DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
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.	08-128529 LO
Project Name/Address:	City of Bellevue Utilities Department SE 30th Street/Sunset Creek Flood Improvement Project
Planner:	Heidi M. Bedwell
Phone Number:	425-452-4862

Minimum Comment Period: September 25, 2008

Materials included in this Notice:

- [x] Blue Bulletin
- [x] Checklist
- [x] Vicinity Map
- [ ] Plans
- [ ] Other:

ENVIRONMENTAL CHECKLIST

Southeast 30th Street/Sunset Creek Flood Improvements Project – Phase 1

Prepared for

City of Bellevue – Department of Utilities

February 2008

ENVIRONMENTAL CHECKLIST

Southeast 30th Street/Sunset Creek Flood Improvements Project – Phase 1

Prepared for

City of Bellevue – Department of Utilities
450 110th Ave NE
P.O. Box 90012
Bellevue WA 98009
425-452-6932

Prepared by

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Telephone: 206/441-9080

February 6, 2008

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Environmental Checklist

A. Background

1. Name of proposed project if applicable:

Southeast 30th Street/Sunset Creek Flood Improvements Project – Phase 1

2. Name of applicant:

City of Bellevue

3. Address and phone number of applicant and contact person:

Brian Ward
City of Bellevue – Department of Utilities
450 110th Ave NE
P.O. Box 90012
Bellevue WA 98009
425-452-6932

4. Date checklist prepared:

February 4, 2008

5. Agency requesting checklist:

City of Bellevue – Department of Planning and Community Development

6. Proposed timing or schedule (including phasing, if applicable):

The project is proposed for construction in the summer of 2008.

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

The proposed project is Phase I of the Flood Control and Sediment Management Plan for the Richards Creek, Sunset Creek, and East Creek Confluence Area. This multiphased project includes a range of sediment management and habitat restoration components, and incorporates long-term and adaptive management components. Subsequent phases of the Flood Control and Sediment Management Plan have not been fully defined, conceptual designs and permitting have not been initiated, and they may or may not be implemented as planned. The proposed project is considered to have independent utility from future phases, and is being permitted and implemented as a separate effort to address immediate needs.

Potential future phases of the plan identified above may include:

- Phase II – Complete channel improvements on Sunset Creek downstream of Southeast 30th Street to increase sediment transport capacity, improve habitat conditions and reduce structural flooding.

- Phase III – Install grade control structures along the "flow-split" and East Creek channels; and between the flow split and Kamber Road to provide sediment storage, limit future channel degradation, and increase the length of channel with quality habitat conditions.

- Phase IV – Establish further sediment control measures in upper watershed channels where areas of streambank and slope instability deliver considerable sediment to the Sunset Creek channel network.

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

- Joint Aquatic Resource Permit Application (JARPA) Complete
- Basis of Design Report Pending
- Geomorphic Assessment Pending
- Biological Assessment Complete
- NEPA Documented Categorical Exclusion Pending
- Critical Areas Report Pending

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No other relevant projects or permit applications have been identified.

10. List any government approvals or permits that will be needed for your proposal, if known.

- Hydraulic Project Approval - Washington Department of Fish and Wildlife

- Clean Water Act Section 404 permit (under Nationwide Permit 3) - U.S. Army Corps of Engineers

- Clean Water Act Section 401 Water Quality Certification - Washington State Department of Ecology

- Endangered Species Act concurrence – National Marine Fisheries Service (no U.S. Fish and Wildlife Service jurisdiction species occur in the action area)

- Critical Area Ordinance compliance, Clearing and Grading Permit - City of Bellevue.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The City of Bellevue proposes to replace existing twin 42-inch diameter corrugated metal pipe culverts on Sunset Creek at Southeast 30th Street with a stream simulation and sedimentation structure, and modify the Sunset Creek channel upstream and downstream of the street to match the culvert replacement structure invert elevations. Proposed channel modifications include removing existing riprap along the channel banks and culvert headwalls, modifying the streambed grade, installing grade control and bank stabilization structures made of boulders and large woody debris, and revegetating disturbed stream banks. The culvert replacement project is designed to reduce ongoing flooding of Southeast 30th Street and adjacent properties and manage sediment transported in Sunset Creek to eliminate the need for annual dredging in the active channel. The replacement culvert project is designed to transmit the 100-year flood without allowing flow to overtop Southeast 30th Street, store approximately 50 cubic yards of sediment within the culvert structure, and provide improved aquatic habitat and fish passage conditions.

The project site is surrounded by commercial/industrial/warehouse facilities. Sunset Creek is located in the Kelsey Creek watershed within WRIA 8 (DNR 2007). Land uses in this drainage are predominantly suburban residential in the upper drainage, and commercial/light industrial in the portion of the drainage containing the project area. Sunset Creek crosses the Interstate 90 (I-90) corridor just east of I-405 before entering Richards Creek approximately 600 feet downstream of the project site. Overall, Sunset Creek has a moderate level of channel and flow modification; over 20 percent of the stream is contained in culverts (Bellevue Critical Areas Update Streams Inventory 2003). The portion of the stream within the project area is extensively hydromodified, contained within an artificial channel constrained between encroaching commercial and light industrial buildings (see Figures 1 and 2, Appendix A).

The aerial extent of the proposed project includes:

- A 565 foot dewatered exclusion area within the Sunset Creek channel, extending approximately 250 feet upstream and 250 feet downstream of Southeast 30th Street (see Figure 2, Appendix A).
- Clearing limits for site access, channel reconfiguration, grade control structure placement, and placement of the new culvert structure (see plan sheets 4 and 7, Appendix A). These limits cover:
  - Approximately 245 linear feet of stream channel (110 feet upstream and 60 feet downstream of Southeast 30th Street, and 64 feet of channel within the culvert).
  - 0.039 acres of adjacent riparian habitat (0.025 acres upstream and 0.014 acres downstream of Southeast 30th Street).

The area of streambank revegetation shown on the referenced plan sheets represents the proposed clearing limits.

12. **Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

The project area is located in the City of Bellevue, northeast of the I-405/I-90 interchange, in Section 9 and 10 of Township 24 North, Range 5 East. The site lies in the Kelsey Creek watershed, part of WRIA 8. The City of Bellevue has defined 26 "storm drainage" basins that further subdivide drainage areas within WRIA 8. The proposed project is located within a tributary basin, the Sunset Creek drainage (see Figure 1, Appendix A) (City of Bellevue 2007).

The project site overlaps City of Bellevue owned right of way on Southeast 30th Street and adjacent private property on the north and south sides of the street (see Figure 2, Appendix A).

B. Environmental Elements

1. Earth

a. General description of the site (check one):

_X_ **flat**
____ **rolling**
____ **hilly**
____ **steep slopes**
____ **mountainous**
____ **other:** _____

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

The gradient of the Sunset Creek channel typically ranges from 5 percent upstream of Southeast 30th Street to 1.5 percent downstream. Stream bank gradients are up to 45 degrees and riprap-armored stream banks are nearly vertical. Other areas in the vicinity of the project are nearly flat.

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.

Soil at the project site is classified as urban land, indicating that the road corridor was constructed in highly disturbed and/or fill soils. Soils in the project vicinity are Everett-Alderwood gravelly sandy loam, Everett gravelly sandy loam, and Seattle muck.

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

No (per King County sensitive areas map)

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

Approximately 80 cubic yards of fill will be used in the proposed project, in the form of washed, rounded river boulders and streambed gravel and cobble. Imported fill will be offset by the removal of approximately 180 cubic yards of existing riprap, accumulated alluvium, and bank material. Non-regulated fill in the form of structural logs, some with rootwads, will be incorporated into the channel bed and banks.

All fill material will be imported from a licensed commercial source.

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

Clearing of riparian vegetation will be required for the placement of the new culvert structure, grade control structures, and other construction activities. Water quality impacts will be controlled through use of construction best management practices (BMPs), including temporary dewatering of the stream reach through the construction site. All disturbed areas will be restored with bioengineered bank stabilization techniques and appropriate native vegetation upon completion of construction.

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

The proposed project will result in no-net increase in impervious surface area. A total of approximately 900 square feet of road surface and sidewalk will be removed and replaced to construct the replacement culvert structure.

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

See proposed BMPs described below.

General Requirements

The proposed project will implement BMPs to avoid or minimize erosion-related impacts in accordance with regulatory requirements. The City of Bellevue will require its construction contractor to implement and maintain BMPs for temporary erosion and sediment control (TESC). These BMPs will be consistent with the Washington State Department of Ecology 2005 *Stormwater Management Manual for Western Washington* (Ecology 2005) and are considered an integral part of the effect determinations made in the biological evaluation of the proposed project.

Construction Timing

All construction activities associated with stream channel grading, culvert replacement, streamflow bypass, and installation of channel grade control structures will take place during the approved in-water work window for the project area (July 1 to August 31). Activities that may result in unavoidable short-term sediment releases to the stream will be scheduled to commence after July 1 to avoid adverse effects on sensitive fish life history stages.

Temporary Erosion and Sediment Control

TESC measures will be in place before work begins, and additional TESC measures will be implemented as work elements occur in different areas of the site. The TESC plan will include appropriate BMPs to be implemented throughout construction that will retain dust, soil, and stormwater runoff onsite and prevent pollutants and turbid discharges from entering Sunset Creek. Turbidity will be monitored during those construction activities having the potential to release sediments to the stream. If measured turbidity 100 feet downstream of construction is more than 5 nephelometric turbidity units (NTU) greater than the background level, the activities causing the turbidity increase will be discontinued until additional measures necessary to achieve the required performance objectives can be implemented. TESC measures will be upgraded and added as necessary in response to unexpected storm events and changing site conditions (i.e., operation of additional pumps or relocation of silt fences).

The TESC plan will be maintained onsite and a recorded log of BMP implementation and TESC measure performance will be updated weekly. The plan and the log will be available onsite throughout the duration of the project. Documentation will include, at a minimum, records of all BMP implementation and performance monitoring by the contractor's TESC lead as appropriate for the site conditions experienced during construction. Dewatering of the work area within the stream is planned as a major element of water quality protection during construction. Details on the dewatering plan are discussed later in this checklist.

Fueling and Lubrication

Fueling and use of lubricating oils and hydraulic fluids will be conducted offsite or at a designated staging area located at least 150 feet away from aquatic resources. All equipment working around aquatic resources that requires hydraulic fluids will use biodegradable hydraulic fluids.

The construction contractor will be required to develop a site-specific spill prevention, control, and countermeasures (SPCC) plan consistent with state law. The SPCC plan will address hazardous materials, fueling and maintenance of equipment, and spill containment and notification.

Removal of Best Management Practices

After the project is complete and disturbed soils are stabilized, all BMPs will be removed according to the following procedures:

- Evaluate the site to determine if the BMP is no longer needed (i.e., the area has been stabilized and the potential for sediment-laden water to exit the area has passed).
- Remove sediment buildup behind the BMP structures and dispose of sediments at an approved location offsite.
- Remove the BMP materials for reuse or recycling, if applicable.

Site Restoration and Revegetation

The boundaries of the clearing limits will be visibly flagged by a continuous tape or bright orange fencing before construction begins. All disturbed areas within the clearing limits will be replanted with native trees and shrubs appropriate for the site as described previously. Soil in stream access points and other areas that have been compacted by heavy machinery will be tilled prior to replanting to enhance restoration and encourage infiltration of runoff.

2. Air

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

Heavy equipment used during construction of this project will emit exhaust and create dust that could contribute to ambient concentrations of suspended particulate matter during project construction. However, these emissions will be short term. Consequently, as long as construction equipment is properly maintained and operated to minimize emissions, no significant air quality impacts are expected to result from construction activities. The proposed project area is located in an urbanized environment characterized by light industrial land uses. The air quality impacts resulting from construction related heavy equipment use are expected to be indistinguishable from levels produced by typical levels of truck and other vehicle traffic in the affected neighborhood.

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

No.

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

Emissions from construction equipment and trucks can be reduced by using relatively new, well maintained equipment. Avoiding prolonged periods of vehicle idling also

would reduce emissions. Construction contractors must comply with Puget Sound Clean Air Agency regulations requiring reasonable precautions to minimize odor and dust impacts. Best management practices for the control of windborne construction dust (such as applying water to the roadway) will be used, if needed.

3. Water

a. Surface water:

*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, or wetlands)? If yes, describe and provide names. If appropriate, name the stream or river it flows into.***

Sunset Creek flows into Richards Creek, a tributary stream within the Kelsey Creek watershed. Kelsey Creek is a tributary to Lake Washington. The project work area encompasses approximately 565 feet of the lower Sunset Creek channel. This 565 feet encompasses the dewatered exclusion area. Approximately 245 feet of active channel will be modified for channel reconfiguration, bank protection, and grade control structures. There are no wetlands or other surface water features in the action area.

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

The proposed project will require work in Sunset Creek, including culvert replacement and associated channel modifications. The project plan sheets are provided in Appendix A.

*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.***

The existing roadway and fill material will need to be excavated prior to culvert replacement. The excavation dimensions will allow for installation of a pipe that will act as the temporary stream bypass adjacent to the existing culverts. Volumes of excavation and fill below the OHWM for culvert replacement, channel grading, and installation of grade control and bank protection structures are summarized in Table 1.

Table 1. Volumes of excavation and fill below the OHWM for culvert replacement, channel grading, and installation of grade control and bank protection structures.

Impact	Upstream of Culvert	Downstream of Culvert
Volume of excavation below existing OHWM (cy) [a]	98	82
Volume of fill below existing OHWM (cy) [b]	52	28
Area of fill below existing OHWM (acre)	0.02	0.01

[a] Includes streambed material and riprap
[b] Includes streambed material and boulders

The existing twin 42-inch diameter corrugated metal pipe (CMP) culverts on Sunset Creek at Southeast 30th Street will be removed and replaced with a natural-substrate bedded, fish-passable culvert and sedimentation structure to reduce Sunset Creek flooding at Southeast 30th Street. Once the existing culverts are removed the new culvert structure will be installed at approximately the same location. The new culvert will be constructed by a combination of poured in-place concrete and precast concrete structures. A 2-foot diameter high flow and maintenance bypass culvert will be installed west of and parallel to the main culvert structure.

Riprap armoring along the banks of Sunset Creek and surrounding the culvert inlet and outlet will be removed in the project area concurrent with the installation of the new culvert and grade control construction. Because riprap forms the toe of the stream banks through much of its extent within the work area, riprap removal will occur within the OHWM. Riprap removal will be conducted in the dry after the streamflow bypass is in place and the project site is dewatered. This component of the project will take place during the in-water work window. The riprap will either be stored on City property for use in future permitted projects, or will be delivered to a permitted commercial facility for reuse. A summary of the location and quantity of riprap to be removed as part of the proposed project is shown in Table 2 below.

Table 2. Location and quantity of riprap to be removed.

Location	Bank Length (ft)	Bank Area (ft^2)
Upstream		
Left Bank	10	30
Above Culvert	14	42
Downstream		
Left Bank	20	80
Right Bank	20	80
Above Culvert	10	50
Totals	74	282

Approximately 8.5 cubic yards of riprap will be removed upstream of the twin culverts from the left bank and above the culvert openings. No riprap is currently present immediately upstream of the culverts on the right bank. Downstream of the culverts approximately 25 cubic yards of riprap will be removed from both the left and right banks as well as above the culvert openings.

Grading of the channel will be conducted both up and downstream of the culvert replacement structure to match the channel streambed to the invert elevations of the new structure. Channel grading will extend approximately 120 feet upstream and 110 feet downstream of the culvert replacement structure. Volumes of excavation and fill below the OHWM for culvert replacement, channel grading, and installation of grade control and bank protection structures are summarized in

Table 1. Any fill in the channel will be either boulders incorporated in grade control structures, a cobble mixture that will be placed in the channel bed to resist scour, or a gravel "fish" mixture that will be placed to form the streambed surface. These rock materials would be imported from a permitted commercial source.

Upstream of the new culvert structure, channel grading will include excavation of the existing channel bed, installation of log and boulder grade control structures, installation of stable channel substrate material consisting of cobble and gravel, installation of gravel streambed material, and reshaping of banks and installation of wood and boulder bank stabilization. The grade control structures will prevent aggradation of sediment at the upstream entrance of the new culvert and allow for the passage of sediment through the culvert. They will each consist of two 18 to 24 inch diameter logs that will span the entire width of the stream channel and that will be keyed into the adjacent stream banks. Boulders will be rounded to subrounded and will be imported from a permitted commercial source. The grade control structures will be keyed into each bank to a distance that is equivalent to approximately one-third the width of the channel that is spanned.

Channel grading downstream of the replacement culvert will include excavation or removal of the existing channel bed, installation of a log and boulder grade control structure, reshaping of banks, and installation of wood and boulder bank stabilization.

Stream banks will be rebuilt and stabilized in all areas where they are disturbed (~110 feet upstream and 60 feet downstream). Bank toes will be protected from stream erosion using large woody debris and boulders that are buried into the stream bank and integrated into grade control structures. Higher portions of the bank that are disturbed will be stabilized with coir-wrapped lifts of soil. The coir fabric will be staked and the top layer will be secured with an anchor trench. These areas will then be replanted.

All fill materials will be imported from a licensed commercial source. All excavated materials that are not backfilled will be retained on City of Bellevue property for use in future permitted actions, or disposed of at a permitted commercial facility.

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

The channel will be temporarily dewatered for a reach extending from approximately 250 feet upstream to 250 feet downstream of the Southeast 30th Street culvert to create a 565 foot long exclusion area for project construction. Streamflows will be diverted using sandbag and membrane coffer dams into a gravity or pump fed bypass pipe. Flows will be discharged back into the Sunset Creek channel downstream of the project area. Channel dewatering/rewatering and fish capture and relocation will be conducted consistent with WSDOT standard practices. The temporary flow bypass pipe will be a 2-foot diameter pipe sized to carry up to approximately 96 cubic feet per second, which equates to approximately the _-year recurrence interval flow in Sunset Creek at the project site.

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

Yes. The 100-year floodplain has been designated along Sunset Creek (see Figure 2 Appendix A).

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 waste materials will be discharged to surface waters as a result of the proposed project. Minor surface erosion of restored bed and bank areas will occur during site rewatering, and during the "first flush" of the project area during initial exposure to storm flows.

b. Ground water:

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

Not applicable.

2) ***Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example, domestic sewage; industrial waste, containing the following chemicals . . .; agricultural waste; 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.***

Not applicable.

c. Water runoff (including stormwater):

1) ***Describe the source of runoff (including stormwater) 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.***

The proposed project is designed to improve conveyance of Sunset Creek through the culvert at Southeast 30th Street and prevent recurring flooding of the surrounding properties. No changes will be made to stormwater collection or disposal systems.

The project will result in replacement of approximately 900 square feet of existing impervious surface, which is below the 5,000 square foot threshold requiring retrofitting for stormwater runoff treatment.

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

Potential spills from construction activities and equipment could enter surface or ground water; however a SPCC plan will be in place to prevent or reduce impacts from accidental spills.

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

All construction work will be conducted within a dewatered exclusion area and on adjacent streambanks and uplands. Curing of concrete will occur within this exclusion area. Curing concrete and leachate will not be allowed to come into contact with surface waters. Stormwater or alluvial flow entering the work area will be pumped into the municipal sewer system, or will be treated using a filtration system to remove suspended sediments and other pollutants prior to discharge back to surface waters.

During construction a SPCC plan will be in place to prevent of reduce impacts from accidental spills, consistent with City of Bellevue requirements for construction activities near critical areas.

4. Plants

a. ***Check types of vegetation found on the site:***

X **deciduous tree:**
- X **alder**
- X **maple**
- ___ **aspen**
- X **others:** Black cottonwood, willow, ornamentals

X **evergreen tree:**
- X **fir**
- X **cedar**
- X **pine**
- ___ **others:** _____

X **shrubs**

X **grass**

___ **pasture**

___ **crop or grain**

___ **wet soil plants:**
- ___ **cattail**
- ___ **buttercup**
- ___ **bulrush**
- ___ **skunk cabbage**
- ___ **others:** _____

___ **water plants:**
- ___ **water lily**
- ___ **eelgrass**
- ___ **milfoil**
- ___ **others:** _____

X **other types of vegetation:** _____
ornamental landscaping

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

The proposed project will result in temporary disturbance of approximately 1,700 square feet (0.039 acres) of riparian vegetation. This disturbance is necessary to reconfigure the channel to support the new culvert, to place grade control structures, remove riprap, and stabilize the banks using bioengineering methods. The vegetated areas to be disturbed extend approximately 110 feet upstream and 60 feet downstream of Southeast 30th Street, and range from approximately 5 to 15 feet in width. Site access and construction will be managed to limit impacts to non-native vegetation to the greatest extent practicable. No large trees will be removed or harmed during the process. Following completion of the project all disturbed areas will be replanted with site appropriate native vegetation, resulting in a net-increase in riparian function. Bioengineering methods used to stabilize reconfigured streambanks will emphasize the use of native vegetation, consistent with Washington State Integrated Streambank Protection Guidelines.

Downstream of the culvert replacement structure approximately 600 square feet (0.014 acres) of streambank will be disturbed and replanted. Currently the affected area is poorly vegetated, characterized predominantly by reed canarygrass over vertical riprap banks with a sparse mixture of other invasive and ornamental plant species. This vegetation will be replaced by native species that, in combination with riprap removal and bank reshaping, should provide increased habitat and riparian function.

Upstream of the culvert replacement structure approximately 1,100 square feet (0.025 acres) will be disturbed and replanted. The banks in this area are generally covered with English ivy and a mix of shrubs and small diameter (less than 4-inch at breast height) alders, and mature alders and cottonwoods, and young red cedars. Non-native species will be removed to provide access corridors between the mature trees. Once construction has been completed, the site will be replanted with native trees, shrubs and other understory vegetation to provide improved riparian function.

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

No known listed threatened or endangered plant species are on or near the sites.

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

Stream banks that have been disturbed during channel regrading and bank stabilization will be revegetated with native trees and shrubs. Revegetation will occur along a riparian area extending approximately 120 feet upstream and 60 feet downstream of the culvert replacement structure, encompassing approximately 1700 square feet (0.039 acres). See response 4b above.

5. Animals

a. ***List the names of any birds and animals that have been observed on or near the site or are known to be on or near the site:***

Birds:	Songbirds
Mammals:	Raccoon, opossum, other urban mammals
Fish:	Salmon, trout

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

Puget Sound Chinook Salmon and Puget Sound steelhead are known to have used this system historically. Prior to hydromodification and subsequent changes in downstream habitat conditions, known and/or likely distribution in Sunset Creek extended up to and perhaps beyond Southeast 30th Street.

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

Sunset Creek is a migratory corridor and a preferential spawning location used by native, anadromous, and adfluvial salmonids. Chinook salmon and steelhead have not been observed in the system in recent years, potentially due to passage barriers imposed by extensive beaver dam complexes in downstream reaches (Paulsen 2007). The affected reach of Sunset Creek is currently used as a preferential spawning location by large adfluvial cutthroat trout.

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

The proposed project is principally intended to address routine flooding exacerbated by chronic sediment deposition in and around the culvert at Southeast 30th Street. However, the design incorporates a number of elements that make this project self mitigating. The project also includes several standard construction BMPs to avoid and minimize adverse impacts on fish and wildlife.

First, the proposed project will improve fish passage in Sunset Creek. Hydraulic conditions induced by sediment deposition within and upstream of the Southeast 30th Street culvert present a barrier to fish passage under high stream flow conditions. The replacement culvert and integrated sediment retention structure have been designed to provide fish passage consistent with WDFW (2003) design guidance. In addition, sediment accumulation downstream of Southeast 30th Street has produced a large sediment plug that present a barrier to fish passage under low flow conditions. The integrated sediment trap will provide the increased capacity and flexibility needed to adaptively manage sediment delivery rates to the downstream channel. This will allow for the gradual development of improved conditions for fish passage, spawning and rearing over time.

Second, the proposed project includes channel and bank reconfiguration, and riparian restoration elements that will result in improved habitat conditions in the affected reach. The channel grade control structures will be composed primarily of logs with intact rootwads and large rounded river boulders. The bank protection elements will also be composed of logs with root wads, integrated with vegetative treatments. The reconfigured channel will have a decreased width/depth ratio, increased roughness, and increased pool density. In combination with riparian enhancements, these elements will increase habitat complexity and productivity in the affected reach. Enhanced riparian conditions will also increase the value of this habitat for birds and wildlife species, and its use as a migratory corridor (recognizing that these uses are probably limited in this urbanized environment).

Third, the proposed project will decrease the frequency of and need for dredging of accumulated sediments in the active channel of Sunset Creek. By integrating a sediment trap into the culvert structure, sediment management and removal will be greatly simplified. The trap will provide increased sediment storage capacity, which will limit the frequency of dredging activities over time, and will allow these activities to be conducted within an enclosed structure. This structure incorporates features that will simplify fish removal and exclusion, decreasing the need for electrofishing during sediment removal. This will in turn decrease the likelihood of fish injury and mortality associated with normal maintenance. Dredging of the active channel will only be required under infrequent circumstances when large sediment delivery events overwhelm the sediment trap and aggrade the downstream channel at unacceptable levels. This will significantly reduce the frequency of routine habitat disturbance associated with flood conveyance dredging in Sunset Creek.

Finally, with regards to construction BMPs, the proposed project has been designed to avoid and minimize adverse impacts on fish and wildlife. The primary concern in this respect is the potential for adverse effects on fisheries resources and aquatic habitats during construction. The in-water construction component of this project will take place entirely within the in-water work window for the Sunset Creek system. The work area will be dewatered using a temporary flow bypass to avoid construction related water quality impacts. The bypass and all related materials will be removed upon completion of the project. Dewatering/rewatering, and fish capture and relocation will be conducted using an accepted protocol for these practices (i.e. the Washington State Department of Transportation standard prococol). Alluvial water and stormwater that collects in the work area during construction will be pumped to the municipal sewer system, or will be treated prior to discharge to surface waters to avoid suspended sediment effects. Turbidity monitoring will be conducted throughout construction to ensure BMP effectiveness. The performance threshold for monitoring is 5 nephelometric turbidity units (NTU) or more above background levels. Should measured turbidity increase above this threshold, construction activities causing elevated turbidity will be halted and the BMPs will be addressed as necessary to achieve the desired performance. Consistent with City of Bellevue requirements, the construction contractor will have TESC and SPCC plans in place to avoid any water quality impacts, and will be required to diligently review and update those plans as site conditions warrant.

6. Energy and Natural Resources

a. What kinds of energy (for example, electricity, 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.

Not applicable.

b. Will 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:***

Not applicable.

7. Environmental Health

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

Environmental health hazards could occur from accidental spills of chemicals during project construction, and construction accidents related to the use of heavy equipment. Small amounts of materials likely to be present during construction include gasoline and diesel fuels, hydraulic fluids, oils, lubricants, and other chemical products. A spill of chemicals could potentially occur during construction as a result of either equipment failure or worker error. During construction, heavy equipment and fuels will be stored at a nearby location. Spills could also occur during refueling, from stored fuels, or from improperly disposed waste materials. Standard construction practices and safety measures will be employed to minimize the risk of spills or accidents.

1) ***Describe special emergency services that might be required.***

Emergency response during an incident would be the responsibility of the contractor. The contractor would require the assistance of the Washington Department of Ecology, Washington Department of Fish and Wildlife, or other agencies depending on the severity of the spill, and the risk to people and the environment. It is expected that the contractor will rely on local emergency services for any accident related injuries.

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

The contractor will develop and implement a SPCC plan according to City of Bellevue requirements, as defined in the bid documents. The SPCC plan will address hazardous materials, fueling and maintenance of equipment, and spill containment and notification. Discovered potentially hazardous waste would be handled in accordance with Environmental Protection Agency, Department of Ecology, and local health regulations.

b. ***Noise***

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

None. Typical background noise levels in this urbanized environment are estimated at 80 to 85 A-weighted decibels (dBA).

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

Heavy equipment used during project related materials transportation, staging, and construction will produce noise levels above ambient background. Estimated peak noise levels will range between 90 and 102.3 dBA. After completion of the project, occasional noise from equipment used for on-going routine maintenance and repair will occur. These noise levels will be consistent with those produced by current maintenance dredging activities. The proposed project will not increase the traffic capacity of Southeast 30th Street, nor will it result in any increase in development. Therefore the project will not result in any long-term change in noise conditions in the vicinity.

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

The contractor will adhere to all applicable federal, state, and local noise regulations governing construction activities.

8. Land and Shoreline Use

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

The project site is surrounded by commercial/industrial/warehouse facilities.

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

No.

c. ***Describe any structures on the site.***

Twin 42-inch diameter corrugated metal pipe (CMP) culverts are currently located on Sunset Creek at Southeast 30th Street. Southeast 30th Street is a two-lane, dead-end, urban corridor serving light industrial and commercial properties. The Sunset Creek channel and riparian buffer is bordered on both banks by commercial/light industrial buildings and parking lots, both upstream and downstream of Southeast 30th Street.

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

The twin 42-inch diameter corrugated metal pipe (CMP) culverts are currently located on Sunset Creek at Southeast 30th Street will be removed and replaced with a natural-substrate bedded, fish-passable culvert and sedimentation structure to reduce Sunset Creek flooding at Southeast 30th Street. Existing street pavement, sidewalk, and hand rail at the culvert crossing will be removed and replaced. Several utilities in the street corridor will be relocated, potentially requiring partial demolition.

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

Light industrial (City of Bellevue 2007).

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

Light industrial (City of Bellevue 2006).

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

Not applicable.

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

Environmentally sensitive areas include the 100 year floodplain of Sunset Creek, the stream channel, and stream buffer (riparian corridor).

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

None.

j. ***Approximately how many people will the completed project displace?***

None.

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

None proposed.

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

Not applicable.

9. Housing

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

Not applicable.

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

Not applicable.

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

Not applicable.

10. Aesthetics

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

Not applicable.

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

The proposed project will not change, alter, or obstruct views in the long-term. Excavation and backfill required for the installation of the culvert and channel work will alter views until vegetation can be reestablished on disturbed sites. The viewshed will

not change in the long-term, but improved stream and riparian habitat conditions will provide a visual amenity and fish and wildlife viewing opportunities.

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

Not applicable.

11. Light and Glare

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

Not applicable.

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

Not applicable.

c. ***What existing offsite sources of light or glare may affect your proposal?***

Not applicable.

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

Not applicable.

12. Recreation

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

The Sunset Ravine Open Space is located approximately 0.5 miles south of the Southeast 30th Street culvert conveying Sunset Creek, and the Mercer Slough Nature Park is about 0.8 miles west of the confluence of the Southeast 30th Street culvert conveying Sunset Creek. No known informal recreation occurs in the immediate project vicinity.

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

The proposed project will not permanently displace any existing recreational uses.

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

Not applicable.

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 cultural resources or listed historic properties are known to exist in the project vicinity.

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

The project area is characterized by light industrial and commercial properties developed during the 1960s and 1970s. Historic development planning documents and existing conditions present no evidence of these types of resources.

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

Should evidence of cultural remains, either historic or prehistoric, be encountered during excavation, work in that immediate area will be suspended, and the find will be examined and documented by a professional archaeologist. Decisions regarding appropriate mitigation and further action will be made at that time.

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:***

Southeast 30th Street crosses over Sunset Creek.

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

Yes, the nearest transit stop is at the intersection of SE 32nd Street and Richards Road, approximately 0.18 miles southwest of the project area.

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

Not applicable.

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).***

The proposal does not require new roads. Following project construction, the road surface will be re-built in the same location. The project will not change the capacity of Southeast 30th Street in any way.

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

Not applicable.

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

None.

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

Temporary traffic disruption will occur during project construction, which will be minimized using a traffic control plan developed by the construction contractor per bid document requirements.

15. Public Services

a. ***Will 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.

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

Not applicable.

16. Utilities

a. ***Check utilities currently available at the site:***

- X **electricity**
- X **natural gas**
- X **water**
- ____ **refuse service**
- X **telephone**
- X **sanitary sewer**
- ____ **septic system**
- ____ **other:** _____

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 that might be needed.***

The proposed project will not require new utilities. However, existing utilities will be relocated within the project footprint to accommodate the replacement culvert structure.

C. 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: Brian Ward

Date: 7/30/08

References

City of Bellevue. 2007. Generalized Zoning [Map]. City of Bellevue, IT Department, GIS Services. Obtained from city website on August 20, 2007: <http://www.ci.bellevue.wa.us/pdf/PCD/zoning_f.pdf>.

City of Bellevue. 2006. Comprehensive Plan, Volume 2, Subarea Plans and Transportation Facilities Plan, Factoria Sub Area Plan, Amended Ord. 5651. Obtained from city website on August 20, 2007: <http://www.ci.bellevue.wa.us/pdf/PCD/CompPlan_Vol_2_SP06.Factoria.pdf>.

Ecology. 2005. Stormwater Management Manual for Western Washington. Washington State Department of Ecology, Olympia, Washington. April 2005.

King County. 2005. King County, Washington, Surface Water Design Manual. King County Department of Natural Resources and Parks. January 24, 2005.

WDFW. 2003. Design of Road Culverts for Fish Passage. Olympia, Washington: Washington Department of Fish and Wildlife, Habitat Program, Environmental Engineering Section.

APPENDIX A

Figures and Plan Sheets

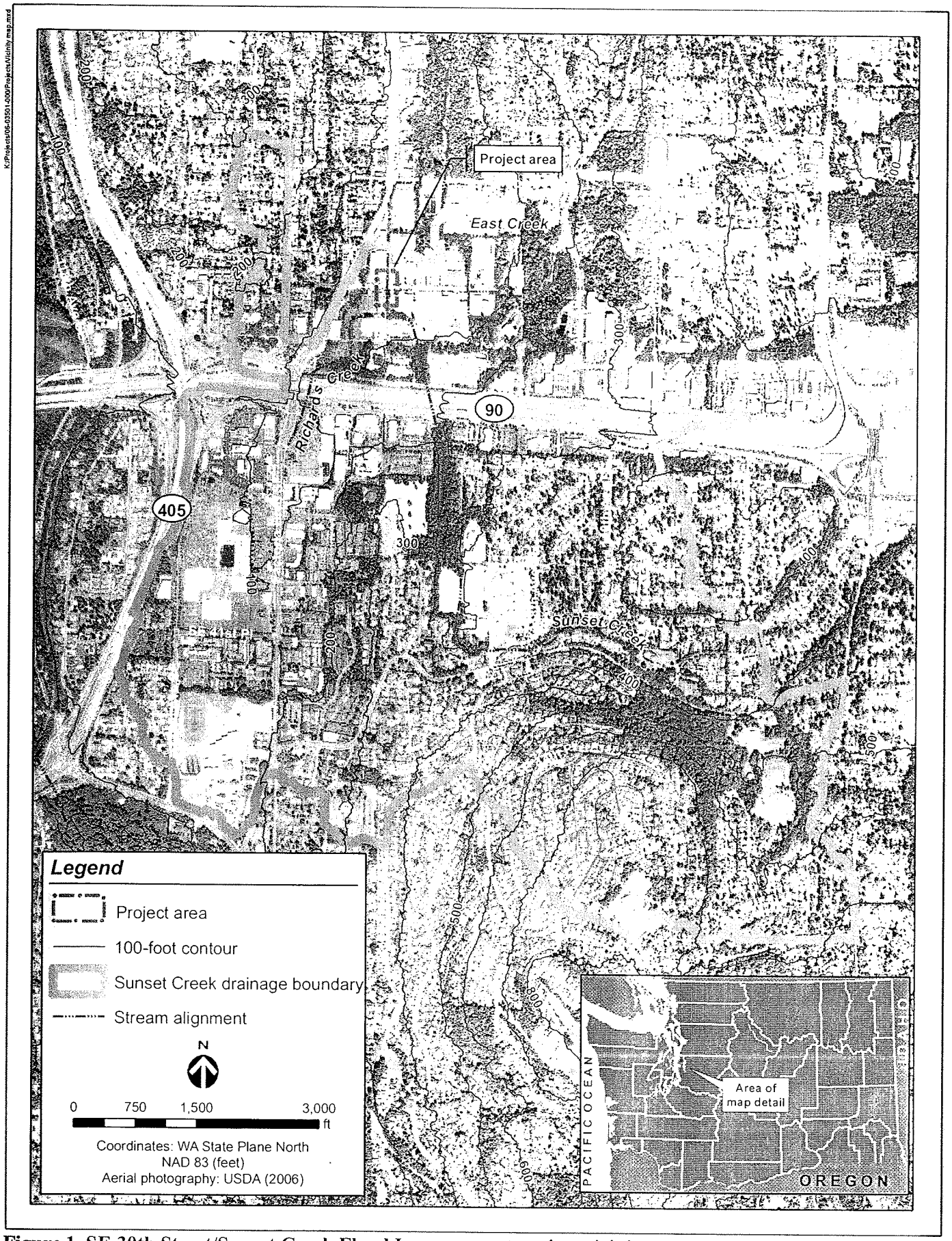


Figure 1. SE 30th Street/Sunset Creek Flood Improvement project vicinity.

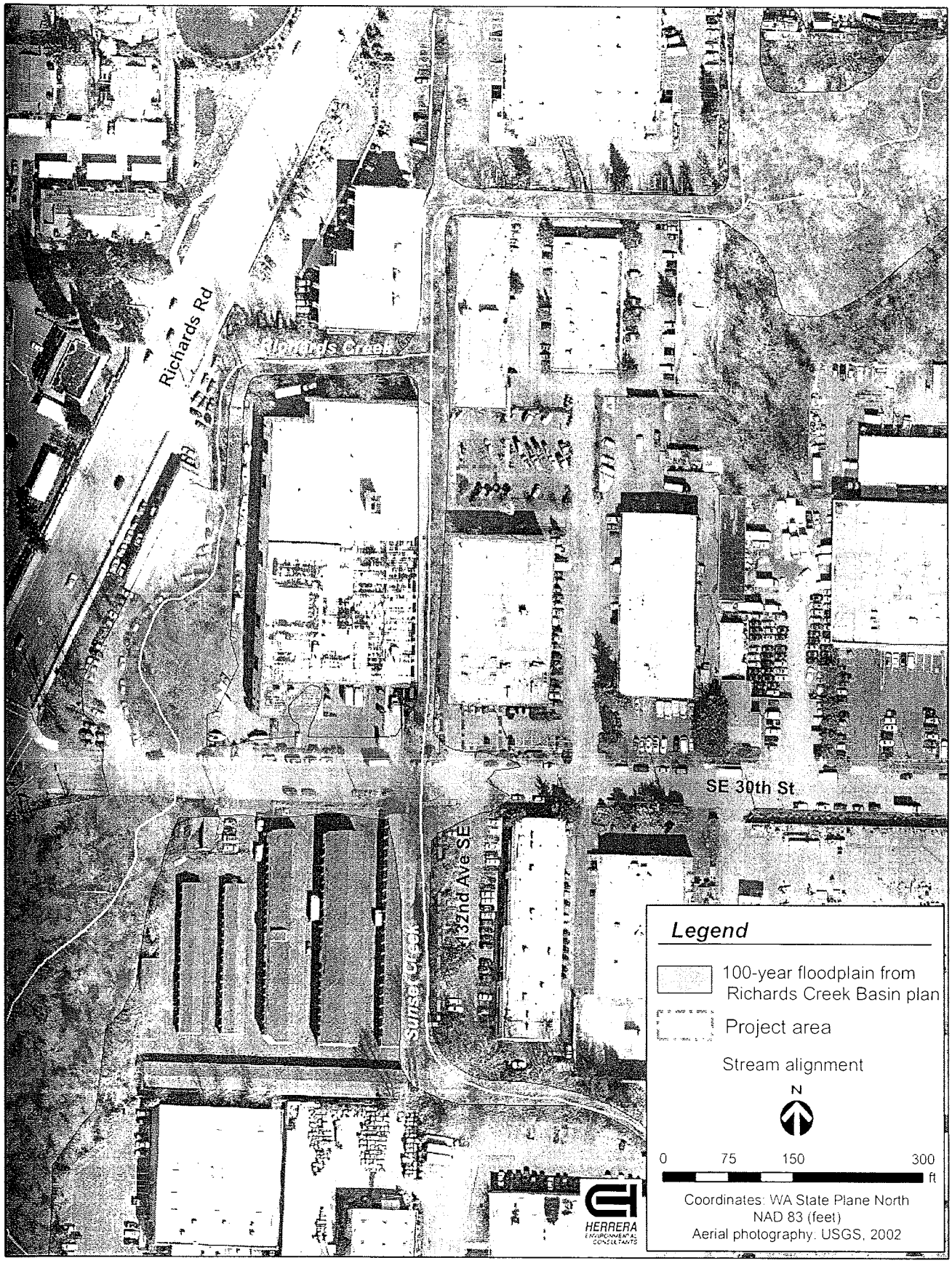
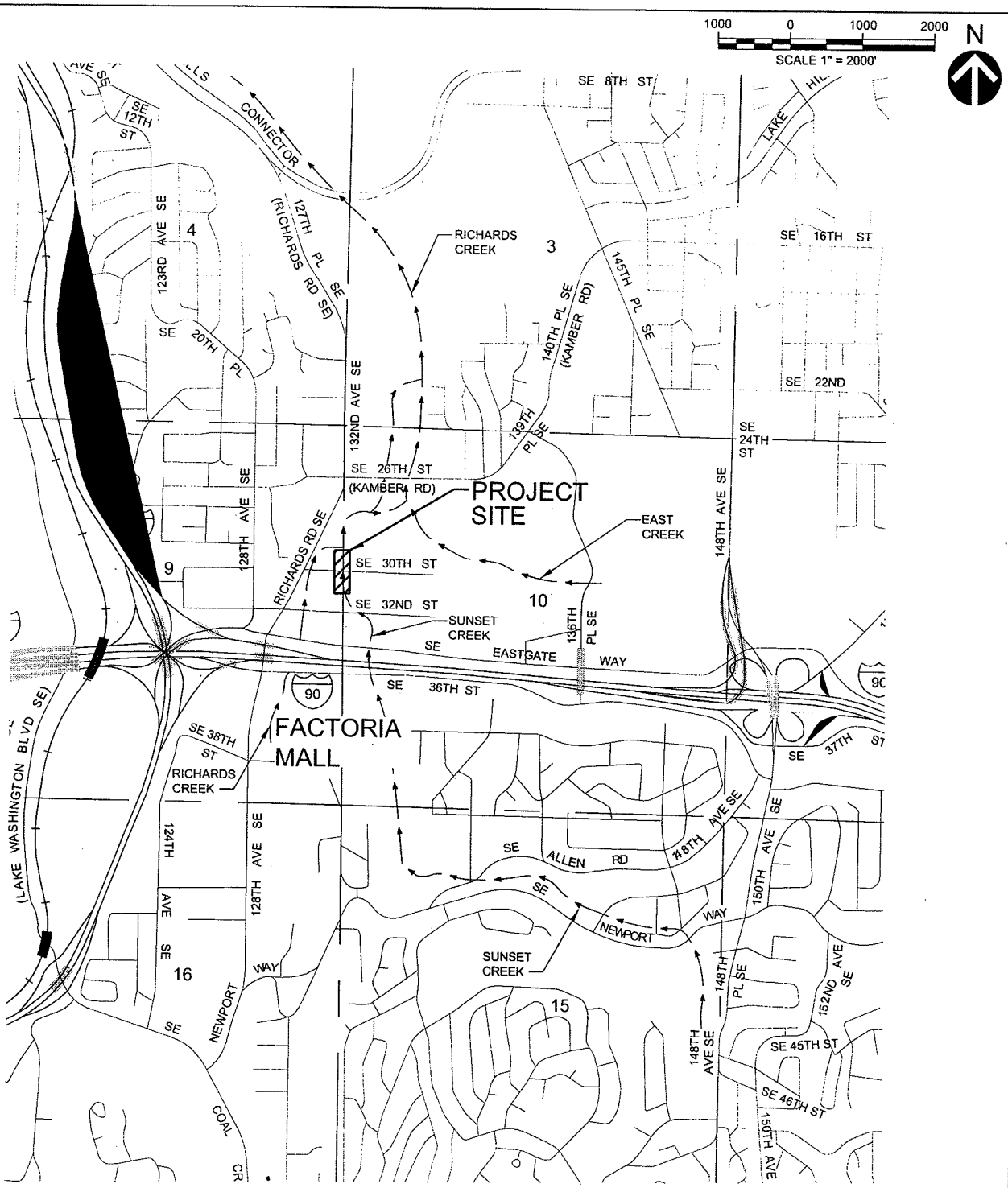


Figure 2. SE 30th Steet/Sunset Creek Flood Improvement project area.



NOTE:
RICHARDS CREEK IS TRIBUTARY TO KELSEY CREEK.

PROJECT SITE COORDINATES:
NORTH 1/2, SEC. 10, TWP. 24 N., RGE 5 E., W.M.
LATITUDE: 47°35'01.91"N
LONGITUDE: 122°10'21.95"W

Prepared by: C. BARTON	VICINITY MAP	Applicant: CITY OF BELLEVUE
HERRERA ENVIRONMENTAL CONSULTANTS 2200 Sixth Avenue Suite 1100 Seattle, Washington 98121-1820 206-441-9080 206-441-9108 FAX http://www.herrerainc.com	Application for: SE 30th / SUNSET CREEK CULVERT REPLACEMENT	Project Location: BELLEVUE, KING COUNTY, WASHINGTON
	Purpose: FLOW CONVEYANCE	SCALE AS NOTED
Date: DECEMBER 2007	Waterbody: SUNSET CREEK	SHEET 1 of 9

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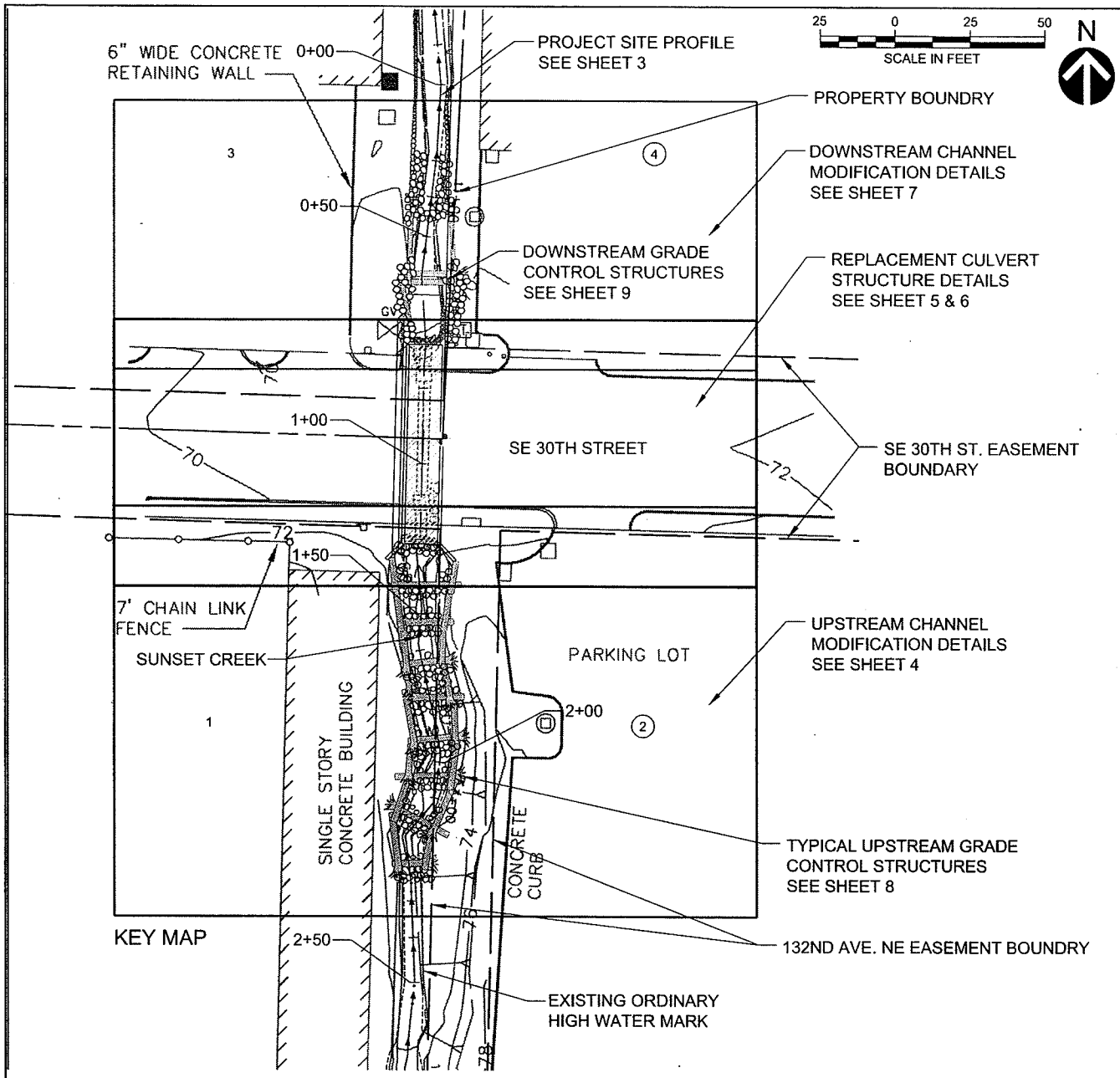

ADJACENT PROPERTY OWNERS:

1	SHURGARD MINI STORAGE (PARCEL #5453300244)
2	PRINTED CIRCUITS ASSEMBLY CORP. (PARCEL #5453300291)
3	SHURGARD MINI STORAGE (PARCEL #5453300194)
4	STEAD BUILDING (PARCEL #5453300183)

NOTE: BOUNDARIES FOR PROPERTIES ADJACENT TO PROJECT AREA DEFINED BY SE 30TH STREET ROAD RIGHT OF WAY. PROPERTIES (1) AND 2 SEPARATED BY 20' EASEMENT PARALLEL TO STREAM CORRIDOR. PROPERTIES 3 AND 4 SEPARATED BY PROPERTY BOUNDARY.

EXCAVATION AND FILL WITHIN EXISTING ORDINARY HIGH WATER MARK

QTY. OF EXCAVATION (CY)	120
QTY. OF FILL (CY)	130
AREA OF FILL (ACRE)	0.04

NOTE: EXCAVATED MATERIAL INCLUDES RIPRAP, NATIVE SOIL, AND STREAMBED SEDIMENT. TO BE DISPOSED OF AT LICENSED DISPOSAL OR REUSE FACILITY.

Prepared by: C. BARTON
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2200 Sixth Avenue
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Seattle, Washington
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http://www.herrerainc.com

Date: DECEMBER 2007

	DETAILED SITE SCHEMATIC	Applicant: CITY OF BELLEVUE
	Application for: SE 30th / SUNSET CREEK CULVERT REPLACEMENT	Project Location: BELLEVUE, KING COUNTY, WASHINGTON
	Purpose: FLOW CONVEYANCE	SCALE AS NOTED
	Waterbody: SUNSET CREEK	SHEET 2 of 9

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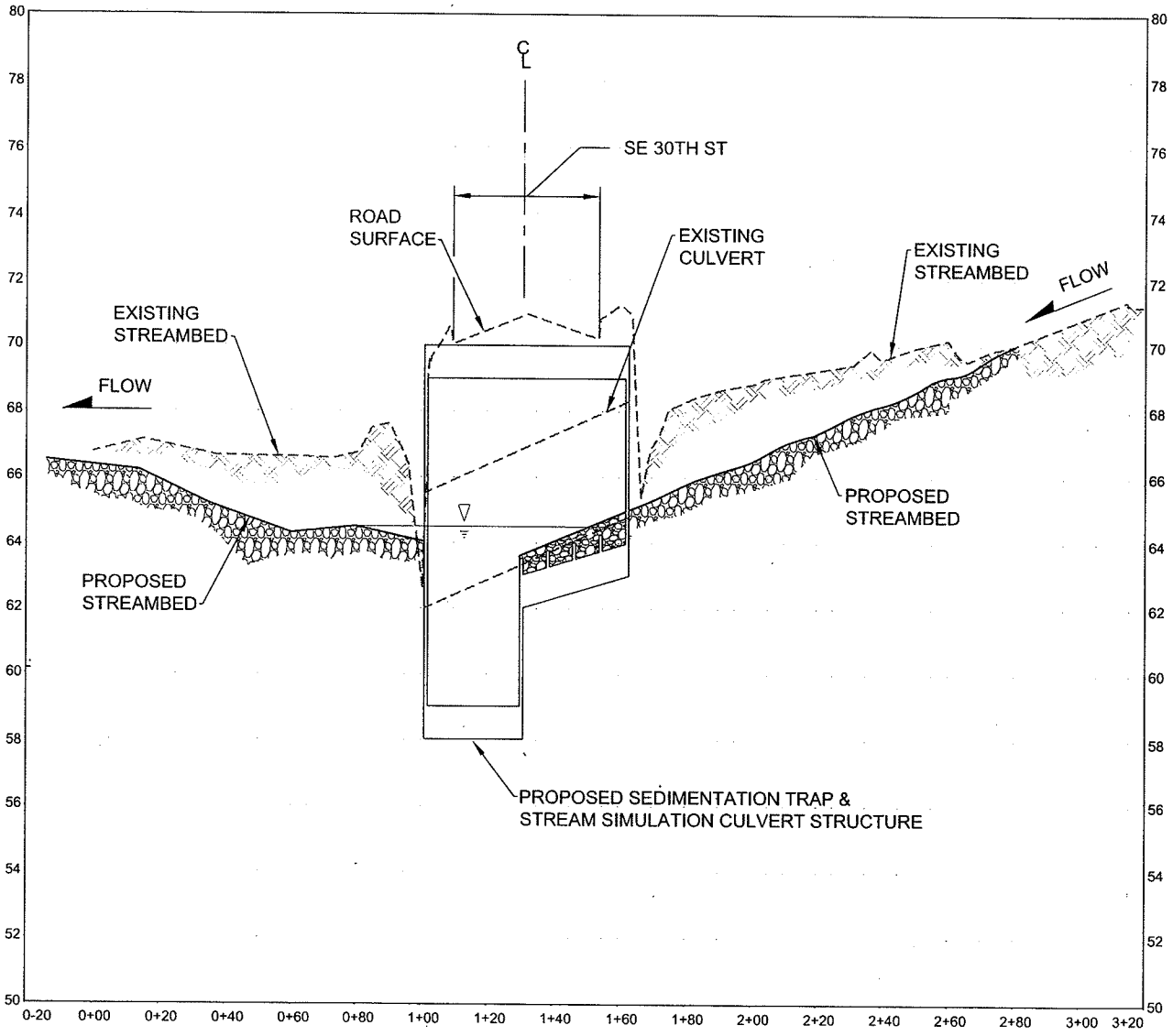

PROJECT PROFILE

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=10'

NOTE:
VERTICAL DATUM NAVD 88

Prepared by: C. BARTON HERRERA ENVIRONMENTAL CONSULTANTS 2200 Sixth Avenue Suite 1100 Seattle, Washington 98121-1820 206-441-9080 206-441-9108 FAX http://www.herrerainc.com Date: DECEMBER 2007	PROJECT PROFILE	Applicant: CITY OF BELLEVUE
	Application for: SE 30th / SUNSET CREEK CULVERT REPLACEMENT	Project Location: BELLEVUE, KING COUNTY, WASHINGTON
	Purpose: FLOW CONVEYANCE	SCALE AS NOTED
	Waterbody: SUNSET CREEK	SHEET 3 of 9

Path: O:\proj\Y2006\06-03501-001\CAD\Dwgs\JarpaU-3.dwg
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ADJACENT PROPERTY OWNERS:

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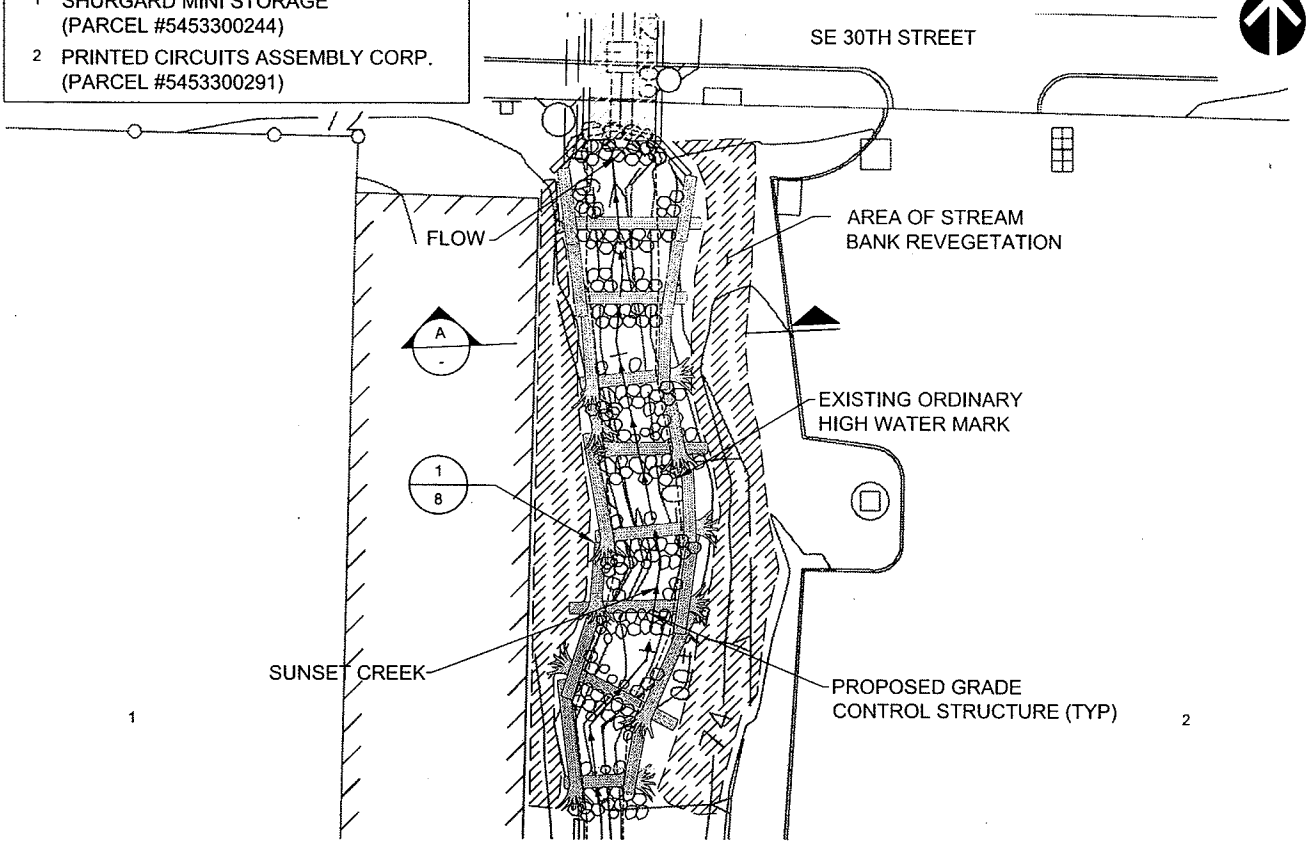
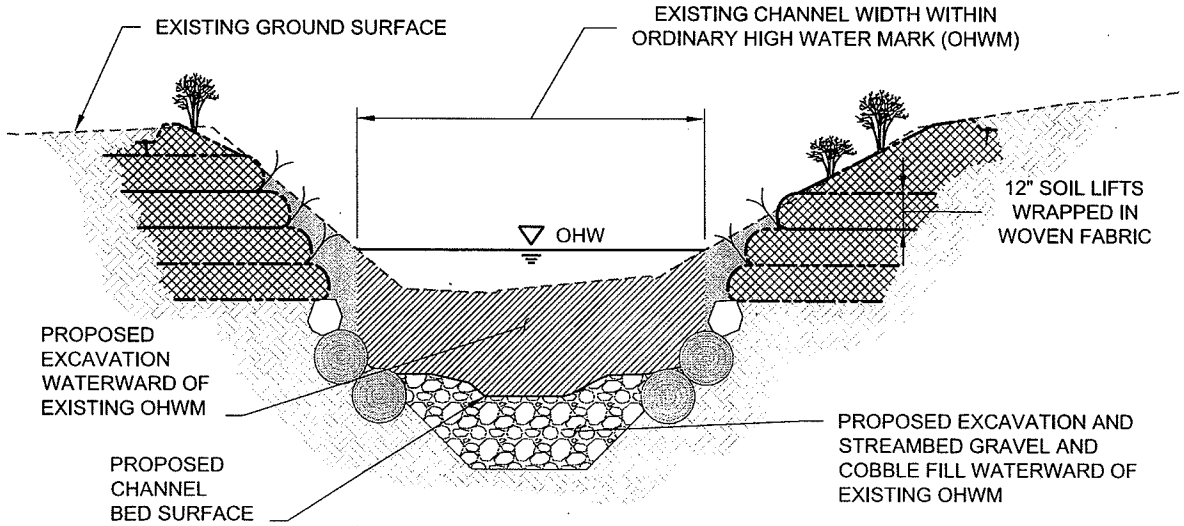
2 PRINTED CIRCUITS ASSEMBLY CORP. (PARCEL #5453300291)



PLAN VIEW - UPSTREAM CHANNEL MODIFICATION

SCALE: 1"=30'

-
2



SECTION - TYPICAL STREAM CHANNEL SECTION

SCALE: 1"=5'

A
-

Prepared by: C. BARTON HERRERA ENVIRONMENTAL CONSULTANTS 2200 Sixth Avenue Suite 1100 Seattle, Washington 98121-1820 206-441-9080 206-441-9108 FAX http://www.herreraInc.com Date: DECEMBER 2007	UPSTREAM CHANNEL MODIFICATION PLAN AND SECTION	Applicant: CITY OF BELLEVUE
	Application for: SE 30th / SUNSET CREEK CULVERT REPLACEMENT	Project Location: BELLEVUE, KING COUNTY, WASHINGTON
	Purpose: FLOW CONVEYANCE	SCALE AS NOTED
	Waterbody: SUNSET CREEK	SHEET 4 of 9

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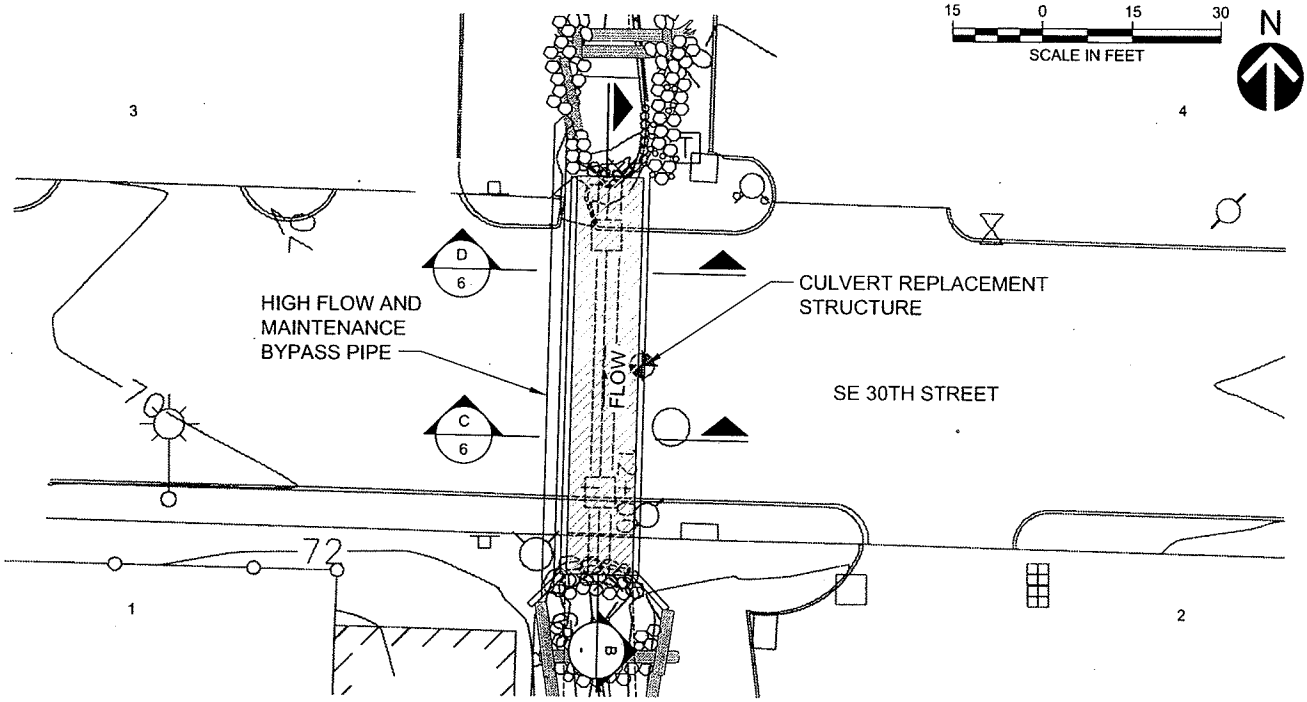
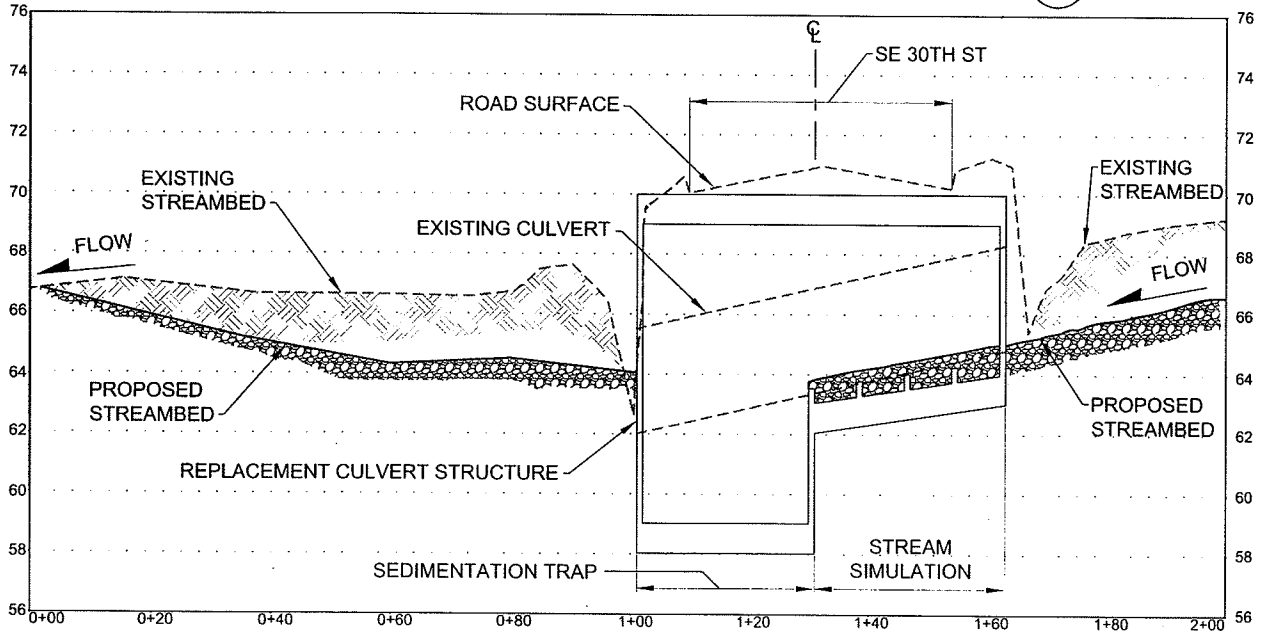


PLAN VIEW - REPLACEMENT CULVERT STRUCTURE (-/2)
SCALE: 1"=30'



REPLACEMENT CULVERT STRUCTURE PROFILE (B/-)
HORIZ SCALE: 1"=30'
VERT SCALE: 1"=6'

ADJACENT PROPERTY OWNERS:

1. SHURGARD MINI STORAGE (PARCEL #5453300244)
2. PRINTED CIRCUITS ASSEMBLY CORP. (PARCEL #5453300291)
3. SHURGARD MINI STORAGE (PARCEL #5453300194)
4. STEAD BUILDING (PARCEL #5453300183)

NOTE:
VERTICAL DATUM NAVD 88

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http://www.herrerainc.com

Date: DECEMBER 2007

REPLACEMENT CULVERT STRUCTURE PLAN AND PROFILE VIEW	Applicant: CITY OF BELLEVUE
Application for: SE 30th / SUNSET CREEK CULVERT REPLACEMENT	Project Location: BELLEVUE, KING COUNTY, WASHINGTON
Purpose: FLOW CONVEYANCE	SCALE AS NOTED
Waterbody: SUNSET CREEK	SHEET 5 of 9

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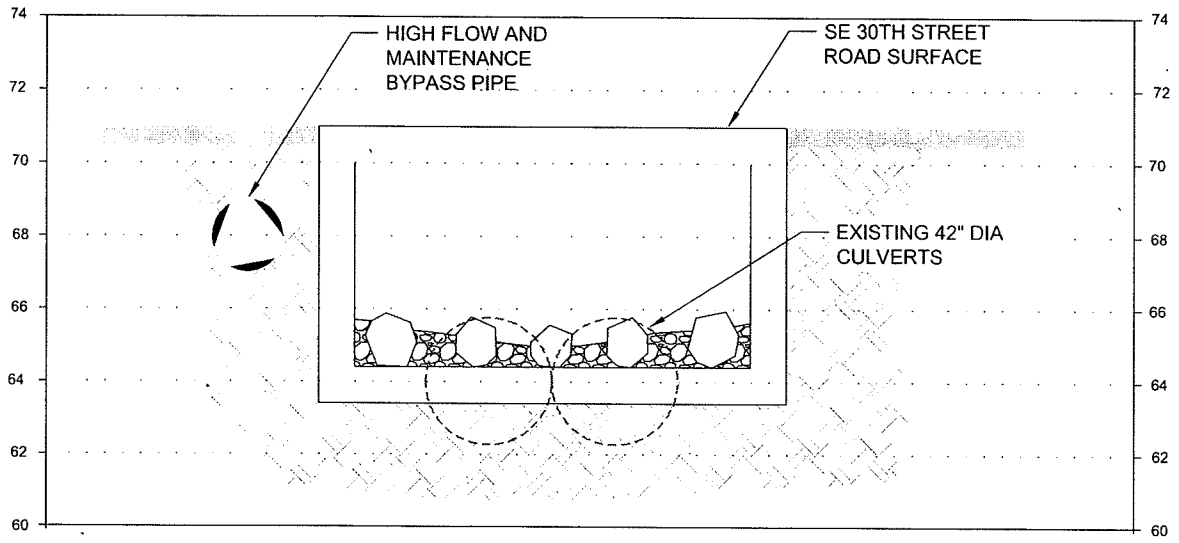

STREAM SIMULATION SECTION
SCALE: 1"=5'

C
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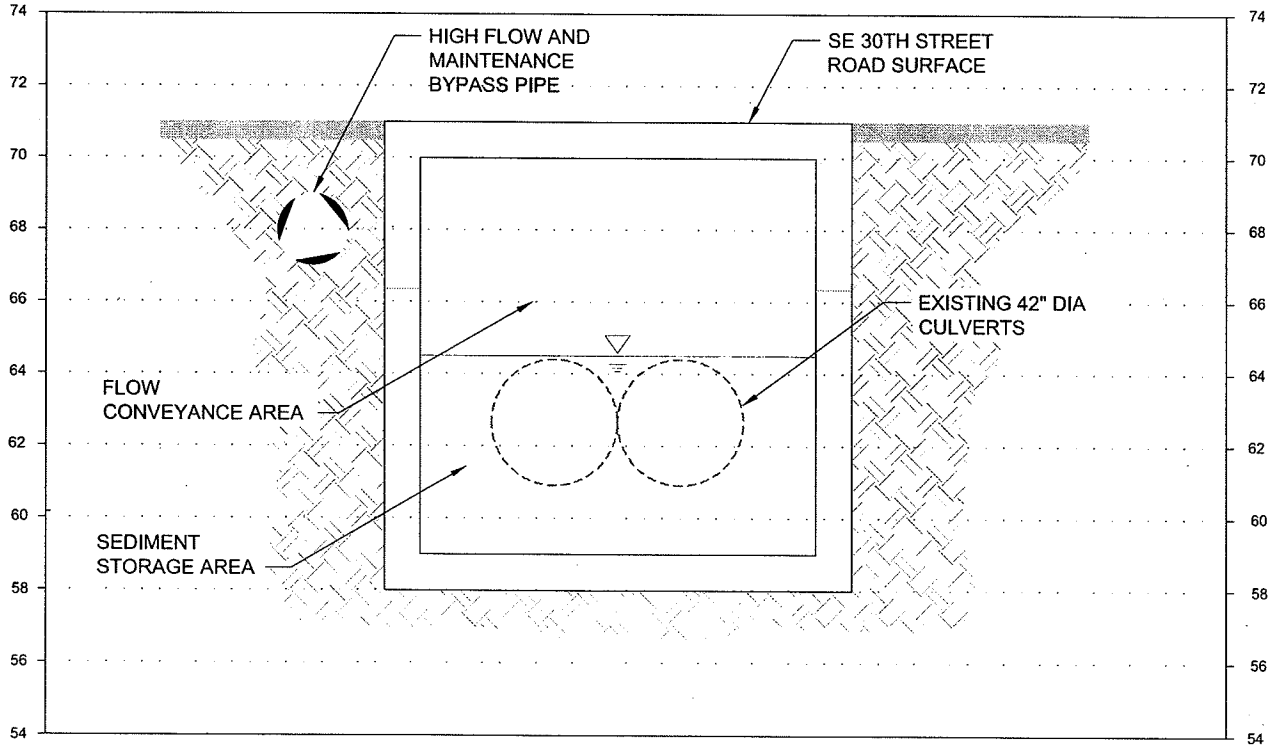

SEDIMENT TRAP SECTION
SCALE: 1"=5'

D
5

NOTE:
VERTICAL DATUM NAVD 88

Prepared by: C. BARTON HERRERA ENVIRONMENTAL CONSULTANTS 2200 Sixth Avenue Suite 1100 Seattle, Washington 98121-1820 206-441-9080 206-441-9108 FAX http://www.herrerainc.com Date: DECEMBER 2007	REPLACEMENT CULVERT STRUCTURE SECTIONS VIEW	Applicant: CITY OF BELLEVUE
	Application for: SE 30th / SUNSET CREEK CULVERT REPLACEMENT	Project Location: BELLEVUE, KING COUNTY, WASHINGTON
	Purpose: FLOW CONVEYANCE	SCALE AS NOTED
	Waterbody: SUNSET CREEK	SHEET 6 of 9

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ADJACENT PROPERTY OWNERS:

3 SHURGARD MINI STORAGE (PARCEL #5453300194)

4 STEAD BUILDING (PARCEL #5453300183)

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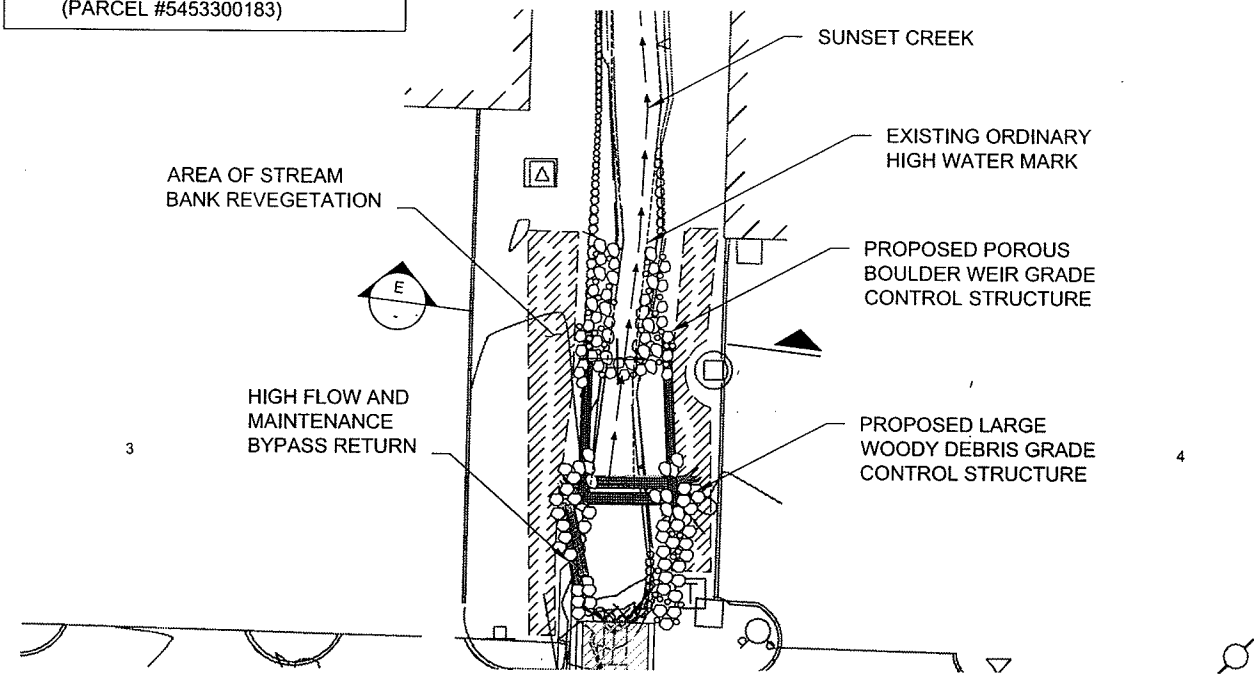

PLAN VIEW - DOWNSTREAM CHANNEL MODIFICATION (-/2)

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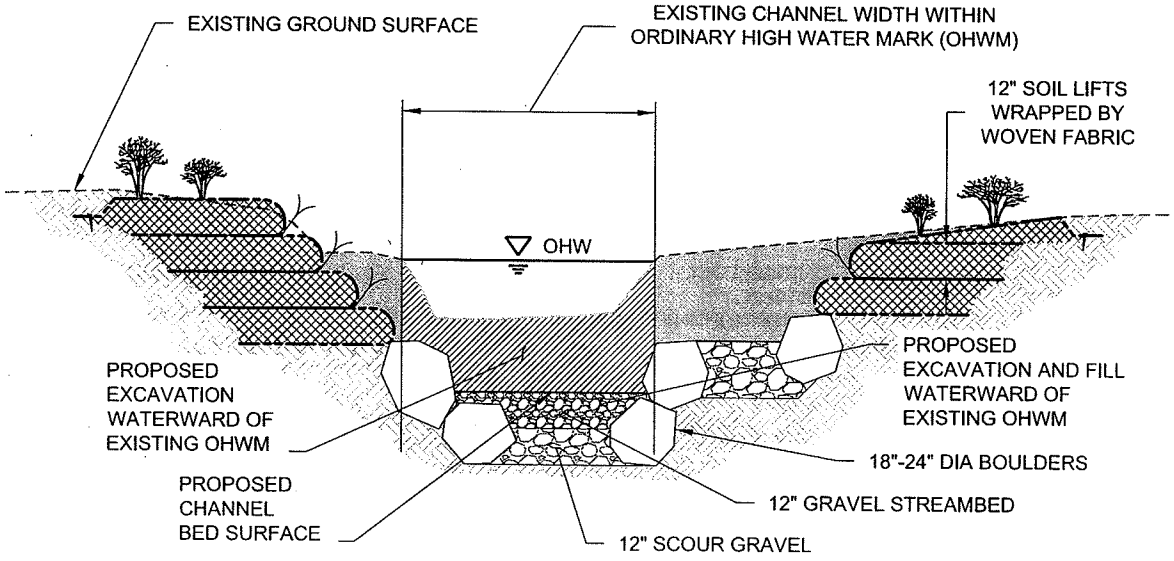

TYPICAL SECTION - DOWNSTREAM CHANNEL MODIFICATION (E/-)

SCALE: 1"=5'

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	Application for: SE 30th / SUNSET CREEK CULVERT REPLACEMENT	Project Location: BELLEVUE, KING COUNTY, WASHINGTON
	Purpose: FLOW CONVEYANCE	SCALE AS NOTED
	Waterbody: SUNSET CREEK	SHEET 7 of 9

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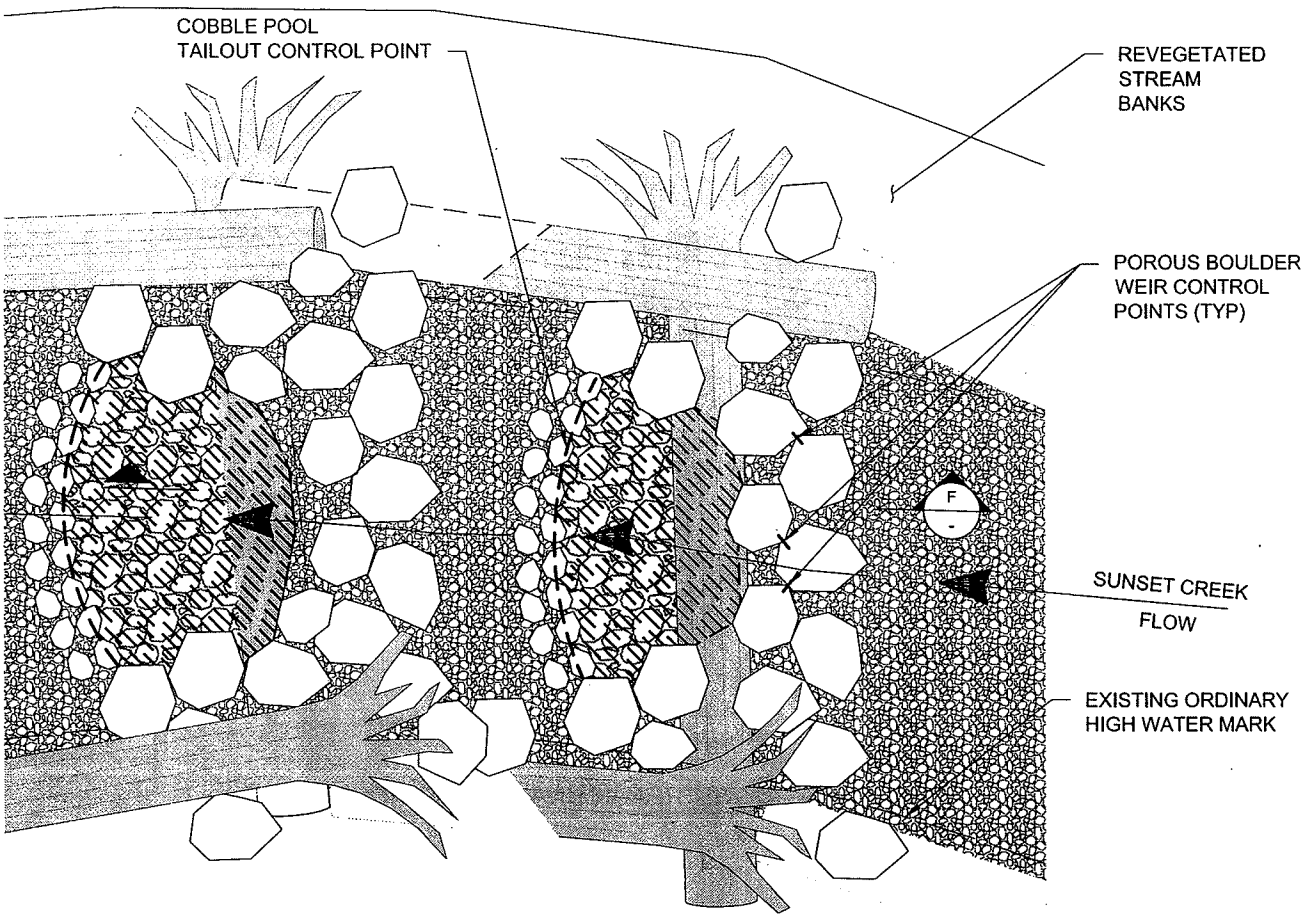
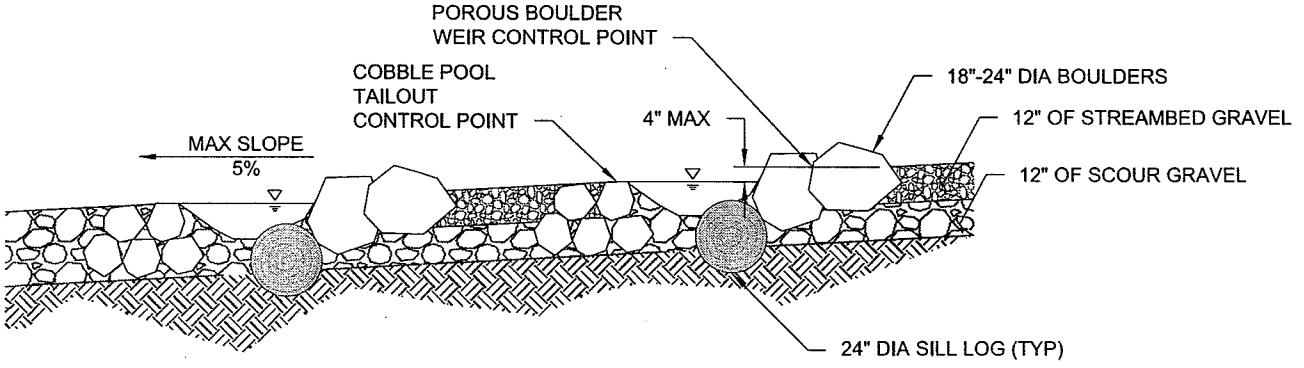


PLAN - TYPICAL UPSTREAM GRADE CONTROL (1 / -)
SCALE: 1"=5'



SECTION - TYPICAL UPSTREAM GRADE CONTROL (F / -)
SCALE: 1"=5'

Prepared by: C. BARTON	UPSTREAM GRADE CONTROL DETAILS PLAN AND SECTION	Applicant: CITY OF BELLEVUE
HERRERA ENVIRONMENTAL CONSULTANTS 2200 Sixth Avenue Suite 1100 Seattle, Washington 98121-1820 206-441-9080 206-441-9108 FAX http://www.herrerainc.com	Application for: SE 30th / SUNSET CREEK CULVERT REPLACEMENT	Project Location: BELLEVUE, KING COUNTY, WASHINGTON
	Purpose: FLOW CONVEYANCE	SCALE AS NOTED
Date: DECEMBER 2007	Waterbody: SUNSET CREEK	SHEET 8 of 9

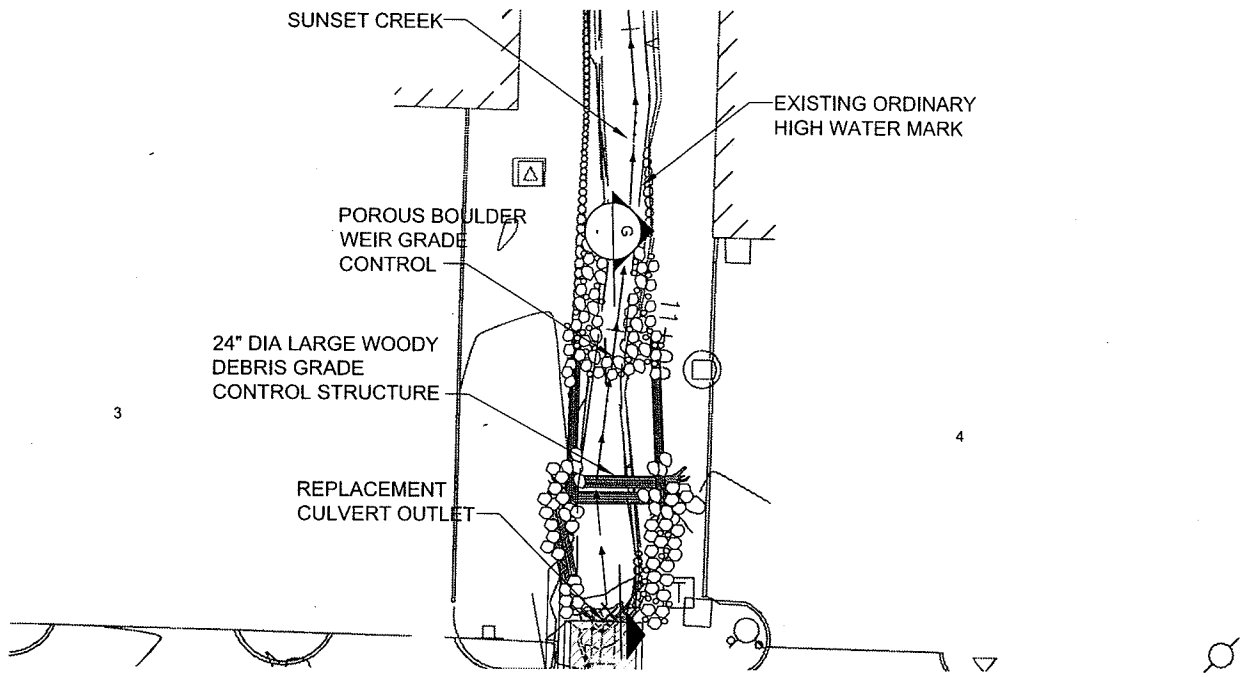
Path: C:\proj\Y2006\06-03501-001\CAD\Dwgs\JarpaU-8.dwg
Plot Date: 1/22/2008 9:37 AM Cad User: Wojciech Wieszczelinski

ADJACENT PROPERTY OWNERS:

3 SHURGARD MINI STORAGE
(PARCEL #5453300194)

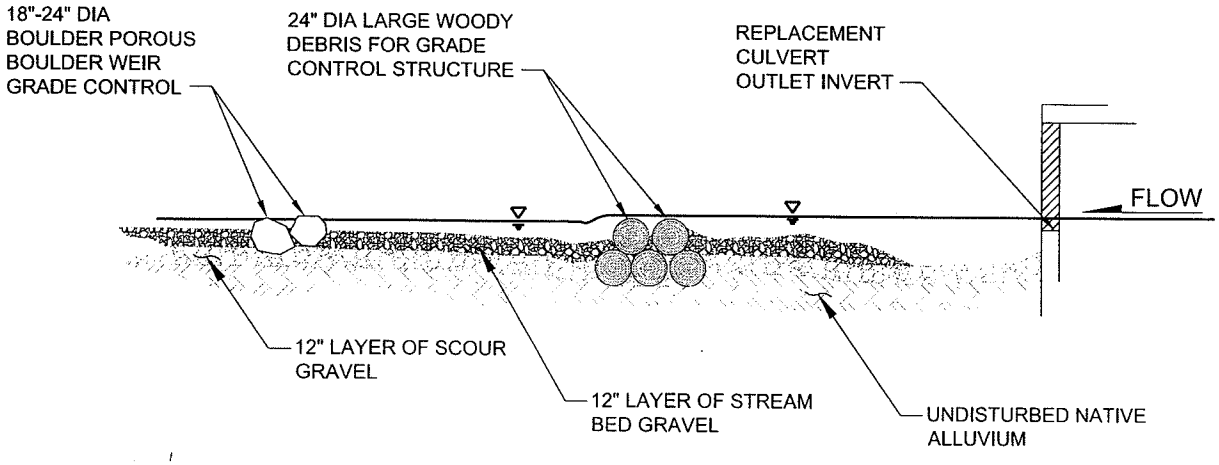
4 STEAD BUILDING
(PARCEL #5453300183)

N



PLAN - DOWNSTREAM GRADE CONTROL STRUCTURES

SCALE: 1"=30'



PROFILE - DOWNSTREAM GRADE CONTROL STRUCTURES

SCALE: 1"=10'

Prepared by: C. BARTON HERRERA ENVIRONMENTAL CONSULTANTS 2200 Sixth Avenue Suite 1100 Seattle, Washington 98121-1820 206-441-9080 206-441-9108 FAX http://www.herreraInc.com Date: DECEMBER 2007	DOWNSTREAM CHANNEL MODIFICATION PLAN AND PROFILE	Applicant: CITY OF BELLEVUE
	Application for: SE 30th / SUNSET CREEK CULVERT REPLACEMENT	Project Location: BELLEVUE, KING COUNTY, WASHINGTON
	Purpose: FLOW CONVEYANCE	SCALE AS NOTED
	Waterbody: SUNSET CREEK	SHEET 9 of 9

Path: O:\proj\Y2006\06-03501-001\CAD\Dwgs\JarpaU-9.dwg
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