM, therefore the AM share should be used and the share is based on 31.77%, resulting in about \$615k
- Oberst Rd Turn Lane Warrant - As shown in Appendix I, the turn lane warrant is just under the threshold based on the development projections for the year of opening. The warrant would likely be met very soon after opening, and this safety need should be considered.
- Brookman Rd Access Management - The narrative states that the access management standards are met, but per Figure 13, several access are within the 600' spacing.

Condition: Prior to final engineering plan approval, applicants engineer shall provide mitigation findings and details on queuing locations that are found to be deficient.

Condition: Prior to final engineering plan approval, applicant shall confirm meeting access spacing standards on Brookman Road or provide a signed design exception approval from WACO.

Washington County (WACO) and ODOT have provided comments for transportation mitigation requirements for both SW Brookman Road and Highway 99W.

State of Oregon DOT Comments and Conditions

ODOT Comments and Conditions are listed in a letter from Marah Danielson, ODOT Development Review Planner, dated February 21, 2019. In this letter, optional solutions are provided for mitigating safety concerns at the intersection of SW Brookman Road and Hwy 99W intersection.

Condition: Prior to final approval of engineering plans, based on a comments and conditions letter submitted by Marah Danielson, ODOT Development Review Planner, dated February 21, 2019, a preferred option solution shall be selected, with mitigation measures shown on the final design plans. Option 1 - the restriction of traffic movements from Brookman Road onto Hwy 99W to right-in/right-out turn movements. Option 2 – the installation of a traffic signal at the intersection of Brookman Road and Hwy 99W.

Condition: Prior to Issuance of Engineering Compliance Agreement, applicant shall pay the City of Sherwood a fee in-lieu-of construction amount for the right-turn lane improvement on Hwy 99W at the Brookman Road intersection.

Condition: Prior to Issuance of Engineering Compliance Agreement, applicant shall submit for and obtain from ODOT a Miscellaneous Permit for working in ODOT right-of-way and, if required, an agreement with ODOT to address transfer of the ownership of the improvement to ODOT.

Condition: Prior to Final Approval of Engineering Plans, the final design plans shall include the installation of continuous fencing along the property line fronting the rail tracks to ensure the safe operation of trains by preventing illegal trespassing of pedestrians across the tracks.

Washington County DLUT Comments and Conditions

WACO has not provided written final comments or conditions at the time of the writing of the City review comments and conditions report. None the less, the applicant shall comply with all conditions and requirements specified by WACO for SW Brookman Road.

Condition: Prior to Final Approval of Engineering Plans, the final design shall comply with all conditions and requirements specified by WACO for SW Brookman Road.

Sanitary Sewer

The proposed project site is located near an existing 15-inch diameter City sanitary sewer trunk line, located within the Cedar Creek corridor. As part of sanitary sewer services to the future southern and western UGB and Urban Reserve parts of Sherwood, the extension of the sanitary sewer trunk line will need to be extended and sized to meet these future needs.

In November 2018, CWS staff presented a Resolution (R&O 18-25) to the CWS Board of Director, whereby CWS staff are being authorized to acquire easement rights for the extension of the Brookman sewer trunk line. This Resolution is the basis for coordination between CWS and the applicant to obtain easement rights and provide sanitary sewer service to the proposed development, while also providing capacity for the future development needs of the areas described above. The design of this segment of the sanitary trunk line is being performed by the applicant's engineer, while approval of the pipeline design size, invert elevation, and slope are being dictated by CWS.

Condition: Prior to Final Approval of Engineering Plans, applicant shall obtain and submit a copy of an agreement letter between applicant and CWS which supports CWS approval of sanitary trunk line design.

Condition: Prior to Final Approval of Engineering Plans, the design of the public sanitary sewer system shall conform with CWS design and construction standards (CWS R&O 17-5).

Condition: Prior to Grant of Occupancy, all installed private sanitary sewer piping shall be installed meeting the standards of the Oregon Specialty Plumbing Code (recent edition).

Environmental

The proposed development has received a Wetland Delineation/Determination Concurrence Letter issued by the State of Oregon Department of State Lands (WD# 2018-0275).

No permit or joint permits from USACE, DSL, NMSF, etc. have been submitted with this application. If needed, all necessary permit(s) from outside jurisdictional agencies will need to be obtained and submitted before an Engineering Compliance Agreement is issued for this project.

Condition: Prior to Final Approval of Engineering Plans, the applicant shall conform with all the requirements and conditions listed in the State of Oregon Department of State Lands, Wetland Delineation/Determination Concurrence Letter (WD# 2018-0275, dated June 27, 2018).

Condition: Prior to Issuance of an Engineering Compliance Agreement, the applicant shall obtain and submit to City engineering any necessary permit(s) required by United States Army Corp of Engineers (USACE), National Marine Fisheries Services (NMFS), or State of Oregon Division of State Lands (DSL) for the proposed project, those requirements and conditions shall become part of the final project approval and acceptance.

Condition: Prior to Acceptance of Public Improvements, the applicant shall have complied with all the requirements and conditions of permit(s) issued by City, CWS, DSL, USACE, and/or NMFS.

Grading and Erosion Sediment Control

The application packet includes a preliminary grading and erosion & sediment control (ESC) plan. Final engineering ESC design plans will need to adhere to all Clean Water Services (CWS) engineering design standards for presentation of ESC facilities utilized on the project.

Since the proposed project is greater than 5 acres of disturbed surface area, the applicant will need to submit for and obtain an NPDES 1200C permit from CWS.

The proposed project has obtained a Service Provider Letter (SPL) from CWS (File No. 18-001504). Final ESC plans will need to comply with all the requirements and conditions of the issued SPL.

Condition: The applicant shall adhere to all the requirements and conditions listed in the Service Provider Letter issued by CWS (File No. 18-001504).

Condition: Prior to Final Approval of Engineering Plans, the ESC plan shall adhere to all CWS engineering design standards for presentation of all ESC facilities utilized on the project.

Condition: Prior to Issuance of an Engineering Compliance Agreement, the applicant shall obtain and submit the NPDES 1200C permit issued from CWS for the proposed project, to the City engineering department.

Condition: Prior to Final Approval of Engineering Plans, applicant shall obtain an NPDES 1200C Permit from CWS and submit it to the Engineering Department. Approved Erosion and Sediment Control construction plans shall show and conform with conditions delineated in the NPDES 1200C permit.

Condition: Prior to Grant of Occupancy, final acceptance of constructed public improvements shall be obtained from the Engineering Department. This acceptance includes complying with all requirements and conditions of the NPDES 1200C Permit.

The site is located adjacent to a wetland and stream corridor. Prior to commencing any on-site clearing or grading activity, City staff will take in-stream water samples from the nearest upstream and downstream point of the site. The percent turbidity shall be recorded and used as an additional tool to help in determination of whether on-site erosion and sediment control facilities are functioning correctly, or if illicit sediment discharge from the site is occurring during site construction. This information will be provided to the site construction manager at the project's pre-construction meeting with the City.

Storm Sewer

The proposed development plans indicate a regional storm water treatment facility located within Tract A of the development site. A preliminary storm water report (PSR), prepared by AKS Engineering, dated September 2018 is included in the application submittal.

Condition: Prior to Final Approval of Engineering Plans, applicant shall submit a final stormwater report, stamped by a civil engineer registered in the State of Oregon, and complying with the engineering design requirements and standards of CWS (*CWS Design and Construction Standards Manual and Surface Water Management R&O 17-05*).

Condition: Prior to Issuance of an Engineering Compliance Agreement, applicant shall obtain a Stormwater Connection Permit issued from CWS.

The Preliminary Stormwater Report (PSR) indicates that SLOPES V (NWR 2014-03-14) conditions exist and that discharge rates for the post developed 2-year and 10-year rainfall events must not exceed the pre-developed discharge rates. The PSR indicates that detention requirements will be necessary to meet the SLOPES V standards.

The PSR also provides analysis of the 25-year stormwater event to determine if any downstream obstruction would require on-site detention as mitigation. The analysis indicates that detention of a 25-year stormwater event to mitigate a downstream obstruction is not required as the post-developed increase of the Cedar Creek flow is less than 5% of the pre-developed flow.

Condition: Prior to Final Approval of Engineering Plans, the final stormwater report and construction plan set shall include provisions for detaining stormwater meeting the SLOPES V requirements.

Condition: Prior to Final Acceptance of Public Improvements, the stormwater treatment and detention facility shall be located in a tract of land dedicated to the City of Sherwood and shown on the recorded plat of the subdivision.

The proposed utility plans indicate that the stormwater system discharges into an existing stormwater culvert located under Brookman Road. The PSR does not provide any information on the condition or capacity of the culvert, to handle the flows. The final stormwater report shall provide a technical assessment of the physical condition and flow capacity of the culvert, along with any necessary recommended mitigation efforts. The design plans will provide specific design details which reflect the mitigation impacts noted in the final stormwater report.

Condition: Prior to Final Approval of Engineering Plans, the final stormwater report shall include a technical analysis of the condition and capacity of the proposed discharge point at the culvert. In addition, the final construction plan set shall provide specific design details which reflect the final stormwater reports mitigation recommendations.

Water

The proposed utility plans indicate that public water mainline services are available within Inkster Drive in the form of a 12" diameter waterline pipe. City Public Works has modeled the existing systems capability to provide water flow and pressure and found that the existing system can provide service to the proposed site development.

Design system plans provide two separate points of connection to the existing waterline within Inkster Drive and routed through two separate public utility easements, south beneath the Portland and Western Railroad system tracks to the site. These connection points meet the looped system requirements of Public Works. The City's water system master plan shows the extension of the 12-inch waterline through Oberst Road to Brookman Road, and east and west along Brookman Road to the extents of the project boundaries.

Maintenance vehicle access to the waterlines that run through easements from the site to Inkster must be shown to be feasible. Profile of waterlines running through easements to be provided as part of plans, along with not less than three cross-section details for each waterline.

Condition: Prior to Final Approval of Engineering Plans, the water system design shall include the extension of a 12-inch diameter water line from Inkster Drive to Brookman Road along Oberst Road, and east and west along Brookman Road to the extents of the site development project along Brookman Road.

Condition: Prior to Final Acceptance of Public Waterline Improvements, the waterline shall obtain approval by City Public Works staff for compliance with City construction and testing requirements.

Condition: Prior to Grant of Occupancy, all installed private water service piping shall be installed meeting the standards of the Oregon Specialty Plumbing Code (recent edition).

Condition: Prior to Final Approval of Engineering Plans, the public water system design shall include waterline extension stubs to allow adjacent future development access to public water systems.

Condition: Prior to Final Approval of Engineering Plans, the public water system alignments that are within easements shall be shown on the design plans and shall include profiles and not less than three cross-sections equally spaced per alignment.

Condition: Prior to Grant of Occupancy, any existing ground water wells located within the defined site development limits, identified during site design or construction shall be abandoned per State OAR 690-220-0030.

Other Engineering Conditions

Condition: As part of recording of the subdivision plat, the applicant shall include a 8-foot wide public utility easement (PUE) outside and adjacent to all created and dedicated street right-of-way lines.

Condition: Prior to issuance of any building permits, the developer shall execute an Engineering Compliance Agreement for the public improvements related to the project.

Condition: Prior to Issuance of an Engineering Compliance Agreement, final engineering plan approval by the Engineering Department is required.

Condition: Prior to Acceptance of Public Improvements, the applicant shall provide copies of all recorded public utilities easements for any public utilities constructed outside the public right-of-way.

Condition: Prior to Acceptance of Public Improvements, as-built drawings and related electronic files shall be submitted to City engineering for review and approval. Public utilities constructed outside public right-of-way shall be verified to have been constructed within recorded public utility easements. If public utilities have been constructed outside recorded public utility easements, the public utility easements shall be re-recorded to accurately reflect the public utility alignment, in conformance with City standards.

Condition: Prior to Grant of Occupancy, final acceptance of the constructed public improvements shall be obtained from the Engineering Department.

Condition: Per City of Sherwood standards, all new utilities shall be placed underground.

Condition: Prior to Grant of Occupancy for the building, Sherwood Broadband utilities (vaults and conduit) shall be installed along the subject properties frontage per requirements set forth in City Ordinance 2005-017 and City Resolution 2005-074.



Home of the Tualatin River National Wildlife Refuge

MEMORANDUM

June 18, 2019

To: Chris Goodell P.E., AKS Engineering
From: Bob Galati P.E., City Engineer, City of Sherwood
Subject: Review Comments of Design Variation Request for
Middlebrook Subdivision Cul-De-Sac Length Exception

The design variation request is to allow for a cul-de-sac design length in exceedance of City Municipal Code (MC) standards. MC Section 16.106.040.E.1 states the following;

"A cul-de-sac shall be more than two hundred (200) feet in length and shall not provide access to more than 25 dwelling units."

The methodology behind how this limit was established in the MC is as follows:

The City standard for Medium Density Residential (MDRL) which includes single family residential units, is a maximum of 8 dwelling units per acre, or approximately 5,000 sf lots. Typically the lots are 50' x 100' in size. With 4 lots per side of the street, this equates to a street length of 200 feet (50' lot width x 4 lots/side).

However, in researching how cul-de-sac length standards are technically established the following information was found:

Text: Residential Streets, 3rd edition

Published by: Urban Land Institute, a collaboration between Association of Home Builders, American Association of Civil Engineers (ASCE), and the Institute of Transportation Engineers (ITE)

The report indicates that the cul-de-sac length should be based on the maximum daily vehicle trip count setting the density of residential units accessing the cul-de-sac section of road. The report suggests a maximum traffic volume of approximately 200 vehicles per day (vpd) using a trip count of between 8 and 10 vehicle per day (vpd) for each single family residential (SFR) dwelling unit. Using this information, the maximum number of SFR dwelling units calculated at 20 SFR dwelling units (200 vpd / 10 vpd/SFR).

By extension, this calculation indicates that the maximum length of a cul-de-sac based on this application and the MDRL classification is 500 feet (50 feet/lot x 10 lots).

The proposed design length of the Oberst Court cul-de-sac is shown as being 464.01 feet in length, with a total of 18 SFR dwelling units taking access off the cul-de-sac.

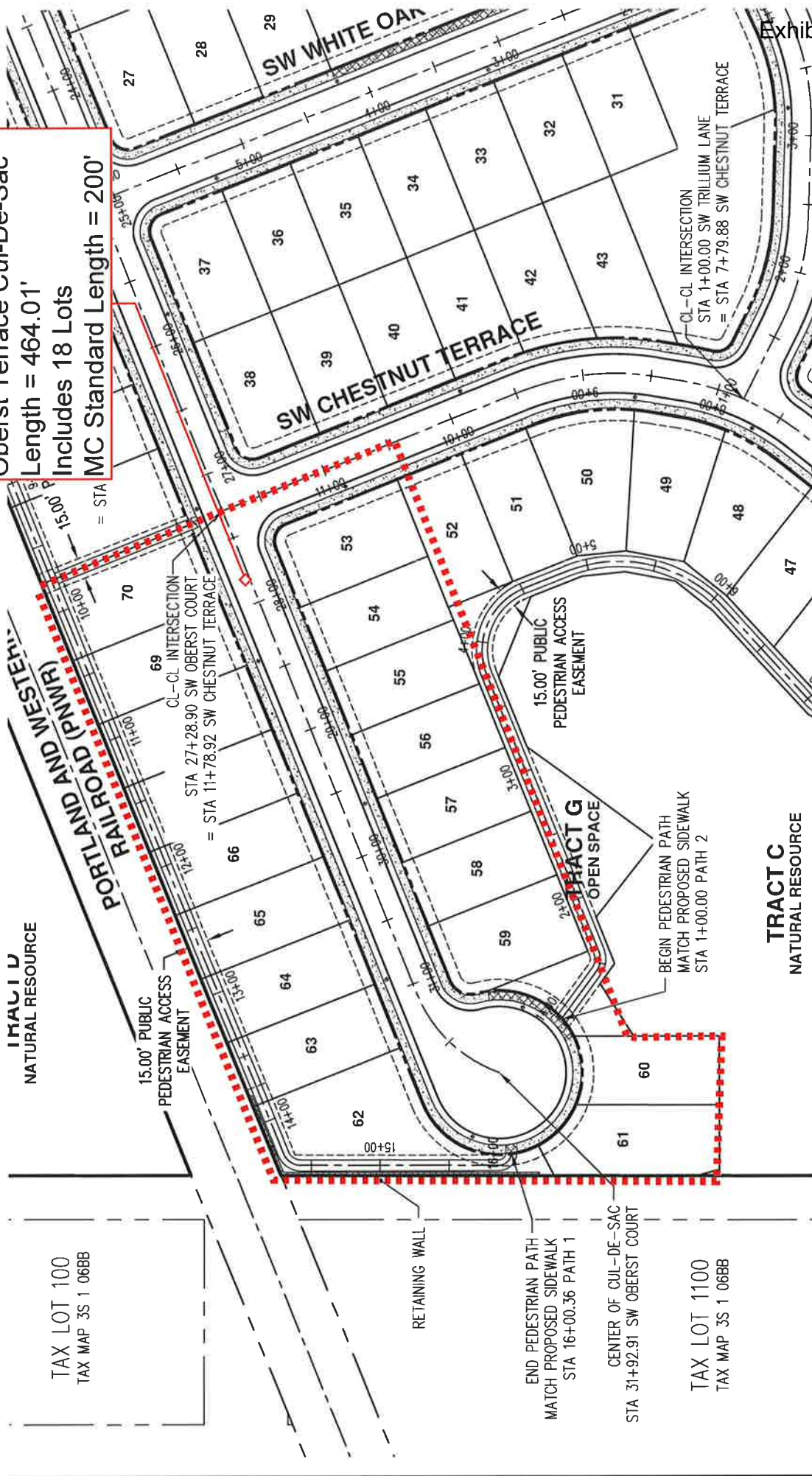
Based on this analysis, the request for a cul-de-sac length in exceedance of MC Section 16.106.040.E.1 is **approved**.



Bob Galati P.E., City Engineer

9.18.19
Date

Oberst Terrace Cul-De-Sac
Length = 464.01'
Includes 18 Lots
MC Standard Length = 200'



TAX LOT 100
TAX MAP 3S 1 06BB

RETAINING WALL
END PEDESTRIAN PATH
MATCH PROPOSED SIDEWALK
STA 16+00.36 PATH 1
CENTER OF CUL-DE-SAC
STA 31+92.91 SW OBERST COURT

TAX LOT 1100
TAX MAP 3S 1 06BB

TRACT D
NATURAL RESOURCE

TRACT C
NATURAL RESOURCE



Home of the Tuolumne River National Wildlife Refuge

MEMORANDUM

June 19, 2019

To: Chris Goodell P.E., AKS Engineering
Chris Brehmer P.E., Kittelson Associates

From: Bob Galati P.E., City Engineer, City of Sherwood

Subject: Review and Discussion of Design Variation Request for
Middlebrook Subdivision Access onto Brookman Road.

The design variation request is to allow for an intersection offset distance of 69-feet from centerline of existing Oberst Road to centerline of proposed site development Oberst Road onto Brookman Road.

The rationale presented is as follows:

1. This offset is the minimum necessary for meeting the sight distance requirement to avoid conflicts with trees located on adjacent property.
 - a. It is noted that negotiations with adjacent property owner could not come to a reasonable mitigation cost amount for the trees removal.
 - b. Also, removal of the tree would not be conducted by WACO under a jurisdictional condemnation process.
2. That the location provided appears to be a permanent location (not temporary in nature) as the applicant has stated the following:

"In the future, Washington County staff has indicated that SW Oberst Road will be required to be reconstructed to align with the new public street if and when the property located south of the proposed access along SW Brookman Road is redeveloped."
3. That the location and distance of the intersection does not cause turning conflicts between vehicles making left turn movements onto Oberst Road from Brookman Road:

"...meaning that there is no path overlap between left-turn on SW Brookman Road completing an eastbound left turn into the proposed residential subdivision or westbound left turn entering SW Oberst Road."

My analysis of these issue revolves around MC Sections 16.106.020.E.1 through 4 (Transportation Facilities Modifications) and 16.106.040.B (Design) which states the following:

MC Section 16.106.040.B

- B. All proposed streets shall, as far as practicable, be in alignment with existing streets. In no case shall the staggering of streets create a "T" intersection or a dangerous condition. Street offsets of less than one hundred (100) feet are not allowed.*

MC Section 16.106.020.E

- 1. A modification to a standard contained within this Chapter and Section 16.58.010 and the standard cross sections contained in Chapter 8 of the adopted TSP may be granted in accordance with the procedures and criteria set out in this section.*
- 2. A modification request concerns a deviation from the general design standards for public facilities, in this Chapter, Section 16.58.010, or Chapter 8 in the adopted Transportation System Plan. The standards that may be modified include but are not limited to:

 - a. Reduced sight distances.*
 - b. Vertical alignment.*
 - c. Horizontal alignment.*
 - d. Geometric design (length, width, bulb radius, etc.).*
 - e. Design speed.*
 - f. Crossroads.*
 - g. Access policy.*
 - h. A proposed alternative design which provides a plan superior to these standards.*
 - i. Low impact development.*
 - j. Access Management Plans**
- 3. Modification Procedure*
 - a. A modification shall be proposed with the application for land use approval.*
 - b. A modification is processed as a Type II application. Modification requests shall be processed in conjunction with the underlying development proposal.*
 - c. When a modification is requested to provide a green street element that is not included in the Engineering Design Manual, the modification process will apply, but the modification fee will be waived.*
- 4. Criteria for Modification: Modifications may be granted when criterion 4a and any one of criteria 4b through 4e are met:*
 - a. Consideration shall be given to public safety, durability, cost of maintenance, function, appearance, and other appropriate factors to advance the goals of the adopted Sherwood Comprehensive Plan and Transportation System Plan as a whole. Any modification shall be the minimum necessary to alleviate the hardship or disproportional impact.*
 - b. Topography, right-of-way, existing construction or physical conditions, or other geographic conditions impose an unusual hardship on the applicant, and an equivalent alternative which can accomplish the same design purpose is available.*
 - c. A minor change to a specification or standard is required to address a specific design or construction problem which, if not enacted, will result in an unusual hardship. Self-imposed hardships shall not be used as a reason to grant a modification request. .*

- d. *An alternative design is proposed which will provide a plan equal to or superior to the existing street standards.*
- e. *Application of the standards of this chapter to the development would be grossly disproportional to the impacts created.*

In previous discussions between the applicant's design team, WACO staff and City staff, it was made clear by City staff that both WACO and City design standards would need to be met with regards to access spacing. That in meeting WACO sight distance standards did not preclude having to meet City intersection spacing standards as well.

It was also noted that the "final" centerline alignment of the proposed site Oberst Road would need to align with "existing" Oberst Road centerline alignment, That an interim offset would be allowed if the offset met City minimum offset standards.

What appears to have been submitted is the following:

1. An offset alignment of 69-feet centerline to centerline, of the proposed site development Oberst Road from the existing Oberst Road.
2. That the proposed offset is a permanent alignment, not temporary.
3. That the proposed offset "fix" is a future realignment of the existing Oberst Road alignment, based on "*if and when*" the properties south of Brookman Road redevelop.
4. That only half of the intersection turning movement analysis has been performed and reported.
5. That agency analysis of the proposed intersection turn movements indicate that a safety issue has been created and not addressed.

ANALYSIS

The proposed design variation request submittal does not meet the minimum standards for providing me the rationale for supporting the request.

1. That the left-turn movements from Brookman Road onto the separate Oberst Road segments do not conflict. However, the rationale ignores the left-turn movements from the separate Oberst Road segments onto Brookman Road, which was ignored in the analysis. Agency analysis of the proposed intersection design turn movements identifies turn movement conflicts, and that alternatives which would mitigate such issues have not been presented.
2. That this proposed plan creates a safety issue relative to left turning movements from the separate Oberst Road access points onto Brookman Road, and the distance of separation along with sight distance issues west of the access points. Attached is an analysis response memorandum by DKS (the City's transportation engineer) which defines the issue in greater detail and supports the conclusion of the City Engineer.
3. That the proposed offset is not temporary in nature, and is portrayed as a permanent fix. The information supporting this statement is that it is portrayed that the existing Oberst Road will be relocated at some unspecified point in the future, and is predicated on the property south of Brookman Road going through a land use process which reclassifies the land from Urban Reserves to within the City's UGB, and then further from UGB to being annexed into the City.

DECISION

The applicants submittal for a Design Variation Request has been denied based on:

1. A non-conforming design alternative which results in the creation of a transportation safety issue that has not been properly addressed.
2. That the design alternative is not temporary in nature and does not provide a final design resolution to bring the development into conformance with City Municipal Code standards.

Design Application Request:
Approved:
Approved with Conditions:
Denied:

Bob J. Galati
Bob J. Galati P.E., City Engineer

6.19.19
Date

Attachments: DKS Memorandum dated 06/19/19



MEMORANDUM

July 9, 2019

To: City of Sherwood Planning Commission
Joy Chang, Senior Planner

From: Bob Galati P.E., City Engineer

Project: Middlebrook Subdivision (SUB 18-02)

Subject: Amended Conditions of Approval

Based on discussions with the applicant's engineer, and between City, WACO, and ODOT staff, the following are recommended changes to the currently submitted Staff Report for the above referenced application:

Condition E3 on page 66 of the staff report to be rewritten as follows:

The applicant's traffic engineer has presented findings supporting transportation mitigation requirements. Due to jurisdictional agency transportation system planning efforts for the area, in lieu of constructing such improvements at this time the City, Washington County and ODOT agree that Prior to Final Approval of Engineering Plans, the applicant shall pay fee in-lieu-of construction amounts as follows:

- a. *SW Brookman Road - \$109,430 for the right-turn lane onto Hwy 99W. Funds to be deposited into City TDT funds account and dedicated strictly for a future SW Brookman Road/Hwy 99W signalized intersection improvement project. This TDT fee in-lieu-of construction payment shall be treated as 100% credit eligible towards TDT fee assessments on the developments single family residential units.*
- b. *SW Woodhaven Drive & SW Sunset Boulevard - \$43,548 for proportionate share of signalized intersection improvements. Funds to be deposited into City funds account and dedicated strictly for a future SW Woodhaven Drive & SW Sunset Boulevard signalized intersection improvements project. This fee in-lieu-of construction payment shall be treated as 100% credit eligible towards City TDT or City Transportation SDC fee assessments on the developments single family residential units.*
- c. *SW Timbrel Lane & SW Sunset Boulevard - \$33,451 for proportionate share of traffic roundabout improvements. Funds to be deposited into City funds account and dedicated strictly for a future SW Timbrel Lane & SW Sunset Boulevard traffic roundabout improvements project. This fee in-lieu-of construction payment shall be treated as 100% credit eligible towards City TDT or 54% credit eligible towards City Transportation SDC fee assessments on the developments single family residential units.*

Condition E13 on Page 67 of the staff report shall be deleted.

07.09.19
Date

P.C.
Gov. Body

6a.
Agenda Item

Exhibit #

Condition E5 on Page 66 of the staff report to be rewritten as follows:

Prior to Final Approval of Engineering Plans, based on comments and conditions stated in a review comment letter from Naomi Vogel, Associate Planner for WACO Department of Land Use and Transportation, dated June 27, 2019, applicant shall convert the intersection of SW Brookman Road at Hwy 99W to a right-in/right-out only access per County/ODOT standards.

Revised Conditions of Approval based on July 9, 2019 Memorandum from Bob Galati

E. Prior to Approval of Engineering Public Improvement Plans

1. Prior to Final Approval of Engineering Plans, the ESC plan shall adhere to all CWS engineering design standards for presentation of all ESC facilities utilized on the project.
2. Prior to Final Approval of Engineering Plans, applicant shall obtain an NPDES 1200C Permit from CWS and submit it to the Engineering Department. Approved Erosion and Sediment Control construction plans shall show and conform with conditions delineated in the NPDES 1200C permit.

~~3. Prior to Final Approval of Engineering Plans, applicants engineer shall provide mitigation findings and details on queuing locations that are found to be deficient.~~

3. The applicant's traffic engineer has presented findings supporting transportation mitigation requirements. Due to jurisdictional agency transportation system planning efforts for the area, in lieu of constructing such improvements at this time the City, Washington County and ODOT agree that Prior to Final Approval of Engineering Plans, the applicant shall pay fee in-lieu-of construction amounts as follows:

SW Brookman Road - \$109,430 for the right-turn lane onto Hwy 99W. Funds to be deposited into City TDT funds account and dedicated strictly for a future SW Brookman Road/Hwy 99W signalized intersection improvement project. This TDT fee in-lieu-of construction payment shall be treated as 100% credit eligible towards TDT fee assessments on the developments single family residential units.

SW Woodhaven Drive & SW Sunset Boulevard - \$43,548 for proportionate share of signalized intersection improvements. Funds to be deposited into City funds account and dedicated strictly for a future SW Woodhaven Drive & SW Sunset Boulevard signalized intersection improvements project. This fee in-lieu-of construction payment shall be treated as 100% credit eligible towards City TDT or City Transportation SDC fee assessments on the developments single family residential units.

SW Timbrel Lane & SW Sunset Boulevard - \$33,451 for proportionate share of traffic roundabout improvements. Funds to be deposited into City funds account and dedicated strictly for a future SW Timbrel Lane & SW Sunset Boulevard traffic roundabout improvements project. This fee in-lieu-of construction payment shall be treated as 100% credit eligible towards City TDT or 54% credit eligible towards City Transportation SDC fee assessments on the developments single family residential units.

4. Prior to final engineering plan approval, applicant shall confirm meeting access spacing standards on Brookman Road or provide a signed design exception approval from Washington County.

~~5. Prior to Final Approval of Engineering Plans, based on a comments and conditions letter submitted by Marah Danielson, ODOT Development Review Planner, dated February 21, 2019, a preferred option solution shall be selected, with mitigation measures shown on the final design plans. Option 1 - the restriction of traffic movements from Brookman Road onto~~

New = New

Deleted = Deleted

~~Hwy 99W to right-in/right-out turn movements. Option 2 – the installation of a traffic signal at the intersection of Brookman Road and Hwy 99W.~~

5. Prior to Final Approval of Engineering Plans, based on comments and conditions stated in a review comment letter from Naomi Vogel, Associate Planner for WACO Department of Land Use and Transportation, dated June 27, 2019, applicant shall convert the intersection of SW Brookman Road at Hwy 99W to a right-in/right-out only access per County/ODOT standards.
6. Prior to Final Approval of Engineering Plans, the final design plans shall include the installation of continuous fencing along the property line fronting the rail tracks to ensure the safe operation of trains by preventing illegal trespassing of pedestrians across the tracks.
7. Prior to Final Approval of Engineering Plans, the street lighting design shall include a photometric analysis report for review and approval by City engineering. Lighting shall be Westbrooke fixtures on all internal streets to the subdivision, with Cobrahead fixtures along the SW Brookman Road right-of-way.
8. Prior to Final Approval of Engineering Plans, the design of the south right-of-way line of the ¼ street section for SW Trillium Lane vertical alignment shall be such that the differential height (cut or fill) to existing grade south of the right-of-way line is not more than 2-feet.
9. Prior to Final Approval of Engineering Plans, frontage improvements along the SW Brookman Road right-of-way, shall extend completely from the west property line to the east property line of the development frontage.
10. Prior to Final Approval of Engineering Plans, the proposed development shall record a 15-foot wide visual corridor easement paralleling and north of the right-of-way dedication occurring along SW Brookman Road.
11. Prior to Final Approval of Engineering Plans, the applicant shall submit a separate design variation request form for each non-conforming public infrastructure design element, to the City Engineer for review and approval.
12. Prior to final engineering plan approval, all new utilities and existing utilities along the subject property's frontage of SW Brookman Road shall be placed underground per City of Sherwood standards.

- ~~13. Prior to Final Approval of Engineering Plans, applicant shall pay fee in-lieu-of construction amounts as follows:~~

~~SW Brookman Road – \$109,430 for the right turn lane onto Hwy 99W. Funds to be deposited into City TDT funds account and dedicated strictly for a future SW Brookman Road/Hwy 99W signalized intersection improvement project. This TDT fee in-lieu-of construction payment shall be treated as 100% credit eligible towards TDT fee assessments on the developments single family residential units.~~

~~SW Woodhaven Drive & SW Sunset Boulevard – \$43,548 for proportionate share of signalized intersection improvements. Funds to be deposited into City funds account and dedicated strictly for a future SW Woodhaven Drive & SW Sunset Boulevard signalized intersection improvements project. This fee in-lieu-of construction payment shall be treated as 100% credit eligible towards City TDT or City Transportation SDC fee assessments on the developments single family residential units.~~

New = New

Deleted = Deleted

~~SW Timbrel Lane & SW Sunset Boulevard—\$33,451 for proportionate share of traffic roundabout improvements. Funds to be deposited into City funds account and dedicated strictly for a future SW Timbrel Lane & SW Sunset Boulevard traffic roundabout improvements project. This fee in lieu of construction payment shall be treated as 100% credit eligible towards City TDT or 54% credit eligible towards City Transportation SDC fee assessments on the developments single family residential units.~~

- 1344.** Prior to Final Approval of Engineering Plans, applicant shall obtain and submit a copy of an agreement letter between applicant and CWS which supports CWS approval of sanitary trunk line design.
- 1415.** Prior to Final Approval of Engineering Plans, the design of the public sanitary sewer system shall conform with CWS design and construction standards (CWS R&O 17-5).
- 1516.** Prior to Final Approval of Engineering Plans, the water system design shall include the extension of a 12-inch diameter water line from Inkster Drive to Brookman Road along Oberst Road, and east and west along Brookman Road to the extents of the site development project along Brookman Road.
- 1617.** Prior to Final Approval of Engineering Plans, the public water system design shall include waterline extension stubs to allow adjacent future development access to public water systems.
- 1718.** Prior to Final Approval of Engineering Plans, the public water system alignments that are within easements shall be shown on the design plans and shall include profiles and not less than three cross-sections equally spaced per alignment.
- 1819.** Prior to Final Approval of Engineering Plans, applicant shall submit a final stormwater report, stamped by a civil engineer registered in the State of Oregon, and complying with the engineering design requirements and standards of CWS (*CWS Design and Construction Standards Manual and Surface Water Management R&O 17-05*).
- 1920.** Prior to Final Approval of Engineering Plans, the final stormwater report and construction plan set shall include provisions for detaining stormwater meeting the SLOPES V requirements.
- 2021.** Prior to Final Approval of Engineering Plans, the final stormwater report shall include a technical analysis of the condition and capacity of the proposed discharge point at the culvert. In addition, the final construction plan set shall provide specific design details which reflects the final stormwater reports mitigation recommendations.
- 2122.** Prior to Final Approval of Engineering Plans, the design of the emergency access road shall include a TVF&R approved locking gate system at both the north right-of-way line of SW Brookman Road and at the north property line of Tax Lot 3S106B000200.
- 2223.** Prior to Final Approval of Engineering Plans, the design of the east leg SW Wapato Lake Drive shall confirm that TVF&R standards which require when a hammerhead turnaround are met or not met. The applicant may also obtain a Uniform Alternate Construction Standard approval for sprinkler systems for the buildings on Lots 6 and 7.
- 2324.** Prior to Final Approval of Engineering Plans, the applicant shall conform with all the requirements and conditions listed in the State of Oregon Department of State Lands, Wetland Delineation/Determination Concurrence Letter (WD# 2018-0275, dated June 27, 2018).

New = New

Deleted = Deleted



720 SW Washington St., Suite 500
 Portland, OR 97205
 503.243.3500
 www.dksassociates.com

MEMORANDUM

DATE: June 19, 2019

TO: Bob Galati, City of Sherwood

FROM: Garth Appanaitis, PE

SUBJECT: Sherwood Middlebrook Residential Development – Access Design Mod.
 Sherwood On Call – Task 10

Per your request, we have reviewed the design modification request¹ for the Middlebrook Subdivision access to Brookman Road. The letter requests access for the subdivision be located on Brookman Road approximately 69 feet west of the existing SW Oberst Road (measured from centerline of roadways).

The request letter indicates that 'City Code identifies a minimum access spacing requirement of 100 feet along collectors such as SW Brookman Road.' In addition to the content presented in the letter, the Transportation System Plan (TSP)² provides additional context related to access spacing on Brookman Road and indicates that the function and design of Brookman Road is an area requiring further refinement. The TSP (page 73) notes that "During the interim, while refinement planning has not yet completed, access spacing and other requirements will need to be evaluated on a case by case basis at the time of any development application."

The letter notes that providing access to the proposed use opposite the existing Oberst Road would not meet sight distance requirements due to an existing tree on the north side of Brookman Road. The letter does not describe other potential access location alternatives in addition to the proposed location 69 feet west of Oberst Road. The letter does not describe if locating the access further west was considered or is feasible.

The request for the design modification does not adequately demonstrate that the proposed access would operate in a safe manner. Additional considerations for the safety and use of the access that have not been addressed include:

- Locating the new access west of Oberst Road creates the potential for left turn conflicts for traffic turning onto Brookman Road from the two side street approaches. The potential conflict for left turning vehicles from Brookman Road was addressed, but the conflicts for vehicles turning onto Brookman Road (from either the proposed access or the existing Oberst Road approach) were not addressed.

¹ RE: Design Modification Request for SW Brookman Road Access Spacing Related to Middlebrook Residential Subdivision - Sherwood, Oregon, Kittelson & Associates, May 28, 2019.

² *Sherwood Transportation System Plan*, adopted June 17, 2014.



Page 2

- The proposed access for Middlebrook Subdivision would serve approximately 35 left turning vehicles (and 50 right turning vehicles) exiting per hour³, which is significantly more than individual residential driveways located along Brookman Road. In addition, the existing Oberst Road appears to serve several homes. Potential conflicts would occur more frequently than single residence offset driveways.
- No information regarding sight distance from the existing Oberst Road approach is provided, however the proposed access would affect this movement due to the potential for left turn conflicts. The sight distance to the west (for northbound left turn movements from Oberst Road) may be partially obscured by the crest vertical curve on Brookman Road. Further, the existing Oberst Road approach appears to be at a lower grade than Brookman Road and may further impact sight distance to the west.
- Exhibit A indicates that Brookman Road will be widened along the site frontage. The widening is consistent with future corridor needs and design. However, in the interim, the partially widened roadway along the site frontage may lead to confusion and uncertainty related to where southbound drivers stop and adjust position to obtain adequate sight distance. This potential maneuvering for southbound vehicles (to adjust line of sight) may be difficult to interpret for northbound drivers on Oberst Road that have potential left turn conflicts and may further distract from the ability to maintain awareness of approaching traffic on Brookman Road.

Collectively, the above items provide contextual safety considerations for the proposed access location. While locating the access 69 feet west of Oberst Road, as presented, may be able to be accommodated in a safe manner through specific design treatments, such indication has not been provided and the information provided does not ensure that the proposed location would operate in a safe manner.

If you have any questions, please call.

³ *Middlebrook Residential Subdivision Transportation Impact Analysis - Sherwood, Oregon, Kittelson & Associates, February 5, 2019, Figure 11.*



WASHINGTON COUNTY, OREGON

Department of Land Use and Transportation, Operations & Maintenance Division
1400 SW Walnut Street, MS 51, Hillsboro, Oregon 97123-5625
(503) 846-7623 · FAX: (503) 846-7620

June 27, 2019

To: Joy Chang – Associate Planner

From: Naomi Vogel – Associate Planner

RE: Middlebrook Subdivision

City File Number: SUB 18-02

County File Number: CP 19-903

**Tax Map and Lot Number: 3S1060000103, 3S106B000100, 3S106B000200
(portion)**

Washington County Department of Land Use and Transportation has reviewed this development application to subdivide approximately 38 acres into 145 individual lots for single family detached homes and a public street access on SW Brookman Avenue, a County-maintained Arterial (5 lanes).

A Traffic Impact Analysis and supplemental information by Kittleson & Associates (February 5, 2019, February 19, 2019 & May 28, 2019) was submitted in accordance with Washington County R&O 86-95, "Determining Traffic Safety Improvement". County staff has reviewed the TIA and concurs with the findings/recommendations of the analysis and supplemental addenda.

The applicant has proposed a public street, White Oak Terrace, approximately 100 feet from SW Oberst Road. However, the proposed access does not meet the County's standard for access to an Arterial because it does not meet a minimum spacing standard of 600 feet. The applicant has submitted a Design Exception to the County's access standards and has received approval by the County Engineer for the proposed public street (dated June 27, 2019).

I. PRIOR TO ISSUANCE OF A SITE GRADING PERMIT BY THE CITY OF SHERWOOD:

A. Submit to **Washington County** Public Assurance Staff the following (503-846-3843):

1. Completed "Design Option" form, geotech/pavement report and "Engineer's Checklist" (Appendix 'E' of County Road Standards).

2. **\$10,000.00** Administration Deposit.

NOTE: The Administration Deposit is a cost-recovery account used to pay for County services provided to the developer, including plan review and approval, field inspections, as-built approval, and project administration. The Administration Deposit amount noted above is an estimate of what it will cost to provide these services. If, during the course of the project, the Administration Deposit account is running low, additional funds will be requested to cover the estimated time left on the project (at then-current rates per the adopted Washington County Fee Schedule). If there are any unspent funds at project close out, they will be refunded to the applicant. Any point of contact with County staff can be a chargeable cost. If project plans are not complete or do not comply with County standards and codes, costs will be higher. There is a charge to cover the cost of every field inspection. Costs for enforcement actions will also be charged to the applicant.

3. Copy of the City's Notice of Decision and the County's letter dated June 27, 2019.
4. Preliminary certification of adequate sight distance for construction access (if proposed) and public street connection to SW Brookman Road, in accordance with County Code, prepared and stamped by a registered professional engineer, as well as:
 - a. A detailed list of improvements necessary to produce adequate intersection sight distance (refer to the following link for sight distance certification submittal requirements).

<http://www.co.washington.or.us/LUT/Divisions/CurrentPlanning/development-application-forms.cfm>
5. Engineering plans via ProjectDox for construction of the following public improvements to County standards, including construction access and traffic control plan:
 - a. Public street connection to SW Brookman Road to County standards. The access shall be located and constructed per the approved Design Exception dated June 27, 2019.
 - b. Improvements required to provide adequate intersection sight distance at the public street connection to SW Brookman Road, including construction access.
 - c. Emergency access (Tax Lot 200) on SW Brookman Road to TVFR and County standards. The access shall be adequately illuminated to County standards.
 - d. Construction of a 5 lane configuration to include street lighting and a 12' concrete multi-use path along the site's frontage of SW Brookman Road. The sidewalk can be located within the PUE per the City.
 - e. Convert the intersection of SW Brookman Road at Hwy 99W to a right-in/right-out only access per County/ODOT standards.

B. Obtain a Washington County **Facility Permit** upon completion of the following:

1. Obtain Engineering Division approval and provide a financial assurance for the construction of the public improvements listed in conditions **I.A.5.**

NOTE: *The Public Assurance staff (503-846-3843) will send the required forms to the applicant's representative after submittal and approval of items listed under I.A.*

*The Facility Permit allows construction work within County rights-of-way and permits site access only after the developer first submits plans and obtains Washington County Engineering approval, obtains required grading and erosion control permits, and satisfies various other requirements of Washington County's Assurances Section including but not limited to execution of financial and contractual agreements. This process ensures that the developer accepts responsibility for construction of public improvements, and that improvements are closely monitored, inspected, and built to standard in a timely manner. **Access will only be permitted under the required Washington County Facility Permit, and only following submittal and County acceptance of all materials required under the facility permit process.***

II. PRIOR TO ISSUANCE OF APPROVAL OF THE PLAT BY THE CITY OF SHERWOOD AND WASHINGTON COUNTY:

- A. The following shall be recorded with Washington County (Contact Survey Division, 503.846.8723):
1. Dedication of additional right-of-way to provide 53 feet from the centerline of SW Brookman Road, including adequate corner radius to accommodate a future signal at the public street connection.

Note: All private signage and improvements are required to be located outside of the dedicated ROW.

III. PRIOR TO OCCUPANCY:

Obtain a Finaled Washington County **Facility Permit**, contingent upon the following:

- A. The road improvements required in condition **I.A.5.** above shall be completed and accepted by Washington County.
- B. Upon completion of necessary improvements, submit **final** certification of adequate sight distance in accordance with County Code, prepared and stamped by a registered professional engineer.

If you have any questions, please contact me at 503-846-7639.

Cc: Road Engineering Services
Traffic Engineering Services
Assurances Section
Transportation File



July 2, 2019

Erika Palmer, Planning Manager
City of Sherwood
22560 SW Pine Street
Sherwood, OR 97140

Re: Middlebrook Subdivision, SUB 18-02

Dear Ms Palmer:

Washington County Long Range Planning appreciates the opportunity to comment on the proposed subdivision known as Middlebrook Subdivision, File No. SUB 18-02. The Middlebrook Subdivision is located along Brookman Road in south Sherwood, which is a county arterial roadway. The Middlebrook Subdivision has limited frontage on Brookman Road; however, as the first urban development along Brookman Road, the roadway design and right-of-way dedication requirements are important as they set the stage for the future look and feel of Brookman Road.

Both the county and the city have designated Brookman Road as a 5-lane arterial in their respective Transportation System Plans (TSP). As development in the area occurs, it will be important that roadway improvements are made in accordance with that designation, with robust access management. Brookman Road is currently a narrow rural road that is ill suited to serve a large volume of traffic. There is not funding identified at this time for a city or county capital project to improve Brookman Road to arterial standards. The city should plan on long-term funding and access management plans for Brookman Road.

The county looks forward to continuing to work with the city on a long-term plan for the Brookman Road corridor, including the ultimate roadway design and right-of-way, access management, and funding.

Sincerely,

Erin Wardell, Principal Planner



WASHINGTON COUNTY

OREGON

To: Joy Chang, Associate Planner; City of Sherwood

From: Ryan Marquardt, Transportation Planner; Washington County

Date: June 4, 2019

Subject: Middlebrook Subdivision & Washington County Community Development Code Article VII

This memorandum is in response to questions from the City of Sherwood and the applicant for the Middlebrook Subdivision (City of Sherwood Project ID# SUB 18-02). The questions concern what County land use review would be required for improvements within right-of-way in unincorporated Washington County that would be conditions of approval for the Middlebrook Subdivision.

I have reviewed the document titled "ODOT Response" for this subdivision (dated February 21, 2019; ODOT #8748) and understand from you and the applicant that the applicant intends to complete option #1 to address the concerns about the intersection of Highway 99W and Brookman Road. This option requires, "As an interim solution, restrict the movements onto Brookman Rd from OR 99W to right in/right out movements."

Completion of this option appears to involve changes within the existing right-of-way for Highway 99W that would alter the highway median to eliminate left turn movements between Highway 99W and Brookman Road. Washington County Community Development Code (CDC) §702 lists activities that are exempt from review under CDC Article VII. §702-3 exempts, "Operational improvements within existing right-of-way and ancillary easements including, but not limited to striping, installation of guard rails, pedestrian ways, widening shoulders, street lighting, signalization, reflectors, buttons, signs, flashing beacons, channelization and median control."

Based on what has been described, the installation of the median described in the ODOT response letter would be exempt from review under CDC Article VII. The work would be within existing right-of-way and would be an operational improvement for median control.



Oregon

Kate Brown, Governor

Exhibit D
Department of Transportation
Region 1 Headquarters
123 NW Flanders Street
Portland, Oregon 97209
(503) 731.8200
FAX (503) 731.8259

February 21, 2019

ODOT #8748

ODOT Response

Project Name: Middlebrook Subdivision	Applicant: Brookman Development, LLC
Jurisdiction: City of Sherwood	Jurisdiction Case #: SUB 18-02
Site Address: 17495, 17601 and 17769 SW Brookman Road, Sherwood, OR	State Highway: OR 99W

The site of this proposed land use action is in the vicinity of the OR 99W/Brookman Rd intersection. ODOT has permitting authority for this facility and an interest in ensuring that this proposed land use is compatible with its safe and efficient operation. **Please direct the applicant to the District Contact indicated below to determine permit requirements and obtain application information.**

COMMENTS/FINDINGS

The City of Sherwood has a Metro grant to study the location of the OR 99W intersection as it relates to the Brookman Rd Concept Plan. This study will identify the preferred alternative for the location of the signalized intersection that is in the City's Transportation System Plan.

To address the mobility impacts of the proposed development, the applicant proposes to construct a right turn lane which may not be needed at this location if the intersection is moved further north. Therefore, it is recommended that the applicant contribute a fee in lieu of construction of the right turn lane.

The intersection of OR 99W and Brookman Rd is identified as a top 10% Safety Priority Index System (SPIS) location. The SPIS score is based on three years of crash data and considers crash frequency, crash rate and crash severity. This intersection is within a high speed corridor and ODOT is concerned about adding additional traffic to this intersection without making safety improvements.

We are recommending two options to mitigate the safety concerns at the OR 99W and Brookman Rd intersection:

1. As an interim solution, restrict the movements onto Brookman Rd from OR 99W to right in/right out movements. This would eliminate the potential for crashes relating to vehicles turning left into and out of Brookman Rd onto OR 99W.

Or

2. As an interim solution, install a traffic signal which will control traffic movements at the intersection increasing the safe operation of the intersection. The signal equipment could be relocated in the future if the City's study recommends locating the signal further north to accommodate the Brookman Rd Concept Plan.

All alterations within the State highway right of way are subject to the ODOT Highway Design Manual (HDM) standards. Alterations along the State highway but outside of ODOT right-of-way may also be subject to ODOT review pending its potential impact to safe operation of the

highway. If proposed alterations deviate from ODOT standards a Design Exception Request must be prepared by a licensed engineer for review by ODOT Technical Services. Preparation of a Design Exception request does not guarantee its ultimate approval. Until more detailed plans have been reviewed, ODOT cannot make a determination whether design elements will require a Design Exception.

Note: Design Exception Requests may take up to 3 months to process.

All ODOT permits and approvals must reach 100% plans before the District Contact will sign-off on a local jurisdiction building permit, or other necessary requirement prior to construction.

ODOT RECOMMENDED LOCAL CONDITIONS OF APPROVAL

1. Restrict the traffic movements from Brookman Rd onto OR 99W to right in/right out, or
 2. Install a traffic signal at the Brookman Rd/OR 99W intersection.
- The applicant shall pay the City of Sherwood a fee in lieu of construction of the right turn lane on OR 99W at the Brookman Rd intersection.

Permits and Agreements to Work in State Right of Way

- An ODOT Miscellaneous Permit must be obtained for all work in the highway right of way. When the total value of improvements within the ODOT right of way is estimated to be \$100,000 or more, an agreement with ODOT is required to address the transfer of ownership of the improvement to ODOT. An Intergovernmental Agreement (IGA) is required for agreements involving local governments and a Cooperative Improvement Agreement (CIA) is required for private sector agreements. The agreement shall address the work standards that must be followed, maintenance responsibilities, and compliance with ORS 276.071, which includes State of Oregon prevailing wage requirements.

Note: If a CIA is required, it may take up to **6 months** to process.

Property Location Adjacent to Rail Tracks

- The applicant shall install continuous fencing (no gates) along the property line fronting the rail tracks to ensure the safe operation of trains by preventing illegal trespassing of pedestrians across the tracks (see attached Rail Fence Detail).

ADVISORY INFORMATION

Noise

- The applicant is advised that a residential development on the proposed site may be exposed to noise from heavy rail freight trains, passenger trains or transit vehicles. It is generally not the State's responsibility to provide mitigation for receptors that are built after the noise source is in place. Builders should take appropriate measures to mitigate the noise impacts.

Please send a copy of the Notice of Decision including conditions of approval to:

ODOT Region 1 Planning
Development Review
123 NW Flanders St
Portland, OR 97209

Region1_DEVREV_Applications@odot.state.or.us

Development Review Planner: Marah Danielson	503.731.8258, marah.b.danielson@odot.state.or.us
Traffic Contact: Avi Tayar, P.E.	503.731.8221
District Contact: via email	D2BUP@odot.state.or.us



February 1, 2019

Joy Chang
Associate Planner
City of Sherwood
22560 SW Pine Street
Sherwood, Oregon 97140

Re: Middlebrook Subdivision
Tax Lot I.D: 3S106B000200, 3S106000100

Dear Joy,

Thank you for the opportunity to review the proposed site plan surrounding the above named development project. These notes are provided in regards to the plans received January 31, 2019. There may be more or less requirements needed based upon the final project design, however, Tualatin Valley Fire & Rescue will endorse this proposal predicated on the following criteria and conditions of approval.

FIRE APPARATUS ACCESS:

1. **FIRE APPARATUS ACCESS ROAD DISTANCE FROM BUILDINGS AND FACILITIES:** Access roads shall be within 150 feet of all portions of the exterior wall of the first story of the building as measured by an approved route around the exterior of the building or facility. An approved turnaround is required if the remaining distance to an approved intersecting roadway, as measured along the fire apparatus access road, is greater than 150 feet. (OFC 503.1.1)
2. **DEAD END ROADS AND TURNAROUNDS:** Dead end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved turnaround. Diagrams can be found in the corresponding guide. <http://www.tvfr.com/DocumentCenter/View/1438> (OFC 503.2.5 & D103.1)

Discussed SW Wapato Dr with Paul Selke at AKS, a turnaround would not be practical as they do not own lot 101. Applicant can apply for a UACS.

3. **ADDITIONAL ACCESS ROADS – ONE- OR TWO-FAMILY RESIDENTIAL DEVELOPMENTS:** Developments of one- or two-family dwellings, where the number of dwelling units exceeds 30, shall be provided with separate and approved fire apparatus access roads and shall meet the requirements of Section D104.3. Exception: Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with section 903.3.1.1, 903.3.1.2, or 903.3.1.3 of the International Fire Code, access from two directions shall not be required. (OFC D107)

Temporary access road on Tax Lot 200 is approved.

4. **MULTIPLE ACCESS ROADS SEPARATION:** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the area to be served (as identified by the Fire Marshal), measured in a straight line between accesses. (OFC D104.3)

5. **FIRE APPARATUS ACCESS ROAD WIDTH AND VERTICAL CLEARANCE:** Fire apparatus access roads shall have an unobstructed driving surface width of not less than 20 feet (26 feet adjacent to fire hydrants (OFC D103.1)) and an unobstructed vertical clearance of not less than 13 feet 6 inches. (OFC 503.2.1)
6. **NO PARKING SIGNS:** Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, “No Parking” signs shall be installed on one or both sides of the roadway and in turnarounds as needed. Signs shall read “NO PARKING - FIRE LANE” and shall be installed with a clear space above grade level of 7 feet. Signs shall be 12 inches wide by 18 inches high and shall have red letters on a white reflective background. (OFC D103.6)

Install No Parking Fire Lane signs on gates.

7. **NO PARKING:** Parking on emergency access roads shall be as follows (OFC D103.6.1-2):
 1. 20-26 feet road width – no parking on either side of roadway
 2. 26-32 feet road width – parking is allowed on one side
 3. Greater than 32 feet road width – parking is not restricted
8. **FIRE APPARATUS ACCESS ROADS WITH FIRE HYDRANTS:** Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet and shall extend 20 feet before and after the point of the hydrant. (OFC D103.1)
9. **SURFACE AND LOAD CAPACITIES:** Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced as to provide all-weather driving capabilities. (OFC 503.2.3)
10. **TURNING RADIUS:** The inside turning radius and outside turning radius shall not be less than 28 feet and 48 feet respectively, measured from the same center point. (OFC 503.2.4 & D103.3)
11. **ACCESS ROAD GRADE:** Fire apparatus access roadway grades shall not exceed 15%.
12. **ANGLE OF APPROACH/GRADE FOR TURNAROUNDS:** Turnarounds shall be as flat as possible and have a maximum of 5% grade with the exception of crowning for water run-off. (OFC 503.2.7 & D103.2)
13. **ANGLE OF APPROACH/GRADE FOR INTERSECTIONS:** Intersections shall be level (maximum 5%) with the exception of crowning for water run-off. (OFC 503.2.7 & D103.2)
14. **GATES:** Gates securing fire apparatus roads shall comply with all of the following (OFC D103.5, and 503.6):
 1. Minimum unobstructed width shall be not less than 20 feet (or the required roadway surface width).
 2. Gates serving three or less single-family dwellings shall be a minimum of 12 feet in width.
 3. Gates shall be set back at minimum of 30 feet from the intersecting roadway or as approved.
 4. Electric gates shall be equipped with a means for operation by fire department personnel
 5. Electric automatic gates shall comply with ASTM F 2200 and UL 325.

Access road gate off of SW Brookman Rd needs to meet these requirements.

15. **ACCESS DURING CONSTRUCTION:** Approved fire apparatus access roadways shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. Temporary address signage shall also be provided during construction. (OFC 3309 and 3310.1)
16. **TRAFFIC CALMING DEVICES:** Shall be prohibited on fire access routes unless approved by the Fire Marshal. (OFC 503.4.1). Traffic calming measures linked here: <http://www.tvfr.com/DocumentCenter/View/1578>

FIREFIGHTING WATER SUPPLIES:

17. **FIREFIGHTING WATER SUPPLY FOR INDIVIDUAL ONE- AND TWO-FAMILY DWELLINGS:** The minimum available fire flow for one and two-family dwellings served by a municipal water supply shall be 1,000 gallons per minute. If the structure(s) is (are) 3,600 square feet or larger, the required fire flow shall be determined according to OFC Appendix B. (OFC B105.2)
18. **FIRE FLOW WATER AVAILABILITY:** Applicants shall provide documentation of a fire hydrant flow test or flow test modeling of water availability from the local water purveyor if the project includes a new structure or increase in the floor area of an existing structure. Tests shall be conducted from a fire hydrant within 400 feet for commercial projects, or 600 feet for residential development. Flow tests will be accepted if they were performed within 5 years as long as no adverse modifications have been made to the supply system. Water availability information may not be required to be submitted for every project. (OFC Appendix B)
19. **WATER SUPPLY DURING CONSTRUCTION IN MUNICIPAL AREAS:** In areas with fixed and reliable water supply, approved firefighting water supplies shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. (OFC 3312.1)

FIRE HYDRANTS:

20. **FIRE HYDRANTS – ONE- AND TWO-FAMILY DWELLINGS & ACCESSORY STRUCTURES:** Where the most remote portion of a structure is more than 600 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the structure(s), on-site fire hydrants and mains shall be provided. (OFC 507.5.1)
21. **FIRE HYDRANT NUMBER AND DISTRIBUTION:** The minimum number and distribution of fire hydrants available to a building shall not be less than that listed in Table C 105.1. (OFC Appendix C)
22. **FIRE HYDRANT(S) PLACEMENT:** (OFC C104)
 - Existing hydrants in the area may be used to meet the required number of hydrants as approved. Hydrants that are up to 600 feet away from the nearest point of a subject building that is protected with fire sprinklers may contribute to the required number of hydrants. (OFC 507.5.1)
 - Hydrants that are separated from the subject building by railroad tracks shall not contribute to the required number of hydrants unless approved by the Fire Marshal.
 - Hydrants that are separated from the subject building by divided highways or freeways shall not contribute to the required number of hydrants. Heavily traveled collector streets may be considered when approved by the Fire Marshal.
 - Hydrants that are accessible only by a bridge shall be acceptable to contribute to the required number of hydrants only if approved by the Fire Marshal.
23. **PRIVATE FIRE HYDRANT IDENTIFICATION:** Private fire hydrants shall be painted red in color. Exception: Private fire hydrants within the City of Tualatin shall be yellow in color. (OFC 507)
24. **FIRE HYDRANT DISTANCE FROM AN ACCESS ROAD:** Fire hydrants shall be located not more than 15 feet from an approved fire apparatus access roadway unless approved by the Fire Marshal. (OFC C102.1)
25. **REFLECTIVE HYDRANT MARKERS:** Fire hydrant locations shall be identified by the installation of blue reflective markers. They shall be located adjacent and to the side of the center line of the access roadway that the fire hydrant is located on. In the case that there is no center line, then assume a center line and place the reflectors accordingly. (OFC 507)

26. **PHYSICAL PROTECTION:** Where fire hydrants are subject to impact by a motor vehicle, guard posts, bollards or other approved means of protection shall be provided. (OFC 507.5.6 & OFC 312)
27. **CLEAR SPACE AROUND FIRE HYDRANTS:** A 3 foot clear space shall be provided around the circumference of fire hydrants. (OFC 507.5.5)

BUILDING ACCESS AND FIRE SERVICE FEATURES

28. **KNOX BOX:** A Knox Box, padlock, or Knox key switch for gate access may be required. See Appendix A (using the link provided below) for further information and detail on required installations. Order via www.tvfr.com or contact TVF&R for assistance and instructions regarding installation and placement. (OFC 506.1)
<http://www.tvfr.com/DocumentCenter/View/1438>

Install Knox padlocks on fire access gates.

29. **PREMISES IDENTIFICATION:** New and existing buildings shall have approved address numbers; building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property, including monument signs. These numbers shall contrast with their background. Numbers shall be a minimum of 4 inches high with a minimum stroke width of 1/2 inch. (OFC 505.1)

If you have questions or need further clarification or would like to discuss any alternate methods and/or materials, please feel free to contact me at 503-259-1419.

Sincerely,

Tom Mooney

Tom Mooney
Deputy Fire Marshal II

Thomas.mooney@tvfr.com

Cc: File
City of Sherwood

A full copy of the New Construction Fire Code Applications Guide for Residential Development is available at <http://www.tvfr.com/DocumentCenter/View/1438>



Residential Access Approval Form

Property Owner Name: BROOKMAN DEVELOPMENT, LLC Phone: CONTACT APPLICANT'S CONSULTANT
 Mailing Address: CONTACT APPLICANT'S CONSULTANT (AKS ENGINEERING & FORESTRY)
 Property/Project Address: LOTS 7 AND 8 MIDDLEBROOK SUBDIVISION (WAPATO LAKE DRIVE)
 Lot Creation Date: TBD - FALL 2019
 Building Jurisdiction: CITY OF SHERWOOD
 Tax Lot I.D. # 35106103 351068100 (PARENT PROPERTY) Building/Land Use Permit #: SUB 18-02
CONSULTANT
 Applicant/Contractor Name: AKS ENGINEERING (CHRIS GOODELL) Phone: (503) 565-6151
 Mailing Address: 12965 SW HERMAN ROAD # 100 TUALATIN, OR 97062

Fire Agency Plan Review:

The plot/site plan provided has been reviewed for conformity to the 2014 edition of the Oregon Fire Code¹ and the TVF&R New Construction Fire Code Application Guide for One- and Two-Family Residential Development².

- The proposed design complies with TVF&R access requirements.
- The proposed design does NOT comply with TVF&R access requirements, and based on the lot creation date (July 2, 2001 or later) is eligible for a Uniform Alternate Construction Standard (UACS). Please contact the Building Official to request a UACS for this project.

TVF&R recommends the Building Official require the following UACS:

- UACS (a): Installation of an NFPA 13-D Sprinkler System; or
- UACS: _____

- The proposed design does NOT comply with TVF&R access requirements, and based on the lot creation date (prior to July 2, 2001) is NOT eligible for a Uniform Alternate Construction Standard (UACS). Please redesign the proposed access in accordance with the following comments and resubmit plans, or provide an NFPA 13-D residential sprinkler system in lieu of access requirements per OFC 503.1.1

Deficiencies: _____

Final Inspection:

Fire District inspection after driveway is constructed is: REQUIRED NOT REQUIRED
 (Contact Deputy Fire Marshal (listed below) a minimum of 72 hours prior to inspection)

Deputy Fire Marshal: Tom Mooney Phone: 503 259 1419
 Signature: [Signature] Date: 2/7/19

¹ http://ecodes.biz/ecodes_support/tree_resources/Oregon/14_Fire/14_ORFire_main.html
² <http://www.tvfr.com/DocumentCenter/View/1438>

M E M O R A N D U M

Date: February 4, 2019

To: Joy L. Chang, Associate Planner, City of Sherwood

From: Jackie Sue Humphreys, Clean Water Services (CWS)

Subject: Middlebrook Subdivision, SUB 18-02, 3S106B000100, 00200, 3S1060000103

Please include the following comments when writing your conditions of approval:

PRIOR TO ANY WORK ON THE SITE AND PLAT RECORDING

A Clean Water Services (CWS) Storm Water Connection Permit Authorization must be obtained prior to plat approval and recordation. Application for CWS Permit Authorization must be in accordance with the requirements of the Design and Construction Standards, Resolution and Order No. 17-5, (or current R&O in effect at time of Engineering plan submittal), and is to include:

- a. Detailed plans prepared in accordance with Chapter 2, Section 2.04.
- b. Detailed grading and erosion control plan. An Erosion Control Permit will be required. Area of Disturbance must be clearly identified on submitted construction plans. If site area and any offsite improvements required for this development exceed one-acre of disturbance, project will require a 1200-CN Erosion Control Permit. If site area and any offsite improvements required for this development exceed five-acres of disturbance, project will require a 1200-C Erosion Control Permit.
- c. Detailed plans showing each lot within the development having direct access by gravity to public storm and sanitary sewer.
- d. Provisions for water quality in accordance with the requirements of the above named design standards. Water Quality is required for all new development and redevelopment areas per R&O 17-5, Section 4.05. Access shall be provided for maintenance of facility per R&O 17-5, Section 4.02.4.

- e. If use of an existing offsite or regional Water Quality Facility is proposed, it must be clearly identified on plans, showing its location, condition, capacity to treat this site and, any additional improvements and/or upgrades that may be needed to utilize that facility.
- f. If private lot LIDA systems proposed, must comply with the current CWS Design and Construction Standards. A private maintenance agreement, for the proposed private lot LIDA systems, needs to be provided to the City for review and acceptance.
- g. Show all existing and proposed easements on plans. Any required storm sewer, sanitary sewer, and water quality related easements must be granted to the City.
- h. Site contains a “Sensitive Area.” Applicant shall comply with the conditions as set forth in the Service Provider Letter No. 18-001504, dated June 27, 2018.
- i. Developer may be required to preserve a corridor separating the sensitive area from the impact of development. The corridor must be set aside in a separate tract, not part of any buildable lot and, shall be subject to a “Storm Sewer, Surface Water, Drainage and Detention Easement over its entirety”, or its equivalent.
- j. Detailed plans showing the sensitive area and corridor delineated, along with restoration and enhancement of the corridor.
- k. If there is any activity within the sensitive area, the applicant shall gain authorization for the project from the Oregon Department of State Lands (DSL) and US Army Corps of Engineers (USACE). The applicant shall provide Clean Water Services or its designee (appropriate city) with copies of all DSL and USACE project authorization permits.
- l. Any proposed offsite construction activities will require an update or amendment to the current Service Provider Letter for this project.

CONCLUSION

This Land Use Review does not constitute CWS approval of storm or sanitary sewer compliance to the NPDES permit held by CWS. CWS, prior to issuance of any connection permits, must approve final construction plans and drainage calculations.

Joy Chang

From: Kampfer, Dean <dkampfer@wm.com>
Sent: Thursday, February 21, 2019 1:51 PM
To: Joy Chang
Cc: Erika Palmer; Duncan, Kirk - COQ
Subject: [EXTERNAL] RE: Request for Comments - Middlebrook Subdivision SUB 18-02

Joy

Waste Management should not have any issues service the units as laid out.

Dean Kampfer

Marketing Manager, Public Sector Services
Pacific Northwest Area
dkampfer@wm.com

Waste Management

7227 NE 55th Avenue
Portland, OR 97218
Tel 503 493 7831
Cell 503 849 6444

Waste Management renewable energy projects create enough energy to power more than 470,000 homes annually. Learn more at www.wm.com .



From: Joy Chang <ChangJ@SherwoodOregon.gov>
Sent: Thursday, February 21, 2019 12:39 PM
To: Kampfer, Dean <dkampfer@wm.com>
Cc: Erika Palmer <PalmerE@SherwoodOregon.gov>
Subject: [EXTERNAL] FW: Request for Comments - Middlebrook Subdivision SUB 18-02

Dean,

Does Waste Management have any comments on this land use proposal? Would WM be able to service the proposed 145 units?

Please let me know either way, so I can incorporate your official comments within the Staff Report.

Joy L Chang
Associate Planner

From: Joy Chang
Sent: Tuesday, January 22, 2019 10:29 AM
To: 'd5b@nwnatural.com' <d5b@nwnatural.com>; 'r2g@nwnatural.com' <r2g@nwnatural.com>; 'henry.english@pgn.com' <henry.english@pgn.com>; 'humphreysj@CleanWaterServices.org'

<humphreysj@CleanWaterServices.org>; 'spieringm@CleanWaterServices.org' <spieringm@CleanWaterServices.org>; 'Kevin_Rolph@kindermorgan.com' <Kevin_Rolph@kindermorgan.com>; 'raindrops2refuge@gmail.com' <raindrops2refuge@gmail.com>; 'Larry_Klimek@fws.gov' <Larry_Klimek@fws.gov>; 'mwerner@gwrr.com' <mwerner@gwrr.com>; 'crbelt@bpa.gov' <crbelt@bpa.gov>; 'rfagliano@sherwood.k12.or.us' <rfagliano@sherwood.k12.or.us>; 'pjohanson@sherwood.k12.or.us' <pjohanson@sherwood.k12.or.us>; 'tumpj@trimet.org' <tumpj@trimet.org>; 'baldwinb@trimet.org' <baldwinb@trimet.org>; 'DevelopmentReview@trimet.org' <DevelopmentReview@trimet.org>; 'michaela.skiles@oregonmetro.gov' <michaela.skiles@oregonmetro.gov>; 'paulette.Copperstone@oregonmetro.gov' <paulette.Copperstone@oregonmetro.gov>; 'jevra.brown@state.or.us' <jevra.brown@state.or.us>; 'kurt.A.MOHS@odot.state.or.us' <kurt.A.MOHS@odot.state.or.us>; 'Robert.W.EBELING@odot.state.or.us' <Robert.W.EBELING@odot.state.or.us>; 'Jill.M.HENDRICKSON@odot.state.or.us' <Jill.M.HENDRICKSON@odot.state.or.us>; 'Seth.A.BRUMLEY@odot.state.or.us' <Seth.A.BRUMLEY@odot.state.or.us>; 'Region1DEVREVAApplications@odot.state.or.us' <Region1DEVREVAApplications@odot.state.or.us>; 'Naomi_Vogel@co.washington.or.us' <Naomi_Vogel@co.washington.or.us>; 'stephen_roberts@co.washington.or.us' <stephen_roberts@co.washington.or.us>; 'Theresa_Cherniak@co.washington.or.us' <Theresa_Cherniak@co.washington.or.us>; 'Mooney, Thomas A.' <Thomas.Mooney@tvfr.com>; Bob Galati <GalatiB@SherwoodOregon.gov>; Brad Crawford <CrawfordB@SherwoodOregon.gov>; Richard Sattler <SattlerR@SherwoodOregon.gov>; Jason Waters <WatersJ@SherwoodOregon.gov>; Craig Christensen <ChristensenC@SherwoodOregon.gov>; Craig Sheldon <SheldonC@SherwoodOregon.gov>; Jo Guediri <GuediriJ@sherwoodoregon.gov>; Andrew Stirling <StirlingA@SherwoodOregon.gov>; Kirsten Allen <AllenK@SherwoodOregon.gov>; Scott McKie <McKieS@SherwoodOregon.gov>; Jeff Groth <GrothJ@SherwoodOregon.gov>; Jon Carlson <CarlsonJ@SherwoodOregon.gov>; 'Joseph.D.Flabetich@usps.gov' <Joseph.D.Flabetich@usps.gov>; 'dkampfer@wm.com' <dkampfer@wm.com>; 'Russell Knoebel' <Russell_Knoebel@co.washington.or.us>; Avi Tayar - ODOT <Abraham.TAYAR@odot.state.or.us>
Cc: Erika Palmer <PalmerE@SherwoodOregon.gov>; Michelle Babcock <babcockm@sherwoodoregon.gov>; Julia Hajduk <HajdukJ@SherwoodOregon.gov>

Subject: Request for Comments - Middlebrook Subdivision SUB 18-02

Good morning agency partners,

The City of Sherwood Planning Department is requesting agency comments on the following proposal in the City of Sherwood.

Proposal: The applicant proposes to subdivide approximately 38 acres into 145 individual lots for single family detached homes zoned for Medium Density Residential Low and High.

The following chapters of the Sherwood Zoning and Community Development Code, and the corresponding approval criteria are applicable to this proposal: Division II: §16.12 (Residential Land Use Districts), §16.72 (Procedures for Processing Development Permits), §16.92 (Landscaping), §16.96 (On-Site Circulation), Division VI. Public Infrastructure- §16.106 (Transportation Facilities), §16.110 (Sanitary Sewers), §16.112 (Water), §16.114 (Storm), §16.116 (Fire Protection), §16.118 (Public and Private Utilities), Division VII. (Land Division), §16.120 (Subdivision), §16.128, (Land Division Design Standards) Division VIII. Environmental Resources, §16.134 (Floodplain Overlay), §16.142 (Parks, Trees, and Open Spaces), §16.144 (Wetland, Habitat and Natural Areas) and §16.156 (Energy Conservation).

Tax Map / Lots: 3S1060000103, 3S106B000100, 3S106B000200 (as adjusted)

Addresses: 17495, 17601 and 17769 SW Brookman Road

Detailed project information can be found online at:

<https://www.sherwoodoregon.gov/planning/project/middlebrook-subdivision>

If you have comments on this proposal, please respond by **February 8, 2019** in order to be included in the staff report. A Planning Commission public hearing is tentatively scheduled for **March 12, 2019**.

If needed, please forward this notice to the appropriate staff and let us know so we may update our notification list. Thank you in advance for your time.

Joy L Chang
Associate Planner
City of Sherwood
503.625.4214
changj@sherwoodoregon.gov



Recycling is a good thing. Please recycle any printed emails.

Joy Chang

From: BROWN Jevra <jevra.brown@state.or.us>
Sent: Tuesday, January 22, 2019 4:38 PM
To: Joy Chang
Cc: HUFFMAN Anita; STEVENSON Christine
Subject: FW: Request for Comments - Middlebrook Subdivision SUB 18-02
Attachments: SUB 18-02 Middlebrook Subdivision - Site Plan.pdf

Hi Joy,

.This project is associated with approved wetland delineation WD2018-075 and permit application 60698-RF, in technical review. The Sherwood planning office should have received the delineation approval letter in June 2018. You can always check the status of delineations and permits in review and recently approved here

<https://lands.dsl.state.or.us/index.cfm?fuseaction=Home.home>

Thank you for the general notice regarding this large project.

Jevra Brown, Aquatic Resource Planner

Department of State Lands

Office 503-986-5297 (M, T, W); cell: 503-580-3172 (Th, F); fax 503-378-4844

jevra.brown@dsl.state.or.us <http://www.oregon.gov/DSL/pages/index.aspx>

Messages to and from this e-mail address may be available to the public under Oregon Public Record Law.



Oregon

Kate Brown, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 986-5200
FAX (503) 378-4844
www.oregon.gov/dsl
State Land Board

June 27, 2018

Brookman Development, LLC
Attn: Joe Schiewe
P.O. Box 61426
Vancouver, WA 98666

Kate Brown
Governor

Re: WD # 2018-0275 Wetland Delineation Report for the Proposed
Brookman Park Subdivision, Washington County;
T 3S R 1W S TL 103; S 6B TL 100 and (200) portion;

Dennis Richardson
Secretary of State

Tobias Read
State Treasurer

Dear Mr. Schiewe:

The Department of State Lands has reviewed the wetland delineation report prepared by AKS Engineering & Forestry LLC for the site referenced above. Please note that the study area includes only a portion of the tax lots described above (see the attached map). Based upon the information presented in the report, and additional information submitted upon request, we concur with the wetland and waterway boundaries as mapped in Figure 5 and 5A – 5C of the report. Within the study area, four wetlands (Wetland A-D, totaling approximately 2.44 acres) and one waterway (Ephemeral Drainage) were identified.

The wetlands are subject to the permit requirements of the state Removal-Fill Law. However, the waterway is exempt per OAR 141-085-0515 (3); therefore, it is not subject to these state permit requirements. Under current regulations, a state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in wetlands or below the ordinary high-water line (OHWL) of the waterway (or the 2-year recurrence interval flood elevation if OHWL cannot be determined).

This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. The Army Corps of Engineers will determine jurisdiction for purposes of the Clean Water Act. We recommend that you attach a copy of this concurrence letter to both copies of any subsequent joint permit application to speed application review.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter unless new information necessitates a revision. Circumstances under which the Department may change a determination are found in OAR 141-090-0045 (available on our web site or upon request). In addition, laws enacted by the legislature and/or rules adopted by the Department may result in a change in jurisdiction; individuals and applicants are subject to the regulations that are in effect at the time of the removal-fill activity or complete permit application. The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months of the date of this letter.

Thank you for having the site evaluated. Please phone me at 503-986-5232 if you have any questions.

Sincerely,



Peter Ryan, PWS
Jurisdiction Coordinator

Approved by



Kathy Verble, CPSS
Aquatic Resource Specialist

Enclosures

ec: Kayla Katkin, AWB, AKS Engineering & Forestry, LLC
City of Sherwood Planning Department (Maps enclosed for updating LWI)
Kinsey Friesen, Corps of Engineers
Lindsey Obermiller, Clean Water Services
Anita Huffman, DSL



May 16, 2019
Folder: 03069-12

BOB GALATI
CITY OF SHERWOOD
22560 SW PINE ST
SHERWOOD OR 97140

Re: Proposed Twelve (12) Inch Potable Water Pipeline In A Eighteen (18) Inch Steel Casing Crossing of Railroad Property at Mile Post 756.49 on the Newberg Branch Subdivision/Branch at or near Sherwood, Washington County, Oregon

Bob Galati:

Attached is an original of the agreement covering your use of the Railroad Company's right of way. Please print two copies, execute on your behalf and return ALL DOCUMENTS with a check for any payments required, as shown below to 1400 Douglas Street, Omaha, NE 68137-1690 Attn: Kylan Crawford.

An original copy of the fully-executed document will be returned to you, when approved and processed by the Railroad Company. Also, please provide a resolution or other authorization for the party executing the documents, *if signature authorization is required by your Entity*.

- Payment in the amount of **Twelve Thousand Six Hundred Ninety Dollars (\$12,690.00)** is due and payable to Union Pacific Railroad Company upon your execution of the agreement. Please include your payment, **with Folder No. 03069-12 noted on that document**. If you require formal billing, you may consider this letter as a formal bill and that 94-6001323 is this Corporation's correct Federal Taxpayer Identification Number.
- Railroad Protective Liability Insurance (RPLI) may be obtained from any insurance company which offers such coverage. Union Pacific has also worked with a national broker, Marsh USA, to make available RPLI to you or your contractor. You can find additional information, premium quotes, and application forms at (uprr.marsh.com).

If we have not received the executed documents within six months from the date of this letter, this proposed offer of an agreement is withdrawn and becomes null and void.

If you have any questions, please contact me at (402) 544-8536.

Sincerely,

Kylan Crawford
Sr Mgr Real Estate Contracts

Pipeline Crossing 080808
Last Modified: 06/05/18
Form Approved, AVP-Law

Folder No. 03069-12

PIPELINE CROSSING AGREEMENT

Mile Post: 756.49, Newberg Branch
Location: Sherwood, Washington County, Oregon

THIS AGREEMENT (“Agreement”) is made and entered into as of May 16, 2019, (“Effective Date”) by and between **UNION PACIFIC RAILROAD COMPANY**, a Delaware corporation, (“Licensor”) and **CITY OF SHERWOOD**, to be addressed at 22560 Sw Pine St, Sherwood, Oregon 97140 (“Licensee”).

IT IS MUTUALLY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

Article 1. LICENSOR GRANTS RIGHT.

A. In consideration of the license fee to be paid by Licensee set forth below and in further consideration of the covenants and agreements to be performed by Licensee, Licensor hereby grants to Licensee the right to construct and thereafter, during the term hereof, maintain and operate twelve (12) inch potable water pipeline in a eighteen (18) inch steel casing. only, including any appurtenances required for the operation of said pipeline (collectively, "Licensee's Facilities") across Licensor's real property, trackage, or other facilities located in Sherwood, Washington County, State of Oregon ("Railroad Property"). The specific specifications and limited purpose for Licensee's Facilities on, along, across and under Railroad Property are described in and shown on the Print and Specifications dated March 26, 2019, attached hereto as **Exhibit A** and made a part hereof.

B. Licensee represents and warrants that Licensee's Facilities will (i) only be used for twelve (12) inch potable water pipeline in a eighteen (18) inch steel casing., and (ii) not be used to convey any other substance, any fiber optic cable, or for any other use, whether such use is currently technologically possible, or whether such use may come into existence during the life of this Agreement.

C. Licensee acknowledges that if it or its contractor provides Licensor with digital imagery depicting Licensee's Facilities ("Digital Imagery"), Licensee authorizes Licensor to use the Digital Imagery in preparing **Exhibit A**. Licensee represents and warrants that through a license or otherwise, it has the right to use the Digital Imagery and to permit Licensor to use the Digital Imagery in said manner.

Article 2. LICENSE FEE.

Upon execution of this Agreement, the Licensee shall pay to the Licensor a one-time License Fee of **Twelve Thousand Six Hundred Ninety Dollars (\$12,690.00)**.

Article 3. TERM.

This Agreement shall take effect as of the Effective Date first herein written and shall continue in full force and effect until terminated as provided in the "TERMINATION; REMOVAL OF LICENSEE'S FACILITIES" Section of **Exhibit B**.

Article 4. LICENSEE'S COMPLIANCE WITH GENERAL TERMS.

Licensee represents and warrants that all work on Licensee's Facilities performed by Licensee or its contractors will strictly comply with all terms and conditions set forth herein, including the General Terms and Conditions, attached hereto as **Exhibit B** and made a part hereof.

Article 5. INSURANCE.

A. During the term of this Agreement, Licensee shall fully comply or cause its contractor(s) to fully comply with the insurance requirements described in **Exhibit C**, attached hereto and made a part hereof. Upon request only, Licensee shall send copies of all insurance documentation (e.g., certificates, endorsements, etc.) to Licensor at the address listed in the "NOTICES" Section of this Agreement.

B. If Licensee is subject to statute(s) limiting its insurance liability and/or limiting its ability to obtain insurance in compliance with **Exhibit C** of this Agreement, those statutes shall apply.

Article 6. DEFINITION OF LICENSEE.

For purposes of this Agreement, all references in this Agreement to Licensee will include Licensee's contractors, subcontractors, officers, agents and employees, and others acting under its or their authority (collectively, a "Contractor"). If a Contractor is hired by Licensee to perform any work on Licensee's Facilities (including initial construction and subsequent relocation, maintenance, and/or repair work), then Licensee shall provide a copy of this Agreement to its Contractor(s) and require its Contractor(s) to comply with all terms and conditions of this Agreement, including the indemnification requirements set forth in the "INDEMNITY" Section of **Exhibit B**. Licensee shall require any Contractor to release, defend, and indemnify Licensor to the same extent and under the same terms and conditions as Licensee is required to release, defend, and indemnify Licensor herein.

Article 7. ATTORNEYS' FEES, EXPENSES, AND COSTS.

If litigation or other court action or similar adjudicatory proceeding is undertaken by Licensee or Licensor to enforce its rights under this Agreement, all fees, costs, and expenses, including, without limitation, reasonable attorneys' fees and court costs, of the prevailing Party in such action, suit, or proceeding shall be reimbursed or paid by the Party against whose interest the judgment or decision is rendered. The provisions of this Article shall survive the termination of this Agreement.

Article 8. WAIVER OF BREACH.

The waiver by Licensor of the breach of any condition, covenant or agreement herein contained to be kept, observed and performed by Licensee shall in no way impair the right of Licensor to avail itself of any remedy for any subsequent breach thereof.

Article 9. ASSIGNMENT.

A. Licensee shall not assign this Agreement, in whole or in part, or any rights herein granted, without the written consent of Licensor, which must be requested in writing by Licensee. Any assignment or attempted transfer of this Agreement or any of the rights herein granted, whether voluntary, by operation of law, or otherwise, without Licensor's written consent, will be absolutely void and may result

in Licensor's termination of this Agreement pursuant to the "TERMINATION; REMOVAL OF LICENSEE'S FACILITIES" Section of **Exhibit B**.

B. Upon Licensor's written consent to any assignment, this Agreement will be binding upon and inure to the benefit of the parties thereto, successors, heirs, and assigns, executors, and administrators.

Article 10. SEVERABILITY.

Any provision of this Agreement which is determined by a court of competent jurisdiction to be invalid or unenforceable shall be invalid or unenforceable only to the extent of such determination, which shall not invalidate or otherwise render ineffective any other provision of this Agreement.

Article 11. NOTICES.

Except Licensee's commencement of work notice(s) required under **Exhibit B**, all other notices required by this Agreement must be in writing, and (i) personally served upon the business address listed below ("Notice Address"), (ii) sent overnight via express delivery by a nationally recognized overnight delivery service such as Federal Express Corporation or United Parcel Service to the Notice Address, or (iii) by certified mail, return receipt requested to the Notice Address. Overnight express delivery notices will be deemed to be given upon receipt. Certified mail notices will be deemed to be given three (3) days after deposit with the United States Postal Service.

If to Licensor: Union Pacific Railroad Company
Attn: Analyst – Real Estate Utilities (Folder No. 03069-12)
1400 Douglas Street, MS 1690
Omaha, Nebraska 68179

If to Licensee: CITY OF SHERWOOD
22560 Sw Pine St
Sherwood, Oregon, 97140

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first herein written.

UNION PACIFIC RAILROAD COMPANY

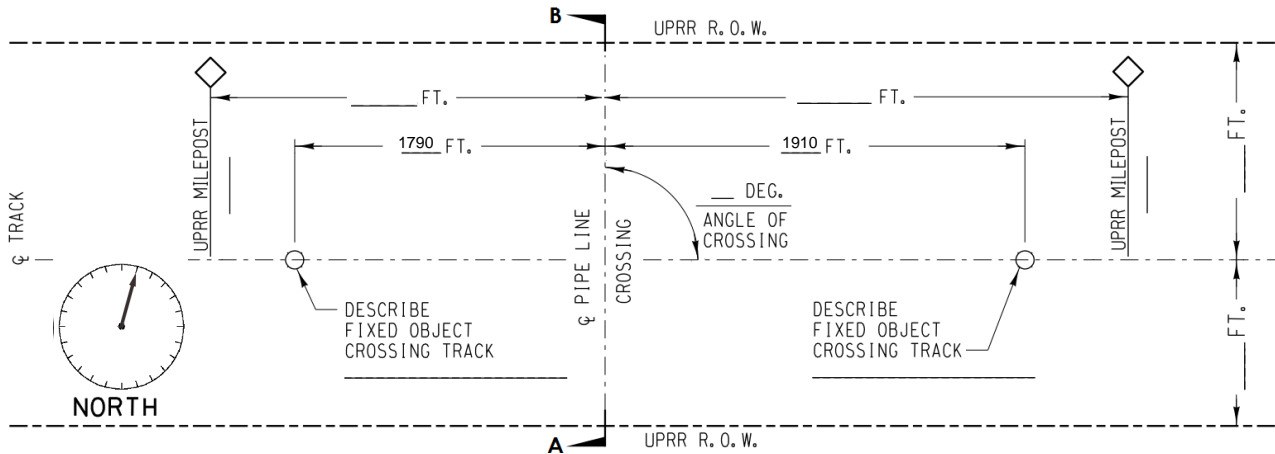
CITY OF SHERWOOD

By: _____
Kylan Crawford
Sr Mgr Real Estate Contracts

By: _____
Name Printed: _____
Title: _____

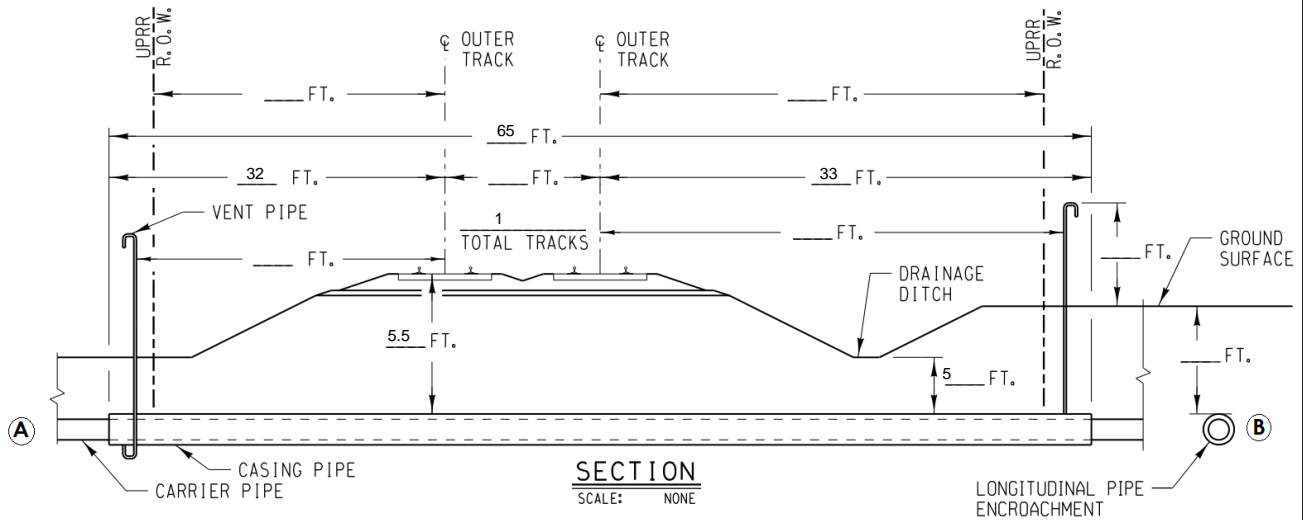
NON-FLAMMABLE LIQUID PIPELINE

- CROSSING
- ENCROACHMENT
- BOTH



PLAN

SCALE: NONE



SECTION

SCALE: NONE

NOTES:

- 1) ALL DIMENSIONS MEASURED PERPENDICULAR TO THE CENTERLINE OF TRACK
- 2) REFER TO AREMA VOLUME 1. CHAPTER 1. PART 5. SECTION 5.1

- A) METHOD OF INSTALLATION BORED AND JACKED
- B) DIST. FROM CENTERLINE OF TRACK TO PIPE ENCROACHMENT _____
- C) SIGNS PROVIDED? AT MINIMUM SIGNS WILL BE PROVIDED AS STATED ABOVE
- D) CARRIER MATERIAL STEEL. IF RCP, CLASS V? NA
 COMMODITY TO BE CONVEYED POTABLE WATER.
 OPERATIONAL PRESSURE 150 PSI. MAOP 150 PSI.
 WALL THICKNESS (INCH)/ SCHEDULE 0.34. DIAMETER 12 IN.
 CATHODIC/COATING PROTECTION NO
- E) CASING MATERIAL STEEL PIPE. IF RCP, CLASS V? NA.
 TOTAL LENGTH CASING PIPE: 65 FT.
 WALL THICKNESS 0.375 IN. DIAMETER 18 IN.
 CATHODIC/COATING PROTECTION NO
 CASING PIPE IS SEALED AT THE ENDS.
- F) DISTANCE FROM CENTERLINE OF TRACK TO NEAR FACE OF BORING AND JACKING PITS WHEN MEASURED AT RIGHT ANGLES 32 AND 33.



BUILDING AMERICA®

EXHIBIT "A"

SUBDIVISION:		
TRACK TYPE: MAINLINE TRACK		
M.P.:	LAT.:	
E.S.M.:	LONG.:	
NEAREST CITY: SHERWOOD	COUNTY:	STATE: OR
APPLICANT: City of Sherwood		
FILE NO.:	0306912	DATE: 03/26/2019

EXHIBIT B**GENERAL TERMS AND CONDITIONS****Section 1. LIMITATION AND SUBORDINATION OF RIGHTS GRANTED.**

A. The foregoing grant is subject and subordinate to the prior and continuing right and obligation of Licensor to use and maintain its entire property including the right and power of Licensor to construct, maintain, repair, renew, use, operate, change, modify or relocate railroad tracks, signal, communication, fiber optics, or other wirelines, pipelines and other facilities upon, along or across any or all parts of its property, all or any of which may be freely done at any time or times by Licensor without liability to Licensee or to any other party for compensation or damages.

B. The foregoing grant is also subject to all outstanding superior rights (including those in favor of licensees and lessees of Railroad Property) and the right of Licensor to renew and extend the same, and is made without covenant of title or for quiet enjoyment. It shall be Licensee's sole obligation to obtain such additional permission, license and grants necessary on account of any such existing rights.

Section 2. ENGINEERING REQUIREMENTS; PERMITS.

A. Licensee's Facilities will be designed, constructed, operated, maintained, repaired, renewed, modified, reconstructed, removed, or abandoned in place on Railroad Property by Licensee or its contractor to Licensor's satisfaction and in strict conformity with: (i) Licensor's current engineering standards and specifications, including those for shoring and cribbing to protect Licensor's railroad operations and facilities ("UP Specifications"), except for variances approved in advance in writing by Licensor's Assistant Vice President Engineering – Design or its authorized representative ("UP Engineering Representative"); (ii) such other additional safety standards as Licensor, in its sole discretion, elects to require, including, without limitation, American Railway Engineering and Maintenance-of-Way Association ("AREMA") standards and guidelines (collectively, "UP Additional Requirements"); and (iii) all applicable laws, rules, and regulations, including any applicable Federal Railroad Administration and Federal Energy Regulatory Commission regulations and enactments (collectively, "Laws"). If there is any conflict between UP Specifications, UP Additional Requirements, and Laws, the most restrictive will apply.

B. Licensee shall keep the soil over Licensee's Facilities thoroughly compacted, and maintain the grade over and around Licensee's Facilities even with the surface of the adjacent ground.

C. If needed, Licensee shall secure, at Licensee's sole cost and expense, any and all necessary permits required to perform any work on Licensee's Facilities.

Section 3. NOTICE OF COMMENCEMENT OF WORK; EMERGENCIES.

A. Licensee and its contractors are strictly prohibited from commencing any work associated with Licensee's Facilities without Licensor's written approval that the work will be in strict compliance with the "ENGINEERING REQUIREMENTS; PERMITS" Section of this **Exhibit B**. Upon Licensor's approval, Licensee shall contact both of Licensor's field representatives ("Licensor's Field Representatives") at least ten (10) days before commencement of any work on Licensee's Facilities.

B. Licensee shall not commence any work until: (1) Licensor has determined whether flagging or other special protective or safety measures ("Safety Measures") are required for performance of the work pursuant to the "FLAGGING" Section of this **Exhibit B** and provided Licensee written authorization to commence work; and (2) Licensee has complied with the "PROTECTION OF FIBER OPTIC CABLE SYSTEMS" Section of this **Exhibit B**.

C. If, at any time, an emergency arises involving Licensee's Facilities, Licensee or its contractor shall immediately contact Licensor's Response Management Communications Center at (888) 877-7267.

Section 4. FLAGGING.

A. Following Licensee's notice to Licensor's Field Representatives required under the "NOTICE OF COMMENCEMENT OF WORK; EMERGENCIES" Section of this **Exhibit B**, Licensor shall inform Licensee if Safety Measures are required for performance of the work by Licensee or its contractor on Railroad Property. If Safety Measures are required, no work of any kind may be performed by Licensee or its contractor(s) until arrangements for the Safety Measures have been made and scheduled. If no Safety Measures are required, Licensor will give Licensee written authorization to commence work.

B. If any Safety Measures are performed or provided by Licensor, including but not limited to flagging, Licensor shall bill Licensee for such expenses incurred by Licensor, unless Licensor and a federal, state, or local governmental entity have agreed that Licensor is to bill such expenses to the federal, state, or local governmental entity. Additional information regarding the submission of such expenses by Licensor and payment thereof by Licensee can be found in the "LICENSEE'S PAYMENT OF EXPENSES" Section of this **Exhibit B**. If Licensor performs any Safety Measures, Licensee agrees that Licensee is not relieved of any of responsibilities or liabilities set forth in this Agreement.

C. For flagging, the rate of pay per hour for each flagger will be the prevailing hourly rate in effect for an eight-hour day for the class of flagmen used during regularly assigned hours and overtime in accordance with Labor Agreements and Schedules in effect at the time the work is performed. In addition to the cost of such labor, a composite charge for vacation, holiday, health and welfare, supplemental sickness, Railroad Retirement and unemployment compensation, supplemental pension, Employees Liability and Property Damage, and Administration will be included, computed on actual payroll. The composite charge will be the prevailing composite charge in effect at the time the work is performed. One and one-half times the current hourly rate is paid for overtime, Saturdays and Sundays, and two and one-half times current hourly rate for holidays. Wage rates are subject to change, at any time, by law or by agreement between Licensor and its employees, and may be retroactive as a result of negotiations or a ruling of an authorized governmental agency. Additional charges on labor are also subject to change. If the wage rate or additional charges are changed, Licensee (or the governmental entity, as applicable) shall pay on the basis of the new rates and charges.

D. Reimbursement to Licensor will be required covering the full eight-hour day during which any flagger is furnished, unless the flagger can be assigned to other railroad work during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagger is engaged in other railroad work. Reimbursement will also be required for any day not actually worked by the flaggers following the flaggers' assignment to work on the project for which Licensor is required to pay the flaggers and which could not reasonably be avoided by Licensor by assignment of such flaggers to other work, even though Licensee may not be working during such time. When it becomes necessary for Licensor to bulletin and assign an employee to a flagging position in compliance with union collective bargaining agreements, Licensee must provide Licensor a minimum of

five (5) days notice prior to the cessation of the need for a flagger. If five (5) days notice of cessation is not given, Licensee will still be required to pay flagging charges for the days the flagger was scheduled, even though flagging is no longer required for that period. An additional ten (10) days notice must then be given to Licensor if flagging services are needed again after such five day cessation notice has been given to Licensor.

Section 5. SAFETY.

A. Safety of personnel, property, rail operations and the public is of paramount importance in the prosecution of any work on Railroad Property performed by Licensee or its contractor, and takes precedence over any work on Licensee's Facilities to be performed Licensee or its contractors. Licensee shall be responsible for initiating, maintaining and supervising all safety operations and programs in connection with any work on Licensee's Facilities. Licensee and its contractor shall, at a minimum comply, with Licensor's then current safety standards located at the below web address ("Licensor's Safety Standards") to ensure uniformity with the safety standards followed by Licensor's own forces. As a part of Licensee's safety responsibilities, Licensee shall notify Licensor if it determines that any of Licensor's Safety Standards are contrary to good safety practices. Licensee and its contractor shall furnish copies of Licensor's Safety Standards to each of its employees before they enter Railroad Property.

[Union Pacific Current Safety Requirements](#)

B. Licensee shall keep the job site on Railroad Property free from safety and health hazards and ensure that their employees are competent and adequately trained in all safety and health aspects of the work.

C. Licensee represents and warrants that all parts of Licensee's Facilities within and outside of the limits of Railroad Property will not interfere whatsoever with the constant, continuous, and uninterrupted use of the tracks, property, and facilities of Licensor, and nothing shall be done or suffered to be done by Licensee at any time that would in any manner impair the safety thereof.

D. Licensor's operations and work performed by Licensor's personnel may cause delays in Licensee's or its contractor's work on Licensee's Facilities. Licensee accepts this risk and agrees that Licensor shall have no liability to Licensee or any other person or entity for any such delays. Licensee must coordinate any work on Railroad Property by Licensee or any third party with Licensor's Field Representatives in strict compliance with the "NOTICE OF COMMENCEMENT OF WORK; EMERGENCIES" Section of this **Exhibit**

E. Licensor shall have the right, if it so elects, to provide any support it deems necessary for the safety of Licensor's operations and trackage during Licensee's or its contractor's construction, maintenance, repair, renewal, modification, relocation, reconstruction, or removal of Licensee's Facilities. In the event Licensor provides such support, Licensor shall invoice Licensee, and Licensee shall pay Licensor as set forth in the "LICENSEE'S PAYMENT OF EXPENSES" Section of this **Exhibit B**.

F. Licensee may use unmanned aircraft systems ("UAS") to inspect Licensee's Facilities only upon the prior authorization from and under the direction of Licensor's Field Representatives. Licensee represents and warrants that its use of UAS on Railroad Property will comply with Licensor's then-current Unmanned Aerial Systems Policy and all applicable laws, rules and regulations, including any applicable Federal Aviation Administration regulations and enactments pertaining to UAS.

Section 6. PROTECTION OF FIBER OPTIC CABLE SYSTEMS.

Fiber optic cable systems may be buried on Railroad Property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. In addition to the notifications required under the "NOTICE OF COMMENCEMENT OF WORK; EMERGENCIES" Section of this **Exhibit B**, Licensee shall telephone Licensor during normal business hours (7:00 a.m. to 9:00 p.m. Central Time, Monday through Friday, except for holidays) at 1-800-336-9193 (also a 24-hour, 7-day number for emergency calls) to determine if fiber optic cable is buried anywhere on Railroad Property to be used by Licensee. If it is, Licensee shall telephone the telecommunications company(ies) involved, and arrange for a cable locator, make arrangements for relocation or other protection of the fiber optic cable, all at Licensee's expense, and will not commence any work on Railroad Property until all such protection or relocation has been completed.

Section 7. LICENSEE'S PAYMENT OF EXPENSES.

A. Licensee shall bear the entire cost and expense of the design, construction, maintenance, modification, reconstruction, repair, renewal, revision, relocation, or removal of Licensee's Facilities.

B. Licensee shall fully pay for all materials joined, affixed to and labor performed on Railroad Property in connection with the construction, maintenance, modification, reconstruction, repair, renewal, revision, relocation, or removal of Licensee's Facilities, and shall not permit or suffer any mechanic's or materialman's lien of any kind or nature to be enforced against the property for any work done or materials furnished thereon at the instance or request or on behalf of Licensee. Licensee shall promptly pay or discharge all taxes, charges, and assessments levied upon, in respect to, or on account of Licensee's Facilities, to prevent the same from becoming a charge or lien upon any property of Licensor, and so that the taxes, charges, and assessments levied upon or in respect to such property shall not be increased because of the location, construction, or maintenance of Licensee's Facilities or any improvement, appliance, or fixture connected therewith placed upon such property, or on account of Licensee's interest therein. Where such tax, charge, or assessment may not be separately made or assessed to Licensee but shall be included in the assessment of the property of Licensor, then Licensee shall pay to Licensor an equitable proportion of such taxes determined by the value of Licensee's property upon property of Licensor as compared with the entire value of such property.

C. As set forth in the "FLAGGING" Section of this **Exhibit B**, Licensor shall have the right, if it so elects, to provide any Safety Measures Licensor deems necessary for the safety of Licensor's operations and trackage during Licensee's or its contractor's construction, maintenance, modification, reconstruction, repair, renewal, revision, relocation, or removal of Licensee's Facilities, including, but not limited to supervision, inspection, and flagging services. In the event Licensor provides such Safety Measures, Licensor shall submit an itemized invoice to Licensee's notice recipient listed in the "NOTICES" Article of this Agreement. Licensee shall pay to Licensor the total amount listed on such invoice within thirty (30) days of Licensee's receipt of such invoice.

Section 8. MODIFICATIONS TO LICENSEE'S FACILITIES.

A. This grant is subject to Licensor's safe and efficient operation of its railroad, and continued use and improvement of Railroad Property (collectively, "Railroad's Use"). Accordingly, Licensee shall, at its sole cost and expense, modify, reconstruct, repair, renew, revise, relocate, or remove (individually, "Modification", or collectively, "Modifications") all or any portion of Licensee's Facilities as Licensor may designate or identify, in its sole discretion, in the furtherance of Railroad's Use.

B. Upon any Modification of all or any portion of Licensee's Facilities to another location on Railroad Property, Licensor and Licensee shall execute a Supplemental Agreement to this Pipeline Agreement to document the Modification(s) to Licensee's Facilities on Railroad Property. If the Modifications result in Licensee's Facilities moving off of Railroad Property, this Agreement will terminate upon Licensee's completion of such Modification(s) and all requirements contained within the "TERMINATION; REMOVAL OF LICENSEE'S FACILITIES" Section of this **Exhibit B**. Any such Modification(s) off of Railroad Property will not release Licensee from any liability or other obligation of Licensee arising prior to and upon completion of any such Modifications to the Licensee's Facilities.

Section 9. RESTORATION OF RAILROAD PROPERTY.

In the event Licensee, in any manner moves or disturbs any property of Licensor in connection with the construction, maintenance, modification, reconstruction, repair, renewal, revision, relocation, or removal of Licensee's Facilities, then, Licensee shall, as soon as possible and at Licensee's sole cost and expense, restore Licensor's property to the same condition as the same were before such property was moved or disturbed.

Section 10. INDEMNITY.

A. Definitions. As used in this Section:

1. "Licensor" includes Licensor, its affiliates, its and their officers, directors, agents and employees, and other railroad companies using Railroad Property at or near the location of Licensee's installation and their officers, directors, agents, and employees.
2. "Licensee" includes Licensee and its agents, contractors, subcontractors, sub-subcontractors, employees, officers, and directors, or any other person or entity acting on its behalf or under its control.
3. "Loss" includes claims, suits, taxes, loss, damages (including punitive damages, statutory damages, and exemplary damages), costs, charges, assessments, judgments, settlements, liens, demands, actions, causes of action, fines, penalties, interest, and expenses of any nature, including court costs, reasonable attorneys' fees and expenses, investigation costs, and appeal expenses.

B. Licensee shall release, defend, indemnify, and hold harmless Licensor from and against any and all Loss, even if groundless, fraudulent, or false, that directly or indirectly arises out of or is related to Licensee's construction, maintenance, modification, reconstruction, repair, renewal, revision, relocation, removal, presence, use, or operation of Licensee's Facilities, including, but not limited to, any actual or alleged:

1. Bodily harm or personal injury (including any emotional injury or disease) to, or the death of, any person(s), including, but not limited to, Licensee, Licensor, any telecommunications company, or the agents, contractors, subcontractors, sub-subcontractors, or employees of the foregoing;
2. Damage to or the disturbance, loss, movement, or destruction of Railroad Property, including loss of use and diminution in value, including, but not limited to, any telecommunications system(s) or fiber optic cable(s) on or near Railroad

Property, any property of Licensee or Licensor, or any property in the care, custody, or control of Licensee or Licensor;

3. Removal of person(s) from Railroad Property;
4. Any delays or interference with track or Railroad's Use caused by Licensee's activity(ies) on Railroad Property, including without limitation the construction, maintenance, modification, reconstruction, repair, renewal, revision, relocation, or removal of Licensee's Facilities or any part thereof, any activities, labor, materials, equipment, or machinery in conjunction therewith ;
5. Right(s) or interest(s) granted pursuant to this Agreement;
6. Contents escaping from Licensee's Facilities, including without limitation any actual or alleged pollution, contamination, breach, or environmental Loss;
7. Licensee's breach of this Agreement or failure to comply with its provisions, including, but not limited to, any violation or breach by Licensee of any representations and warranties Licensee has made in this Agreement; and
8. Violation by Licensee of any law, statute, ordinance, governmental administrative order, rule, or regulation, including without limitation all applicable Federal Railroad Administration regulations.

C. THE FOREGOING OBLIGATIONS SHALL APPLY TO THE FULLEST EXTENT PERMITTED BY LAW FOR THE BENEFIT OF LICENSOR TO LOSSES CAUSED BY, ARISING FROM, RELATING TO, OR RESULTING FROM, IN WHOLE OR IN PART, THE NEGLIGENCE OF LICENSOR, AND SUCH NEGLIGENCE OF LICENSOR SHALL NOT LIMIT, DIMINISH, OR PRECLUDE LICENSEE'S OBLIGATIONS TO LICENSOR IN ANY RESPECT. NOTWITHSTANDING THE FOREGOING, SUCH OBLIGATION TO INDEMNIFY LICENSOR SHALL NOT APPLY TO THE EXTENT THE LOSS IS CAUSED BY THE SOLE, ACTIVE AND DIRECT NEGLIGENCE, GROSS NEGLIGENCE, OR WILLFUL MISCONDUCT OF LICENSOR AS DETERMINED IN A FINAL JUDGMENT BY A COURT OF COMPETENT JURISDICTION.

Section 11. TERMINATION; REMOVAL OF LICENSEE'S FACILITIES.

A. If Licensee does not use the right herein granted on Licensee's Facilities for one (1) year, or if Licensee continues in default in the performance of any provision of this Agreement for a period of thirty (30) days after written notice from Licensor to Licensee specifying such default, Licensor may, at its sole discretion, terminate this Agreement by written notice to Licensee at the address listed in the "NOTICES" Article of this Agreement. This Agreement will not terminate until Licensee complies with Paragraphs "C" and "D" of this Section found below.

B. In addition to the provisions of Paragraph "A" above, this Agreement may be terminated by written notice given by either party, without cause, upon thirty (30) days written notice to the non-terminating party at the address listed in the "NOTICES" Article of this Agreement. This Agreement will not terminate until Licensee complies with Paragraphs "C" and "D" of this Section found below.

C. Prior to the effective date of any termination described in this Section, Licensee shall submit an application to Licensor's online Utility Contracts System at [this link](#) for Licensee's removal, or if applicable, abandonment in place of Licensee's Facilities located on Railroad Property ("Removal/Abandonment

Work"). Upon the UP Engineering Representative's approval of Licensee's application for the Removal/Abandonment Work, Licensor and Licensee shall execute a separate consent document that will govern Licensee's performance of the Removal/Abandonment Work from those portions of Railroad Property not occupied by roadbed and/or trackage ("Consent Document"). Licensor shall then restore the impacted Railroad Property to the same or reasonably similar condition as it was prior to Licensee's installation of Licensee's Facilities. For purposes of this Section, Licensee's (i) performance of the Removal/Abandonment Work, and (ii) restoration work will hereinafter be collectively referred to as the "Restoration Work".

D. Following Licensee's completion of the Restoration Work, Licensee shall provide a written certification letter to Licensor at the address listed in the "NOTICES" Article of this Agreement which certifies that the Restoration Work has been completed in accordance with the Consent Document. Licensee shall report to governmental authorities, as required by law, and notify Licensor immediately if any environmental contamination is discovered during Licensee's performance of the Restoration Work. Upon discovery, the Licensee shall initiate any and all removal, remedial and restoration actions that are necessary to restore the property to its original, uncontaminated condition. Licensee shall provide written certification to Licensor at the address listed in the "NOTICES" Article of this Agreement that environmental contamination has been remediated and the property has been restored in accordance with Licensor's requirements. Upon Licensor's receipt of Licensee's restoration completion certifications, this Agreement will terminate.

E. In the event that Licensee fails to complete any of the Restoration Work, Licensor may, but is not obligated, to perform the Restoration Work. Any such work actually performed by Licensor will be at the cost and expense of Licensee. In the event that Licensor performs any of the Restoration Work, Licensee shall release Licensor from any and all Loss (defined in the "INDEMNITY" Section of this **Exhibit B**) arising out of or related to Licensor's performance of the Restoration Work.

F. Termination of this Agreement for any reason will not affect any of rights or obligations of the parties which may have accrued, or liabilities or Loss (defined in the "INDEMNITY" Section of this **Exhibit B**), accrued or otherwise, which may have arisen prior to such termination.

EXHIBIT C

INSURANCE REQUIREMENTS

In accordance with Article 5 of this Agreement, Licensee shall (1) procure and maintain at its sole cost and expense, or (2) require its Contractor(s) to procure and maintain, at their sole cost and expense, the following insurance coverage:

A. **Commercial General Liability Insurance.** Commercial general liability (CGL) with a limit of not less than \$2,000,000 each occurrence and an aggregate limit of not less than \$4,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).

The policy must also contain the following endorsement, WHICH MUST BE STATED ON THE CERTIFICATE OF INSURANCE:

- Contractual Liability Railroads ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Railroad Company Property" as the Designated Job Site.

B. **Business Automobile Coverage Insurance.** Business auto coverage written on ISO form CA 00 01 10 01 (or a substitute form providing equivalent liability coverage) with a limit of not less \$2,000,000 for each accident, and coverage must include liability arising out of any auto (including owned, hired, and non-owned autos).

The policy must contain the following endorsements, WHICH MUST BE STATED ON THE CERTIFICATE OF INSURANCE:

- "Coverage For Certain Operations In Connection With Railroads" ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Railroad Company Property" as the Designated Job Site.

C. **Workers' Compensation and Employers' Liability Insurance.** Coverage must include but not be limited to:

- Licensee's statutory liability under the workers' compensation laws of the state(s) affected by this Agreement.
- Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy limit \$500,000 each employee.

If Licensee is self-insured, evidence of state approval and excess workers' compensation coverage must be provided. Coverage must include liability arising out of the U. S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

D. **Environmental Liability Insurance.** Environmental Legal Liability Insurance (ELL) applicable to bodily injury, property damage, including loss of use of damaged property or of property that has not been physically injured or destroyed, cleanup costs, and defense, including costs and expenses incurred in the investigation, defense, or settlement of claims, or compliance with statute, all in

connection with any loss arising from the insured's performance under this Agreement. Except with respect to the limits of insurance, and any rights or duties specifically assigned to the first named insured, this insurance must apply as if each named insured were the only named insured; and separately to the additional insured against which claim is made or suit is brought. Coverage shall be maintained in an amount of at least \$2,000,000 per loss, with an annual aggregate of at least \$4,000,000.

Licensee warrants that any retroactive date applicable to ELL insurance coverage under the policy is the same as or precedes the Effective Date of this Agreement, and that continuous coverage will be maintained for a period of five (5) years beginning from the time the work under this Agreement is completed or if coverage is cancelled for any reason the policies extended discovery period, if any, will be exercised for the maximum time allowed.

E. **Railroad Protective Liability Insurance.** Licensee must maintain for the duration of work "Railroad Protective Liability" insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of Licensor only as named insured, with a limit of not less than \$2,000,000 per occurrence and an aggregate of \$6,000,000. The definition of "JOB LOCATION" and "WORK" on the declaration page of the policy shall refer to this Agreement and shall describe all WORK or OPERATIONS performed under this Agreement. Notwithstanding the foregoing, Licensee does not need Railroad Protective Liability Insurance after its initial construction work is complete and all excess materials have been removed from Licensor's property; PROVIDED, however, that Licensee shall procure such coverage for any subsequent maintenance, repair, renewal, modification, reconstruction, or removal work on Licensee's Facilities.

F. **Umbrella or Excess Insurance.** If Licensee utilizes umbrella or excess policies, and these policies must "follow form" and afford no less coverage than the primary policy.

Other Requirements

G. All policy(ies) required above (except business automobile, workers' compensation and employers' liability) must include Licensor as "Additional Insured" using ISO Additional Insured Endorsement CG 20 26 (or substitute form(s) providing equivalent coverage). The coverage provided to Licensor as additional insured shall not be limited by Licensee's liability under the indemnity provisions of this Agreement. BOTH LICENSOR AND LICENSEE EXPECT THAT LICENSOR WILL BE PROVIDED WITH THE BROADEST POSSIBLE COVERAGE AVAILABLE BY OPERATION OF LAW UNDER ISO ADDITIONAL INSURED FORM CG 20 26.

H. Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless (a) insurance coverage may not lawfully be obtained for any punitive damages that may arise under this Agreement, or (b) all punitive damages are prohibited by all states in which this Agreement will be performed.

I. Licensee waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against Licensor and its agents, officers, directors and employees for damages covered by the workers' compensation and employers' liability or commercial umbrella or excess liability obtained by Licensee required in this Agreement, where permitted by law. This waiver must be stated on the certificate of insurance.

J. All insurance policies must be written by a reputable insurance company acceptable to Licensor or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the work is to be performed.

K. The fact that insurance is obtained by Licensee will not be deemed to release or diminish the liability of Licensee, including, without limitation, liability under the indemnity provisions of this

Agreement. Damages recoverable by Licensor from Licensee or any third party will not be limited by the amount of the required insurance coverage.

Joy Chang

From: Kelly Freuler <kellyfreuler@gmail.com>
Sent: Thursday, June 20, 2019 11:13 AM
To: Joy Chang
Subject: Comments on Middlebrook subdivision

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you are expecting this email and/or know the content is safe.

Hi,

I am concerned about the traffic impact 145 homes will have on both the Sunset/Elwert/99W intersection and the 99W/Brookman Chapman intersection. The Sunset/Elwert/99W has already seen several accidents this year even with the addition of red light cameras. Reconfiguration of that intersection is to occur for the new high school which will be occurring during the occupancy of this subdivision. All of those cars will go elsewhere and will likely clog Middleton road as they cut through neighborhoods to get to 99W.

The crossing of 99W at Brookman/Chapman is inherently dangerous – there is no signal and there is a small space for cars to wait after crossing NB in an attempt to go southbound.

Further with the advent of the new school – there are no sidewalks for kids from the Middlebrook development to walk or bike to the new high school. Crossing 99W is dangerous enough at the crosswalks at Sunset but there is no way for kids from Middlebrook to get there without walking on roadsides with no sidewalks.

The density of housing and its impact on traffic, both vehicular and pedestrian has been underestimated in my opinion. I live close to the site and see the increasing number of cars cutting through our neighborhoods now when 99W is slow. Adding ~300 cars to that total will make the streets more unsafe.

Thanks!
Kelly Freuler

Sent from [Mail](#) for Windows 10

Joy Chang

From: wendywells7@gmail.com
Sent: Saturday, June 22, 2019 10:31 AM
To: Joy Chang
Subject: Sub 18-02 Middlebrook Subdivision

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you are expecting this email and/or know the content is safe.

Hello Joy,

Here are my public comments for the July 9, 2019 7:00 pm meeting on the proposed Middlebrook Subdivision. I will not be able to attend.

I continue to be concerned about the safety of those traveling Brookman Road with the additional traffic 145 single family homes will bring to a yet to be improved Brookman Rd.

I am concerned this developer will Only be responsible for an insignificant amount of Brookman Road improvements. They are responsible of adding an estimated 300 additional vehicles to an already hazardous Brookman Rd.

I am concerned, in case of an emergency, how a single entry/exit to a 145 lot subdivision will allow safe evacuation.

These are the same concerns raised in prior proposals to develop this property. The good news is this proposal is a third of the size of the last proposal.

When the city drafted a comprehensive plan in early 2000 for the Brookman Annexation, the space was promoted as light industrial, small retail, multi family and single family homes.

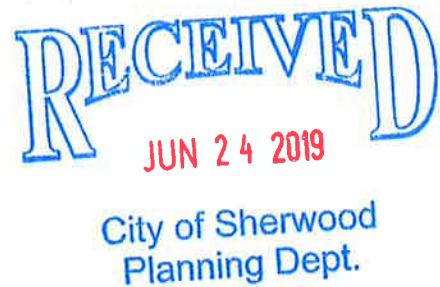
As stand alone development is approved how will the original vision be accomplished?

Thank you

Wendy Wells
24895 SW Oberst Rd
Sherwood, Or 97140
503-522-1917

Sent from my iPhone

June 24, 2019



Ms Joy Chang, Associate Planner
Planning Dept, Sherwood City Hall
22560 SW Pine Street
Sherwood, OR 97140

RE: SUB 18-02, Middlebrook Subdivision Public Hearing 07/09/19

Dear Ms Chang,

As we live on Brookman Road, we are very concerned about the safety issues that need to be addressed concerning the coming subdivision of 145 individual single-family detached homes. We attended the most recent meeting a couple of weeks ago held at City Hall regarding this development, specifically addressing road issues, where many attended and a variety of concerns were expressed.

For this coming meeting on July 9, please consider the following:

1. Single entrance/exit on SW Brookman Road at SW Oberst Road: the potential fire and emergency exit hazard to those living and visiting the homes in the development is of great concern, as is the number of people using this portal and the traffic backups that will ensue throughout each day. One access point is unacceptable.
2. Increase of traffic on SW Brookman Road: changes in the configuration of the road that will ensure safe travel to all using it (residents, visitors, drive-through traffic, contractors, etc.) must be made without penalizing residents by taking their land and putting people's homes on the "doorstep" of the road in order to accommodate a severely widened Brookman Road.
3. Access point to SW Pacific Hwy (99W) from Brookman Road and Chapman Road: a traffic light must be installed to provide safe passage across the 99W. Right now, it is difficult and unsafe to travel from either of these two roads to the center divider area throughout most of each day. A traffic light must be installed before the development is completed and hundreds of additional vehicles on Brookman Road are trying to navigate this passage making it even more unsafe. Additionally, with the completion of the new high school and many more young drivers making their way to school, the potential for tragic accidents will be increased greatly.

While there are many other important factors to address, our overriding concern is for the safety of all living on and using Brookman Road. Thank you for your attention to these concerns. We look forward to the meeting on July 9.

Sincerely,

Ed and Debi Bascom

Handwritten signatures of Ed Bascom and Debi Bascom.

18127 SW Brookman Road, Sherwood, OR 97140

Exhibit J-3

Joy Chang

From: Tatman <PineTopInc@comcast.net>
Sent: Wednesday, June 26, 2019 1:16 PM
To: Joy Chang
Cc: 'Tatman'
Subject: Middlebrook Subdivision

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you are expecting this email and/or know the content is safe.

To: Joy Chang, Associate Planner for City of Sherwood, OR

Regarding Case File No.: SUB 18-02
Location: 17495, 17601 and 17769 SW Brookman Road
Public Hearing to be held on Tuesday, 7/9/19 at 7PM at Sherwood City Hall

Our main concern regarding this development is **Safety**. As stated in the city proposal "Access from the proposed subdivision will be from SW Brookman Road."

We all know the line of site on Brookman Road is horrible and unsafe. There is a lot of traffic (vehicles, pedestrians, bicycles, horses, etc.) and people tend to drive too fast.

We should **IMMEDIATELY** have the speed on Brookman Road lowered to **No More Than 25 mph**. That is the very minimum change that needs to occur and the sooner the better. That would help travelers get used to the speed change.

Once the building of the new homes and preparation for them begins (services installed, etc.) there will be trucks using Brookman Road and that will, of course, increase the risks to all users of Brookman Road. There are areas of Brookman Road that are barely wide enough for two cars to pass and having trucks added to the mix will greatly increase safety hazards.

Sincerely,

Dan and Joanne Tatman
24351 SW Middleton Road
Sherwood, OR 97140
(503)625-2103
pinetopinc@comcast.net

Joy Chang

From: Wayne Hayson <whayson@pd-grp.com>
Sent: Tuesday, July 9, 2019 3:00 PM
To: Joy Chang
Cc: Irwin, Mike; Siddiqui, Aziz; Matt Sprague
Subject: Case File No.: SUB 18-02 (Middlebrook)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you are expecting this email and/or know the content is safe.

RE: Case File No.: SUB 18-02 (Middlebrook)

Good Afternoon Joy,

David Weekley Homes, as applicant for "The Reserve at Cedar Creek", located on the adjoining Tax Lots 100 & 101 of Tax Map 3S106 and submitted the City on April 19, 2019, would like to submit to the record their support for the approval of City of Sherwood Case File No. SUB 18-02, to be heard at 7pm on July 9, 2019, by the City of Sherwood Planning Commission.

We would note that public facilities such as public streets, water, and sewer services will be extended to the Reserve at Cedar Creek site through the Middlebrook development. In accordance with the requirements of the City of Sherwood Zoning and Community Development Code, including but not limited to Sections 16.106.040.C., 16.110.020.A., 16.112.020.A, and 16.114.020.C., we would request that the City ensure that all required public facilities be extended to the boundary of the proposed development, and sized with appropriate capacity to adequately allow for future extensions. In addition, it is noted that the applicant has proposed construction of the development in a single phase. We would request notification of any proposed changes to the phasing schedule prior to approval.

Thank you for your time and consideration in this matter.

Wayne Hayson | PLANNING MANAGER | D 971.708.6274
PIONEER DESIGN GROUP, INC. CIVIL ENGINEERING | LAND USE PLANNING | LAND SURVEYING | LANDSCAPE ARCHITECTURE
OREGON: 9020 SW Washington Square Rd. Suite 170 Portland, OR 97223 P 503.643.8286 ext. 1019
HAWAII: PO Box 283304, Honolulu, HI 96828 P 808.753.2376
pd-grp.com

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07.09.19 PC
Date Gov. Body
ba.
Agenda Item Exhibit #

In Reviewing the Sub_18-02_final_submittal_12-18-18.pdf

Traffic Concerns with Exhibit J – Transportation Analysis

- I moved to Sherwood from Austin, Texas suburbs in January 2017. I can think of numerous occasions where 2 lane country roads were used to feed new subdivisions. The roads were not addressed prior to the new subdivisions. They had to be addressed later with great heartache and congestion because planners lacked the foresight to plan for ALL of the new subdivisions. Now is the time to widen Brookman road to 99W and address those traffic concerns for all of the new subdivisions Not just this one.
- At the Brookman/99W Intersection, I see that a new, westbound right turn lane is being implemented as part of this project for peak morning traffic. Great! What happens when those folks come home? The southbound left turn lane is very small. I travel this way going to Newberg on the weekends, and this intersection is always chaotic. I shudder to think what this intersection will look like at peak evening traffic.
- The Brookman Rd crossing of the Portland and Western Railroad track is smaller than a 2 lane road. I find no mention of this in the report. Will this be addressed?
- Similarly, The Middleton Rd crossing of the Portland and Western Railroad track is smaller than a 2 lane road. I find no mention of this in the report. Will this be addressed?
- The Brookman/Middleton intersection has a blind spot. This intersection has roads that are not perpendicular to one another. Travelling eastbound on Brookman Rd, it is very difficult to see northbound traffic from Middleton. Accidents will happen. Will this be addressed?

Portland and Western Railroad

- Does this railroad still operate? Will there be children playing on or near the railroad track?
- I see that Tract D is across the railroad track from the new subdivision. Will the trees stay as noted in the document? Will this always be the case with the build out of Harrison Street as shown in page 102 or will this turn into another house?

from: Robby Bailey

07.09.19
Date

P.C.
Gov. Body

69.
Agenda Item

Exhibit #