CONTRACT DRAWINGS FOR
CITY OF KIRKLAND

JOB NO. 11–20–PW
CIF#: CSD0124

CITY OFFICIALS

PENNY SWEET  MAYOR
JAY ARNOLD  DEPUTY MAYOR
NEAL BLACK  COUNCIL MEMBER
KELLI CURTIS  COUNCIL MEMBER
AMY FALCONE  COUNCIL MEMBER
TOBY NIXON  COUNCIL MEMBER
JON PASCAL  COUNCIL MEMBER
KURT TRIPLETT  CITY MANAGER
JULIE UNDERWOOD  PUBLIC WORKS DIRECTOR
ROD STEITZER  CAPITAL PROJECTS MANAGER

CONTACT PERSONNEL

NAME  AGENCY  PHONE
JAMES MCPHERSON  STANTEC CONSULTING  425–615–3164

CEDAR CREEK
CULVERT REPLACEMENT

DESIGN DRAWINGS
CONSTRUCTION NOTES/CONTRACTOR, STAGING, STORAGE AND ACCESS

1. LOCATION

Cedar Creek CULVERT REPLACEMENT

1.1 Project No.: #18899

1.2 City of Kirkland

1.3 Project Manager: [Name]

1.4 Project Team:

1.5 Contact Information:

2. GENERAL

2.1 Utility Relocation: No part of this contract is subject to utility relocation.

2.2 Specifications: For all materials and work, see the specific construction documents.

3. Project Information

3.1 Quantity: [quantity]

3.2 Duration: [duration]

3.3 Contract Amount: [amount]

3.4 Payment Schedule: [schedule]

3.5 Insurance: Contractor shall provide liability insurance as required by the City of Kirkland.

4. Construction

4.1 Site Preparation: Contractor shall prepare the site as required by the City of Kirkland.

4.2 Construction Schedule: Contractor shall adhere to the approved construction schedule.

4.3 Quality Assurance: Contractor shall perform quality assurance checks as required by the City of Kirkland.

4.4 Safety: Contractor shall comply with all applicable safety regulations.

4.5 Subcontracts: Contractor shall not subcontract without the written approval of the City of Kirkland.

4.6 Change Orders: Change orders shall be approved in writing by the City of Kirkland.

5. Documentation

5.1 Records: Contractor shall maintain complete records of all work performed.

5.2 Final Inspection: Final inspection shall be conducted by the City of Kirkland.

5.3 Closeout: Closeout shall be completed within 30 days after final inspection.

6.-General Notes:

6.1 Additional Notes:

6.2 Revision History:

[signature]

City of Kirkland

[Signature]

Project Manager

[Date]

[City of Kirkland]

[Signature]

City of Kirkland

[Date]

[City of Kirkland]
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## CITY OF KIRKLAND
### CEDAR CREEK CULVERT REPLACEMENT

**KIRKLAND, WA**

**36**
2020.03.11

**CSD0124**

**GC-1**

**N/A**

Notes:
- Contractor responsible for operating bypass system such that no turbid water is discharged into creek.
- Line trench with class C non-woven geotextile for drainage and filtration shall conform to WSDOT Standard Specifications 9-33.2(1), Table 2.
- Contractor responsible for holding down geotextile (typ).
- Line trench with class C non-woven geotextile for drainage and filtration shall conform to WSDOT Standard Specifications 9-33.2(1), Table 2.

### Civil Details 1

**Plan No**: 09-125

**Sheet**: 3

**Scale**: 1/50

**Not to Scale**

**Dwg No**: 800111

**Appd YY.MM.DD**

**Dsgn YY.MM.DD**

**Chkd YY.MM.DD**

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**File Name**: 10451GC-001

**ORIGINAL SHEET - ANSI D**

**Tel**: (425) 869-9448

**www.stantec.com**

**Stantec Consulting Services Inc.**
11130 NE 33rd Place Suite 200
Bellevue WA 98004-1465

**Permit/Seal**

**Issued YY.MM.DD**

**Appd YY.MM.DD**

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CONNECT BYPASS PIPING

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1. Install concrete barrier type 2 per WSDOT STD plan C-8.
2. Construct HMA pavement section per DETAIL sheet 12.
3. Construct barrier pad pavement section per DETAIL sheet 12.
4. Install pedestrian lane markings per CITY of KIRKLAND STD plan CK-R-346.
5. Install painted double yellow centerline per CITY of KIRKLAND STD plan CK-R-301.
6. Install 4" white painted edge line per WSDOT standard plan M-20 10-02.
7. Adjust sewer manhole to grade per CITY of KIRKLAND STD plan CK-R-12.
8. Adjust catch basin to grade per CITY of KIRKLAND STD plan CK-R-12.
10. Install ±2" CSTC gravel shoulder.

ROADWAY LEGEND:
- SAWCUT
- HMA PAVEMENT SECTION
- BARRIER PAD PAVEMENT SECTION
- GRAVEL SHOULDER
- CONCRETE TRAFFIC BARRIER

CITY OF KIRKLAND
CEDAR CREEK CULVERT REPLACEMENT
KIRKLAND, WA

100TH AVE NE
**KEY NOTES**

1. HMA PAVEMENT SECTION, SEE DETAIL THIS SHEET.
2. BARRIER PAD PAVEMENT SECTION, SEE DETAIL THIS SHEET.
3. 2" CSTC FOR ROAD WIDENING.
4. PRECAST CONCRETE BARRIER TYPE 2 PER WSDOT STD PLAN C-8.
5. STRUCTURAL EARTH WALL, SEE SHEETS S-3.

**ROADWAY DETAILS**

- **ROADWAY WIDTH**: Varies - See Plan
- **SLOPE**: 2.0% Max. All Directions
- **2.0% MAX**
- **8.3% MAX**
- **EXIST CURB AND GUTTER (TO REMAIN)**
- **EXIST GROWTH CONCRETE SIDEWALK (TO REMAIN)**
- **FULL DEPTH EXPANSION JOINT**
- **HMA RAMP**
- **HMA LANDING**: 2.0% Max. Slope All Directions
- **HMA TRANSITION RAMP DETAIL**
- **BARRIER PAD**
- **ROADWAY VARIABLES - SEE PLAN**
- **WIDENING VARIABLES - SEE PLAN**
- **100TH AVE NE TYPICAL SECTION**
  - Scale: 1:48

**ISOMETRIC VIEW**

- **COMPACTED SUBGRADE**
- **HMA PAVEMENT SECTION**
- **BARRIER PAD PAVEMENT SECTION**
- **HMA TRANSITION RAMP DETAIL**
- **EXISTING GROUND**

**NOTES**

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TRAFFIC CONTROL GENERAL NOTES
1. FULL ROAD CLOSURE OF 100TH AVE NE SHALL BE ALLOWED ONLY IN ACCORDANCE WITH THE CONTRACT SPECIAL PROVISIONS.
2. ALL TRAFFIC CONTROL SHALL COMPLY WITH MUTCD REQUIREMENTS.
3. MINIMUM TEMPORARY LANE WIDTHS SHALL BE 10FT.
4. SEE ALSO SPECIFICATIONS AND SPECIAL PROVISIONS, INCLUDING WSDOT STD SPEC 1-07.23(1).
5. ALL CONSTRUCTION SIGNS SHALL BE CLASS A UNLESS DESIGNATED OTHERWISE.
6. CONFICTING SIGNS SHALL BE COVERED OR REMOVED.
7. CONTRACTOR SHALL SUBMIT FOR APPROVAL ANY ADDITIONAL TRAFFIC CONTROL PLANS AS REQUIRED TO COMPLETE WORK.
8. PEDESTRIAN ACCESS THROUGH THE WORK AREA DURING THE FULL ROAD CLOSURE IS NOT REQUIRED. SEE SPECIAL PROVISIONS.
9. CONTRACTOR SHALL CONTACT RK MAPPERS AT (206) 496-6365, OR STEVE HOOPES AT (425) 623-5386 FOR ALL RELATED TRAFFIC SIGNAL COORDINATION.
10. CONTRACTOR SHALL COORDINATE ACCESS FOR SERVICES INCLUDING, BUT NOT LIMITED TO, MAIL DELIVERY, GARBAGE PICKUP, BUSINESS DELIVERIES/PICKUPS, AND ANY SPECIAL TRANSPORTATION SERVICES. CONTRACTOR SHALL COORDINATE WITH BUSINESSES TO ENSURE ALL DELIVERIES AND GARBAGE PICKUP IS MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
11. CONTRACTOR AND OR ITS AGENTS SHALL NOT PARK IN ANY BUSINESS PARKING LOTS WITHOUT WRITTEN PERMISSION FROM THE PROPERTY OWNER.
12. CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS TO ALL PROPERTIES UNLESS APPROVED OTHERWISE. THE CONTRACTOR SHALL COORDINATE ALL TEMPORARY CLOSURES WITH THE CHATTEY CONTRACTING AGENCY REPRESENTATIVE AND AFFECTED PROPERTY OWNER PRIOR TO IMPLEMENTING CLOSURE.

TRAFFIC CONTROL LEGEND
- TEMPORARY SIGN LOCATION
- CHANNELIZATION DEVICE
- PROTECTIVE VEHICLES
- DETOUR ROUTE
- TEMPORARY CONCRETE BARRIER
- MOVEABLE TYPE A BARRIERS
- POSTER REMOVABLE MESSAGE SIGN
- SIGNALIZED INTERSECTION

TRAFFIC CONTROL PLAN - FULL ROAD CLOSURE WITH DETOUR

STANTEC Consulting Services Inc.
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11130 NE 33rd Place Suite 200
(425) 869-9448
Tel:
Stantec Consulting Services Inc.
CEDAR CREEK CULVERT REPLACEMENT
BOISE, ID 83704
10451TC-001

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TRAFFIC CONTROL GENERAL NOTES

1. FULL ROAD CLOSURE OF 100TH AVE NE SHALL BE ALLOWED ONLY IN ACCORDANCE WITH THE CONTRACT SPECIAL PROVISIONS.

2. ALL TRAFFIC CONTROL SHALL COMPLY WITH MUTCD REQUIREMENTS.

3. MINIMUM TEMPORARY LANE WIDTHS SHALL BE 1 FT.

4. SEE ALSO SPECIFICATIONS AND SPECIAL PROVISIONS, INCLUDING WSDOT STD SPEC 1-07.23(1).

5. ALL CONSTRUCTION SIGNS SHALL BE CLASS A UNLESS DESIGNATED OTHERWISE.

6. CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.

7. CONTRACTOR SHALL SUBMIT FOR APPROVAL ANY ADDITIONAL TRAFFIC CONTROL PLANS AS REQUIRED TO COMPLETE WORK.

8. PEDESTRIAN ACCESS THROUGH THE WORK AREA DURING THE FULL ROAD CLOSURE IS NOT REQUIRED. SEE SPECIAL PROVISIONS.

9. CONTRACTOR SHALL CONTACT RIK MAYER AT (206) 496-4265, OR STEVE HOOPES AT (425) 623-5086 FOR ALL RELATED TRAFFIC SIGNAL COORDINATION.

10. CONTRACTOR SHALL COORDINATE ACCESS FOR SERVICES INCLUDING, BUT NOT LIMITED TO, MAIL DELIVERY, GARBAGE PICKUP, BUSINESS DELIVERIES/PICKUPS, AND ANY SPECIAL TRANSPORTATION SERVICES. CONTRACTOR SHALL COORDINATE WITH BUSINESSES TO ENSURE ALL DELIVERIES AND GARBAGE PICKUP IS MAINTAINED DURING THE DURATION OF CONSTRUCTION.

11. CONTRACTOR AND/OR ITS AGENTS SHALL NOT PARK IN ANY BUSINESS PARKING LOTS WITHOUT WRITTEN PERMISSION FROM THE PROPERTY OWNER.

12. CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS TO ALL PROPERTIES UNLESS APPROVED OTHERWISE. THE CONTRACTOR SHALL COORDINATE ALL TEMPORARY CLOSURES WITH THE ON-SITE CONTRACTING AGENCY REPRESENTATIVE AND AFFECTED PROPERTY OWNER PRIOR TO IMPLEMENTING CLOSURE.

TRAFFIC CONTROL LEGEND

- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE
- DETOUR ROUTE
- TEMPORARY CONCRETE BARRIER
- MOVEABLE TYPE III BARRICADE
- PORTABLE CHANGEABLE MESSAGE SIGN
- SIGNALIZED INTERSECTION

MINIMUM TAPER LENGTH - L (FEET)

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<th>LANE WIDTH (feet)</th>
<th>POSTED SPEED (MPH)</th>
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</thead>
<tbody>
<tr>
<td>25</td>
<td>10 15 20 25 30 35 40 45 50 55 60 65 70</td>
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<tr>
<td>30</td>
<td>10 15 20 25 30 35 40 45 50 55 60</td>
</tr>
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<td>35</td>
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<td>60</td>
<td>10 15 20</td>
</tr>
<tr>
<td>65</td>
<td>10</td>
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</tbody>
</table>

SIGN SPACING = X (1)

RURAL ROADS:
- 43-55 MPH: 500'
- 25-30 MPH: 200' (2)

RURAL ROADS & URBAN ARTERIALS:
- 35-40 MPH: 350'

RESIDENTIAL & BUSINESS DISTRICTS:
- 25 MPH OR LESS: 100' (2)

1. ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
2. SIGN SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

CHANNELIZATION DEVICE SPACING (FEET)

<table>
<thead>
<tr>
<th>MPH</th>
<th>TAPER</th>
<th>MARGINAL</th>
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</thead>
<tbody>
<tr>
<td>30</td>
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<tr>
<td>35/40</td>
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<td>25/30</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

14 TC-2

TRAFFIC CONTROL PLAN - NORTH CLOSURE
The Contractor shall verify and be responsible for all dimensions. DO NOT scale the ORIGINAL SHEET - ANSI D

Revision
Issued
Chkd.
Appd
YYYY.MM.DD
Dsgn.
Dwn.
YYYY.MM.DD
By
YYYY.MM.DD
By
STRM-2.2
drawing - any errors or omissions shall be reported to Stantec without delay.

1. COARSE BANDS SHALL BE ORIENTED IN AN UPSTREAM DIRECTION AT 45° ANGLE FROM CULVERT WALL AS SHOWN.
2. COARSE BAND LENGTH SHALL BE A MIN OF 6 FEET MEASURED ALONG ITS CENTERLINE. BUT SHALL NOT EXTEND BEYOND THE CULVERTS CENTERLINE.
3. COARSE BAND PROFILE TO BE NO GREATER THAN 8" BELOW DESIGN CHANNEL SECTION IN HEIGHT AND SHALL NOT EXTEND HIGHER THAN THE CHANNEL PROFILE.
4. COARSE BANDS SHALL BE CONSTRUCTED USING COARSE STREAMBED AGGREGATE AS DEFINED BY THE SPECIFICATIONS. ENGINEER TO VISUALLY INSPECT AND APPROVE MATERIAL USED FOR COARSE BANDS PRIOR TO INSTALLATION.
5. LOGS OUTSIDE OF STREAM CHANNEL SHALL BE INSTALLED PERPENDICULAR TO STORMWATER FLOW DIRECTION AS DIRECTED BY ENGINEER.
CHARACTERISTIC STREAM SECTIONS

1. UPSTREAM SITE SECTION

2. UPSTREAM CULVERT SECTION

3. DOWNSTREAM SITE SECTION A

4. DOWNSTREAM SITE SECTION B

Client/Project
City of Kirkland
Cedar Creek Culvert Replacement
Issued 3/11/20

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File Name: 10451STRM-003

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www.stantec.com
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FLOOR SPLIT STRUCTURE TABLE

<table>
<thead>
<tr>
<th>DRAWING SHEET</th>
<th>STRUCTURE TABLE FOR VARIATIONS IN TRACKING</th>
<th>1.00</th>
<th>1.00</th>
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<tbody>
<tr>
<td>SHEET</td>
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<td>995</td>
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<td>10%</td>
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<tr>
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<tr>
<td>9</td>
<td>999</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

NOTES:
1. VANE BOULDERS SHALL HAVE A MINIMUM AVERAGE DIAMETER OF 12 INCHES CONFORM TO THE SPECIFICATIONS.
2. ON THE LEFT SIDE OF THE VANE BOULDERS, A LAYER OF BIOREGENERABLE MATERIAL SHALL BE INSTALLED AS SHOWN. BIOREGENERABLE MATERIAL SHALL CONFORM TO THE SPECIFICATIONS.
3. VANE BOULDERS SHALL PROTRUD 0.5 FOOT UNDER THE EXPOSED SURFACE OF THE BOULDERS.
4. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, VANE BOULDERS SHALL BE UNPLATED BY FOOTER BOULDER AS SHOWN.
5. VANE WILL BE TAKEN WITH PLACEMENT TO MAIN CHAMBER BETWEEN MAIN CHAMBER DRUMS PROPER TO ABIDE THE SPECIFICATIONS.
6. VANE SURFACE SHALL BE FLAT AND VANE BOULDERS SHALL BE PLANTED TO MAIN CHAMBER PROPER TO ABIDE THE SPECIFICATIONS.

CONTRACTOR SHALL CONFORM TO THE SPECIFICATIONS.

A-1

1. Includes provisions for rock vane as directed.

3. SETTLEMENT DETAIL

2. INSTALL ROCK VANE AS DIRECTED BY ENGINEER.

4. INSTALL HIGH DENSITY LIVE STAKING.

5. COBBLES AND COARSE STREAMBED AGGREGATE AS DIRECTED BY ENGINEER.

6. COARSE STREAMBED FROM A SLOPE PLACE 24"CPEP INTO BANK, TIE INTO BANK, MINE TYPICAL BANK LOSS TO BE INSTALLED AS DIRECTED BY ENGINEER.

7. BIODEGRADABLE PLANTS TO BE PLANTED ACROSS MATERIAL OR PREVIOUS FILL.

8. PROBLEMATIC AREAS TO BE TREATED AS SHOWN.

9. LIVE STAKING TO BE INSTALLED AS DIRECTED.

10. INSTALL OF 2' DEPTH AT OUTLET SIDES.

11. INSTALL COARSE STREAMBED LIVING STAKING.

12. INSTALL GEOTEXTILE.
1. The Contractor shall verify and be responsible for all dimensions. DO NOT SCALE THE REMAINDER (2 TO 4 FEET) OF EACH LIVE BRANCH WILL BE COVERED BY THE NEXT SOIL LIFT.

2. Place layer of topsoil (TYP.) over previous lift.

3. Small woody material shall be placed inside and between the coarse woody debris with sufficient space to prevent erosion of the coarse woody debris. Fill voids with select backfill material.

4. All woody debris shall be of the species specified for live stakes. Small woody material may be used in place of coir lifts above the woody toe if available and approved by engineer.

5. No brush or small woody material is to be placed on top of the previous lift.

6. Rack log (TYP.) on the downstream slope of woody toe.

7. Live branches shall be of the species specified for live stakes.

8. Small woody material shall be placed inside and between the coarse woody debris with sufficient space to prevent erosion of the coarse woody debris. Fill voids with select backfill material.

9. Live branches shall be of the species specified for live stakes.

10. Small woody material shall be placed inside and between the coarse woody debris with sufficient space to prevent erosion of the coarse woody debris. Fill voids with select backfill material.

11. The Contractor shall verify and be responsible for all dimensions. DO NOT SCALE THE REMAINDER (2 TO 4 FEET) OF EACH LIVE BRANCH WILL BE COVERED BY THE NEXT SOIL LIFT.

12. Live branches shall be of the species specified for live stakes. Small woody material may be used in place of coir lifts above the woody toe if available and approved by engineer.

13. No brush or small woody material is to be placed on top of the previous lift.


15. Live branches shall be of the species specified for live stakes.

16. Small woody material shall be placed inside and between the coarse woody debris with sufficient space to prevent erosion of the coarse woody debris. Fill voids with select backfill material.

17. Live branches shall be of the species specified for live stakes. Small woody material may be used in place of coir lifts above the woody toe if available and approved by engineer.

18. No brush or small woody material is to be placed on top of the previous lift.

19. Rack log (TYP.) on the downstream slope of woody toe.

20. Live branches shall be of the species specified for live stakes.

21. Small woody material shall be placed inside and between the coarse woody debris with sufficient space to prevent erosion of the coarse woody debris. Fill voids with select backfill material.

22. Live branches shall be of the species specified for live stakes. Small woody material may be used in place of coir lifts above the woody toe if available and approved by engineer.

23. No brush or small woody material is to be placed on top of the previous lift.

24. Rack log (TYP.) on the downstream slope of woody toe.

25. Live branches shall be of the species specified for live stakes.

26. Small woody material shall be placed inside and between the coarse woody debris with sufficient space to prevent erosion of the coarse woody debris. Fill voids with select backfill material.

27. Live branches shall be of the species specified for live stakes. Small woody material may be used in place of coir lifts above the woody toe if available and approved by engineer.

28. No brush or small woody material is to be placed on top of the previous lift.

29. Rack log (TYP.) on the downstream slope of woody toe.

30. Live branches shall be of the species specified for live stakes.
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NOTES:

1. MAXIMUM EXCAVATION SLOPES TO BE EVALUATED BY GEOTECHNICAL ENGINEER DURING CONSTRUCTION.
2. CONCRETE WING WALLS AND CULVERT ARE SHOWN FOR GUIDANCE ONLY. PRECASTER SHALL PROVIDE DETAILED DRAWINGS AND SPECIFICATION AS PER SHEET 6.02.
3. PRECASTER SHALL INCORPORATE MAINTENANCE ACCESS LOAD IN THE CULVERT DESIGN.
4. PRECASTER SHALL USE 5'X10' ACCESS HATCH PRODUCTS COMPANY MODEL HHD4 OR APPROVED EQUAL. PRECASTER SHALL PROVIDE CULVERT DRAINAGE REQUIREMENTS FOR ALL CONDITIONS PER SELECTED CULVERT MANUFACTURER SPECIFICATION.
5. PRECASTER SHALL INCORPORATE HEAD WALL LOAD IN THE CULVERT DESIGN, HEADWALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH WSDOT SPEC T-162.3(1) AND 6.02.
6. CONTRACTOR SHALL PROVIDE ALL SUBMITTALS FOR STRUCTURAL CONNECTIONS OF BOX CULVERT AND WING WALLS IN ACCORDANCE WITH THE ORDER OF WORK IN THE SPECIFICATIONS.

12" MIN CSBC PER WSDOT SPEC 9-03.9(3), COMPACT TO 95% MAX DENSITY, BY ASTM D-1557, FINES CONTENT LESS THAN 5%.

SCALE: 1" = 10'
NOTES:

1. THE SEWS SHALL BE DESIGNED IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (2002).


4. DRAINAGE SHALL BE PROVIDED BEHIND ALL SEWS AND SHALL CONSIST OF 6-INCH DIAMETER, PERFORATED, RIGID PLASTIC PIPES, BLED AND BAKETLED WITH GRAVEL, SHOWN FOR DRAINS, AS SPECIFIED IN SECTION 9-03.12(4) OF THE STANDARD SPEC (WSDOT, 2018). THE PIPE SHALL SLOPE TO DRAIN TO A SUITABLE OUTLET.

5. GRAVEL BACKFILL FOR SEWS PROVIDED AS PER WSDOT SPEC 9-03.4(4).

6. BACKFILL WITHIN THE REINFORCED ZONE OF SEWS SHALL CONSIST OF GRAVEL BORROW AS PER WSDOT SPEC 9-03.14(4).

7. CONTRACTOR SHALL PROVIDE ALL SUBMITTALS FOR STRUCTURAL CONNECTIONS OF BOX CULVERT AND WING WALLS IN ACCORDANCE WITH THE ORDER OF WORK IN THE SPECIFICATIONS.

UPSTREAM WINGWALL ALIGNMENT

<table>
<thead>
<tr>
<th>LINE NO</th>
<th>LENGTH</th>
<th>DIRECTION</th>
<th>STATION (FT)</th>
<th>START NORTHING</th>
<th>START EASTING</th>
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<tbody>
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<td>N 64°11'55&quot; E</td>
<td>0+00.00</td>
<td>597348.11</td>
<td>1630213.21</td>
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<tr>
<td>2</td>
<td>16.00</td>
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<td>597358.99</td>
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<tr>
<td>3</td>
<td>25.00</td>
<td>N 25°48'05&quot; W</td>
<td>0+41.00</td>
<td>597374.96</td>
<td>1630236.81</td>
</tr>
<tr>
<td>4</td>
<td>25.00</td>
<td>N 25°48'05&quot; W</td>
<td>0+41.00</td>
<td>597374.96</td>
<td>1630236.81</td>
</tr>
</tbody>
</table>
The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawings.

**NOTES:**
1. The sewer shall be designed in accordance with AASHTO Standard Specifications for Highway Bridges (2002).
2. A leveling pad consisting of crushed rock backfill shall be placed outside the reinforced zone of the sews. This leveling course shall be at least 12 inches thick and shall consist of material meeting the requirements for crushed surface base course, as described in Section 9-63.10(b) of the Standard Spec (WSDOT, 2018). It shall be compacted to a dense condition, and to at least 95 percent of its modified proctor maximum density (ASTMD-1557).
3. The backfill within the reinforced zone of sews shall consist of gravel borrow as per WSDOT Spec 9-03.12(4). The pipe shall slope to drain to a suitable outlet.
4. Gravel backfill for sews provided as per WSDOT Spec 9-03.14.
5. Backfill for sews provided as per WSDOT Spec 9-03.14.
6. 4' black vinyl coated chain link fence per detail, sheet S-4.
7. Leveling course shall consist of materials meeting the requirements for structural connections of box culvert and wing walls in accordance with the order of work in the specifications.

**DOWNSWAM SEW ALIGNMENT**

<table>
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<tr>
<th>LINE NO</th>
<th>LENGTH</th>
<th>DIRECTION</th>
<th>STATION (PT)</th>
<th>START NORTHING</th>
<th>START EASTING</th>
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<td>562696.80</td>
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**DOWNSWAM WALL PLAN, PROFILE AND SECTIONS**

**SECTION**

**DOWNSWAM SEW PROFILE**

**SCALE:** VERTICAL 1"=10'

**SCALE:** HORIZONTAL 1"=20'

---

Stantec Consulting Services Inc.

City of Kirkland

CEDAR CREEK CULVERT REPLACEMENT

BELLWOOD, WA
PLANTING SEQUENCE:
1. PLANT STREAM BUFFER (ZONE 1) IN THE FOLLOWING ORDER: BRIAR, BRIAR, NE 142ND PL.
2. PLANT WETLAND ZONE (ZONE 2) IN THE FOLLOWING ORDER: TRASH, TRASH, 100TH AVE NE.
3. PLANT UPLAND ZONE (ZONE 3) IN THE FOLLOWING ORDER: TRASH, TRASH, 100TH AVE NE.
4. PLANT SODDIES (ZONE 4) IN THE FOLLOWING ORDER: GRASS, GRASS, TRASH.
5. PLANT PLANINAS IN THE FOLLOWING ORDER: TRASH, TRASH, TRASH.

GENERAL RESTORATION NOTES:

1. COORDINATE A TIME FOR PLANTING AND SEEDING TO ALLOW THROUGHFALL FLOWAGE AND TIME TO PLANT IN NOVEMBER 19.
2. TESTS AND INSPECTION WILL BE PERFORMED IMMEDIATELY AFTER PLANTING ANY PLANT MATERIAL INSTALLED.
3. ALL PLANT MATERIALS WERE TO BE RESTORED TO A CONDITION OF RESTORATION TO THE ORIGINAL CONDITIONS.
4. PLANTS SHALL BE PLANTED TO PERMIT PROPER GROWTH AND CARE.
5. PLANTS MAY BE REPLANTED TO PROVIDE PROPER GROWTH AND CARE.

REDEVASITION NOTES:

1. ALL PLANTS MAY BE REPLANTED TO PROVIDE PROPER GROWTH AND CARE.
2. PLANTS MAY BE REPLANTED TO PROVIDE PROPER GROWTH AND CARE.
3. PLANTS MAY BE REPLANTED TO PROVIDE PROPER GROWTH AND CARE.
4. PLANTS MAY BE REPLANTED TO PROVIDE PROPER GROWTH AND CARE.
5. PLANTS MAY BE REPLANTED TO PROVIDE PROPER GROWTH AND CARE.

MAINTENANCE OF LANDSCAPING PLANTING PERIOD TO ACCEPTANCE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PLANTING, MAINTENANCE, AND REPLACEMENT OF ALL PLANTS UPON ACCEPTANCE.
2. PLANTS WERE TO BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS.
3. PLANTS WERE TO BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS.
4. PLANTS WERE TO BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS.
5. PLANTS WERE TO BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS.

REDEVASITION FINAL INSPECTION AND GUARANTEE NOTES:

1. OSBREEDS OF THE PROPER VARIETY AND SIZE SHALL BE PLANTED IN CONFORMANCE WITH THE INITIAL PLANTING.
2. PLANTS WERE TO BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS.
3. PLANTS WERE TO BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS.
4. PLANTS WERE TO BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS.
5. PLANTS WERE TO BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS.

MAINTENANCE DURING MAINTENANCE PERIOD:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER MAINTENANCE, REPLACEMENT, AND REPLANTING OF ALL PLANTS UPON ACCEPTANCE.
2. PLANTS WERE TO BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS.
3. PLANTS WERE TO BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS.
4. PLANTS WERE TO BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS.
5. PLANTS WERE TO BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS.

THE MITIGATION PLANTING PLAN AND NOTES

Project No: C58042
Scale: AS NOTED
Revision: Sheet: 28 of 33
Closing No: P-1
<table>
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<th>Zone</th>
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<th>Total SF</th>
<th>Planting SF</th>
<th>Structural Community</th>
<th>Spp Name</th>
<th>Common Name</th>
<th>% Community Composition</th>
<th>Plant Quantity</th>
<th>Container</th>
<th>Spacing O.C. (ft)</th>
<th>Grouping</th>
<th>Planting Comments</th>
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<td>17</td>
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<td>Salix purpurea</td>
<td>Swamp Willow</td>
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<td>18</td>
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<td>Shrub</td>
<td>Salix lanata</td>
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<td></td>
<td>Shrub</td>
<td>Spiraea douglas</td>
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<td>seed</td>
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<td>Groundcover NAVY 32 inch</td>
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<td></td>
<td>Groundcover</td>
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<td>75</td>
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<td>seed</td>
<td>--</td>
<td>2 lb. per 1000 sq ft (40-60 lbs. per acre), hydroseed with fertilizer</td>
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</table>

| W2   | Upstream Side Small Wetland  | 1320     | 1320        | Tree                 | Cornus obliqua            | Red Oyster              | 20                      | 22              | 1 gallon           | 5               | 4-8               |                               |
|      |                              |          |             | Shrub                | Salix purpurea            | Swamp Willow            | 20                      | 18              | 1 gallon           | 5               | 4-8               |                               |
|      |                              |          |             | Shrub                | Salix lanata             | Black Twig               | 20                      | 14              | 1 gallon           | 5               | 4-8               |                               |
|      |                              |          |             | Groundcover          | Lysichiton americanum    | Black Cabbage            | 5                       | 2               | 0.42 qt            | 1               | 4-8               |                               |
|      |                              |          |             | Groundcover          | Polygon torch/Spreadleaf | Lysichiton americanum    | 10                      | --              | seed               | --              | Groundcover NAVY 32 inch |
|      |                              |          |             | Groundcover          | PT 406 Native Mix for Wet Areas | 4% American Sloughgrass, 40% Western Marshgrass, 5% Spreading Rush, 5% Slough Sedge | 90 | -- | seed | -- | 2 lb. per 1000 sq ft (40-60 lbs. per acre), hydroseed with fertilizer |

| W3   | Downstream Side North Wetland Area | 640 | 640     | Shrub                | Cornus obliqua            | Red Oyster              | 20                      | 7               | 1 gallon           | 5               | 4-8               |                               |
|      |                              |          |             | Shrub                | Salix purpurea            | Swamp Willow            | 20                      | 7               | 1 gallon           | 5               | 4-8               |                               |
|      |                              |          |             | Shrub                | Salix lanata             | Black Twig               | 20                      | 7               | 1 gallon           | 5               | 4-8               |                               |
|      |                              |          |             | Groundcover          | Lysichiton americanum    | Black Cabbage            | 5                       | 2               | 0.42 qt            | 1               | 4-8               |                               |
|      |                              |          |             | Groundcover          | Polygon torch/Spreadleaf | Lysichiton americanum    | 10                      | --              | seed               | --              | Groundcover NAVY 32 inch |
|      |                              |          |             | Groundcover          | PT 406 Native Mix for Wet Areas | 4% American Sloughgrass, 40% Western Marshgrass, 5% Spreading Rush, 5% Slough Sedge | 90 | -- | seed | -- | 2 lb. per 1000 sq ft (40-60 lbs. per acre), hydroseed with fertilizer |

<p>| W4   | Downstream Side South Wetland Area | 460 | 460     | Shrub                | Cornus obliqua            | Red Oyster              | 20                      | 7               | 1 gallon           | 5               | 4-8               |                               |
|      |                              |          |             | Shrub                | Salix purpurea            | Swamp Willow            | 20                      | 7               | 1 gallon           | 5               | 4-8               |                               |
|      |                              |          |             | Shrub                | Salix lanata             | Black Twig               | 20                      | 2               | 1 gallon           | 5               | 4-8               |                               |
|      |                              |          |             | Groundcover          | Lysichiton americanum    | Black Cabbage            | 5                       | 1               | 0.42 qt            | 1               | 4-8               |                               |
|      |                              |          |             | Groundcover          | Polygon torch/Spreadleaf | Lysichiton americanum    | 10                      | --              | seed               | --              | Groundcover NAVY 32 inch |
|      |                              |          |             | Groundcover          | PT 406 Native Mix for Wet Areas | 4% American Sloughgrass, 40% Western Marshgrass, 5% Spreading Rush, 5% Slough Sedge | 100 | -- | seed | -- | 2 lb. per 1000 sq ft (40-60 lbs. per acre), hydroseed with fertilizer |</p>
<table>
<thead>
<tr>
<th>Zone</th>
<th>Description</th>
<th>Total SF</th>
<th>Planting SF</th>
<th>Structural Community</th>
<th>Spp Name</th>
<th>Common Name</th>
<th>% Community Composition</th>
<th>Plant Quantity</th>
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<th>Spacing O.C. (Ft)</th>
<th>Grouping</th>
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<td>1 gallon</td>
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<td>1 gallon</td>
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<td>Shrub</td>
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<td>Dipsacus sativus</td>
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<td>PT 402 Native Mix for Wet Areas</td>
<td>100</td>
<td>-</td>
<td>seed</td>
<td>-</td>
<td>2 lb. per 1000 sq ft (40-60 lbs. per acre), hydroseed with tackifier</td>
<td></td>
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<td>UL</td>
<td>Upstream Side Upland Area South of Wetland 1</td>
<td>3360</td>
<td>3360</td>
<td></td>
<td>Tree</td>
<td>Acer pennsylvanicus</td>
<td>American Elm</td>
<td>50</td>
<td>10</td>
<td>1 gallon</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tree</td>
<td>Picea engelmanniana</td>
<td>Engelmann Spruce</td>
<td>25</td>
<td>9</td>
<td>1 gallon</td>
<td>10</td>
<td>-</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tree</td>
<td>Prunus triloba</td>
<td>Western Red Cedar</td>
<td>25</td>
<td>3</td>
<td>1 gallon</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Malus aquifolium</td>
<td>Tall Dogwood Grape</td>
<td>20</td>
<td>25</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Dipsacus sativus</td>
<td>Indian Plum</td>
<td>25</td>
<td>25</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Physocarpus monheim</td>
<td>Western Snow Fern</td>
<td>20</td>
<td>25</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
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<td></td>
<td></td>
<td>Shrub</td>
<td>Symphoricarpos albus</td>
<td>Vine Maple</td>
<td>20</td>
<td>25</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Vaccinium parvifolium</td>
<td>Red Huckleberry</td>
<td>20</td>
<td>15</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>Seed Mix</td>
<td>Pacific Northwest Native Erosion Control Mix</td>
<td>100</td>
<td>-</td>
<td>seed</td>
<td>-</td>
<td>2 lb. per 1000 sq ft (40-60 lbs. per acre), hydroseed with tackifier</td>
<td></td>
</tr>
<tr>
<td>Zone</td>
<td>Description</td>
<td>Total SF</td>
<td>Planting SF</td>
<td>Structural Community</td>
<td>Taxa Name</td>
<td>Common Name</td>
<td>% Community Composition</td>
<td>Plant Quantity</td>
<td>Container</td>
<td>Spacing O.C. (ft)</td>
<td>Grouping</td>
<td>Planting Comments</td>
</tr>
<tr>
<td>------------</td>
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<td>-----------------------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>U2</td>
<td>Upland Side Upland Area Adjacent to Roadway</td>
<td>3540</td>
<td>3540</td>
<td>Tree</td>
<td>Arbutus menziesii</td>
<td>Pacific madrone</td>
<td>20% Mountain Brome</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td>2 lb. per 1000 sq ft (40 lbs. per acre), hydroseeded with tackifier, and then covered with jute blanket. Shrubs planted through holes in jute blanket.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Pinus contorta</td>
<td>pine</td>
<td>10% Sterile Triticale Hybrid</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Thuja occidentalis</td>
<td>Alaska Yellow</td>
<td>10% White Clover</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Vaccinium parvifolium</td>
<td>Red Huckleberry</td>
<td>20% Annual Ryegrass</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Vaccinium ovatum</td>
<td>Evergreen Huckleberry</td>
<td>20% Perennial Ryegrass</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrubs</td>
<td>Species Mix</td>
<td>2 lb. per 1000 sq ft (40 lbs. per acre), hydroseed with 1 gallon 20% Snowberry 20% Mountain Brome 20% Siskiyou Juniper 20% Annual Ryegrass 20% White Clover 20% Stakle Tricate Hybrid</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td>2 lb. per 1000 sq ft (40 lbs. per acre), hydroseeded with tackifier, and then covered with jute blanket. Shrubs planted through holes in jute blanket.</td>
<td></td>
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<tr>
<td>U3</td>
<td>Downtown Side Upland Area North of Culvert</td>
<td>2570</td>
<td>2570</td>
<td>Tree</td>
<td>Arbutus menziesii</td>
<td>Pacific madrone</td>
<td>20% Mountain Brome</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Pinus contorta</td>
<td>pine</td>
<td>10% Sterile Triticale Hybrid</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Thuja occidentalis</td>
<td>Alaska Yellow</td>
<td>10% White Clover</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Vaccinium parvifolium</td>
<td>Red Huckleberry</td>
<td>20% Annual Ryegrass</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Vaccinium ovatum</td>
<td>Evergreen Huckleberry</td>
<td>20% Perennial Ryegrass</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
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<td></td>
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<td></td>
<td></td>
<td>Shrubs</td>
<td>Species Mix</td>
<td>2 lb. per 1000 sq ft (40 lbs. per acre), hydroseed with 1 gallon 20% Snowberry 20% Mountain Brome 20% Siskiyou Juniper 20% Annual Ryegrass 20% White Clover 20% Stakle Tricate Hybrid</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td>2 lb. per 1000 sq ft (40 lbs. per acre), hydroseeded with tackifier, and then covered with jute blanket. Shrubs planted through holes in jute blanket.</td>
<td></td>
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<tr>
<td>U4</td>
<td>Downtown Side Upland Area Staging and Access</td>
<td>11980</td>
<td>11980</td>
<td>Tree</td>
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<td>Pacific madrone</td>
<td>20% Mountain Brome</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Pinus contorta</td>
<td>pine</td>
<td>10% Sterile Triticale Hybrid</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td>Shrub</td>
<td>Thuja occidentalis</td>
<td>Alaska Yellow</td>
<td>10% White Clover</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Vaccinium parvifolium</td>
<td>Red Huckleberry</td>
<td>20% Annual Ryegrass</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Vaccinium ovatum</td>
<td>Evergreen Huckleberry</td>
<td>20% Perennial Ryegrass</td>
<td>1 gallon</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrubs</td>
<td>Species Mix</td>
<td>2 lb. per 1000 sq ft (40 lbs. per acre), hydroseed with 1 gallon 20% Snowberry 20% Mountain Brome 20% Siskiyou Juniper 20% Annual Ryegrass 20% White Clover 20% Stakle Tricate Hybrid</td>
<td>2 10</td>
<td>4.6</td>
<td>10</td>
<td>2 lb. per 1000 sq ft (40 lbs. per acre), hydroseeded with tackifier, and then covered with jute blanket. Shrubs planted through holes in jute blanket.</td>
<td></td>
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</tr>
<tr>
<td>Zone</td>
<td>Description</td>
<td>Total SF</td>
<td>Planting SF</td>
<td>Structural Community</td>
<td>Spc Name</td>
<td>Common Name</td>
<td>% Community Composition</td>
<td>Plant Quantity</td>
<td>Container</td>
<td>Spacing D.C. (ft)</td>
<td>Grouping</td>
<td>Planting Comments</td>
</tr>
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<td>--------------</td>
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<tr>
<td>US</td>
<td>Downstream Side Upland Area: Eastern Portion</td>
<td>640</td>
<td>640</td>
<td>Tree</td>
<td>White oak</td>
<td>Red Oak</td>
<td>50</td>
<td>4</td>
<td>1 gallon</td>
<td>20</td>
<td>4-8</td>
<td>Plant sitting edge of open area, or surrounded by fast growing trees/berries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tree</td>
<td>Picea abies</td>
<td>Western Red Cedar</td>
<td>50</td>
<td>1</td>
<td>1 gallon</td>
<td>20</td>
<td>4-8</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Thuja occidentalis</td>
<td>Douglas Fir</td>
<td>20</td>
<td>1</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
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<td></td>
<td></td>
<td>Shrub</td>
<td>Betula cordata</td>
<td>River Birch</td>
<td>20</td>
<td>1</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
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<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Pinus strobus</td>
<td>Western Larch</td>
<td>20</td>
<td>1</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Pseudotsuga menziesii</td>
<td>Western Hemlock</td>
<td>20</td>
<td>1</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
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<td>Seed Mix</td>
<td>FT 404 Native Upland Mix + Oak</td>
<td>50% Shasta Lilac 50% Blue Harely 50% Upland Hemlock 50% Western Yarrow</td>
<td>100</td>
<td>--</td>
<td>seed</td>
<td>--</td>
<td>2 lb, per 1000 sq ft, per acre, hydroseeded with tackifier</td>
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<tr>
<td>B1</td>
<td>Upstream Side Streamsides</td>
<td>3900</td>
<td>3800</td>
<td>Shrub</td>
<td>Salix planifolia</td>
<td>Willow</td>
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<td>965</td>
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<td>Partially silting stream</td>
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<td></td>
<td>Shrub</td>
<td>Salix nigra</td>
<td>Willow</td>
<td>12</td>
<td>18</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
<td>Partially silting stream</td>
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<td></td>
<td></td>
<td>Shrub</td>
<td>Salix planifolia</td>
<td>Willow</td>
<td>30</td>
<td>55</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
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<td></td>
<td></td>
<td>Shrub</td>
<td>Salix planifolia</td>
<td>Willow</td>
<td>30</td>
<td>55</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
<td>Partially silting stream</td>
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<td></td>
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<td></td>
<td></td>
<td>Seed</td>
<td>FT 402 Native Mix for Wet Areas</td>
<td>50% Blue Harely 50% Western Harely 50% Upland Hemlock 50% Western Yarrow</td>
<td>100</td>
<td>--</td>
<td>seed</td>
<td>--</td>
<td>2 lb, per 1000 sq ft, per acre, hydroseeded with tackifier</td>
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<tr>
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<td>Downstream Side Streamsides</td>
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<td>Salix planifolia</td>
<td>Willow</td>
<td>60</td>
<td>913</td>
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<td>2</td>
<td>12-24</td>
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<td></td>
<td></td>
<td>Shrub</td>
<td>Salix nigra</td>
<td>Willow</td>
<td>12</td>
<td>18</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
<td>Partially silting stream</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Salix planifolia</td>
<td>Willow</td>
<td>30</td>
<td>40</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
<td>Partially silting stream</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Shrub</td>
<td>Salix planifolia</td>
<td>Willow</td>
<td>30</td>
<td>40</td>
<td>1 gallon</td>
<td>5</td>
<td>4-8</td>
<td>Partially silting stream</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>Seed</td>
<td>FT 402 Native Mix for Wet Areas</td>
<td>50% Blue Harely 50% Western Harely 50% Upland Hemlock 50% Western Yarrow</td>
<td>100</td>
<td>--</td>
<td>seed</td>
<td>--</td>
<td>2 lb, per 1000 sq ft, per acre, hydroseeded with tackifier</td>
<td></td>
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