PROPOSED CHANNEL GRADING & TESC PLAN - REACH 1

SCALE: 1" = 30'-0"

STREAM PROFILE (STN 0+00 - 8+50)

H=1:30  V=1.6
PROPOSED CHANNEL GRADING & TESC PLAN - REACH 3

SCALE: 1" = 30'-0"
### Notes for Contractor

1. Before final grading is completed, the contractor should inspect the entire work area to ensure that soils, surface and grade are suitable for planting. If drainage, water table conditions and/or terrains provide amendment or planting areas such that there is at least a 10% organic material.

2. Note: The contractor is responsible for any unforeseen conditions that may affect proper plant growth and establishment. Notify the City or City’s representatives of any poor drainage conditions prior to construction.

3. The species selected for removal include: Thryptomene rubra, English holly, English ivy, Scotch broom, Japanese knotweed, English honeysuckle and Spotted knapweed. The gypsophila, coreopsis, and grass at a rate of 6 inches. The contractor shall not contain any desiccated wood, cress, edibles, plants or any other deleterious materials.

### RESTORATION PLANTING PLAN

Scale: 1" = 30'-0"

### Plant Legend

<table>
<thead>
<tr>
<th>Plant Species</th>
<th># of Plants</th>
<th>Total Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cercocarpus betuloides</td>
<td>100</td>
<td>1000 sq ft</td>
</tr>
<tr>
<td>Dryas integrifolia</td>
<td>50</td>
<td>500 sq ft</td>
</tr>
<tr>
<td>Juniperus communis</td>
<td>75</td>
<td>750 sq ft</td>
</tr>
<tr>
<td>Vaccinium angustifolium</td>
<td>150</td>
<td>1500 sq ft</td>
</tr>
<tr>
<td>Solidago virgaurea</td>
<td>200</td>
<td>2000 sq ft</td>
</tr>
<tr>
<td>Eriogonum fasciculatum</td>
<td>125</td>
<td>1250 sq ft</td>
</tr>
<tr>
<td>Thymus serpyllum</td>
<td>100</td>
<td>1000 sq ft</td>
</tr>
<tr>
<td>Salix × sepulchralis</td>
<td>50</td>
<td>500 sq ft</td>
</tr>
</tbody>
</table>

### Property Line

- SR-11 Old Fairhaven Parkway
- Property Line
- Existing Sidewalk
- Spread Wood Chip Mulch

### Property Manager

- Project Manager
- Old Fairhaven Parkway
- Bellingham, WA

<table>
<thead>
<tr>
<th>Sheet Number</th>
<th>Sheet of 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>061008</td>
<td>10</td>
</tr>
</tbody>
</table>
NOTES FOR CONTRACTOR

1. Before final grading is completed, the contractor shall inspect the entire work area to ensure that soil, surface and grades are suitable for planting.

2. The contractor is responsible for any adverse drainage conditions that may affect proper plant growth and establishment. Notify the City or City's representatives of any poor drainage conditions prior to construction.

3. Species interception occurs within the work area. Removal of undesired species is required before planting. Species targeted for removal include Himalayan blackberry, English ivy, Scotch broom, Japanese boxwood, English laurel, and morning glory. Thatch removal is required within the protection fence and work area.

4. Loosen any compacted soil in the entire work area.

5. Avoid soil as needed per 2.1 below map of adjacent paved surfaces.

6. Spread topsoil across the entire work area. Hydrosed the entire grading area (level of work) with the Phlox bed soil mix to comply with the plant specifications (see Sheet 7). Seed all bare soil areas along the stream bank. Spread a coarse soil mix at the entire planting area. No further construction activities and compaction are allowed on unsaturated areas.

7. The contractor shall prepare and maintain the site in a ready-to-plant condition and final inspection and approval by the owner or owner's representative.

**Vegetative Mix**

This area will consist of planting and treating wood chips at locations shown on the plans. Planting shall be placed in a layer approximately 1 inch thick over the final graded area. Planting shall be performed evenly from two native, cordilleran, and deciduous species. At least 10% shall be cordilleran species. No more than 40% shall be single cordilleran species. Planting shall be dug out site sorted so that single cordilleran species shall be larger than 15 inches. Planting shall consist of evergreen and deciduous, shrubs, trees, sedges, subshrubs, plastic, or any other vegetation materials.
NOTES FOR CONTRACTOR

1. Before final grading is completed, the contractor shall inspect the entire work area to ensure that soils, surface and grades are suitable for planting. If necessary, erosion control conditions and/or necessary provide amendments or grading areas such that there is a minimum of 30% organic material.

2. Note: The contractor is responsible for any adverse drainage conditions that may affect proper plant growth and establishment. Notify the City or County representatives of any adverse drainage conditions prior to construction.

3. The following species are to be planted:

   - **Sedum** - used for erosion control
   - **Coreopsis** - used for erosion control
   - **Nasturtium** - used for erosion control
   - **Bacopa** - used for erosion control
   - **Lysimachia** - used for erosion control
   - **Lupine** - used for erosion control
   - **Buddleia** - used for erosion control
   - **Verbena** - used for erosion control

4. Specimen trees and shrubs shall be located as specified in the plan. All trees and shrubs shall be planted according to the specifications provided in the plan.

5. All tree and shrub plantings shall be protected from damage by construction activities.

6. This plan is subject to change until the final inspection and approval by the owner or owner's representative.

*Wood Chip Mulch:

This layer shall consist of spreading and installing wood chip mulch at specified locations shown on the plan. Mulch shall be placed in a layer approximately 4 inches thick over the final graded surface. Mulch shall be delivered entirely from one source, same source, and delivered in one load. Not more than 15% shall be delivered from any other supplier. Mulch shall be delivered within 30 days of receipt of purchase order, beginning with the lowest elevation, progressing higher as the project moves east. Property line. Mulch shall not contain any decaying wood, roots, or other deleterious material.
MONITORING AND MAINTENANCE

Performance Standards

The following objectives and performance standards have been established to measure the success of this plan:

Objective 1: The in-stream woody debris shall remain as installed. Normal disturbances and espoused changes in the stream channel and its substrate are expected and include the formation of water ponds, filling and trimming of cut banks in the vicinity of woody structures. Sycamore channel migration is expected to occur due to tree root development and tree stump settlement. The streambank shall remain as installed and tree or shrub migration will remain within the established floodplain area.

Objective 2: The seeded supplemental grass shall contribute to the added vegetative complexity by boring riffles. The performance standard for years after establishment is for the supplemental grass to survive for at least four years and provide visual and biological benefits. Riffles shall be defined as portions of stream where trees and shrubs are absent or shall be present at the channel bottom, and natural stream bottom gravel is exposed.

The stream channel and its associated features in the stream corridor shall be constructed to include the following features: woodlot development, stream channel stabilization, riparian buffer, water quality, and hydrology. Woodlot development shall include the use of woody debris and gravel placement to stabilize streambanks and reduce erosion. Stream channel stabilization shall include the use of woody debris and gravel placement to stabilize streambanks and reduce erosion. Riparian buffer shall include the use of woody debris and gravel placement to stabilize streambanks and reduce erosion. Water quality shall include the use of woody debris and gravel placement to stabilize streambanks and reduce erosion. Hydrology shall include the use of woody debris and gravel placement to stabilize streambanks and reduce erosion.

CONTINGENCY AND MANAGEMENT PLANS

As described above, the components of in-stream habitat features including the leg structures shall be monitored and evaluated periodically to ensure that the system is functioning as intended. The performance standards include the following:

1. The stream channel and its associated features in the stream corridor shall be constructed to include the following features: woodlot development, stream channel stabilization, riparian buffer, water quality, and hydrology. Woodlot development shall include the use of woody debris and gravel placement to stabilize streambanks and reduce erosion. Stream channel stabilization shall include the use of woody debris and gravel placement to stabilize streambanks and reduce erosion. Riparian buffer shall include the use of woody debris and gravel placement to stabilize streambanks and reduce erosion. Water quality shall include the use of woody debris and gravel placement to stabilize streambanks and reduce erosion. Hydrology shall include the use of woody debris and gravel placement to stabilize streambanks and reduce erosion.

2. In-stream woody debris shall remain as installed. Normal disturbances and espoused changes in the stream channel and its substrate are expected and include the formation of water ponds, filling and trimming of cut banks in the vicinity of woody structures. Sycamore channel migration is expected to occur due to tree root development and tree stump settlement. The streambank shall remain as installed and tree or shrub migration will remain within the established floodplain area.

3. The seeded supplemental grass shall contribute to the added vegetative complexity by boring riffles. The performance standard for years after establishment is for the supplemental grass to survive for at least four years and provide visual and biological benefits. Riffles shall be defined as portions of stream where trees and shrubs are absent or shall be present at the channel bottom, and natural stream bottom gravel is exposed.

REFERENCES

