Land Use Applications
Section 2: Pipelines Overview

Applicant|Owner:	**Bonita Oswald, CAPM** **City of Portland | Portland Water Bureau** **1120 SW 5th Avenue, Room 405 Portland, OR 97204**
Representative:	Winterbrook Planning | 610 SW Alder Street, Suite 810 Portland, Oregon 97205
Contact:	Tim Brooks, ASLA or Jesse Winterowd, AICP, PMP
Location:	Raw water pipelines are proposed from existing conduits in Lusted Road to the filtration site. Finished water pipelines are proposed from the filtration facility to (a) the Lusted Hill Treatment Facility, (b) the finished water intertie (intertie), and (c) existing conduits near Pipeline Road.
Site Address:	The pipelines connect the filtration facility site on Carpenter Lane to the existing Bull Run conduit system.
Map & Tax Lot Numbers:	Pipelines are proposed primarily within public street rights-of-way (ROW) and across the following tax lots: 1400 (1S4E23C) 1500 (1S4E23C) 2200 (1S4E23C) 7300 (1S4E22DB) 900 (1S4E21A) 100 (1S4E22BA) 200 (1S4E22BA) 801 (1S4E15C) 800 (1S4E23C)
Property ID:	R649716640 R649716620 R238000610 R994220850 R994150140 R994221120 R994220300 R994210630 R994230150
Base Zones:	Pipelines and the intertie are proposed in the Multiple Use Agriculture (MUA-20), Rural Residential (RR), Commercial Forest Use (CFU), and Exclusive Farm Use (EFU) Zones.
Plan Area:	West of Sandy River Rural Planning Area
Proposal:	The Water Bureau proposes to construct about four miles (21,700 lf) of pipeline corridor—with approximately seven and a half miles (40,500 lf) of pipelines within that corridor—in Multnomah County, including appurtenances and the finished water intertie on Lusted Road.
Land Use Review and Procedures:	• Type III CU reviews for proposed pipelines in the MUA-20, RR, and CFU zones • Type II Design Review for pipelines • Type II Lot of record verification for the private property along the pipeline and at the intertie • Type II EFU review for proposed pipelines in the EFU zone • Type II SEC review for pipelines and appurtenances within the SEC-h and SEC-wr overlay zones • Type II Geologic Hazards (GH) review for pipelines
Pre-Application Conference:	April 28, 2022

Exhibit A.7

Bull Run Filtration Projects
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Applications Narrative Guide

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As described in the **Introduction**, the project spans Multnomah and Clackamas counties, includes the filtration facility and communications tower on the filtration facility site, the intertie facility on Lusted Road near Altman Road, and the raw water and finished water pipelines.[1]

In addition to explaining the organization framework for reviewing the proposed intertie, pipelines, and appurtenances, and their respective core analysis areas, this Section 2 Overview demonstrates compliance with the following:

- Lot of record review standards (Section 2.1);
- RR, MUA-20, CFU, and EFU base zone use and procedural requirements (Section 2.2); and
- Compliance with Geologic Hazards (GH) overlay zone standards (Section 2.3).

Section 2 also includes background information and proposed findings in support of approval of the following land use permits:

- Section 2.A: Type III CUP for connecting CS uses (pipelines, appurtenances, and the Lusted Intertie) in the MUA-20, CFU, and RR zones;
- Section 2.B: Type II Design review for pipelines in the EFU, RR, MUA-20, and CFU zones;
- Section 2.C: Type II EFU Review to allow utility facilities for public service for pipelines and appurtenances in EFU zone outside of public street ROW; and
- Section 2.D: Type II SEC review for pipelines and appurtenances within the SEC-h overlay zone.

As explained in the **Introduction**, this Section 2 of this consolidated Multnomah County land use application narrative focuses on land use permits necessary for pipelines, appurtenances, and the intertie. Defined terms used in this Section 2 Overview are provided in the overall application **Introduction**.

Existing Pipelines

The Water Bureau installed the three conduits currently in operation in the area between the early 1910s and mid-1950s. These conduits are referred to as Conduit 2 (C2), Conduit 3 (C3), and Conduit 4 (C4) in order from oldest to newest. New raw and finished water pipelines, designed to current seismic and other standards, will connect the existing conduit system to the proposed filtration facility.

[1] In addition to the consolidated land use application in Multnomah County, the Water Bureau will be submitting a Clackamas County Type II application for emergency access to the filtration facility site from Bluff Road.

Proposed Pipeline and Intertie Facilities

The pipelines work[2] consists of four pipeline segments and the finished water intertie, depicted on Figure 1 with the following segment number labels:

1. Two raw water (RW) pipelines extend approximately 0.4 miles from the proposed Multnomah Connection at Lusted Road to the filtration facility, through areas zoned Rural Residential (RR) and Exclusive Farm Use (EFU);
2. Two finished water (FW) pipelines extend approximately 1.5 miles in the MUA-20 zone from the filtration facility to the finished water intertie, entirely in the existing Dodge Park Boulevard ROW and subsequently along an easement connecting Dodge Park Boulevard to the intertie at Lusted Road;
3. Three FW pipelines extend from the intertie to connect with existing conduits: one at Altman Road and Lusted Road, the second at Altman Road and Pipeline Road, and the third at Altman Road and Oxbow Drive. From leaving the intertie easement, the pipelines are located entirely in existing road ROW through areas zoned MUA-20 and EFU; and
4. A separate pipe, the Lusted Road Distribution Main (LRDM) will supply existing local water customers and five wholesale water districts with treated water. This main connects proposed FW pipelines in Dodge Park Boulevard to the existing main adjacent to the Lusted Hill Treatment Facility (LHTF) site. The main is located in the Cottrell Road ROW (zoned MUA-20) before entering the LHTF site (zoned CFU) and connecting to an existing main.

The proposed FW intertie (intertie) is zoned MUA-20 and located next to Lusted Road east of Altman Road. The intertie controls the flow of finished water to the water transmission system. Because the intertie contains above ground features including a utility building, fencing, and a covered stairway to an underground vault, it is analyzed in this narrative separately from the pipeline segments. Note that, where a ROW forms the boundary between two zones, the zoning extends to the center of the ROW and applies to the proposal in that section of the ROW. See, e.g., MCC 39.4302 (MUA-20 zone applies to lands with that designation on Multnomah County Zoning Map, which shows the zone extending to the centerline of the ROW). This concept applies to portions of Segments 2, 3, and 4.

[2] Pipelines include City fiber internet in the same utility trench.

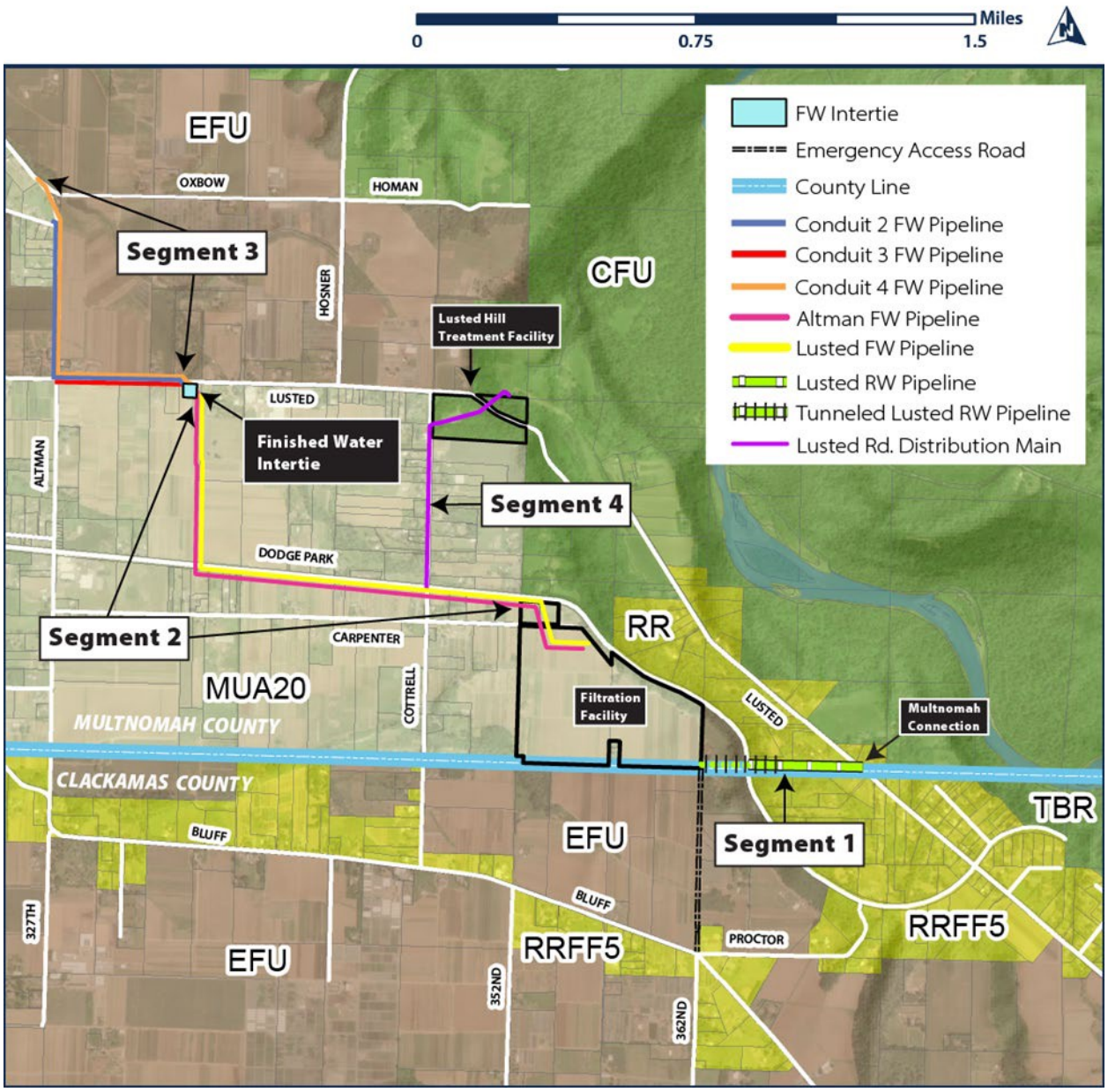

Figure 1. Proposed Pipeline Route and Intertie Location

Core Analysis Areas

The **Introduction** describes the character of the project study area, which includes land zoned for farm, forest, and rural residential land uses and is large enough to account for all potential impacts resulting from the filtration facility, communications tower, intertie, about four miles (21,700 lf) of pipeline corridor, and the emergency access road in Clackamas County.

In this section, the Water Bureau describes core (impact-specific) analysis areas for the pipelines and intertie. Two core analysis areas are proposed depending on the proposed facility type:

- **Pipeline Core Analysis Area**: Potential impacts from pipelines and appurtenances on surrounding farm, forest, and rural residential land uses.
- **Intertie Core Analysis Area**: Potential impacts from the intertie on surrounding farm and rural residential land uses.

Pipeline Core Analysis Area

Water Bureau pipelines and appurtenances have existed in road ROW and public utility easements across private property in the study area for over 100 years. Local water districts served by the Bull Run water system have relied on water pipelines and related facilities in this area since the early 1900s. Thus, water pipelines and appurtenances preceded and support much of the development that has occurred in the study area – and have played a role in defining its character. Water facilities have co-existed with agricultural and forest operations as well as rural residential development in the study area since the 1890s and do not conflict with these land uses.

The proposed core analysis area for the pipelines and appurtenances is limited to the public road ROW or the public utility easements[3] (PUE) where these facilities are proposed and the adjacent lands surrounding those ROW and PUEs. As noted in **Section 2.A**, all proposed pipelines will be constructed below-ground; above-ground appurtenances are spread far apart and do not exceed 2.5 feet in height.

Public ROW and PUEs are intended to accommodate a wide range of public facilities, including water lines and appurtenances, and have co-existed with rural land uses in the study area for more than a century. The proposed easements include existing farm access roads and will not limit access to adjacent farm fields.

Intertie Core Analysis Area

Without mitigation, the intertie structure would be visible from the road and surrounding farm and rural residential uses from as much as a quarter mile away. The intertie also generates sound and requires outdoor security lighting. To ensure that all potential impacts are considered, the intertie core analysis area extends one-quarter mile from the boundaries of the intertie easement. Figure 2 shows the intertie easement and the quarter-mile core analysis area.

[3] Road ROWs vary in width from 60 to 100 feet in the study area. Proposed water easements vary in size and shape.

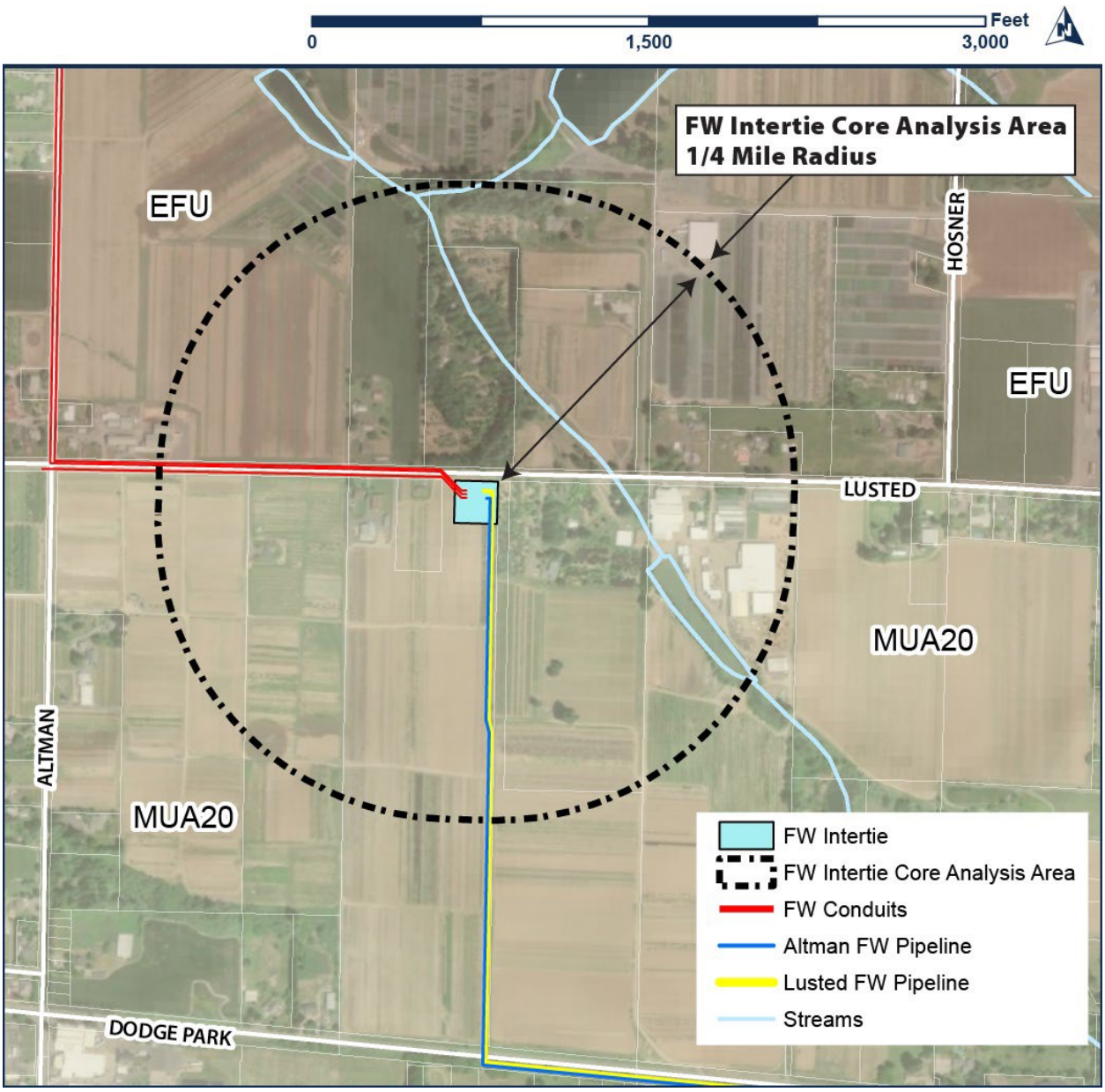

Figure 2. Intertie Core Analysis Area

Lot of Record Review—Proposed Water Easements

Multnomah County Code (MCC) requires that all land use actions on private property occur on a legal lot of record pursuant to the general provisions of MCC 39.3005 and applicable requirements specific to each zone in sections 39.3010 through 39.3160. A lot of record is a parcel that met all applicable zoning and land division regulations in place at the time the parcel was created (MCC 39.3005). Appendix K.2 provides a current title report for each lot.

The proposed pipelines will be located within ROWs, within easements on private property, or on Water Bureau property. Compliance with the applicable lot of record standards generally and in the RR, MUA-20, EFU, and CFU zones is documented below. The review covers lots along the raw water pipeline (RR and EFU zones), lots along the FW pipelines (MUA-20), and lots along the LRDM (CFU).

Raw Water Pipelines

As shown on Figure 3, the raw water pipelines cross four lots to extend between Lusted Road and the filtration facility site, commonly known as tax lots 800, 1400, and 1500 (zoned RR), and tax lot 2200 (zoned EFU).

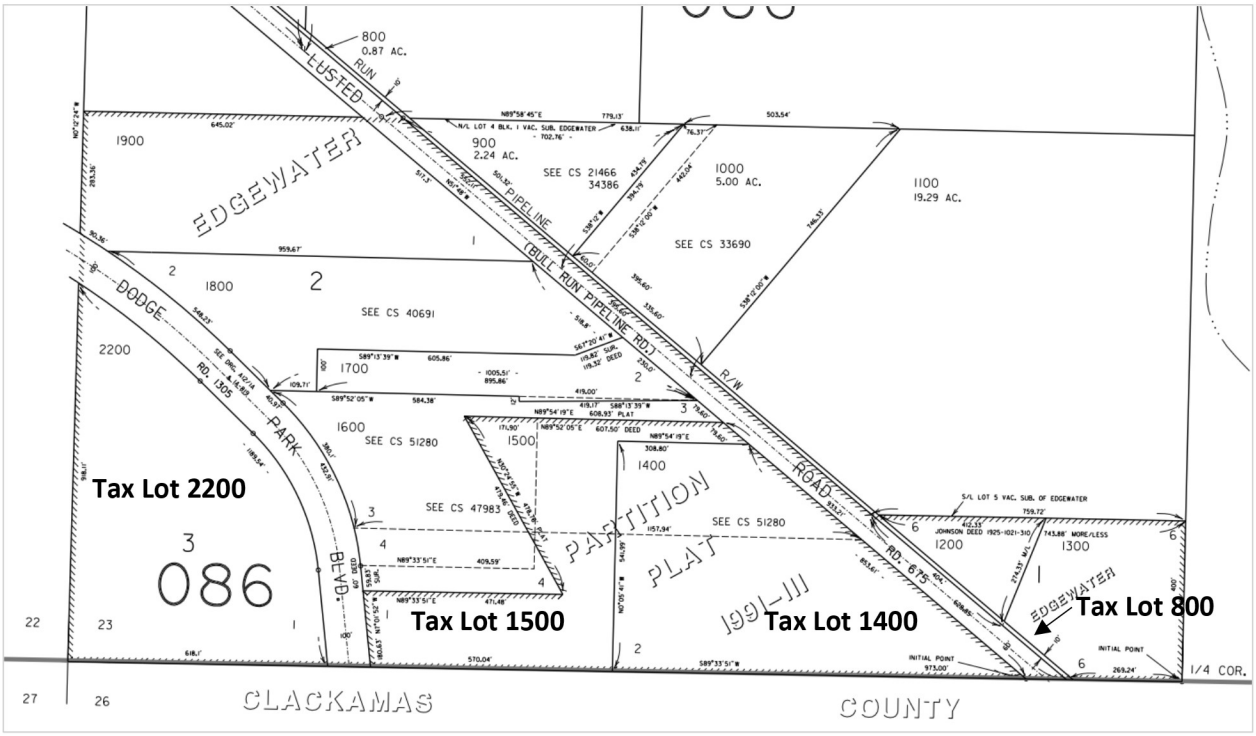

Figure 3. Clip of Multnomah County Tax Assessor Map 1S4E23C with Markup of Relevant Lots

Raw Water Pipelines – MCC 39.3005 Lot of Record – Generally

A. An area of land is a "Lot of Record" if it meets the standards in Subsection (B) of this Section and meets the standards set forth in this Part for the Zoning District in which the area of land is located.

Response: Each of the lots along the RW pipelines meet the standards of Subsection (B) and the standards for the applicable base zone, as described below. Therefore, each of the four lots is a Lot of Record.

B. A Lot of Record is a parcel, lot, or a group thereof that, when created or reconfigured, either satisfied all applicable zoning laws and satisfied all applicable land division laws, or complies with the criteria for the creation of new lots or parcels described in MCC 39.9700. Those laws shall include all required zoning and land division review procedures, decisions, and conditions of approval.

a. "Satisfied all applicable zoning laws" shall mean: the parcel, lot, or group thereof was created and, if applicable, reconfigured in full compliance with all zoning minimum lot size, dimensional standards, and access requirements.

b. "Satisfied all applicable land division laws" shall mean the parcel or lot was created:

1. *By a subdivision plat under the applicable subdivision requirements in effect at the time; or*
2. *By a deed, or a sales contract dated and signed by the parties to the transaction, that was recorded with the Recording Section of the public office responsible for public records prior to October 19, 1978; or*
3. *By a deed, or a sales contract dated and signed by the parties to the transaction, that was in recordable form prior to October 19, 1978; or*
4. *By partitioning land under the applicable land partitioning requirements in effect on or after October 19, 1978; and*
5. *"Satisfied all applicable land division laws" shall also mean that any subsequent boundary reconfiguration completed on or after December 28, 1993 was approved under the property line adjustment provisions of the land division code. (See Date of Creation and Existence for the effect of property line adjustments on qualifying a Lot of Record for the siting of a dwelling in the EFU and CFU districts.)*

Response: Tax lot 800 was first created in its current configuration in 1923 by a deed recorded on November 30, 1923, in book 950, page 126/127 of the Multnomah County deed records. The deed is provided in Appendix K.3. This lot was created before the advent of County zoning in the 1950s so no zoning laws applied. Therefore, because there were no applicable laws at the time, tax lot 800 "satisfied all applicable zoning laws and satisfied all applicable land division laws" when created.

Tax lots 1400 and 1500 were first created in their current configuration in 1991. Partition Plat No. 1991-111, approved by the County Planning Director on August 6, 1991, created Parcel 1 and Parcel 2, commonly known as tax lot 1500 and tax lot 1400, respectively (Appendix K.5). As shown in the title reports (Appendix K.2), tax lots 1400 and 1500 have remained in the same configuration and ownership since their creation. Therefore, the lots were created by "partitioning land under the applicable land

partitioning requirements in effect on or after October 19, 1978" under subsection (B)(b)(4) and "satisfied all applicable land division laws" as required by subsection (B)(b).

Because they were created through a partition plat approved by the County, tax lots 1400 and 1500 would have been evaluated for compliance with the zoning code at the time of creation and the partition plat would not have been approved if the lots were not in compliance. Therefore, each "satisfied all applicable zoning laws" when created. Additional analysis confirms this conclusion. At the time, the lots were zoned RR (Appendix K.6) and the applicable (1990) zoning code provisions related to dimensional and access standards were as follows: minimum lot size was 5 acres; minimum front lot line length was 50 feet; yard dimensions were 30 ft. (front), 10 ft. (side) and 30 ft. (rear); and structure height 35 ft. Access standards required lots to abut a street. The two lots abut Lusted Road. Tax lot 1500 is 5 acres in size, has a 79 ft. front lot line. Tax lot 1400 is 7.95 acres in size, has an 853 ft. front lot line. No structures are shown on the Partition Plat, but historic topographic maps (Appendix K.4) show three structures on tax lot 1400 in 1985; structures appear centrally located on site and more than 30 feet from lot lines. Both lots complied with the RR zoning standards when created. Therefore, they "satisfied all applicable zoning laws" when created, as required by subsection (B)(a).

Tax lot 2200 was first created in its current configuration as Block 3 of the Edgewater plat, approved by the County and recorded (book 618, page 85/86) on December 21, 1912 (Figure 4 and Appendix K.5). The title report in Appendix K.2 contains a deed from 1948 (book 1287, page 486) that describes the property as Block 3 of the Edgewater plat. This deed description is consistent throughout subsequent deeds and the current deed, document 2020-048152. The lot was legally platted in 1912, and no reconfiguration of the property boundaries has taken place since. Therefore, this lot "satisfied all applicable land division laws" as required by subsection (B)(b). In addition, there were no applicable zoning laws at the time the lot was partitioned.[4] Therefore, tax lot 2200 "satisfied all applicable zoning laws" when created.

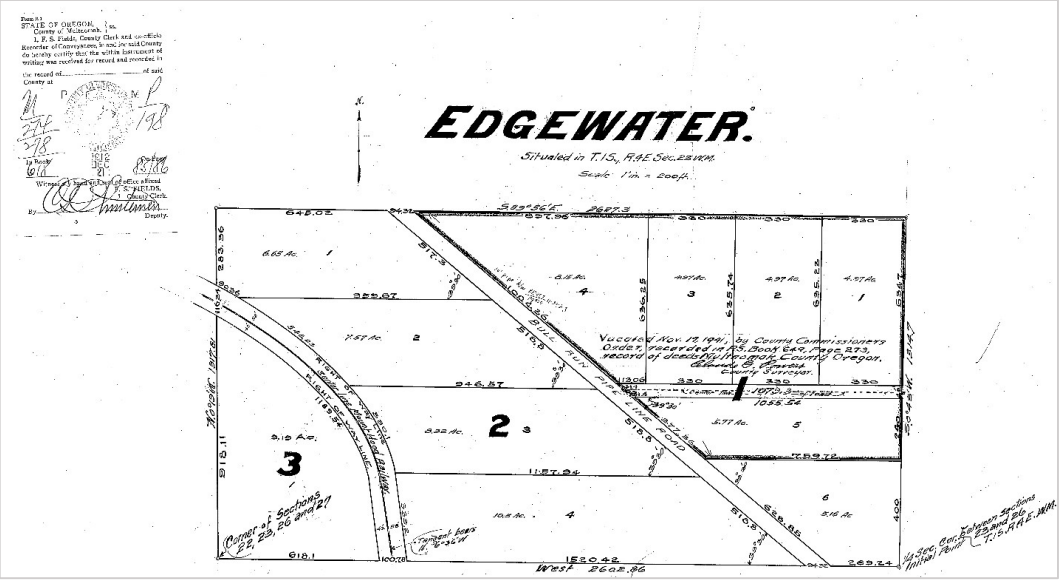

Figure 4. Clip of 1912 Edgewater Plat PL0618-085-086, Multnomah County Survey Records

[4] Multnomah County first applied F2 zoning to the area in 1958. The F2 zone created a 2-acre minimum lot size, and at 9.19-acres, the lot exceeded the standard.

Raw Water Pipelines—MCC 39.3090 Lot of Record—Rural Residential (RR)

A. *In addition to the standards in MCC 39.3005, for the purposes of the RR district the significant dates and ordinances for verifying zoning compliance may include, but are not limited to, the following:*
   1. *July 10, 1958, SR zone applied;*
   2. *July 10, 1958, F-2 zone applied;*
   3. *December 9, 1975, F-2 minimum lot size increased, Ord. 115 & 116;*
   4. *October 6, 1977, RR zone applied, Ord. 148 & 149;*
   5. *October 13, 1983, zone change from MUF-19 to RR for some properties, Ord. 395;*
   6. *October 4, 2000, Oregon Administrative Rules Chapter 660 Division 004, 20 acre minimum lot size for properties within one mile of Urban Growth Boundary;*
   7. *May 16, 2002, Lot of Record section amended, Ord. 982, reenacted by Ord. 997.*

Response: As described above, TL 800 was first created in its current configuration in 1923, which predated County zoning, as shown by the dates in this section. Tax lots 1400 and 1500 are the result of a land partition approved by the County in 1991 when the RR zoning had been adopted (Ordinance #395). This section provides information relevant to the evaluation of a lot of record, but does not provide a separate standard to meet for approval.

B. *A Lot of Record which has less than the minimum lot size for new parcels or lots, less than the front lot line minimums required, or which does not meet the access requirement of MCC 39.4395, may be occupied by any allowed use, review use or conditional use when in compliance with the other requirements of this district.*

Response: Tax lots 1400 and 1500 are 7.95-acres and 5-acres respectively, meeting the 5-acre minimum lot size of the RR zone. Both lots exceed the minimum 30-foot front lot line requirement: tax lot 1400 has over 850-feet of frontage on Lusted Road, and tax lot 1500 has 79 feet of frontage on Lusted Road. Each property has an existing access to Lusted Road. Therefore, tax lots 1400 and 1500 meet the applicable standards for new lots. Tax lot 800 has a 629-foot front lot line and has access on Lusted Road. The lot is 6288 sf, below the minimum lot size for new parcels. The other requirements of the RR district are met, as discussed below. Therefore, this standard is met.

C. *Except as otherwise provided by MCC 39.4380, 39.4385, and 39.5300 through 39.5350, no sale or conveyance of any portion of a lot other than for a public purpose shall leave a structure on the remainder of the lot with less than minimum lot or yard requirements or result in a lot with less than the area or width requirements of this district.*

Response: There has been no sale, conveyance, or reconfiguration of any portion of tax lots 1400 and 1500 since the 1991 partition, as demonstrated by the title report for each property included in Appendix K.2. Similarly, tax lot 800 has been in Water Bureau ownership since its acquisition in 1923.

D. *The following shall not be deemed to be a lot of record:*
   1. *An area of land described as a tax lot solely for assessment and taxation purposes;*
   2. *An area of land created by the foreclosure of a security interest.*
   3. *An area of land created by court decree.*

Response: The creation of each lot is described above. The subject lots are not tax lots created solely for assessment and taxation purposes and were not created by foreclosure or court decree.

Raw Water Pipelines—MCC 39.3070 Lot of Record—Exclusive Farm Use (EFU)

A. In addition to the standards in MCC 39.3005, for the purposes of the EFU district a Lot of Record is either:

1. A parcel or lot which was not contiguous to any other parcel or lot under the same ownership on February 20, 1990, or

2. A group of contiguous parcels or lots […]

Response: Tax lot 2200 was not contiguous to any other parcel or lot under the same ownership on February 20, 1990. The filtration facility property abuts the lot to the west; it has been owned by the Water Bureau since 1975 (Appendix K.2). The property is bounded by SE Dodge Park Boulevard to the east and Clackamas County to the south. No contiguous lots were in the same ownership on February 20, 1990.

B. In this district, significant dates and ordinances applicable for verifying zoning compliance may include, but are not limited to, the following:

1. July 10, 1958, F-2 zone applied;

2. December 9, 1975, RL-C zone applied, F-2 minimum lot size increased, Ord. 115 & 116;

3. October 6, 1977, MUA-20 and EFU38 zones applied, Ord. 148 & 149;

4. August 14, 1980, zone change from MUA-20 to EFU-38 for some properties, zone change from EFU-38 to EFU-76 for some properties. Ord. 236 & 238;

5. February 20, 1990, lot of record definition amended, Ord. 643;

6. April 5, 1997, EFU zone repealed and replaced with language in compliance with 1993 Oregon Revised Statutes and 1994 Statewide Planning Goal 3 Oregon Administrative Rules for farmland, Ord. 876;

7. May 16, 2002, Lot of Record section amended, Ord. 982, reenacted by Ord. 997;

Response: As noted above, tax Lot 2200 was first created in its current configuration as Block 3 of the Edgewater plat, approved by the County and recorded (book 618, page 85/86) on December 21, 1912, prior to the establishment of zoning regulations, as shown by the dates in this section. Tax Lot 2200 has not changed in configuration since that time. This section provides information relevant to the evaluation of a lot of record, but does not provide a separate standard to meet for approval.

C. A Lot of Record which has less than the minimum lot size for new parcels, less than the front lot line minimums required, or which does not meet the access requirements of MCC 39.4260 may be occupied by any allowed use, review use or conditional use when in compliance with the other requirements of this district.

Response: The subject lot has access on Dodge Park Boulevard and its front lot line is 1189 feet, exceeding the 50-foot requirement. This lot of record is smaller than the 80-acre minimum lot size for new parcels. As demonstrated below, the project meets the other requirements of the EFU district. Therefore, this standard is met.

D. The following shall not be deemed a Lot of Record:

1. *An area of land described as a tax lot solely for assessment and taxation purposes;*
2. *An area of land created by the foreclosure of a security interest;*
3. *A Mortgage Lot.*
4. *An area of land created by court decree.*

Response: The subject lot is recorded in the County deed records in its current configuration and is not a lot solely for assessment and taxation purposes, nor was it created by foreclosure or court decree.

Finished Water Pipelines

The finished water pipelines cross two lots located in the MUA-20 zone, commonly known as tax lot 900 (1S4E21A), where the finished water intertie is also sited, and tax lot 300 (1S4E22DB) across Carpenter Lane from the filtration facility site. Figure 5 shows tax lot 900 on Tax Assessor Map 1S4E21A. Figure 6 shows tax lot 300 on Tax Assessor Map 1S4E22DB.

A current title report for each property is provided in Appendix K.2.

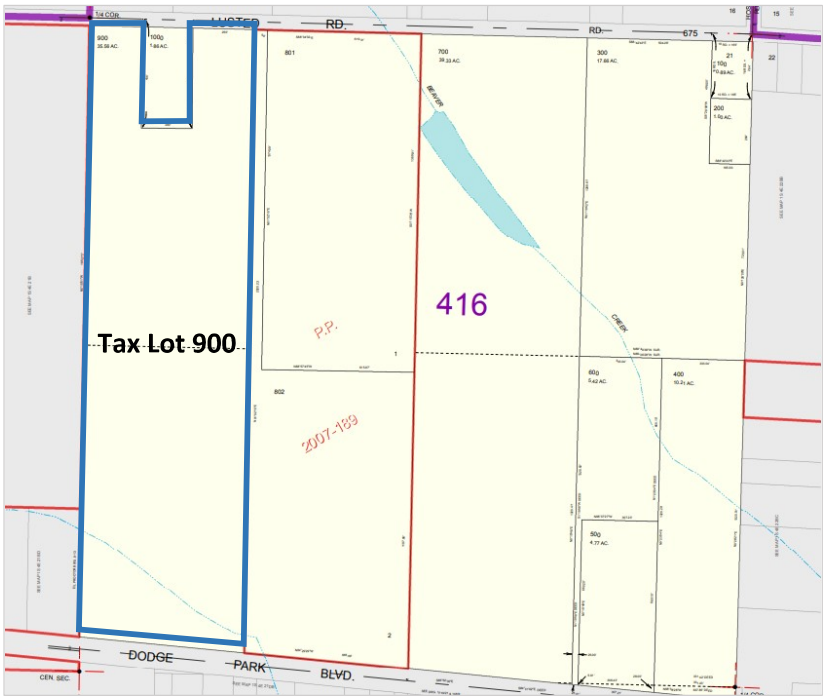

Figure 5. Multnomah County Tax Assessor Map 1S4E21A Showing TL900 (blue)

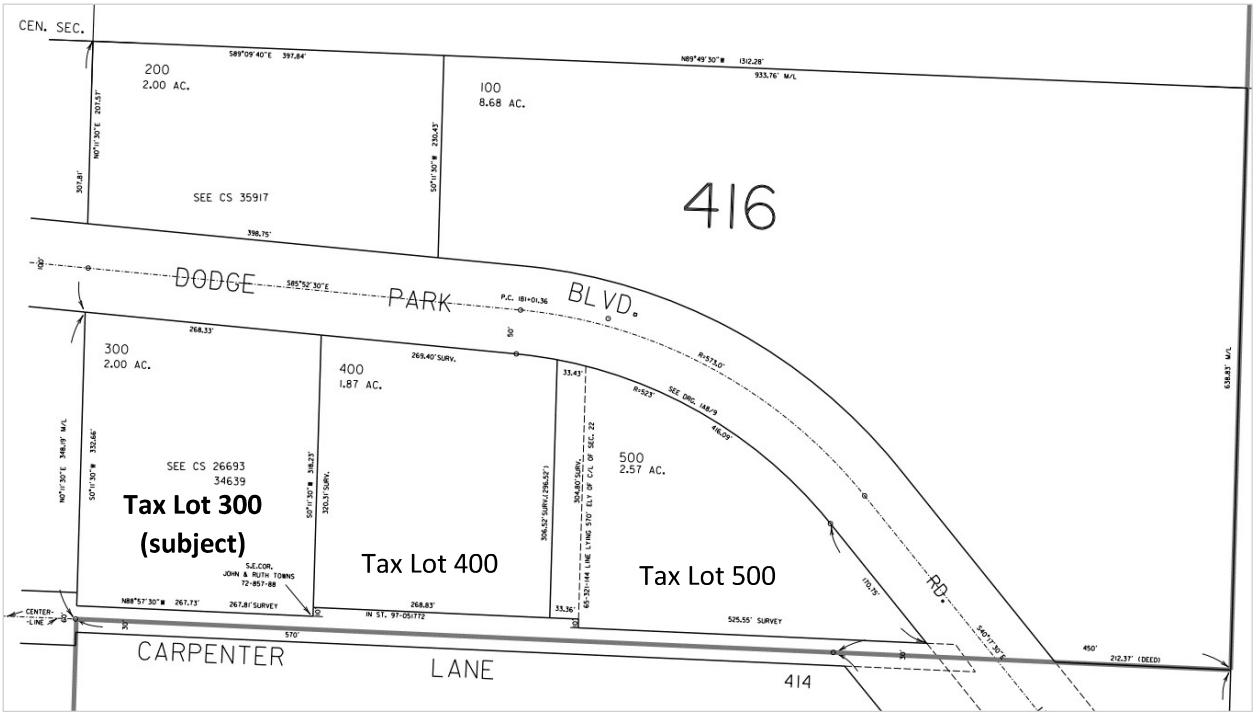

Figure 6. Tax Assessor Map 1S4E22DB

Finished Water Pipelines—MCC 39.3005 Lot of Record—Generally

A. An area of land is a "Lot of Record" if it meets the standards in Subsection (B) of this Section and meets the standards set forth in this Part for the Zoning District in which the area of land is located.

Response: Each of the lots along the FW pipelines meet the standards of Subsection (B) and the standards for the MUA-20 zone, as described below. Therefore, each of the lots is a Lot of Record.

B. A Lot of Record is a parcel, lot, or a group thereof that, when created or reconfigured, either satisfied all applicable zoning laws and satisfied all applicable land division laws, or complies with the criteria for the creation of new lots or parcels described in MCC 39.9700. Those laws shall include all required zoning and land division review procedures, decisions, and conditions of approval.

a. "Satisfied all applicable zoning laws" shall mean: the parcel, lot, or group thereof was created and, if applicable, reconfigured in full compliance with all zoning minimum lot size, dimensional standards, and access requirements.

b. "Satisfied all applicable land division laws" shall mean the parcel or lot was created:

1. By a subdivision plat under the applicable subdivision requirements in effect at the time; or

2. By a deed, or a sales contract dated and signed by the parties to the transaction, that was recorded with the Recording Section of the public office responsible for public records prior to October 19, 1978; or

3. *By a deed, or a sales contract dated and signed by the parties to the transaction, that was in recordable form prior to October 19, 1978; or*
4. *By partitioning land under the applicable land partitioning requirements in effect on or after October 19, 1978; and*
5. *"Satisfied all applicable land division laws" shall also mean that any subsequent boundary reconfiguration completed on or after December 28, 1993 was approved under the property line adjustment provisions of the land division code. (See Date of Creation and Existence for the effect of property line adjustments on qualifying a Lot of Record for the siting of a dwelling in the EFU and CFU districts.)*

Response: Tax lot 900 was first created in its current configuration by a deed recorded on February 4, 1969, in Book 661 Page 1297 of the Multnomah County deed records. The deed is provided in Appendix K.3. The major dates for determining the "applicable zoning laws" under subsection (B)(a) are indicated by MCC 39.3080(A), provided below. On the relevant 1969 creation date, the lot was zoned SR.

As indicated in MCC 39.3080(A), the lot was zoned SR on July 10, 1958.[5] For this lot, the 1968-5-21 Zoning Ordinance 100 as amended, is the relevant document.[6] The minimum lot size was 40,000 square feet, the minimum average lot width was 70 feet, the minimum lot depth was 100 feet, and lots were required to abut a street or have other approved suitable access. The 35.56-acre tax lot 900 fronting Lusted Road and Dodge Park Boulevard has an average width greater than 600 feet and a depth greater than 2000 feet. Therefore, tax lot 900 complied with the SR zoning standards and "satisfied all applicable zoning laws" when created, as required by subsection (B)(a).

The configuration of tax lot 900 has not changed since its creation in 1969; the legal description remains consistent throughout subsequent deeds to the most recent deed document, record number 2018-058579, as shown in the title report (Appendix K.2). Therefore, this lot was created by a "deed recorded with the Recording Section of the public office responsible for public records prior to October 19, 1978" under subsection (B)(b)(2) and the lot "satisfied all applicable land division laws" as required by subsection (B)(b).

Tax lot 300 (1S4E22DB) is located between Carpenter Lane and Dodge Park Boulevard. Tax lot 300 was created on May 16, 1972 by a deed recorded at book 857, page 88 in the Multnomah County deed records. The deed is provided in Appendix K.3. The major dates for determining the "applicable zoning laws" under subsection (B)(a) are indicated by MCC 39.3080(A), provided below. On the relevant 1972 creation date, the lot was zoned SR.

As indicated in MCC 39.3080(A), the lot was zoned SR on July 10, 1958.[7] For this lot, the 1968-5-21 Zoning Ordinance 100 as amended, is the relevant document.[8] The minimum lot size was 40,000 square feet, the minimum average lot width was 70 feet, the minimum lot depth was 100 feet, and lots were required to abut a street or have other approved suitable access. Tax lot 300 is two acres in size and has an average lot width of approximately 268 feet and lot depth of approximately 318 feet. The lot has

[5] County map showing 1958 zoning in the area: http://www4.multco.us/lup_historical_maps/1962-11-15%20Earliest%20maps%20-%20deemed%20to%20show%201955-58%20first%20zoning/1s4e21a62-11-15szm712.pdf
[6] 1968-5-21 Zoning Ordinance 100, including SR zone: http://www4.multco.us/lup_historical_maps/1968-5-21%20Zoning%20Ordinance%20100%20as%20amended/03%20Residential%20ZO%201968-5-21.PDF
[7] County map showing 1958 zoning in the area: http://www4.multco.us/lup_historical_maps/1962-11-15%20Earliest%20maps%20-%20deemed%20to%20show%201955-58%20first%20zoning/1s4e22_62-11-15szm715.pdf
[8] 1968-5-21 Zoning Ordinance 100, including SR zone: http://www4.multco.us/lup_historical_maps/1968-5-21%20Zoning%20Ordinance%20100%20as%20amended/03%20Residential%20ZO%201968-5-21.PDF

frontage on Carpenter Lane and Dodge Park Boulevard. Therefore, tax lot 300 complied with the applicable SR zoning standards in 1972 and "satisfied all applicable zoning laws" when created.

The configuration of tax lot 300 has not changed since its creation in 1972; the legal description remains consistent throughout subsequent deeds to the most recent deed document, record number 2021-165976, as shown in the title report (Appendix K.2). Therefore, this lot was created by a deed "recorded with the Recording Section of the public office responsible for public records prior to October 19, 1978" under subsection (B)(b)(2) and therefore it "satisfied all applicable land division laws" as required by subsection (B)(b).

Finished Water Pipelines—MCC 39.3080 Lot of Record—Multiple Use Agriculture-20 (MUA-20)

A. In addition to the standards in MCC 39.3005, for the purposes of the MUA-20 district the significant dates and ordinances for verifying zoning compliance may include, but are not limited to, the following:

1. *July 10, 1958, SR zone applied;*
2. *July 10, 1958, F-2 zone applied;*
3. *December 9, 1975, F-2 minimum lot size increased, Ord. 115 & 116;*
4. *October 6, 1977, MUA-20 zone applied, Ord. 148 & 149;*
5. *October 13, 1983, zone change from EFU to MUA-20 for some properties, Ord. 395;*
6. *May 16, 2002, Lot of Record section amended, Ord. 982, reenacted by Ord. 997.*

Response: This section provides information relevant to the evaluation of a lot of record but does not provide a separate standard to meet for approval.

B. A Lot of Record which has less than the minimum lot size for new parcels or lots, less than the front lot line minimums required, or which does not meet the access requirement of MCC 39.4345, may be occupied by any allowed use, review use or conditional use when in compliance with the other requirements of this district.

Response: Tax lot 900 has 35.56 acres, exceeding the 20-acre minimum lot size in the MUA-20 zone. The lot has approximately 460 feet of frontage along Lusted Road feet and approximately 660 feet of frontage along Dodge Park Boulevard. Both of these dimensions exceed the minimum 50-foot front lot line length in the MUA-20 zone and show that each lot abuts a public street in compliance with MCC 39.4345.

Tax lot 300 has approximately 268 feet of frontage along both Lusted Road and Dodge Park Boulevard. The dimensions exceed the minimum 50-foot front lot line length in the MUA-20 zone and show that the lot abuts a public street in compliance with MCC 39.4345. The lot is less than the 20-acre minimum size required in the MUA-20 zone for new parcels. As demonstrated below, the project is in compliance with the requirements of the district. Therefore, this standard is met.

C. Except as otherwise provided by MCC 39.4330, 39.4335, and 39.5300 through 39.5350, no sale or conveyance of any portion of a lot other than for a public purpose shall leave a structure on the remainder of the lot with less than minimum lot or yard requirements or result in a lot with less than the area or width requirements of this district.

Response: There has been no sale, conveyance, or reconfiguration of any portion of the subject lots creating nonconforming structure or lot conditions. As demonstrated above, the lots meet all minimum lot, yard, area, and width requirements of the MUA-20 zoning district. Therefore, this standard is met.

D. The following shall not be deemed to be a Lot of Record:
   1. An area of land described as a tax lot solely for assessment and taxation purposes;
   2. An area of land created by the foreclosure of a security interest.
   3. An area of land created by court decree.

Response: The subject lots are recorded in County deed records in their current configuration and are not tax lots solely for assessment and taxation purposes, nor is there evidence in the chain of title that they were created by foreclosure or court decree (Appendix K.2).

Lusted Road Distribution Main

The LRDM crosses three lots located in the CFU zone. Two of the lots, commonly known as tax lots 100 (1S4E22BA) and 200 (1S4E22BA), are owned by the Water Bureau. The third property is tax lot 801 (1S4E15C). Figures 7 and 8 show Tax Assessor Maps 1S4E22BA and 1S4E15C, respectively.

Figure 7. Assessor Map 1S4E22BA

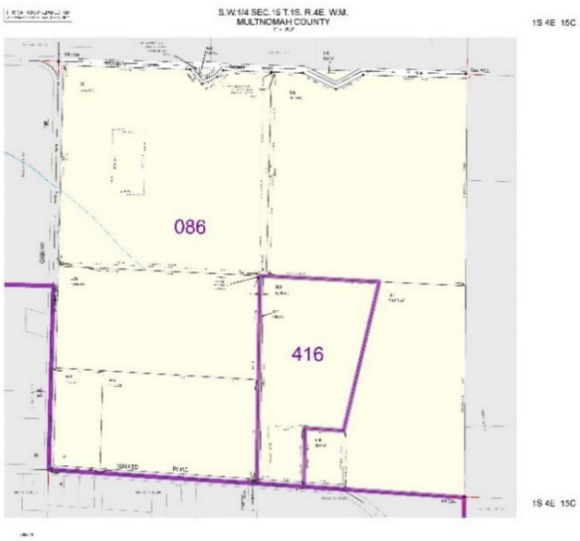

Figure 8. Assessor Map 1S4E15C

In Case T3-06-003 (Appendix O.3), the Hearings Officer found that both tax lot 100 (1S4E22BA) and tax lot 200 (1S4E22BA) are lots of record. Both lots are still owned by the City of Portland as shown in the title reports in Appendix K.2. The lot configuration has not changed since the 2006 permit; therefore, the properties remain lots of record.

In Case T3-2019-11784 (Appendix O.3), the Hearings Officer found that tax lot 801 is a lot of record. The lot is still in the same ownership as shown in the title report in Appendix K.2. Its configuration has not changed since the 2019 permit; therefore, the property remains a lot of record.

Compliance with Base Zone Standards

This sub-section demonstrates compliance with appliable MUA-20, RR, CFU, and EFU base zone standards.[9] Code text is shown in *italic font*, followed by the applicant's response explaining how applicable standards and criteria are met.

Multiple Use Agriculture (MUA-20) Base Zone

The applicable standards of the MUA-20 base zone are reviewed in this section. The MUA-20 zone applies to portions of Segments 2 through 5, as shown in Figure 1.

MCC 39.4305 Uses

No building, structure or land shall be used and no building or structure shall be hereafter erected, altered or enlarged in this base zone except for the uses listed in MCC 39.4310 through 39.4320 when found to comply with MCC 39.4325 through 39.4345 provided such uses occur on a Lot of Record.

Response: The lot of record status for the lots in the MUA-20 zone is addressed above. A current title report for each lot is provided in Appendix K.2. Compliance with MCC 39.4325 through 39.4345 is addressed below, as applicable.

MCC 39.4320 Conditional Uses

The following uses may be permitted when found by the approval authority to satisfy the applicable standards of this Chapter:

A. Community Service Uses listed in MCC 39.7520 pursuant to the provisions of MCC 39.7500 through MCC 39.7810; […]

Response: The proposed pipeline is a utility facility listed as a community service use under MCC 39.7520(A)(6). The applicable community service conditional use criteria are reviewed in **Section 2.A**.

MCC 39.4325 Dimensional Requirements and Development Standards

All development proposed in this base zone shall comply with the applicable provisions of this section.

A. Except as provided in MCC 39.3080, 39.4330, 39.4335 and 39.5300 through 39.5350, the minimum lot size for new parcels or lots shall be 20 acres.

B. That portion of a street which would accrue to an adjacent lot if the street were vacated shall be included in calculating the area of such lot.

[9] As noted above, where a ROW forms the boundary between two zones, the zoning extends to the center of the ROW and applies to the proposal for that section of the ROW.

Response: There are no "new parcels or lots" proposed in this application; therefore, Subsections A and B do not apply.

C. Minimum Yard Dimensions – Feet

Front	*Side*	*Street Side*	*Rear*
30	*10*	*30*	*30*

Response: As a CU in the MUA-20 zone, yard dimensions are modified by MCC 39.7525 Restrictions, notably to extend the side setback for one-story buildings to 20 feet. As provided in the response to MCC 39.7525(A) in **Section 2.A**, the minimum yard dimensions are met. At the intertie (Figure 9, below), the electrical building is set back 121 feet (front), 112 and 95 feet (sides) and over 2000 feet (south/rear). The stairway cover is set back 35 feet (front) and 42 feet (east side) from the nearest property lines. The fan cover is set back 75 feet (front) and 120 feet (sides).

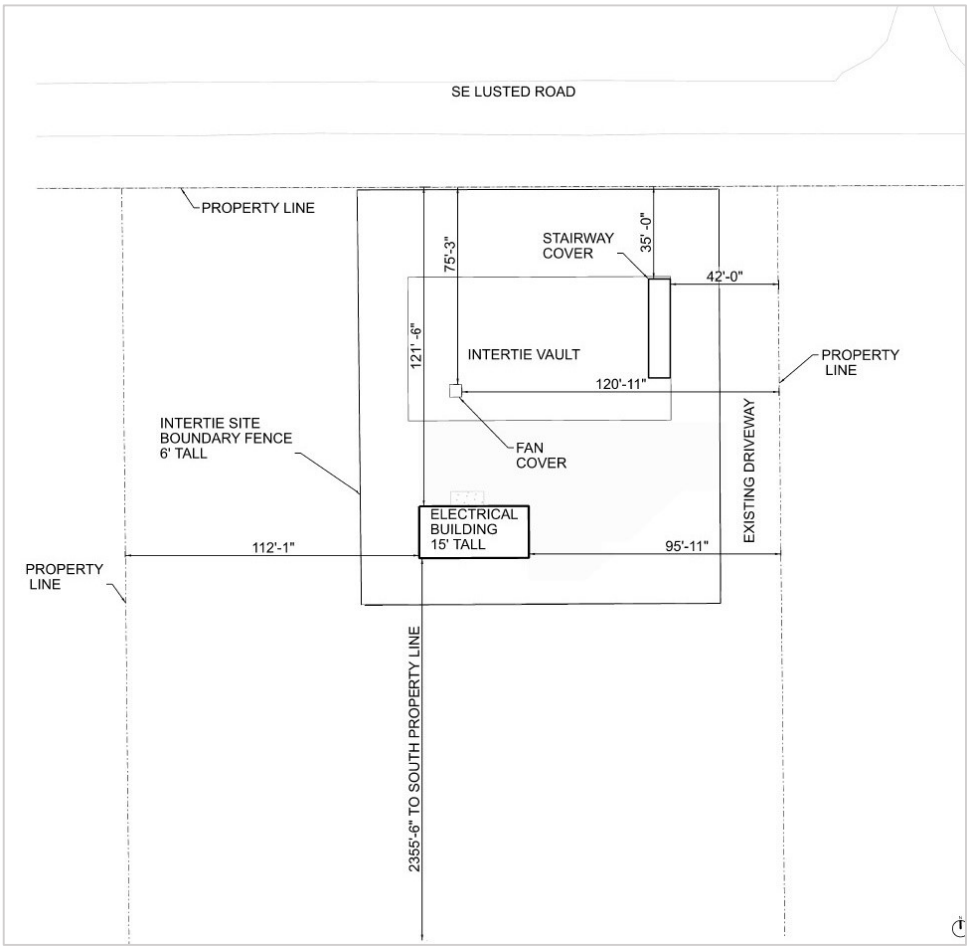

Figure 9. Yard Dimensions at Intertie Site

For the balance of the pipelines in the MUA-20 zone, yard requirements are also met. Underground pipelines are allowed in yards, per the definition of Yard in MCC 39.2000 ("An open space, on a lot with a building and bounded on one or more sides by such building, such space being unoccupied and unobstructed from 30 inches above the ground upward, except as otherwise specified in the base

zone."). Proposed pipeline appurtenances will be under 30 inches in height and therefore also comply with yard requirements. In addition, the majority of pipeline appurtenances are located in ROW, rather than "on a lot" in potential yard areas.

Maximum Structure Height – 35 feet

Response: The tallest proposed structure in the MUA-20 portions of the pipelines is the proposed electrical building at the intertie. The electrical building will be 16 feet tall at its peak, well below the maximum structure height for the zone.

Minimum Front Lot Line Length – 50 feet.

Response: No front lot lines will change in length as a result of the project. Additionally, as indicated in Figure 9, the line separating the front of the intertie easement from the street is more than 50 feet long, which would be in compliance with this standard if it applied.

1. *Notwithstanding the Minimum Yard Dimensions, but subject to all other applicable Code provisions, a fence or retaining wall may be located in a Yard, provided that a fence or retaining wall over six feet in height shall be setback from all Lot Lines a distance at least equal to the height of such fence or retaining wall.*

Response: Proposed perimeter fencing at the intertie will be six feet in height and therefore complies with the requirements to be located in a yard. No other portion of the pipelines propose to include fences.

2. *An Accessory Structure may encroach up to 40 percent into any required Yard subject to the following […]*

Response: There is no proposed encroachment into required yards.

D. *The minimum yard requirement shall be increased where the yard abuts a street having insufficient right-of-way width to serve the area. The county Road Official shall determine the necessary right-of-way widths based upon the county "Design and Construction Manual" and the Planning Director shall determine any additional yard requirements in consultation with the Road Official.*

Response: The existing Lusted Road ROW width is 60 feet. According to the county *Design and Construction Manual*, the preferred ROW width for a rural collector street is 18.3 meters, or 60 feet. Therefore, no dedications or additional yard setbacks are anticipated. As noted in the response to MCC 39.7525(A), the front yard setback substantially exceeds the minimum yard requirement.

E. *Structures such as barns, silos, windmills, antennae, chimneys or similar structures may exceed the height requirement if located at least 30 feet from any property line.*

Response: No proposed structures will exceed the maximum height requirements of the zone.

F. *Agricultural structures and equine facilities such as barns, stables, silos, farm equipment sheds, greenhouses or similar structures that do not exceed the maximum height requirement may have a reduced minimum rear yard of less than 30 feet, to a minimum of 10 feet, if: […]*

Response: No agricultural structures are proposed in this application. This standard does not apply.

G. On-site sewage disposal, storm water/drainage control, water systems unless these services are provided by public or community source, required parking, and yard areas shall be provided on the lot.

1. Sewage and stormwater disposal systems for existing development may be off-site in easement areas reserved for that purpose.

2. Stormwater/drainage control systems are required for new impervious surfaces. The system shall be adequate to ensure that the rate of runoff from the lot for the 10 year 24-hour storm event is no greater than that before the development.

Response: There are no occupied structures along the pipelines or at the intertie, and therefore no need for septic / sewage disposal. The sole enclosed building at the intertie site is an electrical utility building. The intertie has no restrooms, sinks, or other features that would require sewage service. Water service to the site will be provided by the PHWD to serve a hose bib at the electrical building and provide irrigation for establishment of landscaping. Both will be captured by the on-site stormwater system (Appendix H.2).

This standard applies "on the lot" rather than to road ROW, and therefore does not apply to the majority of the pipelines and appurtenances, which are located in ROW.

The Stormwater Management Plans in Appendix H.2 and H.3 detail the proposed stormwater facilities related to the pipelines and intertie, which will be located on site. The stormwater facilities are designed to meet a 25-year 24-hour storm event, exceeding this standard.

Yard and parking areas are addressed in **Section 2.A** and **2.B**, respectively. Overall, this standard is met.

H. New, replacement, or expansion of existing dwellings shall minimize impacts to existing farm uses on adjacent land (contiguous or across the street) by: […]

Response: No new, replaced, or expanded dwellings are proposed in this project. This standard does not apply.

I. Required parking, and yard areas shall be provided on the same Lot of Record as the development being served.

Response: Parking standards are addressed in **Section 2.B**. Yard standards are addressed above and in **Section 2.A**. Additionally, this standard applies to development on lots of record, rather than to road ROW, and therefore does not apply to the majority of the pipelines and appurtenances, which are located in ROW.

J. All exterior lighting shall comply with MCC 39.6850.

Response: No exterior lights are proposed in conjunction with the pipelines. Exterior lighting for the intertie is addressed in **Section 2.B**, Pipeline Design Review, and will comply with the dark sky lighting standards of MCC 39.6850, as further documented in Appendix F.1.

MCC 39.4335 Lot Sizes for Conditional Uses

The minimum lot size for a Conditional Use permitted pursuant to MCC 39.4320, except subsection (C)(1) thereof, shall be based upon [….]

Response: No new lots are proposed with this application. This standard does not apply.

MCC 39.4340 Off-Street Parking and Loading

Off-Street parking and loading shall be provided as required by MCC 39.6500 through 39.6600.

Response: The applicable parking criteria of MCC 39.6500 – 39.6600 are reviewed in **Section 2.B**, Pipeline Design Review.

MCC 39.4345 Access

All lots and parcels in this base zone shall abut a public street or shall have other access determined by the approval authority to be safe and convenient for pedestrians and for passenger and emergency vehicles. This access requirement does not apply to a pre-existing lot and parcel that constitutes a Lot of Record described in MCC 39.3080(B).

Response: All lots in this application are lots of record as documented above. Therefore, this standard does not apply.

Rural Residential (RR) Base Zone

The raw water pipelines between Lusted Road and Dodge Park Boulevard (a portion of Segment 1) are located in the RR zone. The applicable standards of the RR zone are reviewed in this section.

MCC 39.4355 Uses

No building, structure or land shall be used and no building or structure shall be hereafter erected, altered or enlarged in this base zone except for the uses listed in MCC 39.4360 through 39.4370 when found to comply with MCC 39.4375 through 39.4395 provided such uses occur on a Lot of Record.

Response: The lot of record status for the lots in the RR zone is addressed above. A current title report for each lot is provided in Appendix K.2. Compliance with MCC 39.4375 through 39.4395 is addressed below, as applicable.

MCC 39.4370 Conditional Uses

The following uses may be permitted when found by the Hearings Officer to satisfy the applicable standards of this Chapter:

A. Community Service Uses under the provisions of MCC 39.7500 through 39.7810;

Response: The proposed pipeline is a utility facility listed as a community service use under MCC 39.7520(A)(6). The applicable CU review criteria are reviewed in **Section 2.A**.

MCC 39.4375 Dimensional Requirements and Development Standards

A. Except as provided in MCC 39.3090, 39.4380, 39.4385 and 39.5300 through 39.5350, the minimum lot size for new parcels or lots shall be five acres. For properties within one mile of the Urban Growth Boundary, the minimum lot size shall be as currently required in the Oregon Administrative Rules Chapter 660, Division 004 (20 acre minimum as of October 4, 2000).

B. That portion of a street which would accrue to an adjacent lot if the street were vacated shall be included in calculating the area of such lot.

Response: There are no new parcels or lots proposed with this land use application. These standards are not applicable.

C. Minimum Yard Dimensions – Feet

Front	*Side*	*Street Side*	*Rear*
30	*10*	*30*	*30*

Response: As a CU in the RR zone, yard dimensions are modified by MCC 39.7525 Restrictions, notably to extend the side setback for one-story buildings to 20 feet. On the three subject RR lots, there is an at-grade vault located at the tunnel portal and two small pipeline appurtenances (<30" high vents) located on the Water Bureau property along Lusted Road. Under the definition of Yard in MCC 39.2000 ("An open space, on a lot with a building and bounded on one or more sides by such building, such space being unoccupied and unobstructed from 30 inches above the ground upward, except as otherwise specified in the base zone."), all structures are in compliance because they are below 30 inches in height. One nearby pipeline vent is located in ROW, rather than "on a lot" in potential yard areas, and are allowed by County Transportation Engineering, subject to an Utility Right of Way Use Permit (Section 18.275 of the County Road Rules). The pipeline appurtenances in ROW will also be under 30 inches in height.

Maximum Structure Height – 35 feet

Response: No structures exceed 30 inches in height on the RR lots.

Minimum Front Lot Line Length – 50 feet

Response: No front lot lines will change in length as a result of the project. This standard does not apply.

1. *Notwithstanding the Minimum Yard Dimensions, but subject to all other applicable Code provisions, a fence or retaining wall may be located in a Yard, provided that a fence or retaining wall over six feet in height shall be setback from all Lot Lines a distance at least equal to the height of such fence or retaining wall.[…]*

Response: No fences are proposed on the RR lots. A retaining wall on Tax Lot 1400 will be repaired along Lusted Road as part of the project. However, the retaining wall is less than six feet in height. Therefore, this standard is met.

2. *An Accessory Structure may encroach up to 40 percent into any required Yard subject to the following […]*

Response: There is no proposed Accessory Structure or encroachment into required yards. This standard does not apply.

D. The minimum yard requirement shall be increased where the yard abuts a street having insufficient right-of-way width to serve the area. The county Road Official shall determine the necessary right-of-way widths based upon the county "Design and Construction Manual" and the Planning Director shall determine any additional yard requirements in consultation with the Road Official.

Response: As described above, all portions of the project on RR lots are below ground or at grade, and therefore comply with yard requirements regardless of the area of the yard.

The proposed pipelines in the RR zone extend from Lusted Road to Dodge Park Boulevard. The existing ROW width for Lusted Road is 60 feet and 100 feet for Dodge Park Boulevard. According to the county *Design and Construction Manual*, the preferred right-of-way width for both (rural collector and local) streets is 18.3 meters, or 60-feet. Therefore, no dedications or additional yard setbacks are anticipated.

E. Structures such as barns, silos, windmills, antennae, chimneys, or similar structures may exceed the height requirement if located at least 30 feet from any property line.

Response: No proposed structures exceed the maximum height requirements of in the RR zone.

F. On-site sewage disposal, storm water/drainage control, water systems unless these services are provided by public or community source, shall be provided on the lot.

1. [N/A]

2. Stormwater/drainage control systems are required for new impervious surfaces. The system shall be adequate to ensure that the rate of runoff from the lot for the 10 year 24-hour storm event is no greater than that before the development.

Response: There are no habitable structures proposed in the RR zone and no need for septic / sewage disposal or water service systems.

The pipelines will be located underground with surface conditions generally restored to pre-construction state. The Pipeline Stormwater Report in Appendix H.3 addresses stormwater/drainage control along the pipelines. The stormwater facilities are designed to meet a 25-year 24-hour storm event, exceeding this standard.

G. New, replacement, or expansion of existing dwellings shall minimize impacts to existing farm uses on adjacent land (contiguous or across the street) by: […]

Response: No new, replaced, or expanded dwellings are proposed in this project. This standard does not apply.

H. All exterior lighting shall comply with MCC 39.6850.

Response: There is no exterior lighting proposed in the RR zone.

MCC 39.4385 Lot Sizes for Conditional Uses

The minimum lot size for a conditional use permitted pursuant to MCC 39.4370, except (B) (8) thereof, shall be based upon: [….]

Response: No new lots are proposed with this application. This standard does not apply.

MCC 39.4390 Off-Street Parking and Loading

Off-street parking and loading shall be provided as required by MCC 39.6500 through 39.6600.

Response: The applicable parking criteria of MCC 39.6500 – 39.6600 are reviewed in **Section 2.B**, Pipeline Design Review.

MCC 39.4395 Access

All lots and parcels in this base zone shall abut a public street or shall have other access determined by the approval authority to be safe and convenient for pedestrians and passenger and emergency vehicles. This access requirement does not apply to a pre-existing lot and parcel that constitutes a Lot of Record described in MCC 39.3090(B).

Response: The three subject lots in the RR zone are lots of record as documented above. All of the subject lots also abut a public street (Lusted Road).

Exclusive Farm Use (EFU) Base Zone

The applicable standards of the EFU base zone are reviewed in this section. As shown in Figure 1, the EFU zone applies to one lot east of the filtration facility in Segment 1, and to a portion of the ROW in Segment 3.

MCC 39.4215 Uses

No building, structure or land shall be used and no building or structure shall be hereafter erected, altered or enlarged in this base zone except for the uses listed in MCC 39.4220 through 39.4230 when found to comply with MCC 39.4245 through 39.4260 provided such uses occur on a Lot of Record.

Response: The lot of record status for the lot in the EFU zone is addressed above. A current title report for the lot is provided in Appendix K.2. Compliance with MCC 39.4245 through 39.4260 is addressed below, as applicable.

MCC 39.4220 Allowed Uses

G. Reconstruction or modification of public roads and highways, including the placement of utility facilities overhead and subsurface of public roads and highways along the public right-of-way, but not including the addition of travel lanes, where no removal or displacement of buildings will occur, or no new land parcels result. […].

Response: The portion of the pipelines in EFU in Segment 3 is located entirely in the subsurface of existing ROW, which falls under MCC 39.4220(G) as "the placement of utility facilities [in the] subsurface of public roads … along the public right-of-way[.]" No additional travel lanes, removal or displacement of buildings, nor new land parcels are proposed.

MCC 39.4225 Review Uses

Utility facilities necessary for public service, including wetland waste treatment systems […]

Response: The proposed pipeline in EFU in Segment 1 is a utility facility necessary for public service as documented in **Section 2.C**.

MCC 39.4245 Dimensional Requirements and Development Standards

A. *Except as provided in MCC 39.3070, the minimum lot size for new parcels shall be 80 acres in the EFU base zone.*
B. *That portion of a street which would accrue to an adjacent lot if the street were vacated shall be included in calculating the size of such lot.*

Response: There are no new parcels proposed in this application; therefore, Standard A and B do not apply.

C. *Minimum Yard Dimensions – Feet*

Front	*Side*	*Street Side*	*Rear*
30	*10*	*30*	*30*

Maximum Structure Height – 35 feet

Minimum Front Lot Line Length – 50 feet.

Response: On the subject lot, there are no proposed appurtenances or above-ground structures. The entire length of the pipeline crossing of this lot will be below ground. Underground pipelines are not subject to yard requirements, per the definition of Yard in MCC 39.2000. With no above-ground elements, the pipelines also meet the height standard. The front lot line length of the subject lot is 1,189 feet, exceeding the 50 feet standard.

For the EFU portion of the ROW in Segment 3, the pipelines and appurtenances are not "on a lot" and therefore not subject to yard requirements (MCC 39.2000). The lot length standard does not apply. At less than 30 inches, all appurtenances are below the structure height standard.

1. *Notwithstanding the Minimum Yard Dimensions, but subject to all other applicable Code provisions, a fence or retaining wall may be located in a Yard, provided that a fence or retaining wall over six feet in height shall be setback from all Lot Lines a distance at least equal to the height of such fence or retaining wall.*

Response: No fence or retaining walls are proposed on the subject lot or in the EFU portion of the ROW.

2. *An Accessory Structure may encroach up to 40 percent into any required Yard subject to the following […]*

Response: There is no proposed encroachment into required yards.

D. *The minimum yard requirement shall be increased where the yard abuts a street having insufficient right-of-way width to serve the area. The county Road Official shall determine the necessary right-of-way widths based upon the county "Design and Construction Manual" and the Planning Director shall determine any additional yard requirements in consultation with the Road Official.*

Response: As indicated above, yard requirements do not apply to underground pipelines.

E. Structures such as barns, silos, windmills, antennae, chimneys or similar structures may exceed the height requirement if located at least 30 feet from any property line.

Response: There are no proposed structures in the EFU zone that would exceed the maximum height requirements of the zone.

F. On-site sewage disposal, storm water/drainage control, water systems unless these services are provided by public or community source, shall be provided on the Lot of Record.

1. [N/A].

2. Stormwater/drainage control systems are required for new impervious surfaces. The system shall be adequate to ensure that the rate of runoff from the lot for the 10 year 24-hour storm event is no greater than that before the development.

Response: On-site sewage disposal, storm water/drainage control, water systems are provided on the lot currently. There are no proposed buildings or occupied structures associated with the underground pipeline that require these services. For the EFU portion of the ROW in Segment 3, the pipelines and appurtenances are not "on a lot" and therefore this standard does not apply.

G. Agricultural structures and equine facilities such as barns, stables, silos, farm equipment sheds, greenhouses or similar structures that do not exceed the maximum height requirement may have a reduced minimum rear yard of less than 30 feet, to a minimum of 10 feet, if […]

Response: There are no proposed agricultural structures or equine facilities; therefore, this standard does not apply.

H. All exterior lighting shall comply with MCC 39.6850.

Response: No exterior lights are proposed in conjunction with the pipelines in EFU. Therefore, this standard does not apply.

MCC 39.4260 Access

All lots and parcels in this base zone shall abut a public street or shall have other access determined by the approval authority to be safe and convenient for pedestrians and for passenger and emergency vehicles. This access requirement does not apply to a pre-existing lot and parcel that constitutes a Lot of Record described in MCC 39.3070(C).

Response: The subject lot is a lot of record as documented above. Therefore, this standard does not apply.

Commercial Forest Use (CFU) District

The northern section of the Lusted Road Distribution Main (LRDM) in Segment 4 is located in the CFU district. The applicable standards of the CFU district are reviewed in this section.

The LRDM will be buried underground for its entire length within the CFU zone. There are no appurtenances that rise to the surface. In addition, the LRDM will be located within an established pipeline corridor and run parallel to Conduit 3. No part of the LRDM will be visible in the CFU zone.

MCC 39.4065 Uses

No building, structure or land shall be used and no building or structure shall be hereafter erected, altered or enlarged in the CFU except for the uses listed in MCC 39.4070 through 39.4080 when found to comply with MCC 39.4100 through 39.4155 provided such uses occur on a Lot of Record.

Response: The lot of record status for the lot in the EFU zone is addressed above. A current title report for the lot is provided in Appendix K.2. Compliance with MCC 39.4100 through 39.4155 is addressed below, as applicable.

MCC 39.4080 Conditional Uses

The following uses may be permitted when found by the approval authority to satisfy the applicable standards of this Chapter:

A. The following Community Service Uses pursuant to all applicable approval criteria, including but not limited to the provisions of MCC 39.4100, MCC 39.4105, MCC 39.4110, MCC 39.4115, and MCC 39.7500 through MCC 39.7525. For purposes of this Section, the applicable criteria of MCC 39.7515 shall be limited to Subsections (A) through (H) of that Section. […]
(5) Water intake facility, related treatment facility, pumping station, and distribution line. The term "distribution line" includes water conduits and water transmission lines.

Response: The proposed main is a "Water…distribution line" listed as a community service use under MCC 39.4080(A)(5). The applicable conditional use criteria are reviewed in **Section 2.A**.

MCC 39.4100 Use Compatibility Standards

(A) Specified uses of MCC 39.4075 (D) and (E) and MCC 39.4080 (A), (B) and (C) may be allowed upon a finding that:

(1) The use will:

(a) Not force a significant change in, or significantly increase the cost of, accepted forestry or farming practices on surrounding forest or agricultural lands;

(b) Not significantly increase fire hazard, or significantly increase fire suppression costs, or significantly increase risks to fire suppression personnel; and

Response: Subsection 1(a) is a slightly different wording of the criterion in MCC 39.7515(C), which is addressed in **Section 2.A**. The Agricultural Land and Forestry Compatibility Studies (Appendices D.1 and D.3) find that the proposed pipelines will have no significant changes to accepted farm or forest practices nor increases in cost of those practices that will occur on surrounding lands.

Subsection (1)(b) addresses fire hazards and costs. The proposed distribution main will be buried underground for its entire length within the CFU zone. In addition, the water main will be located within the developed portion of the subject properties, under a driveway and in existing utility corridor, set back from forested areas. Therefore, the proposed water main will not significantly increase fire hazard, or significantly increase fire suppression costs, or significantly increase risks to fire suppression personnel.

(2) A statement has been recorded with the Division of Records that the owner and the successors in interest acknowledge the rights of owners of nearby property to conduct forest operations consistent with the Forest Practices Act and Rules, and to conduct accepted farming practices.

Response: The required statement was recorded with the Division of Records as part of the Case File T3-2019-11784 (Appendix O.3) for the LHTF approval. The recorded document is provided in Appendix D.7.

MCC 39.4105 Building Height Requirements

(A) Maximum structure height – 35 feet.

(B) Structures such as barns, silos, windmills, antennae, chimneys, or similar structures may exceed the height requirements.

Response: There are no above ground structures proposed in the CFU zone. These standards do not apply.

MCC 39.4110 Forest Practices Setbacks and Fire Safety Zones

The Forest Practice Setbacks and applicability of the Fire Safety Zones is based upon existing conditions, deviations are allowed through the exception process and the nature and location of the proposed use. The following requirements apply to all structures as specified:

Use	*Forest Practice Setbacks*		*Fire Safety Zones*	
Description of use and location	*Nonconforming Setbacks*	*Front Property Line Adjacent to County Maintained Road (feet)*	*All Other Setbacks (feet)*	*Fire Safety Zone Requirements (FSZ)*
Other Structures	*N/A*	*30*	*130*	*Primary & Secondary required*

Response: The proposed distribution main will be buried underground for its entire length within the CFU zone. "Other structures" are a listed use; however, the Hearings Officer determined that underground infrastructure is not a structure or building (Appendix O.3, Case File T3-2019-11784). In addition, the context of these standards indicates that "structures" refers to above-ground structures that have a roof and are sensitive to fire.

As staff and the Hearings Officer found in the above LHTF case: "the underground infrastructure related to the expansion are not subject to these requirements because of how structure is defined. A structure is defined as 'that which is built or constructed. An edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.' "'Building is defined as any structure used or intended for supporting or sheltering any use or occupancy.' Staff does not consider the associated pipeline to meet definition of building or structure and because of this it is not required to meet fire safety zone setbacks."

Therefore, fire safety zone setbacks do not apply to the proposed distribution main.

MCC 39.4115 Development Standards for Dwellings and Structures

All dwellings and structures shall comply with the approval criteria in (B) through (D) below except as provided in (A). All exterior lighting shall comply with MCC 39.6850:

> *(A) For the uses listed in this subsection, the applicable development standards are limited as follows:*

Response: None of the listed uses or standards apply to underground infrastructure, as discussed under the MCC 39.4110 response immediately above. For example, "the dwelling or structure shall … have a fire retardant roof." MCC 39.4115(C).

MCC 39.4135 Access

All lots and parcels in this base zone shall abut a public street or shall have other access deemed by the approval authority to be safe and convenient for pedestrians and for passenger and emergency vehicles. This access requirement does not apply to a preexisting lot and parcel that constitutes a Lot of Record described in MCC 39.3010(C), 39.3020(C), 39.3030(C), 39.3040(C), 39.3050(C) or 39.3060(C).

Response: All of the subject lots in the CFU district are lots of record as documented above. Therefore, this standard does not apply.

MCC 39.4140 Lot Size for Conditional Uses

Lots less than the minimum specified in MCC 39.4120(A) may be created for the uses listed in MCC 39.4070(R) and 39.4080(A)(1) through (6), (9) through (13), and (16) and (B)(1) through (4), after approval is obtained pursuant to MCC 39.4100 and based upon: [….]

Response: No new lots are proposed to be created with this application. This standard does not apply.

MCC 39.4145 Off-Street Parking and Loading

Off-street parking and loading permitted as an accessory use shall be provided as required by MCC 39.6500 through 39.6600.

Response: The applicable parking criteria of MCC 39.6500 – 39.6600 are reviewed in **Section 2.B**, Pipeline Design Review.

Compliance with Geohazards (GH) Overlay Standards

The proposed Geologic Hazard (GH) permits are for pipeline segments of the Bull Run Filtration Project within Multnomah County's GH Overlay. Please see **Introduction** for a full description of this project and its consolidated land use application package.

GH Forms, plans, and erosion control details are provided for the two pipeline segments within the GH Overlay, in Appendices I.3 and I.4. MCC 39.5075-5090 requirements are quoted below in *italic* font followed by findings demonstrating compliance with each applicable requirement and review standard.

MCC 39.5075 Permit Required

Unless exempt under this code or authorized pursuant to a Large Fill permit, no development, or ground disturbing activity shall occur: (1) on land located in hazard areas as identified on the Geologic Hazards Overlay map, or (2) where the disturbed area or the land on which the development will occur has average slopes of 25 percent or more, except pursuant to a Geological Hazards permit (GH).

Response: The GH permit is triggered by project development traversing GH Overlay areas as identified on Appendices I.3 and I.4, Sheet GH-001, Key Map. Two pipeline segments traverse GH Overlay areas:

1. A raw water (RW) connection from Lusted Road to the filtration facility site, also known as the **LRWP Tunnel**, will traverse a GH Overlay area on TLs 1S4E23C-01500 and 02200. The LRWP Tunnel pipeline segment will be entirely trenchless, with no proposed ground disturbance.
2. A finished water (FW) connection at the Lusted Hill Treatment Facility (LHTF) (TLs 1S4E22BA-00100 and 00200) is proposed to connect to existing conduits within an easement on TL 1S4E15C-00801. This segment is also known as the LRDM. The LRDM segment within most of the GH Overlay is proposed to be installed trenchless, with no ground disturbance. A small, trenched portion is proposed for 125 feet on a flat, upland portion of the site on the western side of the GH Overlay area.

MCC 39.5085 Geologic Hazards Permit Application Information Required

An application for a Geologic Hazards Permit shall include two copies of each of the following:

A. A scaled site plan showing the following both existing and proposed:

1. Property lines;

2. Building structures, driveways, roads and right of way boundaries;

3. Location of wells, utility lines, site drainage measures, stormwater disposal system, sanitary tanks and drainfields (primary and reserve);

4. Trees and vegetation proposed for removal and planting and an outline of wooded areas;

5. Water bodies;

6. Boundaries of ground disturbing activities;

7. Location and height of unsupported finished slopes;

8. *Location for wash out and cleanup of concrete equipment;*
9. *Storage location and proposed handling and disposal methods for potential sources of non-erosion pollution including pesticides, fertilizers, petrochemicals, solid waste, construction chemicals, and wastewaters;*
10. *Soil types;*
11. *Ground topography contours (contour intervals no greater than 10- feet); and*
12. *Erosion and sediment control measures.*

Response: The LRWP Tunnel segment is shown in Appendix I.3. No ground disturbance is proposed within the GH Overlay for this segment.

The LRDM Backfeed Pipeline segment is shown in Appendix I.4, Sheets GH-04 through GH-06, ESC-004, and ESC 201.

B. *Calculations of the total area of proposed ground disturbance (square feet), volume of proposed cut (cubic yards) and fill (cubic yards), total volume of fill that has been deposited on the site over the 20-year period preceding the date of application, and existing and proposed slopes in areas to be disturbed (percent slope). Such calculations are not required for fill physically supporting and/or protecting a structure or access road for essential and public facilities subject to earthquake or tsunami building code requirements of the Oregon Structural Specialty Code. For purposes of this subsection, the term "site" shall mean either a single lot of record or contiguous lots of record under same ownership, whichever results in the largest land area.*

Response: Calculations for total area of ground disturbance, proposed cuts and fills are provided in Geologic Hazards Form 1s in Appendices I.3 and I.4. Existing slope percentages are identified; no change in slope is proposed in either location.

As shown in Appendix I.3, the LRWP Tunnel consists of zero ground disturbance within the GH Overlay. Total volume of tunneled material to be disposed of is approximately 4,000 cubic yards. No fill has been deposited on the site within the last 20 years.

As shown in Appendix I.4, the LRDM will disturb approximately 260 cubic yards of soil within the open cut segment of the pipeline within the GH Overlay. Total volume of material to be disposed of is approximately 325 cubic yards. No fill has been deposited on the site within the last 20 years.

The proposed GHs permits are for construction of essential and public facilities subject to earthquake code standards that are either entirely (LRWP Tunnel) or almost entirely (LRDM) contained within tunnels under areas regulated by the GH Overlay; no import of fill regulated by MCC 39.5085 is proposed in either segment.

C. Written findings, together with any supplemental plans, maps, reports or other information necessary to demonstrate compliance of the proposal with all applicable provisions of the Geologic Hazards standards in MCC 39.5090. Necessary reports, certifications, or plans may pertain to: engineering, soil characteristics, stormwater drainage control, stream protection, erosion and sediment control, and replanting. The written findings and supplemental information shall include:

1. With respect to fill:

a. Description of fill materials, compaction methods, and density specifications (with calculations). The planning director may require additional studies or information or work regarding fill materials and compaction.

b. Statement of the total daily number of fill haul truck trips, travel timing, loaded haul truck weight, and haul truck travel route(s) to be used from any fill source(s) to the fill deposit site.

Response: Regulated fill is defined within MCC 39.5085(B) above and MCC 39.2000, shown below:

39.2000 Definitions.

Fill – The deposit (noun or verb) of any earth materials by motorized means for any purpose, including, but not limited to, stockpiling, storage, dumping, raising elevation or topography, and tracking materials such as mud onto a road surface with vehicle tires. Work conducted by hand without the use of motorized equipment is not filling. For the purposes of this code, fill does not include materials included in a design by a registered professional engineer to physically support and/or protect a structure or access road for essential and public facilities subject to earthquake or tsunami building code requirements of the Oregon Structural Specialty Code.

All materials involved in proposed pipeline development within GH Overlay areas are engineered to physically support and protect essential and public facilities (i.e., public water pipelines serving nearly one million people in the region). Structural fill materials are identified in Appendices I.3 and I.4 and are not regulated by GH permit standards.

2. *A description of the use that the ground disturbing activity will support or help facilitate.*

Response: The proposed use within GH Overlay areas are water pipeline components of the Bull Run Filtration Project. Please see **Introduction** for a full description of this project.

3. One of the following:

a. Additional topographic information showing the proposed development to be on land with average slopes less than 25 percent, and located more than 200 feet from a landslide, and that no cuts or fills in excess of 6 feet in depth are planned. High groundwater conditions shall be assumed unless documentation is available, demonstrating otherwise; or

b. A geological report prepared by a Certified Engineering Geologist or Geotechnical Engineer certifying that the site is suitable for the proposed development; or,

c. A GHP Form– 1 completed, signed and certified by a Certified Engineering Geologist or Geotechnical Engineer with their stamp and signature affixed indicating that the site is suitable for the proposed development.

i.If the GHP Form– 1 indicates a need for further investigation, or if the director requires further study based upon information contained in the GHP Form– 1, a geotechnical report as specified by the director shall be prepared and submitted.

a. A geotechnical investigation in preparation of a geotechnical report shall be conducted at the applicant's expense by a Certified Engineering Geologist or Geotechnical Engineer. The report shall include specific investigations required by the director and recommendations for any further work or changes in proposed work which may be necessary to ensure reasonable safety from landslide hazards.

b. Any development related manipulation of the site prior to issuance of a permit shall be subject to corrections as recommended by the geotechnical report to ensure safety of the proposed development.

c. Observation of work required by an approved geotechnical report shall be conducted by a Certified Engineering Geologist or Geotechnical Engineer at the applicant's expense; the geologist's or engineer's name shall be submitted to the director prior to issuance of the permit.

d. The director, at the applicant's expense, may require an evaluation of GHP Form– 1 or the geotechnical report by another Certified Engineering Geologist or Geotechnical Engineer.

Response: The project has prepared stamped and signed GHP Form 1s addressing both areas where pipeline components intersect with GH Overlay areas. These are provided in Appendices I.3 and I.4. As demonstrated in Appendices I.1b, I.1c, I.3 and I.4, a geotechnical engineer has certified that the proposed design within GH Overlay areas is suitable for the proposed development and geologic conditions.

4. Documentation of approval by each governing agency having authority over the matter of any new stormwater discharges into public right-of-way.

Response: No pipeline elements within GH overlay areas are proposed to generate stormwater discharge; no impervious surfaces are proposed within GH overlay areas. See Appendix H.3 for the Pipeline Stormwater Report and Appendix H.4 for the Stormwater Certificate.

5. Documentation of approval by the City of Portland Sanitarian and any other agency having authority over the matter of any new stormwater surcharges to sanitary drainfields.

Response: No pipeline elements within GH overlay areas are proposed to generate stormwater discharge to sanitary drainfields; no impervious surfaces are proposed within GH overlay areas. See Appendix H.3 for the Pipeline Stormwater Report and Appendix H.4 for the Stormwater Certificate.

MCC 39.5090 Geologic Hazards Permit Standards

A Geologic Hazards (GH) permit shall not be issued unless the application for such permit establishes compliance with MCC 39.6210 and satisfaction of the following standards:

A. The total cumulative deposit of fill on the site for the 20-year period preceding the date of the application for the GH permit, and including the fill proposed in the GH permit application, shall not exceed 5,000 cubic yards. Fill physically supporting and/or protecting a structure or access road for essential and public facilities subject to earthquake or tsunami building code requirements of the Oregon Structural Specialty Code is not included in this 5,000 cubic yard calculation. For purposes of this provision, the term "site" shall mean either a single lot of record or contiguous lots of record under same ownership, whichever results in the largest land area.

Response: As noted in responses to MCC 39.5085(B) and (C)(1) above, no regulated fill is proposed within the GH overlay area. No fill has been deposited either site within the last 20 years.

B. Fill shall be composed of earth materials only.

Response: Specifications for structural fill used in this project are provided in Appendices I.3. and I4. As noted above, no regulated fill is proposed within GH overlay areas.

C. Cut and fill slopes shall not exceed 33 percent grade (3 Horizontal: 1 Vertical) unless a Certified Engineering Geologist or Geotechnical Engineer certifies in writing that a grade in excess of 33 percent is safe (including, but not limited to, not endangering or disturbing adjoining property) and suitable for the proposed development.

Response: The entire project has been designed in close coordination with geotechnical engineers. Appendices I.3 and I.4 provide stamped certification by a geotechnical engineer that the project has been designed suitably for the proposed development.

D. Unsupported finished cuts and fills greater than 1 foot in height and less than or equal to 4 feet in height at any point shall meet a setback from any property line of a distance at least twice the height of the cut or fill, unless a Certified Engineering Geologist or Geotechnical Engineer certifies in writing that the cuts or fills will not endanger or disturb adjoining property. All unsupported finished cuts and fills greater than 4 feet in height at any point shall require a Certified Engineering Geologist or Geotechnical Engineer to certify in writing that the cuts or fills will not endanger or disturb adjoining property.

Response: No unsupported finished cuts and fills are proposed within GH overlay areas. Every portion of the project has been reviewed by a geotechnical engineer; no project ground disturbance will endanger or disturb adjoining properties, as demonstrated in Appendices I.3. and I.4.

E. Fills shall not encroach on any water body unless an Oregon licensed Professional Engineer certifies in writing that the altered portion of the waterbody will continue to provide equal or greater flood carrying capacity for a storm of 10-year design frequency.

Response: As shown on Appendix I.3, Sheet GH-02 and I.4, Sheet GH-04, there are no mapped water bodies within the proposed pipeline alignments or related development area within the GH Overlay. No proposed cuts or fill will encroach into any mapped water bodies.

F. Fill generated by dredging may be deposited on Sauvie Island only to assist in flood control or to improve a farm's soils or productivity, except that it may not be deposited in any SEC overlay, WRG overlay, or designated wetland.

Response: There is no fill generated from dredging proposed in this application, and no element of the project is on Sauvie Island. This standard is not applicable.

G. On sites within the Tualatin River drainage basin, erosion, sediment and stormwater drainage control measures shall satisfy the requirements of OAR 340-041- 0345(4) and shall be designed to perform as prescribed in the most recent edition of the City of Portland Erosion and Sediment Control Manual and the City of Portland Stormwater application, shall not exceed 5,000 cubic yards. For purposes of this provision, the term "site" Management Manual. Ground-disturbing activities within the Tualatin Basin shall provide a 100-foot undisturbed buffer from the top of the bank of a stream, or the ordinary high watermark (line of vegetation) of a water body, or within 100-feet of a wetland; unless a mitigation plan consistent with OAR 340-041-0345(4) is approved for alterations within the buffer area.

Response: The site is not located within the Tualatin River drainage basin. This standard is not applicable.

H. Stripping of vegetation, ground disturbing activities, or other soil disturbance shall be done in a manner which will minimize soil erosion, stabilize the soil as quickly as practicable, and expose the smallest practical area at any one time during construction.

Response: The LRWP Tunnel segment is shown on Appendix I.3, Sheets GH-02 and GH-03. This segment is entirely underground; no stripping of vegetation or ground disturbing activities are proposed.

The LRDM segment is shown on Appendix I.4, Sheets GH-04 through GH-06. Please see direction and details on Appendix I.4, Sheets ESC-004 and ESC-201.

I. Development Plans shall minimize cut or fill operations and ensure conformity with topography so as to create the least erosion potential and adequately accommodate the volume and velocity of surface runoff.

Response: Both pipeline segments within the GH Overlay minimize cuts and ground disturbance, and ensure conformity with topography, through the use of trenchless construction.

The entire LRWP Tunnel segment is trenchless, ensuring no ground disturbance as well as complete conformance with topography.

Over 90 percent of the LRDM segment is proposed to be trenchless. For the small portion of the project with an open cut trench, detailed erosion control methodology is provided in Appendix I.4, Sheets GH-06, ESC-004, and ESC-201.

J. Temporary vegetation and/or mulching shall be used to protect exposed critical areas during development.

Response: For the LRDM, temporary erosion control measures are proposed as detailed in Appendix I.4, Sheets GH-06, ESC-004, and ESC-201.

The entire LRWP Tunnel segment is trenchless, ensuring no exposed critical areas during development.

K. Whenever feasible, natural vegetation shall be retained, protected, and supplemented;

a. A 100-foot undisturbed buffer of natural vegetation shall be retained from the top of the bank of a stream, or from the ordinary high watermark (line of vegetation) of a water body, or within 100-feet of a wetland;

b. The buffer required in subsection (K)(1) may only be disturbed upon the approval of a mitigation plan which utilizes erosion, sediment, and stormwater control measures designed to perform as effectively as those prescribed in the most recent edition of the City of Portland Erosion and Sediment Control Manual and the City of Portland Stormwater Management Manual and which is consistent with attaining equivalent surface water quality standards as those established for the Tualatin River drainage basin in OAR 340-041-0345(4).

Response: As shown on Appendix I.3, Sheet GH-02 and I.4, Sheet GH-04, there are no mapped streams, water bodies or wetlands within the proposed pipeline alignments or related development area within or within 100 feet of the GH Overlay. No vegetation is proposed for removal within 100 feet of mapped streams, water bodies, or wetlands. This standard is met.

L. Permanent plantings and any required structural erosion control and drainage measures shall be installed as soon as practical.

Response: The entire LRWP Tunnel segment within the GH Overlay is trenchless, requiring no planting or structural erosion control or drainage measures.

For the LRDM, no structural erosion control or drainage measures are required as the project includes no additional impervious surface areas within the GH Overlay. Permanent ground cover planting over the small portion of the project using trenched construction is proposed as detailed in Appendix A.3, Sheet LU-602.

M. Provisions shall be made to effectively accommodate increased runoff caused by altered soil and surface conditions during and after development. The rate of surface water runoff shall be structurally retarded where necessary.

N. Sediment in the runoff water shall be trapped by use of debris basins, silt traps, or other measures until the disturbed area is stabilized.

Response: The entire LRWP Tunnel segment within the GH Overlay is trenchless, resulting in no change in soil and surface conditions relating to runoff water.

For the LRDM Backfeed Line, use of erosion control measures are proposed as detailed in Appendix I.4, Sheets GH-06, ESC-004, and ESC-201.

O. Provisions shall be made to prevent surface water from damaging the cut face of excavations or the sloping surface of fills by installation of temporary or permanent drainage across or above such areas, or by other suitable stabilization measures such as mulching or seeding.

P. All drainage measures shall be designed to prevent erosion and adequately carry existing and potential surface runoff to suitable drainageways such as storm drains, natural water bodies, drainage swales, or an approved drywell system.

Q. Where drainage swales are used to divert surface waters, they shall be vegetated or protected as required to minimize potential erosion.

Response: The entire LRWP Tunnel segment within the GH Overlay is trenchless, requiring no planting or structural erosion control or drainage measures.

For the LRDM, use of erosion control measures are proposed as detailed in Appendix I.4, Sheets GH-06, ESC-004, and ESC-201.

R. Erosion and sediment control measures must be utilized such that no visible or measurable erosion or sediment shall exit the site, enter the public right-of-way or be deposited into any water body or storm drainage system. Control measures which may be required include, but are not limited to:

a. Energy absorbing devices to reduce runoff water velocity;

b. Sedimentation controls such as sediment or debris basins. Any trapped materials shall be removed to an approved disposal site on an approved schedule;

c. Dispersal of water runoff from developed areas over large undisturbed areas.

Response: The entire LRWP Tunnel segment within the GH Overlay is trenchless, resulting in no ground disturbance or surface water runoff changes during or after construction.

For the LRDM, use of erosion control measures are proposed as detailed in Appendix I.4, Sheets GH-06, ESC-004, and ESC-201. Sheet ESC-004 provides a 26-point approach to erosion and sediment control for the proposed trenched area, including sediment fencing and a sediment review schedule. The disturbed area is centrally-located on a relatively flat portion of the site. The measures proposed are designed and stamped by a registered engineer to ensure that no visible or measurable erosion or sediment will exit the site, enter the public right-of-way, or be deposited into a water body or storm drainage system.

S. Disposed spoil material or stockpiled topsoil shall be prevented from eroding into water bodies by applying mulch or other protective covering; or by location at a sufficient distance from water bodies; or by other sediment reduction measures;

Response: No disposed spoil material or stockpiled topsoil is proposed within the GH Overlay area for either GH permit.

T. Such non-erosion pollution associated with construction such as pesticides, fertilizers, petrochemicals, solid wastes, construction chemicals, or wastewaters shall be prevented from leaving the construction site through proper handling, disposal, continuous site monitoring and clean-up activities.

Response: The entire LRWP Tunnel segment within the GH Overlay is trenchless; no pesticides, fertilizers, petrochemicals, solid wastes, construction chemicals, or wastewaters are proposed within the GH Overlay.

For the LRDM, handling, disposal, site monitoring and cleanup are proposed as detailed in Appendix I.4, Sheet ESC-004, BMP Matrix for Construction Phase.

U. On sites within the Balch Creek drainage basin, erosion, sediment, and stormwater control measures shall be designed to perform as effectively as those prescribed in the most recent edition of the City of Portland Erosion and Sediment Control Manual and the City of Portland Stormwater Management Manual. All ground disturbing activity within the basin shall be confined to the period between May first and October first of any year. All permanent vegetation or a winter cover crop shall be seeded or planted by October first the same year the development was begun; all soil not covered by buildings or other impervious surfaces must be completely vegetated by December first the same year the development was begun.

Response: No portion of the project is located within the Balch Creek drainage basin. This standard is not applicable.

V. Ground disturbing activities within a water body shall use instream best management practices designed to perform as prescribed in the City of Portland Erosion and Sediment Control Manual and the City of Portland Stormwater Management Manual.

Response: As shown on Appendix I.3, Sheet GH-02 and I.4, Sheet GH-04, there are no water bodies within the proposed pipeline alignments or related development area within the GH Overlay. No ground disturbing activities within water bodies are proposed in these GH permit applications.

W. The total daily number of fill haul truck trips shall not cause a transportation impact (as defined in the Multnomah County Road Rules) to the transportation system or fill haul truck travel routes, unless mitigated as approved by the County Transportation Division.

Response: As noted in responses to MCC 39.5085(B) and (C)(1), and MCC 39.5090(A) above, no regulated fill is proposed within GH Overlay areas. Therefore, the total daily number of fill haul truck trips related to the proposed geohazard permits is zero and will not cause a transportation impact.

X. Fill trucks shall be constructed, loaded, covered, or otherwise managed to prevent any of their load from dropping, sifting, leaking, or otherwise escaping from the vehicle. No fill shall be tracked or discharged in any manner onto any public right-of-way.

Response: As noted in responses to MCC 39.5085(B) and (C)(1), and MCC 39.5090(A) and (W) above, no regulated fill is proposed within GH Overlay areas. Therefore, no fill trucks are involved in relation to the geohazard permits. Trucks carrying structural fill and other construction materials will be covered and managed so that contents are kept from escaping when transported to construction sites.

Y. No compensation, monetary or otherwise, shall be received by the property owner for the receipt or placement of fill.

Response: As noted in responses to MCC 39.5085(B) and (C)(1), and MCC 39.5090(A), (W), and (X) above, no regulated fill is proposed within GH overlay areas. This standard is not applicable.