

Planning & Development • 22500 Salamo Rd #1000 • West Linn, Oregon 97068 Telephone 503.656.4211 • Fax 503.656.4106 • westlinnoregon.gov

DEVELOPMENT REVIEW APPLIC	CATION
For Office Use Only	
STAFF CONTACT Sohn Boyd. PROJECT NO(S). MISC-16-0	10
NON-REFUNDABLE FEE(S) REFUNDABLE DEPOSIT(S)	TOTAL
Type of Review (Please check all that apply):	
<ul> <li>Annexation (ANX)</li> <li>Historic Review</li> <li>Appeal and Review (AP) *</li> <li>Legislative Plan or Change</li> <li>Conditional Use (CUP)</li> <li>Lot Line Adjustment (LLA) */**</li> <li>Design Review (DR)</li> <li>Minor Partition (MIP) (Preliminary Plat or Plan</li> <li>Easement Vacation</li> <li>Non-Conforming Lots, Uses &amp; Structures</li> <li>Extraterritorial Ext. of Utilities</li> <li>Planned Unit Development (PUD)</li> <li>Final Plat or Plan (FP)</li> <li>Pre-Application Conference (PA) */**</li> <li>Flood Management Area</li> <li>Street Vacation</li> <li>Hillside Protection &amp; Erosion Control</li> <li>Home Occupation, Pre-Application, Sidewalk Use, Sign Review Permit, and Temp different or additional application forms, available on the City website or at City</li> </ul>	<ul> <li>Water Resource Area Protection/Single Lot (WAP)</li> <li>Water Resource Area Protection/Wetland (WAP)</li> <li>Willamette &amp; Tualatin River Greenway (WRG)</li> <li>Zone Change</li> </ul>
Site Location/Address:	Assessor's Map No.: 21E25AD
6123 and 6175 Skyline Dr.	Tax Lot(s): 09900, 09901
	Total Land Area: .98 acre
Brief Description of Proposal: Temporary construction use of properties during the Bolton Re	eservoir Replacement Project.
Applicant Name: Lance Calvert, P.E., Public Works Director/City Engineer	Phone: 503-722-5516
Address: 22500 Salamo Rd.	Email: lcalvert@westlinnoregon.gov
City State Zip: West Linn, OR 97068	
<b>Owner Name</b> (required): City of West Linn	Phone: 503-657-0331
Address: 22500 Salamo Rd.	Email:
City State Zip: West Linn, OR 97068	
Consultant Name: N/A (please print)	Phone:
Address:	Email:
City State Zip:	
<ol> <li>All application fees are non-refundable (excluding deposit). Any overruns to deposit.</li> <li>The owner/applicant or their representative should be present at all public hearing 3. A denial or approval may be reversed on appeal. No permit will be in effect until the transmission of application materials must be one (1) complete hard-copy sets (single sided) of application materials must be one (1) complete set of digital application materials must also be submitted on Cl If large sets of plans are required in application please submit only two sets.</li> </ol>	s. he appeal period has expired. submitted with this application.
* No CD required / ** Only one hard-copy set needed	
The undersigned property owner(s) hereby authorizes the filing of this application, and authorize comply with all code requirements applicable to my application. Acceptance of this application of to the Community Development Code and to other regulations adopted after the application is a Approved applications and subsequent development is not vested under the provisions in place a	does not infer a complete submittal. All amendments pproved shall be enforced where applicable.

Applicant's signature

1/4/16 Date

Owner's signature (required)

ENGINEERING 22500 Salamo Rd. West Linn Oregon



telephone: (503) 722-5500

fax: (503) 656-4106

## BOLTON RESERVOIR REPLACEMENT TEMPORARY USE PERMIT APPLICATION 6123 AND 6175 SKYLINE DRIVE

- OWNER: City of West Linn 22500 Salamo Rd. West Linn, OR 97068
- APPLICANT: City of West Linn Public Works Lance Calvert, P.E., Public Works Director/City Engineer Erich Lais, P.E., Assistant City Engineer 22500 Salamo Rd., Suite 800 West Linn, OR 97068
- SITE INFORMATION: 6123 Skyline Dr., West Linn, OR 97068 Assessor's Map 21E25AD, Tax Lot 09900, R-10 Zoning 32,503 square feet/0.75 acres

6175 Skyline Dr., West Linn, OR 97068 Assessor's Map 21E25AD, Tax Lot 09901, R-10 Zoning 10,001 square feet/0.23 acres

APPROVAL CRITERIA:Community Development Code (CDC) Chapters 11 Single Family Residential<br/>Detached, 35 Temporary Structures and Uses, 42 Clear Vision Areas, 46 Off<br/>Street Parking, Loading and Reservoir Areas, 48 Access, Egress and Circulation.

## **INTRODUCTION AND BACKGROUND**

This application is a request for temporary use of the properties at 6123 and 6175 Skyline Drive for construction related uses including material and equipment storage, construction office space, construction staging, and construction parking for the Bolton Reservoir Replacement Project. These properties are directly adjacent to the Bolton Reservoir site. These properties were purchased by the City at the February 9<sup>th</sup>, 2015 meeting by City Council under Resolution 2015-02 (attached for reference) with the express purpose for use during construction of the Bolton Reservoir.

Use of the two sites during construction provides many benefits to the public, the contractor, and the City. These benefits include greatly reducing truck trips to the site (approximately 1,000 to 1,700 less truck trips) due to the ability to stockpile excavated soil for reservoir backfilling onsite, improving construction efficiency and safety, reducing the need for shoring the reservoir excavation, improving construction access/staging, and reducing the number of large trees needing to be cleared from the Reservoir site. Net savings of public funds are estimated at \$175,000. Both properties will be restored, designated as surplus, and sold following completion of construction in accordance with the Resolution 2015-02.

## **RESPONSES TO APPLICABLE CDC APPROVAL CRITERIA**

#### I. CHAPTER 11, SINGLE-FAMILY RESIDENTIAL DETACHED AND ATTACHED, R-10

11.050 USES AND DEVELOPMENT PERMITTED UNDER PRESCRIBED CONDITIONS The following uses are allowed in this zone under prescribed conditions.

3. Temporary uses, subject to the provisions of Chapter <u>35</u> CDC.

RESPONSE: Temporary uses, such as those for short-term construction-related uses are permitted in R-10 zones subject to City approval and the provisions of Chapter 35, which this application will address. The proposed temporary use is for Bolton Reservoir staging and construction-related uses at 6123 and 6175 Skyline Drive and is currently anticipated to be needed through the scheduled project completion date of November 2017.

11.070 DIMENSIONAL REQUIREMENTS, USES PERMITTED OUTRIGHT AND USES PERMITTED UNDER PRESCRIBED CONDITIONS

Except as may be otherwise provided by the provisions of this code, the following are the requirements for uses within this zone:

- 1. The minimum lot size shall be 10,000 square feet for a single-family detached unit.
- 2. The minimum front lot line length or the minimum lot width at the front lot line shall be 35 feet.
- 3. The average minimum lot width shall be 50 feet.
- 4. Repealed by Ord. 1622.

...

- 5. Except as specified in CDC <u>25.070(C)(1)</u> through (4) for the Willamette Historic District, the minimum yard dimensions or minimum building setback area from the lot line shall be:
- a. For the front yard, 20 feet; except for steeply sloped lots where the provisions of CDC <u>41.010</u> shall apply.
- b. For an interior side yard, seven and one-half feet.
- c. For a side yard abutting a street, 15 feet.
- d. For a rear yard, 20 feet.
- 6. The maximum building height shall be 35 feet, except for steeply sloped lots in which case the provisions of Chapter <u>41</u> CDC shall apply.
- 7. The maximum lot coverage shall be 35 percent.

8. The minimum width of an accessway to a lot which does not abut a street or a flag lot shall be 15 feet.

9. The floor area ratio shall be 0.45. Type I and II lands shall not be counted toward lot area when determining allowable floor area ratio, except that a minimum floor area ratio of 0.30 shall be allowed regardless of the classification of lands within the property. That 30 percent shall be based upon the entire property including Type I and II lands. Existing residences in excess of this standard may be replaced to their prior dimensions when damaged without the requirement that the homeowner obtain a non-conforming structures permit under Chapter <u>66</u> CDC.

10. The sidewall provisions of Chapter <u>43</u> CDC shall apply.

## **RESPONSE:** No new lots or permanent structures are proposed at this time. Lot sizes conform to the R-10 zoning.

#### **II. CHAPTER 35, TEMPORARY USES AND STRUCTURES**

#### 35.010 APPLICABILITY

Notwithstanding the limitations of use established by this code, the approval authority can authorize temporary uses consistent with the provisions of this chapter. (Ord. 1613 § 6, 2013)

#### **RESPONSE:** This temporary use application is submitted for approval in accordance with Chapter 35.

#### 35.020 EXEMPTIONS

The following temporary uses and structures are exempt from the provisions of this chapter:

A. Construction related uses including, but not limited to, trailers and staging areas, on sites approved for the associated development.

B. Portable outdoor storage units or similar structures as are typically used for storing items in conjunction with a move, minor remodel, or construction project that will remain on site 14 days or less during a given calendar year. (Ord. 1613 § 6, 2013)

RESPONSE: This temporary use application is for a construction-related use during the Bolton Reservoir Replacement Project. The proposed use is not an allowed exemption under this section because it is not taking place on a site clearly approved under the Bolton Reservoir Replacement Project Conditional Use/Design Review Permit. The site use will continue until conclusion of construction in approximately November 2017, well beyond the 14 day exemption.

#### 35.030 TEMPORARY USE STANDARDS

A. Temporary uses shall be approved if they meet the following standards:

1. Sites accommodating a temporary use shall be appropriate for the proposed use, as determined by the approval authority with consideration of the following:

a. The proposed site shall have adequate parking and circulation space consistent with Chapter <u>46</u> CDC, Off-Street Parking, Loading and Reservoir Areas; safe ingress and egress consistent with Chapter <u>48</u> CDC, Access, Egress and Circulation; and adequate line of sight and vision clearance per Chapter <u>42</u> CDC, Clear Vision Areas.

RESPONSE: The sites, at just under one acre combined, have more than adequate parking and circulation space to meet the needs of the contractor and have safe ingress/egress and clear vision clearance in accordance with City code requirements. The sites are not open to the public and no new permanent structures will be placed on them. Applicable elements of these chapters will be addressed in detail further on in this document.

b. The proposed site shall have a paved or graveled surface sufficient to avoid dust generation and mud tracking from anticipated traffic or erosion control measures, consistent with Clackamas County Erosion Prevention and Sediment Control Planning and Design Manual, rev. 2008, and shall be used to keep any mud, sediment and dust on site.

RESPONSE: The site will be maintained in accordance with the current Clackamas County Erosion Prevention and Sediment Control Planning and Design Manual and as shown in the attached erosion control plans. Both the contractor and City staff will regularly inspect the erosion control measures to ensure their adequacy. The existing home at 6123 Skyline Drive has been properly demolished and the site has been surrounded by sediment fence and erosion control measures. Downstream catch basins have sediment control protections, and access to the 6123 Skyline Drive site will be via an approved rock/gravel construction entrance. Any off-site tracking shall be cleaned up promptly by the contractor per City code.

The existing home and paved asphalt driveway at 6175 Skyline Drive will remain for use as a job-site construction office. No grading or actual construction activities will take place on the 6175 Skyline Drive site. Regular construction coordination meetings will take place in the home. The home and grove of protected trees will remain to provide a screen and buffer of construction activities for residents to the west.

Non-significant tree removal has been completed according to code and with the approval of the City Arborist under the Bolton Reservoir building/tree removal permit. Remaining trees on the site will be protected at the dripline plus ten feet with fencing per the approved tree protection plan (attached). Construction noise levels will be maintained in accordance with all City codes, including Municipal Code section 5.487, "Sound Levels and Noise."

c. The proposed use shall conform to all applicable requirements of Chapter <u>27</u> CDC, Flood Management Areas; Chapter <u>28</u> CDC, Willamette and Tualatin River Protection; Chapter <u>32</u> CDC, Water Resource Area Protection; and other City regulations.

**RESPONSE:** This site is not within a Flood Management, Water Resource, or Willamette/Tualatin River Protection Area. This criteria is not applicable.

d. The proposed temporary use shall not be materially detrimental to the public welfare, or injurious to the property or improvements in the immediate vicinity.

RESPONSE: Use of the temporary site provides a benefit as part of public improvements to the area with no detrimental impact to property in the vicinity. Benefits include greatly reducing truck trips to and from the site due to the ability to stockpile soil onsite, improving construction efficiency, reducing the need for shoring the reservoir excavation, improving construction access/staging, and reducing the number of large trees needing to be cleared from the Reservoir site.

2. The approval authority may require that structures and trailers allowed as temporary uses for more than 60 days be screened from the view of occupants of any abutting residential and commercial structures, consistent with Chapter <u>44</u> CDC, unless the applicant demonstrates that such screening is not needed.

RESPONSE: No temporary structures are proposed. Existing fences, grading, and vegetation already substantially screen the site from adjacent properties. The existing home at 6175 Skyline Drive and a grove of protected trees behind this property will remain to provide a buffer between primary construction activities on 6123 Skyline Drive and residents to the west.

3. Drop boxes, trailers, or structures that serve a similar function are allowed, consistent with subsection A of this section, for registered nonprofit, religious or benevolent groups, orders or associations, when they are proposed to be located in General Commercial, Office Business Center, Campus Industrial, General Industrial, or Neighborhood Commercial districts. Drop boxes and structures serving a similar function, not including trailers, shall not exceed seven feet in height or have a footprint of more than 25 square feet on a single site. Their color shall be limited to earth tones.

## **RESPONSE:** Drop boxes for nonprofit, religious, associations or other similar uses are not proposed for this site. This criteria is not applicable.

4. The property owner has authorized the proposed temporary use in writing.

#### **RESPONSE:** The City is the property owner.

B. The approval authority may attach conditions to any temporary use approval as needed to achieve compliance with the applicable standards of this section or otherwise protect public health, safety, and welfare. (Ord. 1613 § 6, 2013; amended during July 2014 supplement)

#### **RESPONSE:** As the applicant, we see no additional conditions necessary to meet standards.

#### 35.050 DURATION OF TEMPORARY USES

Temporary uses may be allowed for up to 60 days, with one additional renewal for no greater duration than the original approval, except as follows:

A. Construction trailers and associated parking and staging areas beyond the site approved for the associated development may be allowed for the duration of active construction projects.

# **RESPONSE:** The proposed temporary use is for construction staging, construction office space, and material/equipment storage and is requested for the duration of the construction project. Currently, it is estimated that the need for the temporary use will continue through November 2017.

B. Drop boxes, structures serving a similar function, and trailers authorized under CDC <u>35.030(A)</u> will be allowed indefinitely, but they will be revoked if they are unused or abandoned for a period of 60 days or if material is not contained by the drop box or trailer and allowed to accumulate outside of the drop box, structure, or trailer.

Upon revocation of the approval, the applicant shall be responsible for removing the drop box, structure, or trailer unless it is abandoned; in that case, removal shall be the responsibility of the property owner.

## **RESPONSE:** Drop boxes for nonprofit, religious, associations or other similar uses are not proposed for this site. This criteria is not applicable.

C. Temporary uses approved by the City Council pursuant to CDC <u>99.060(C)(1)(d)</u> shall be for up to one year with one possible renewal of up to one year, for a maximum of two years. (Ord. 1613 § 6, 2013)

## **RESPONSE:** Work at the Bolton Reservoir is not anticipated to be complete until November 2017. The duration of this temporary use is expected to exceed one year and will require renewal.

#### 42.020 CLEAR VISION AREAS REQUIRED, USES PROHIBITED

A. A clear vision area shall be maintained on the corners of all property adjacent to an intersection as provided by CDC <u>42.040</u> and <u>42.050</u>.

B. A clear vision area shall contain no planting, fence, wall, structure or temporary or permanent obstruction (except for an occasional utility pole or tree) exceeding three feet in height, measured from the top of the curb, or, where no curb exists, from the street centerline grade, except that trees exceeding this height may be located in this area, provided all branches below eight feet are removed. (Ord. 1192, 1987)

#### **RESPONSE:** A clear vision area in accordance with this code will be maintained at all site accesses.

#### 42.050 COMPUTATION; ACCESSWAY LESS THAN 24 FEET IN WIDTH

The clear vision area for street and accessway intersections (accessways having less than 24 feet in width) shall be that triangular area whose base extends 30 feet along the street right-of-way line in both

directions from the centerline of the accessway at the front setback line of a single-family and two-family residence, and 30 feet back from the property line on all other types of uses.

## **RESPONSE:** A 30 foot clear vision area will be maintained in accordance with this code at all site accesses.

#### 46.020 APPLICABILITY AND GENERAL PROVISIONS

A. At the time a structure is erected or enlarged, or the use of a structure or unit of land is changed within any zone, parking spaces, loading areas and reservoir areas shall be provided in accordance with the requirements of this chapter unless other requirements are otherwise established as a part of the development approval process.

B. The provision and maintenance of off-street parking and loading spaces are the continuing obligation of the property owner.

C. No building or other permit shall be issued until plans are approved that show the property that is and will remain available for exclusive use as off-street parking and loading space as required by this chapter.

D. Required parking spaces and loading areas shall be improved to the standards contained in this chapter and shall be available for use at the time of the final building inspection except as provided in CDC <u>46.150</u>. (Ord. 1463, 2000; Ord. 1622 § 25, 2014; Ord. 1636 § 30, 2014)

**RESPONSE:** The proposed use is temporary staging of equipment and materials for construction of the new Bolton Reservoir. No permanent structures are proposed for this temporary use. Parking not directly associated with the construction project is not proposed and no permanent surfacing is planned. This criteria is not applicable.

#### 46.090 MINIMUM PARKING SPACE REQUIREMENTS

**RESPONSE:** As the proposed use is temporary staging for construction of the new Bolton Reservoir, there are no minimum number of parking spaces required. The sites will sufficiently accommodate the contractor and City's needs for staging, storage, and parking related to Reservoir construction.

#### 48.010 PURPOSE

The purpose of this chapter is to ensure that efficient, safe, and well-directed vehicular, bicycle, and pedestrian access, circulation, and egress are designed into development proposals. Access management seeks to balance mobility, the need to provide efficient, safe and timely travel with the ability to allow access to individual properties. Proper implementation of access management techniques should guarantee reduced congestion, reduced accident rates, less need for roadway widening, conservation of energy, and reduced air pollution. (Ord. 1584, 2008)

## **RESPONSE:** Access will be at the location of driveways that already access the sites. These accesses provide clear and safe ingress and egress to the sites.

#### 48.040 MINIMUM VEHICLE REQUIREMENTS FOR NON-RESIDENTIAL USES

Access, egress, and circulation system for all non-residential uses shall not be less than the following:

- A. Service drives for non-residential uses shall be fully improved with hard surface pavement:
- 1. With a minimum of 24-foot width when accommodating two-way traffic; or
- 2. With a minimum of 15-foot width when accommodating one-way traffic. Horizontal clearance shall be two and one-half feet wide on either side of the driveway.
- 3. Meet the requirements of CDC <u>48.030(E)(3)</u> through (6).
- 4. Pickup window driveways may be 12 feet wide unless the Fire Chief determines additional width is required.

B. All non-residential uses shall be served by one or more service drives as determined necessary to provide convenient and safe access to the property and designed according to CDC <u>48.030</u>(A). In no case

shall the design of the service drive or drives require or facilitate the backward movement or other maneuvering of a vehicle within a street, other than an alley.

C. All on-site maneuvering and/or access drives shall be maintained pursuant to CDC 46.130.

D. Gated accessways to non-residential uses are prohibited unless required for public safety or security. (Ord. 1408, 1998, Ord. 1463, 2000)

**RESPONSE:** Construction access to 6123 Skyline will be maintained with a rock and gravel entrance designed to control dirt and mud from leaving the site in accordance with City erosion control standards. Access to the 6175 Skyline Drive property will be left asphalt as-is to accommodate smaller personnel vehicles using the existing home as a construction office.

#### **SUMMARY**

Applicable criteria of the Community Development Code have been met or exceeded in this application for temporary use of the 6123 and 6175 Skyline Drive properties for construction purposes during replacement of the Bolton Reservoir. These properties are critical to the timely and efficient construction of the new Bolton Reservoir to serve the citizens of West Linn. These properties were purchased publically with the express intention to be used for the Bolton Reservoir Replacement Project. Use of the two sites during construction provides many monetary and community benefits to the public, the contractor, and the City. The applicant courteously requests approval of this temporary use permit.

#### **RESOLUTION NO. 2015 - 02**

#### A RESOLUTION AUTHORIZING THE PURCHASE OF 6123 SKYLINE DRIVE AND 6175 SKYLINE DRIVE, WEST LINN, OREGON, TO AID IN THE CONSTRUCTION OF THE BOLTON RESERVOIR REPLACEMENT

WHEREAS, the Bolton Reservoir is in need of replacement; and

**WHEREAS,** the City has entered into a contract for the design and engineering of the Bolton Reservoir replacement that includes an evaluation of potential sites for the new reservoir;

**WHEREAS,** the City Council has determined that the current site of the Bolton Reservoir will be the location for the replacement reservoir;

WHEREAS, construction at the current site on Skyline Drive would necessitate the purchase of nearby properties for staging and construction purposes;

**WHEREAS,** the property owners of 6123 Skyline Drive and 6175 Skyline Drive are willing sellers of properties that could be used for staging and construction purposes; and

**WHEREAS**, West Linn City Charter, Chapter XI, Section 46(d) requires the City Council to determine the appropriate designation of the property.

NOW, THEREFORE, THE CITY OF WEST LINN RESOLVES AS FOLLOWS:

**SECTION 1. Designation of Bolton Reservoir Site.** The City Council designates the current site of the Bolton Reservoir as the location for the replacement reservoir.

**SECTION 2. Acquisition of Properties.** The City Council authorizes the City Manager to purchase the properties located at 6123 Skyline Drive and 6175 Skyline Drive, West Linn, with money from the water fund. The City Council authorizes the City Attorney to undertake any actions necessary to facilitate the purchase of the properties.

**SECTION 3. Designation of Properties.** The properties located at 6123 Skyline Drive and 6175 Skyline Drive, West Linn shall be designated as city-owned properties upon acquisition.

**SECTION 4.** Surplus of Properties. The City Council authorizes the purchase of these properties with the intent to surplus and sell the properties after the Bolton Reservoir replacement is completed. Any proceeds received from the future sale of the properties would be deposited in the water fund.

This resolution was PASSED and ADOPTED this 9th day of February, 2015, and takes effect upon passage.

JOHN KOVASH, MAYOR

ATTEST:

KATHY MOLLUSKY, CITY RECORDER

APPROVED AS TO FORM: **CITY ATTORNEY** 



#### Agenda Report 2015-02-09-02

Date:	January 30, 2015
То:	John Kovash, Mayor Members, West Linn City Council
From:	Megan Thornton, Assistant City Attorney
Through:	Chris Jordan, City Manager $C \mathcal{J}$
Subject:	Resolution 2015-02, Purchase of 6123 and

#### Purpose

Staff is seeking authorization from the Council to proceed with the purchase of 6123 and 6175 Skyline Drive.

6175 Skyline Drive

#### Question(s) for Council:

Does Council wish the City to proceed with purchasing the properties on Skyline Drive?

#### **Public Hearing Required:**

None required.

#### **Background & Discussion:**

Staff evaluated options to purchase properties near Bolton Reservoir to aid in the future construction of the replacement for the Bolton Reservoir. During site visits to the Bolton Reservoir, staff identified two neighboring properties that would be advantageous to own if future construction occurs in that location. Staff approached the property owners about the purchase of the properties, and after determining that there was interest from the property owners, staff obtained authority to conduct appraisals.

Council directed staff to complete appraisals and contact the owners of 6123 and 6175 Skyline Drive regarding purchasing their properties, with the caveat that the purchases would require the Bolton Reservoir to be placed in its current location. The inspections were completed on June 3, 2014, and the appraisals were completed on June 19, 2014. On August 7, 2014, at the direction of the City Council, staff offered the owners the appraised values for their properties. In August, both owners expressed a desire to accept the appraised value and work with the City to establish acceptable terms for the purchase of the properties. Resolution 2015-02 will allow staff to move forward with the purchase of the properties.

#### **Budget Impact:**

Approximately \$385,000 for 6123 Skyline Drive. Approximately \$220,000 for 6175 Skyline Drive.

#### **Council Options:**

1. Pass Resolution 2015-02 directing staff to undertake any actions necessary to facilitate purchasing the properties.

2. Do not pass the Resolution and direct staff on how to proceed.

#### Staff Recommendation:

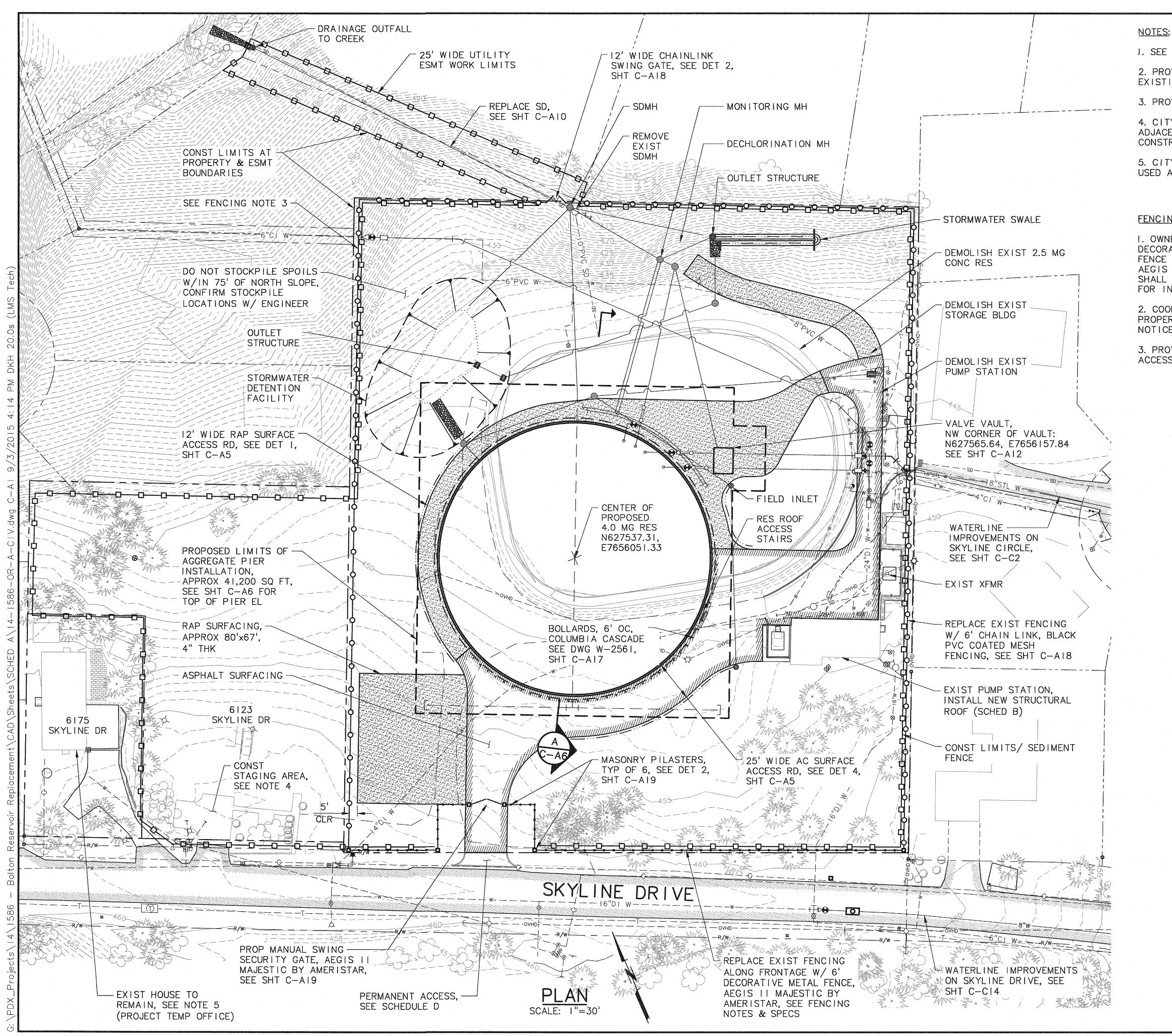
Staff recommends that Council adopt Resolution 15-02 authorizing the purchase of the properties.

#### **Potential Motion:**

Move to adopt Resolution 2015-02, authorizing the purchase of 6123 Skyline Drive and 6175 Skyline Drive to aid in the construction of the Bolton Reservoir Replacement.

#### Attachments:

- 1. Resolution 2015-02
- 2. Murray, Smith & Assoc. December 1, 2014, Memorandum



I. SEE SHEET SPECIFICATIONS FOR SEQUENCING.

2. PROVIDE TEMPORARY SHORING AS NECESSARY TO PROTECT EXISTING STRUCTURES AND TREES, SEE SHEET C-A2.

3. PROVIDE CONSTRUCTION ENTRANCE, SEE SHEET ESC-10.

4. CITY OWNED PROPERTY, 6123 SKYLINE DRIVE, LOCATED ADJACENT TO THE RESERVOIR SITE, MAY BE USED FOR CONSTRUCTION STAGING.

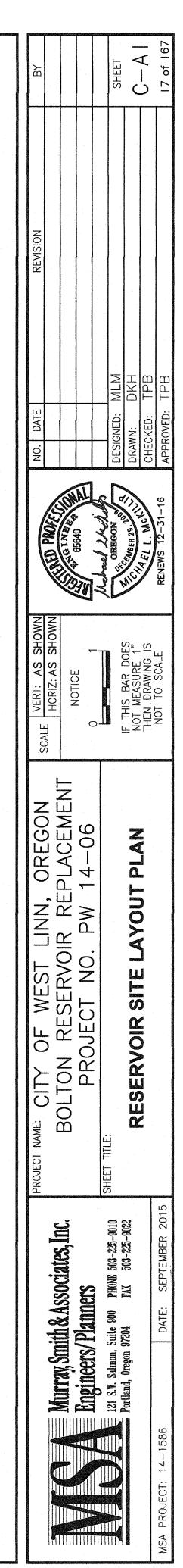
5. CITY OWNED PROPERTY, 6175 SKYLINE DRIVE MAY BE USED AS A TEMPORARY CONSTRUCTION OFFICE.

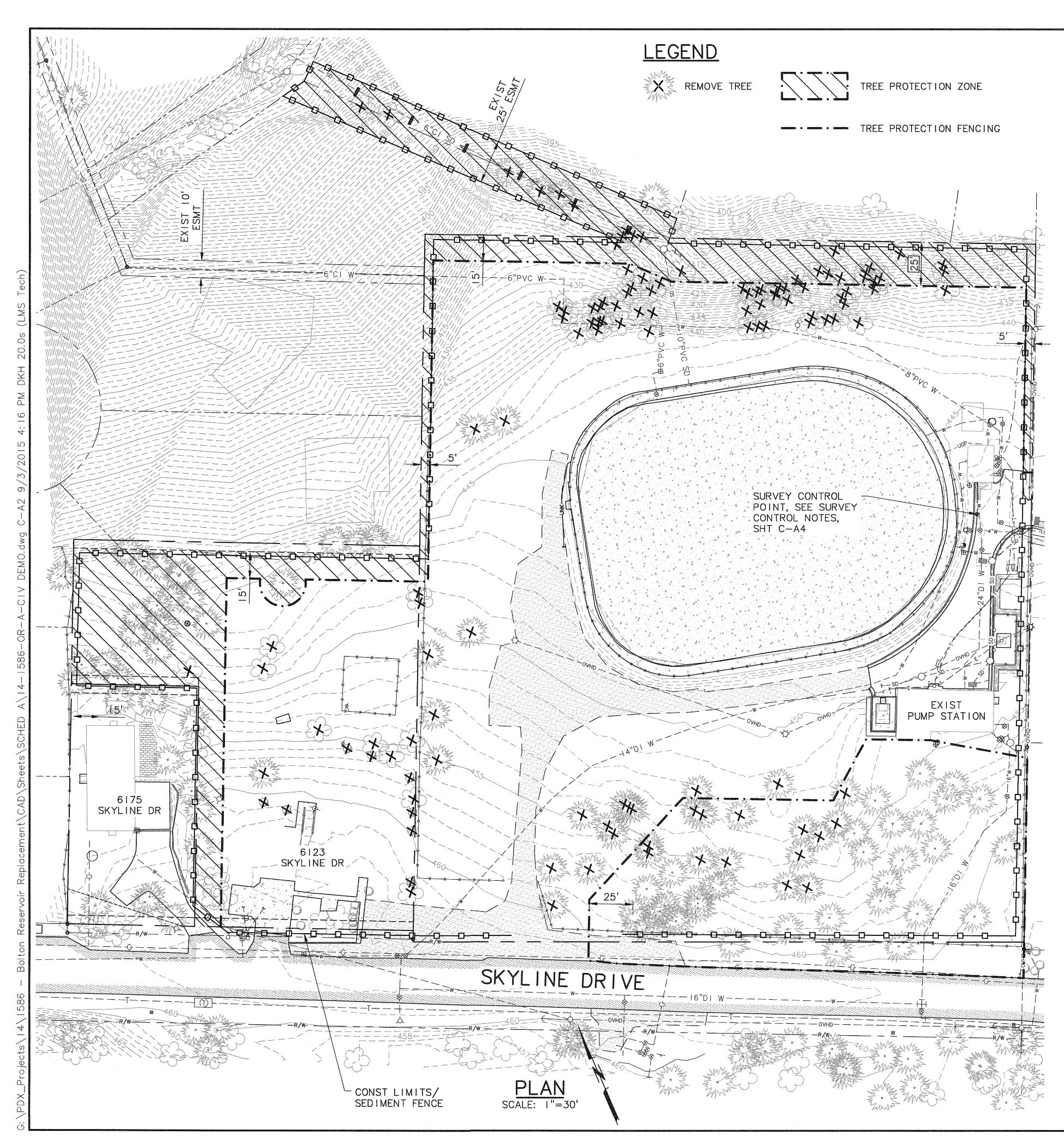
## FENCING NOTES:

I. OWNER HAS APPROXIMATELY 160 LF OF EXISTING DECORATIVE METAL FENCE. SUPPLIER SHALL MATCH FENCE STYLE. DECORATIVE METAL FENCE SHALL BE AEGIS II MAJESTIC BY AMERISTAR. CONTRACTOR SHALL TRANSPORT FENCING FROM CITY FACILITIES FOR INSTALLATION.

2. COORDINATE FENCE REMOVAL WITH ADJACENT PROPERTY OWNERS. PROVIDE 2 WEEK WRITTEN NOTICE TO CITY PRIOR TO REMOVAL OF FENCING.

3. PROVIDE FENCING STOP TO ALLOW ROLL BACK ACCESS TO UTILITY EASEMENT.





## TREE PROTECTION NOTES TREE REMOVAL NOTES

I. ONLY THOSE TREES IDENTIFIED FOR REMOVAL MAY BE REMOVED. 2. TREE LOCATIONS APPROXIMATE. 3. CONTRACTOR SHALL COMPLY WITH CITY TREE REMOVAL PERMIT, TO BE OBTAINED BY OWNER. 4. TREE REMOVAL AND CLEARING SHALL BE COMPLETED BETWEEN AUGUST I AND JANUARY 31, TO AVOID BIRD NESTING SEASON. BEFORE CONSTRUCTION BEGINS

I. FENCING: a. FURNISH AND INSTALL APPROVED TREE PROTECTION FENCING AROUND EACH TREE OR GROVE OF TREES TO BE RETAINED.

b. THE FENCING SHALL BE INSTALLED PRIOR TO THE GROUND BEING CLEARED IN ORDER TO PROTECT THE TREES AND SOIL AROUND THE TREES FROM ANY DISTURBANCE.

c. FENCING SHALL BE PLACED AT THE EDGE OF THE ROOT PROTECTION ZONE. ROOT PROTECTION ZONES WILL BE ESTABLISHED BY THE PROJECT ARBORIST BASED IN THE NEEDS OF THE SITE AND THE TREE TO BE PROTECTED. THE TREE PROTECTION ZONE WILL BE APPROXIMATELY 15' FROM THE CENTER OF THE TREE IN ALL DIRECTIONS.

d. FENCING SHALL REMAIN IN THE LOCATION AS ESTABLISHED BY THE PROJECT ARBORIST AND NOT MOVED WITHOUT WRITTEN PERMISSION FROM THE PROJECT ARBORIST UNTIL THE END OF THE PROJECT.

2. SIGNAGE:

a. ALL TREE PROTECTION FENCING SHALL HAVE SIGNAGE AS FOLLOWS:

DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION FENCING

Please contact the project arborist or owner if alternations to the approved location of the tree protection fencing are necessary.

b. SIGNAGE SHOULD BE PLACE AS TO BE VISIBLE FROM ALL SIDES OF TREE PROTECTION AREA AND SPACED EVERY 75 FEET.

DURING CONSTRUCTION

PROTECTION GUIDELINES WITHIN THE ROOT PROTECTION ZONE: a. ENTRY INTO THE TREE PROTECTION AREAS IS PROHIBITED EXCEPT BY THE PROJECT ARBORIST UNLESS THROUGH WRITTEN PERMISSION OF THE PROJECT ARBORIST.

b. NO TRAFFIC SHALL BE ALLOWED WITHIN THE ROOT PROTECTION ZONE. NO VEHICLE, HEAVY EQUIPMENT, OR REPEATED FOOT TRAFFIC SHALL BE ALLOWED WITHIN THE ROOT PROTECTION ZONE.

c. STORAGE OF MATERIALS INCLUDING, BUT NOT LIMITED TO, SOIL, CONSTRUCTION MATERIAL, OR WASTE FROM THE SITE WILL NOT BE ALLOWED WITHIN THE TREE PROTECTION ZONE. WASTE INCLUDES, BUT IS NOT LIMITED TO, CONCRETE WASH OUT, GASOLINE, DIESEL, PAINT, CLEANER, THINNERS, ETC.

d. CONSTRUCTION TRAILERS SHALL BE NOT PARKED/PLACED WITHIN THE ROOT PROTECTION ZONE WITHOUT WRITTEN APPROVAL FROM THE PROJECT ARBORIST.

e. VEHICLES SHALL NOT BE PARKED WITHIN THE ROOT PROTECTION AREAS.

f. NO ACTIVITY SHALL BE ALLOWED THAT WILL CAUSE SOIL COMPACTION WITHIN THE ROOT PROTECTION ZONE.

2. TREES TO REMAIN SHALL BE PROTECTED FROM ANY CUTTING, SKINNING OR BREAKING OF BRANCHES, TRUNKS OR ROOTS.

3. PRIOR TO CUTTING ROOTS FROM EXISTING TREES THAT ARE TO BE RETAINED, THE PROJECT ARBORIST SHALL BE NOTIFIED TO EVALUATE AND OVERSEE THE PROPER CUTTING OF ROOTS WITH SHARP CUTTING TOOLS. CUT ROOTS SHALL BE IMMEDIATELY COVERED WITH SOIL OR MULCH TO PREVENT DRYING OF THE ROOT.

4. NO GRADE CHANGES SHALL OCCUR WITHIN THE ROOT PROTECTION ZONE.

5. ANY NECESSARY DEVIATION OF THE ROOT PROTECTION ZONE SHALL BE APPROVED BY THE PROJECT ARBORIST OR THE OWNER, PRIOR TO IMPLEMENTING CHANGES.

6. PROVIDE WATER TO TREES DURING THE SUMMER MONTHS. TREE(S) THAT WILL HAVE HAD ROOT SYSTEM(S) CUT BACK WILL NEED SUPPLEMENTAL WATER TO OVERCOME THE LOSS OF ABILITY TO ABSORB NECESSARY MOISTURE DURING THE SUMMER MONTHS.

7. ANY NECESSARY PASSAGE OF UTILITIES THROUGH THE ROOT PROTECTION ZONE SHALL BE BY MEANS OF TUNNELING UNDER ROOTS BY HAND DIGGING OR BORING.

## AFTER CONSTRUCTION

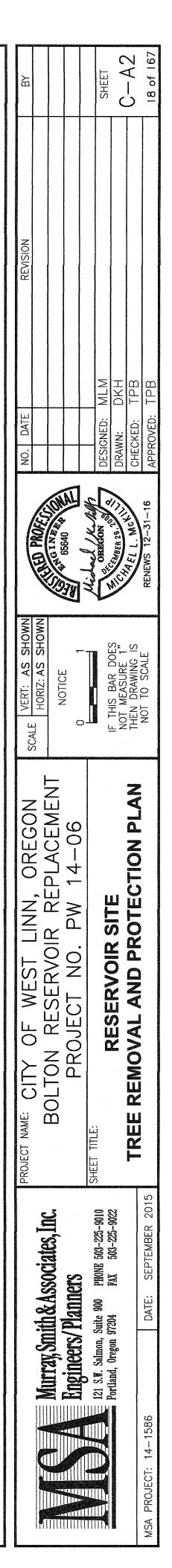
I. CAREFULLY LANDSCAPE IN THE AREA OF THE TREE. DO NOT ALLOW TRENCHING WITHIN THE ROOT PROTECTION ZONE. CAREFULLY PLANT NEW PLANTS WITHIN THE ROOT PROTECTION ZONE. AVOID CUTTING THE ROOTS OF THE EXISTING TREES.

2. DO NOT PLACE IRRIGATION WITHIN THE ROOT PROTECTION ZONE OF EXISTING TREES UNLESS IT IS DRIP IRRIGATION FOR A SPECIFIC PLANTING OR CLEARED BY THE PROJECT ARBORIST.

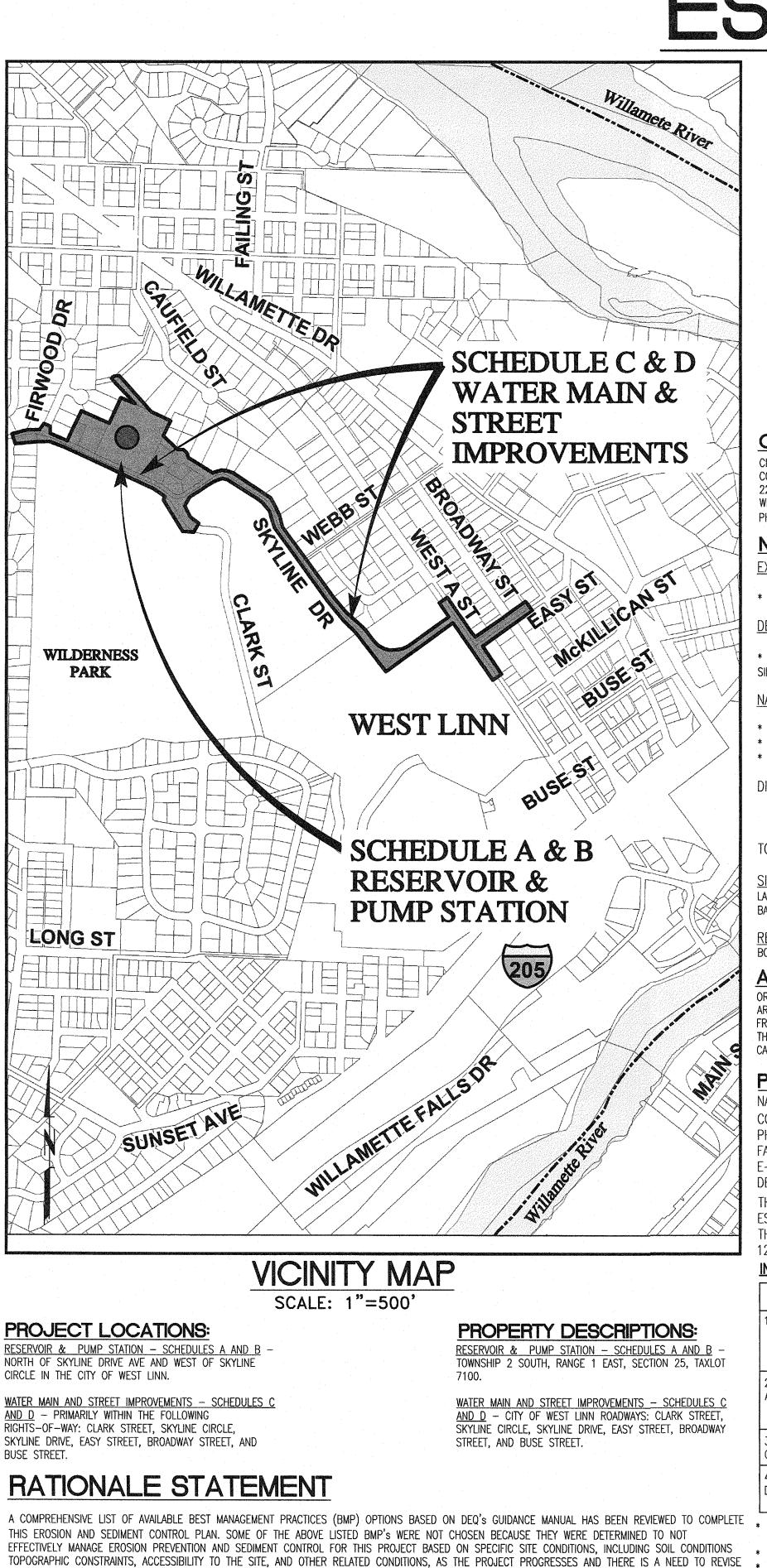
3. PROVIDE FOR ADEQUATE DRAINAGE OF THE AREA AROUND THE RETAINED TREES.

4. PRUNING OF THE TREES SHALL BE COMPLETED AS ONE OF THE LAST STEPS OF THE LANDSCAPING PROCESS BEFORE THE FINAL PLACEMENT OF TREES, SHRUBS, GROUND COVERS, MULCH OR SEEDING.

TREE PROTECTION ZONE



THE ESC PLAN, AN ACTION PLAN WILL BE SUBMITTED.



ESC-1 ESC-4

> ESC-6 ESC-7 ESC-8 ESC-9

### **OWNER**:

CITY OF WEST LINN CONTACT: KHOI LE, CIVIL ENGINEER II 22500 SALAMO, RD WEST LINN, OR 97068 PHONE: (503) 722-5517

EXISTING SITE CONDITIONS

DEVELOPED CONDITIONS

SITE SOIL CLASSIFICATION: DASALI

**RECEIVING WATER BODIES:** 

CALL 503-246-6699.

NAME COMPANY/AGENCY PHONE: FAX: E-MAIL:

DESCRIPTION OF EXPERIENCE:

. ACTIVE PERIOD

2. PRIOR TO THE ANTICIPATION OF SIT

3. INACTIVE PERIOD CALENDAR DAYS. 4. PERIODS DURING DUE TO INCLEMENT

HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (SCHEDULE A.8.C.I.(3)) ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS. INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS. RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR



# ESC PLAN FOR 1200-C SITES

## SHEET INDEX

## EROSION AND SEDIMENT CONTROL PLANS EROSION AND SEDIMENT CONTROL COVER SHEET ESC-2 EROSION AND SEDIMENT CONTROL SCHEDULES A & B -

- INITIAL CLEARING AND GRADING ESC-3 EROSION AND SEDIMENT CONTROL SCHEDULES A & B -FINAL GRADING
- EROSION AND SEDIMENT CONTROL SCHEDULES C -TYPICAL PIPELINE INSTALLATION MEASURES EROSION AND SEDIMENT CONTROL SCHEDULE D - PLAN ESC-5 EROSION AND SEDIMENT CONTROL SCHEDULE D - PLAN 2
  - EROSION AND SEDIMENT CONTROL SCHEDULE D PLAN 3 EROSION AND SEDIMENT CONTROL SCHEDULE D - PLAN 4
  - EROSION AND SEDIMENT CONTROL ALL SCHEDULES -STANDARD DETAILS – 1
- ESC-10 EROSION AND SEDIMENT CONTROL ALL SCHEDULES -STANDARD DETAILS – 2

## PLANNING / ENGINEERING:

121 SW SALMON (SUITE 900) PORTLAND. OR 97204 PHONE: (503) 225-9010

MURRAY, SMITH & ASSOCIATES

CONTACT: JUSTIN FORD, P.E.

## NARRATIVE DESCRIPTIONS:

\* WATER RESERVOIR. PUMP STATION BUILDING: CITY OF WEST LINN ROADWAYS AND RIGHTS-OF-WAY

\* WATER RESERVOIR, PUMP STATION BUILDING, ASSOCIATED UTILITIES (WATER AND STORM PIPING), WATER MAIN, SIDEWALK, AND STREET IMPROVEMENTS.

## NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE

MOBILIZATION & PIPING IMPROVEMENTS (12/2015-4/2016) \* DEMOLITION, MASS EXCAVATION & GROUND IMPROVEMENT (4/2016-9/2016) \* RESERVOIR CONSTRUCTION (9/2016-5/2017)

DISTURBED AREAS = SCHEDULES A & B: RESERVOIR & PUMP STATION = 2.8 ACRES SCHEDULE C: WATER MAIN = 0.7 ACRES SCHEDULE D: SIDEWALK AND ROAD IMPROVEMENTS = 1.7 ACRES

TOTAL DISTURBED AREA = 5.2 ACRES

LANDSLIDE DEPOSITS; SILT (PORTLAND HILLS), ALLUVIAL DEPOSITS, FINE GRAINED SAND, CLAYEY SILT, DECOMPOSED

## BOLTON CREEK AND MADDAX CREEK DRAINAGE BASINS

## **ATTENTION EXCAVATORS:**

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION.

## PERMITTEE'S SITE INSPECTOR:

******	 	 	 
•			
•	 	 	

THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200C PERMIT. THIS ESCP AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200C PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 200C PERMIT REQUIREMENTS SUPERCEDE REQUIREMENTS OF THIS PLAN.

INSPECTION FREQUENCY:

SITE CONDITION	MINIMUM FREQUENCY
	DAILY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOWMELT, IS OCCURRING. AT LEAST ONCE EVERY TWO WEEKS, REGARDLESS OF WHETHER OR NOT RUNOFF IS OCCURRING.
SITE BECOMING INACTIVE OR IN ITE INACCESSIBILITY.	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
DS GREATER THAN FOURTEEN (14)	ONCE EVERY TWO (2) WEEKS.
g which the site is inaccessible T weather.	IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.
NETRUCTION MEETING OF DROJECT CONSTE	

DAYS, RETAIN THE ESCP AT THE CONSTRUCTION SITE OR AT ANOTHER LOCATION. (SCHEDULE B.2.A)

## LOCAL AGENCY-SPECIFIC EROSION **CONTROL NOTES:**

- THE PRINCIPLES. PRACTICES. INSTALLATION. AND MAINTENANCE OF EROSION AND SEDIMENT CONTROLS WHO WORKS FOR THE PERMITTEE. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND FROM OCTOBER 1 THROUGH MAY 31 EACH YEAR.
- DURING WET WEATHER PERIOD. TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORK DAY.
- ÆGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED. ALL ACTIVE INLETS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. UNLESS OTHERWISE APPROVED, A SURFACE MOUNTED AND ATTACHABLE. U-SHAPED
- FILTER BAG IS REQUIRED FOR ALL CURB INLET CATCH BASINS. SIGNIFICANT AMOUNTS OF SEDIMENT WHICH LEAVES THE SITE MUST BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE AND STABILIZED OR PROPERLY DISPOSED. THE CAUSE OF THE
- ACCORDING TO THE OREGON DEPARTMENT OF STATE LANDS REQUIRED TIME FRAME SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES
- SEDIMENT MUST BE REMOVED FROM BEHIND ALL SEDIMENT CONTROL MEASURES WHEN IT HAS REACHED A HEIGHT OF 1/3RD THE BARRIER HEIGHT, AND PRIOR TO THE CONTROL MEASURES REMOVAL
- STRUCTURES WITH SUMPS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY 50% AND AT COMPLETION OF PROJECT. TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL
- 11. THE PERMITTEE MUST PROPERLY MANAGE HAZARDOUS WASTES, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR
- 12. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS. NUTRIENT RELEASES FROM FERTILIZERS TO SURFACE WATERS MUST BE MINIMIZED. TIME RELEASE FERTILIZERS SHOULD BE USED AND CARE SHOULD BE MADE IN APPLICATION OF FERTILIZERS WITHIN ANY WATER WAY RIPARIAN ZONE PERSON SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES. IN ACCORDANCE WITH CURRENT CITY OF WEST LINN PUBLIC
- ANDARDS AND STATE, AND FEDERAL REGULATIONS PRIOR TO ANY LAND DISTURBING ACTIVITIES. THE BOUNDARIES OF THE CLEARING LIMITS, VEGETATED BUFFERS, AND ANY UNLESS OTHERWISE APPROVED, NO DISTURBANCE IS PERMITTED BEYOND THE CLEARING LIMITS. THE PERMITTEE MUST MAINTAIN
- CORRIDORS TO BE DELINEATED WITH ORANGE CONSTRUCTION FENCE OR APPROVED FOUAL 15. PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BMPS THAT MUST BE INSTALLED ARE GRAVEL CONSTRUCTION ENTRANCE, PERIMETER SEDIMENT CONTROL, AND INLET PROTECTION. THESE BMPS MUST BI MAINTAINED FOR THE DURATION OF THE PROJECT.
- 16. IF VEGETATIVE SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO SPECIFIED BY THE DESIGN ENGINEER.
- 17. WATER-TIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED SOILS FROM THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT IS TO DRAIN THE SOIL ON SITE AT A DESIGNATED LOCATION USING PPROPRIATE BMPS; SOIL MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE.
- 18. ALL PUMPING OF SEDIMENT LADEN WATER MUST BE DISCHARGED OVER AN UNDISTURBED, PREFERABLY VEGETATED AREA, AND THROUGH A SEDIMENT CONTROL BMP (I.E. FILTER BAG). 19. THE ESC PLAN MUST BE KEPT ONSITE, ALL MEASURES SHOWN ON THE PLAN MUST BE INSTALLED PROPERLY TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER A SURFACE WATER SYSTEM. ROADWAY, OR OTHER PROPERTIES
- 20. THE ESC MEASURES SHOWN ON THIS PLAN ARE MAINTAIN COMPLIANCE WITH ALL REGULATIONS.
- WRITTEN ESC LOGS ARE SUGGESTED TO BE MAINTAINED ONSITE AND AVAILABLE TO CITY OF WEST LINN INSPECTORS UPON REQUEST. 23. ALL EXPOSED SOILS MUST BE COVERED DURING WET WEATHER PERIOD.

# STANDARD EROSION AND SEDIMENT **CONTROL PLAN DRAWING NOTES:**

- A.12.C.III) AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SCHEDULE A 8.C.II.(1)(D)) PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF
- VEGETATIVE SEED MIX USED. (SCHEDULE A.7.B.III(1) AND A.7.B.III(3)) ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.C.I.(6))
- APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES AND FOR ALL ROADWAYS INCLUDING GRAVEL ROADWAYS. (SCHEDULE A.8.C.II.(2)
- IMPLEMENT IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SCH A 7.E.III.)
- 8. IF A STORMWATER TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND SPECIFICATIONS. (SCHEDULE A.9.D)
- ALL TIMES OF THE YEAR. (SCHEDULE A 7.B)
- 10. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT, AND BEFORE BMP REMOVAL. (SCHEDULE A.9.C.II)
- MORE. (SCHEDULE A.7.F.I) OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.7.F.II)

# **BMP MATRIX FOR CONSTRUCTION PHASES**:

REFER TO DEQ GUIDANCE MANUAL FOR A LIST OF AVAILABLE BMP'S.

	CLEARING	MASS GRADING	UTILITY INSTALLATION	STREET CONSTRUCTION	FINAL STABILIZATION	WET WEATHER (OCT. 1- MAY 31ST)
EROSION PREVENTION	L		<b>1</b>			
PRESERVE NATURAL VEGETATION	**X	Х	X	X	Х	X
GROUND COVER	-				X	Х
PLASTIC SHEETING	********	· · · · · · · · · · · · · · · · · · ·				X
DUST CONTROL	X	X	X	X		X
TEMPORARY/ PERMANENT SEEDING		X	Х	Х	X	Х
MATTING					Х	Х
SEDIMENT CONTROL	· · ·	·	· ·			
SEDIMENT FENCE (PERIMETER)	**X	Х	Х	Х	]	X
SEDIMENT FENCE (INTERIOR)	· · · · · · · · · · · · · · · · · · ·		Х	X		Х
BIO BAGS		Х	X	Х		X
INLET PROTECTION	**X	Х	Х	X		Х
DEWATERING (GENERAL)			X	X		
STRAW WATTLES			Х	X	Х	Х
FILTER BERM	Х	Х	X	X		
RUN-OFF CONTROL						
CONSTRUCTION ENTRANCE	**X	X	X	X		
CHECK DAMS	**X	Х	Х	Х	Х	
OUTLET PROTECTION	Х	X	X	Х		
SURFACE ROUGHENING						
POLLUTION PREVENTION						
PROPER SIGNAGE	Х	Х	Х	X	Х	X
HAZ WASTE MGMT	Х	X	X	X	Х	X
SPILL KIT ON-SITE	Х	Х	Х	Х	X	X
CONCRETE WASH OUT AREA	Х	x X	Х	X		X

SIGNIFIES DWI THAT WILL DE MASTALLED FINION TO ANT GROUND DISTONDING ACTIVITE



WHEN RAINFALL AND RUNOFF OCCURS DAILY INSPECTIONS OF THE EROSION AND SEDIMENT CONTROLS AND DISCHARGE OUTFALLS MUST BE PROVIDED BY SOME ONE KNOWLEDGEABLE AND EXPERIENCED IN

CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION. THEY MUST REMAIN IN PLACE UNTIL PERMANENT

RELEASE MUST BE FOUND AND PREVENTED FROM CAUSING A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED

TYPE AND PERCENTAGES OF SEED IN THE MIX ARE AS IDENTIFIED ON THE PLANS OR AS

SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES SHALL BE UPGRADED AS NEEDED TO

22. IN AREAS SUBJECT TO WIND EROSION, APPROPRIATE BMPS MUST BE USED WHICH MAY INCLUDE THE APPLICATION OF FINE WATER SPRAYING, PLASTIC SHEETING, MULCHING, OR OTHER APPROVED MEASURES.

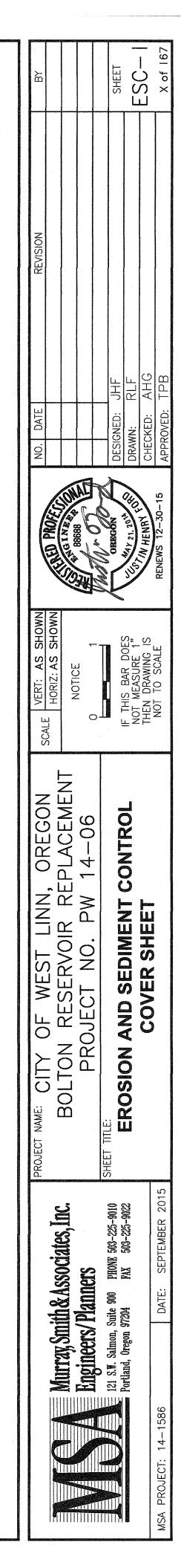
REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SCHEDULE A 8.A) SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT. (SCHEDULE

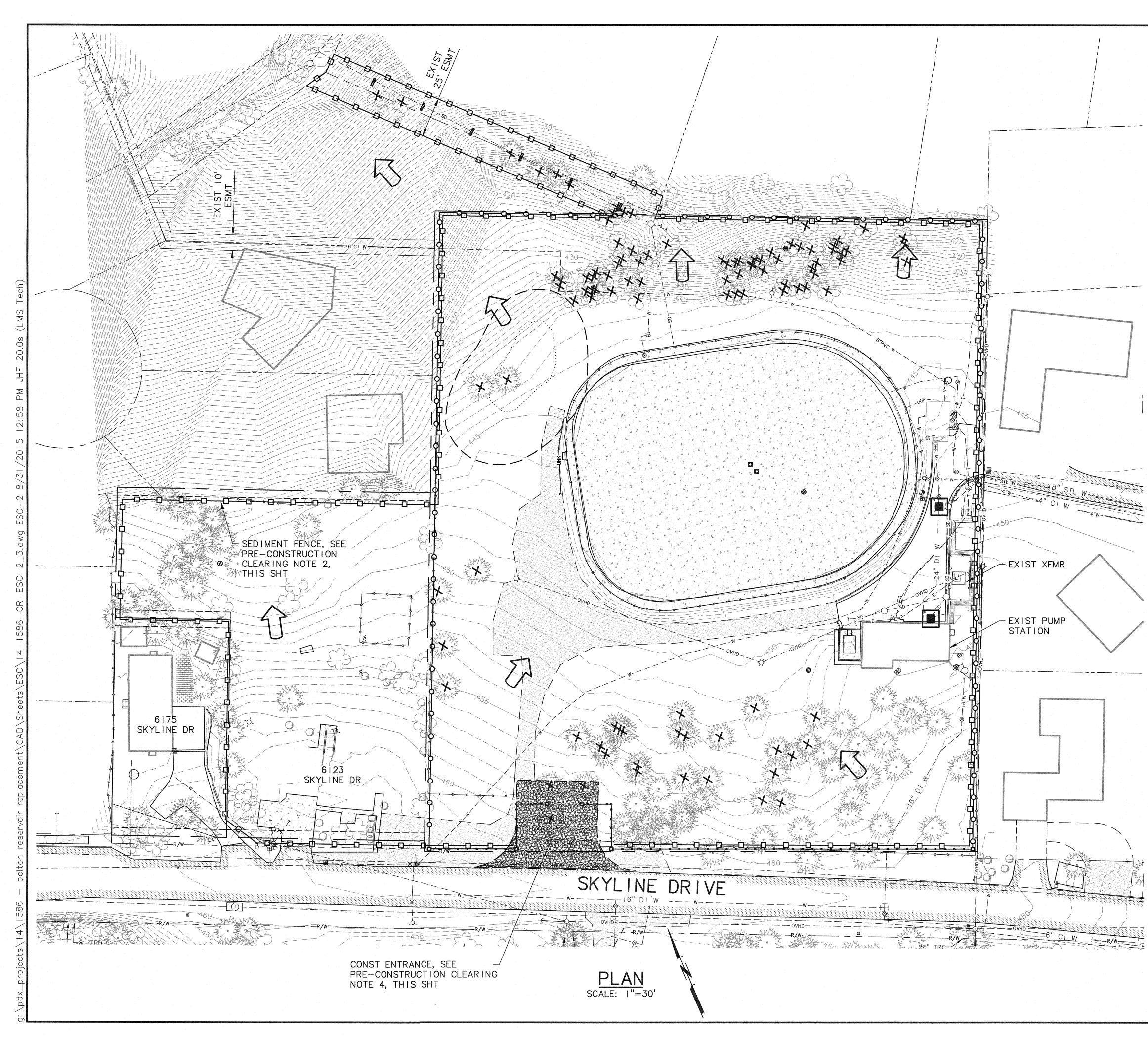
OLLOWING BMPS WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS

MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S

TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT

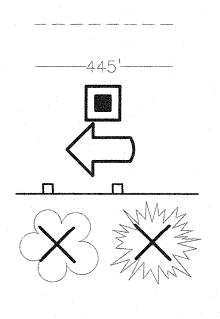
11. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR 12. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW,





# LEGEND

EXISTING CONTOURS (1') EXISTING CONTOURS (5') INLET PROTECTION DRAINAGE FLOW DIRECTION SEDIMENT FENCING (PERIMETER) TREES TO BE REMOVED



## PRE-CONSTRUCTION CLEARING NOTES:

I. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

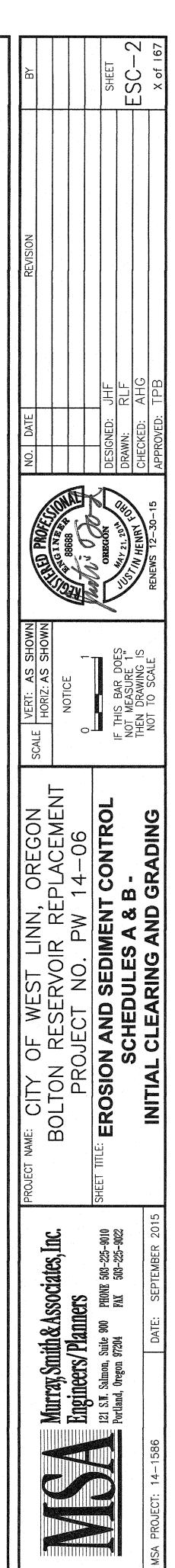
2. SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS CONSTRUCTED OUT OF MULCH, CHIPPINGS, OR OTHER SUITABLE MATERIAL, STRAW WATTLES, OR OTHER APPROVED MATERIALS.

3. SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.

4. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT. SEE DETAIL SHEET ESC-10.

5. RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAINS (WITH OUTLET PROTECTION), CHECK DAMS, SURFACE ROUGHENING, AND BANK STABILIZATION.

6. LIMIT SPEED OF VEHICLES ON SITE AND MOISTEN HAUL ROADS AS NECESSARY TO CONTROL DUST.



## GRADING. STREET AND UTILITY EROSION AND SEDIMENT CONSTRUCTION NOTES:

I. SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING MIXTURES, UNLESS OTHERWISE AUTHORIZED:

A. VEGETATED CORRIDOR AREAS REQUIRE NATIVE SEED MIXES. SEE RESTORATION PLAN FOR APPROPRIATE SEED MIX.

B. DWARF GRASS MIX (MINIMUM 100 LB/AC). I. DWARF PERENNIAL RYEGRASS (80% BY WEIGHT)

2. CREEPING RED FESCUE (20% BY WEIGHT). C. STANDARD HEIGHT GRASS MIX (MINIMUM 100 LB/AC).

I. ANNUAL RYEGRASS (40% BY WEIGHT). 2. TURF-TYPE FESCUE (60% BY WEIGHT).

2. SLOPES AND DISTURBED AREAS TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.

3. LONG TERM SLOPE AND DISTURBED AREAS STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE. SEE SPECIFICATIONS. IN ADDITION, ALL SLOPES OF 2: I OR GREATER SHALL RECEIVE MATTING.

4. TEMPORARY SLOPE AND DISTURBED AREAS STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES.

5. STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. DURING "WET WEATHER" PERIODS, STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.

6. EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.

7. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE

EROSION AND SEDIMENT CONTROL BMP **IMPLEMENTATION:** 

MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL

ACTIVITIES.

SHOWN ON THESE PLANS.

EXPOSED SOILS BY OCTOBER I.

ACTIVITIES.

EROSION CONTROL NOTES

- BY CONTRACTOR. OVERLAY SEDIMENT FENCE 6" MINIMUM.
- CONSTRUCTION.
- NECESSARY IF CONSTRUCTION ENTRANCE IS NOT SUFFICIENT.
- CONTRACTOR TO A SUITABLE LOCATION, IF REQUIRED.
- (7) INSTALL SLOPE MATTING ON ALL SLOPES 2:1 OR GREATER.

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DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A EINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, ON THE RUDDEN WENT MANGER SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

9. ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.

10. SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.

11. AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERM OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.

12. SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.

13. AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.

14. USE BMPS SUCH AS CHECK-DAMS, BERMS, AND INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.

15. COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.

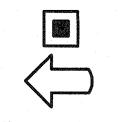
	E	<u>G</u>	E	Ν	D	
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INLET PROTECTION

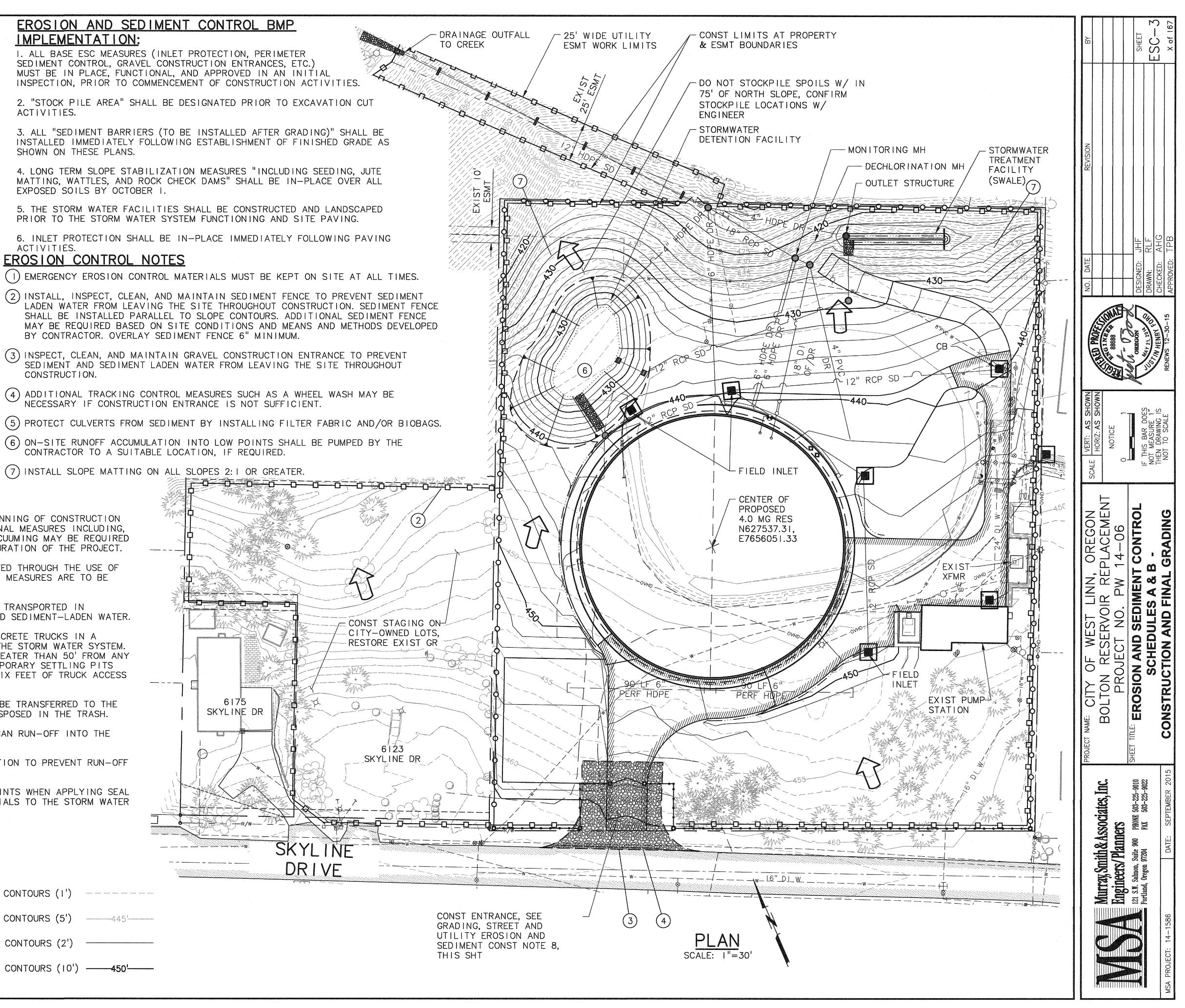
DRAINAGE FLOW DIRECTION

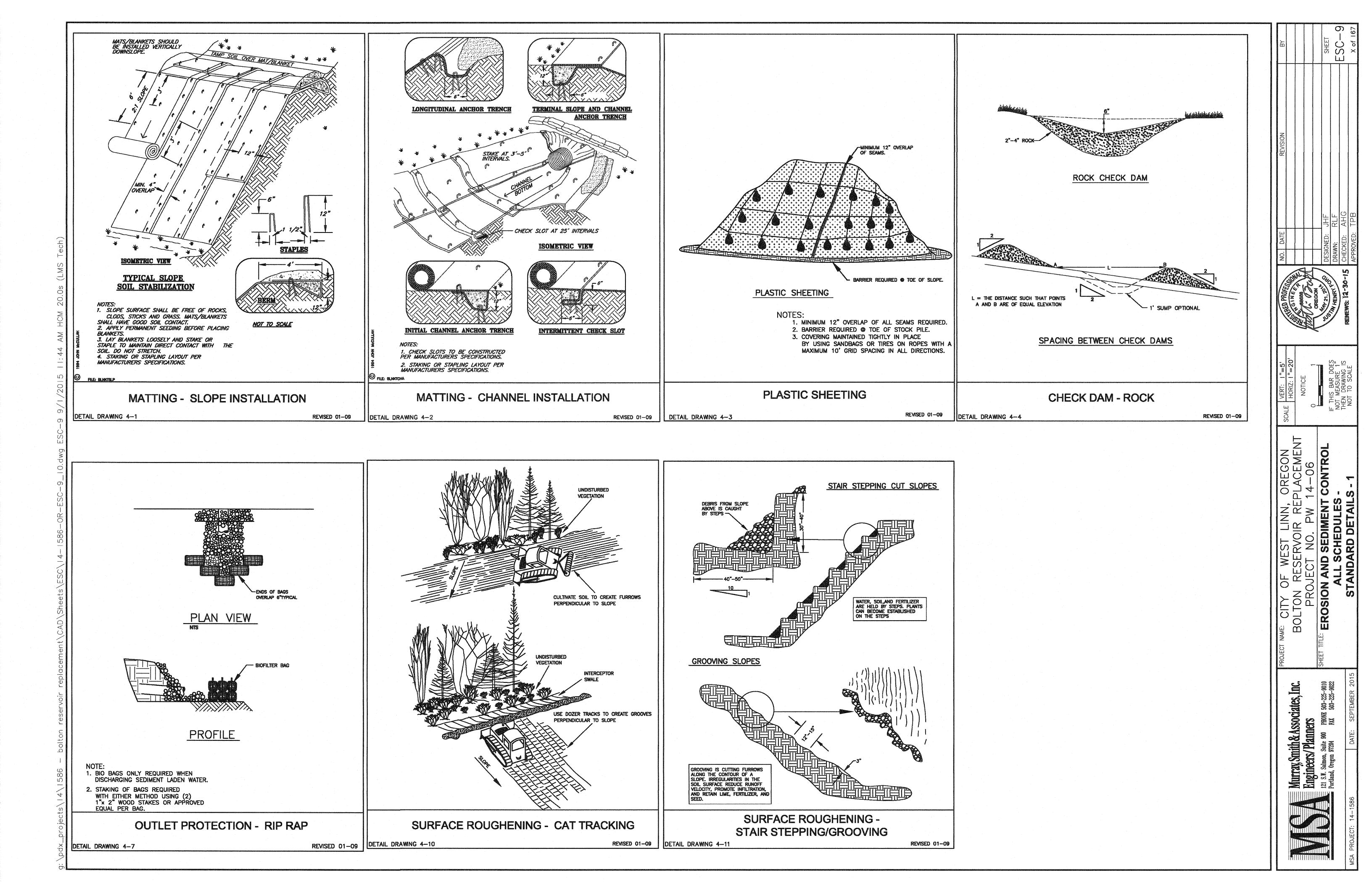
SEDIMENT FENCING (PERIMETER)

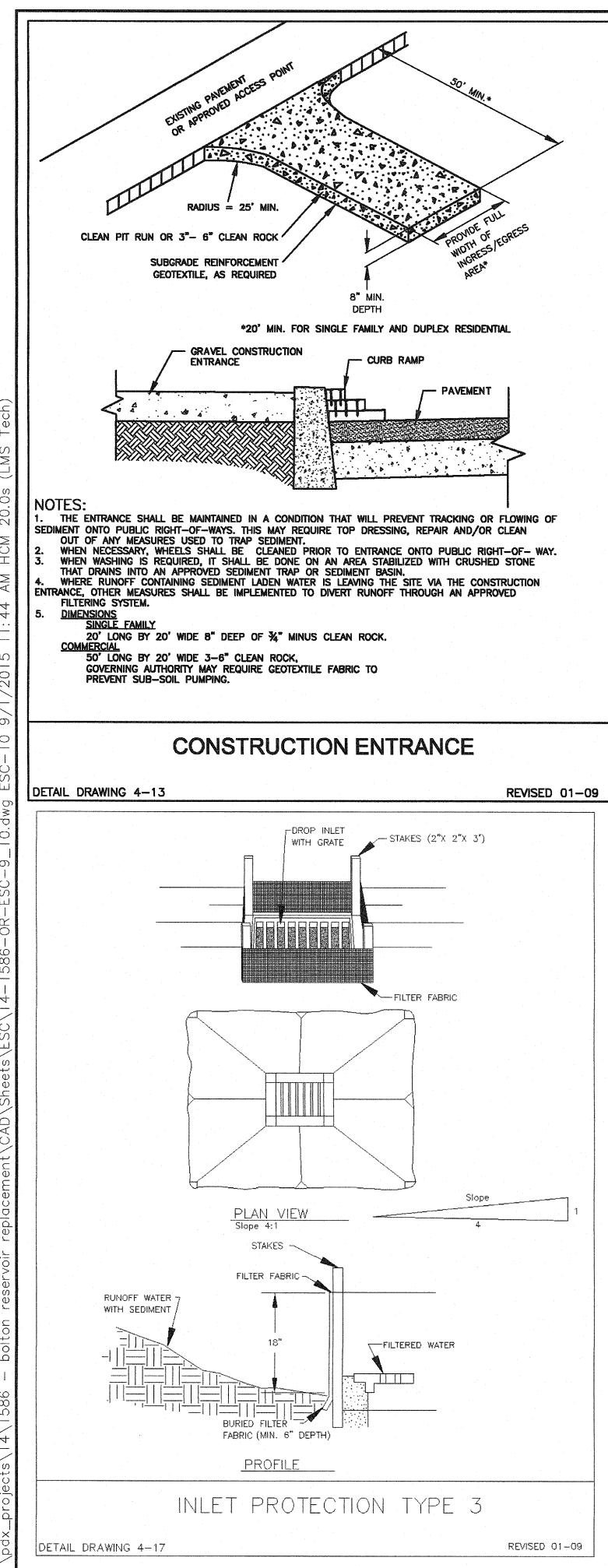
TREES TO REMAIN AND BE PROTECTED

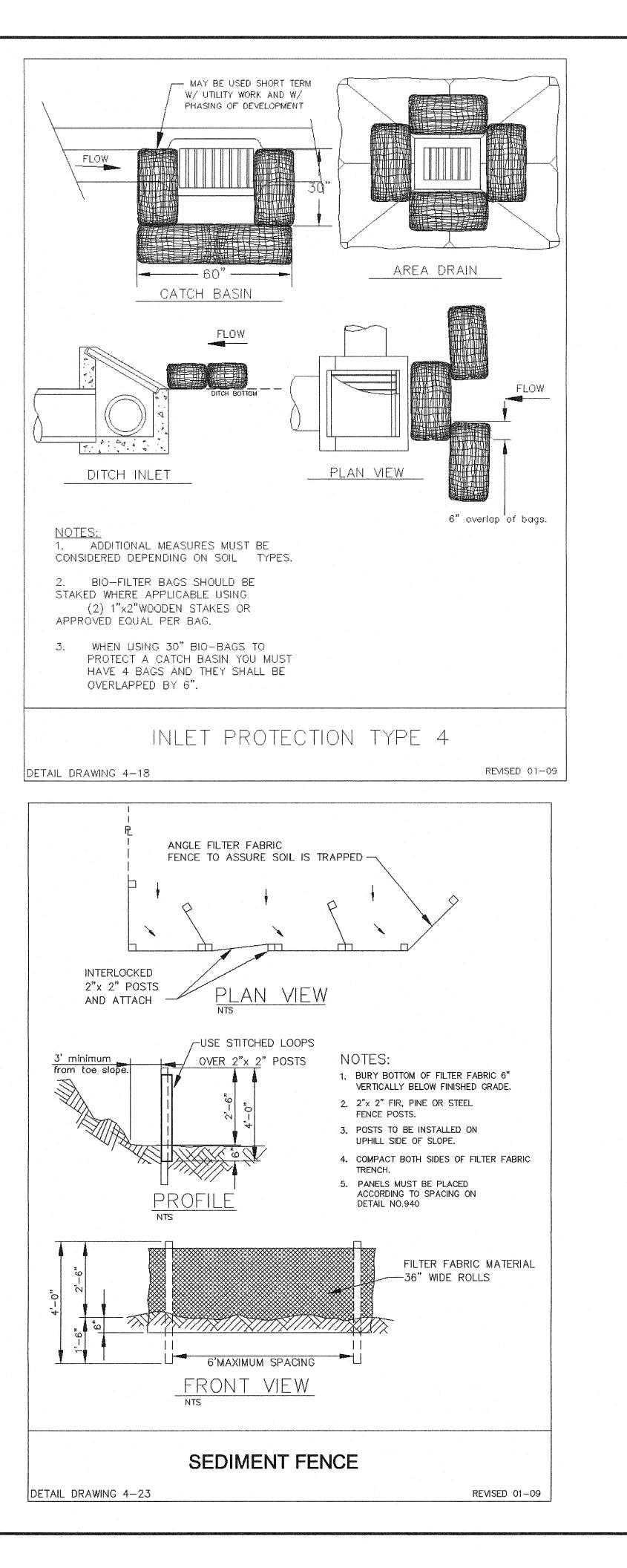


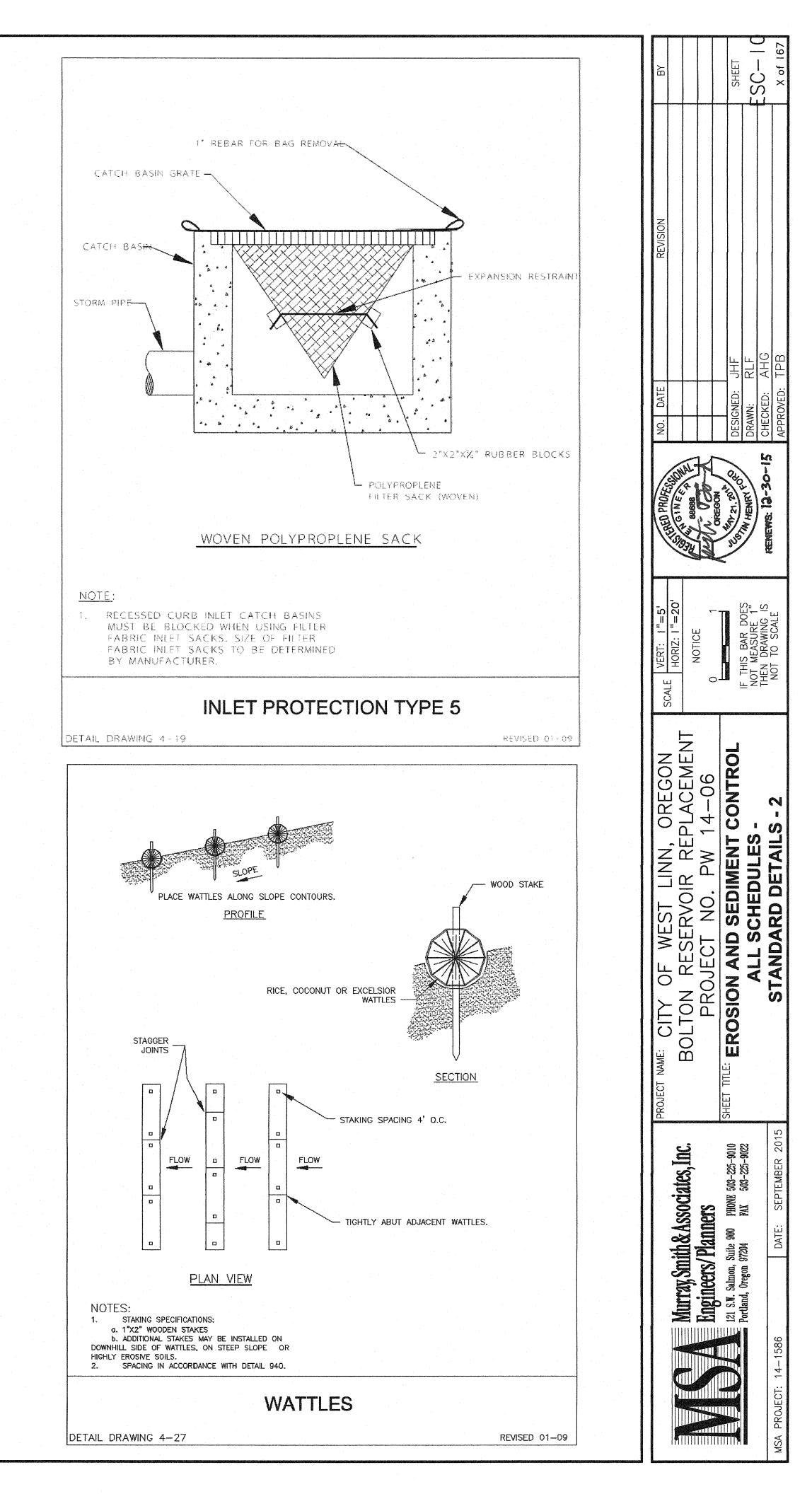
EXISTING CONT	OURS (1')	
EXISTING CONT	OURS (5')	445'
 PROPOSED CONT	OURS (2')	
PROPOSED CONT	OURS (10')	450'

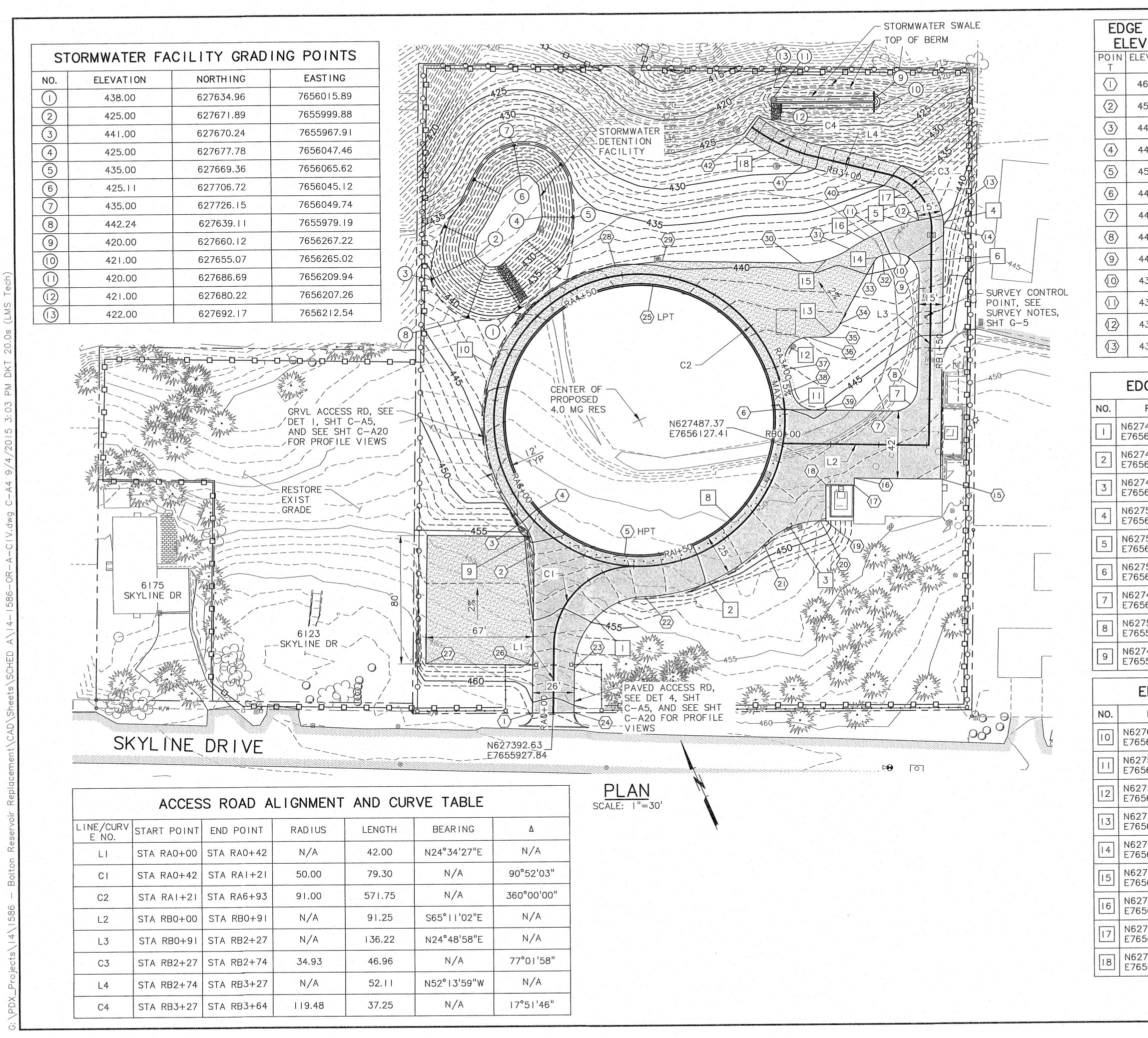












	VE TABLE	AND CUR	LIGNMENT	S ROAD A	ACCES	
Δ	BEARING	LENGTH	RADIUS	END POINT	START POINT	LINE/CURV E NO.
N/A	N24°34'27"E	42.00	N/A	STA RAO+42	STA RAO+00	LI
90°52'0	N/A	79.30	50.00	STA RAI+2I	STA RA0+42	СІ
360°00'(	N/A	571.75	91.00	STA RA6+93	STA RAI+2I	C2
N/A	S65°II'02"E	91.25	N/A	STA RB0+91	STA RB0+00	L2
N/A	N24°48'58"E	136.22	N/A	STA RB2+27	STA RB0+91	L3
77°01'5	N/A	46.96	34.93	STA RB2+74	STA RB2+27	C3
N/A	N52°13'59"W	52.11	N/A	STA RB3+27	STA RB2+74	L4
17°51'4	N/A	37.25	119.48	STA RB3+64	STA RB3+27	C4

		1
OFF		
VATIC		
EVATIO N	POIN T	ELEVATIO N
460.68	(4)	440.00
151.00	(5)	448.25
148.17	(6)	447.35
148.89		447.43
452.00	(8)	447.29
445.12	(19)	448.05
446.16	20>	448.03
446.95	2	448.32
440.05	22	451.50
439.95	23	457.86
439.95	24	460.43
439.90	25	440.30
439.85		

		·				
E	DGE OF	GRA	VEL			
ELEVATION TABLE						
POIN T	ELEVATIO N	POIN T	ELEVATIO N			
26	457.75	(35)	442.65			
27	456.99	(36)	442.90			
28	440.67	37	444.10			
29	439.01	38	444.65			
30	439.59	39	444.80			
3	439.80	(40)	435.00			
(32)	439.95	$\langle 4 \rangle$	429.10			
33	439.95	(42)	425.50			
34	441.97					

GE OF PAVEMENT CURVE TABLE						
PC	PT	DELTA	RADIUS	LENGTH		
7435.61 56009.40	N627412.72 E7655951.33	87°49'53"	45.00'	68.98'		
7434.67 56090.89	N627435.61 E7656009.40	43°29'03"	110.00'	83.48'		
7433.70 56129.17	N627434.67 E7656090.89	45°02'00"	50.00'	39.30'		
7570.23 56274.48	N627574.29 E7656275.83	5°47'03"	42.43'	4.28'		
7582.57 56236.74	N627579.57 E7656261.69	°47'45"	122.29'	25.18'		
7546.97 56247.23	N627567.98 E7656236.50	103°43'54"	15.00'	27.16'		
7477.58 56198.62	N627484.90 E7656218.53	90°00'00"	15.00'	23.56'		
7512.58 55970.01	N627508.68 E7656131.36	43°24'20"	85.00'	212.75'		
7487.88 55957.11	N627509.08 E7655958.53	41°29'17"	30.00'	21.72'		

# EDGE OF GRAVEL CURVE TABLE

PC	PT	DELTA	RADIUS	LENGTH
27630.98 356076.52	N627509.08 E7655958.53	2 °57'5 "	97.00'	206.48'
27515.20 356145.78	N627498.17 E7656154.09	78°21'14"	15.00'	20.51'
27541.24 556168.97	N627528.83 E7656147.96	108°51'09"	15.00'	28.50'
27538.69 556174.74	N627540.78 E7656190.34	62°59'02"	15.07'	16.57'
27567.59 556225.83	N627568.84 E7656232.14	47°45'55"	7.94'	6.62'
27585.18 656183.84	N627580.95 E7656214.81	34°16'51"	53.04'	31.73'
27580.95 656214.81	N627582.57 E7656236.74	10°18'51"	122.29'	22.01'
27579.57 656261.69	N627608.29 E7656250.37	68°29'49"	27.43'	32.79'
27640.26 656209.11	N627671.31 E7656183.69	18°30'00"	124.83'	40.31'

