DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 100th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: Abe Santos, Utilities Department

LOCATION OF PROPOSAL: 14617 SE 45th Street

NAME & DESCRIPTION OF PROPOSAL:
Clearing and Grading Permit to abandon in-place 310 ft. of iron or asbestos concrete (AC) water main and replace with high-density polyethylene (HDPE) or ductile iron water main within an existing utility easement connecting SE 45th Street and SE 45th Place, while traversing critical area steep slopes and crossing Sunset Creek.

FILE NUMBER: 10-112785 XD

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

☐ There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on _____.

X This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on July 29, 2010.

☐ This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on _____. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5 p.m. on _____.

This DNS may be withdrawn at any time if the proposal is modified so that it is likely to have significant adverse environmental impacts; if there is significant new information indicating, or on, a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project): or if the DNS was procured by misrepresentation or lack of material disclosure.

Environmental Coordinator

July 15, 2010
Date

OTHERS TO RECEIVE THIS DOCUMENT:
State Department of Fish and Wildlife
State Department of Ecology,
Army Corps of Engineers
Attorney General
Muckleshoot Indian Tribe

WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

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

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

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

A. BACKGROUND

1. Name of proposed project, if applicable: AC Water Main Replacement Site 13 – Somerset Woods

2. Name of applicant: City of Bellevue Utilities
3. Address and phone number of applicant and contact person:

Abe Santos

450 110th Ave NE, Bellevue, WA 98009

425-452-6456

4. Date checklist prepared: May 4, 2010
5. Agency requesting checklist: City of Bellevue, Development Services Department
6. Proposed timing or schedule (including phasing, if applicable): Construction is anticipated to begin after June 1, 2010 and be complete by December 31, 2010.

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

Mitigation planting is planned following completion of the water main replacement within the stream buffer. Replacing private landscaping along the utility easement between the houses is also planned to follow completion of construction.

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MAY 21 2010
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8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- Geotechnical Report by Landau and Associates, dated April 13, 2010.

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.

- Right of Way Use Permit

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

- Right of Way Use Permit
- Clear and Grade Permit
- SEPA Threshold Determination (environmental review)

A critical areas land use permit is not required for work in the critical area or critical area buffer because the work is classified as repair and maintenance of an existing utility per LUC 20025H.055.

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 proposal is to abandon in place 310 feet of 12" diameter iron and AC water main and replace with HDPE or ductile iron water main within the two street Rights-of-Way, SE 45th St, and SE 45th Place. The replacement water main will follow the alignment of the existing water main between houses on each street and then down into the stream buffer of Sunset Creek. Unlike the existing water main, the new water main will be routed over an existing three foot diameter culvert that carries the flow of Sunset Creek.

The construction corridor will be approximately ten feet wide and will be fenced of with erosion control fencing prior to beginning construction. The trench for the new pipe will be approximately 4 feet wide and three to four feet deep. Total excavation is estimated at 200 cubic yards and estimated fill is also estimated at 200 yards. The construction corridor, between the existing homes will be restored with similar plants and materials. The disturbed stream buffer and the area over the stream culvert will be replanted with a mix of native trees and plants selected for shady conditions. English Ivy dominates the stream buffer ground cover. It is anticipated that the Ivy will re-establish its dominance across the construction corridor within one to three years. A combination of re-seeding, application of mulch and planting will be used to stabilize soil and the stream buffer slopes.

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 water main replacement project will start in the middle of the cul-de-sac on SE 45th St, continue south and east between residences at 14617 and 14625 SE 45th St, continue down into the Sunset Creek stream buffer and then continue along the existing easement between 14708 and 14712 SE 45th Place, before being tied into an existing water main in the center of SE 45th Place.

B. ENVIRONMENTAL ELEMENTS

1. **Earth**

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other .

The site is relatively flat with slopes below 5% grade at the two ends of the project on SE 45th Street and SE 45th Place. The middle section of the project includes steep slopes up to 40% grade in the stream buffer area of Sunset Creek. The new water main will flatten out as it crosses above sunset creek in existing rock and soil fill.

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

The steepest slope on the site is 40%.

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.

Potholes were dug on the site at two locations. The geo-tech report describes the subsurface soil as "wet, brown, loose to medium dense, silty sand with gravel to silty, gravelly sand. These soils are consistent with the geologic map of King County that describes the general area of the project as "either glacial till, the Blakely Formation (sandstone), or alluvial deposits (Alluvium)." No soil conditions were found that would cause re-design of the project or exceptional design features.

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

No. No evidence was found of unstable soils in the vicinity of the site.

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

The project will include approximately 200 cubic yards of excavation and 200 yards of fill. Bedding material for the new water main will come from off site, but may be supplemented by native materials.

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

Erosion could occur during the trenching for the replacement water main. A combination of sediment control inserts in catch basins, street sweeping, placing erosion control fencing along the construction corridor and the placement of plastic and mulch over disturbed areas will prevent erosion from leaving the site.

Erosion will be controlled through the application of required erosion control BMPs, per BCC 23.76.

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

Because the project includes trenching into existing streets and then grinding and overlay in the disturbed street sections, the project is currently covered along approximately 20 % of its length. No additional impervious surfaces will be added with this project.

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

A combination of sediment control inserts in catch basins, street sweeping, placing erosion control fencing along the construction corridor and the placement of plastic and mulch over disturbed areas will prevent erosion from leaving the site.

TO BE COMPLETED BY APPLICANT

EVALUATION FOR AGENCY USE ONLY

a. **Air**

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

The project could create emissions to the air from construction equipment engines and dust from the actual trenching and excavation.

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

No.

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

Shut off equipment rather than idling the equipment during breaks in construction. Use equipment that is properly tuned and in good repair.

TO BE COMPLETED BY APPLICANT

EVALUATION FOR AGENCY USE ONLY

3. **Water**

a. Surface:

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

Sunset Creek. The project includes crossing over sunset creek in soil on top of an existing culvert. No work is proposed below Ordinary High Water.

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

Yes. The project includes work within a ten foot wide construction corridor. A trench approximately four feet wide will be excavated within the stream buffers and then across fill that was placed over a culvert. The culvert and fill were probably placed with the original pipe installation which was approximately 30 years ago. See plans submitted with this checklist.

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

No fill or dredging will be done below ordinary high water. The project estimate is for 200 cubic yards of excavation and 200 cubic yards of fill.

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

No.

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

No.

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.

b. Ground:

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

No.

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

None.

c. Water runoff (including stormwater):

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

This project should only have the potential to cause storm water to leave the construction site during construction. To avoid this potential, the contractor is to keep the streets clean, install sediment barriers in any catch basins serving the project site. The construction corridor will be fenced prior to beginning construction and any soil that is stored on site will be covered with plastic. Once the replacement water main has been installed, the contractor will use combination of native species plantings, mulch and appropriate erosion control seed to secure the stream buffer portions of the project. The areas between the houses will be restored and mulch used to cover any residual exposed soils.

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

No. Temporary Erosion Control measures should keep erodible soil out of Sunset Creek.

Erosion control BMPs will be in place to prevent erosion per BCC 23.76.

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

4. **Plants**

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

X deciduous tree: alder, maple, aspen, other

X evergreen tree: fir, cedar, pine, other

X shrubs
——— grass
——— pasture
——— crop or grain
——— wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

Ravine is heavily dominated by English Ivy. No significant trees in the critical area or critical area buffer will be removed. All areas of temporary disturbance will be restored to preexisting condition.

——— water plants: water lily, eelgrass, milfoil, other
——— other types of vegetation

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

Areas between the residences on SE 45th St and SE 45th Place include retaining walls and ornamental trees and shrubs with limited ground cover. The area within the 50 foot stream buffer is matted with English Ivy and includes a limited number of native trees and shrubs. The trees include broad leaf maple and cedar.

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

No known threatened or endangered species on or near the site.

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

Landscape mitigation plan includes six new Red Alder and Western Red Cedar trees, eight Red-Osier Dogwood, eight Salmonberry, and eight Vine Maple.

5. **Animals**

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

birds: hawk, eagle, songbirds, other:
mammals: deer, raccoon, possum:
fish: None:

The stream is categorized as a Type N stream and is not considered fish bearing.

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

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

None

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

Replace small trees and shrubs that are removed with the construction with native trees and shrubs.

6. **Energy and natural resources**

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

None.

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

No.

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

Replacing the existing 12"pipe with another 12" pipe keeps the electrical pumping costs down compared to replacing with a smaller pipe.

7. **Environmental health**

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

None.

1) Describe special emergency services that might be required.

During construction, the project may need emergency services for any accident or injury. No long term demand for emergency services will be required.

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

Use iron and HDPE pipes to replace existing pipe. Abandon existing pipe in place. This reduces potential exposure to the existing AC pipe.

b. **Noise**

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

Noise in the project site area is limited to residential traffic noise and yard maintenance equipment.

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

Noise from utility repair and construction is exempt between the hours of 7:00 a.m. and 10:00 p.m. on weekdays and 9:00 a.m. and 10:00 p.m. on weekends per BCC 9.18.

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

Limit idle time for equipment. Use equipment in good working order with mufflers that are in good repair.

8. **Land and shoreline use**

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

The current use of the site is single family residential. The proposed project is limited to an existing utility easement across four residential lots, that runs from SE 45th St to SE 45th Place.

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

No.

c. Describe any structures on the site.

The utility easement runs across portions of four lots. It runs between two houses on SE 45th Street and between two houses on SE 45th Place.

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

No.

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

Single Family Residential – R 3.5

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

Single Family Medium – SF M

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

N/A

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

Yes. Geotechnical Critical area due to presence of steep slopes and non-fish bearing stream segment that is a Critical Area and Critical Area Buffer for the areas within 50 feet of the Ordinary High Water Mark of Sunset Creek.

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

None.

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

None.

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

None.

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

The proposed project is designed to replace an old pipe section using new materials that will enhance the surrounding neighborhood by helping to provide a more reliable water supply system.

9. **Housing**

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

None.

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

None.

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

None.

10. **Aesthetics**

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

N/A

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

N/A

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

N/A

11. **Light and glare**

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

N/A

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

N/A

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

N/A

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

N/A

12. **Recreation**

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

N/A

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

N/A

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

N/A

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.

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

None.

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

None.

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.

SE 45th Street and SE 45th Place.

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

No.

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

N/A

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).

None.

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

No.

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

None.

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

Retain access to adjacent houses from the street. Traffic control to allow access to surrounding neighborhoods.

15. **Public services**

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

No.

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

Keep access to adjacent residential neighborhoods during construction.

16. **Utilities**

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, 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 which might be needed.

Project is replacement of old water main as part of regular replacement program for system reliability.

C. SIGNATURE

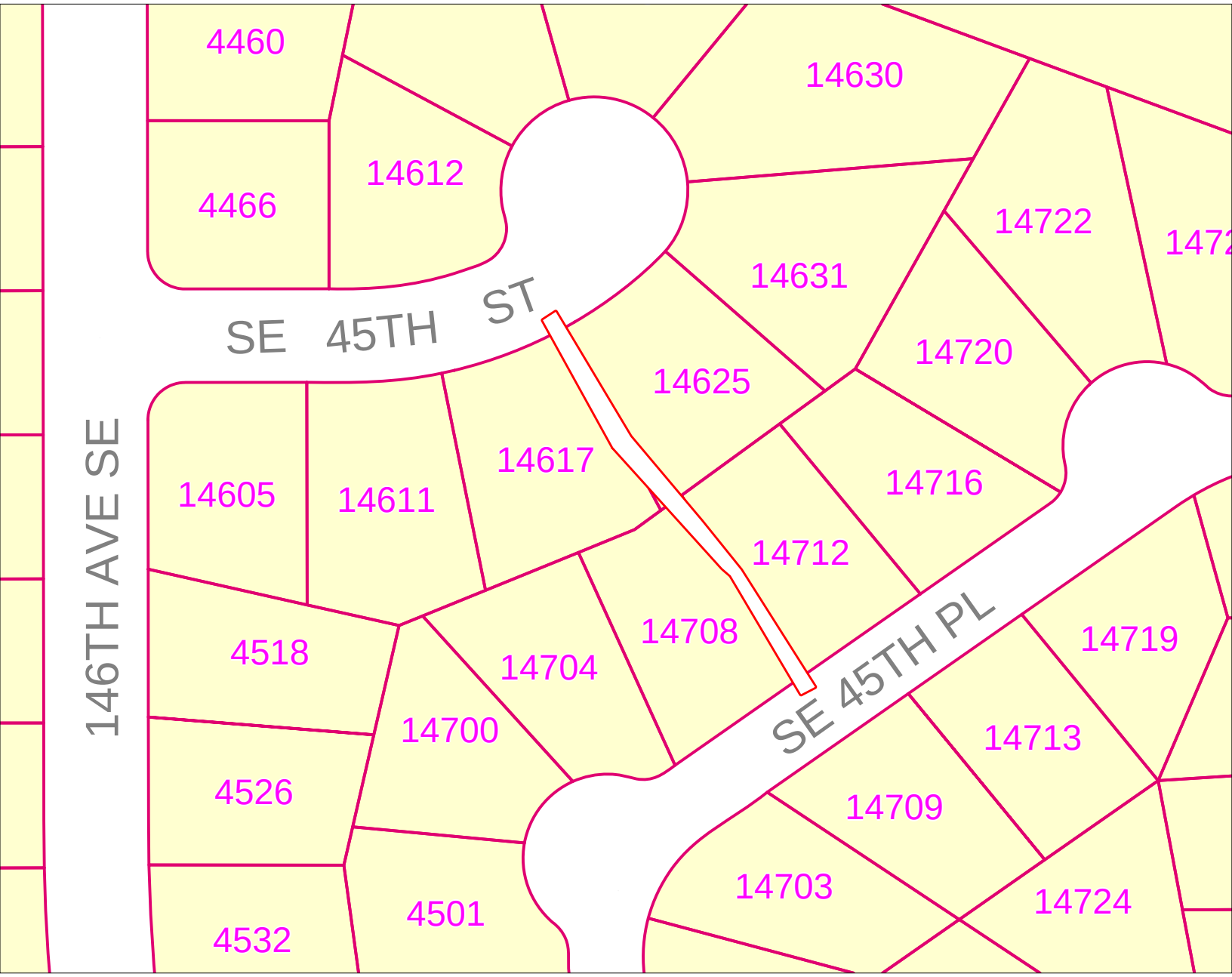
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:

Date Submitted: 5/5/10

REVIEWED
By Kevin LeClair at 2:16 pm, Jul 13, 2010

10-112785-XD Phase 2 AC Water Main Replacement - Vicinity Map



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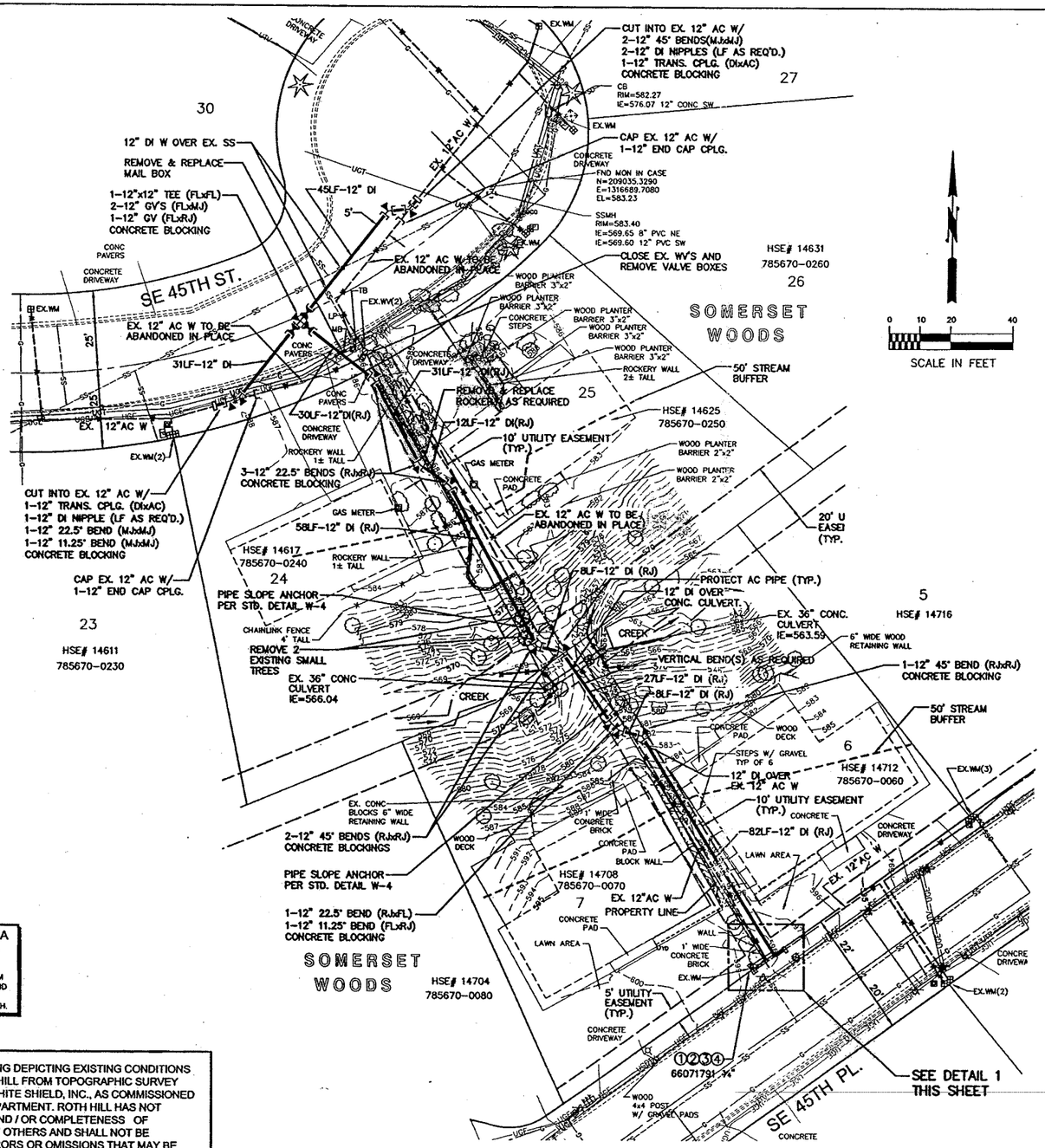
Thursday, June 03, 2010 11:54 AM



SITE 13

GENERAL WATER CONSTRUCTION NOTES:

WORK IN PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH CONDITIONS OF CITY OF BELLEVUE RIGHT OF WAY USE PERMIT. WORK ON PRIVATE PROPERTY SHALL COMPLY WITH CONDITION OF CRITICAL AREAS PERMIT, CSWPPP, AND EASEMENTS.

CONTACT UTILITY LOCATES AND POTHOLE UTILITIES A MINIMUM OF 200 FEET IN ADVANCE OF WORK, TO DETERMINE LOCATION AND DEPTH OF UTILITIES. ADJUST DEPTH AND LOCATION OF NEW WATER MAINS AND SERVICES, AS REQUIRED, TO AVOID EXISTING UTILITIES.

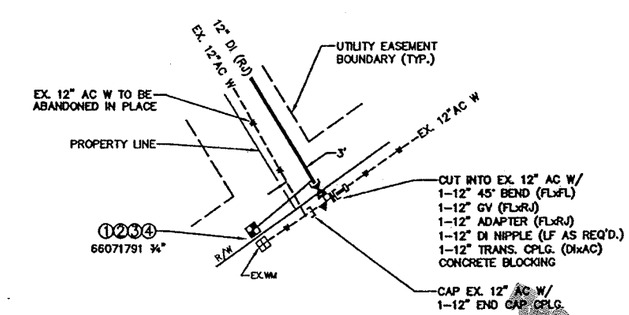
WATER-SEWER CROSSINGS MUST COMPLY WITH CURRENT DOE MANUAL: "CRITERIA FOR SEWAGE WORKS DESIGN."

POTHOLE EXISTING AC WATER PIPE IN ADVANCE OF WORK AND TAKE APPROPRIATE MEASURES NECESSARY TO PROTECT STABILITY OF EXISTING AC WATER MAIN PIPE FROM THE POTENTIAL ADVERSE EFFECTS OF CLOSE CONSTRUCTION OF THE NEW WATER MAIN.

SEE SITE 13 TESC ON SHT 15B.

WATER SERVICE CONSTRUCTION NOTES:

1. EXISTING SUBSTANDARD SERVICE LINES SHALL BE REPLACED WITH 1-INCH, 1 1/2-INCH, OR 2-INCH (MATCH EXISTING) TYPE K COPPER SERVICE LINE. CRIMP OR CAP EXISTING SERVICE LINE AND ABANDON IN PLACE.
2. REMOVE AND DISPOSE OF EXISTING SETTER, FURNISH AND INSTALL NEW 1- INCH SETTER PER STANDARD DETAIL NO. W-23, ITEM E OR W-24, ITEM D, WITH ADAPTERS FOR 3/4" WATER METER. CONNECT SETTER TO WATER SERVICE LINE AND CUSTOMER SERVICE LINE.
3. REMOVE AND DISPOSE OF EXISTING WATER METER BOX, FURNISH AND INSTALL NEW MID STATES PLASTIC MODEL MSBCF 1324-12 BOX. FOR 1 1/2-INCH AND 2-INCH SERVICES, REPLACE WITH MID STATES PLASTIC MODEL MSBCF 1730-12 OR 1730 - 18. NEW METER BOX SHALL BE OLYMPIC FOUNDRY SM 30 IN SIDEWALKS OR AREAS WITH VEHICULAR TRAFFIC.
4. INSTALL NEW METER SUPPLIED BY THE CITY OF BELLEVUE. RETURN EXISTING METER TO THE CITY.



DETAIL 1
NTS

Received
MAY 21 2010
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BURIED UTILITIES IN AREA
CALL BEFORE YOU DIG
1-800-424-5555
EXISTING UTILITIES SHOWN ARE FROM THE BEST AVAILABLE INFORMATION AND NO GUARANTEE IS MADE AS TO THE EXACT SIZE, TYPE, LOCATION OR DEPTH.

THE PROJECT BASE DRAWING DEPICTING EXISTING CONDITIONS WAS DEVELOPED BY ROTH HILL FROM TOPOGRAPHIC SURVEY DRAWINGS PROVIDED BY WHITE SHIELD, INC., AS COMMISSIONED BY THE C.O.B. UTILITIES DEPARTMENT. ROTH HILL HAS NOT VERIFIED THE ACCURACY AND / OR COMPLETENESS OF INFORMATION PROVIDED BY OTHERS AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS.

PERMIT PLAN

THIS DRAWING REDUCED ONE-HALF (SCALE ACCORDINGLY)

NO.	DATE	BY	REVISIONS
4	05/21/10	TMT	CRITICAL AREAS PERMIT

ROTHHILL
Roth Hill, LLC Tel 425.869.9448 www.rothhill.com
11130 NE 33rd Place, Suite 200 Bellevue, WA 98004

Approved By	
DESIGN/CONSTRUCTION MANAGER	DATE
DESIGN SUPERVISOR	DATE
PROJECT MANAGER	DATE

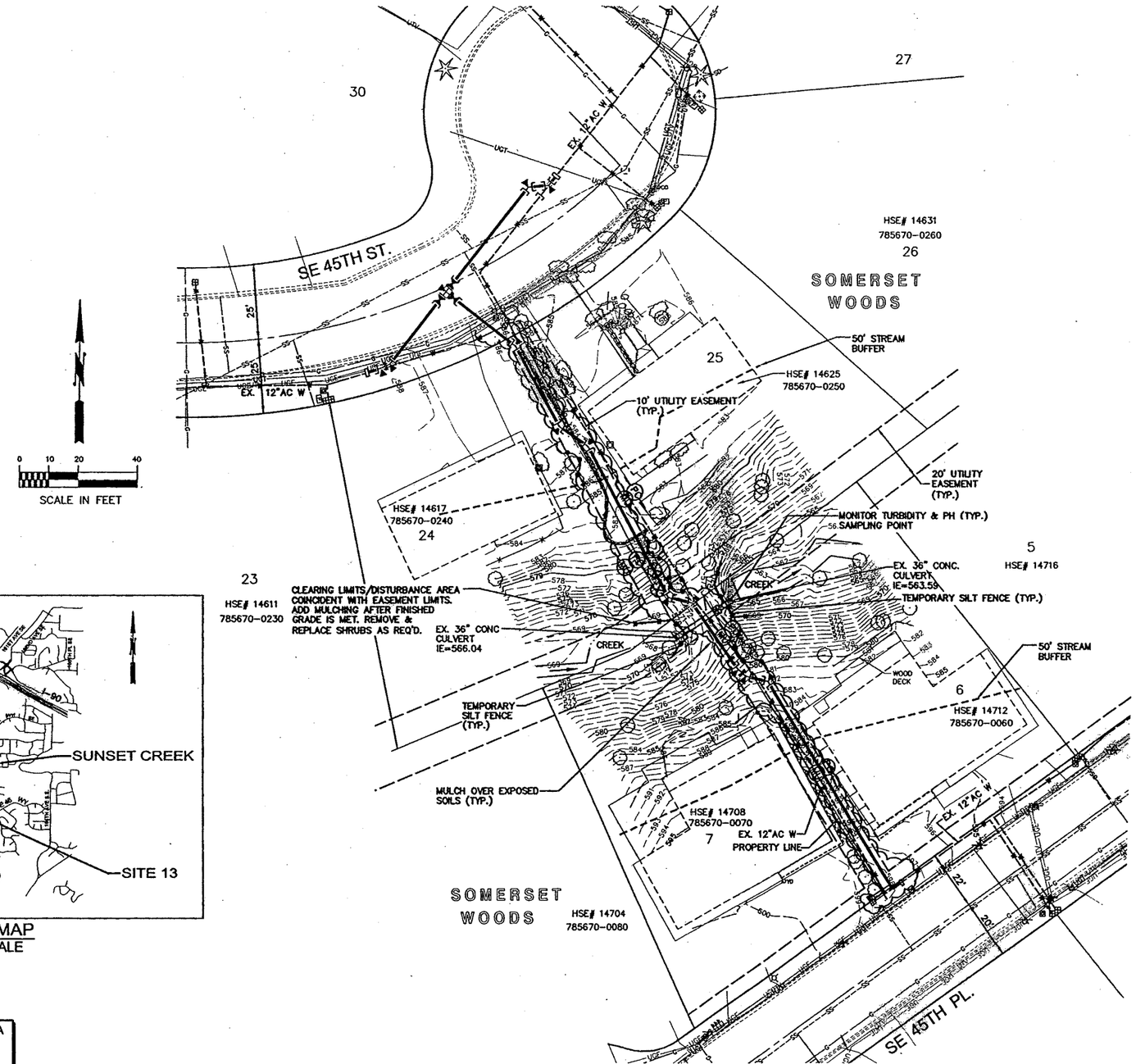
TIM TOBIN	
DESIGNED BY	DATE
BACH NGUYEN	
DRAWN BY	DATE
CHECKED BY	DATE

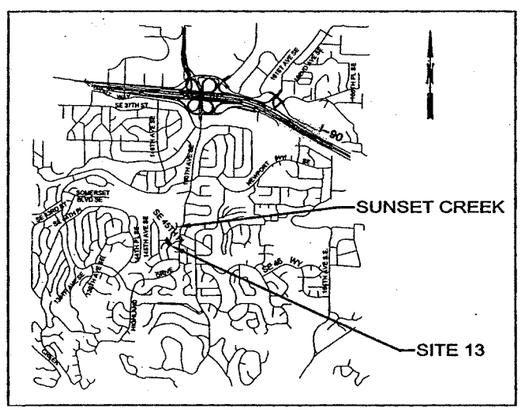
City of Bellevue
UTILITIES

2010 PHASE 2
AC WATER MAIN REPLACEMENT - C.I.P. W - 16
SITE 13

SE 15-24-5 J-14 SHT 15A OF 19

PLOTTING DATE: 5/21/2010 USER: Nguyen, Bach VERSION: 2006 FILE NAME: F:\0022\00006.022\ACAD\Production Dwgs\Phase 2 (Site 13).dwg





VICINITY MAP
NOT TO SCALE

BURIED UTILITIES IN AREA
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EXISTING UTILITIES SHOWN ARE FROM THE BEST AVAILABLE INFORMATION AND NO GUARANTEE IS MADE AS TO THE EXACT SIZE, TYPE, LOCATION OR DEPTH.

GENERAL TESC NOTES

1. CLEARING AND GRADING CONSTRUCTION MUST BE IN ACCORDANCE WITH CITY OF BELLEVUE CLEARING & GRADING CODE; CLEARING & GRADING EROSION CONTROL STANDARD DETAILS, CITY OF BELLEVUE RIGHT OF WAY USE PERMIT, CONTRACT SPECIFICATIONS, CRITICAL AREAS PERMIT, CSWPPP AND EASEMENTS.
2. A COPY OF THE APPROVED PLANS MUST BE ON-SITE DURING CONSTRUCTION.
3. A REINFORCED SILT FENCE MUST BE INSTALLED IN ACCORDANCE WITH COB EC5 AND LOCATED PER THE APPROVED PLANS OR PER THE INSPECTOR, ALONG SLOPE CONTOURS AND DOWN SLOPE FROM THE CONSTRUCTION SITE.
4. CLEARING WILL BE LIMITED TO THE AREAS WITHIN THE APPROVED DISTURBANCE LIMITS. EXPOSED SOILS MUST BE COVERED AT THE END OF EACH WORKING DAY WHEN WORKING FROM OCTOBER 1ST THROUGH APRIL 30TH. FROM MAY 1ST THROUGH SEPTEMBER 30TH, EXPOSED SOILS MUST BE COVERED AT THE END OF EACH CONSTRUCTION WEEK AND ALSO AT THE THREAT OF RAIN. WHEN THERE IS LIKELIHOOD OF MEASURABLE PRECIPITATION (0.1 INCH OR MORE), THE CONTRACTOR SHALL TEMPORARILY COVER DISTURBED SOILS AND STOCKPILES WITH PLASTIC SHEETING TO PROTECT THEM FROM EROSION.
5. WHEN FINAL GRADES HAVE BEEN ESTABLISHED, AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE PERMANENTLY STABILIZED WITHIN 14 DAYS BY MEASURES SHOWN ON THESE PLANS AND LISTED IN THE CONTRACT SPECIFICATIONS.
6. LANDSCAPING / REVEGETATION SHALL BE COMPLETED IN ACCORDANCE WITH THE LANDSCAPE PLAN (DRAWING SHEET 15C) AND PROPERTY RESTORATION OF THE CONTRACT SPECIFICATIONS.
7. TO REDUCE THE POTENTIAL FOR EROSION OF EXPOSED SOILS, OR WHEN RAINY SEASON CONSTRUCTION IS PERMITTED, THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) ARE REQUIRED: PRESERVE NATURAL VEGETATION FOR AS LONG AS POSSIBLE OR AS REQUIRED BY THE INSPECTOR. PROTECT EXPOSED SOIL USING PLASTIC (EC-14), EROSION CONTROL BLANKETS, STRAW OR MULCH (COB GUIDE TO MULCH MATERIALS, RATES AND USE CHART) OR AS DIRECTED BY THE INSPECTOR.
8. PERFORM TURBIDITY AND PH MONITORING IN ACCORDANCE WITH THE TURBIDITY AND PH MONITORING PLAN. MARK TURBIDITY / PH SAMPLING POINT WITH A FLAT, TAPE, STAKE OR OTHER VISIBLE MARKER.

RECOMMENDED CONSTRUCTION SEQUENCE

(1) PRE-CONSTRUCTION MEETING.
(2) FLAG OR FENCE CLEARING LIMITS.
(3) INSTALL CATCH BASIN PROTECTION.
(4) INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
(5) MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OF BELLEVUE STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
(6) RELOCATE EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH CITY OF BELLEVUE EROSION AND SEDIMENT CONTROL STANDARDS.
(7) CONDUCT TURBIDITY AND PH MONITORING AT REQUIRED FREQUENCIES.
(8) COVER ALL AREAS THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING OR EQUIVALENT.
(9) STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN SEVEN DAYS.
(10) SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
(11) UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BMPS REMOVED IF APPROPRIATE.

TESC LEGEND

- CLEARING LIMITS
- TREE PROTECTION FENCING
- SILT FENCE
- PC — PLASTIC COVERING
- MU — MULCH

SITE 13

PERMIT PLAN

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NO.	DATE	BY	REVISIONS
3	05/21/10	TMT	CRITICAL AREAS PERMIT

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11130 NE 33rd Place, Suite 200 Bellevue, WA 98004

Approved By
DESIGN/CONSTRUCTION MANAGER — DATE
DESIGN SUPERVISOR — DATE
PROJECT MANAGER — DATE

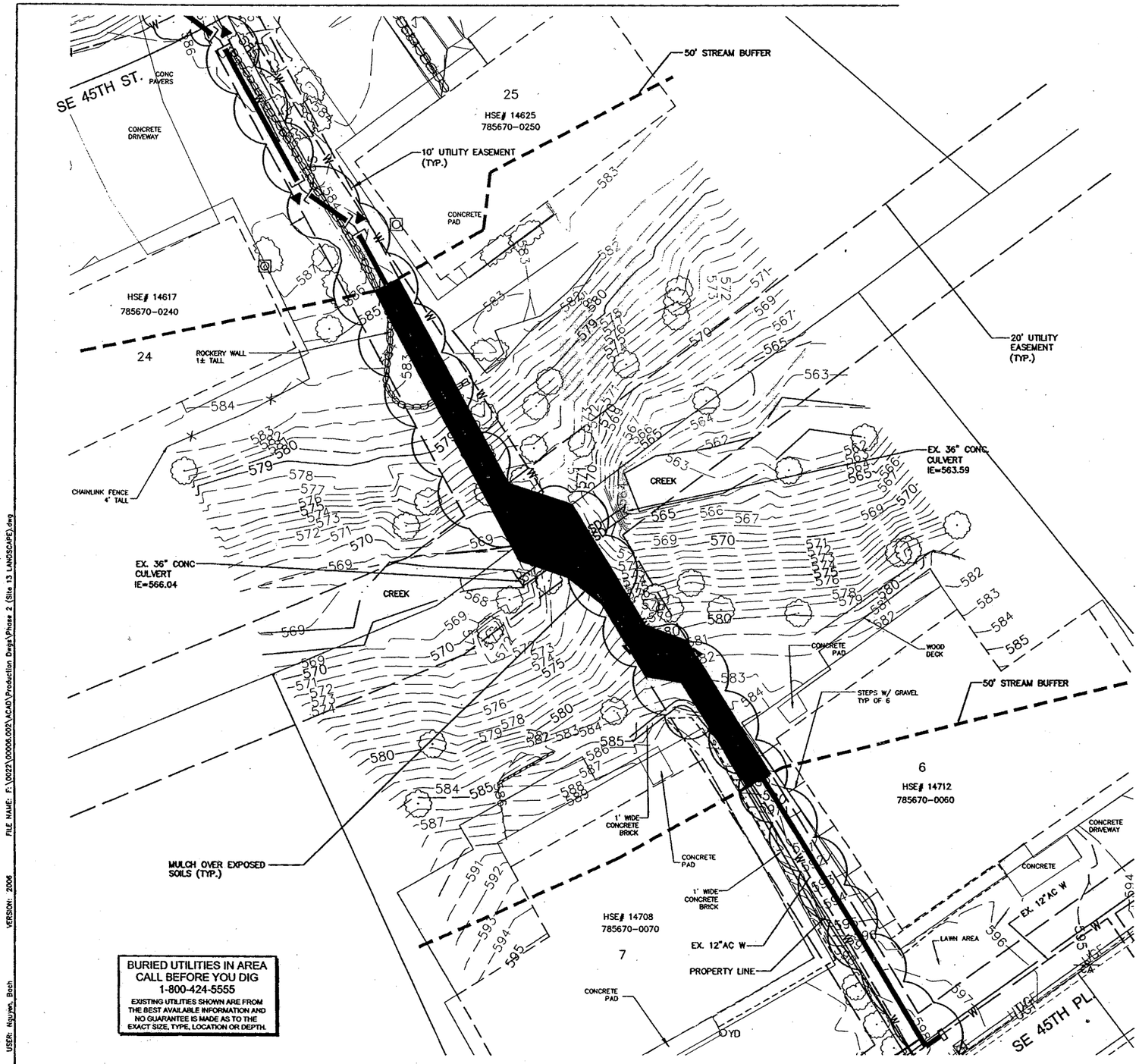
TM TOBIN — DESIGNED BY — DATE
BACH NGUYEN — DRAWN BY — DATE
CHECKED BY — DATE

City of Bellevue UTILITIES

2010 PHASE 2
AC WATER MAIN REPLACEMENT - C.I.P. W - 16
SITE 13 TESC PLAN

SE 15-24-5 J-14 SHT 15B OF 19

FILE NAME: F:\0022\00006.002\ACAD\Production Dwgs\Phase 2 (Site 13).dwg VERSION: 2006 USER: Nguyen, Bach PLOTTING DATE: 5/21/2010



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LANDSCAPE NOTES:

1. THESE NOTES COVER REPLANTING WITHIN THE 50' STREAM BUFFER. THE AREAS OUTSIDE THE STREAM BUFFER AND BETWEEN RESIDENCES ARE TO BE REPLACED ONE TO ONE WITH MATCHING ORNAMENTAL SHRUBS, TREES AND GROUNDCOVERS.
2. ALL SIGNIFICANT TREES 8" IN DIAMETER OR LARGER ARE TO RETAINED WITHIN THE STREAM BUFFER PORTION OF THE CONSTRUCTION CORRIDOR.
3. SIX SMALL TREES (2" TO 6" IN DIAMETER) WILL BE REMOVED WITH THE PROJECT AND 10 NATIVE SHRUBS.
4. TREES TO BE REPLACED ON A TWO-TO-ONE RATIO
5. SHRUBS TO BE REPLACED ON A THREE-TO-ONE RATIO.
6. EVEN DISTRIBUTION OF TREES AND SHRUBS IN STREAM BUFFER AREA BETWEEN THE TWO SIDES OF SUNSET CREEK.
7. TREES TO BE PLANTED OFF-SET FROM THE WATER MAIN REPLACEMENT TRENCH.
8. SHRUBS TO BE PLANTED ACROSS THE ENTIRE DISTURBED CONSTRUCTION CORRIDOR
9. MULCH 2-4 INCHES DEEP AROUND EACH TREE AND SHRUB
10. STREAM BUFFER SEED MIX FOR EROSION CONTROL APPROPRIATE FOR SHADY CONDITIONS.
11. MULCH 2-4 INCHES DEEP IN AREAS NOT RESEEDED OR REPLANTED.
12. NO GROUNDCOVER IS PROPOSED IN THE STREAM BUFFER PORTION OF THE CONSTRUCTION CORRIDOR DUE TO THE DOMINANCE OF ENGLISH IVY. IT IS ANTICIPATED THAT THE ENGLISH IVY WILL RE-ESTABLISH DOMINANCE AS THE GROUND COVER OVER THE DISTURBED AREA IN A ONE TO THREE YEAR PERIOD.
13. RELEASE RETAINED TREES AND SHRUBS FROM ENGLISH IVY BY CUTTING 12 FOOT SECTION OF CLIMBING IVY AT THE BASE OF EVERY TREE AND SHRUB RETAINED WITHIN THE CONSTRUCTION CORRIDOR.

TREES SHRUBS TO BE PLANTED IN STREAM BUFFER:

TREE	QUANTITY	SIZE	HEIGHT	SPACING
RED ALDER	SIX	2 - 3 GAL	3' - 6'	MIN. 9' ON CENTER
WESTERN RED CEDAR	SIX	1 - 2 GAL	3' - 4'	MIN. 9' ON CENTER

SHRUB	QUANTITY	SIZE	HEIGHT	SPACING
RED-OSIER DOGWOOD	EIGHT	2 GAL	3' MIN.	4' ON CENTER
SALMONBERRY CENTER	EIGHT	1 GAL	2' MIN.	4' ON CENTER
VINE MAPLE CENTER	EIGHT	2 GAL	3' MIN.	6' ON CENTER

0 10 20
SCALE IN FEET

LEGEND
CLEARING LIMITS
STREAM BUFFER PLANTING AREA

SITE 13

PERMIT PLAN

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2010 PHASE 2
AC WATER MAIN REPLACEMENT - C.I.P. W - 16
SITE 13 LANDSCAPE PLAN

SE 15-24-5 J-14 SHT 15C OF 19

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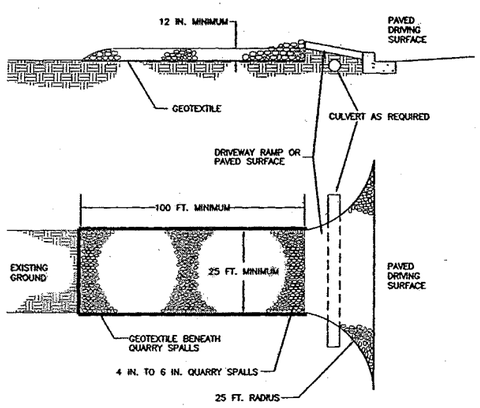


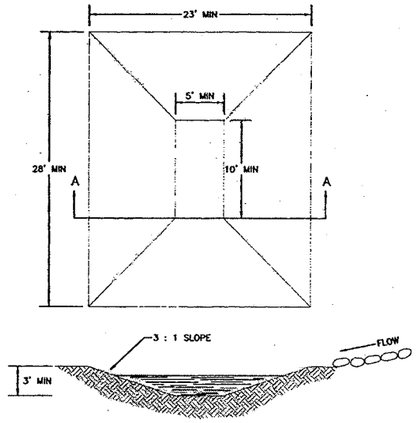
PLAN

NOTES:

1. PAD SHALL BE REMOVED AND REPLACED WHEN SOIL IS EVIDENT ON THE SURFACE OF THE PAD OR AS DIRECTED BY THE CITY CLEARING AND GRADING INSPECTOR.
2. PAD SHALL BE INSTALLED IN PLANTING STRIP AS APPROPRIATE.
3. PAD THICKNESS SHALL BE INCREASED IF SOIL CONDITIONS DICTATE OR PER THE DIRECTION OF THE CITY CLEARING AND GRADING INSPECTOR.
4. MINIMUM DIMENSIONS MAY BE MODIFIED AS REQUIRED BY SITE CONDITIONS UPON APPROVAL OF THE CITY CLEARING AND GRADING INSPECTOR.

TEMPORARY CONSTRUCTION EXIT - PLAT/COMMERCIAL EC-1

N.T.S.



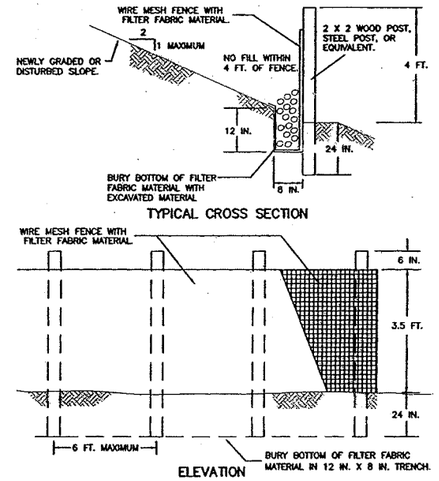
SECTION A

NOTES:

1. INSTALL ADJACENT AND DOWNGRADIENT OF TEMPORARY CONSTRUCTION EXIT OR SINGLE FAMILY DRIVEWAY AND AS CLOSE TO PAVED DRIVING SURFACE AS POSSIBLE.
2. MORE TRUCK TRAFFIC MAY REQUIRE A LARGER AREA.
3. FOR SINGLE FAMILY APPLICATIONS, MINIMUM BOTTOM DIMENSIONS MAY BE REDUCED TO 6 FT. X 3 FT

CONCRETE WASH EC-4

N.T.S.

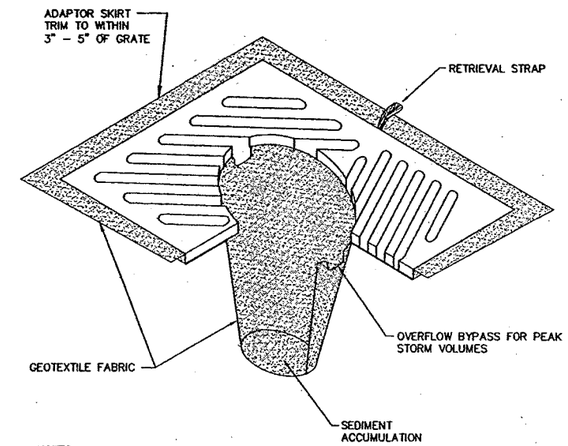


NOTES:

1. FENCE SHALL NOT BE INSTALLED ON SLOPES STEEPER THAN 2 : 1.
2. JOINTS IN FILTER FABRIC SHALL BE OVERLAPPED 6 INCHES AT POST.
3. USE STAPLES, WIRE RINGS, OR EQUIVALENT TO ATTACH FABRIC TO WIRE FENCE.
4. REMOVE SEDIMENT WHEN IT REACHES 1/3 FENCE HEIGHT.

REINFORCED SILT FENCE EC-5

N.T.S.

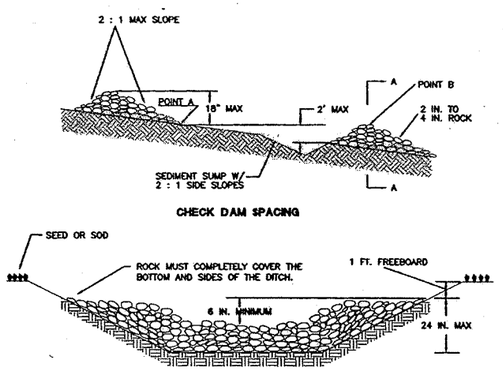


NOTES

1. INSERT SHALL BE INSTALLED PRIOR TO CLEARING AND GRADING ACTIVITY, OR UPON PLACEMENT OF A NEW CATCH BASIN.
2. SEDIMENT SHALL BE REMOVED FROM THE UNIT WHEN IT BECOMES HALF FULL .
3. SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING, AND RE–INSERTING IT INTO THE CATCH BASIN.

CATCH BASIN INLET PROTECTION INSERT EC-6

N.T.S.

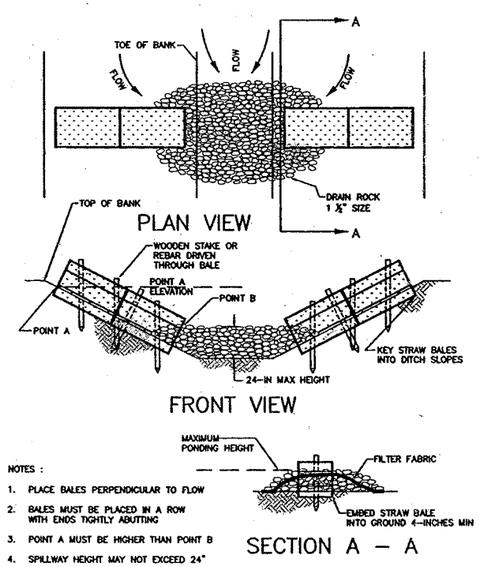


NOTES :

1. 50 FT MAXIMUM SPACING BETWEEN CHECK DAMS.
2. ANY SEDIMENT DEPOSITION OF MORE THAN 0.5 FT. IN DEPTH SHALL BE REMOVED SO THAT THE CHANNEL IS RESTORED TO ITS ORIGINAL DESIGN CAPACITY.
3. THE CHANNEL SHALL BE EXAMINED FOR SIGNS OF SCOURING AND EROSION OF THE BED AND BANKS. IF SCOURING OR EROSION HAS OCCURED, AFFECTED AREAS SHALL BE PROTECTED BY RIP–RAP, AN EROSION CONTROL BLANKET, OR A NET.
4. A 6–INCH SUMP SHALL BE PROVIDED IMMEDIATELY UPSTREAM OF CHECK DAM.
5. CHECK DAMS SHALL BE CONSTRUCTED SO THAT POINTS A AND B ARE OF EQUAL ELEVATION.
6. SANDBAG CHECK DAMS MAY BE SUBSTITUTED FOR ROCK CHECK DAMS AS APPROVED BY THE CLEARING AND GRADING INSPECTOR.

ROCK CHECK DAM EC-10

N.T.S.

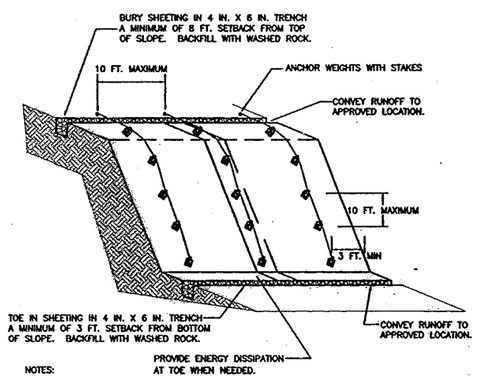


NOTES :

1. PLACE BALES PERPENDICULAR TO FLOW
2. BALES MUST BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING
3. POINT A MUST BE HIGHER THAN POINT B
4. SPILLWAY HEIGHT MAY NOT EXCEED 24"

SEMI-PERVIOUS CHECK DAM EC-13

N.T.S.



NOTES:

1. TIRES, SANDBAGS, OR EQUIVALENT MAY BE USED TO WEIGHT PLASTIC SHEETING.
2. SEAMS BETWEEN SHEETS MUST OVERLAP A MINIMUM OF 12 IN. AND BE WEIGHTED OR TAPED.
3. PLASTIC SHEETING SHALL HAVE A MINIMUM THICKNESS OF 6 MIL.
4. DUE TO RAPID RUNOFF CAUSED BY PLASTIC SHEETING, THIS METHOD SHALL NOT BE USED UPSLOPE OF AREAS THAT MIGHT BE ADVERSELY IMPACTED BY CONCENTRATED RUNOFF.
5. CONSTRUCT BERM OR SWALE AT TOP OF SLOPE AS DIRECTED BY THE CLEARING AND GRADING INSPECTOR.
6. CONSTRUCT DITCH AT BASE OF SLOPE AS REQUIRED BY CITY CLEARING AND GRADING INSPECTOR. DISCHARGE TO APPROVED LOCATION.

PLASTIC COVERING FOR SLOPES AND STOCKPILES EC-14

N.T.S.

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City of Bellevue UTILITIES

2010 PHASE 2
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