

Habitat Management Plan Addendum for the City of Spokane's Glover Field River Access

This addendum is intended to serve as an update and supplement to the Habitat Management Plan (HMP) developed for the City of Spokane's Peaceful Valley Trail, which was completed on June 30, 2015. In 2016, an addendum was also created for the City of Spokane's Peaceful Valley Trail HMP that outlined the phased project schedule. The purpose of this addendum is to describe the Glover Field River Access in detail, now that the design is clearly defined. Secondly, this addendum will update the number of mitigation plantings installed to date. The original HMP and first addendum remain valid for all of the project elements described within those documents.

Project Description linked to Glover Field River Access:

The Glover Field River Access encompasses an area of approximately 1.5 acres (approximately 115 square feet would be below the Ordinary High Water Mark [OHWM]), including: a slide-type boat launch, new parking area, and approximately 4,034 square feet of drought tolerant fescue blend turf sod. The design of the Glover Field River Access would be based on the most current plan set (i.e. 90% design set, see **Attachment 1**).

Prior to construction or demolition operations, the temporary erosion and sediment control (TESC) measures would be implemented and tree protect fencing would be installed around the tree in the southeastern corner of the proposed project footprint.

As illustrated in Sheet L1.1, the demolition components of the project would include:

- Removal of a chain link fence, adjacent to the proposed location of the boat launch;
- Removal of railroad ties that intersect the proposed location of the boat launch;
- Removal of wood fiber and edging along the eastern boundary of the proposed project footprint; and,
- Relocation of a swing set, play structure, rubber tile and picnic bench.

As illustrated in Sheet L1.2, installation components of the project would include:

- Installing a slide-type boat launch;
- Reconstructing the drystack stone wall, as necessary;
- Placing boulder rip-rap (salvaged from excavation operations linked to the existing rock retaining wall) on either side of the boat launch. Placing a 2-inch layer of washed, crushed basalt above and below the OHWM. The intention is to utilize rip-rap materials from the site. Rock placement below the OHWM is estimated at 10 cubic yards;
- Installing a new chain link fence; "Private Property Keep Out" and River Map signs;
- "Limb up-ing" two trees, whose canopy encroaches on the access road that leads to the boat launch, per guidance from a Landscape Architect and City Urban Forester.

Boat launch design specifics and construction details are illustrated in Sheets L2.0, L2.1, and L2.2. Key components of the design would include:

- An approximately 6' by 36' slide-type boat launch - the boat launch starting elevation would be 1,755.4 feet above sea level and sloping downward to 1,725 feet (approximately 8 feet below the OHWM, which is defined at 1,733.8 feet);
- Three removable, 20' long, in-water stainless steel segments located below the OHWM; and,
- Galvanized steel stairs on either side of the boat launch, with steel handrails on the exterior side of the stairs.

Planting or vegetation management aspects of the project would include:

- Installing approximately 4,034 square feet of drought tolerant fescue blend turf sod, per Sheet L3.0; and,
- Protecting existing trees by following the information detailed on Sheet L3.1.
 - For instance, a tree protection zone (TPZ) would be determined by an urban forester. The TPZ boundary would be designated using a 3' tall (minimum) orange vinyl diamond mesh construction fencing. The fencing would be secured by using 8" wire "U" and metal T-posts installed below grade.
 - 3" to 4" of mulch would be applied to the ground, excluding a 1' radius around the trunk of the tree.
 - A critical root zone (CRZ) would be established that is at least a 1' radius from the base of the trunk (per each inch of caliper at 4.5' above grade).

The Spokane River would be protected from sediment and erosion by implementing TESC measures illustrated in Sheets C1.0 and C1.1. TESCs would include:

- Covering disturbed areas outside grading limits with an erosion control blanket;
- Covering the soil stockpile with plastic, secured with sandbags;
- Installing filter fences south of the existing retaining wall following the completion of grading;
- Installing coffer dams (super sacks or water bladders or double run sediment curtains) at the base of the boat launch prior to the start of construction;
- Directing drainage towards the dewatering pond; and,
- Not removing TESCs until the area is permanently stabilized with vegetation.

Best Management Practices (BMPs):

The BMPs described on pages 15-16 of the HMP shall be incorporated into final construction designs. In addition, the following BMPs will be implemented:

1. Work would occur during low flow of the Spokane River.
2. The Contractor would follow established daytime working hours.
3. Footings for the boat launch would be pre-cast concrete, rather than poured-in-place.

Mitigation Planting Update:

Mitigation planting for the River Walk Park improvements discussed in the HMP and first addendum were installed during the late summer/early fall of 2016. **Table 1** describes the total number of plantings installed during the River Walk Park project compared to the percentage of prescribed plantings for that type (i.e. as presented in the original HMP).

Table 1. Plantings installed.

Planting	Quantity	Percentage of Total Plantings Prescribed
Trees (25-gallon)	22	9.1% (241)
Ponderosa pine	15	
Black cottonwood	3	
Peachleaf willow	4	
Trees (5-gallon)	0	0.0% (279)
Black hawthorn	0	
Black cottonwood	0	
Peachleaf willow	0	
Serviceberry	0	
Trees (2-gallon)	0	0.0% (414)
Ponderosa pine	0	
Shrubs (5-gallon)	88	100.0% (88)
Oceanspray	8	
Oregon grape	8	
Pacific ninebark	16	
Chokecherry	8	
Mountain rose	20	
Snowberry	28	
Planting plugs (10-cubic inches)	301	69.0% (436)
Terra cotta yarrow	107	
Lupine	61	
Silky lupine	73	
Large-leaved lupine*	60	
Ground cover	13,142 square feet	N/A**
Custom meadow mix	13,142 square feet	

Note (*): 1-gallon in size.

Note (**): The amount of custom meadow mix described in **Table 1** is related to BMP #4 detailed within the HMP.

The HMP states that for every 50 square feet of anticipated impact, one 10-cubic inch native forb planting plug would be installed. As illustrated in **Table 1**, the current mitigation planting efforts have installed 69.0% of the necessary forb plantings. Collectively, the prescribed mitigation woody plantings assembled for the River Walk Park project comprise approximately 10.7% of the total number of prescribed woody plantings (trees and shrubs) outlined within the HMP.

As described in the first addendum, the construction activities associated with the Clarke Avenue Street and Water Improvements from Riverside Avenue to Elm Street were not anticipated to impact woody vegetation assemblages. The Glover Field River Access is expected to impact 435 square feet of woody vegetation canopy cover [CC] (peachleaf willow pruning = 400 square feet CC; black hawthorn removal = 10 square feet CC; chokecherry removal = 25 square feet CC). Based on the vegetation replacement ratios described in Table 4 of the HMP, 435 square feet of vegetation impacts correlates to 9, 5-gallon mitigation plantings. To date, 88, 5-gallon plantings have been installed. Therefore, the current mitigation planting efforts to date well exceed the required mitigation commitments for the vegetation impacts associated with the Clarke Avenue Street and Water Improvements from Riverside Avenue to Elm Street and the Glover Field River Access.

A Conditional Use Permit should be obtained prior to any construction activities related to the Glover Field River Access.

Please contact me with any further questions or concerns. I can be reached at (509) 458-3727 or via email at vbarthels@jub.com. Lastly, it should be noted that the final authority regarding implementation of the HMP rests with the appropriate regulatory agencies.

Sincerely,

Vincent Barthels, Biologist
J-U-B ENGINEERS, Inc.

Attachments

1. Glover Field River Access (AHBL) 90% design set (11 Sheets total)