City of Bellevue

MEMORANDUM

DATE: June 18, 2012

TO: Chair Turner and Members of the Planning Commission

FROM: Paul Inghram AICP, Comprehensive Planning Manager 452-4070
Planning and Community Development

Carol Helland, Land Use Division Director 452-2724
Shoreline Update Team
Development Services Department

SUBJECT: Citizen and Environmental Services Commission comments regarding Phantom Lake

The study session on June 27, 2012, will include review of comments submitted May 8, 2012, by Brian Parks regarding Phantom Lake in response to Planning Commission request for position clarification. The Environmental Services Commission (ESC) has provided the Planning Commission with a letter that responds to Mr. Park's comments. The Planning Commission may use this study session to direct additional changes to the Shoreline Master Program related to Phantom Lake. Additional review of the Shoreline Master Program is scheduled to occur on July 11 and 25, and staff has provided details regarding the proposed schedule at the end of this memorandum for Planning Commission consideration and feedback.

PHANTOM LAKE

Regulatory Comments

At the April 11, 2012, meeting, the Planning Commission discussed the Shoreline Master Program update and heard a detailed presentation from Mr. Parks related to Phantom Lake lake levels, flooding of residential properties and the management of inflows and outflows. The Commission discussed how to address these concerns, and asked Mr. Parks to provide staff with a list of the specific changes he was requesting to the draft Shoreline Master Program.

Mr. Parks met with staff on May 8 and provided the attached list of comments (Attachment 1). Mr. Parks' comment on the regulatory part of the Shoreline Master Program is to categorize and treat Phantom Lake as a lake. He notes that while its shorelines may have critical areas, Phantom Lake is not in-and-of-itself a critical area. He also states that the Ordinary High Water Mark (OHWM) for Phantom Lake should be established at 260.7 feet.

Based on testimony from Mr. Parks, the Planning Commission directed the Shoreline Update Team at the April 11 meeting to use an administrative OHWM at an elevation of 260.7 feet for

the purposes of establishing building setbacks in the Planning Commission SMP Redraft. Staff is including that change to the redrafted SMP, which will be reviewed with the Planning Commission in July. It should be noted that in the past, when set elevations have been accepted as a standard to be used in place of a site specific OHWM, the elevation has been based on a special study. While Mr. Parks has provided a wealth of information about Phantom Lake, the City may be required by the Department of Ecology to legitimize that work with a lake level study to confirm the 260.7 foot elevation prior to inclusion of the elevation in the SMP.

Mr. Parks is correct that Phantom Lake would not be classified as a critical area simply because it is a shoreline. This is the same as with other shorelines in Bellevue. However, Phantom Lake has been identified as a wetland on the National Wetlands Inventory. Consistent with Mr. Parks' comment, the SMP will include critical areas provisions that will apply where critical areas, such as wetlands, are verified and delineated. At the time of development an assessment of the particular site would need to be completed to determine precisely where wetlands are present.

Restoration Plan Comments

Mr. Parks' May 8 comments also include a number of suggestions related to the Phantom Lake portion of the draft Restoration Plan.

Mr. Parks recommends removing two projects from the Restoration Plan, PL-2 and PL-3. PL-2 would create stream meanders and additional planting along the Phantom Lake inlet channel. PL-3 would have the city acquire additional Phantom Lake shoreline property for restoration.

Mr. Parks also recommends inserting several additional restoration projects, including to:

- Not direct additional waters to Phantom Lake (PL-4)
- Restore Phantom Creek (PL-5)
- Expand Detention Pond A in the Eastgate area (PL-6)
- Operate the Phantom Lake weir at one timber (PL-7)
- Remove beavers (PL-8)
- Remove the abandoned aerator (PL-9)
- Establish policies and monitor lake water (PL-10)

Mr. Parks' numbering is different from that provided in the draft SMP. He includes projects PL-11 through 13, which are the same as PL-4-6 in the draft SMP. Mr. Parks' comments include a mix of policy suggestions, potential projects and comments on management of the lake as a way to reduce flooding.

The state Shoreline Master Program Guidelines require shoreline master programs to include a restoration plan for the restoration of impaired shoreline ecological functions that supports overall improvement in shoreline ecological functions over time. Since the Restoration Plan is not intended to be a comprehensive list of management actions and capital projects, some of the objectives listed by Mr. Parks are more suited to be addressed in other documents and

programs. For example, parks and stormwater projects are included in the City's Parks and Open Space System Plan or the Storm and Surface Water Capital Investment Plan. Those facility plans are periodically updated by the Parks and Utility departments in consultation with their boards and the City Council. The Restoration Plan is not an appropriate mechanism to amend those facility plans. Requests for new parks and stormwater projects should be directed to those departments and/or boards. Restoration Plan projects should be those that directly address the goals and objectives for ecological restoration. Where the Planning Commission identifies opportunities to address community concerns that fall outside of the SMP, the Commission could identify those opportunities in its transmittal to the Council.

Consistent with the above-provided example, the Environmental Services Commission letter to the Planning Commission (Attachment 2) identifies most of Mr. Parks' Restoration Plan comments as more directly related to stormwater, lake management, and flooding impacts, rather than ecological restoration. Therefore, the Environmental Services Commission sees most of these comments as appropriate for their review and consideration of stormwater policy and capital investment projects.

The Environmental Services Commission noted that two of the suggestions from Mr. Parks (PL-3 and PL 5) involve Bellevue parks and should be reviewed by the Parks Department.

Previously, the Planning Commission indicated that it had completed its review of the Restoration Plan. Therefore, staff is not currently drafting any changes to that component of the plan for the release of the Planning Commission SMP Redraft scheduled for July 5th. At the Planning Commission's direction, responses to Mr. Parks could include a combination of requests to the Environmental Services Commission and Park Department for additional review, and/or direction to staff to development additional amendments.

UPCOMING SMP REVIEW SCHEDULE

<u>July 5, 2012</u>

- Planning Commission SMP Redraft released
- Meetings with Shoreline Update Team to orient project stakeholders to SMP Redraft will be available upon request and will be accommodated prior to the July 11 if desired.

<u>July 11, 2012</u>

- Introduction to SMP Redraft and Review

<u>July 18, 2012 (possible added meeting at Planning Commission's direction)</u>

- Further Review of SMP Redraft

July 25

- Planning Commission direction on Transmittal to Council

Once Commission review of the SMP redraft is complete, staff will prepare a formal transmittal delivering the redrafted SMP to City Council. If final direction on the Planning Commission SMP redraft is provided prior to the summer recess, the Shoreline Update Team will complete any final revisions and prepare the transmittal for Planning Commission consideration in September.

For Planning Commission reference, a summary of the direction provided to staff on the most substantive changes to be incorporated into the SMP Redraft is included with this memorandum as Attachment 3. This list was updated following the last Planning Commission on April 11, where direction on the SMP Redraft was provided.

Staff looks forward to seeing you on June 27th. Please let us know if you have any questions or comments in advance of the June 27th meeting, so that staff can be prepared to address these issues promptly to support the expeditious final review of the Planning Commission SMP Redraft.

ATTACHMENTS

1. Comments from Brian Parks submitted May 8, 2012
2. Letter from the Environmental Services Commission
3. Substantive Changes directed for incorporation into the Planning Commission Redraft

City of Bellevue

MEMORANDUM

DATE: May 9, 2012

TO: Chair Turner and Members of the Planning Commission

FROM: Paul Inghram, AICP, Comprehensive Planning Manager

SUBJECT: Letter from Brian Parks

To keep the Commission abreast of work on the Shoreline Master Program, we would like to inform you that staff met with Brian Parks on Tuesday, May 8, to discuss his recommendations for Phantom Lake. He provided the attached comments, which staff will use in preparing the revised Shoreline Master Program and draft recommendations.

Phantom Lake – Regulatory an Non-Regulatory Additions to SMP (And see attached amended Table 8)

For inclusion into Regulatory Section of SMP Document:

- Phantom lake is a lake and as such shall be categorized and treated as a lake. Its shorelines may have areas subject to the Critical Areas Ordinance when verified wetlands (or other features) are identified, however, its shorelines are not in-and-of-themselves wetlands or subject to the Critical Areas Ordinance.
- The regulatory OHWM for Phantom Lake shall be established at 260.7.

For inclusion into Restoration Plan:

- **The Community, Its' Concerns and Considerations**
  The Phantom Lake neighborhood is centered on a 64 acre kettle lake sitting on a bluff about a mile west of the southern section of Lake Sammamish. Originally skirted partially by farm land, the neighborhood's focus shifted in the 1950's toward more suburban activity as the area that is now along I-90 began to develop. Along with this was use of the Northern end of the Mercer Airfield being used as a King County Landfill. Studies in the 1970's specified detention use of this private kettle lake. In the early 1980's a major change in drainage occurred when commercial development in the Eastgate/I-90 area redeveloped this mostly gravel airfield to one of intense commercial/office uses. During this period factors impacting the lake occurred, such as greatly increasing impervious surfaces, and creation of the first of three detention ponds and piping to the lake of landfill and partial Eastgate stormwaters. Following studies were conducted in the mid-to-late-1980's to determine aggravated issues about the lake and their solutions, resulting in recommendation of an outlet weir and berm blocking natural NW surface flows, both to increase summer levels, an aerator to increase dissolved oxygen in depths, as well as alum treatment to seal in contaminates. There has been a continuing concern from the residential community that impacts to the lake have been predominantly caused by these changes and external sources. Residents seek equitable resolution of lake issues, including factors key to shoreline management. The use of the lake as a secondary detention pond for landfill and as a receiving body (which it is not categorized as) for drainage is at issue, as are the implications downstream at Lake Sammamish where these waters are directed.

Ref. Number	Location	Lake or Stream Project	General Description	Land Ownership
PL-1	Phantom Lake	Lake	Initiate a reforestation program @ Phantom Lake which specifically identifies the area south of the main park and Robinsglen. Revegetation area is well over 4,000 square feet	Public
PL-2	Phantom Lake Inlet Channel	Stream	Remove Reason: Incompatible with resolving documented water imbalance and pollution problems, and this is not a natural stream and as such cannot be "restored".	Private
PL-3	Phantom Lake	Lake	Remove. Reason: Such a nebulous program will result in depressed land values and create unnecessary lawsuits.	Private
PL-4	Phantom Lake	Lake	Prepare policies and regulations, and so direct staff and prospective developers that: No more waters will be directed to Phantom Lake (from new development) and that existing development will participate in mitigating high water and pollution occurring in Phantom Lake.	Public/Private
PL-5	Phantom Creek in Weowna Park	Stream	While maintaining existing ecological functions, identify and fund changes to this waterway that mitigate impacts to lake Sammamish and to adjoining properties.	Public
Pl -6	Eastgate as affects Phantom Lake Basin	Pond-A	Expand Detension Pond-A in Eastgate Land Use Plan and/or Airfield Park Plan collectively, as it was permitted to be undersized (by apx 50%) due to Phantom Lake having been used as secondary detention. Goal is to reduce illicit discharge of sludge and heavy metals into Phantom Lake. Re-engineer Detention Pond-B and re-institute its use.	Public/Private
PL-7	Phantom Lake Outlet Channel	Lake	Operate seasonal weir gate at setting of no more than one timber (.3 ft high, which is 3.5 inches), so as to not exceed regulatory OHWM established at 260.7 (.5 ft or 6 inches over weir threshold, with overflow). City shall acquire permanent access easements along entire outlet channel for maintenance purposes.	Public/Private
PL-8	Phantom Lake	Lake	Monitor and remove beavers/beaver dams on Phantom lake (known dam at City Park property), due to importance of maintaining (currently limited) outflow channel for entire basin at full capacity.	Public/Private
PL-9	Phantom Lake	Lake	City shall removed abandoned aerator located in middle of lake.	Public/Private
PL -10	Phantom Lake	Lake	Establish policies and implement monitoring program of Phantom Lake waters for: 1) nutrients, phytoplankton and zooplankton, as indicator of lake's biotic balance, and 2) contaminants, including heavy metals (are believed to be coming from abandoned Eastgate landfill).	

PL- 11	Larsen Lake Outlet Channel	Stream	Improve habitat functions and retain or improve flood control functions in outlet channel (~500 feet) at Larsen Lake. Restore riparian vegetation (>4,000 s.f.) in the Larsen Lake stream channel and initiate a reforestation program at Larsen Lake	Public
PL-12	Lake Hills	Lake	Develop a Street Edge Alternatives (SEA streets) program for Bellevue with a pilot project. Rehabilitate the neighborhood drainage in the SE 9th street area using infiltration for flood control similar to the "C" street model	Public
PL-13	Lake Hills Greenbelt-Ranger Station	Lake	Approximately 500 feet north of the Lake Hills Greenbelt Ranger Station is a constructed open water pond that helps retain sediments and control flood flows through the greenbelt. The pond is dominated by invasive species on its banks and would benefit from restoration and enhancement.	Public

City of Bellevue

Post Office Box 90012 • Bellevue, Washington • 98009 9012

June 21, 2012

Planning Commission
City of Bellevue
PO Box 90012
Bellevue, WA 98009-9012

Dear Chair Turner:

I'm writing to thank you and the Planning Commission for the opportunity to speak to you about the Environmental Services Commission (ESC) and Phantom Lake at your March 28 meeting and to offer to collaborate on issues that are relevant to our commissions going forward.

As the commission charged with reviewing utility policy, budgets and rates, and providing rate recommendations to Council, ESC must continually assess programs and policies for ratepayer equity, affordability, and service. I appreciated being able to share with you the ESC's responsibility to advise City Council on storm and surface water programs, including water quality and quantity policies, and have a brief discussion of the:

- Challenges of stormwater management, including the many aspects that are beyond City control or jurisdiction;
- Storm and surface water programs and services provided citywide and funded by Utility ratepayers;
- Recently completed ESC review of Phantom Lake residents' concerns as part of the Storm and Surface Water System Plan update, including a summary of actions taken to address residents' water quality and water quantity concerns and the advice provided to the residents' request for enhanced services (Attachment A).

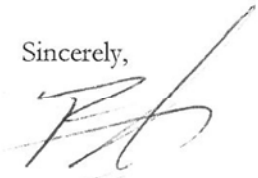
There is great potential in commissions and boards working together. We respect that the Shoreline Master Program and the regulatory framework to implement it is in the purview of the Planning Commission. The ESC is committed to working collaboratively with the Planning Commission as it moves forward in finalizing the Shoreline Master Program (SMP). We recognize certain issues are relevant to multiple commissions and boards, and we can provide information on those issues within our purview to assist you in your recommendations to Council on land use regulations.

For example, Mr. Brian Parks submitted requests regarding Phantom Lake to the Planning Commission under the SMP update process on May 8th. These are detailed in Attachment B. Most of these requests are in the purview of the ESC or Parks Board and the ESC anticipates such requests will be directed to the appropriate body for consideration, as determined by Council. Utilities staff informed me that following submittal of his May 8th SMP requests, Mr. Parks provided additional material and SMP requests to the Planning Commission on June 13th. Included were requests related to stormwater management, water quality, lake management, and flooding issues,

policies, and capital investment projects which appear to fall within the purview of the ESC. The ESC has not had an opportunity to review this information. As appropriate, we will consider new information and provide the Planning Commission with comments.

We look forward to working together with you on these and other issues in the future.

Sincerely,



Brad Helland
Chair, Environmental Services Commission

cc: Jennifer Robertson, Deputy Mayor, Liaison to the Planning Commission
John Stokes, Councilmember, Liaison to the Environmental Services Commission
Kevin Wallace, Councilmember, Liaison to the Parks & Community Services Board
Lynne Robinson, Chair, Parks and Community Services Board

ATTACHMENT A
Cover Page

Summary of Recent City Actions to Address Phantom Lake Homeowners Concerns

Attachment A consists of a 2-page summary of four recent City actions to address Phantom Lake Homeowners concerns along with photographs and documents providing additional information on these actions. Here is an index for the information included in this attachment.

A1 Pond A Maintenance

A1.a Photos - before and after sediment removal from the public stormwater facility

A2 Illicit Discharge Detection and Elimination (IDDE) Investigation

A2.a One page summary of Eastgate Landfill illicit discharge investigation

A3 Outlet Channel Maintenance Pilot Project

A3.a Photos – before and after maintenance

A3.b Survey and engineering drawings of the outlet channel and culvert

A4 Response to the PLHOA on Future Work on Phantom Lake

A4.a Written response to a November 28, 2011 letter from the Phantom Lake Homeowners Association on the formation of a lake management district and suggested sources of funding for enhanced services to Phantom Lake.

Attachment A

Summary of Recent City Actions to Address Phantom Lake Homeowners Concerns

City Outreach

City staff from the Utilities and Parks and Community Services Departments held bi-weekly meetings with Phantom Lake Homeowners Association (PLHOA) Board members from mid-July 2011 into early 2012 to keep them informed on the following City efforts and to share information. Periodic mailings were also sent to Phantom Lake watershed residents as key project milestones were met.

A1. Pond A Maintenance

A sediment removal project was undertaken at Pond A, a public stormwater detention and water quality treatment facility located upstream of Phantom Lake. The Project was completed in September 2011 with nearly 1,000 cubic yards of sediment and organics removed to improve the storage and water quality capabilities of the facility at a cost of nearly $200,000. Photographs are attached (Attachment A1.a).

A2. Illicit Discharge Detection and Elimination (IDDE) Investigation

The City conducted an IDDE investigation in 2011 in response to citizens' concerns that contamination from the Eastgate Landfill (closed in 1964) may be entering Phantom Lake through Phantom Creek or Pond A (the public stormwater detention and water quality treatment facility, noted above). The investigation was thorough and included a consultant review of water quality sample data and hydraulic information.

Both the City and the consultant concluded that there is no evidence of contamination of Phantom Lake by the Eastgate Landfill through groundwater movement or surface water contamination. The IDDE investigation information was shared with the Washington State Department of Ecology Water Quality Program staff who also concluded that there was no indication of illicit discharges entering the public drainage system or violations of water quality standards with regards to the landfill, Pond A, or Phantom Creek.

A one-page summary of the IDDE investigation of the landfill is attached (Attachment A2.a). The attached information along with the consultant's review report was provided to the PLHOA Board members at a bi-weekly meeting.

City staff also conducted business pollutant source control inspections on each property that drains to Pond A and found only relatively minor housekeeping issues that needed to be corrected. Staff worked with property owners to implement best management practices where appropriate to minimize potential pollutant releases to the storm drainage system.

Attachment A

Summary of Recent City Actions to Address Phantom Lake Homeowners Concerns

A3. Outlet Channel Maintenance Pilot Project

The City (via the Parks and Community Services Department, a property owner on the lake) obtained a King Conservation District (KCD) grant in 2011 to perform removal of organic and sediment build-up in the privately owned lake outlet channel and roadway culvert as a pilot project to help define the requirements and costs associated with a long-term sustainable management plan [June 6, 2011 City Council Regular Session Items 5(f) and 8(i)].

Representatives from Utilities, Parks and the City Attorney's office met with the officers of the Phantom Lake Homeowners Association and explained that the grant was a short term solution and urged them to pursue a more long term funding strategy such as a lake management district (LMD) for ongoing maintenance of the channel and culvert and any other improvements they might want to undertake in the future. This is consistent with the approach other small lakes in the region have undertaken to address issues related to lake management. City parks represent roughly 20 percent of the Phantom Lake shoreline. As a property owner, the City would be an active participant and contribute its proportionate share of costs for future maintenance. The officers unanimously voted to accept the assistance provided by the grant and agreed to look into forming an entity such as a Lake Management District. City staff assured the officers that they would assist with the formation and management of the LMD.

The Utilities Department worked with the Parks Department to implement the pilot project and it was completed in August, 2011; photographs are attached (Attachment A3.a). In bi-weekly meetings with the Phantom Lake Homeowners Association, Utilities and Parks Department staff shared the survey and engineering drawings for the outlet channel maintenance project (Attachment A3.b) and discussed them in detail. An Open House was also held prior to the beginning of the project. The project includes evaluating the effect of the maintenance work on lake levels for three years after the work is completed.

A4. Response to PLHOA on Future Work on Phantom Lake

More recently, the PLHOA determined they are not interested in forming a public-private partnership such as a Lake Management District and suggested sources of funding for enhanced City services to Phantom Lake in a November 28, 2011 letter. Utilities provided a written response to these suggestions in a February 6, 2012 meeting with the PLHOA Board members (Attachment A4.a).

Sediment removal from Pond A

Before sediment removal

After sediment removal

Attachment A1.a

Attachment A2.a

City of Bellevue

PO Box 90012
Bellevue, WA 98009-9012

The City of Bellevue conducted an Illicit Discharge Detection and Elimination (IDDE) investigation in response to citizen concerns that contamination from the Eastgate Landfill may be entering Phantom Lake through Phantom Creek and a municipal water quality and detention pond (Pond A). The investigation was thorough and included a consultant review of water quality sample data and hydraulic information. The investigation concluded there is no evidence of contamination of Phantom Lake from the landfill. The city and the consultant work included:

- Water sampling analysis
- Review of hydraulic data regarding groundwater movement
- Review of ongoing landfill monitoring program sample data
- Business source control inspections
- Dry Weather Screening of low flows

The consultant identified two potential pathways for the migration of landfill contaminants into Phantom Lake, ground water movement and surface water contamination. The consultant's review of hydraulic data concluded that groundwater flow in the area of the landfill is generally away from Phantom Lake and not towards it, making subsurface contamination of the lake from the landfill unlikely. This is consistent with a 1987 report commissioned by the City of Bellevue that concluded, "*The Eastgate landfill leachate is not contaminating Phantom Lake through groundwater.*"

For surface water, based on a review of the surface water collection and treatment system, samples collected by city staff, and landfill program sampling data, the consultant concluded that there is no evidence of landfill contaminants entering Phantom Lake through the surface water collection system.

City staff also conducted business source control inspections on each property within the area of the landfill with no significant evidence of poor housekeeping at any of these properties.

Both the city and the consultant have concluded that there is no contamination of Phantom Lake by the Eastgate Landfill. This information has been shared with the Department of Ecology Water Quality Program, who also concluded that there was no indication of illicit discharges entering the city drainage system or violations of water quality standards with regards to the landfill, Pond A, or Phantom Creek (letter attached).

Sediment removal from outlet channel

Before sediment removal

After sediment removal

Attachment A3.a

CITY OF BELLEVUE

PARKS AND COMMUNITY SERVICES

PHANTOM LAKE OUTLET CHANNEL AND CULVERT MAINTENANCE
SE 17TH PLACE
A KING CONSERVATION DISTRICT (KCD) GRANT-FUNDED PILOT PROJECT IN COOPERATION WITH THE PHANTOM LAKE NEIGHBORHOOD

MAYOR
DON DAVIDSON

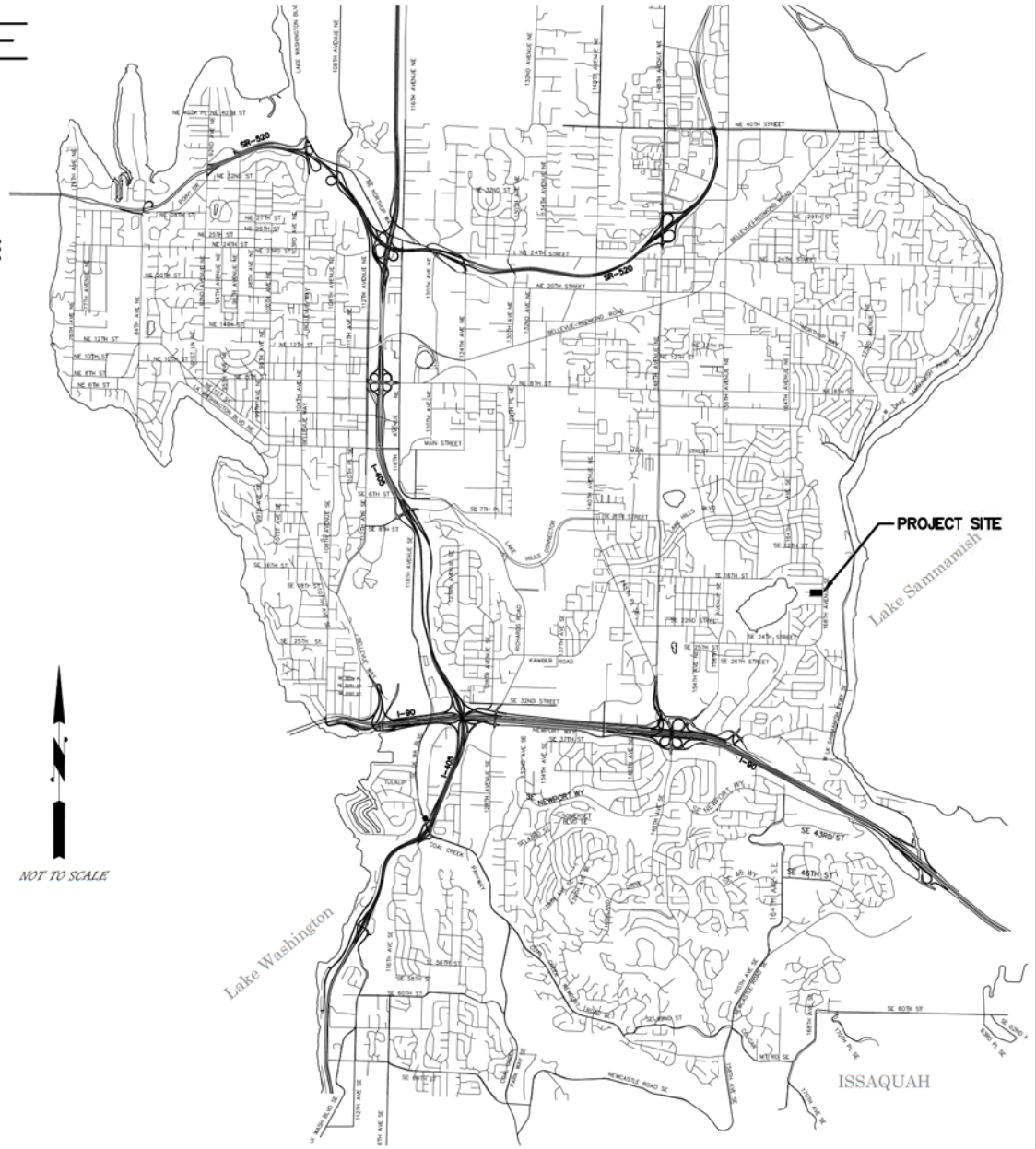
DEPUTY MAYOR
CONRAD LEE

CITY MANAGER
STEVE SARKOZY

CITY COUNCIL
CLAUDIA BALDUCCI
JOHN CHELMINIAK
GRANT DEGGINGER
JENNIFER ROBERTSON
KEVIN WALLACE

DIRECTOR OF PARKS AND COMMUNITY SERVICES
PATRICK FORAN

SHEET 1 OF 3	COVER SHEET AND INDEX
SHEET 2 OF 3	EXISTING AND PROPOSED CONDITIONS AND PROFILE
SHEET 3 OF 3	CROSS-SECTIONS AND LANDSCAPING NOTES



MICHAEL E. HRACHOVEC
STATE OF WASHINGTON
38039
REGISTERED PROFESSIONAL ENGINEER

Approved By	
DESIGN MANAGER	DATE
DESIGN SUPERVISOR	DATE
PROJECT MANAGER	DATE

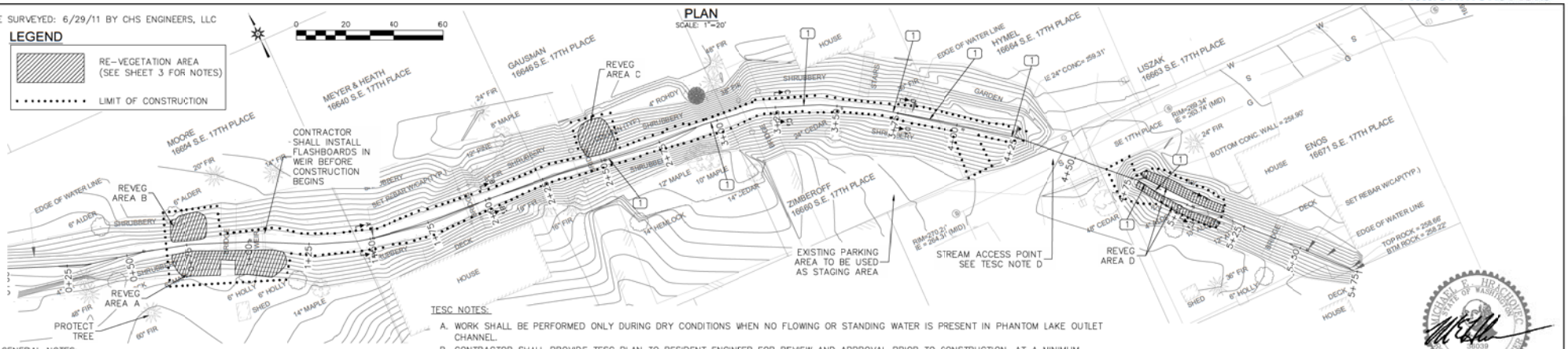
BID NO.

SITE SURVEYED: 6/29/11 BY CHS ENGINEERS, LLC

LEGEND

RE-VEGETATION AREA (SEE SHEET 3 FOR NOTES)

LIMIT OF CONSTRUCTION



GENERAL NOTES:

A. HORIZONTAL DATUM: NAD 83 (2007), BASED ON CITY OF BELLEVUE CONTROL POINTS #1273 AND #1274.
B. VERTICAL DATUM: NAVD 88, BASED ON CITY OF BELLEVUE CONTROL POINT #192.
C. PARCELS SHOWN HEREON ARE BASED UPON KING COUNTY GIS DATA.
D. UTILITIES OTHER THAN THOSE SHOWN MAY EXIST ON SITE. UNDERGROUND UTILITY LOCATIONS SHOWN HEREON ARE FROM VISIBLE FIELD EVIDENCE. CHS ENGINEERS, LLC ASSUMES NO LIABILITY FOR THE ACCURACY OF THE PUBLIC RECORDS. UNDERGROUND UTILITY LOCATIONS ARE ONLY APPROXIMATE. UNDERGROUND CONNECTIONS ARE SHOWN AS STRAIGHT LINES BETWEEN VISIBLE SURFACE LOCATIONS BUT MAY CONTAIN BENDS OR CURVES NOT SHOWN.
E. CONTRACTOR SHALL PROVIDE TEMPORARY ACCESS AND STAGING PLAN TO RESIDENT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. THIS PLAN SHALL INCLUDE ANTICIPATED RESTORATION OF ACCESS AND STAGING AREAS. ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS SHALL BE RESTORED BY CONTRACTOR AND APPROVED BY RESIDENT ENGINEER.
F. IT IS IMPERATIVE THAT DISTURBANCE TO RESIDENTS' PROPERTY BE AVOIDED BEYOND CHANNEL BOTTOM AND AREAS WHERE INVASIVE PLANTS ARE TO BE REMOVED AND NATIVE PLANTS INSTALLED. FOR THIS REASON, ALL WORK SHALL ONLY BE CONDUCTED BY MANUAL/HAND METHODS. LARGE/HEAVY EQUIPMENT WILL NOT BE ALLOWED IN CHANNEL OR ON BANKS. LARGE/HEAVY EQUIPMENT IS CONFINED TO OPERATING ONLY ON SE 17TH PLACE AND MAY BE USED TO REACH INTO CHANNEL FROM STREET TO MOVE MANUAL/HAND EQUIPMENT INTO AND OUT OF CHANNEL AND TO REMOVE STOCKPILED SEDIMENT.
G. CONTRACTOR SHALL NOTIFY RESIDENT ENGINEER OF ANY CONFLICTS WITH EXISTING TREES. PRUNING OR REMOVAL OF EXISTING TREES MUST BE APPROVED BY RESIDENT ENGINEER.
H. CONTRACTOR SHALL ENSURE ALL EXISTING BRIDGES ARE NOT DAMAGED DUE TO CONTRACTOR NEGLIGENCE.

TESC NOTES:

A. WORK SHALL BE PERFORMED ONLY DURING DRY CONDITIONS WHEN NO FLOWING OR STANDING WATER IS PRESENT IN PHANTOM LAKE OUTLET CHANNEL.
B. CONTRACTOR SHALL PROVIDE TESC PLAN TO RESIDENT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. AT A MINIMUM, CONTRACTOR'S TESC PLAN MUST ADDRESS HOW SITE AND MATERIAL STOCKPILES WILL BE PROTECTED AND WATER ROUTED AROUND PROJECT SITE DURING RAIN EVENTS.
C. AFTER RAIN EVENT, CONTRACTOR WILL NOT BE ALLOWED TO RESUME WORK UNTIL RESIDENT ENGINEER DETERMINES SITE CONDITIONS ARE ADEQUATELY DRY. IF CONTRACTOR DEWATERS SITE AFTER RAIN EVENT, TURBID WATER MUST BE TREATED TO REMOVE ALL SUSPENDED SEDIMENT BEFORE DISCHARGING WATER DOWNSTREAM OF PROJECT SITE.
D. CONTRACTOR SHALL LIFT MOTORIZED EQUIPMENT IN AND OUT OF STREAM TO AVOID STREAM BANK DAMAGE.
E. CONTRACTOR SHALL LIFT MOTORIZED EQUIPMENT OUT OF STREAM FOR REFUELING.
F. CONTRACTOR SHALL COVER SEDIMENT STOCKPILE IF RAIN IS IN FORECAST OR IF STORED ON SITE MORE THAN 48 HOURS.
G. CONTRACTOR SHALL INSTALL FLASHBOARDS IN WEIR PRIOR TO BEGINNING SEDIMENT REMOVAL.
H. CONTRACTOR SHALL INSTALL STRAW WATTLES DOWNSTREAM, AS NEEDED TO CONTAIN SEDIMENT, WHEN CLEANING CULVERT.

CONSTRUCTION NOTES:

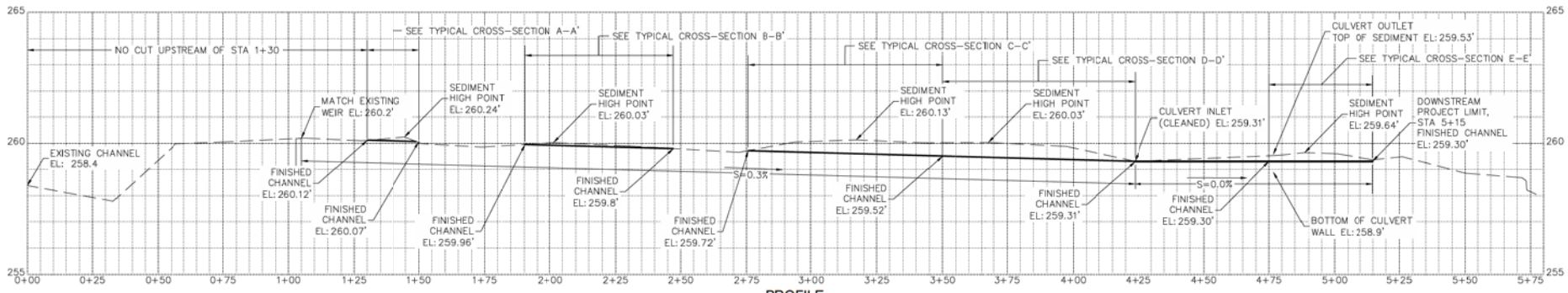
1. CHANNEL-CONSTRICTING ROCKS EXIST THROUGHOUT PROJECT SITE. CONTRACTOR SHALL REMOVE, EXCAVATE WITHIN THE BANK, AND RESET EACH ROCK SUCH THAT THE ROCK FACE IS SMOOTH WITH THE ADJACENT BANK IN LOCATIONS AS INDICATED ON PLANS AND PER DIRECTION OF RESIDENT ENGINEER.
2. CONTRACTOR TO ENSURE DEPTH OF SEDIMENT REMOVAL DOES NOT EXCEED 14 INCHES (1.2 FEET) ANYWHERE WITHIN LIMITS OF CONSTRUCTION. WIDTH OF FINISHED BOTTOM CHANNEL SHALL BE AT LEAST 24 INCHES (2.0 FEET) WITHIN LIMITS OF CONSTRUCTION.
3. CONTRACTOR SHALL REMOVE SEDIMENT IN SUCH A MANNER AS TO LEAVE SIDE SLOPES WITHIN CHANNEL OR ON BANKS AT 1H:1V OR LESS STEEP.

TIMING OF WORK NOTES:

A. CONSTRUCTION IS TO OCCUR DURING THE DRY SEASON, AUGUST 1 TO SEPTEMBER 15. CONSTRUCTION INCLUDES RESTORATION OF AREAS OF TEMPORARY DISTURBANCE; INCLUDING, BUT NOT LIMITED TO, ACCESS AND STAGING AREAS, AND "REVEG AREA D." RESTORATION OF "REVEG AREA D" SHALL BE LIMTED TO APPLICATION OF WOOD CHIP MULCH AND INSTALLATON OF COIR FABRIC.
B. REVEGETATION WORK IN AREAS A-D SHALL BE PERFORMED AFTER OCTOBER 1.

STREAMBED & REBAR ELEVATION SCHEDULE

STATION	EXISTING STREAM BED ELEV	TOP OF REBAR ELEV (AT TIME OF SURVEY)	PROPOSED STREAM BED ELEV
1+01	260.06	260.62	260.06
1+51	259.99	260.68	259.99
2+02	260.03	260.65	259.93
2+51	259.78	260.62	259.78
3+02	260.08	260.55	259.65
3+52	260.00	260.44	259.51
4+03	259.77	260.31	259.37
5+06	259.58	260.19	259.07



PROFILE

SCALE: "H: 1"=20', V: 1"=2'

FINAL DESIGN

NO	DATE	BY	APPR	REVISIONS

811 Know what's below. Call before you dig.

Natural Systems Design
P.O. Box 15609
Seattle, WA 98115

Approved By

DESIGN MANAGER DATE

PROJECT MANAGER DATE

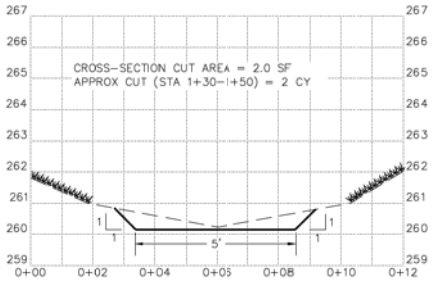
M. HRACHOVEC DESIGNED BY DATE
A. GREER DRAWN BY DATE
J. AMANN CHECKED BY DATE

City of Bellevue
PARKS AND COMMUNITY SERVICES

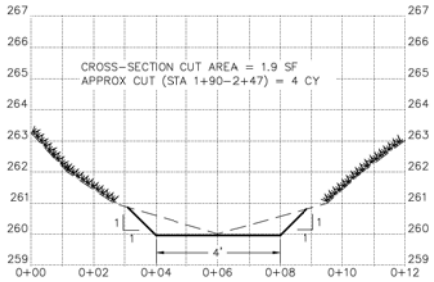
PHANTOM LAKE OUTLET CHANNEL AND CULVERT MAINTENANCE

SECTION

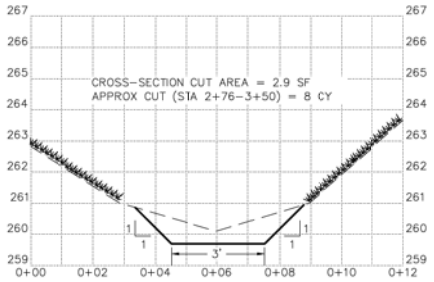
SHT 2 OF 3



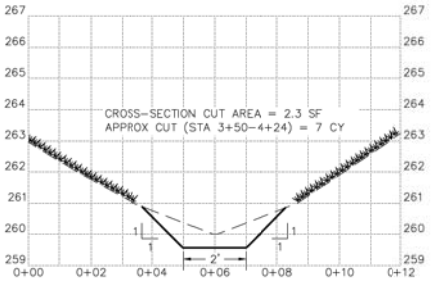
STA 1+30 TO 1+50
SECTION A-A'₂
SCALE: 1"=2'



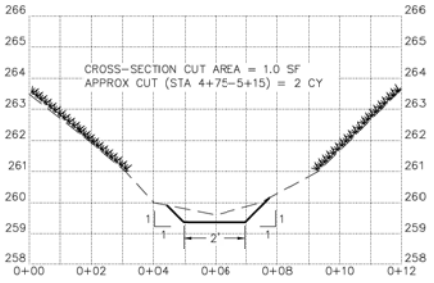
STA 1+90 TO 2+47
SECTION B-B'₂
SCALE: 1"=2'



STA 2+76 TO 3+50
SECTION C-C'₂
SCALE: 1"=2'



STA 3+50 TO 4+24
SECTION D-D'₂
SCALE: 1"=2'



STA 4+75 TO 5+15
SECTION E-E'₂
SCALE: 1"=2'

LEGEND

- EXISTING VEGETATION
- EXISTING GRADE
- PROPOSED CHANNEL

LANDSCAPE AND REVEGETATION INSTALLATION NOTES:

1. ALL HERBACEOUS VEGETATION THAT EXTENDS INTO THE CHANNEL BEYOND TOE OF BANK SHALL BE REMOVED.
2. IVY SHALL BE REMOVED FROM STA 4+77 TO STA 5+15 (REVEG. AREA D) UP TO AN ELEVATION EQUAL TO 4 VERTICAL FEET ABOVE FINISHED STREAM BED.
3. TREES, SHRUBS, AND GROUNDCOVERS SHALL BE INSTALLED PER DETAIL ON PAGE 37 OF THE CITY OF BELLEVUE CRITICAL AREAS HANDBOOK.
4. ALL EXPOSED SOILS LOCATED MORE THAN 1 FOOT ABOVE FINISHED CHANNEL BOTTOM SHALL BE COVERED WITH FOUR (4) INCHES OF WOODCHIP MULCH.
5. IN AREAS C AND D, REVEGETATION SEQUENCE SHALL BE AS FOLLOWS: INSTALL WOODCHIP MULCH, INSTALL AND STAKE COIR BLANKET, MAKE X-SHAPED CUTS IN COIR FABRIC TO ALLOW PLANT INSTALLATION, PULL BACK MULCH, INSTALL PLANTS, REPLACE MULCH, FOLD COIR FABRIC TO PLANT STEM AND STAKE COIR FABRIC.
6. PRESERVE EXISTING NON-INVASIVE VEGETATION IN AREA C.
7. INSTALLED PLANT SPECIES ARE BASED ON PLANTING TEMPLATES 'D-3 SHADE' (AREAS A, B & C) AND 'D-3 SUN' (AREA D) FROM THE CITY OF BELLEVUE CRITICAL AREAS HANBOOK. SEE TEMPLATES FOR ADDITIONAL SPECIES IF REQUIRED.
8. ADDITIONAL NOTES AND QUANTITIES ARE LOCATED ON THE PLANT SCHEDULE, SHEET 3.

PERFORMANCE STANDARD NOTES:

1. OBJECTIVE IS TO ACHIEVE 80% SURVIVAL RATE FOR THE TREES AND SHRUBS.
2. REPLACEMENT GROUNDCOVERS IN AREAS OF TEMPORARY DISTURBANCE WILL BE PLANTED AT A DENSITY DESIGNED TO ACHIEVE 80 PERCENT OF ORIGINAL COVERAGE WITHIN THREE YEARS.
3. NON-NATIVE INVASIVES ARE TO BE KEPT BELOW 10 PERCENT COVERAGE AT THE END OF THREE YEARS.
4. CONTRACTOR TO BE RESPONSIBLE FOR PLANT SURVIVAL AND NON-NATIVE COVERAGE PERFORMANCE STANDARDS FOR YEAR 1 ONLY. CITY TO BE RESPONSIBLE FOR YEARS 2 AND 3.

MONITORING NOTES:

1. CONTRACTOR TO TAKE PRE-PROJECT AND POST-PROJECT SITE PHOTOS, INCLUDING THE ACCESS POINT.
2. PLANTINGS TO BE MONITORED EACH FALL AT THE END OF THE GROWING SEASON FOR THREE YEARS TO ASSESS PLANT SURVIVAL.
3. ANNUAL REPORTS WILL BE SUBMITTED TO DEVELOPMENT SERVICES INCLUDING:
   a. PHOTO DOCUMENTATION OF THE MAIN PLANTED SLOPE AREA.
   b. COUNT OF LIVE AND DEAD PLANTS BY SPECIES.
   c. ESTIMATE OF COVER BY NON-NATIVE SPECIES
   d. RECOMMENDATION FOR INVASIVE REMOVAL, REPLANTING AND/OR CHANGING PLANTED SPECIES TO SPECIES THAT HAVE PROVEN MORE SUCCESSFUL AT THE SITE.
4. CONTRACTOR TO BE RESPONSIBLE FOR YEAR 1 REPORT. CITY TO BE RESPONSIBLE FOR REPORTS IN YEARS 2 AND 3.

TIMING OF WORK NOTES:

1. CONSTRUCTION IS TO OCCUR DURING THE DRY SEASON AUGUST 1 TO SEPTEMBER 15
2. PLANTING IS TO OCCUR IN THE FALL AFTER OCTOBER 1.
3. CONSTRUCTION ACCESS POINTS TO BE REMOVED AND RESTORED AT THE END OF THE PROJECT. VEGETATION IN THE AREAS OF TEMPORARY DISTURBANCE TO BE RESTORED.

CONTINGENCY PLAN NOTES:

1. PLANTINGS THAT ARE NOT SUCCESSFUL AT THE SITE WILL BE EVALUATED BY A BIOLOGIST.
2. PLANT SPECIES, PLANT QUANTITY, AND/OR PLANTING TECHNIQUE WILL BE ALTERED TO ACHIEVE THE THREE-YEAR SURVIVAL RATE (80%) AND THE MITIGATION GOAL OF REPLACING THE FUNCTION OF THE PRE-PROJECT VEGETATION.
3. IF SIGNIFICANT DISTURBANCE OCCURS ALONG THE ACCESS ROUTES SHOWN ON SHEET 2, CONTRACTOR SHALL RESTORE VEGETATION WITH PRE-CONSTRUCTION TREES, SHRUBS, AND GROUNDCOVERS IN LIKE, TYPE, AND SIZE. GROUNDCOVER DISTURBED DURING CONSTRUCTION WILL BE REPLANTED WITH THE INTENT OF ACHIEVING 80% OR ORIGINAL COVERAGE WITHIN THREE YEARS.

PLANT SCHEDULE

UPSTREAM OF CULVERT

Area A:	Species Name	Common Name	Qty	Size	Spacing	Notes
Right Bank	*Acer circinatum*	vine maple	6	2 gal	8' oc	
STA 0+70 to	*Oemleria cerasiformis*	osoberry	5	1 gal	8' oc	
1+13.	*Rubus spectabilis*	salmonberry	7	1 gal	8' oc	See Bellevue Critical Area Handbook template 'D-3 **Shade**' for additional species if required.
~375 SF	*Rubus parviflorus*	thimbleberry	8	1 gal	6' oc	4.5 CY wood chip mulch required
	Sombucus racemosa	red elderberry	5	1 gal	8' oc	
	Polystichum munitum	sword fern	15	1 gal	2' oc	
		Total	46			

Area B	Species Name	Common Name	Qty	Size	Spacing	Notes
Left Bank	*Acer circinatum*	vine maple	3	2 gal	8' oc	
STA 0+70 to	*Oemleria cerasiformis*	osoberry	3	1 gal	8' oc	
0+84.	*Rubus spectabilis*	salmonberry	3	1 gal	8' oc	See Bellevue Critical Area Handbook template 'D-3 **Shade**' for additional species if required.
~140 SF	*Rubus parviflorus*	thimbleberry	4	1 gal	6' oc	1.7 CY wood chip mulch required
	Sombucus racemosa	red elderberry	2	1 gal	8' oc	
	Polystichum munitum	sword fern	10	1 gal	2' oc	
		Total	25			

Area C	Species Name	Common Name	Qty	Size	Spacing	Notes
Left Bank	*Acer circinatum*	vine maple	2	2 gal	8' oc	
STA 2+45 to	*Oemleria cerasiformis*	osoberry	4	1 gal	8' oc	See Bellevue Critical Area Handbook template 'D-3 **Shade**' for additional species if required.
2+57	*Rubus spectabilis*	salmonberry	4	1 gal	8' oc	Retain all existing vegegation within the plot.
~1805F	*Rubus parviflorus*	thimbleberry	4	1 gal	6' oc	2.25 CY wood chip mulch required.
	Sombucus racemosa	red elderberry	3	1 gal	8' oc	Install coir blanket with <1/2"mesh size or equal to a 900 series fabric.
	Polystichum munitum	sword fern	8	1 gal	2' oc	
		Total	25			

DOWNSTREAM OF CULVERT

Area D	Species Name	Common Name	Qty	Size	Spacing	Notes
Both Banks	Cornus sericea	red-twig dogwood	10	1 gal	3' oc	
STA 4+77 to	Rubus spectabilis	salmonberry	7	1 gal	3' oc	See Bellevue Critical Area Handbook template 'D-3 **Sun**' for additional species if required.
5+17.	Rubus parviflorus	thimbleberry	7	1 gal	3' oc	3 CY wood chip mulch required
~240 SF	Symphoricarpus albus	snowberry	7	1 gal	4' oc	Install coir blanket with <1/2"mesh size or equal to a 900 series fabric.
	Polystichum munitum	sword fern	15	1 gal	2' oc	
	Athyrium filix-femina	lady fern	10	1 gal	2' oc	
		Total	56			

Total Plants	**152**
Total mulch	**12 CY**

FINAL DESIGN

NO	DATE	BY	APPR	REVISIONS

811 Know what's below. Call before you dig.

Natural Systems Design
P.O. Box 15609
Seattle, WA 98115

Approved By

DESIGN MANAGER DATE

PROJECT MANAGER DATE

M. HRACHOVEC DESIGNED BY DATE
A. GREER DRAWN BY DATE
J. AMANN CHECKED BY DATE

City of Bellevue
PARKS AND COMMUNITY SERVICES

PHANTOM LAKE OUTLET CHANNEL AND CULVERT MAINTENANCE

SECTION

SHT 3 OF 3

Response to November 28, 2011 letter from PLHOA on the formation of a Lake Management District

Background:

All residents are served by the stormwater system which is a complicated combination of public and private systems that work together to convey runoff. Rainwater runoff can flow from private property to public property to private property and back again over and over as it finds its way to either Lake Washington or Lake Sammamish.

The City manages a public stormwater system and private property owners manage many private stormwater systems that were constructed to standards in place at the time they were built. Neither the City nor private interests can afford to continually upgrade systems as the science of stormwater management advances. Stormwater systems are required to be upgraded as redevelopment occurs according to standards established by the State of Washington and the City.

Phantom Lake residents receive the same stormwater management level of service and exercise same legal control over runoff as do those in other parts of the city.

Phantom Lake Home Owners Association is requesting a level of service beyond that provided to the general rate-paying public. Among other actions, the request includes maintenance of an open channel/culvert facility on private property.

The Phantom Lake Restoration Project and associated berm, aerator & weir

The City has assisted Phantom Lake owners by conducting an over $2.0 million Phantom/Larsen Lake Restoration project between 1985 and 1993. The Project's primary goal was to break the lakes' cycle of nutrient-enrichment and improve lake water quality. Public access to the lake was a requirement for public grant funds to be used on the private lake and an agreement allowing for limited public access was developed that was acceptable to the State, lake property owners and the City.

The berm and the cutoff dike were installed to reduce the phosphorous rich surface and ground waters from entering Phantom Lake from the wetland area. Studies and field observations show that water on the Phantom Lake side is lower than Larson Lake side of the berm. Similarly, the weir is designed to be operated in late spring and summer to minimize phosphorous ground water entering Phantom Lake from the wetlands and contributing to algal blooms. Contrary to lake property owners' assertions, neither the berm nor the weir were installed for detention purposes.

The hypolimnetic aerator was installed to minimize phosphorous loading from peat lake bed by aerating the lower thermal layer of the lake. Peat lake bed is the highest source of phosphorous for Phantom Lake. Since there was mixed scientific opinion on the effectiveness of the aerator in reducing algal blooms, the residents chose to have the aerator turned off. It is not cost effective to remove the aerator. The Utility conducts minimum servicing to ensure that the aerator is secured and not a safety hazard.

The Phantom Lake Restoration Project was a basin wide approach to dealing with lake issues. The water clarity goals agreed upon by the community stakeholders for the project were met.

Phantom Lake Basin

The city funds the same level of service in the Phantom Lake drainage basin that it does across the city, all of which drains to one lake or another Additional water quality and flood control services requested by property owners on Phantom Lake cannot be provided by existing citywide stormwater rate revenues.

Over the years, the City has taken advantage of sporadic funding opportunities that have arisen to deal with lake issues where doing so would not gift public funds to private interests and where the general rate base would not be funding service levels for lake residents beyond those enjoyed by other rate payers.

In response to lakefront property owners' continued requests for additional Phantom Lake studies and improvements, in 1995, the city Council affirmed the City's lake management policy by resolution stating the following:

Future City funding of additional Phantom Lake watershed studies and projects will be contingent on implementation of a Lake Management District, in which the City will participate as a partner along with other stakeholders in the watershed.

The facts and the City's role have not changed since then. Most recently the City helped Phantom Lake property owners by obtaining a grant for short-term solution to maintaining privately owned lake outlet channel and culvert. The City has emphasized in numerous written communications and meetings with the PLHOA that it is the responsibility of the Phantom Lake property owners to form a public-private partnership in the form of a Lake Management District for the long-term funding of enhanced services.

The PLHOA has determined that they are not interested in forming a Lake Management District. That being the case, the Utility can only provide the same level of service as provided to the rest of the city and cannot sustain this level of engagement to PLHOA.

Briefly, the response to PLHOA's suggested sources of funding for enhanced services is listed below:

1. Reserve a % of the drainage fees for Phantom Lake

   COB: Stormwater fees are collected for general purpose and, by state law & Bellevue City Code, cannot be used to provide enhanced services to any specific group or individual. Additionally, state law prohibits use of stormwater rates for improvements and maintenance activities for private facilities. Both the channel and the culvert are private, as is the lake. The fact that public has limited access to the lake does not change private nature of the lake, the channel or the culvert.

2. Remove the aerator & use the savings for Phantom Lake

   COB: Removing the aerator is far more expensive than current maintenance costs. Also, any savings would be savings of general rate revenues and would be returned for general use for citywide services and not applied to provide higher level of service to any specific group.

3. Annual "cleaning day" by PLHOA & channel/culvert residents

   COB: Community members working together is an approach that has been used successfully in many areas and is encouraged by the City. If work is needed beyond that which is performed by residents, the PLHOA could also collect needed funds as part of its membership dues.

4. City secure grant or other sources of additional funding

   COB: The City has already assisted the Phantom Lake homeowners by securing a grant for the Phantom Lake Restoration Project in mid 1980s and most recently with a grant from King County Conversation District for the maintenance of the channel and the culvert. The Council and the Utilities department has made it very clear in both cases that this is not a sustainable model and that any future projects for Phantom Lake must be funded by formation of a Lake Management District.

   The PLHOA, however, may seek its own grant opportunities.

5. Special Purpose District or similar

   COB: A Lake Management District is a special purpose or special benefit district that is specifically designed to address the types of issues facing Phantom Lake residents. The governing concept of an LMD is that participants share in decision-making. All of those within the District boundaries and participating in providing the District funding would have representation in District decision-making.

Many public and private lakes use this mechanism to finance maintenance and water quality improvements. There are at least 16 LMDs in Western Washington, including the Beaver Lake Management District in Sammamish.

6. The City get permanent easements from the channel property owners and take over maintenance of the channel.

COB: Acquiring these easements is not supportive of Utilities mission of preventing structural flooding or enhanced environmental benefit to the community in the form of enhanced habitat or fish passage. The channel is not a year- round stream corridor since it dries up in the summer.

WP0491C-RES
12/12/95

ORIGINAL

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 5968

A RESOLUTION officially creating the Phantom Lake Watershed Committee and authorizing the expenditure of funds in support of the Phantom Lake Watershed Committee in fulfilling their charge as directed by the City Council.

WHEREAS, Phantom Lake is a water body providing: recreational opportunities for swimmers, boaters and anglers; a warmwater fishery; and aesthetic value for residents and visitors and is therefore unique as a recreational resource within an urbanized area; and

WHEREAS, Phantom Lake is an older lake (~ 13,500 years) in terms of the classical lake succession (aging) process, lying within a fertile watershed in which it developed into a highly nutrient-rich and eutrophic lake prior to human disturbance in the watershed; and

WHEREAS, these inherently nutrient-rich conditions along with the impacts from subsequent human disturbance in the watershed limit the level of water quality achievable for Phantom Lake while at the same time requiring continual efforts to maintain improvements in the highly dynamic system; and

WHEREAS, a citizens committee known as the Phantom/Larsen Lakes Advisory Group was formed in 1985 to advise the City on both Phantom Lake and Larsen Lake water quality issues; and

WHEREAS, in support of the Phantom/Larsen Lakes Advisory Group's direction, on January 19, 1988 the City Council unanimously passed Resolution No. 4966, authorizing execution of a Grant Agreement between the City of Bellevue and the Washington State Department of Ecology to accept funds for the Phantom/Larsen Lake Restoration Project; and

WHEREAS, over two million dollars have been invested by local and state government, Boeing Information and Support Services, and Cabot, Cabot and Forbes, to maintain acceptable water quality in the Phantom and Larsen Lake watersheds to protect the lakes; and

ORIGINAL

WHEREAS, community concerns remain with respect to the quality of Phantom Lake waters including clarity, odor, phytoplankton (algae), zooplankton and macrophyte conditions; and

WHEREAS, community concerns remain with respect also to lake level fluctuation, noise, aesthetics, public access, safety, lake use, and long-term funding, maintenance and management for the lake watershed; and

WHEREAS, in response to these concerns, a group of interested stakeholders, acting in an advisory capacity to the Utilities Department Director and known as the Phantom Lake Watershed Committee, has been volunteering significant time and effort since July 1994 in working to resolve competing objectives and to develop recommendations regarding appropriate goals, actions and funding mechanisms to address these community concerns; and

WHEREAS, the Committee made 1996 Utilities budget recommendations on June 28, 1995 and has a recommended budget of $18,000 for its activities in 1996; and

WHEREAS, at the request of City Council, on October 25, 1995 the Phantom Lake Watershed Committee forwarded a budget recommendation to the Environmental Services Commission for funding additional water quality services of $43,250; and

WHEREAS, on October 26, 1995, the Environmental Services Commission concurred with the recommendation of the Phantom Lake Watershed Committee with the condition that the Watershed Committee formally commit to specific outcomes to be achieved, including the formation of an on-going management structure for the lake, with the budgeted funds; and

WHEREAS, it is in the best interests of Phantom Lake for the stakeholders in the watershed to share responsibility for and to build and expand on current efforts to protect and improve the water quality of Phantom Lake; and

WHEREAS, the City Council desires to formally establish the Phantom Lake Watershed Committee and to support its efforts in a mutual partnership, sharing responsibility for lake management; now, therefore,

ORIGINAL

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. There is hereby officially created the Phantom Lake Watershed Committee to be comprised of eleven stakeholders representing Phantom Lake watershed residents, businesses, Bellevue citizens-at-large, the Environmental Services Commission, Sammamish Community Council, Phantom Lake Homeowners Association and certain City departments to share with the City the responsibility for and development of strategies to manage the Phantom Lake watershed. The City Council hereby appoints those individuals listed in Attachment A as representatives of the stakeholders indicated below. Such appointments shall take effect upon written acceptance by the appointed member. In the event an individual chooses not to accept his/her appointment or in the event an appointee chooses to no longer serve on the Committee, the Mayor shall be notified and shall make a new appointment of such stakeholder's representative.

Stakeholders:

One (1) member of the Environmental Services Commission
One (1) member of the Sammamish Community Council (also lakeshore resident)
One (1) member of the Phantom Lake Homeowners Association (also lakeshore resident)
Three (3) watershed residents (a lakeshore resident and two residents on the outlet creek)
Two (2) businesses located in the watershed
One (1) citizen-at-large
One (1) staff member of the Bellevue Parks and Community Services Department
One (1) staff member responsible for street maintenance

Section 2. The charge of the Phantom Lake Watershed Committee is to develop a plan for the creation of a Lake Management District for the Phantom Lake Watershed by July 1, 1996. The budget for the Committee's activities in 1996 will be the initially recommended $18,000 for scheduled Committee meetings, staff support, and recommended water quality management activities and an additional $12,500 for support services in developing a plan for a Lake Management District. Future City funding of the Committee and additional

WP0491C-RES
12/12/95

ORIGINAL

Phantom Lake watershed studies and projects will be contingent on implementation of a Lake Management District, in which the City would participate as a partner along with other stakeholders in the watershed.

Section 3. Members of the Phantom Lake Watershed Committee shall select a chair and vice-chair by majority vote and shall adopt operating rules and procedures which shall include recording of minutes and individual votes. All recommendations and other actions of the Committee shall be made by majority vote of the membership of the Committee. The Committee will be staffed by the Bellevue Utilities Department.

Section 4. The Committee shall terminate upon creation of the governing body of the Lake Management District, or in the event that a District fails to form.

PASSED by the City Council this 18th day of December, 1995, and signed in authentication of its passage this 18th day of December, 1995.

(SEAL)

Donald S. Davidson, DDS, Mayor

Attest:

Myrna L. Basich, City Clerk

WP0474C-RES
11/21/95

ORIGINAL

ATTACHMENT 'A'

PHANTOM LAKE WATERSHED COMMITTEE
STAKEHOLDER REPRESENTATIVES/MEMBERS

Watershed Resident Representation	
Twenty-two year resident	Norma Jean Trabold
Nine year resident	Norman Baullinger
Three year resident	Jerry Liszak
Committee Representation	
Sammamish Community Council	Don McGinnis
Phantom Lake Homeowners Association	Elfi Rahr
Environmental Services Commission	John Salathe
Watershed Business Representation	
Boeing Computer Services	Rex Turner
Trammel Crow Co.	Phil Wood
Citizen-at-Large Representation	Jane Paige
Bellevue Parks and Community Services	Dan Dewald
Bellevue Street Maintenance	Denny Vidmar

CITY OF BELLEVUE
CITY COUNCIL

Summary Minutes of Regular Session

November 27, 1995
8:00 p.m.

Council Chambers
Bellevue, Washington

PRESENT: Mayor Davidson, Mayor Pro Tem Heaton, Councilmembers Blacker, Lee, Lukens, Smith and Zumdieck

ABSENT: None

1. Call to Order

The meeting was called to order at 8:08 p.m. by Mayor Davidson, who presided.

2. Roll Call, Flag Salute

Upon roll call by the City Clerk, all members were present. Mr. Lee led the flag salute.

(a) Introduction of Sister-City Dignitary

Mayor Davidson introduced a special guest of the Council, Guntis Dambergs from Liepaja, Bellevue's sister city in Latvia. Mr. Dambergs is a member of the Liepaja City Council and Director of Education, Culture, and Sports. Funded by a US AID grant, he has spent one week in Washington, D.C., one week in Portsmouth, VA, and two weeks in Bellevue.

(b) American Planning Association/Planning Association of Washington Awards

Rita Perstac of the Planning Association of Washington (PAW) and Michelle Stern of the American Planning Association (APA), co-chairs of this year's APA/PAW awards program, presented the City with two awards: (1) the 1995 Citizen Involvement Merit Award for the Bellevue Community Outreach Project (accepted by Bruce Freeland, Planning Department Director); and (2) the 1995 Transportation Merit Award for Bellevue's transit planning study (accepted by Tom Noguchi, Transportation Department Program Manager).

The Mayor thanked the APA/PAW for these prestigious awards and commended staff for their exemplary work in earning them.

(c) City and County Communication and Marketing Association

Mr. Freeland drew attention to two displayed plaque awards from the City and County Communication and Marketing Association (CCCMA), a national organization with the goal of assisting cities and counties solve public sector problems by applying the best of private and

November 27, 1995

Meeting Extension

At 11:00 p.m. Mrs. Blacker moved to extend the meeting until 11:30 p.m. The motion was seconded and carried by a vote of 7-0.

13. Unfinished Business

(a) Phantom Lake Watershed Committee Recommendations

Pam Bissonnette, Director of the Utilities Department, referred Council to page 677 of the meeting packet and reviewed the history of the Phantom Lake Watershed Committee and the resolution before Council.

Mayor Pro Tem Heaton moved that the proposed Phantom Lake Watershed Committee Resolution contained as agenda item 13(a) be modified to provide that the Committee be charged with developing a plan for creation of a Lake Management District no later than July 1, 1996, and that any future City funding will be contingent on the creation of that Lake Management District. Mr. Lee seconded the motion.

Mayor Pro Tem Heaton stated that she was concerned that the Phantom Lake project may come full circle without any gain for the City. Much time and energy has been invested in the project, and it is time to move forward. She believes that the Phantom Lake community has responsibilities which it must accept, the City should work as a partner, and that creating a Lake Management District will provide for this relationship.

In response to Mayor Davidson, Mrs. Heaton verified that the "City funding" in the motion referred to the $43,000 dedicated to the Committee, not future budget appropriations.

Mr. Lukens stated that he supported the motion, but his concern is that the City appropriations will only slow the death of the lake; he feels that the lake will die eventually despite the best of efforts. He does not believe that this is the best use of City funds, but understands that the District will provide a more comprehensive look at the problem and solutions.

Ms. Bissonnette, in response to Mrs. Blacker, explained that the motion provided support for the plan to develop the District including the District's financial and legal foundations, not the creation of the District itself.

Mrs. Zumdieck asked if a significant study and the services of limnologist were included in the budget. Ms. Bissonnette explained that a major portion of the one-time $43,250 funding is $25,000 for "expert opinion" for the committee.

In response to Mrs. Blacker, Ms. Bissonnette stated that the ESC approved the funding of the study only when the resolution included an outcome.

Mayor Davidson noted that this item was included as a discussion item on the agenda. Because there is an active motion, he suggested that Council deal with the motion now and the budget issues and the process of water district development at a later date.

The motion that the proposed Phantom Lake Watershed Committee Resolution contained as agenda item 13(a) be modified to provide that the Committee be charged with developing a plan for the creation of a Lake Management District no later than July 1, 1996, and that any future City funding will be contingent on the creation of that Lake Management District carried by a vote of 7-0.

14. Continued Oral Communications: None

15. New Business: None

16. Executive Session: None

17. Adjournment: The Mayor adjourned the meeting at 11:10 p.m.

Myrna L. Basich
City Clerk

msb

Attachment B

SMP Requests for Phantom Lake – received from Mr. Brian Parks on May 8, 2012

Mr. Park's requests fall into the following categories. This document comments on the requests and the appropriate Commission or Board to consider the requests.

1. **SMP Regulatory Requests** – requested two additions to SMP regulatory section.
2. **SMP Restoration Plan** – requested removal of two Restoration Plan projects.
3. **SMP Restoration Plan** – requested addition of 7 new proposals to the Restoration Plan (including policies, projects, and statements about the "Community, Its' Concerns and Considerations").

1. Mr. Park's SMP Regulatory Requests	ESC Response		
Add following to Regulatory Section of SMP Document:	Comments	Function	Commission or Board
• Phantom lake is a lake and as such shall be categorized and treated as a lake. Its shorelines may have areas subject to the Critical Areas Ordinance when verified wetlands (or other features) are identified, however, its shorelines are not in-and-of-themselves wetlands or subject to the Critical Areas Ordinance.	No comments	Land Use	Planning Commission
• The regulatory Ordinary High Water Mark (OHWM) for Phantom Lake shall be established at 260.7.	There is no scientific study to support an OHWM of 260.7 feet NAVD88. Ecology determined that the scientific study sponsored by the City for Lake Sammamish established a surrogate elevation in lieu of a site-specific OHWM for shoreline setback of structures only. Ecology requires a site-specific scientific study to set OHWM for bulkheads on the lake. In any case, the OHWM does not affect the lake floodplain. The 100 year floodplain elevation for Phantom Lake is 264.6 feet NAVD88 as mapped by the Federal Emergency Management Agency.	Land Use	Planning Commission

Attachment B

SMP Requests for Phantom Lake – received from Mr. Brian Parks on May 8, 2012

2. SMP Restoration Plan Mr. Parks requests removal of projects PL-2 and PL-3 as highlighted below					ESC Response		
Plan Ref. No.	**Location**	**Lake or Stream Project**	**General Description**	**Land Ownership**	**Comments**	**Function**	**Direct Request to**
PL-1	Phantom Lake	Lake	Initiate a reforestation program @ Phantom Lake which specifically identifies the area south of the main park and Robinsglen. Revegetation area is well over 4,000 square feet	Public	No action requested.		
Remove PL-2	Phantom Lake Inlet Channel	Stream	Phantom Lake inlet channel-create > 100 feet of stream meanders, install LWD, replant with native veg (>4,000 sf), reduce shoreline hardening and improve overall habitat complexity *Mr. Park's Reasons for Removing PL-2:* Incompatible with resolving documented water imbalance and pollution problems, and this is not a natural stream and as such cannot be "restored."	Private	Phantom inlet stream is a natural stream (Washington State Catalogue of Streams #08-0154). It has been modified through human activities. Stream channel improvements are used to improve habitat, water quality, and water quantity functions.	SMP	Planning Commission

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Remove PL-3	Phantom Lake	Lake	Acquire lake front property as it becomes available & set up conservation easement along shoreline. *Mr. Park's Reasons for Removing PL-3:* Such a nebulous program will result in depressed land values and create unnecessary lawsuits.	Private	It's unclear how a conservation easement would affect stormwater management. Real estate acquisition is outside ESC purview.	SMP	Parks and Community Services Board and Planning Commission
PL-4	Larsen Lake Outlet Channel	Stream	Improve habitat functions and retain or improve flood control functions in outlet channel (~500 feet) at Larsen Lake. Restore riparian vegetation (>4,000 sf) in the Larsen Lake stream channel and initiate a reforestation program at Larsen lake.	Public	No action requested.		
PL-5	Lake Hills	Lake	Develop a Street Edge Alternatives (SEA streets) program for Bellevue with a pilot project. Rehabilitate the neighborhood drainage in the SE 9th street area using infiltration for flood control similar to the "C" street model.	Public	No action requested.		
PL-6	Lake Hills Greenbelt Ranger Station	Lake	Approximately 500 feet north of the Lake Hills Greenbelt Ranger Station is a constructed open water pond that helps retain sediment and control flood flow through the greenbelt. The pond is dominated by invasive species on its banks and would benefit from restoration and enhancement.	Public	No action requested.		

Attachment B

SMP Requests for Phantom Lake – received from Mr. Brian Parks on May 8, 2012

3. Mr. Park's Request for Additions to the SMP Restoration Plan Add the following new proposals to the SMP Restoration Plan					ESC Response		
Mr. Park's Ref. No.	**Location**	**Lake or Stream Project**	**General Description**	**Land Ownership**	**Comment**	**Function**	**Direct request to**
PL-4	Phantom Lake	Lake	Prepare policies and regulations, and so direct staff and prospective developers that: No more waters will be directed to Phantom Lake (from new development) and that existing development will participate in mitigating high water and pollution occurring in Phantom Lake.	Public/Private	Not a restoration plan project. These are water quality and drainage policy and regulation issues.	Water Quality and Drainage	ESC
PL-5	Phantom Creek in Weowna Park	Stream	While maintaining existing ecological functions, identify and fund changes to this waterway that mitigate impacts to lake Sammamish and to adjoining properties.	Public	The Parks and Community Services Department did a CIP project for the waterway in Weowna Beach Park. They confirmed that this request should be directed to them as a maintenance or follow-up CIP request to this project.	Parks Dept. CIP or O&M	Parks Dept.

PL-6	Eastgate as affects Phantom Lake Basin	Pond A	Expand Detention Pond-A in Eastgate Land Use Plan and/or Airfield Park Plan collectively, as it was permitted to be undersized (by approx. 50%) due to Phantom Lake having been used as secondary detention. Goal is to reduce illicit discharge of sludge and heavy metals into Phantom Lake. Re-engineer Detention Pond B and re-institute its use.	Public/Private	These are stormwater water quality and drainage requests, not shoreline restoration projects. Development is required to comply with stormwater standards in place at the time of development. Ponds A (public) and B (private) were designed and built in accordance with stormwater detention and water quality treatment standards in place at the time of development When any property develops or redevelops, including the Airfield Park, it will be required to comply with the stormwater standards in place at the time of development. New development stormwater standards took effect Jan. 1, 2010.	Water Quality and Drainage	ESC
PL-7	Phantom Lake Outlet Channel	Lake	1) Operate seasonal weir gate at setting of no more than one timber (.3 ft. high, which is 3.5 inches), so as to not exceed regulatory OHWM established at 260.7 (0.5 ft. or 6 inches over weir threshold, with overflow). 2) City shall acquire permanent access easements along entire outlet channel for maintenance purposes.	Public/Private	Not shoreline restoration projects; an operations and policy request. 1) This is a water quality and drainage operations request. 2) This request about private outlet channel maintenance is a policy request.	Water Quality and Drainage	ESC

PL-8	Phantom Lake	Lake	Monitor and remove beavers/beaver dams on Phantom lake (known dam at City Park property), due to importance of maintaining (currently limited) outflow channel for entire basin at full capacity.	Public/Private	Utility Department Operations request. Consistent with existing City storm and surface water policies, Utilities Department staff removes beaver dams on public property and City easements and on private property if necessary to reduce flooding risks to human safety, roads and structures.	Emergency Flooding	ESC
PL-9	Phantom Lake	Lake	City shall remove abandoned aerator located in middle of lake.	Public/Private	Utilities will assess this request.	Water Quality	ESC
PL-10	Phantom Lake	Lake	Establish policies and implement monitoring program of Phantom Lake waters for: 1) nutrients, phytoplankton and zooplankton, as indicator of lake's biotic balance, and 2) contaminants, including heavy metals (are believed to be coming from abandoned Eastgate landfill).	Public/Private	This is a policy request (to do more Phantom Lake water quality monitoring than is already being done). Utilities Department has monitored Phantom Lake water quality (including nutrients) on a monthly or bi-monthly schedule since 1993. A thorough investigation of landfill contamination concerns was completed by Utilities in 2011 and reviewed by a consultant as well as the Washington State Department of Ecology. The consultant and Ecology concluded that there were no illicit discharges or violations of water quality standards with regards to the landfill, Pond A, or Phantom Inlet Creek. The report and Ecology letter were provided to the PLHOA.	Water Quality	ESC

Add these statements in the Plan.	• **The Community, Its' Concerns and Considerations** The Phantom Lake neighborhood is centered on a 64 acre kettle lake sitting on a bluff about a mile west of the southern section of Lake Sammamish. Originally skirted partially by farm land, the neighborhood's focus shifted in the 1950's toward more suburban activity as the area that is now along 1-90 began to develop. Along with this was use of the Northern end of the Mercer Airfield as a King County Landfill. Studies in the 1970's specified detention use of this private kettle lake. In the early 1980's a major change in drainage occurred when commercial development in the Eastgate/I-90 area redeveloped this mostly gravel airfield to one of intense commercial/office uses. During this period factors impacting the lake occurred, such as greatly increasing impervious surfaces, and creation of the first of three detention ponds and piping to the lake of landfill and partial Eastgate storm waters. Following studies were conducted in the mid-tolate-1980's to determine aggravated issues about the lake and their solutions, resulting in recommendation of an outlet weir and berm blocking natural NW surface flows, both to increase summer levels, an aerator to increase dissolved oxygen in depths, as well as alum treatment to seal in contaminates. There has been a continuing concern from the residential community that impacts to the lake have been predominantly caused by these changes and external sources. Residents seek equitable resolution of lake issues, including factors key to shoreline management. The use of the lake as a secondary detention pond for landfill and as a receiving body (which it is not categorized as) for drainage is at issue, as are the implications downstream at Lake Sammamish where these waters are directed.	Statements concern opinions about water quality and quantity issues and policies.	Water Quality and Drainage	ESC

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Attachment 3

Substantive Changes directed for incorporation into the Planning Commission Redraft
As of April 11, 2012

Changes to the Shoreline Master Program Package

Shoreline Setbacks

- Shoreline setback was revised from 50 feet to 25 feet from Ordinary High Water Mark (OHWM)
- A new fixed OHWM was established in the code for Lake Sammamish (30.6 NAVD 88), Lake Washington (25.10 NAVD 88) and Phantom Lake (260.7 NAVD 88)
- Lateral expansion of structures located within the setback was authorized per City of Sammamish requirements
- The 10 percent Mercer Island limitation for impervious surface was established for the shoreline setback

Vegetation Conservation

- The requirement for a vegetation conservation area was deleted from the shoreline residential and recreational boating environments and reference to city-wide tree preservation requirements was put in its place.
- The references to expansion in and out of the vegetation conservation area and the options chart were deleted
- The nonconforming standards for vegetation conservation area were deleted.

Residential Moorage

- Most of the new dock performance standards were eliminated and replaced with deference to state and federal approval
- Repair standards were modified to allow 100 percent repair of legally-established docks provided work uses grating (above a certain threshold) and incorporation of new materials subject to requirements of state and federal agencies.

Shoreline Stabilization

- The distinction of between minor and major repair of shoreline stabilization was deleted and replaced with a requirement that legally-established stabilization may be repaired and replaced in its existing configuration

Nonconforming Single-Family Development

- The nonconforming standards were modified to make conforming all lawfully constructed residential structures that encroach on the shoreline structure setback .
- Existing lawfully constructed structures that are destroyed would be allowed to be replaced in their same footprint.
- All existing lawfully constructed structures would be allowed to be maintained and repaired.

Public Access

- Public access requirements for private projects of all kinds were removed and refocused them on public infrastructure projects

Recreation

- This section was modified in response to issues raised by the Meydenbauer Yacht Club regarding: educational and cultural activities; what constitutes maintenance, repair, and minor expansion; and, eliminated the public access requirement for overwater structures.

Meydenbauer Park

- A footnote was added on each use chart noting that a Council-adopted Master Plan is required for the Meydenbauer Bay Park;
- A reference was added in each footnote to the "Implementation Principles" in addition to the broader Park Plan
- Staff developed an hybrid process for review of permits submitted for Meydenbauer Bay Park development that would provide for heightened notice and a public hearing for Planning Commission consideration.

Changes for Consistency and Simplification

- Numerous changes were made to enhance consistency, reduce complexity and improve clarity.

<u>Additional Key Topics for the Transmittal</u>
In addition to key topics identified above, the Commission has expressed interest in a number of other additional important issues to include in the Transmittal:

- Lake level management for Phantom Lake and Lake Sammamish
- City-wide storm water management
- Post Adoption SMP Enforcement Strategy