DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No.	10-126356-LO
Project Name/Address:	Lewis Creek Vegetation Management and Nature Trail 5808 Lakemont Boulevard
Planner:	Kevin LeClair
Phone Number:	425-452-2928
Minimum Comment Period:	**December 30, 2010**

Materials included in this Notice:

- ☒ Blue Bulletin
- ☒ Checklist
- ☐ Vicinity Map
- ☒ Plans
- ☒ Other: Vegetation Management Plan

ENVIRONMENTAL CHECKLIST

12/21/00

Thank you in advance for your cooperation and adherence to these procedures. If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.

INTRODUCTION
Purpose of the Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21c RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the City of Bellevue identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the City decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Answer the questions briefly, with the most precise information known, or give the best description you can. You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the Planner in the Permit Center can assist you.
The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. Include references to any reports or studies that you are aware of which are relevant to the answers you provide. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impacts.

Use of a Checklist for Nonproject Proposals: *A nonproject proposal includes plans, policies, and programs where actions are different or broader than a single site-specific proposal.*

For nonproject proposals, complete the Environmental Checklist even though you may answer "does not apply" to most questions. In addition, complete the Supplemental Sheet for Nonproject Actions available from Permit Processing.

For nonproject actions, the references in the checklist to the words *project*, *applicant*, and *property* or *site* should be read as *proposal*, *proposer*, and *affected geographic area*, respectively.

Attach an 8½" x 11" vicinity map which accurately locates the proposed site.

City of Bellevue Submittal Requirements	**27a**

ENVIRONMENTAL CHECKLIST

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BACKGROUND INFORMATION

Property Owner: **City of Bellevue**

Proponent: **City of Bellevue – Parks and Community Services Department, Attn: Jim Bennett**
450 110th Ave NE
Bellevue, WA 98004
(425) 452-2740

Reviewed under Bellevue File # 10-126356-LO

Contact Person: **The Watershed Company, Attn: Kenny Booth**
(If different from the owner. All questions and correspondence will be directed to the individual listed.)

Address: **750 Sixth Street South, Kirkland, WA 98033**

Phone: **(425) 822-5242**

Proposal Title: **Lewis Creek Park Vegetation Management/Trail Installation**

Proposal Location (Street address and nearest cross street or intersection) Provide a legal description if available:

See vicinity map on page 18.

The project is located within Lewis Creek Park on the east side of Lakemont Blvd SE near the intersection with 164th Way SE, in Bellevue, WA, 98006, King County. The project is located within ten parcels:

1. **Tax parcel 2324059024, Legal: S 416 FT OF SE 1/4 OF NE 1/4 LY ELY OF LAKEMONT BLVD SE LESS PTN CONVEYED TO KING COUNTY BY DEED REC #7104290326 LESS C/M RGTS**
2. **Tax parcel 2324059023, Legal: N 208 FT OF S 624 FT OF SE 1/4 OF NE 1/4 LY E OF CO RD LESS C/M RGTS**
3. **Tax Parcel 2324059048, Legal: N 1/2 OF E 1/2 OF S 1/2 OF NE 1/4 OF SE 1/4 & POR OF S 1/2 OF NE 1/4 OF SE 1/4 - BEG 30 FT S OF NW COR SD N 1/2 OF E 1/2 SD SUBD TH S ALG W LN THOF TO SW COR THOF TH W PLW N LN SD SUBD 100 FT TH NELY TO POB**
4. **Tax Parcel 2324059013N, Legal: 1/2 OF NE 1/4 OF SE 1/4 LESS POR LYING WLY OF RD LESS C/M RGTS LESS CO RD**
5. **Tax Parcel 4139410170, Legal: LAKEMONT DIV NO 02 NGPE TGW TRACTS J & M PER REC NO. 20010215001613**
6. **Tax Parcel 4139410260, Legal: LAKEMONT DIV NO 02 FUTURE DEVELOPMENT**
7. **Tax Parcel 4139410190, Legal: LAKEMONT DIV NO 02 NGPE**
8. **Tax Parcel 4139410270, Legal: LAKEMONT DIV NO 02 FUTURE DEVELOPMENT**
9. **Tax Parcel 4139440910, Legal: LAKEMONT DIV NO 04 NGPE TGW TRACTS H-N-O-R & V PER REC NO. 20010215001616**
10. **Tax Parcel 4139440900, Legal: LAKEMONT DIV NO 04 PARK TGW TRACTS J-P-Q-S-T-W & X PER REC NO. 20010215001616**

REVIEWED
By Kevin LeClair at 3:34 pm, Dec 14, 2010

Please attach an 8½“ X 11” vicinity map that accurately locates the proposal site.

Give an accurate, brief description of the proposal’s scope and nature:

1. General description:

Lewis Creek Park is a 56-acre community park located in southeastern Bellevue that serves as the trailhead for the South Bellevue Greenway system. The City Council adopted the *Lewis Creek Park Management Plan* in 2002. In accordance with that document, development of the park has been undertaken in phases. Phase 1, which included two sports fields, a playground, sport court, visitor center, parking lot and trails, was completed in 2005. Phase 2 includes additional parking, picnic facilities, public restrooms and trails and is currently under permit review.

Within the park, a network of trails provides public access to the undeveloped forested portion of the park, located northeast of the visitor center. Perimeter trails are paved; interior trails are soft surface (gravel, dirt or wood chip mulch). Several existing footbridges accommodate stream and wetland crossings throughout the trail system.

Under the current proposal and in accordance with the management objectives identified in the *Lewis Creek Park Management Plan,* the 25.8-acre northeastern forest area of the park will be managed to maximize ecological functions and values, while maintaining soft-surface trail connections to the Lakemont Trail. Design considerations for the park reflect an open space philosophy that balances recreational and community needs with environmental preservation. The proposal includes a Vegetation Management Plan (VMP) that is intended to aid the Parks and Community Services Department in accomplishing those management objectives identified for the northeastern forest area in the *Lewis Creek Park Management Plan*.

The objective of the VMP is to maximize the ecological functions and values of the 25-8 acre forested area. In some areas, invasive species are growing up and over native vegetation and native vegetation is completely lacking within a few monocultures of invasive weeds. Invasive plant species eradication or suppression is key to improving ecological functions in this natural area. Once invasive plant cover is reduced, native plant density and diversity can be increased. In-fill planting with conifers would further diversify the vegetative strata, providing more habitat niches.

In concert with the VMP, a new soft-surface trail, approximately 800 feet in length, will be installed within the forest area. The trail will connect existing trails within the park and will provide passive recreation opportunities for the public within the forest area. The trail will be located almost entirely within buffers of on-site wetlands (4,738 square feet of trail and 5,482 square feet of total clearing within the buffer) and in one area will cross over a portion a wetland and a section of Lewis Creek. A bridge will be used to span the wetland and stream, thereby preventing direct impacts to either the stream or wetland. An area of enhancement, approximately 5,600 square feet in size, is proposed as mitigation for the buffer impacts associated with trail construction. Enhancement will involve the planting of native trees and shrubs within a degraded wetland and wetland buffer area.

2. Acreage of site: **The northeastern portion of Lewis Creek Park, in which vegetation management activities and trail construction are proposed, is approximately 25.8 acres in size.**

REVIEWED
By Kevin LeClair at 3:34 pm, Dec 14, 2010

3. Number of dwelling units/buildings to be demolished: **None**

4. Number of dwelling units/buildings to be constructed: **None**

5. Square footage of buildings to be demolished: **N/A**

6. Square footage of buildings to be constructed: **N/A**

7. Quantity of earth movement (in cubic yards): **Cut: 1 cubic yard / Fill: 158 cubic yards**

8. Proposed land use: **The project area is located within Lewis Creek Park. The project area is currently undeveloped. There are no existing structures on the property and no changes are proposed to the existing land use.**

9. Design features, including building height, number of stories, and proposed exterior materials: **The applicant proposes vegetation management activities within the project area, as well as the construction of a soft surface trail and bridge crossing over Lewis Creek. The proposed trail would be 5 feet wide and made of pervious wood chips. The bridge crossing will be constructed of wood and wire panels.**

10. Other

Estimated date of completion of the proposal or timing of phasing:

Once started, trail and bridge construction, and native planting should take approximately two to four weeks. Vegetation management activities will continue for a minimum of five years. It is anticipated that construction would occur sometime in 2011.

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

None at this time.

Bellevue Parks & Community Services is also pursuing permits to construct phase II of the park master plan consisting of a picnic area within the wetland critical area buffer of the Beebe Property.

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

***Lewis Creek Park Wetland & Stream Inventory for the Vegetation Management Area*. June 10, 2010. The Watershed Company.**

***Lewis Creek Park Vegetation Management Plan.* June 2010.**

***Addendum to the Lewis Creek Park – Vegetation Management Plan*. November 8, 2010. The Watershed Company.**

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

None.

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

Critical Areas Land Use Permit – submitted concurrently with this SEPA Checklist (City of Bellevue)

REVIEWED
By Kevin LeClair at 3:34 pm, Dec 14, 2010

Clearing and Grading Permit – not yet applied (City of Bellevue)
Building Permit – not yet applied (City of Bellevue)

A building permit is required for the bridge construction. The trail work can be completed under this permit or it can be done under a separate clearing and grading permit. The vegetation management will be done under a clearing and grading permit.

Please provide one or more of the following exhibits, if applicable to your proposal. (Please check appropriate box(es) for exhibits submitted with your proposal):

- ☐ Land Use Reclassification (rezone)
  Map of existing and proposed zoning

- ☐ Preliminary Plat or Planned Unit Development
  Preliminary plat map

- ☑ Clearing & Grading Permit
  Plan of existing and proposed grading
  Development plans

- ☐ Building Permit (or Design Review)
  Site plan
  Clearing & grading plan

- ☐ Shoreline Management Permit
  Site plan

REVIEWED
By Kevin LeClair at 3:34 pm, Dec 14, 2010

A. ENVIRONMENTAL ELEMENTS

1. EARTH

a. General description of the site (circle one): Flat Rolling Hilly Steep slopes Mountains Other:

Topography within the project area varies drastically. The main channel of Lewis Creek is approximately 80 feet lower in elevation than upland areas to the west and east.

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope on-site is approximately 35%, located along the edge of the Lewis Creek stream channel.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

According to the King County Soil Survey, the entire project area is mapped as Beausite gravelly sandy loam, 6 to 15 percent slopes.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No indications of unstable soils were observed.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

	FILL	CUT
Purpose	**All cut and fill activities are planned as part of trail and bridge installation.**	
Type and Quantity	**Trail: 58 c.y. of woodchips** **Native Restoration: 100 c.y. mulch**	**Trail: 0 c.y. soil** **Bridge Installation: 1 c.y. soil**
Total	**158 c.y.**	**1 c.y.**
Fill Source	**Local source for woodchips**	

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion could occur if exposed soils are mobilized by rainfall. Short-term erosion may occur during trail and bridge construction and in areas cleared of vegetation. However, any impacts would be short-term and the measures described below would help minimize erosion.

TESC measures are required and will be reviewed and approved through the applicant's Construction Stormwater Pollution Prevention Plan.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The proposed trail would be constructed of wood chips and is therefore considered to be pervious. No new impervious surfaces are proposed.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

All clearing and grading construction would be in accordance with City of Bellevue Clearing & Grading Code (Chapter 23.76), permit conditions, and all other applicable codes,

REVIEWED
By Kevin LeClair at 3:34 pm, Dec 14, 2010

ordinances, and standards. To ensure that no impacts to wetlands or streams occur, the applicant proposes to use temporary erosion and sedimentation control measures such as silt fencing. The fencing would be installed around soil stockpile areas and exposed soils as necessary to prevent any silt-laden water from reaching adjacent wetlands or waters during rainfall.

It is not anticipated that soils would be left exposed for more than two days. However, to ensure that erosion potential is minimized, disturbed soils shall be covered with straw, hydroseeded, or otherwise revegetated with native plants as soon after construction as possible. In all cases, exposed soil must be covered at the end of the construction week and also at the threat of rain.

2. AIR

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Any air quality impacts from construction-related vehicle trips would be temporary. Heavy equipment may be used for a short period of time during the construction process. After project completion, no further impacts to air would occur.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of emissions that will affect the project.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Standard methods of reducing impacts to air would be utilized, and include keeping all heavy equipment and hand-held power equipment in good operating condition and managing disturbed soils as described above under 1h.

3. WATER

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The project area includes fourteen wetlands and seven streams. Detailed descriptions of each critical area can be found in the *Lewis Creek Park Wetland & Stream Inventory for the Vegetation Management Area*, dated June 10, 2010 by The Watershed Company. The table below summarizes the classification of each critical area.

Feature	Classification	Habitat Score	Buffer Width (ft)
Wetland A	**Category II**	**18**	**75**
Wetland BGI	**Category II**	**25**	**110**
Wetland C	**Category II**	**16**	**75**
Wetland D1	**Category II**	**20**	**110**

REVIEWED
By Kevin LeClair at 3:34 pm, Dec 14, 2010

Wetland D2	**Category III**	**17**	**60**
Wetland E	**Category III**	**16**	**60**
Wetland F	**Category II**	**15**	**75**
Wetland H	**Category II**	**16**	**75**
Wetland J	**Category III**	**19**	**60**
Wetland K	**Category II**	**18**	**75**
Wetland L	**Category II**	**23**	**110**
Wetland M	**Category I**	**23**	**110**
Wetland N	**Category II**	**18**	**75**
Wetland O	**Category II**	**15**	**75**
Stream A	**Type N**	**NA**	**50**
Stream B/G (Lewis Creek)	**Type F**	**NA**	**100**
Stream C	**Type N**	**NA**	**50**
Stream D	**Type N**	**NA**	**50**
Stream E	**Type N**	**NA**	**50**
Stream F	**Type O**	**NA**	**25**
Stream H	**Type O**	**NA**	**25**

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

   No impacts are proposed to any of the on-site wetlands or streams. However, enhancement may occur within some areas of wetland. Further, all portions of the proposed bridge crossing are to be positioned above the ordinary high water mark of Lewis Creek.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

   No impacts to wetlands are proposed. The bridge will span the entirety of Lewis Creek and its associated wetland. All other portions of the trail are located outside of the on-site wetlands and all on-site waters.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

   No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

   No. The project site does not lie within a 100-year floodplain.

   Verified on the city's floodplain maps prepared by FEMA

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

   No intentional discharges of waste materials would occur during project construction.

REVIEWED
By Kevin LeClair at 3:34 pm, Dec 14, 2010

b. Ground

1. Will ground water be withdrawn, or will water be discharged to ground water? Give a general description, purpose, and approximate quantities if known.

There will be no withdrawal of or discharge to ground water associated with this project.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

There will be no waste material from septic tanks or other sources discharged into the ground as part of this project.

c. Water runoff (including stormwater):

1. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Runoff from the immediate project site is not expected except at natural, pre-project rates. Trail construction and vegetation management activities are not expected to alter or increase stormwater runoff within the project area.

2) Could waste materials enter ground or surface waters? If so, generally describe.

It is not expected that waste materials will enter the on-site wetlands or stream channels. Construction of the trail and bridge will primarily be done by hand. Any heavy equipment that may be used would be positioned as far from the on-site critical areas as feasible.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

The erosion control measures described under question 1h would help control impacts to surface and runoff water. In addition, all heavy equipment and hand-held power equipment would be in good working order.

4. PLANTS

a. Check or circle types of vegetation found on the site:

No threatened, endangered or rare plants are known to exist at the project site.

- ☒ deciduous tree: **alder**, **maple**, aspen, other:
- ☒ evergreen tree: **fir**, **cedar**, pine, other:
- ☒ shrubs: **Himalayan blackberry, giant horsetail, salmonberry, serviceberry, sword fern, oceanspray**
- ☐ pasture
- ☐ crop or grain
- ☒ wet soil plants: cattail, **buttercup, bulrush**, **skunk cabbage**, other:
- ☐ water plants: water lily, eelgrass, milfoil, other:
- ☐ other types of vegetation:

REVIEWED
By Kevin LeClair at 3:34 pm, Dec 14, 2010

b. What kind and amount of vegetation will be removed or altered?

Invasive vegetation will be removed as part of vegetation management activities. Invasive species to be removed include Himalayan blackberry, English ivy, reed canarygrass, and English holly. Small amounts of native vegetation will be removed as part of trail construction activities.

c. List threatened or endangered species known to be on or near the site.

No threatened or endangered plant species are known to be on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Permanent wetland buffer impacts associated with trail construction total 4,738 square feet. An area of enhancement, approximately 5,600 square feet in size, is proposed as mitigation for the buffer impacts. Proposed native plantings include Oregon ash, black cottonwood, Sitka spruce, Doulglas-fir, western red cedar, vine maple, salmonberry, oceanspray, osoberry, red twig dogwood, and red flowering currant.

Vegetation management activities include invasive species removal, native restoration of degraded areas, and in-fill planting. These actions will increase diversity and interspersion of habitat niches, increase tree health and density, and improve wetland and stream buffer functions.

5. ANIMALS

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: **hawk**, **heron**, eagle, **songbirds**, other: **blackbirds, chickadees, wrens, finches, robins**
mammals: **deer**, bear, elk, beaver, other:
fish: bass, salmon, **trout**, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

No threatened or endangered animal species are known to be on or near the site.

c. Is the site part of a migration route? If so, explain.

No.

d. Proposed measures to preserve or enhance wildlife, if any:

The proposed project will enhance wildlife habitat through the removal of invasive species and the planting of native species within the project area.

6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

REVIEWED
By Kevin LeClair at 3:34 pm, Dec 14, 2010

Hand-held power equipment or a mower will be used for vegetation removal. Hand-held power equipment will be used for the trail construction and vegetation management activities. However, no energy will be necessary after the project is completed.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

No forms of energy are necessary for the completed project.

7. ENVIRONMENTAL HEALTH

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Typical hazards related to heavy equipment and electrical and gasoline powered hand tools are associated with construction of the proposed project.

1) Describe special emergency services that might be required.

Emergency services are not anticipated at the site. In the unlikely event that an accident (spill, fire, other exposure) occurs involving toxic chemicals or hazardous wastes, the local Fire Department's Hazardous Materials Team would respond. If necessary, local medical services might also be required. The full range of safety and accident response supplies would be on-site to treat any emergency during construction.

2) Proposed measures to reduce or control environmental health hazards, if any:

Standard precautions would be taken to ensure the safety of the work crew. The construction manager would be contacted by a crew member immediately upon discovery of a spill. The construction manager would then ensure that the spill is cleaned up in the manner dictated by the chemical use instructions and would contact the appropriate authorities.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The project site is located adjacent to Lakemont Blvd SE, a heavily traveled road. However, proposed improvements are planned within the interior of the park, away from the roadway.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Noise associated with the proposed project would be restricted to the use of hand-operated power tools, hand excavation and possibly a mower during the construction phase. Construction noise would be limited to normal daytime working hours as dictated by the City of Bellevue's noise policy. The only noise generated by the proposed project would be that

REVIEWED
By Kevin LeClair at 3:41 pm, Dec 14, 2010

of trail users. There would be no significant long-term noise associated with the proposed project.

3) Proposed measures to reduce or control noise impacts, if any:

As mentioned above, noise would be limited to daylight weekday hours. No other noise-control measures are necessary.

8. LAND AND SHORELINE USE

a. What is the current use of the site and adjacent properties?

The City of Bellevue, Parks and Community Services Department currently owns the parcels upon which improvements are proposed. The parcels are designated open spaces within the City and lie within the limits of the Lewis Creek Park. Additional areas of the park are located to the north and south of the project area; single-family residences are located easterly of the site; and multi-family residences are located westerly of the site.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

There are currently no structures on the site.

d. Will any structures be demolished? If so, what?

No structures are proposed for demolition.

e. What is the current zoning classification of the site?

Zoning Designations are PO and R-5.

Zoning classifications on the project site include Office (O) and Single-Family Residential (R-5).

f. What is the current comprehensive plan designation of the site?

The project area has a Comprehensive Plan designation of Single-Family Residential - Low Density (SF-L), Parks/Professional Office (P/PO), and Parks/Single-Family Residential – High Density (P/SF-H).

g. If applicable, what is the current shoreline master program designation of the site?

N/A

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

The project site contains areas of wetland and Lewis Creek (the proposed bridge will cross a section of Lewis Creek). These areas are considered to be "environmentally sensitive" areas. The applicant will apply for a Critical Areas Land Use Permit to allow for disturbances within proximity of the sensitive areas.

i. Approximately how many people would reside or work in the completed project?

No person will reside or work in the completed project.

REVIEWED
By Kevin LeClair at 3:44 pm, Dec 14, 2010

j. Approximately how many people would the completed project displace?

No person will be displaced as a result of this project.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Does not apply.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The size, topography, and sensitive area status of the site will prevent any future development opportunities. Therefore, it is appropriate and compatible that the site be used as open space and managed by the Parks and Community Services Department. The improved trail and vegetation management activities are in accordance with the City's long-term goal of making open and natural spaces accessible to citizens for passive recreation.

9. HOUSING

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

Does not apply.

10. AESTHETICS

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The only structures proposed as part of the vegetation management and trail installation project are a small bridge and timber stairs that will allow for the crossing over a portion of Lewis Creek. The proposed bridge will be approximately 3.5 feet above the existing adjacent grade. The bridge structure will be constructed of wood and wire panels.

b. What views in the immediate vicinity would be altered or obstructed?

The bridge will be visible from areas of the trail within the park. However, the bridge is to be constructed of natural looking wood materials. Vegetation management activities within the park will include invasive species removal and the planting of native vegetation. These activities are expected to improve views within the park.

c. Proposed measures to reduce or control aesthetic impacts, if any:

No measures are necessary.

REVIEWED
By Kevin LeClair at 3:44 pm, Dec 14, 2010

11. LIGHT AND GLARE

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

No light or glare will be produced by the proposed project.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

No measures are necessary.

12. RECREATION

a. What designated and informal recreational opportunities are in the immediate vicinity?

The proposed trail will connect two existing trails within Lewis Creek Park. Lewis Creek Park is situated at the headwaters of Lewis Creek and offers natural areas accessible by boardwalks and soft-surface trails. In addition to the extensive trail system, the site includes a visitor center, play area, basketball court, soccer/baseball fields that can be reserved for practices and games, and restrooms. The adjacent Lakemont Community Park offers a play area, two picnic shelters, a basketball court, two tennis courts, a softball field and a trail system.

The proposed project will create an additional portion of trail between two existing trails and offer additional passive recreational use for park users.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No. The proposed project will enhance passive recreational use within the area.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No measures are necessary.

13. HISTORIC AND CULTURAL PRESERVATION

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No places or objects of this type are known to exist in the immediate vicinity.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

There is no known evidence of historic or cultural importance on the project site.

c. Proposed measures to reduce or control impacts, if any:

REVIEWED
By Kevin LeClair at 3:44 pm, Dec 14, 2010

Should historic, archeological, scientific or cultural significant items be encountered during implementation of this project, work would be temporarily stopped while the appropriate agencies are notified.

14. TRANSPORTATION

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

The proposed trail will provide a link between two areas of existing trails within Lewis Creek Park. Access to the park will not change with implementation of the vegetation management and trail installation project.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The nearest King County Metro transit stop is located at the corner of 164th Avenue SE and Lakemont Blvd SE, directly adjacent from the proposed project area.

c. How many parking spaces would the completed project have? How many would the project eliminate?

This project will neither create nor eliminate parking spaces.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No impacts/improvements to roads or streets will occur as part of the proposed project.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Water, rail, or air transportation would not be utilized by the completed project.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

None.

g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. PUBLIC SERVICES

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No increase in public service needs will result from this project.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

REVIEWED
By Kevin LeClair at 3:46 pm, Dec 14, 2010

16. UTILITIES

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

No utilities are currently available at the site.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No new utilities are proposed as part of the project.

Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

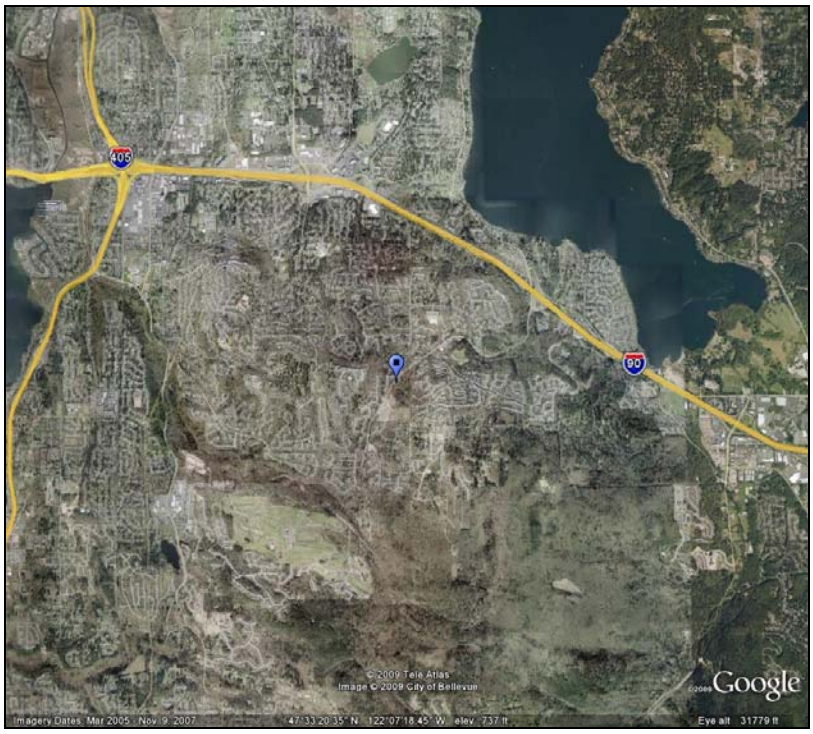
Signature

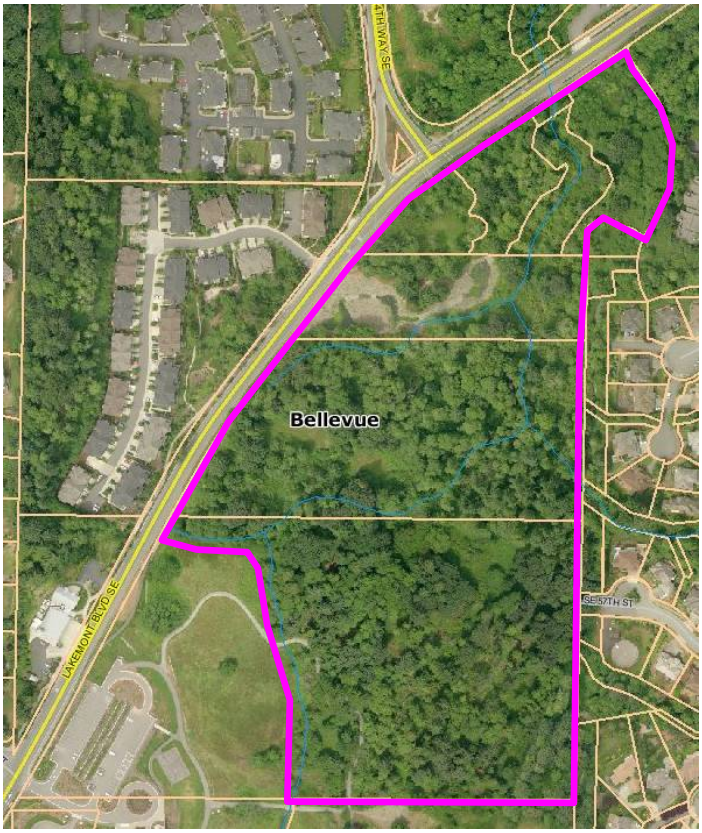
Kenny Booth, AICP

Date Submitted: November 17, 2010

REVIEWED
By Kevin LeClair at 3:46 pm, Dec 14, 2010

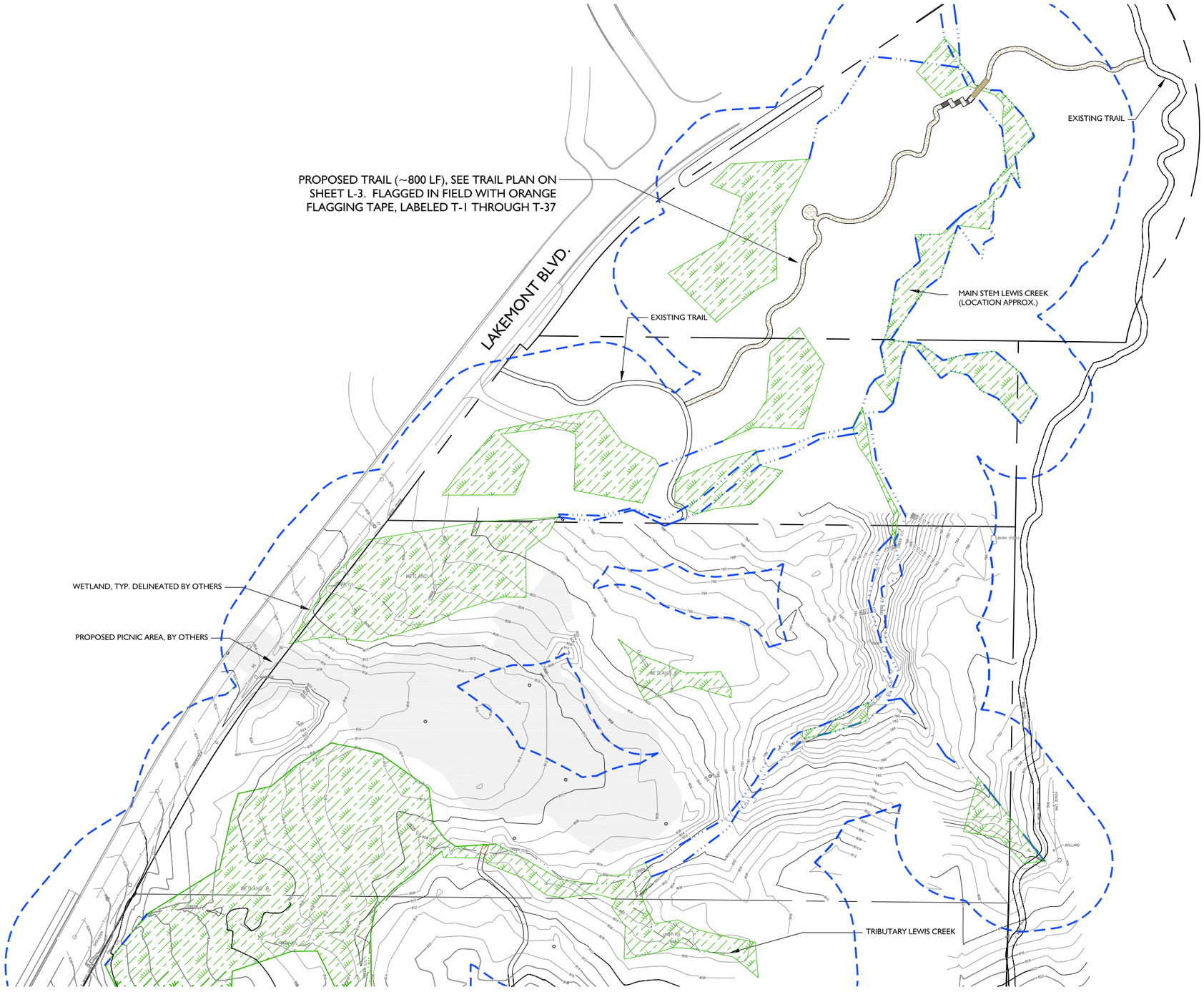
<u>Vicinity Map</u> from Google Earth (top) and iMAP (bottom)





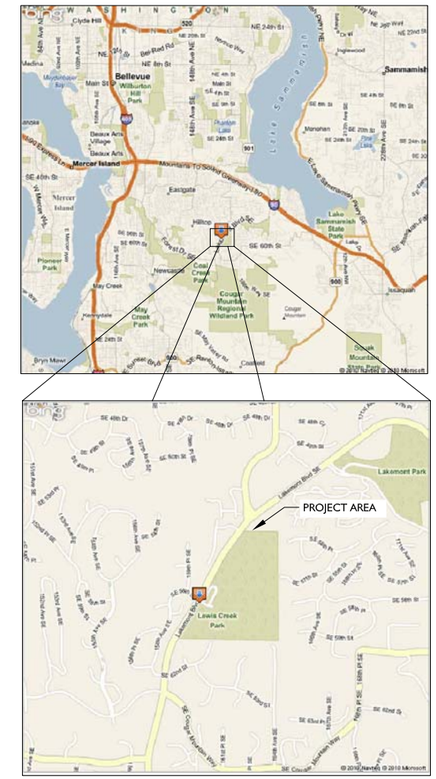
LEWIS CREEK PARK

TRAIL SPUR PLANS



PROJECT OVERVIEW

0 30 60 120
SCALE: 1"=60'
NORTH



VICINITY MAPS

PLAN LEGEND

- STREAM
- WETLAND
- WETLAND AND/OR STREAM BUFFER
- EXISTING TREE TO REMAIN
- EXISTING TRAIL
- PROPOSED TRAIL
- PROPOSED BRIDGE

SHEET INDEX

L-1	PROJECT OVERVIEW
L-2	CLEARING AND WEEDING PLAN
L-3	TRAIL PLAN AND NOTES
L-4	DETAILS AND ENLARGEMENTS
L-5	PLANTING PLAN AREA A; DETAILS NOTES & SPECS.
L-6	PLANTING AREA B & MITIGATION AREA
L-7	MITIGATION PLAN NOTES
S-1	BRIDGE PLANS
S-2	BRIDGE DETAILS

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5808 LAKEMONT BLVD. SE
BELLEVUE, WA 98009

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3	08-13-10	PRE-APPLICATION CONFERENCE	MG
4	11-04-10	REVIEW SET	MG
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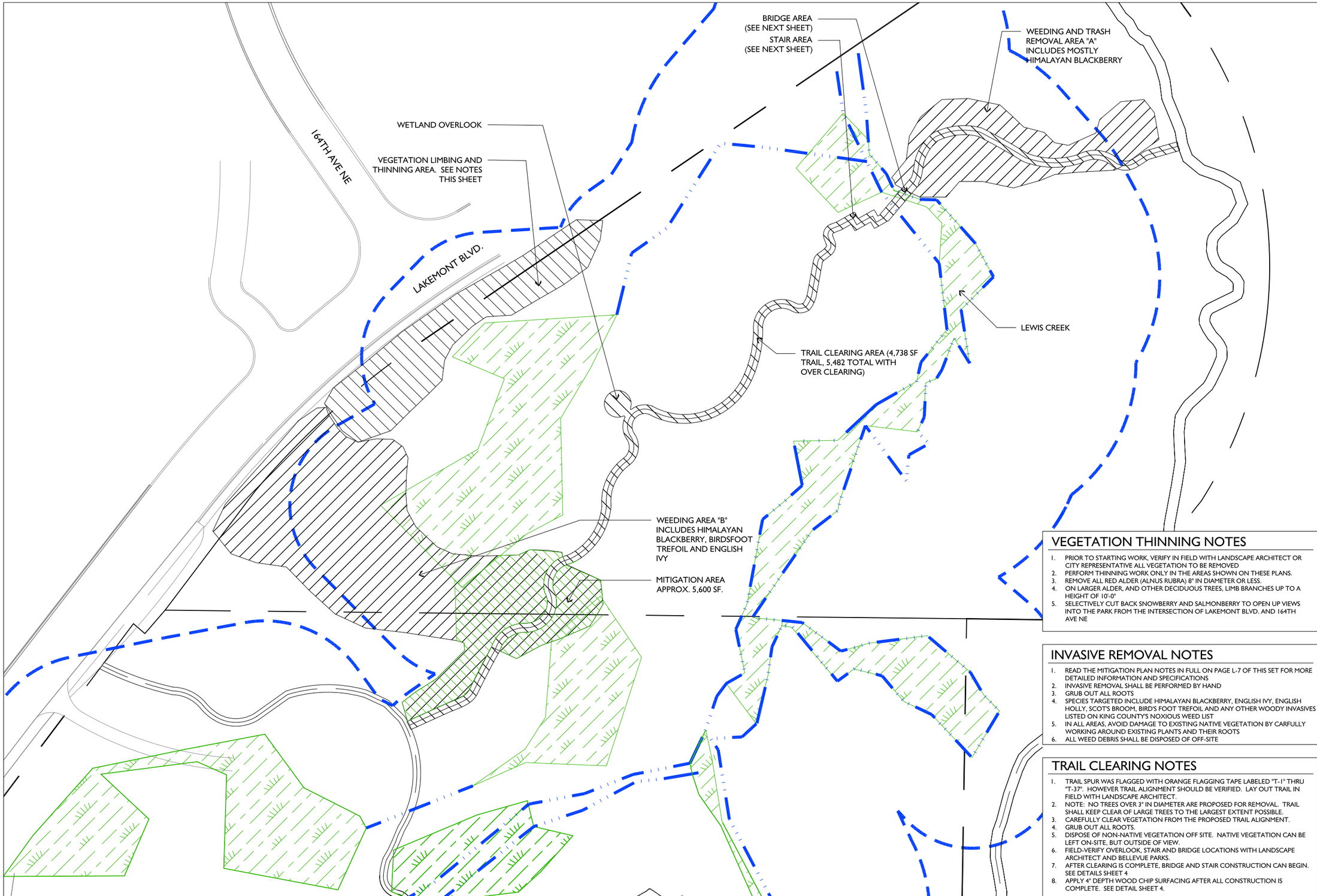
SHEET SIZE:
ORIGINAL PLAN IS 22" x 34" .
SCALE ACCORDINGLY.

PROJECT MANAGER: MG
DESIGNED: MG
DRAFTED: MG,CL
CHECKED: MG,BW
JOB NUMBER:
100220
SHEET NUMBER:
L-1 OF 7

DATE 11/11/2010 | PRINTED BY MARK GARFF | FILENAME WS:\100220-TRAIL PLAN.DWG



VEGETATION THINNING NOTES

1. PRIOR TO STARTING WORK, VERIFY IN FIELD WITH LANDSCAPE ARCHITECT OR CITY REPRESENTATIVE ALL VEGETATION TO BE REMOVED
2. PERFORM THINNING WORK ONLY IN THE AREAS SHOWN ON THESE PLANS.
3. REMOVE ALL RED ALDER (ALNUS RUBRA) 8" IN DIAMETER OR LESS.
4. ON LARGER ALDER, AND OTHER DECIDUOUS TREES, LIMB BRANCHES UP TO A HEIGHT OF 10'-0"
5. SELECTIVELY CUT BACK SNOWBERRY AND SALMONBERRY TO OPEN UP VIEWS INTO THE PARK FROM THE INTERSECTION OF LAKEMONT BLVD. AND 164TH AVE NE

INVASIVE REMOVAL NOTES

1. READ THE MITIGATION PLAN NOTES IN FULL ON PAGE L-7 OF THIS SET FOR MORE DETAILED INFORMATION AND SPECIFICATIONS
2. INVASIVE REMOVAL SHALL BE PERFORMED BY HAND
3. GRUB OUT ALL ROOTS
4. SPECIES TARGETED INCLUDE HIMALAYAN BLACKBERRY, ENGLISH IVY, ENGLISH HOLLY, SCOT'S BROOM, BIRD'S FOOT TREFOIL AND ANY OTHER WOODY INVASIVES LISTED ON KING COUNTY'S NOXIOUS WEED LIST
5. IN ALL AREAS, AVOID DAMAGE TO EXISTING NATIVE VEGETATION BY CARFULLY WORKING AROUND EXISTING PLANTS AND THEIR ROOTS
6. ALL WEED DEBRIS SHALL BE DISPOSED OF OFF-SITE

TRAIL CLEARING NOTES

1. TRAIL SPUR WAS FLAGGED WITH ORANGE FLAGGING TAPE LABELED "T-1" THRU "T-37". HOWEVER TRAIL ALIGNMENT SHOULD BE VERIFIED. LAY OUT TRAIL IN FIELD WITH LANDSCAPE ARCHITECT.
2. NOTE: NO TREES OVER 3" IN DIAMETER ARE PROPOSED FOR REMOVAL. TRAIL SHALL KEEP CLEAR OF LARGE TREES TO THE LARGEST EXTENT POSSIBLE.
3. CAREFULLY CLEAR VEGETATION FROM THE PROPOSED TRAIL ALIGNMENT.
4. GRUB OUT ALL ROOTS.
5. DISPOSE OF NON-NATIVE VEGETATION OFF SITE. NATIVE VEGETATION CAN BE LEFT ON-SITE, BUT OUTSIDE OF VIEW.
6. FIELD-VERIFY OVERLOOK, STAIR AND BRIDGE LOCATIONS WITH LANDSCAPE ARCHITECT AND BELLEVUE PARKS.
7. AFTER CLEARING IS COMPLETE, BRIDGE AND STAIR CONSTRUCTION CAN BEGIN. SEE DETAILS SHEET 4
8. APPLY 4" DEPTH WOOD CHIP SURFACING AFTER ALL CONSTRUCTION IS COMPLETE. SEE DETAIL SHEET 4.

CLEARING / WEEDING PLAN

0 15 30 60
SCALE: 1"=30'
NORTH

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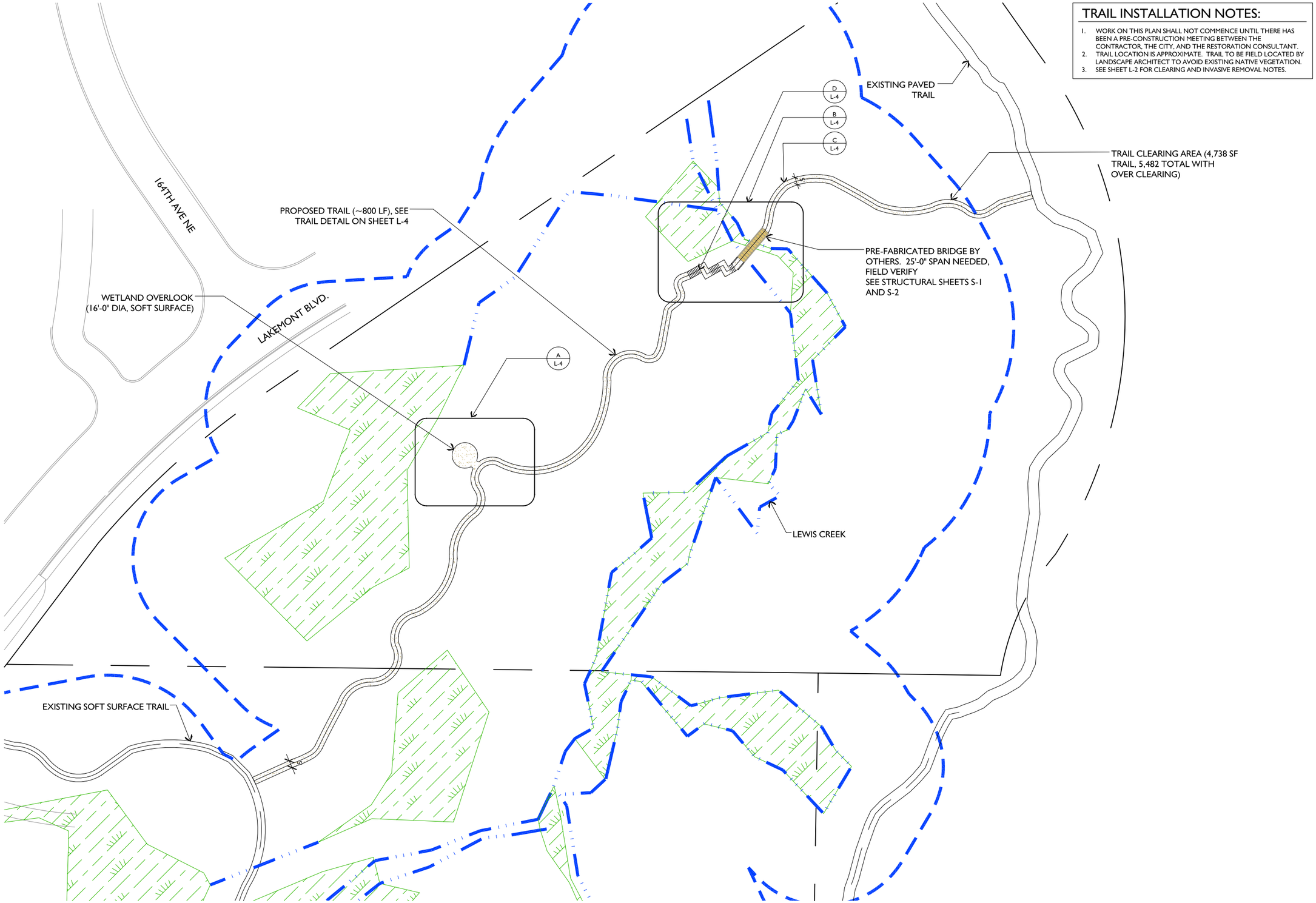
100220
SHEET NUMBER:
L-2 OF 7

DATE 11/11/2010 | PRINTED BY MARK GARFF | FILENAME WS-100220-TRAIL PLANS.DWG

TRAIL INSTALLATION NOTES:

1. WORK ON THIS PLAN SHALL NOT COMMENCE UNTIL THERE HAS BEEN A PRE-CONSTRUCTION MEETING BETWEEN THE CONTRACTOR, THE CITY, AND THE RESTORATION CONSULTANT.
2. TRAIL LOCATION IS APPROXIMATE. TRAIL TO BE FIELD LOCATED BY LANDSCAPE ARCHITECT TO AVOID EXISTING NATIVE VEGETATION.
3. SEE SHEET L-2 FOR CLEARING AND INVASIVE REMOVAL NOTES.



TRAIL PLAN

0 15 30 60
SCALE: 1"=30'
NORTH

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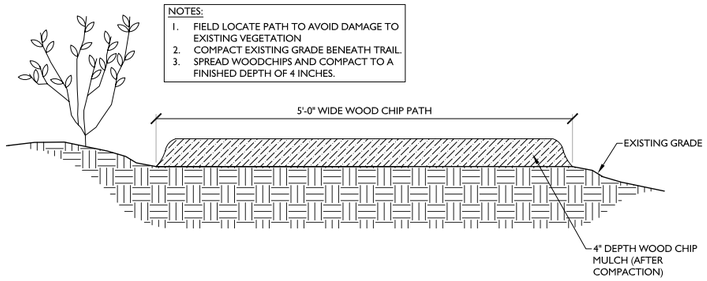
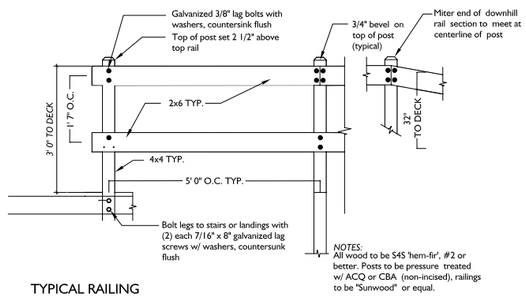
SHEET NUMBER:
L-3 OF 7

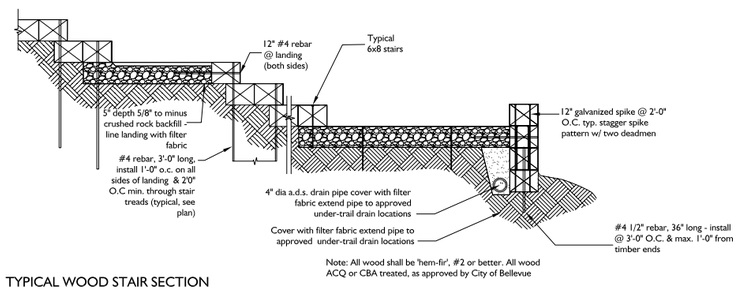
DATE: 11/11/2010
PRINTED BY: MARK GARFF
FILENAME: WS-100220-TRAIL PLAN-L.DWG



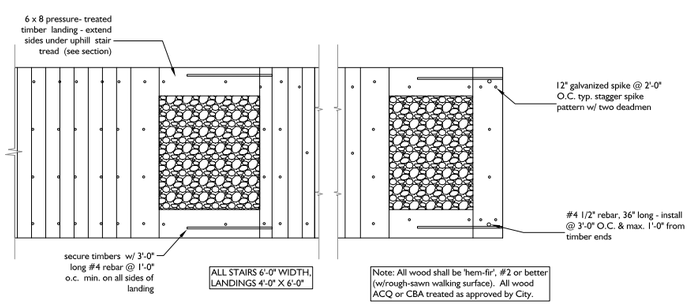
C TYPICAL TRAIL SECTION
NTS



TYPICAL RAILING



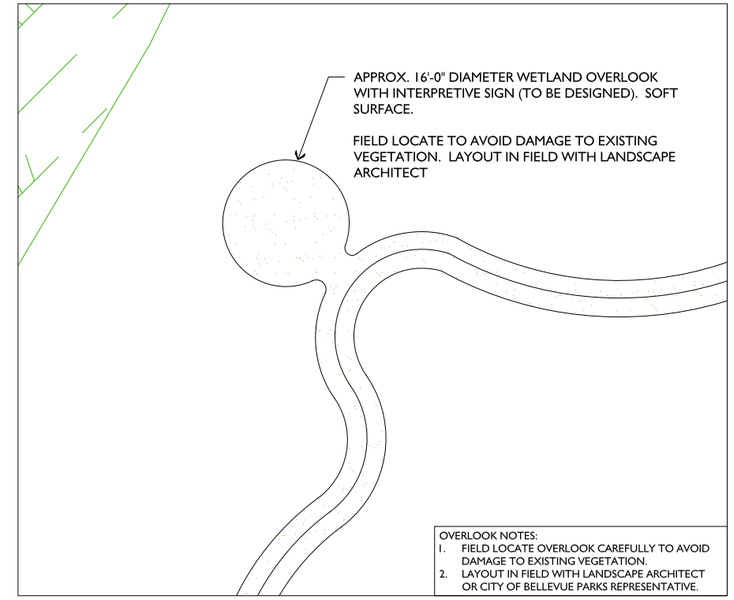
TYPICAL WOOD STAIR SECTION



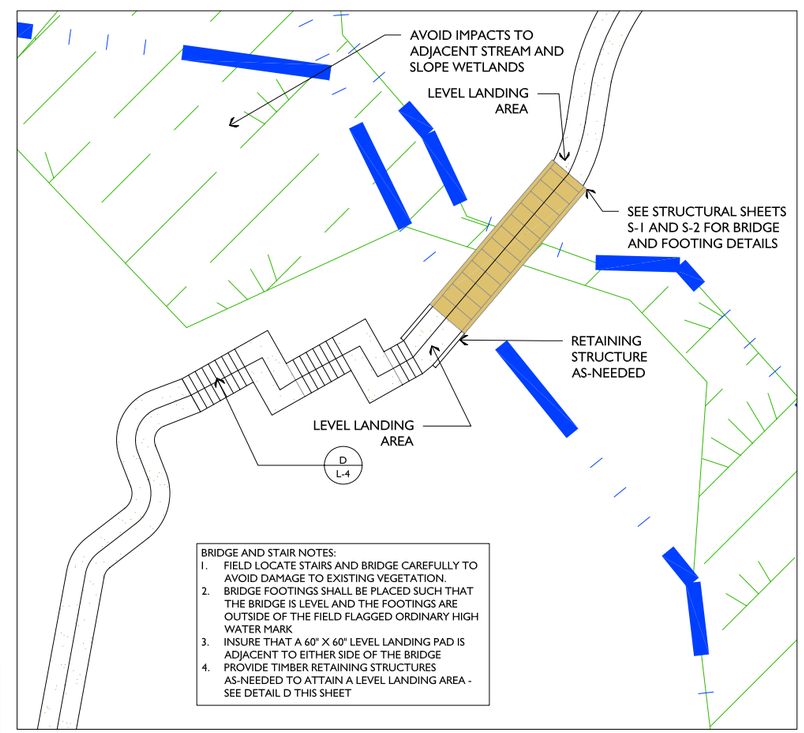
TYPICAL WOOD STAIR PLAN

D STAIR AND RAILING DETAIL
NTS

SEE STRUCTURAL SHEETS S-1 AND S-2 FOR BRIDGE INSTALLATION AND FOOTING CONSTRUCTION DETAILS



A PLAN ENLARGEMENT "A"
NTS



B PLAN ENLARGEMENT "B"
NTS

DETAILS AND ENLARGEMENTS

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SHEET NUMBER: L-4 OF 7

DATE | PRINTED BY | FILENAME
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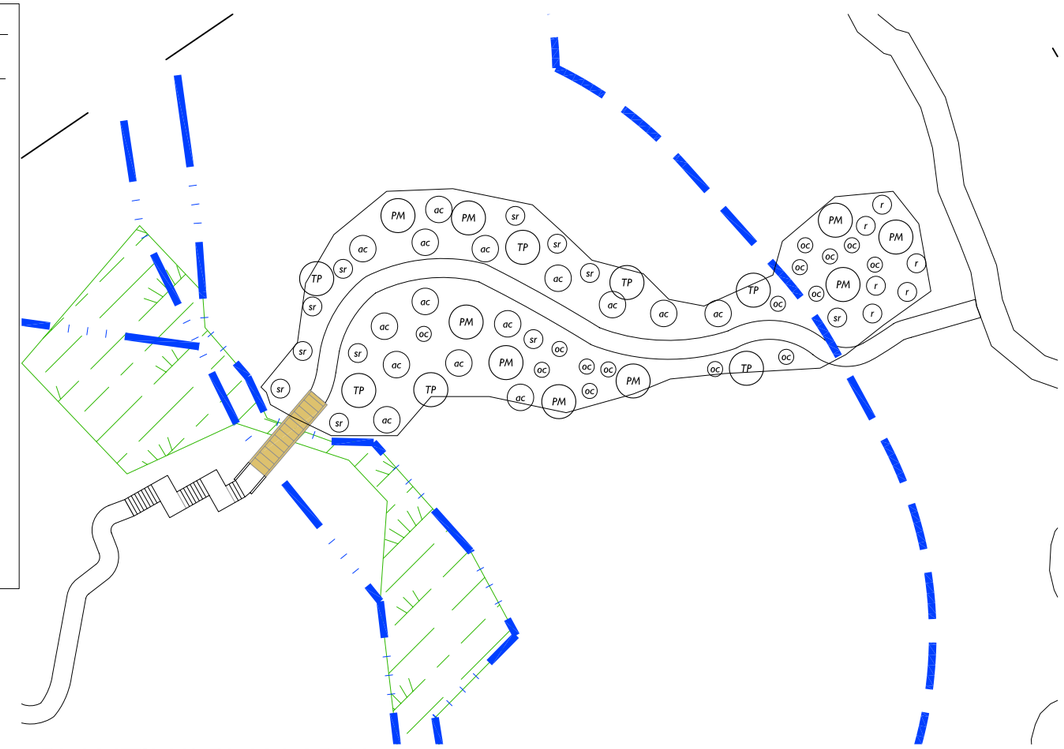
PLANTING LEGEND

SCIENTIFIC / COMMON NAME	QTY	SIZE
TREES		
(FL) FRAXINUS LATIFOLIA OREGON ASH	5	2 GAL
(PB) POPULUS B. ssp. TRICHOCARPA BLACK COTTONWOOD	3	2 GAL
(PS) PICEA SITCHENSIS SITKA SPRUCE	6	5 GAL
(PM) PSEUDOTSUGA MENZIESII DOUGLAS FIR	17	5 GAL.
(TP) THUJA PLICATA WESTERN RED CEDAR	16	5 GAL

SEEDING — *HYDROSEED ALL DISTURBED OR EXPOSED SOIL AREAS AND WHERE SYMBOL IS SHOWN ON PLAN*

PROTIME 404 NATIVE WATER QUALITY SEED MIX
BROMUS CARINATUS / CALIFORNIA BROME - 55%
ELYMUS GLAUCUS / BLUE WILD RYE - 25%
LUPINUS ALBICAULUS / LUPINE - 15%
YARROW MILLEFOLIUM / WESTERN YARROW - 5%

SCIENTIFIC / COMMON NAME	QTY	SIZE
SHRUBS		
(ac) ACER CIRCINATUM VINE MAPLE	39	2 GAL
(cs) CORNUS SERICEA RED TWIG DOGWOOD	39	1 GAL
(cd) CRATAEGUS DOUGLASII BLACK HAWTHORN	7	1 GAL.
(hd) HOLODISCUS DISCOLOR OCEANSPRAY	12	1 GAL
(li) LONICERA INVOLUCRATA BLACK TWINBERRY	16	1 GAL
(m) MAHONIA NERVOSA DULL OREGON GRAPE	62	1 GAL
(oc) OEMLERIA CERASIFORMIS OSOBERRY	20	1 GAL
(r) RIBES SANGUINEUM RED FLOWERING CURRANT	15	1 GAL
(rs) RUBUS SPECTABILIS SALMONBERRY	37	1 GAL
(sr) SAMBUCUS RACEMOSA RED ELDERBERRY	36	1 GAL
(ss) SALIX SITCHENSIS SITKA WILLOW	10	1 GAL
(ssc) SALIX SCOULERIANA SCOULER'S WILLOW	12	1 GAL
(sa) SYMPHORICARPOS ALBUS SNOWBERRY	5	1 GAL



PLANTING PLAN AREA A

0 10 20 40 SCALE: 1"=20' NORTH

PLANTING NOTES

1. NATIVE PLANT INSTALLATION SHALL OCCUR DURING FROST-FREE PERIODS ONLY.
2. LOCATE ALL EXISTING UTILITIES WITHIN THE LIMIT OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR ANY UTILITY DAMAGE AS A RESULT OF THE LANDSCAPE CONSTRUCTION.
3. REMOVE ANY AND ALL INVASIVE WEEDS, SEE INVASIVE WEED NOTES AND MITIGATION NOTES.
4. CONSULT WITH THE RESTORATION SPECIALIST TO DETERMINE IF ANY SOIL AMENDMENT, SUCH AS COMPOST, IS NEEDED.
5. LOOSEN ANY COMPACTED SOILS IN THE PLANTING AREA.
6. LAYOUT PLANT MATERIAL PER PLAN FOR INSPECTION BY THE LANDSCAPE ARCHITECT. PLANT SUBSTITUTIONS WILL NOT BE ALLOWED WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT.
7. INSTALL PLANTS PER PLANTING DETAILS.
8. WATER EACH PLANT THOROUGHLY TO REMOVE AIR POCKETS.
9. INSTALL A 4" DEPTH, 18" DIAMETER, COARSE WOOD-CHIP MULCH RING AROUND EACH PLANT

THE LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL UNTIL FINAL INSPECTION AND APPROVAL BY THE OWNER OR OWNER'S REPRESENTATIVE. ALL PLANTINGS AND WORKMANSHIP SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING FINAL OWNER ACCEPTANCE

PLANT INSTALLATION SPECIFICATIONS

NOTE: THESE SPECIFICATIONS ARE A LEGALLY BINDING CONTRACT

GENERAL NOTES

QUALITY ASSURANCE
1. PLANTS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND LOCAL LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL.
2. PLANTS SHALL BE HEALTHY, VIGOROUS, AND WELL-FORMED, WITH WELL DEVELOPED, FIBROUS ROOT SYSTEMS, FREE FROM DEAD BRANCHES OR ROOTS. PLANTS SHALL BE FREE FROM DAMAGE CAUSED BY TEMPERATURE EXTREMES, LACK OR EXCESS OF MOISTURE, INSECTS, DISEASE, AND MECHANICAL INJURY. PLANTS IN LEAF SHALL BE WELL FOLIATED AND OF GOOD COLOR. PLANTS SHALL BE HABITUATED TO THE OUTDOOR ENVIRONMENTAL CONDITIONS INTO WHICH THEY WILL BE PLANTED (HARDENED-OFF).
3. TREES WITH DAMAGED, CROOKED, MULTIPLE OR BROKEN LEADERS WILL BE REJECTED. WOODY PLANTS WITH ABRASIONS OF THE BARK OR SUNSCALD WILL BE REJECTED.

DEFINITIONS
1. PLANTS/PLANT MATERIALS. PLANTS AND PLANT MATERIALS SHALL INCLUDE ANY LIVE PLANT MATERIAL USED ON THE PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CONTAINER GROWN, B&B OR BAREROOT PLANTS; LIVE STAKES AND FASCINES (WATTLES); TUBERS, CORMS, BULBS, ETC.; SPRIGS, PLUGS, AND LINERS.
2. CONTAINER GROWN. CONTAINER GROWN PLANTS ARE THOSE WHOSE ROOTBALLS ARE ENCLOSED IN A POT OR BAG IN WHICH THAT PLANT GREW.

SUBSTITUTIONS
1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SPECIFIED MATERIALS IN ADVANCE IF SPECIAL GROWING, MARKETING OR OTHER ARRANGEMENTS MUST BE MADE IN ORDER TO SUPPLY SPECIFIED MATERIALS.
2. SUBSTITUTION OF PLANT MATERIALS NOT ON THE PROJECT LIST WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE LANDSCAPE ARCHITECT / CONSULTANT.
3. IF PROOF IS SUBMITTED THAT ANY PLANT MATERIAL SPECIFIED IS NOT OBTAINABLE, A PROPOSAL WILL BE CONSIDERED FOR USE OF THE NEAREST EQUIVALENT SIZE OR ALTERNATIVE SPECIES, WITH CORRESPONDING ADJUSTMENT OF CONTRACT PRICE.
4. SUCH PROOF WILL BE SUBSTANTIATED AND SUBMITTED IN WRITING TO THE CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION.

INSPECTION
1. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE CONSULTANT FOR CONFORMANCE TO SPECIFICATIONS. EITHER AT TIME OF DELIVERY ON-SITE OR AT THE GROWER'S NURSERY. APPROVAL OF PLANT MATERIALS AT ANY TIME SHALL NOT IMPAIR THE SUBSEQUENT RIGHT OF INSPECTION AND REJECTION DURING PROGRESS OF THE WORK.
2. PLANTS INSPECTED ON SITE AND REJECTED FOR NOT MEETING SPECIFICATIONS MUST BE REMOVED IMMEDIATELY FROM SITE OR RED-TAGGED AND REMOVED AS SOON AS POSSIBLE.
3. THE CONSULTANT MAY ELECT TO INSPECT PLANT MATERIALS AT THE PLACE OF GROWTH. AFTER INSPECTION AND ACCEPTANCE, THE CONSULTANT MAY REQUIRE THE INSPECTED PLANTS BE LABELED AND RESERVED FOR PROJECT. SUBSTITUTION OF THESE PLANTS WITH OTHER INDIVIDUALS, EVEN OF THE SAME SPECIES AND SIZE, IS UNACCEPTABLE.

MEASUREMENTS OF PLANTS
1. PLANTS SHALL CONFORM TO SIZES SPECIFIED UNLESS SUBSTITUTIONS ARE MADE AS OUTLINED IN THIS CONTRACT.
2. HEIGHT AND SPREAD DIMENSIONS SPECIFIED REFER TO MAIN BODY OF PLANT AND NOT BRANCH OR ROOT TIP TO TIP. PLANT DIMENSIONS SHALL BE MEASURED WHEN THEIR BRANCHES OR ROOTS ARE IN THEIR NORMAL POSITION.
3. WHERE A RANGE OF SIZE IS GIVEN, NO PLANT SHALL BE LESS THAN THE MINIMUM SIZE AND AT LEAST 50% OF THE PLANTS SHALL BE AS LARGE AS THE MEDIAN OF THE SIZE RANGE. (EXAMPLE: IF THE SIZE RANGE IS 12" TO 18", AT LEAST 50% OF PLANTS MUST BE 15" TALL.)

SUBMITTALS

PROPOSED PLANT SOURCES
1. WITHIN 45 DAYS AFTER AWARD OF THE CONTRACT, SUBMIT A COMPLETE LIST OF PLANT MATERIALS PROPOSED TO BE PROVIDED DEMONSTRATING CONFORMANCE WITH THE REQUIREMENTS SPECIFIED. INCLUDE THE NAMES AND ADDRESSES OF ALL GROWERS AND NURSERIES.

PRODUCT CERTIFICATES
1. PLANT MATERIALS LIST - SUBMIT DOCUMENTATION TO CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION THAT PLANT MATERIALS HAVE BEEN ORDERED. ARRANGE PROCEDURE FOR INSPECTION OF PLANT MATERIAL WITH CONSULTANT AT TIME OF SUBMISSION.
2. HAVE COPIES OF VENDOR'S OR GROWERS' INVOICES OR PACKING SLIPS FOR ALL PLANTS ON SITE DURING INSTALLATION. INVOICE OR PACKING SLIP SHOULD LIST SPECIES BY SCIENTIFIC NAME, QUANTITY, AND DATE DELIVERED (AND GENETIC ORIGIN IF THAT INFORMATION WAS PREVIOUSLY REQUESTED).

DELIVERY, HANDLING, & STORAGE

NOTIFICATION
CONTRACTOR MUST NOTIFY CONSULTANT 48 HOURS OR MORE IN ADVANCE OF DELIVERIES SO THAT CONSULTANT MAY ARRANGE FOR INSPECTION.

PLANT MATERIALS
1. TRANSPORTATION - DURING SHIPPING, PLANTS SHALL BE PACKED TO PROVIDE PROTECTION AGAINST CLIMATE EXTREMES, BREAKAGE AND DRYING. PROPER VENTILATION AND PREVENTION OF DAMAGE TO BARK, BRANCHES, AND ROOT SYSTEMS MUST BE ENSURED.
2. SCHEDULING AND STORAGE - PLANTS SHALL BE DELIVERED AS CLOSE TO PLANTING AS POSSIBLE. PLANTS IN STORAGE MUST BE PROTECTED AGAINST ANY CONDITION THAT IS DETRIMENTAL TO THEIR CONTINUED HEALTH AND VIGOR.
3. HANDLING - PLANT MATERIALS SHALL NOT BE HANDLED BY THE TRUNK, LIMBS, OR FOLIAGE BUT ONLY BY THE CONTAINER, BALL, BOX, OR OTHER PROTECTIVE STRUCTURE, EXCEPT BAREROOT PLANTS SHALL BE KEPT IN BUNDLES UNTIL PLANTING AND THEN HANDLED CAREFULLY BY THE TRUNK OR STEM.
4. LABELS - PLANTS SHALL HAVE DURABLE, LEGIBLE LABELS STATING CORRECT SCIENTIFIC NAME AND SIZE. TEN PERCENT OF CONTAINER GROWN PLANTS IN INDIVIDUAL POTS SHALL BE LABELED. PLANTS SUPPLIED IN FLATS, RACKS, BOXES, BAGS, OR BUNDLES SHALL HAVE ONE LABEL PER GROUP.

WARRANTY

PLANT WARRANTY
PLANTS MUST BE GUARANTEED TO BE TRUE TO SCIENTIFIC NAME AND SPECIFIED SIZE, AND TO BE HEALTHY AND CAPABLE OF VIGOROUS GROWTH.

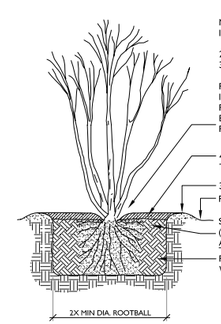
REPLACEMENT
1. PLANTS NOT FOUND MEETING ALL OF THE REQUIRED CONDITIONS MUST BE REMOVED FROM SITE AND REPLACED IMMEDIATELY AT THE CONSULTANT'S DISCRETION.
2. PLANTS NOT SURVIVING AFTER ONE YEAR TO BE REPLACED AT THE CONTRACTOR'S EXPENSE.

PLANT MATERIAL

GENERAL
1. PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO OR MORE SEVERE THAN THOSE OF THE PROJECT SITE.
2. PLANTS SHALL BE TRUE TO SPECIES AND VARIETY OR SUBSPECIES. NO CULTIVARS OR NAMED VARIETIES SHALL BE USED UNLESS SPECIFIED AS SUCH.

QUANTITIES
SEE PLANT LIST ON ACCOMPANYING PLANS.

ROOT TREATMENT
1. CONTAINER GROWN PLANTS (INCLUDES PLUGS): PLANT ROOT BALLS MUST HOLD TOGETHER WHEN THE PLANT IS REMOVED FROM THE POT, EXCEPT THAT A SMALL AMOUNT OF LOOSE SOIL MAY BE ON THE TOP OF THE ROOTBALL.
2. PLANTS MUST NOT BE ROOT-BOUND; THERE MUST BE NO CIRCLING ROOTS PRESENT IN ANY PLANT INSPECTED.
3. ROOTBALLS THAT HAVE CRACKED OR BROKEN WHEN REMOVED FROM THE CONTAINER SHALL BE REJECTED.



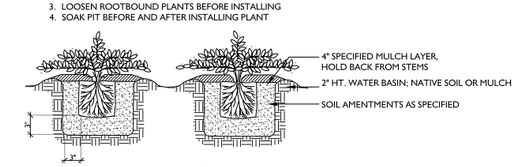
NOTES:
1. PLANTING PIT SHALL NOT BE LESS THAN (2) TIMES THE WIDTH OF THE ROOT BALL DIA.
2. LOOSEN SIDES AND BOTTOMS OF PLANTING PIT
3. SOAK PLANTING PIT AFTER PLANTING

REMOVE FROM POT & ROUGH-UP ROOT BALL BEFORE INSTALLING. UNTANGLE AND STRAIGHTEN CIRCLING ROOTS - PRUNE IF NECESSARY. IF PLANT IS EXCEPTIONALLY ROOT-BOUND, DO NOT PLANT AND RETURN TO NURSERY FOR AN ACCEPTABLE ALTERNATIVE

4" MULCH LAYER. HOLD BACK MULCH FROM TRUNK/STEMS
3" MIN HT. WATER BASIN
FINISH GRADE
SLOW RELEASE, PHOSPHORUS FREE FERTILIZER (OUTSIDE OF O.H.W.M. ONLY) APPLIED ONE YEAR AFTER INITIAL PLANTING
REMOVE DEBRIS AND LARGE ROCKS AND BACKFILL WITH NATIVE SOIL. FIRM UP SOIL AROUND PLANT

A TREE & SHRUB PLANTING DETAIL
NTS

NOTES:
1. PLANT GROUNDCOVER AT SPECIFIED DISTANCE ON-CENTER (O.C.) USING TRIANGULAR SPACING, TYP.
2. LOOSEN SIDES AND BOTTOM OF PLANTING PIT AND REMOVE DEBRIS
3. LOOSEN ROOTBOUND PLANTS BEFORE INSTALLING
4. SOAK PIT BEFORE AND AFTER INSTALLING PLANT



B GROUNDCOVER
NTS

PLANT INSTALLATION SPECIFICATIONS & DETAILS

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TRAIL SPUR PLANS
PREPARED FOR THE CITY OF BELLEVUE
PARKS AND COMMUNITY DEVELOPMENT
5808 LAKEMONT BLVD. SE
BELLEVUE, WA 98009

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SHEET NUMBER: L-5 OF 7

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PLANTING LEGEND

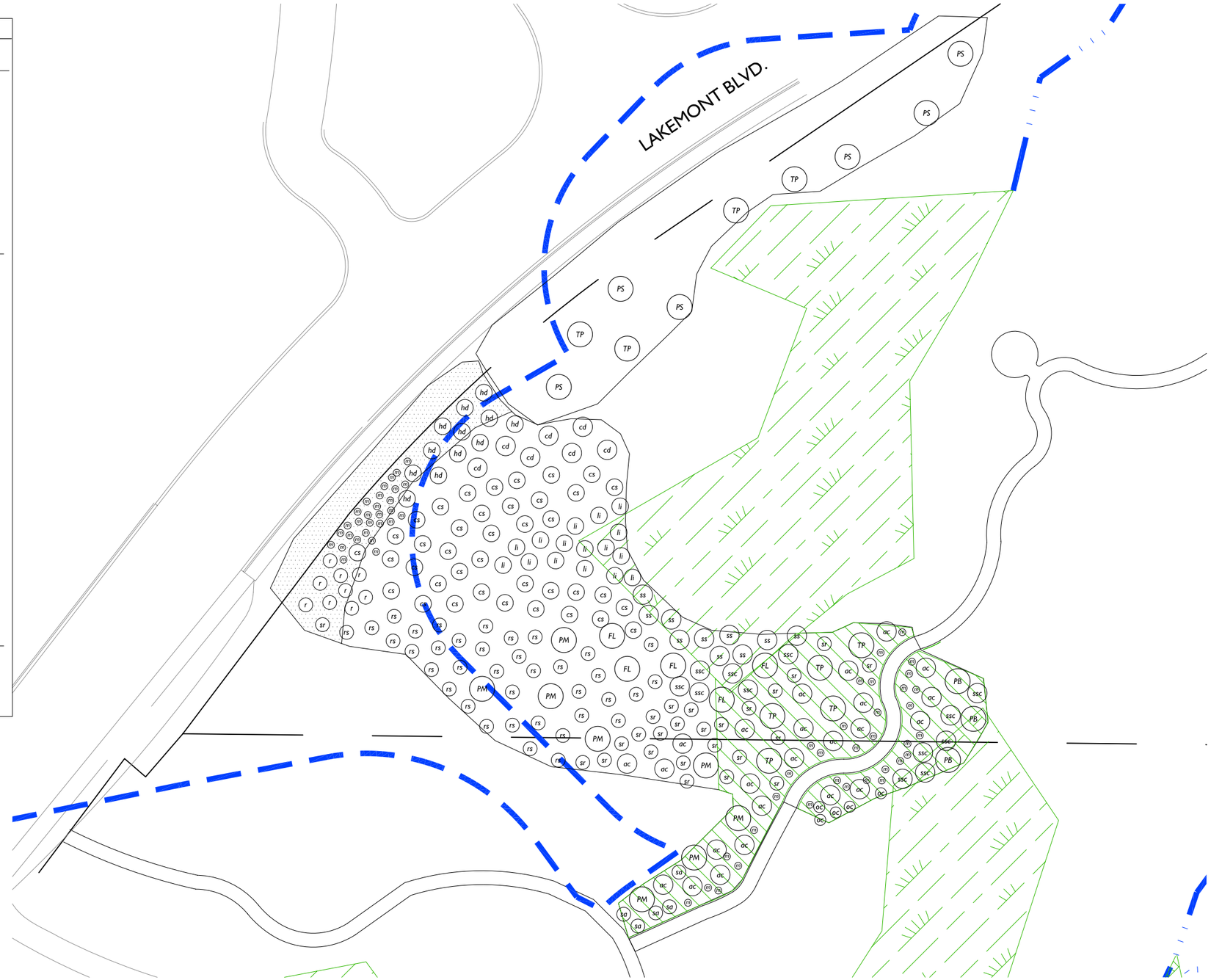
SCIENTIFIC / COMMON NAME		QTY	SIZE
TREES			
FL	FRAXINUS LATIFOLIA OREGON ASH	5	2 GAL
PB	POPULUS B. ssp. TRICHOCARPA BLACK COTTONWOOD	3	2 GAL
PS	PICEA SITCHENSIS SITKA SPRUCE	6	5 GAL
PM	PSEUDOTSUGA MENZIESII DOUGLAS FIR	17	5 GAL.
TP	THUJA PLICATA WESTERN RED CEDAR	16	5 GAL

SCIENTIFIC / COMMON NAME		QTY	SIZE
SHRUBS			
ac	ACER CIRCINATUM VINE MAPLE	39	2 GAL
cs	CORNUS SERICEA RED TWIG DOGWOOD	39	1 GAL
cd	CRATAEGUS DOUGLASII BLACK HAWTHORN	7	1 GAL.
hd	HOLODISCUS DISCOLOR OCEANSPRAY	12	1 GAL
li	LONICERA INVOLUCRATA BLACK TWINBERRY	16	1 GAL
m	MAHONIA NERVOSA DULL OREGON GRAPE	62	1 GAL
oc	OEMLERIA CERASIFORMIS OSOBERRY	20	1 GAL
r	RIBES SANGUINEUM RED FLOWERING CURRANT	15	1 GAL
rs	RUBUS SPECTABILIS SALMONBERRY	37	1 GAL
sr	SAMBUCUS RACEMOSA RED ELDERBERRY	36	1 GAL
ss	SALIX SITCHENSIS SITKA WILLOW	10	1 GAL
ssc	SALIX SCOULERIANA SCOULER'S WILLOW	12	1 GAL
sd	SYMPHORICARPOS ALBUS SNOWBERRY	5	1 GAL

SEEDING

HYDROSEED ALL DISTURBED OR EXPOSED SOIL AREAS AND WHERE SYMBOL IS SHOWN ON PLAN

PROTIME 404 NATIVE WATER QUALITY SEED MIX
BROMUS CARINATUS / CALIFORNIA BROME - 55%
ELYMUS GLAUCUS / BLUE WILD RYE - 25%
LUPINUS ALBICAULUS / LUPINE - 15%
YARROW MILLEFOLIUM / WESTERN YARROW - 5%



PLANTING PLAN AREA B, & MITIGATION AREA

0 10 20 40
SCALE: 1"=20'
NORTH

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MITIGATION PLAN NOTES

EXECUTIVE SUMMARY
To accommodate and encourage passive recreation within the forested northeast end of Lewis Creek Park, a new trail spur is proposed. This new soft-surface trail, approximately 800 feet in length, will be installed within the forested area of Lewis Creek Park. The trail will connect existing trails within the park and will provide passive recreation opportunities for the public within the forest area. The trail will be located almost entirely within buffers of on-site wetlands (4,738 square feet of trail and 5,482 square feet of total clearing within the buffer) and in one area will cross over a portion a wetland and a section of Lewis Creek. A bridge will be used to span the wetland and stream, thereby preventing direct impacts to either the stream or wetland. An area of enhancement, approximately 5,600 square feet in size, is proposed as mitigation for the buffer impacts associated with trail construction. Enhancement will involve the planting of native trees and shrubs within a degraded wetland and wetland buffer area.

GOALS
- Improve habitat function in the wetland and stream buffer.
- Remove invasive weeds, primarily Himalayan blackberry.
- Establish a predominance of diverse native vegetation across all planted areas.
- Limit re-invasion of invasive weeds within planted areas.
- Increase habitat cover and refuge for amphibians, small mammals and invertebrates.

PERFORMANCE STANDARDS
1. Survival: Achieve 100% survival of installed plants by the end of Year 1. This standard can be met through plant establishment or through replanting as necessary to achieve the required numbers.
2. Native woody vegetation cover in all planted areas:
   a. Achieve 60% cover of native trees and shrubs by Year 3. Volunteer species may count towards this cover standard.
3. Invasive cover: No more than 10% cover by invasive weed species in the mitigation areas in any monitoring year.
4. Species diversity:
   a. Successfully establish at least 5 native tree species. Volunteer species may count towards this cover standard.
   b. Successfully establish at least 7 native shrub species. Volunteer species may count towards this cover standard.

MONITORING METHODS
This monitoring program is designed to track the success of the planted areas over time and to measure the degree to which it is meeting the performance standards outlined elsewhere in this document.

An as-built plan will be prepared by the restoration specialist prior to the beginning of the monitoring period. The as-built plan shall be a mark-up of the planting plans included in this plan set. The as-built plan will document any departures in plant placement or other components from the proposed plan.

Transects: During the as-built inspection, the restoration specialist shall install monitoring transects. Approximate transect locations shall be marked on the as-built plan. Two twenty five-foot transects shall be established in the planted area. All planted areas not directly covered by transects will be visually assessed and noted as to how they are meeting the performance standards during regularly scheduled Parks maintenance visits.

Monitoring should take place twice annually for five years (per LUC 20.25H.220.D). During each year there shall be a spring and a late summer or fall visit. First-year monitoring should commence in the first spring subsequent to installation.

The spring monitoring visit will record maintenance needs such as plant replacement and weeding needs. Following the spring visit the restoration specialist will notify the City/or maintenance crews of necessary early growing season maintenance. The second annual monitoring visit will contain the bulk of the site assessment and will take place in the late summer or early fall. The late-season formal monitoring visit shall record and report the following in an annual report submitted to the City of Bellevue.

1. General summary of the spring visit.
2. First-year counts of dead plants by species in the planted area.
3. Counts of dead plants where mortality is significant in any monitoring year.
4. Estimate of native sapling tree and shrub cover using the line intercept method along established transects in the planted areas.
5. Estimate of woody invasive cover using the line-intercept method along established transects in the planted areas.
6. Estimate of herbaceous invasive weed cover using the cover class method site-wide.
7. Photographic documentation from fixed reference points or transect ends.
8. Intrusions into the planting areas, vandalism or other actions that impair the intended functions of the planted areas.
9. Recommendations for maintenance or repair of any portion of the mitigation area.

MAINTENANCE

The site will be maintained for five years following completion of the construction. Note: specifications for items in bold can be found above under "Material Specifications and Definitions."

1. Replace each plant found dead in the summer monitoring visits during the upcoming fall dormant season (October 15th to March 1st).
2. Reed canarygrass is currently present in the buffer, and may further intensify following blackberry clearing. Reed canarygrass maintenance plan (within planted areas only):
   a. Remove reed canarygrass and roots from the base of all installed plants and desirable volunteer vegetation to a distance of 18 inches from the main plant stem. If weeding is difficult due to a thick sod layer, herbicide may be used if approved by City of Bellevue Best Management Practices Notebook. Areas around desirable plants shall be treated with herbicide only by a state licensed applicator. Glyphosate without a surfactant (Rodeo) is approved for use in aquatic areas.
   b. Identify reed canarygrass monoculture areas defined as a 50 square-foot patch of 100% reed canarygrass that is entirely absent of healthy native trees or shrubs. Patches are not linear or long and narrow (e.g. 2 feet wide and 25 feet long). Rather, patches are roughly square, circular, or otherwise simply shaped polygons.
      - Cut monoculture areas to the ground and install trees and shrubs in monoculture areas. Species selection shall be based on plants shown on this plan or as directed by the Restoration Specialist.
      - Cover with at least 4 inches of wood chip mulch.
3. Non-native Blackberry maintenance plan (within planted areas only):
   a. Ensure adequate native plants cover the infested area. Install replacement plants at the direction of the Restoration Specialist to ensure adequate native cover.
   b. Ensure a 4-inch thick cover of wood chip mulch is in place in all planted areas.
   c. Encroaching Himalayan and evergreen blackberry from off-site shall be cut back to 10 feet beyond the project boundary on an ongoing basis (at least 4 times per growing season).
   d. Sprouting or rooted Himalayan and evergreen blackberry shall be grubbed out by hand on an ongoing basis, being careful to grub out roots.
   e. Should hand grubbing of invasive weeds prove unsuccessful, application of an herbicide approved for use in aquatic areas may be used. Herbicide applications must be conducted by a state licensed applicator. Applications should be done only between mid-spring and mid-summer for maximum effectiveness. Application should be by a targeted method such as spot spray or wick (preferred).
4. General weeding for all planted areas:
   a. At least twice-yearly, remove all competing weeds and weed roots from beneath each installed plant and any desirable volunteer vegetation to a distance of 18 inches from the main plant stem. Weeding should occur at least twice during the spring and summer. Frequent weeding will result in lower mortality and lower plant replacement costs.
   b. More frequent weeding may be necessary depending on weed conditions that develop after plan installation.
   c. Do not weed the area near the plant bases with string trimmer (weed whacker/weed eater). Native plants are easily damaged or killed, and weeds easily recover after trimming.
5. Apply slow release granular fertilizer to each installed plant annually in the spring (by June 1) of years two through five.
6. Mulch the weeded areas beneath each plan with wood chip mulch as necessary to maintain a 4-inch thick mulch ring and keep down weeds.
7. The manager shall ensure that water is provided should it be necessary during the summer drought period.

Construction Notes and Specifications

Note: specifications for items in bold can be found below under "Material Specifications and Definitions."

Note: The Watershed Company [(425) 822-5242] personnel, or other persons qualified to evaluate environmental restoration projects, shall monitor:

1. All site preparation
   a. Weed removal
   b. Soil preparation
2. Plant material inspection
   a. Plant material delivery inspection
   b. 50% plant installation inspection
   c. 100% plant installation inspection

General Work Sequence

1. Salvage large woody debris, greater than 8 inches in diameter, from the areas to be cleared and replace in the buffer as shown on the plan or at the direction of the restoration specialist. Woody debris shall be placed to maximize ground contact.
2. Invasive blackberry removal just prior to planting:
   - If practical roto-till areas infested with Himalayan or evergreen blackberry to loosen soil and roots.
   - Hand-rake and grub the roto-tilled area to remove as many blackberry roots and root fragments as is practical.
   - Dispose of blackberry roots off-site in an approved manner.
   - Cover with at least 4 inches of wood chip mulch where directed by the restoration specialist.
4. Evaluate existing soil conditions. If the restoration specialist determines the soils are deficient in organic material, the restoration specialist shall make a recommendation for amendment with compost.
5. All plant installation is to take place during the dormant season (October 15th - March 1st), for best survival.
6. Prepare a planting pit for each plant and install per the planting details on sheet 4.
7. Mulch each plant with a circular wood chip mulch ring (32.5 cubic yards needed), four inches thick and extending to a distance of 9 inches from the plant stem (18 inches in diameter).
8. Provide irrigation as necessary during summer drought periods. Irrigation can be by water truck or by a temporary irrigation system supplied by truck or by city water if available.

Material Specifications and Definitions

1. Compost: Cedar Grove Compost or equivalent product. 100% vegetable compost with no appreciable quantities of sand, gravel sawdust or other non-organic materials.
2. Fertilizer: Slow release, granular PHOSPHOROUS-FREE fertilizer. Follow manufacturer's instructions for application. Keep fertilizer in a weather-tight container while on site. Note that fertilizer is to be applied only in Years two, three, four and five and not in the first year.
3. Irrigation system: Automated system capable of delivering at least two inches of water per week from June 1 through September 30 for the first two years following installation.
4. Restoration specialist: The Watershed Company [(425) 822-5242] personnel, or other persons qualified to evaluate environmental restoration projects.
5. Wood chip mulch:
   a. Stockpiled bark from site until depleted, then:
   b. Arborist chips" (chipped woody material) approximately 1 to 3 inches in maximum dimension (not sawdust or coarse hog fuel). This material is commonly available in large quantities from arborists or tree-pruning companies. This material is sold as "Animal Friendly Hog Fuel" at Pacific Topsoils [(800) 884-7645]. Mulch shall not contain appreciable quantities of garbage, plastic, metal, soil, and dimensional lumber or construction/demolition debris. Quantity required: 32.5 cubic yards.

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VEGETATION MANAGEMENT PLAN

Lewis Creek Park

June 2010
TWC Reference # 100220

Prepared for:

City of Bellevue
Parks & Community Services
Forest Management Program
450 – 110th Avenue SE
Bellevue, WA 98004

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VEGETATION MANAGEMENT PLAN

Lewis Creek Park

Prepared for:

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June 2010

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TABLE OF CONTENTS

Page #

1 Introduction 1

2 Site History 2

3 Current Site Description 2

3.1 Park Features 2
3.2 Critical Areas 2
3.3 Soils 3
3.4 Vegetation 3
3.5 Habitat 4
3.5.1 Species of Local Importance 6

4 Vegetation Management Objectives 7

4.1 Management Zones 7
4.1.1 Red 8
4.1.2 Orange 8
4.1.3 Blue 9
4.2 Management Objectives 9
4.2.1 Short term 9
4.2.2 Long-term 9
4.3 Five Year Management Program 10
4.3.1 Year One 10
4.3.2 Year Two 10
4.3.3 Year Three 10
4.3.4 Year Four 10
4.3.5 Year Five 10

LIST OF FIGURES

Figure 1. Northeastern portion of Lewis Creek Park, vegetation management area 1
Figure 2. Habitat corridors / landscape overview 5

LIST OF TABLES

Table 1. Native Plants observed within the management area by strata. 3
Table 2. Invasive weeds identified and the associated King County management status. 4
Table 3. Species of Local Importance as defined in LUC 20.25H.150.A. 6
Table 4. Invasive plant management zones..... 7
Table 5. Recommended Management Actions – Year One..... 11
Table 6. Recommended Management Actions – Year Two..... 12
Table 7. Recommended Management Actions – Year Three 13

APPENDICES

Appendix A: Site Photos
Appendix B: Vegetation Maps
Appendix C: Lewis Creek Park Wetland and Stream Inventory for the Vegetation Management Area

VEGETATION MANAGEMENT PLAN

LEWIS CREEK PARK

1 INTRODUCTION

Lewis Creek Park is a 56-acre community park located in southeastern Bellevue that serves as the trailhead for the South Bellevue Greenway system. The City Council adopted the *Lewis Creek Park Management Plan* in 2002. In accord with that document, the park design reflects an open space philosophy that balances recreational and community needs with environmental preservation. The approximately 25.8-acre northeastern forest area will be managed to maximize ecological functions and values, while maintaining soft-surface trail connections to the Lakemont trail system (see Figure 1 below). This vegetation management plan is intended to aid the City Parks and Community Services Department in accomplishing those management objectives identified for the northeastern forest area in the *Lewis Creek Park Management Plan*.

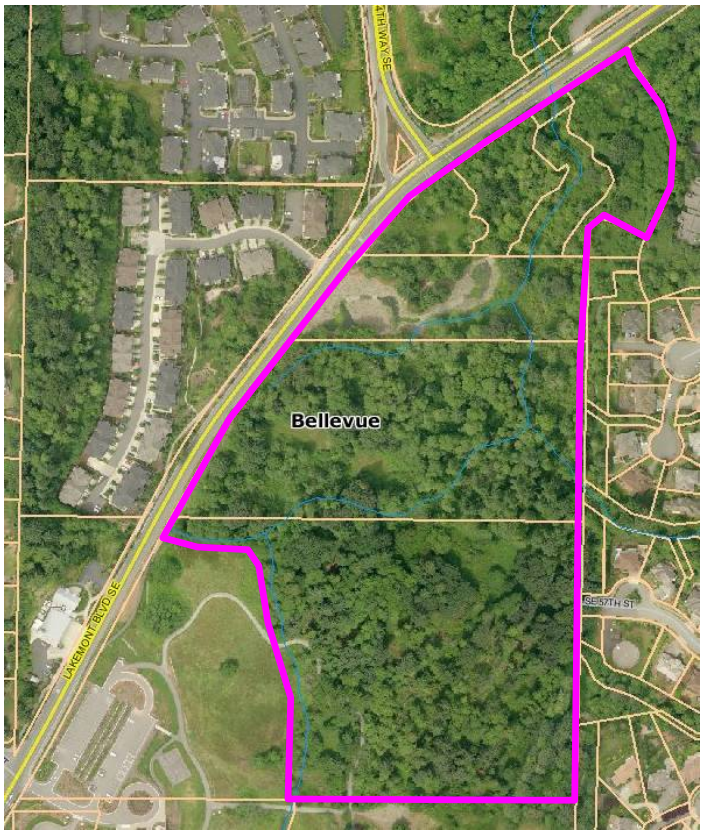


Figure 1. Northeastern portion of Lewis Creek Park, vegetation management area

2 SITE HISTORY

In the 1990's the City of Bellevue purchased three farm properties for eventual use as a community park and in 2005 the Johnson property, located at the north end of the park, was acquired, completing the 56-acre park site. Property acquisitions were funded by a combination of county, state and municipal sources. Park development continues in phases. Phase 1, which included two sports fields, a playground, sport court, visitor center, parking lot and trails, was completed in 2005. Phase 2 is planned to include additional parking, picnic facilities, public restrooms and trails.

3 CURRENT SITE DESCRIPTION

3.1 Park Features

A network of trails provides public access to the undeveloped forested portion of the park, located northeast of the visitor center. Perimeter trails are paved; interior trails are soft surface (gravel, dirt or wood chip mulch). Several existing footbridges accommodate stream and wetland crossings throughout the trail system. The vegetation management area, 25.8 acres at the northeastern end of the park, is a relatively low-impact passive recreation area.

Additionally, a picnic area has been designed and will be sited on the old Johnson homestead. The proposed design includes 19 parking spaces, a driveway loop, a public restroom, a pedestrian path and two picnic shelters. In concert with stewardship of critical areas within the park, green building techniques and public awareness of ecosystem services are key design elements.

3.2 Critical Areas

Lewis Creek, tributaries, wetlands and associated buffers cover most of the vegetation management area. Wetlands and streams in the vicinity of the proposed picnic area were delineated and mapped by SVR Design Company in 2010. The Watershed Company completed a wetland and stream inventory of the entire vegetation management area in June 2010. A total of 14 wetlands and seven streams are present within the management area. All on-site wetlands, streams and their respective buffers are regulated by the City's critical areas regulations. See the delineation report in Appendix C for complete details (The Watershed Company 2010).

3.3 Soils

According to Natural Resources Conservation Service (NRCS) soil maps, the vegetation management area is comprised of Beausite gravelly sandy loam (BeC), six to 15 percent slopes. BeC is a well-drained soil, but soils were saturated in several areas on the day of our site visit. Soils in the vegetation management area contain numerous hydric inclusions not captured by NRCS mapping.

3.4 Vegetation

The vegetation management area is primarily forested. Mixed conifer-deciduous stands are scattered throughout the deciduous forest cover, which is dominated by red alder (see the Overstory Mapping in Appendix B, sheet 1). Native plants identified in the management area include, but are not limited to the species listed in Table 1 below.

Table 1. Native Plants observed within the management area by strata.

	Common Name	Botantical Name
Trees	Big-leaf maple	*Acer macrophyllum*
	Black cottonwood	*Populus balsamifera*
	Douglas-fir	*Pseudotsuga menziesii*
	Red alder	*Alnus rubra*
	Western hemlock	*Tsuga heterophylla*
	Western red cedar	*Thuja plicata*
Shrubs	Beaked hazelnut	*Corylus cornuta*
	Hardhack spirea	*Spiraea douglasii*
	Nootka rose	*Rosa nutkana*
	Osoberry	*Oemleria cerasiformis*
	Pacific ninebark	*Physocarpus capitatus*
	Red elderberry	*Sambucus racemosa*
	Red huckleberry	*Vaccinium parvifolium*
	Red-osier dogwood	*Cornus sericea*
	Salmonberry	*Rubus spectabilis*
	Vine maple	*Acer circinatum*
Groundcover	Bedstraw	*Galium sp.*
	Bracken fern	*Pteridium aquilinum*
	Deer fern	*Blechnum spicant*
	Lady fern	*Athyrium filix-femina*
	Miners lettuce	*Claytonia sibirica*
	Pacific bleeding heart	*Dicentra formosa*
	Pacific waterleaf	*Hydrophyllum tenuipes*
	Salal	*Gaultheria shallon*
	Stinging nettle	*Urtica dioica*
	Sword fern	*Polystichum munitum*
	Tall Oregon grape	*Mahonia aquifolium*

Vine	Trailing blackberry	*Rubus ursinus*

Invasive weedy plant species within the management area are primarily non-native blackberry, English holly, English ivy and reed canarygrass. Most of the invasive weedy brambles are mixed with native trees and shrubs. For a more detailed list of invasive plants observed, see Table 2 below. Significant occurrences of invasive plant infestations were mapped (see the Invasives Mapping inAppendix B, sheet 2).

Table 2. Invasive weeds identified and the associated King County management status.

Common Name	Botantical Name	King County Status
Canada thistle	*Cirsium arvense*	non-regulated noxious weed
Creeping buttercup	*Ranunculus repens*	weed of concern
English holly	*Ilex aquifolium*	weed of concern
English ivy	*Hedera helix*	non-regulated noxious weed
English laurel	*Prunus laurocerasus*	weed of concern
Evergreen blackberry	*Rubus laciniatus*	non-regulated noxious weed
Himalayan blackberry	*Rubus armeniacus*	non-regulated noxious weed
Reed canarygrass	*Phalaris arundinacea*	non-regulated noxious weed
Robert's geranium	*Geranium robertianum*	non-regulated noxious weed
Scot's broom	*Cytisus scoparius*	non-regulated noxious weed

3.5 Habitat

The 25.8-acre vegetation management area is primarily forested with a mix of first- and second-growth trees. Deciduous trees present throughout the site are mixed with conifers in several areas (see Vegetation Management Zones in Appendix B, sheet 3). A few open emergent patches are present, one of which is a restored wetland. In most areas a native understory is present. Salmonberry and vine maple are the dominant shrubs. Some less-dense patches of trees break the forest canopy, and native ground cover is generally dense. Invasive weeds have taken hold in several areas, and most weed patches are mixed with native trees and shrubs.

The diversity of plant species and structure throughout the site provides for many different food and cover opportunities for wildlife. Snags and large woody debris present throughout the forest provide additional habitat niches. Many snags show signs of use by woodpeckers. Numerous berry-producing plants within the vegetation management area, such as salmonberry, provide a good food source for songbirds along with other varied plant parts such as seeds and cones.

As noted above, wetlands and streams cross through the vegetation management area. Lewis Creek, the on-site tributaries, and seasonally inundated wetlands are valuable sources of fresh water for animals accessing this natural area. The seasonally ponded wetland located in the open field south of the management area is suitable amphibian breeding habitat. The restored wetland within the management area is also likely to provide suitable herptile (reptile and amphibian) habitat.

Putting the management area into a landscape scale context, Lewis Creek Park is about one mile away from Cougar Mountain and Coal Creek natural areas. Dense residential development separates forested areas within Lewis Creek Park from expansive natural areas to the south. Through the fragmented urban landscape, narrow connections remain between Lewis Creek Park, Lakemont Park, open spaces to the northeast, and ultimately Lake Sammamish (see Figure 2 below). More than three-quarters of the 56-acre Lewis Creek Park remains in natural condition.

Figure 2. Habitat corridors / landscape overview

The management area provides valuable habitat for birds, herptiles, small mammals, and larger game animals moving through the region, although large mammals are less likely to penetrate breaks in vegetated corridors. Forest fragments surrounded by urban development are vital to urban bird conservation, although they don't support the species that larger forests on the outskirts of urbanizing areas can (Donnelly and Marzluff 2004). Songbirds and woodpeckers in particular are likely to use the forested stand at Lewis Creek Park. Birds are better able to travel in broken corridors, such as that which exists

between the park and surrounding natural areas. Some herptiles may have their entire life cycle requirements met in the park.

3.5.1 Species of Local Importance

The City of Bellevue designates habitat associated with species of local importance as a critical area (LUC 20.25H.150.B). Species of local importance (LUC 20.25H.150.A) are listed in Table 3 below.

Table 3. Species of Local Importance as defined in LUC 20.25H.150.A.

Common name	Scientific name
Bald eagle	*Haliaeetus leucocephalus*
Peregrine falcon	*Falco peregrinus*
Common loon	*Gavia immer*
Pileated woodpecker	*Dryocopus pileatus*
Vaux's swift	*Chaetura vauxi*
Merlin	*Falco columbarius*
Purple martin	*Progne subis*
Western grebe	*Aechmophorus occidentalis*
Great blue heron	*Ardea herodias*
Osprey	*Pandion haliaetus*
Green heron	*Butorides striatus*
Red-tailed hawk	*Buteo jamaicensis*
Western big-eared bat	*Plecotus townsendii*
Keen's myotis	*Myotis keenii*
Long-legged myotis	*Myotis volans*
Long-eared myotis	*Myotis evotis*
Oregon spotted frog	*Rana pretiosa*
Western toad	*Bufo boreas*
Western pond turtle	*Clemmys marmorata*
Chinook salmon	*Oncorhynchus tshawytscha*
Bull trout	*Salvelinus confluentus*
Coho salmon	*Oncorhynchus kisutch*
River lamprey	*Lampetra ayresi*

Given on-site conditions and landscape position, the management area is likely to provide habitat, primarily perching and foraging habitat, for the following species of local importance: red-tailed hawk, merlin, great blue heron, Pileated woodpecker, Vaux's swift, and purple martin. The site contains sparse snags suitable for nesting by pileated woodpecker or Vaux's swift. Bald eagles and osprey more commonly forage and nest next to large open waters, but may pass through the park. No raptor nests were noted during our fieldwork. The on-site streams are near the headwaters of Lewis Creek and are not mapped by King County as part of the Chinook salmon, coho salmon or bull trout distribution areas. Habitat in the park may be suitable for Oregon spotted frog and western toad, but none were observed during our site visit.

4 VEGETATION MANAGEMENT OBJECTIVES

The management objective is to maximize the ecological functions and values of this forested area. In some park areas invasive species are growing up and over native vegetation and native vegetation is completely lacking within a few monocultures of invasive weeds. Invasive plant species eradication or suppression is key to improving ecologic functions in this natural area. Once invasive plant cover is reduced, native plant density and diversity can be increased. In-fill planting with conifers would further diversify the vegetative strata, providing more habitat niches.

4.1 Management Zones

Invasive plant removal and suppression is the first step in this vegetation management plan. Locally dominant patches of invasive vegetation were located using GPS and mapped as Polygons A through J (see Invasives Mapping in Appendix B, Sheet 2 for the location of polygons). Where appropriate, polygons were subdivided into areas based on canopy cover type (deciduous forest, mixed forest, or open field). Those areas were then divided into zones based on the presence or absence of native plant species and the extent of the infestation. Smaller patches of invasive plants were mapped as single points, labeled DP-1 through DP-11. Based on these criteria, invasive plant management areas are divided into three zones, red, Orange and blue. Red zones are monocultures of invasive plants. Orange zones are areas of dense invasive cover mixed with native trees and shrubs. Blue zones are smaller-scattered patches of invasive plants within the native forest. Table 4 below assigns a zone to each mapped invasive area (see Vegetation Management Zones in Appendix B, sheets 3).

The vegetation mapping did not capture some general maintenance items. Robert's geranium is scattered along trail edges throughout the vegetation management area and should be removed. Also, locally dominant patches of creeping buttercup are present in several wet areas. Although not particularly aggressive, this is a weed of concern.

Table 4. Invasive plant management zones

Zone	Mapped feature	Invasive plants listed in order of dominance (high to low cover dominance)
Red	part of Polygon D	Himalayan blackberry
	part of Polygon J	Himalayan blackberry
	Polygon I	Himalayan blackberry (mixed with sparse willow saplings)
Orange	Polygon A	Himalayan and evergreen blackberry, reed canarygrass, English holly, Robert's geranium
	Polygon B	Himalayan and evergreen blackberry

	Polygon C	Himalayan and evergreen blackberry, trace Scot's broom
	Polygon D	Himalayan and evergreen blackberry, trace Robert's geranium
	Polygon E	English ivy, Himalayan blackberry, Canada thistle
	Polygon F	Himalayan blackberry
	Polygon G	Himalayan and evergreen blackberry
	Polygon H	English holly and Himalayan and evergreen blackberry, trace English ivy
	Polygon J	Himalayan and evergreen blackberry, English holly, English ivy
Blue	DP-1	English ivy
	DP-2	English holly
	DP-3	English holly
	DP-4	English holly
	DP-5	Ornamental shrubs (spreading)
	DP-6	English holly and laurel
	DP-7	English holly
	DP-8	Himalayan blackberry
	DP-9	Himalayan blackberry
	DP-10	English holly
	DP-11	English ivy

4.1.1 Red

Red zones are dense blackberry thickets that lack significant presence of native vegetation. Non-native blackberry, Himalayan and evergreen, dominate red zones. These zones will require intensive weed removal followed by dense planting with native woody vegetation.

The following areas contain red zones: D2, D3, I, J1 and J2 (see Sheet 3 of the vegetation mapping).

4.1.2 Orange

Orange zones contain expansive thickets of invasive weeds, primarily non-native blackberry, mixed with native trees and shrubs. These zones will require prolonged maintenance to remove/suppress invasive weeds. The dominant weed is non-native blackberry. Existing native plant density is relatively high in the orange zones. Therefore, additional planting is a lower priority and may be limited. Overall, density of native stands should be assessed after weeding is complete. Variations in canopy cover do occur in some areas. To achieve the management objectives, native plant density/diversity may need to be increased in localized areas within the orange zones.

Most of the management areas are zoned orange. The orange zones are A1, A2, B, C, D1, E1, E2, F1, F2, G1, G2, G3, H1, H2, and J3 (see Sheet 3 of the vegetation mapping).

4.1.3 Blue

Blue zones are small clusters or single occurrences of invasive weeds. Most of the blue zones contain English holly trees/shrubs. Although these weed patches are currently small, they should be uprooted to prevent them from spreading. Then these zones will need to be checked periodically to be sure initial weed removal efforts were successful.

Due to their small size, blue zones are not subdivided by canopy type. Eleven blue zones are mapped in the vegetation management area (see Sheet 3 of the vegetation mapping).

4.2 Management Objectives

4.2.1 Short term

Identifying and removing any public safety hazards along the existing trail network are a short-term priority. English ivy can kill and take down large trees. Some trees along the path are infested with ivy and will become a hazard if not controlled. Therefore, eradicating invasive English ivy that is endangering established native trees is a top priority.

Given the extent of invasive weedy vegetation along paths, primarily Himalayan blackberry, trail maintenance is essential to allow safe passage. Invasive non-native blackberry vines will continue to encroach into the trail and require periodic maintenance until they are eradicated.

4.2.2 Long-term

The long-term objectives for the vegetation management area are to maintain and improve the ecologic services provided by the management area, while preserving public access. The following elements will guide management actions:

- Forest Health – maintain and improve forest health through invasive removal and targeted replanting efforts.
- Wildlife Habitat – increase diversity and interspersion of habitat niches.
- Air Quality – increase tree health and density.
- Water Quality – maintain wetland and stream buffers with dense and diverse native vegetation.
- Public Safety – maintain trails and prune trees as needed for health and safety.
- Neighborhood buffering – maintain forested area to buffer the adjacent residential neighborhoods from other high intensity recreational uses within the park.

4.3 Five Year Management Program

4.3.1 Year One

As detailed in the short-term objectives above (section 4.2.1) removing any potential hazards along the existing trail network is a priority. Weed control/removal efforts are a key element of successful management and should be among the first steps taken. Weed removal actions in year one should be followed by some targeted replanting. Detailed descriptions of recommended action items in each mapped area (see the Individual Vegetation Management Zones Map, Sheet 3) are listed in Table 5 below.

4.3.2 Year Two

Intensive follow up on initial weed removal areas will be required in year two. With large invasive blackberry brambles removed, the shrub layer can now be assessed and replanted as needed to achieve high native shrub density and species diversity. Planted installed in Year one should be monitored for health and maintenance needs. Blue zones should be screened to verify eradication of localized weed infestations. For maintenance actions by area see Table 6 below.

4.3.3 Year Three

In addition to on-going weed maintenance, the forest canopy can be diversified by planting clusters of native conifers in areas dominated by deciduous cover. Previously installed restoration plantings should be monitored for health and maintenance needs. For maintenance actions by area see Table 7 below.

4.3.4 Year Four

Screening for weed re-emergence and on-going weed maintenance should continue. Previously installed restoration plantings should be monitored for health and maintenance needs. Native tree/shrub density, diversity and interspersion should be evaluated to determine if the restoration plantings are meeting the intended objectives. Replanting and/or additional plant installation should be implemented as needed. Habitat features, such as large woody debris, may be recommended to increase habitat niches within the management area. Existing tree health should be evaluated and pruning may occur as needed to optimize health and safety.

4.3.5 Year Five

On-going weed maintenance should continue. Previously installed restoration plantings should be monitored for growth, health, and maintenance needs. Any additional trail construction or maintenance may be implemented.

Table 5. Recommended Management Actions – Year One

Area	Zone	Recommended Actions -Year One
A1	Orange	Cut back and grub out non-native blackberry vines, cut back reed canarygrass patches and weed away from the base of existing native trees and shrubs, remove sparse occurrances of English holly shrubs
A2		
B	Orange	Cut back and grub out non-native blackberry vines
C	Orange	Cut back and grub out non-native blackberry vines, remove Scot's broom
D1	Orange	Cut back and grub out non-native blackberry vines, remove trace occurrances of Robert's geranium
D2	Orange/Red	1) Cut back and grub out non-native blackberry vines, remove trace occurrances of Robert's geranium; 2) replant cleared invasive monoculture areas with a mix of native trees and shrubs
D3	Orange/Red	
E1	Orange	Remove English ivy, cut back and grub out non-native blackberry vines, uproot Canada thistle
E2	Orange	
F1	Orange	Cut back and grub out non-native blackberry vines
F2	Orange	
G1	Orange	Cut back and grub out non-native blackberry vines
G2	Orange	
G3	Orange	
H1	Orange	Cut back and grub out non-native blackberry vines, remove English holly, pull out trace occurrances of English ivy
H2	Orange	
I	Red	1) Cut back and grub out non-native blackberry vines; 2) replant cleared invasive monoculture area with a mix of native trees and shrubs (riparian plantings)
J1	Orange/Red	1) Cut back and grub out non-native blackberry vines; 2) replant cleared invasive monoculture areas with a mix of native trees and shrubs (riparian plantings)
J2	Orange/Red	
J3	Orange	Cut back and grub out non-native blackberry vines
DP-1	Blue	Remove English ivy
DP-2	Blue	Remove English holly
DP-3	Blue	Remove English holly
DP-4	Blue	Remove English holly
DP-5	Blue	Remove ornamental shrubs (spreading)
DP-6	Blue	Remove English holly
DP-7	Blue	Remove English holly and laurel
DP-8	Blue	Cut back and grub out non-native blackberry vines
DP-9	Blue	Cut back and grub out non-native blackberry vines
DP-10	Blue	Remove English holly
DP-11	Blue	Remove English holly

Table 6. Recommended Management Actions – Year Two

Area	Zone	Recommended Actions -Year Two
A1	Orange	Remove re-emerging weeds; install in-fill plantings as needed to establish a dense and diverse native shrub understory, clusters of willow stakes are recommended in reed canarygrass patches
A2	Orange	Remove re-emerging weeds; install in-fill plantings as needed to establish a dense and diverse native shrub understory
B	Orange	
C	Orange	
D1	Orange	
D2	Orange/Red	Cut back and grub out non-native blackberry vines; remove any weeds from the base of installed restoration plants, monitor plants for health/growth
D3	Orange/Red	
E1	Orange	Remove re-emerging weeds; install in-fill plantings as needed to establish a dense and diverse native shrub understory
E2	Orange	
F1	Orange	
F2	Orange	
G1	Orange	
G2	Orange	
G3	Orange	
H1	Orange	
H2	Orange	
I	Red	Cut back and grub out non-native blackberry vines; remove any weeds from the base of installed restoration plants, monitor plants for health/growth
J1	Orange/Red	
J2	Orange/Red	
J3	Orange	Remove re-emerging weeds; install in-fill plantings as needed to establish a dense and diverse native shrub understory
ALL	Blue	Verify eradication of localized weed patches, remove any re-emerging weeds

Table 7. Recommended Management Actions – Year Three

Area	Zone	Recommended Actions -Year Three
A1	Orange	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor any previously installed in-fill plants
A2	Orange	Remove re-emerging weeds, monitor any previously installed in-fill plants
B	Orange	
C	Orange	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor any previously installed in-fill plants
D1	Orange	Remove re-emerging weeds, monitor any previously installed in-fill plants
D2	Orange/Red	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor previously installed restoration plantings
D3	Orange/Red	
E1	Orange	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor any previously installed in-fill plants
E2	Orange	
F1	Orange	Remove re-emerging weeds, monitor any previously installed in-fill plants
F2	Orange	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor any previously installed in-fill plants
G1	Orange	
G2	Orange	Remove re-emerging weeds, monitor any previously installed in-fill plants
G3	Orange	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor any previously installed in-fill plants
H1	Orange	
H2	Orange	
I	Red	Remove re-emerging weeds, plant clusters of native conifers as needed, monitor previously installed restoration plantings
J1	Orange/Red	
J2	Orange/Red	
J3	Orange	Remove re-emerging weeds, monitor any previously installed in-fill plants
ALL	Blue	Verify eradication of localized weed patches, remove any re-emerging weeds

APPENDIX A

Site Photos – Existing Conditions

(Photos taken February and March 2010)

Photo 1. Polygon A, invasive weeds mixed with native trees and shrubs

Photo 2. Polygon C, disturbed edge adjacent to Lakemont Blvd.

Photo 3. Polygon D, Himalayan blackberry monoculture.

Photo 4. Polygon E, English ivy infestation

Photo 5. Polygon G, Himalayan blackberry mixed with native riparian vegetation

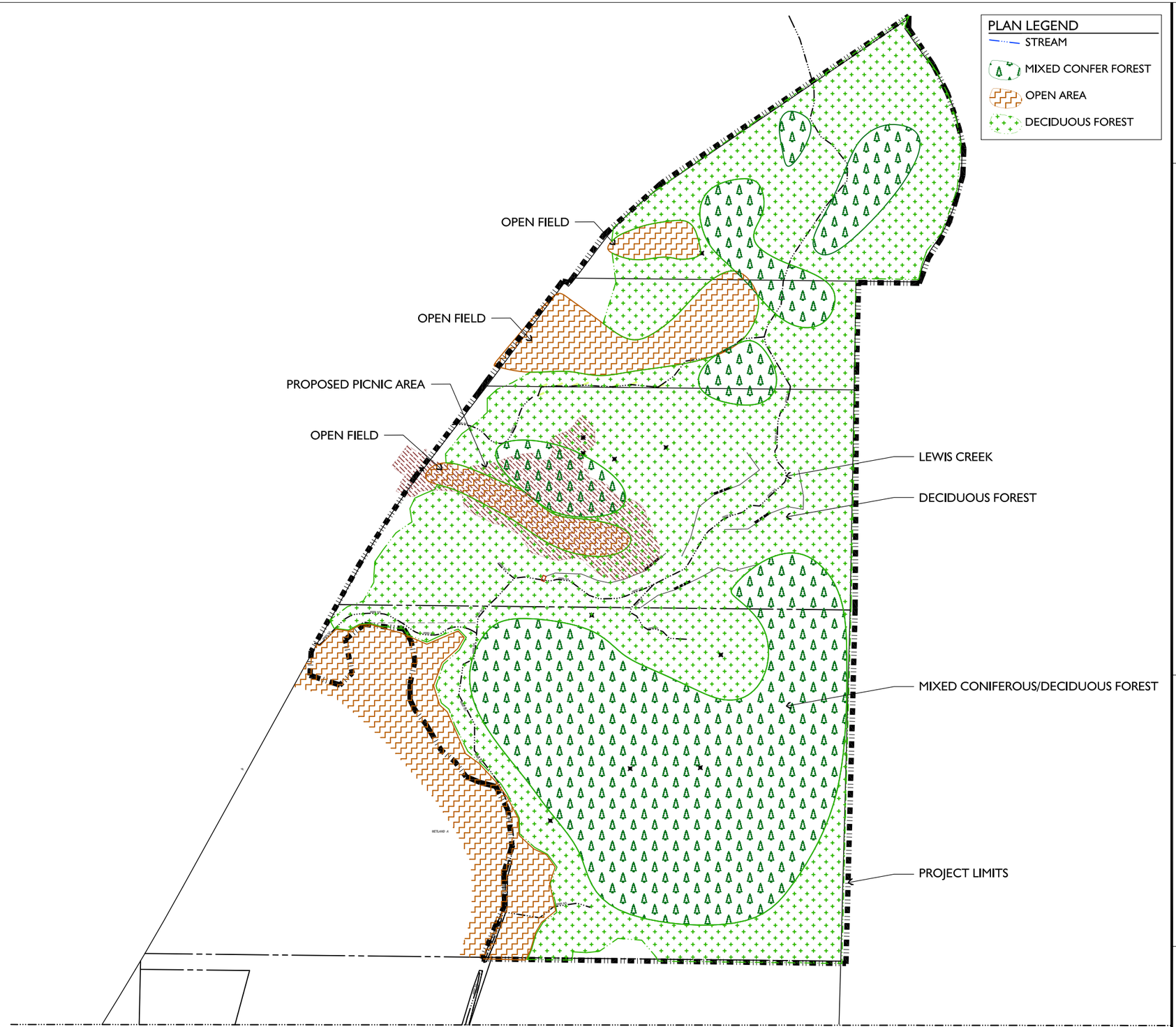
Photo 6. Polygon H, primarily non-native blackberry and English holly mixed with native trees and shrubs

Photo 7. Polygon I, non-native blackberry cluster along riparian corridor.

Photo 8. Polygon J, dense non-native blackberry along riparian corridor.

APPENDIX B

Vegetation Maps



OVERSTORY MAPPING

0 50 100 200
SCALE: 1"=100'
NORTH

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3	4-16-10	REVIEW SET	MG

SHEET SIZE:
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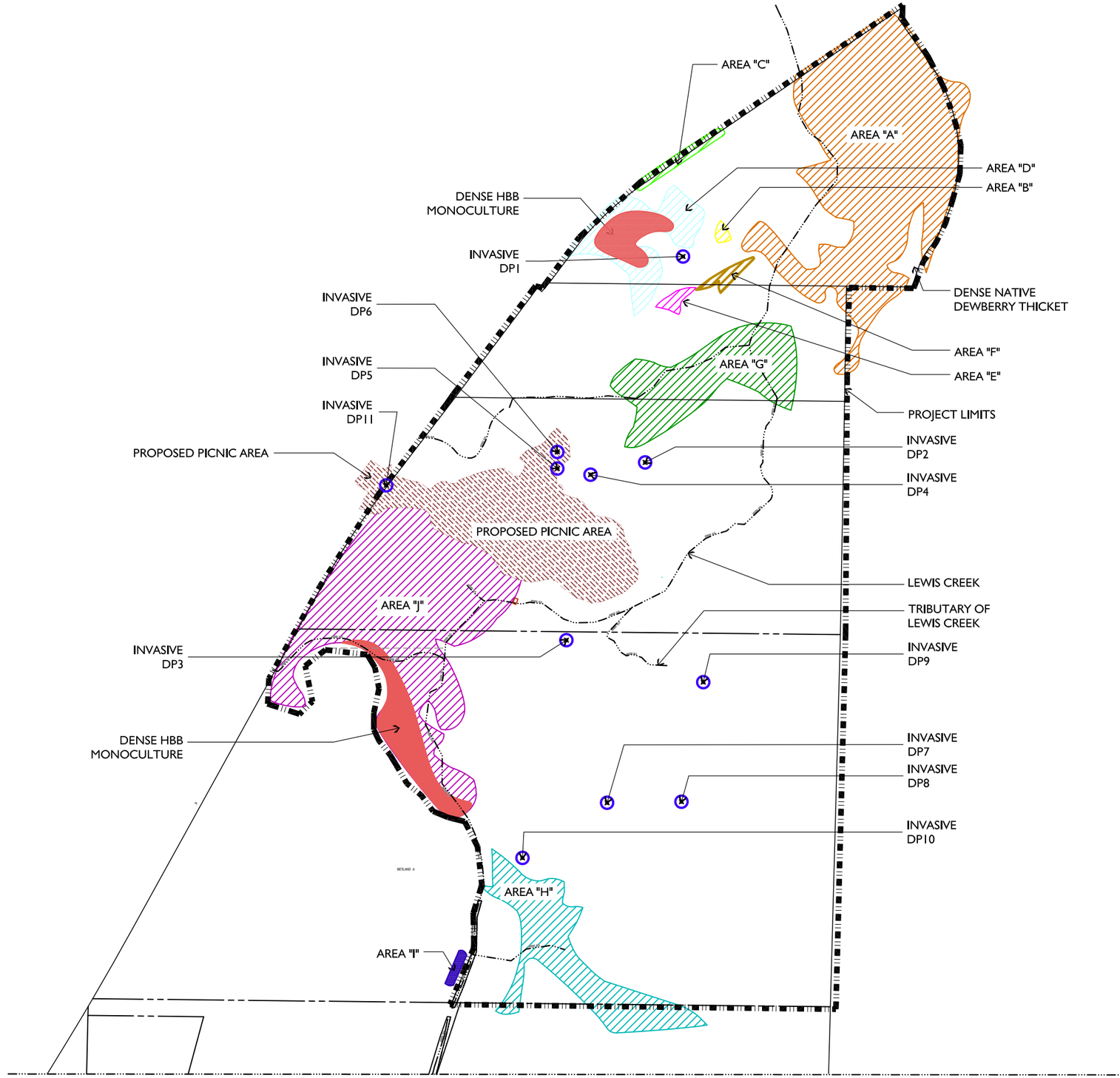

INVASIVES MAPPING

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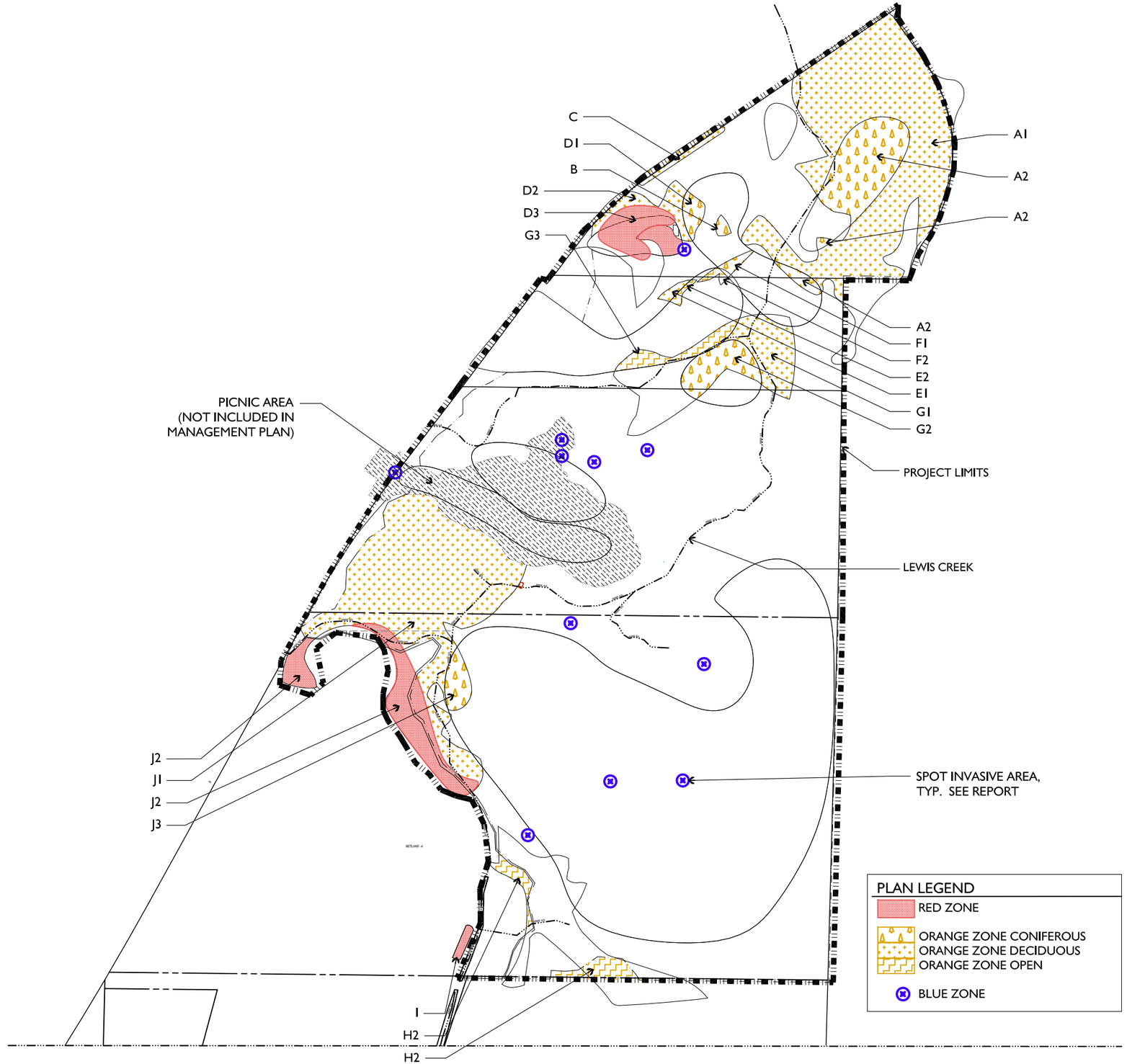

INDIVIDUAL VEGETATION MANAGEMENT ZONES

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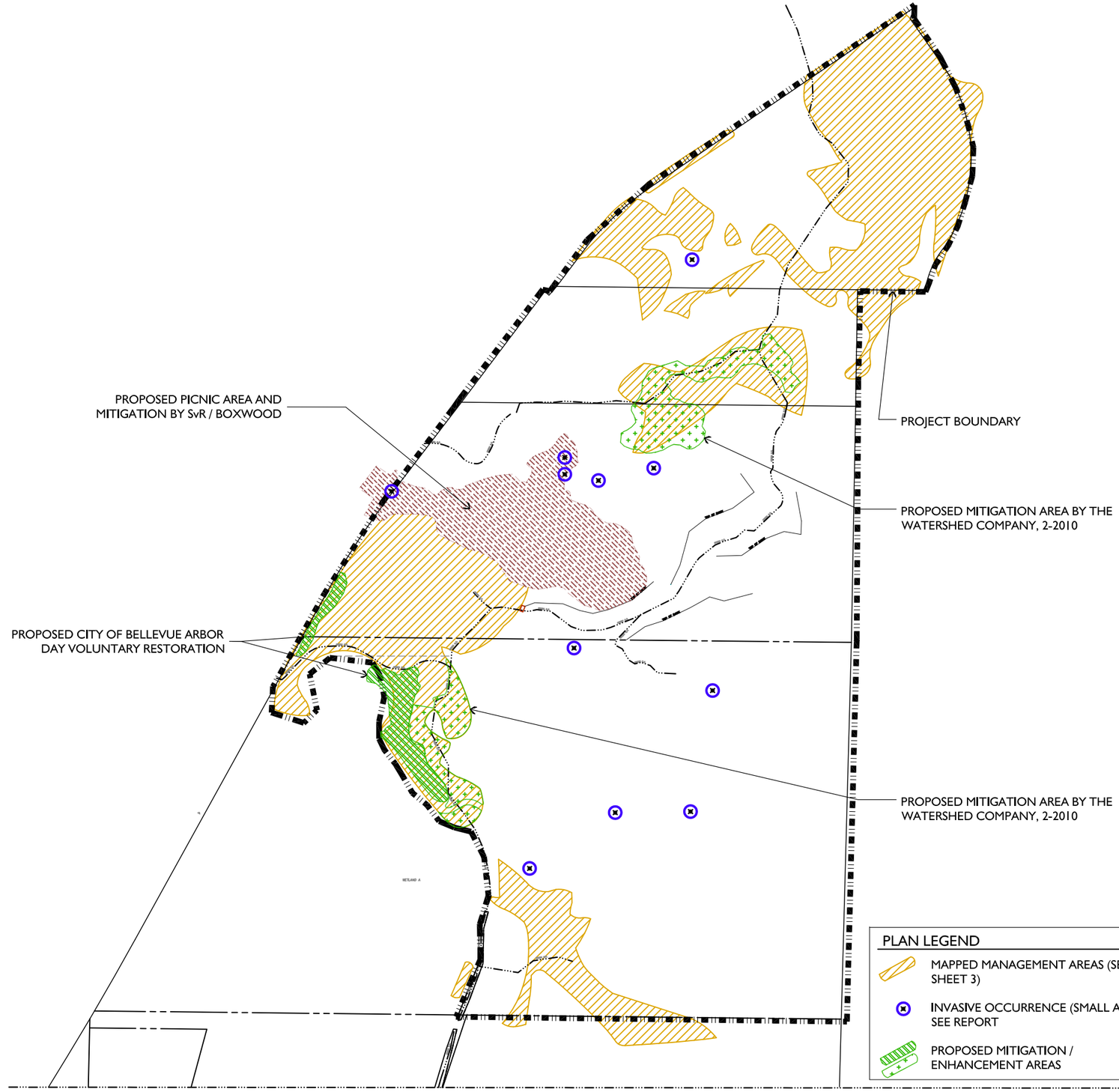

PROPOSED MITIGATION AREAS MAP

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APPENDIX C

Lewis Creek Park Wetland and Stream Inventory for the Vegetation Management Area

June 10, 2010

Jim Bennett
Forest Management Program Supervisor
Parks and Community Services
450 110th Ave SE
Bellevue, WA 98004
Via email: JNBennett@bellevuewa.gov

Re: Lewis Creek Park Wetland and Stream Inventory for the Vegetation Management Area

The Watershed Company Reference Number: 100220

Dear Jim:

Ecologist Meagan McManus and I completed a wetland and stream delineation study for the north end of Lewis Creek Park in May 2010. The study area was limited to the Vegetation Management Area, which is the approximately 25.8-acre northeastern forested portion of the park (see Figure 1 below).

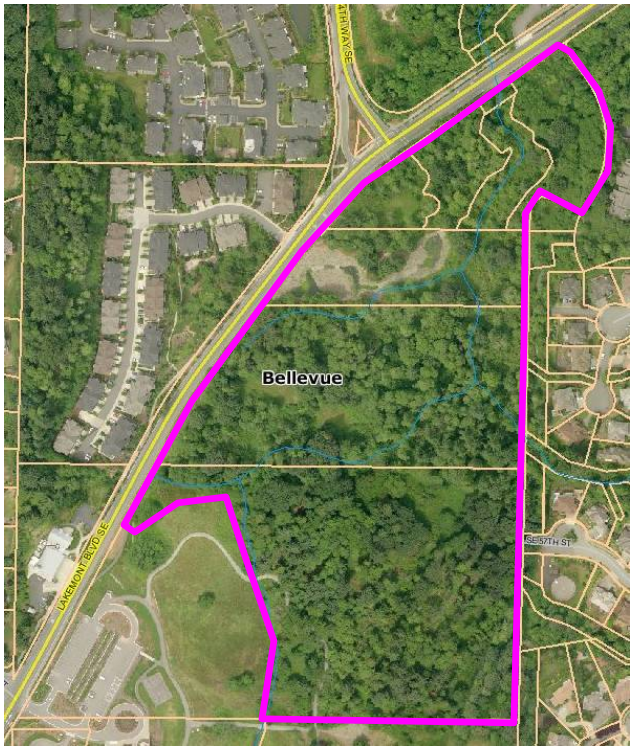


Figure 1. Vegetation Management Area at Lewis Creek Park

This letter summarizes the findings of this study and details applicable federal, state, and local regulations. The following attachments are included:

- Wetland Delineation Map
- Wetland Determination Data Forms
- Wetland Rating Forms

Methods

The study area was evaluated for wetlands using methodology from the *Washington State Wetlands Identification and Delineation Manual* (Manual) (Washington Department of Ecology [Ecology] 1997) and the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Regional Supplement) (US Army Corps of Engineers [Corps] April 2008). Wetland boundaries were determined on the basis of an examination of vegetation, soils, and hydrology. Areas meeting the criteria set forth in the Manual and Regional Supplement were determined to be wetland. Soil, vegetation, and hydrologic parameters were sampled at several locations along the wetland boundaries to make the determination. Data points on-site are marked with yellow- and black-striped flags. We recorded data at 10 of these locations.

Delineated wetlands were marked with pink- and black-striped flagging and classified using the *Western Washington Wetland Rating System* (Ecology, Aug 2004, version 2).

The ordinary high water mark (WM) of streams was determined based on the definition provided by the Washington Department of Fish and Wildlife and WAC 220-110-020(57). The WM is located by examining the bed and bank physical characteristics and vegetation to ascertain the water elevation for mean annual floods. Areas meeting the definition were determined to be the WM and flagged with blue- and white-flagging. Streams were identified and classified using definitions from the City of Bellevue Critical Areas Ordinance.

Findings

Lewis Creek Park is within the West Lake Sammamish drainage basin of the Cedar-Sammamish Water Resource Inventory Area (WRIA 8). The study area in the forested northeast portion of the park contains a network of foot trails and clearings associated with the former homestead, but is otherwise undeveloped. Fourteen wetlands and seven streams were identified, flagged and mapped within the study area.

Wetlands

Wetlands A, BGI, F, K and M

Slope and riverine hydrogeomorphic classes (HGM) characterize Wetlands A, BGI, F, K and M. All are rated as riverine wetlands per Ecology guidance. Groundwater seeps and overbank flooding are the primary sources of hydrology in these wetlands. All of these wetlands contain a palustrine forested vegetation class, typically dominated by western red cedar and red alder. Wetlands A and BGI also contain palustrine scrub shrub areas that are primarily vegetated with salmonberry and vine maple. In addition to a forested class, Wetlands BGI and M also have palustrine emergent patches characterized by mannagrass, lady fern, skunk cabbage, and meadow grasses. Soils at a 12-inch depth are a black (10YR 2/1) clay loam. Observed soil saturation ranged from the surface to eight inches below the surface at the time of our fieldwork.

Wetlands C, D1 and H

Riverine HGM classes characterize these wetlands along Lewis Creek. Overbank flooding and an elevated watertable are the primary sources of hydrology in these wetlands. Wetlands C and H contain a palustrine forested class dominated by black cottonwood and red alder. Wetland D1 contains both palustrine forested and scrub-shrub areas dominated by red alder, western red cedar and salmonberry. Skunk cabbage, piggyback plant and lady fern dominate groundcover in all these wetlands. Soils at a 10-inch depth are a black (10YR 2/1) silty loam. At the time of our fieldwork, soils were saturated to the surface and the watertable was 6 inches below the surface.

Wetlands D2, E and J

Wetlands D2, E and J contain a slope HGM class. Groundwater seeps are the primary sources of hydrology. All of these wetlands contain a palustrine forested vegetation class, typically dominated by western red cedar and/or red alder. Wetland D2 also contains a palustrine scrub-shrub patch dominated by salmonberry and Wetland J has a palustrine emergent area characterized by soft rush, velvet grass and other meadow grasses. Soils down to a 14-inch depth are a black (10YR 2/1) silty clay loam. Soils were saturated to the surface and the watertable was 6 inches below the surface at the time of our fieldwork.

Wetlands L, N and O

Wetlands L, N and O are each within a depressional HGM feature. Wetland L is a diverse wetland containing an interspersion of palustrine forested, scrub-shrub and emergent vegetation classes. Red alder and black cottonwood dominate forest cover in Wetland L and palustrine scrub-shrub patches are primarily salmonberry. Emergent areas within Wetland L, which were inundated on day of our site visit, contain slough sedge, yellow-flag iris, mannagrass and skunk cabbage. Wetlands N and O were

previously restored by the City and contain palustrine scrub-shrub and emergent vegetation classes. A diversity of native species was planted in these restored wetlands including Sitka spruce, willows, Pacific ninebark, twinberry and bulrush. Soils at a 12-inch depth ranged from a black (10YR 2/1) silty clay loam to a very dark grayish brown (10YR 3/2) sandy clay loam with redoximorphic features. Observed soil saturation was at or ten inches below the surface.

Streams

Lewis Creek (Stream B/G)

The on-site segment of Lewis Creek is mapped by King County as habitat for salmonids, including chinook and coho salmon. The streambed is primarily composed of gravel and cobble; riffle and pool formations are present throughout the channel.

Streams A, C, D and E

Streams A, C, D and E are all tributaries of Lewis Creek that are associated with delineated wetlands. All these tributaries are presumed non-fish bearing based on steep inclines and/or low flow conditions.

Streams F and H

Streams F and H are not connected to any other streams by an above ground channel or wetland. Stream F is ditched parallel to a trial segment in the southeast quadrant of the study area; it crossed under the trail and infiltrates a short distance to the northwest. Stream H is a cobble-lined channel that conveys seasonal flows from Wetland N into Wetland O across an existing trail.

Local Regulations

In Bellevue, wetlands and streams are regulated under the Critical Areas Ordinance, Land Use Code, Title 20, Part 20.25H. According to LUC 20.25H.095.C, wetland buffer widths are determined based on wetland category and habitat score using Ecology's Western Washington Rating System. Wetland classifications and associated buffer widths are listed in Table 1 below. Several Category II wetlands scored 20 or more habitat points, which requires an increased buffer width. Streams in the City of Bellevue are classified according to shoreline designation, presence or absence of fish habitat, and surface connections to other streams. Stream buffer widths are based on stream classification. Wetland and stream buffer requirements are also based on current site condition, developed or undeveloped. The study area does not contain any primary structures; therefore, it is undeveloped.

Table 1. Wetland and Stream Summary: Classifications and Regulatory Buffer Widths

Feature	Classification	Habitat Score	Buffer Width (ft)
Wetland A	Category II	18	75
Wetland BGI	Category II	25	110
Wetland C	Category II	16	75
Wetland D1	Category II	20	110
Wetland D2	Category III	17	60
Wetland E	Category III	16	60
Wetland F	Category II	15	75
Wetland H	Category II	16	75
Wetland J	Category III	19	60
Wetland K	Category II	18	75
Wetland L	Category II	23	110
Wetland M	Category I	23	110
Wetland N	Category II	18	75
Wetland O	Category II	15	75
Stream A	Type N	NA	50
Stream B/G (Lewis Creek)	Type F	NA	100
Stream C	Type N	NA	50
Stream D	Type N	NA	50
Stream E	Type N	NA	50
Stream F	Type O	NA	25
Stream H	Type O	NA	25

Additionally, Bellevue requires that there be a structure setback of 15 feet beyond the edge of all wetland buffers (20.25H.035.A) Setbacks from stream buffers are 20 feet, 15 feet and 10 feet for Type F, Type N and Type O streams, respectively.

State and Federal Regulations

Wetlands are also regulated by the U.S. Army Corps of Engineers (Corps) under section 404 of the Clean Water Act. Any filling of Waters of the State, including wetlands (except isolated wetlands), would require notification and permits from the Corps. The identified wetlands would likely not be considered isolated. Federally permitted actions that could affect endangered species (i.e. salmon or bull trout) may also require a biological assessment study and consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service. Application for Corps permits may also require an individual 401 Water Quality Certification and Coastal Zone Management Consistency determination from Ecology.

In general, neither the Corps nor Ecology regulates wetland buffers, unless direct impacts are proposed. When direct impacts are proposed, mitigated wetlands may be required to employ buffers based on Corps and Ecology joint regulatory guidance.

The information contained in this letter or report is based on the application of technical guidelines currently accepted as the best available science and in conjunction with the manuals and criteria outlined in the methods section. All discussions, conclusions and recommendations reflect the best professional judgment of the author(s) and are based upon information available to us at the time the study was conducted. All work was completed within the constraints of budget, scope, and timing. The findings of this report are subject to verification and agreement by the appropriate local, state and federal regulatory authorities. No other warranty, expressed or implied, is made.

Please call if you have any questions or if we can provide you with any additional information.

Sincerely,

Nell Lund
Ecologist, WPIT

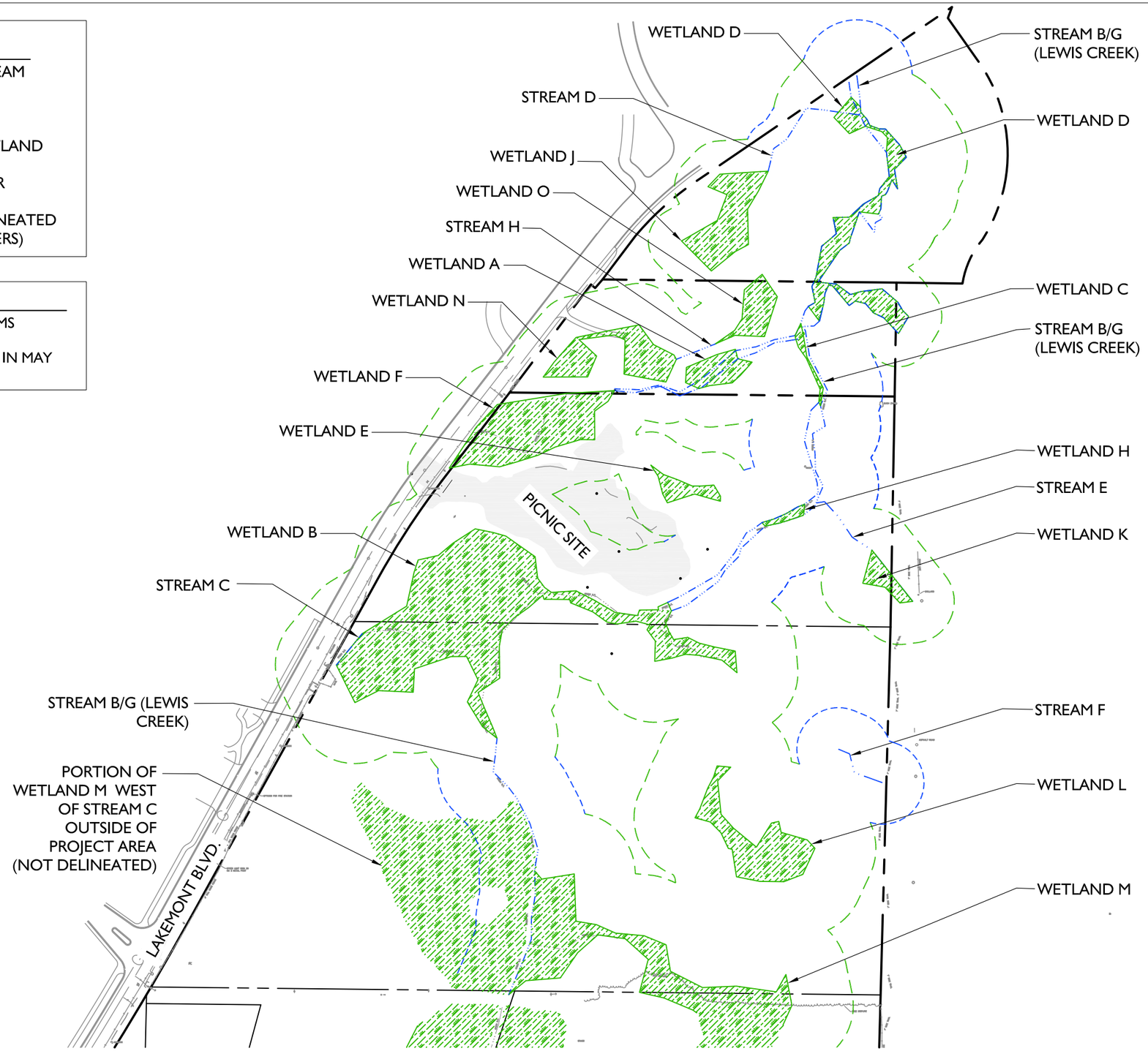
Enclosures

PLAN LEGEND

- DELINEATED STREAM
- STREAM BUFFER
- DELINEATED WETLAND
- WETLAND BUFFER
- PREVIOUSLY DELINEATED STREAM (BY OTHERS)

NOTES

1. WETLANDS AND STREAMS DELINEATED BY THE WATERSHED COMPANY IN MAY OF 2010 USING GPS.



DELINEATION MAP

0 100 200 800

SCALE: 1"=200'

NORTH

THE WATERSHED COMPANY

750 Sixth Street South
Kirkland WA 98033

p 425.822.5242 f 425.827.8136
www.watershedco.com

Science & Design

LEWIS CREEK PARK

DELINEATION MAP
PREPARED FOR THE CITY OF BELLEVUE

5808 LAKEMONT BLVD. SE
BELLEVUE, WA 98009

SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
1	6-2-10	REVIEW SET	CL

SHEET SIZE:
ORIGINAL PLAN IS 11" x 17".
SCALE ACCORDINGLY.

PROJECT MANAGER: MG
DESIGNED: --
DRAFTED: CL
CHECKED: NL
JOB NUMBER: 100220
SHEET NUMBER: 1 OF 1

DATE 6/2/2010 | PRINTED BY COURTNEY LANDOLL | TILENAME VYS-100220-TRAIL PLANS-DELIN.DWG