DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
11511 MAIN ST., P.O. BOX 90012
BELLEVUE, WA 98009-9012

# DETERMINATION OF NON-SIGNIFICANCE

**PROPONENT:** Barrier Porsche

**LOCATION OF PROPOSAL:** 11830 NE 8th Street

**DESCRIPTION OF PROPOSAL:**

Proposal to demolish five single story commercial structures and construct a new auto sales and service facility with approximately 33,000 SF. Work also includes associated site work and improvements, and remediation activities which include the removal of underground storage tanks and the removal of petroleum-contaminated soils.

**FILE NUMBERS: 13-119197-LM**

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 _____.

☒ 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 December 5, 2013 .

☐ 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This DNS may be withdrawn at any time if the proposal is modified so that it is likely to have significant adverse environmental impacts; if there is significant new information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.

Michael M. Paine for
Environmental Coordinator

11/15/2013
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

# ENVIRONMENTAL CHECKLIST

4/11/2O13

If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the permit Center [(425) 452-6864] between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is (4250 452-4636.

**PROPERTY OWNER'S NAME:** Barrier Properties LBSC, LLC ✓

**PROPONENT'S NAME:**

**CONTACT PERSON'S NAME:** Lance Mueller & Associates/Architects – Contact: Lance Mueller
**(If different from Owner. All questions and correspondence will be directed to the individual listed.)**

**ADDRESS:** 130 Lakeside, Suite 250
Seattle, WA 98122

**PHONE:** (206) 325-2553 **E-mail:** lmueller@lmueller.com

**PROPOSAL TITLE:** BARRIER PORSCHE ✓
Parcel Numbers: 1099100403, 1099100475, 1099100474, 1099100476, 1099100465, 1099100442, 1099100440, 1099100445 (Also: 11810, 11814, 11816, 11818, 11822, 11824, 11830)

**PROPOSAL LOCATION:** 11830 N.E., Bellevue, WA ✓
**(Street address and nearest cross street or intersection.) Provide a legal description if available.**

**PLEASE ATTACH AN 81/2" X 11" VICINITY MAP WHICH ACCURATELY LOCATES THE PROPOSAL SITE.**

**GIVE AN ACCURATE, BRIEF DESCRIPTION OF THE PROPOSAL'S SCOPE AND NATURE:**

Received OCT 8 2013 Permit Processing City of Bellevue

1. **GENERAL DESCRIPTION:** Demolish existing buildings and construct new auto sales and service building with associated site improvements. incl. parking lots ✓
2. **ACREAGE OF SITE:**. 3.15 Acres, 137,205 s.f. ✓
3. **NUMBER OF DWELLING UNITS/BUILDINGS TO BE DEMOLISHED:** 5 Commercial Buildings ✓
4. **NUMBER OF DWELLING UNITS/BUILDINGS TO BE CONSTRUCTED:** ✓
   1 Auto Sales/Service Building
5. **SQUARE FOOTAGE OF BUILDINGS TO BE DEMOLISHED:** 32,000 s.f. to 33,000 s.f. ✓
6. **SQUARE FOOTAGE OF BUILDINGS TO BE CONSTRUCTED:** 38,655 s.f. ✓ ±
7. **QUANTITY OF EARTH MOVEMENT (IN CUBIC YARDS):** 9,000 to 10,000 cu. yds.

Refer to GAP prepared by Hart Crowser dated 10/8/2013 (attached) incl. 8200 cu. yds of contaminated soil to be removed from site. ∴ qty at least 16,000 CY.

BR-GC (Bel-Red General Commercial) ✓

8. **PROPOSED LAND USE:** Auto sales and service with associated auto parking and display.

9. **DESIGN FEATURES, INCLUDING BUILDING HEIGHT, NUMBER OF STORIES & PROPOSED EXTERIOR MATERIALS:** ✓

The design is per Porsche criteria with curved fascia and simple forms. Height is approximately 30' with a mezzanine floor. Materials are aluminum composite panels, painted concrete and glass. Concrete color will be a warm gray color.

10. **OTHER:**

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**ESTIMATED DATE OF COMPLETION OF THE PROPOSAL OR TIMING OF PHASING:**

Completion and occupancy by January 2015. ✓

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

No

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

Soils Report by Earth Solutions N.W., ES1255.02, June 13, 2013, ES1255.01, Feb. 18, 2013
Environmental studies of existing hydrocarbons soil contamination on Eastside Rental site underway.
Report by Hart Crowser to be submitted to City. Clean-Up Action Plan/Construction Contingency Plan dated Oct. 4, 2013 (CAP/CCP) by Hart Crowser
Prior to demolition, an inspection to find any asbestos will be made.

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

No
13-124351-BE (demo)
13-119201-BB (building)
13-119200-GD (clear & grade)
13-119197-LM (sepa)
13-124188-TN (r.o.w).

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

Open – 13-106293DC
~~To be filed~~ – Demo Permit, Clear & Grade, Major Project Building, Row Use Permit, Utility Developer Extension Agreement, BLA or Binding Site Plan, Occupancy Certificate.

To Be Filed . . .



gw

PLEASE PROVIDE ONE OR MORE OF THE FOLLOWING EXHIBITS, IF APPLICABLE TO YOUR PROPOSAL.
(PLEASE CHECK APPROPRIATE BOX(ES) FOR EXHIBITS SUBMITTED WITH YOUR PROPOSAL):

[ ] LAND USE RECLASSIFICATION (REZONE) Map of existing & proposed zoning.

[ ] PRELIMINARY PLAT (AND/OR P.R.U.D. OR P.U.D.) Preliminary plat map.

[ X ] CLEARING & GRADING PERMIT
Planing of existing & proposed grading.
Development plans.

[ X ] BUILDING PERMIT ~~(OR DESIGN REVIEW)~~. no DR required
Site plan.
Clearing & grading plan.

[ ] SHORELINE MANAGEMENT PERMIT
Site plan.



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## B. ENVIRONMENTAL ELEMENTS

### 1. Earth

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

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

Less than 5%.

**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.**

Glacial till with small amounts of shallow fill. Small amount of shallow peat to be removed in limited area.

GeoTech report by Earth Solutions Inc. Addendum 2/18/2013

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

Many buildings near Lake Bellevue are pile supported due to peat. No significant peat at building area of proposal site.

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

Existing asphalt and base course will be removed during demolition, clearing and grading. Approximately 8,500 c.y. of contaminated soils or other unsuitable soil will need to be removed and replaced with clean granular fill. Probably 2,000 – 3,000 c.y. grading and 8,500 c.y. of replacement fill.

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

Not likely, however erosion control is required by C&G permit, review and inspections by City.

Per C&G code BCC 23.76 TESC

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

75%, the maximum allowed.

Per LUC 20.25D.080

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

Provide erosion control procedures during construction. BCC 23.76 TESC measures
Utilize landscaping, rain gardens and pervious pavement to reduce run-off.
Clean-up contaminated soils on Eastside Rentals site will improve conditions.

Refer to CAP/CCP prepared by Hart Crowser 10/4/2013



SN

2. **Air**

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

During construction – Demolition dust, equipment exhaust.
After construction – Exhaust from cars and service trucks.

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

No

Potential for Vapor Intrusion remediated by contaminated soil removal. (see page 5- CAP/CCP by Hart Crowser 10/4/2013)

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

During demo and construction, wet site to control dust during dry weather. Adjacent roads will be kept clean to control tracked soil and dust, all per BCC 23.76.

potential vapor intrusion removed w/ ~~sos~~ contam soil

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 if flows into.**

Lake Bellevue is a few hundred feet to the north.
Run-off from this Lake flows to Lake Washington.

Site drains to Lake Bellevue

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.**

~~No~~ Lake Bellevue approx. ~~220'~~ 220' to north. ✓ ✓ ~~[illegible]~~ outside of 200'

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.**

None ✓

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

No ✓

all areas of contaminated soil under developed land (bldg parking lot, etc.)

If needed, will be subsurface piping for in situ water treatment need determined during constr. CAP/CCP 10/4/2013 P. 5,15

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

If deemed necessary, piping and/or vaults will be used to allow for additional in situ treatment CAP/CCP 10/4/2013

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 systems are expected to serve.**

None ✓

contaminants and UST's removed per CAP/CCP 10/4/2013

c. **Water Runoff (including storm water)**

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.**

Strom water from impervious surfaces will be collected by catch basins and flow by pipe to existing storm system in street. ✓

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

If materials are accidentally spilled, they could flow to catch basins, or enter ground directly. ✓

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

Use oil/water separator for sanitary sewer system and use underground filter system for storm water quality treatment. Utilize pervious paving and rain garden(s) to reduce run-off.
Site is subject to rainy season restrictions – erosion control per BCC 23.76 will be required. ✓

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, Bulrush, Skunk, Cabbage, other
___ Water Plants: Water Lily, Eelgrass, Milfoil, other
___ Other types of vegetation – Nursery stock

landscaping in exist parking lots



SN

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

Much of existing parking lot and site perimeter landscaping will be removed. Existing landscaping is typical for Bellevue.
Parking lots and perimeters per LUC 20.20.520, pre Bel-Red overlay. ✓ ✓ ALO for reduced buffers

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

None known

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

Approximately 15.6% of site area will be landscaping as required by 20.25D.110. ✓
Indigenous food source and shelter plantings will be utilized to attract small birds.

**5. Animals**

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

**Birds:** Hawk, Heron, Eagle, **Songbirds**, **others**; **Pigeons, Starlings & Sparrows**
**Mammals:** Deer, Bear, Elk, Beaver, **other; Rats/Mice may be present due to restaurant food waste in trash containers.**
Fish: Bass, Salmon, Trout, Herring, Shellfish, other

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

None known

existing site retail & parking

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

Yes, the Pacific Flyway. entire Puget Sound region

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

Native plant materials will enhance wildlife habitat.

**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.**

Electric – power, lights, equipment
Gas - heat

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

No

Bldg in middle of site w/ low profile



gN

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:**

Recycle demolition materials where possible, use high performance glass, exceed WA State Energy Code for building envelope, utilize low energy lighting with LEDs, and high efficiency HVAC or other equipment.

7. **Environmental Health**

rain gardens/ pervious paving

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.**

No. Auto related fluids/waste will be contained and recycled.

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

No special emergency services.

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

The project construction will comply with applicable health and safety codes. Asbestos survey required before demolition and any found will be removed per regulations.

b. **Noise**

Refer to CAP/CCP by Hart Crowser 10/14/2013

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

None

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.**

Short Term – Equipment noise during demo and construction.
Long Term – No significant noise due to business operation.

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

Limit hours of construction hours in conformance with BCC 9.18.

8. **Land and Shoreline Use**

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

Retail, restaurants, equipment rental.
North – parking and office buildings, East – Barrier Mercedes – Benz,
West – Pumphouse Restaurant/Tavern, South – N.E. 8th and commercial uses.

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

No

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

5 single story frame or block structures, all to be removed.
Two restaurants (sit down) totaling 7,745 s.f.
Three retail totaling 23,681 s.f.

**d. Will any existing structures be demolished?**

Per 8.c., all will be demolished. Combined floor area is approximately 32,000 to 33,000 s.f. ✓

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

BR - GC Bel-Red general commercial LUC 20.25D.080

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

Commercial

**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?** ✓

No

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

35 to 45.

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

Not sure, maybe 40 to 60, some tenants have vacated.

**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:** ✓

Project complies with Zoning Regulations and Comp Plan.

LUC 20.25D
Bel-Red
Comprehensive Plan
Bel-Red Subarea

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?**

Building height is 28 – 30 ft. to roof, 36' to top of parapet. Exterior is silver/gray aluminum composite panels at front facade with warm gray painted concrete elsewhere. Clear glass a showroom

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

None

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

Remove old buildings. New buildings will be a clean, simple but attractive design theme created by Porsche. New landscape areas and street sidewalk and landscaping will be a great improvement.

landscape @ site permeter 20.25D.110

11. **Light and Glare**

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

Parking lot and building lighting at night.

all fixtures to have cut-off shields

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

No

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

None

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

Site and building exterior lighting impacts will be reduced/controlled by required cut-off shields that meet LOC 20.20.522.

LUC

**12. Recreation**

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

Shopping and food. Popular Pumphouse next door to west. Shopping center on 120th Ave. N.E. to south of N.E. 8th St.

BNSF rail line for future trail

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

Not physical recreation, just restaurants and small shops.

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

None

**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, describe.**

None known

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

None known

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

None

**14. Transportation**

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

Site is served by N.E. 8th St., 118th Ave. N.E., or from Lake Bellevue property to north.

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

Metro Routes 230, 253, 261 and 272 pass by site on N.E. 8th St., walking distance to nearest stop.

In vicinity of proposed lightrail station to the west.

Realignment of 120th Ave NE will necessitate change of some routes slightly.



BN

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

183 stalls new, 135 to 140 will be eliminated.

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).**

LUC 20.25D.110 streetscape & landscape development

BCC 14.60.021, 14.60.110
Street frontage improvements of sidewalk and landscape will be required on N.E. 8th St. and also on 118th Ave. N.E.

e. **Will the project use (or occur in 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.**

Estimated trips per day for new project is 200. peak hour pm trips about 68.
Existing restaurant, retail and rental use generate approximately 98 peak hour trips.

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

Van pool employees from Barrier PDC parking area (near Barrier Audi).
Encourage employee use of Metro transit.

in future, next to light rail station

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, most employees already work at the existing Porsche facility on 120th Ave. N.E. & Bel-Red Road, which will be demolished due to City's 120th Ave. N.E. realignment work.

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

No change.

16. **Utilities**

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

Water and sewer per C.O.B. Utility Requirements, BCC 24.02, 24.04.

✓

**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.**

All utilities are available to the site. Numerous water and sanitary sewer connections to existing buildings will need to be disconnected and capped, resulting in one water and sewer connection. A new fire service water line with associated F.D. connections and valves will be required.

**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: _____
Architect & Agent for Barrier Properties

Date Submitted: ORIG. 6/27/13 REVISED 10/8/13

Revised building area and amount of contaminated soils. ✓

Attached:
* Clean-Up Action Plan / Construction Contingency Plan Prepared by Hart Crowser, dated 10/4/2013 in project file 13-119197-LM and in ~~Clear~~ Clearing and Grading file 13-119200-GD.

# LEGAL DESCRIPTION

1 OF 3

BARRIER PORSCHE

SEE SHEET A0.1

SITE ADDRESS:
11830 NORTHEAST BELLEVUE-REDMOND ROAD
11830 NORTHEAST 8TH STREET
11824 NORTHEAST 8TH STREET
11822 NORTHEAST 8TH STREET
11810 NORTHEAST 8TH STREET
11814 NORTHEAST 8TH STREET
11816 NORTHEAST 8TH STREET
11818 NORTHEAST 8TH STREET
810 118TH AVENUE NORTHEAST — NOT A PART OF PROJECT SITE
BELLEVUE, WASHINGTON 98005

TAX PARCEL NUMBER:
11810 NE 8TH ST=109910-0463-08
11814 NE 8TH ST=109910-0475-04
11816 NE 8TH ST=109910-0474-05
11818 NE 8TH ST=109910-0476-03
11822 NORTHEAST 8TH STREET=109910-0465-06
11824 NORTHEAST 8TH STREET=109910-0442-04
11830 NORTHEAST 8TH STREET=109910-0445-01
11830 NORTHEAST BELLEVUE-REDMOND ROAD=109910-0440-06
810 118TH AVENUE NORTHEAST=109910-0477-02 — NOT A PART

ZONING:
GC = COMMERCIAL

FLOOD MAP:
LOCATED IN ZONE "X" AND IS OUTSIDE 500 YEAR FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 53033C0656F, DATED MAY 16, 1995.

AREA:
TOTAL SITE AREA IS 137,194.97 SQUARE FEET OR 3.1496 ACRES.

METHOD OF SURVEY:
INSTRUMENTATION FOR THIS SURVEY WAS A LEICA TOTAL STATION UNIT. PROCEDURES USED IN THIS SURVEY WERE DIRECT AND REVERSE ANGLES, NO CORRECTION NECESSARY. MEETS WASHINGTON STATE STANDARDS SET BY WAC 332-130-090.

UNDERGROUND UTILITIES:
BURIED UTILITIES SHOWN BASED ON RECORDS FURNISHED BY OTHERS AND VERIFIED WHERE POSSIBLE IN THE FIELD. GEODIMENSIONS ASSUMES NO LIABILITY FOR THE ACCURACY OF THOSE RECORDS OR ACCEPT RESPONSIBILITY FOR UNDERGROUND LINES WHICH ARE NOT MADE PUBLIC RECORD. FOR THE FINAL LOCATION OF EXISTING UTILITIES IN AREAS CRITICAL TO DESIGN CONTACT THE UTILITY OWNER/AGENCY. AS ALWAYS, CALL 1-800-424-5555 BEFORE CONSTRUCTION.

BASIS OF BEARING:
THEORETICAL SECTION LINE BETWEEN COB 0079 AND COB 0080 BEARS S89°26'53"E

LEGAL DESCRIPTION:

PARCEL A:
THE NORTH 269 FEET OF THE SOUTH 379 FEET OF THE WEST 0.82 FEET OF THE EAST HALF OF LOT 87, THE WEST HALF OF LOT 87, ALL OF LOTS 88 AND 89, AND THAT PORTION OF LOT 90 LYING EASTERLY OF 118TH AVENUE NORTHEAST, ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE(S) 18, IN KING COUNTY, WASHINGTON;
EXCEPT THAT PORTION DESCRIBED AS FOLLOWS:
BEGINNING AT THE SOUTHWEST CORNER OF SAID TRACT;
THENCE EAST ALONG THE SOUTH LINE THEREOF 60.86 FEET;
THENCE NORTH PARALLEL WITH THE WEST LINE OF LOT 89, A DISTANCE OF 167.00 FEET;
THENCE WEST PARALLEL WITH THE SOUTH LINE OF SAID LOT 89 A DISTANCE OF 60 FEET, MORE OR LESS, TO THE EASTERLY MARGIN OF 118TH AVENUE NORTHEAST;
THENCE SOUTHERLY ALONG SAID MARGIN 167.00 FEET, MORE OR LESS, TO THE POINT OF BEGINNING;
EXCEPT THE SOUTH 10 FEET FOR STREET;
AND EXCEPT THAT PORTION LYING NORTHERLY OF THE FOLLOWING DESCRIBED LINE:
BEGINNING AT THE SOUTHWEST CORNER OF LOT 1, LAKE BELLEVUE, DIV. 2, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 109 OF PLATS, PAGES 34 AND 35, IN KING COUNTY, WASHINGTON;
THENCE NORTH 00°41'41" EAST ALONG SAID WEST LINE 36.51 FEET TO THE TRUE POINT OF BEGINNING OF SAID LINE;
THENCE NORTH 89°18'19" WEST 55.56 FEET; THENCE SOUTH 84°29'06" WEST 34.86 FEET;
THENCE NORTH 82°53'05" WEST 20.00 FEET; THENCE SOUTH 86°55'23" WEST 20.32 FEET;
THENCE NORTH 82°57'50" WEST 40.00 FEET; THENCE SOUTH 12°59'28" WEST 17.88 FEET;
THENCE SOUTH 00°33'31" WEST 55.00 FEET;
THENCE NORTH 89°26'28" WEST 55.56 FEET TO THE EASTERLY MARGIN OF 188TH AVENUE NORTHEAST AND THE TERMINUS OF SAID LINE;
ALSO EXCEPT ANY PORTION WITHIN SAID LAKE BELLEVUE, DIV. 2 AND 3.
PARCEL B:
THAT PORTION OF LOTS 87, 88 AND 89, BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE(S) 18, IN KING COUNTY, WASHINGTON, LYING SOUTHERLY AND EASTERLY OF LAKE BELLEVUE, DIV. 3, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 117 OF PLATS, PAGES 67 AND 68, IN KING COUNTY, WASHINGTON, LYING WESTERLY OF LAKE BELLEVUE, DIV. 2, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 109 OF PLATS, PAGES 34 AND 35, IN KING COUNTY, WASHINGTON, AND NORTHERLY OF THE ABOVE-DESCRIBED PARCEL A.

REFERENCE:
LEGAL DESCRIPTION BASED ON TITLE REPORT FURNISHED BY CHICAGO TITLE COMPANY, ORDER NUMBER 1267061, DATED JUNE 4, 2008.

LEGAL, CONTIN. 2 OF 3

EXCEPTIONS:

1. UNDERGROUND UTILITY EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
GRANTEE: PUGET SOUND POWER & LIGHT COMPANY, A WASHINGTON CORPORATION
PURPOSE: ELECTRIC TRANSMISSION AND/OR DISTRIBUTION SYSTEM TOGETHER WITH ALL NECESSARY OR CONVENIENT APPURTENANCES
AREA AFFECTED: NORTHERLY PORTION OF SAID PREMISES LYING WITHIN A STRIP OF LAND 5 FEET IN WIDTH
RECORDED: APRIL 27, 1973
RECORDING NUMBER: 7304270655

CONTAINS COVENANT PROHIBITING STRUCTURES OVER SAID EASEMENT OR OTHER ACTIVITIES WHICH MIGHT ENDANGER THE UNDERGROUND SYSTEM.
2. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
PURPOSE: ACCESS
AREA AFFECTED: THE DESCRIPTION CONTAINED THEREIN IS NOT SUFFICIENT TO DETERMINE ITS EXACT LOCATION WITHIN THE PROPERTY HEREIN DESCRIBED.
RECORDED: JANUARY 5, 1979
RECORDING NUMBER: 7901050780

3. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
DISCLOSED BY: STATUTORY WARRANTY DEED
PURPOSE: VEHICULAR AND PEDESTRIAN ACCESS
(INGRESS AND EGRESS) AND UTILITIES AFFECTS: PORTION OF SAID PREMISES AND OTHER PROPERTY, AS DESCRIBED IN DOCUMENT
RECORDED: JANUARY 26, 1979
RECORDING NUMBER: 7901260260

SAID EASEMENT(S) ALSO ARE DISCLOSED BY DOCUMENTS RECORDED UNDER RECORDING NUMBERS 7901260261 AND 7905310961.

4. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
DISCLOSED BY: DEED AND PURCHASER'S ASSIGNMENT OF REAL ESTATE CONTRACT
PURPOSE: VEHICULAR AND PEDESTRIAN ACCESS
(INGRESS AND EGRESS) AND UTILITIES AFFECTS: PORTION OF SAID PREMISES AND OTHER PROPERTY, AS DESCRIBED IN DOCUMENT
RECORDED: MARCH 5, 1981
RECORDING NUMBER: 8103050642

5. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
DISCLOSED BY: DEED AND PURCHASER'S ASSIGNMENT OF REAL ESTATE CONTRACT
PURPOSE: VEHICULAR AND PEDESTRIAN ACCESS
(INGRESS AND EGRESS) AND UTILITIES AFFECTS: PORTION OF SAID PREMISES AND OTHER PROPERTY, AS DESCRIBED IN DOCUMENT
RECORDED: MARCH 5, 1981
RECORDING NUMBER: 8103050953

6. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
DISCLOSED BY: STATUTORY WARRANTY DEED
PURPOSE: VEHICULAR AND PEDESTRIAN ACCESS
(INGRESS AND EGRESS) AND UTILITIES AFFECTS: PORTION OF SAID PREMISES AND OTHER PROPERTY, AS DESCRIBED IN DOCUMENT
RECORDED: MARCH 5, 1981
RECORDING NUMBER: 8103050954

7. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
DISCLOSED BY: STATUTORY WARRANTY DEED
PURPOSE: VEHICULAR AND PEDESTRIAN ACCESS
(INGRESS AND EGRESS) AND UTILITIES AFFECTS: PORTION OF SAID PREMISES AND OTHER PROPERTY, AS DESCRIBED IN DOCUMENT
RECORDED: APRIL 25, 1983
RECORDING NUMBER: 8304250794

SAID EASEMENT(S) ALSO ARE DISCLOSED BY DOCUMENT RECORDED UNDER RECORDING NUMBER 8407160462.

8. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
GRANTEE: CITY OF BELLEVUE, A MUNICIPAL CORPORATION
PURPOSE: PUBLIC SIDEWALK AND PEDESTRIAN USE, AND FOR CONSTRUCTING, INSTALLING, RECONSTRUCTING, REPLACING, REPAIRING, MAINTAINING AND OPERATING STREET UTILITIES AND LIGHTING AND ALL NECESSARY CONNECTIONS AND APPURTENANCES THERETO
AREA AFFECTED: A SOUTHERLY PORTION OF SAID PREMISES
RECORDED: MARCH 6, 1997
RECORDING NUMBER: 9703061365

9. MATTERS DISCLOSED BY SURVEY BY GEODIMENSIONS DATED DECEMBER 16, 2004, AS JOB NUMBER 4244, AS FOLLOWS:
A) ENCROACHMENT OF SIGN BORDER BY 1.3 FEET OVER WESTERLY PROPERTY LINE INTO RIGHT OF WAY FOR 118TH STREET.
B) ENCROACHMENT OF BUILDING LOCATED ON THE SOUTHWESTERLY ADJOINER BY 0.3 FEET ONTO SUBJECT PROPERTY.
C) ENCROACHMENT OF SUBJECT PROPERTY BUILDING (#11814) ONTO THE SOUTHWESTERLY ADJOINER BY UP TO 1.1 FEET.
D) ENCROACHMENT OF RETAINING WALL INTO UTILITY EASEMENT.
E) ENCROACHMENT OF BUILDING LOCATED ON EASTERLY ADJOINER BY UP TO 1.7 FEET ONTO SUBJECT PROPERTY.

NOTE: SAID MATTERS ALSO ARE DISCLOSED BY RECITALS CONTAINED IN STATUTORY WARRANTY DEED RECORDED UNDER RECORDING NUMBER 20050104001361.

LEGAL CONTIN. 3 OF 3

LEGAL DESCRIPTION:

PARCEL A:
THE NORTH 72.79 FEET OF THE SOUTH 182.79 FEET OF LOTS 85 AND 86, AND ALSO THE NORTH 72.79 FEET OF THE SOUTH 182.79 FEET OF LOT 87 LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE EAST HALF OF SAID LOT 87;
THENCE NORTH ALONG THE WEST LINE OF SAID EAST HALF 110.00 FEET;
THENCE EAST 0.82 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED LINE;
THENCE NORTH 72.70 FEET, MORE OR LESS, TO A POINT ON THE NORTH LINE OF SAID SOUTH 182.79 FEET, WHICH POINT LIES 0.82 FEET EAST OF THE NORTHWEST CORNER OF THE SOUTH 182.79 FEET OF THE EAST HALF OF SAID LOT 87;

ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, IN KING COUNTY, WASHINGTON.

PARCEL B:
THE NORTH 75 FEET OF THE SOUTH 257.79 FEET OF LOTS 85 AND 86, AND ALSO THE NORTH 75 FEET OF THE SOUTH 257.79 FEET OF LOT 87, LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE EAST HALF OF SAID LOT 87;
THENCE NORTH ALONG THE WEST LINE OF SAID EAST HALF 110.00 FEET;
THENCE EAST 0.82 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED LINE;
THENCE NORTH 147.79 FEET, MORE OR LESS, TO A POINT ON THE NORTH LINE OF SAID SOUTH 257.79 FEET, WHICH POINT LIES 0.82 FEET EAST OF THE NORTHWEST CORNER OF THE SOUTH 257.79 FEET OF THE EAST HALF OF SAID LOT 87;

ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, IN KING COUNTY, WASHINGTON.

PARCEL C:
THE NORTH 77.21 FEET OF THE SOUTH 335 FEET OF LOTS 85 AND 86, AND ALSO THE NORTH 77.21 FEET OF THE SOUTH 335 FEET OF LOT 87, LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE EAST HALF OF SAID LOT 87;
THENCE NORTH ALONG THE WEST LINE OF SAID EAST HALF 257.79 FEET;
THENCE EAST 0.82 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED LINE;
THENCE NORTH 77.21 FEET, MORE OR LESS, TO A POINT ON THE NORTH LINE OF SAID SOUTH 335 FEET, WHICH POINT LIES 0.82 FEET EAST OF THE NORTHWEST CORNER OF THE SOUTH 335 FEET OF THE EAST HALF OF SAID LOT 87;

ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, IN KING COUNTY, WASHINGTON.

PARCEL D:
THAT PORTION OF THE SOUTH 110 FEET OF THE WEST 5 FEET OF TRACT 84, THAT PORTION OF THE SOUTH 110 FEET OF TRACTS 85 AND 86, AND THAT PORTION OF THE SOUTH 110 FEET OF THE EAST HALF OF TRACT 87, ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, IN KING COUNTY, WASHINGTON, LYING NORTH OF BELLEVUE-REDMOND REVISION ROAD AS CONVEYED TO KING COUNTY BY DEED RECORDED UNDER RECORDING NUMBER 2544485;

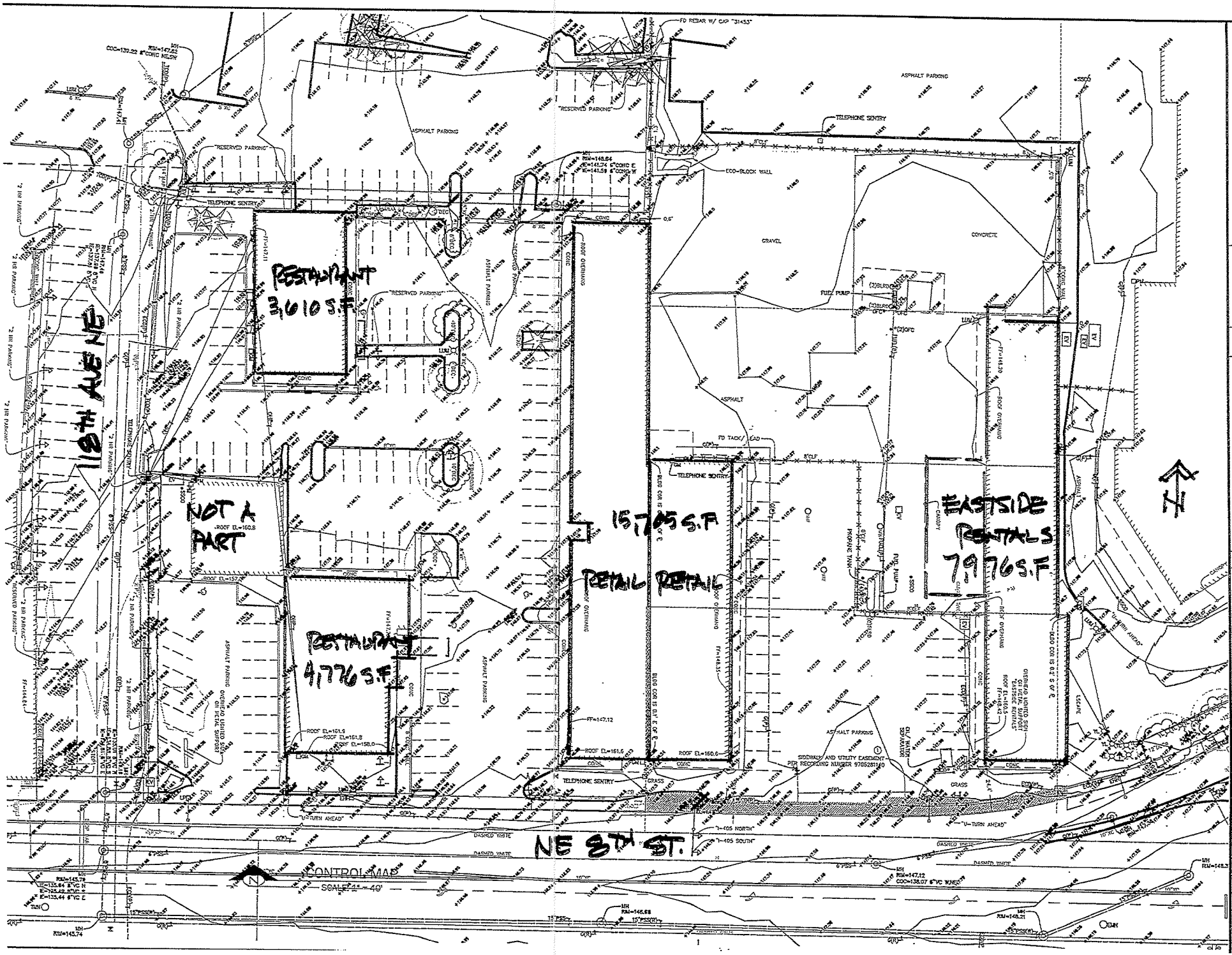
EXCEPT THOSE PORTIONS CONVEYED TO THE CITY OF BELLEVUE BY DEED RECORDED UNDER RECORDING NUMBER 6654157 AND 9705281139.
REFERENCE:
LEGAL DESCRIPTION BASED ON TITLE REPORT FURNISHED BY CHICAGO TITLE COMPANY, ORDER NUMBER 1354048, DATED APRIL 18, 2013.

1. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
GRANTEE: THE CITY OF BELLEVUE, A WASHINGTON MUNICIPAL CORPORATION
PURPOSE: SIDEWALK AND UTILITIES
AREA AFFECTED: SOUTHERLY PORTIONS OF THE PROPERTY HEREIN DESCRIBED
RECORDED: MAY 28, 1997
RECORDING NUMBER: 9705281140

2. COVENANTS, CONDITIONS AND RESTRICTIONS CONTAINED IN INSTRUMENT, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW:
RECORDED: JANUARY 17, 1967
RECORDING NUMBER: 6128929

3. COVENANTS, CONDITIONS AND RESTRICTIONS CONTAINED IN INSTRUMENT, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW:
RECORDED: JANUARY 7, 1972
RECORDING NUMBER: 7201070145

4. AGREEMENT AND THE TERMS AND CONDITIONS THEREOF:
BETWEEN: EDWARD A. RAUSCHER AND BARBARA G. RAUSCHER
AND: THE CITY OF BELLEVUE
RECORDED: MAY 25, 1978
RECORDING NUMBER: 7805250944




GeoDimensions

GeoDimensions, Inc., 10601 Main Street, Suite 102, Bellevue, WA 98004
phone 425.455.4488 support@geodimensions.net www.geodimensions.net

TOPOGRAPHIC SURVEY

BARRIER PROPERTIES SITE

WASHINGTON

JOB NO.:

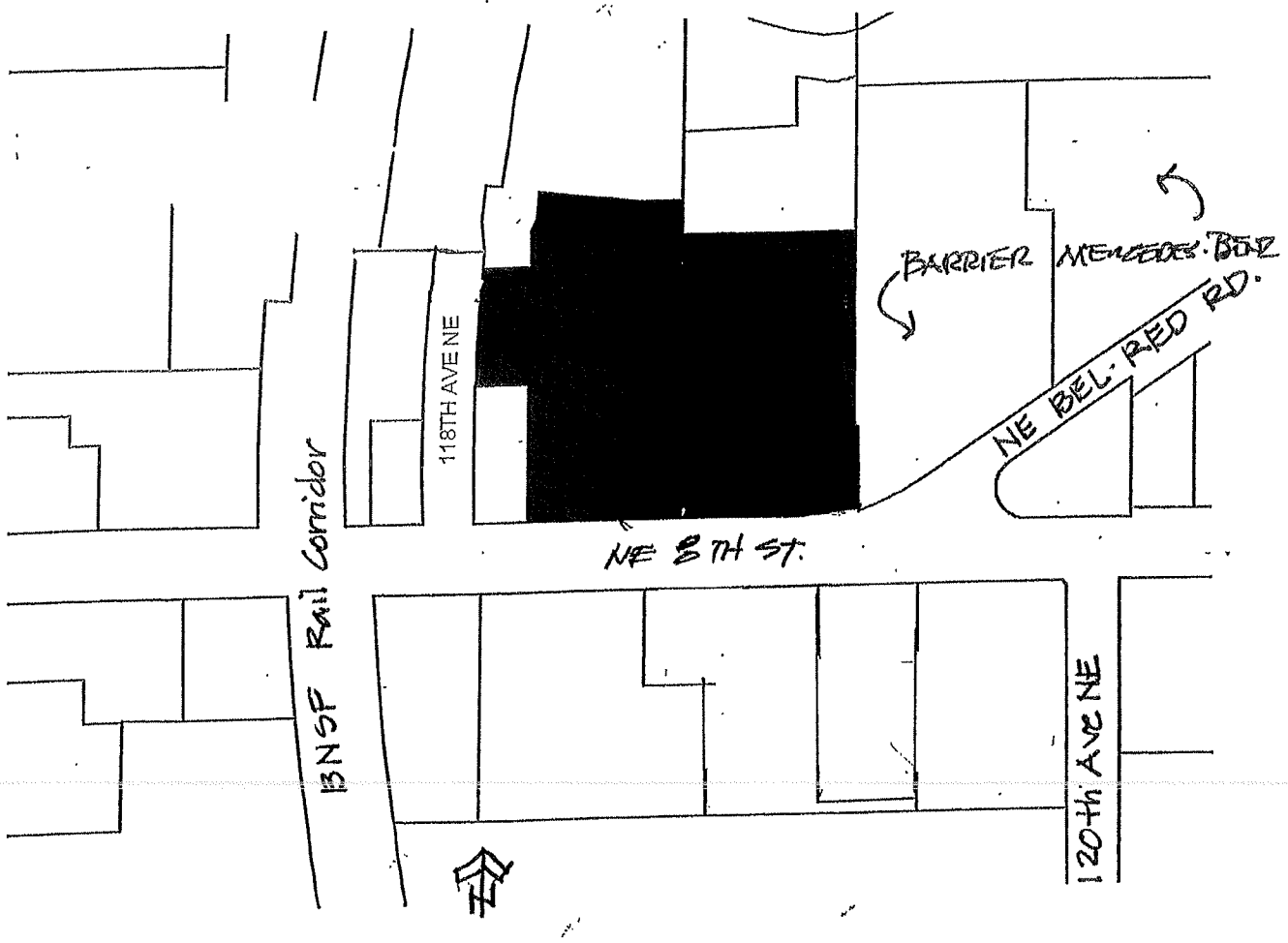
DATE:

DRAFTED BY: CJC

CHECKED BY: EJG

SCALE: 1" = 10'

Vicinity Map for Barrier ~~PORSCHE~~



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# *Cleanup Action Plan (CAP)/ Construction Contingency Plan (CCP) Eastside Rental Property Bellevue, Washington*

***Prepared for***
***Barrier Motors***

***October 4, 2013***
***2461-02***


Prepared by
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## PUSH PROBE LOGS

# CLEANUP ACTION PLAN (CAP)/
# CONSTRUCTION CONTINGENCY PLAN (CCP)
# EASTSIDE RENTAL PROPERTY
# BELLEVUE, WASHINGTON

## 1.0 INTRODUCTION

This combination cleanup action plan/construction contingency plan (CAP/CCP) was prepared for Barrier Motors to assist in the remediation of the Eastside Rental (ER) property and a portion of the adjacent Barrier West property. The ER property is located at 11830 NE 8th Street in Bellevue, Washington (Figure 1). The Barrier West property is located to the west of the ER Property at NE 8th Street in Bellevue, Washington. The Site shall be referred to as the "Eastside Rentals Site" (Site) and is defined as the area of impacted soil and groundwater that was released from operations at the ER property (Figure 2). The Site includes the impacted areas of the ER property, the Barrier West property, and a separate Barrier property to the north of the ER property.

This CCP/CAP was prepared on behalf of Barrier Motors (Barrier) to conduct the proposed remedial actions in general accordance with requirements listed in the Washington State Model Toxics Control Act (MTCA - WAC 173-340-360).

This work is being conducted will be performed as the substantial equivalent of a Washington State Department of Ecology (Ecology)-conducted or Ecology-supervised remedial action pursuant to WAC 173-340-545.

This CAP/CCP summarizes procedures for removing areas of known impacted soil and includes procedures to be followed if suspected hazardous materials in soil are encountered during excavation and remediation work at the subject property. This CAP/CCP also provides a basis for materials handling and worker health and safety requirements.

### *1.1 Planned Development Project Description*

Barrier intends to redevelop the ER property and the Barrier West property in approximately mid-December 2013. Remedial activities on the ER property and the Barrier West property will occur after demolition of the existing on-site buildings, but prior to construction and site redevelopment. Site demolition will be handled separately by the construction contractor.

The remedial activities will include the removal of the existing ER and Barrier West retail buildings, the known underground storage tanks, and the removal of petroleum-contaminated soil.

A retail automobile facility will be constructed partially on the ER property and the Barrier West property. The new building will be concrete slab on grade with supporting pilings. The remainder of the site will be paved and will include landscaped areas. The paved areas will be used for retail automobile sales.

## 2.0 SITE BACKGROUND

This section presents background information on the site including the location, operational history, hydrogeology, and previous environmental investigations completed at the site.

### *2.1 Site Description and History – Prior Environmental Investigations*

The ER property is located at 11830 NE 8th Street in Bellevue, Washington. Barrier Motors recently purchased the property to develop it and the surrounding Barrier property as a retail automobile dealership. Until recently, the ER property was being used as an equipment rental facility.

Based on our review of previous reports, we understand that in 1989 and 1990, five underground storage tanks (USTs) were removed from the ER property. Three of the USTs contained gasoline and two contained diesel fuel. Petroleum hydrocarbon-impacted soil and groundwater was identified during these UST removals. Three 2,000-gallon USTs remain at the site and have recently been taken out of service. Two of the USTs contained diesel fuel and one contained gasoline.

In 1990, Hart Crowser (acting on behalf of Eastside Rental) installed a groundwater treatment system to remediate the contaminated groundwater. In 1994, the treatment system was modified by ICF Kaiser to include a soil vapor extraction (SVE) system.

In March 2000, Applied Hydrogeologic Research (AHR) conducted a subsurface investigation to evaluate the limits of soil and groundwater contamination. AHR noted an antiquated stormwater system that appeared to be delivering potentially contaminated water (runoff and equipment wash water) into the subsurface. This stormwater and wash water was likely transported through leaking pipes and possibly open-bottomed catch basins or sumps.

Soil sample analytical results at that time indicated that the soil contamination was likely contained within the ER property boundaries. However, groundwater analytical results collected from direct-push probes indicated that groundwater contamination extended to the ER property boundaries and may have extended beyond the northern property boundary.

In October 2010, on behalf of Barrier Motors, Hart Crowser collected groundwater samples from the available groundwater monitoring wells for chemical analysis. The results showed that the groundwater concentrations were lower than the concentrations measured in 1999 by AHR except for one groundwater monitoring well location. This groundwater monitoring event used existing groundwater monitoring wells, so it did not further determine the extent of soil and groundwater contamination.

## 2.2 Recent Environmental Investigations

On behalf of Barrier Motors, Hart Crowser completed a subsurface investigation on the adjacent Barrier property located to the north of the ER property (Barrier Mercedes property) on August 2, 2012 and an ER property investigation in May 2013. As part of these investigations, a total of nine off-site push probes and five groundwater monitoring wells (Figure 3A) were completed on the Barrier Mercedes property and thirteen push-probes (Figure 3B) were completed on the ER property.

Soil and groundwater samples were collected from each of the push-probes and groundwater monitoring wells. Soil sample analytical results are presented in Table 1 and groundwater analytical results are presented in Table 2 (both tables are located at the end of this document). In addition, selected chemicals of concern results are shown on Figures 3A, 3B, 4A, and 4B.

The soil sample analytical results indicated gasoline- and lube oil-range petroleum hydrocarbon, benzene, and total xylene concentrations above Washington State Department of Ecology Model Toxic Control Act (MTCA) Method A cleanup levels were present on the ER property, the Barrier Mercedes property, and the Barrier West property. The approximate extent of soil impacts are presented on Figures 3A and 3B.

Groundwater analytical results indicated gasoline-, diesel-, and lube oil-range petroleum hydrocarbon, benzene, ethylbenzene, and total xylene concentrations above MTCA Method A cleanup levels were present beneath the ER property, the Barrier Mercedes property, and the Barrier West property. In addition, the groundwater analytical results indicated the presence of tetrachloroethylene (PCE), trichloroethylene (TCE), vinyl chloride (VC) and

naphthalene at concentrations above MTCA Method A cleanup levels in a contained area located predominantly on the west side of the ER property. The approximate extent of groundwater contamination is presented on Figures 4A and 4B.

## 2.3 Regulatory Status

The former owner of the ER property has notified Ecology of the petroleum hydrocarbon contamination. Barrier is currently preparing the documentation to notify Ecology of the current delineated extent of the soil and groundwater contamination, as well as the planned remedial activities.

## 2.4 Site Geology and Hydrogeology

The topography of the ER property and surrounding properties is generally flat. Currently, there are two commercial retail buildings on the ER property with asphalt paving on the southern two-thirds of the site and bare soil on the northern third. The adjacent Barrier West property is paved or has a building. The impacted area of the Barrier Mercedes property, located directly to the north of the ER property, is used as a parking lot for vehicles. Lake Bellevue is located approximately 200 feet north of the ER property.

The projections of subsurface conditions for the Site are based on our push-probe investigations completed in August 2012 and May 2013. Groundwater was encountered in the push-probes at approximately 5 to 7 feet below ground surface (bgs). The inferred groundwater flow direction is to the north toward Lake Bellevue.

Subsurface soil typically consisted of 1 to 4 feet of fill material over 1 to 3 feet of native peat. Native sand underlies the peat.

## 2.5 Nature and Extent of Contamination

Subsurface contamination at the Site was caused by releases from the USTs and may also have resulted from rental equipment maintenance associated with the former ER operations. The total petroleum hydrocarbon (TPH) contamination from former UST releases appears to be located in the central and northern half of the Site (Figure 2). The impacted soil is within the upper 7 feet on the ER property and from 4 to 7 feet bgs on the Barrier West and Barrier Mercedes properties.

Groundwater was encountered between 5 and 7 feet bgs. Based on the groundwater sampling results, groundwater has been impacted by TPH and volatile organic compounds (VOCs).

## *2.6 Chemicals of Concern*

We compared chemical occurrences to applicable MTCA Method A cleanup levels to identify chemicals of concern (COCs) for each medium at the Site. These chemicals of concern are as follows:

**Soil.** Gasoline-range TPH (TPH-G), heavy oil-range TPH (TPH-O), benzene, total xylenes.

**Groundwater.** Lube oil- and diesel-range TPH (TPH-D), gasoline-range TPH (TPH-G), heavy oil-range TPH (TPH-O), benzene, ethylbenzene, total xylenes, PCE, TCE, VC, and naphthalene.

## *2.7 Potential Exposure Pathways*

planting areas?

### 2.7.1 Direct Contact with Soil

TPH-D and TPH-G are primarily in shallow soil within the upper 7 feet on the ER property and between 4 and 7 feet bgs on the Barrier property. The potential for long-term direct contact exposure is minimal due to the planned cleanup and redevelopment, which includes excavation and then placing asphalt and concrete pavement above the affected area.

excavation, removal asphalt.

### 2.7.2 Groundwater Protection

removing tanks

Groundwater is has been impacted by operation of the USTs. The planned remedial activities will remove the source of ongoing groundwater contamination and will include subsurface piping to allow for additional *in situ* treatment, if necessary.

### 2.7.3 Potential Vapor Intrusion

The potential for vapor intrusion from known contamination (TPH-G and VOCs) on the Site is minimal due to the planned remedial actions that will be undertaken as part of the redevelopment of the ER property and Barrier West property. All areas of contaminated soil within the ER property and the Barrier West property are expected to be removed during excavation, so there should be no known TPH-G-impacted soil or any known impacted soil remaining under the building footprint.

## 2.8 Remedial Action Objectives

The Remedial Action Objective (RAO) for the Site is to remove the source areas of petroleum-impacted soil within the ER property and the Barrier West property. The residual low-level impacted groundwater remaining on the ER property and on the Barrier West and Barrier Mercedes properties may be treated after this remedial effort is complete by implementing *in situ* treatment techniques, if necessary. The *in situ* treatment activities will be based on the results of the sampling and analysis completed during and after excavation activities.

Cleanup actions at the ER property and a portion of the Barrier West property are designed to address the following RAOs:

- **Prevent Direct Contact with Contaminated Soil.** Prevent direct contact with impacted soil exhibiting concentrations of COCs above MTCA unrestricted cleanup levels.

- **Protect Groundwater.** Address impacted soil to eliminate any potential for future groundwater impacts.

- **Mitigate Potential Vapors.** Address potential vapors from residual soil impacts that may remain under or around the proposed building.

Achieving Method A cleanup levels in all soil throughout the Site (ER property and Barrier properties) will not occur because of the impracticability of removing the isolated areas of impacted soil outside of the planned excavation footprint on the ER property and Barrier West property. Any residual petroleum hydrocarbons exceeding MTCA Method A cleanup levels that are left in place on the Barrier Mercedes property or any other location can be addressed by monitored natural attenuation or post-construction *in situ* treatment, if deemed necessary.

## 2.9 Cleanup Standards

Cleanup standards include cleanup levels and points of compliance (POCs) as described in WAC 173-340-700 through WAC 173-340-760. Cleanup standards must also incorporate other state and federal regulatory requirements applicable to the cleanup action and/or its location as appropriate. The following sections summarize current applicable cleanup standards for the Site.

### 2.9.1 Cleanup Levels

Table 3 summarizes the cleanup levels (CULs) selected for the Site COCs. MTCA Method A soil CULs have been selected for the Site. Prior to cleanup, these cleanup levels may be modified if additional volatile/extractable petroleum hydrocarbon analysis is performed on soil samples collected during construction.

**Table 3 – MTCA Method A Cleanup Levels**

| Medium | Constituent of Concern | Concentration | Units |
|---|---|---|---|
| Soil | | | |
| | Diesel-Range | 2000 | mg/kg |
| | Gasoline-Range | 100/30 [a] | mg/kg |
| | Heavy-Oil Range | 2000 | mg/kg |
| | Benzene | 0.03 | mg/kg |
| | Total xylenes | 9 | mg/kg |
| Groundwater | | | |
| | Diesel-Range | 500 | ug/l |
| | Gasoline-Range | 800/1000[b] | ug/l |
| | Heavy-Oil Range | 500 | ug/l |
| | Benzene | 5 | ug/l |
| | Ethylbenzene | 700 | ug/l |
| | Total xylenes | 1000 | ug/l |
| | PCE | 5 | ug/l |
| | TCE | 5 | ug/l |
| | VC | 0.2 | ug/l |

Notes:
(a) 100 mg/kg for gasoline mixtures without benzene and the total of ethylbenzene, toluene, and xylenes are less than 1 percent of the gasoline mixture; 30 mg/kg for all other gasoline mixtures.
(b) 800 ug/l if benzene is present in groundwater.

### 2.9.2 ARARs

The selected cleanup action will comply with federal, state, and local Applicable or Relevant and Appropriate Requirements (ARARs). Applicable requirements are federal and state laws or regulations that legally apply to a hazardous substance, cleanup action, location, or other circumstance at the Site. Relevant and appropriate requirements are those federal and state regulations that do not legally apply but address situations sufficiently similar that they may warrant application to the cleanup action.

The following ARARs have been identified for the Site:

- **Model Toxics Control Act (MTCA 70.105D RCW, Chapter 173-340 WAC).** MTCA contains detailed requirements and Washington State's expectations for cleanup of contaminated sites.

- **State Environmental Policy Act (SEPA – 43.21 RCW, Chapter 197-11 WAC).** An environmental checklist is necessary as part of any permitting activity within the City of Bellevue and pursuant to MTCA.

- **Minimum Standards for Construction and Maintenance of Wells (Chapter 173-160 WAC).** This regulation contains requirements for construction and abandonment of resource protection wells.

- **State Clean Air Act (RCW 70.94), General Regulations for Air Pollution Sources (Chapter 173-403 WAC), and Toxic Air Contaminant New Source Review Guidelines.** Emissions during any on-site operations may be subject to these regulations and will require a Notice of Construction Permit from the Puget Sound Clean Air Agency (PSCAA).

## 3.0 REMEDIAL ALTERNATIVES FOR CLEANUP ACTION

The remediation alternatives combine technologies that are applicable to impacted soil, groundwater, and soil vapor at the Site. Candidate remedial technologies were identified and screened to develop potential cleanup alternatives for further evaluation. The remedial technologies considered in the screening process include methodologies capable of achieving the remedial action objectives for site soil, groundwater, and soil vapor.

### *3.1 Remediation Alternative Descriptions*

The technologies retained in the screening process were separated into three remediation alternatives for further evaluation (Alternatives 1 through 3). The components of the remediation alternatives developed for the Site are summarized below. All alternatives include compliance monitoring to meet WAC 173-340-410.

Alternative 1 consists of the following components:

- Excavation and off-site disposal of all known impacted soil throughout the Site;
- *In situ* treatment of residual impacted groundwater; and
- Compliance monitoring.

Alternative 2 consists of the following components:

- Excavation and off-site disposal of all known impacted soil throughout the ER property and the Barrier West property;
- *In situ* treatment and/or monitored natural attenuation of residual impacted soil on the Barrier Mercedes property;
- *In situ* treatment and/or monitored natural attenuation of residual impacted groundwater; and
- Compliance monitoring.

Alternative 3 consists of the following components:

- Excavation and off-site disposal of impacted soil within the limits of the planned building location only;
- *In situ* treatment and/or monitored natural attenuation of residual impacted soil remaining at the Site;
- *In situ* treatment and/or monitored natural attenuation of residual impacted groundwater; and
- Compliance monitoring.

## 3.2 Selected Remedial Alternative

Alternative 2 was selected, which includes the off-site disposal of all known impacted soil within the ER property and Barrier West property. Approximately 8,200 cubic yards of impacted soil is estimated to be within the ER property and Barrier West property.

Since the petroleum hydrocarbon contamination identified within the Barrier Mercedes property is beneath an increasing thickness of non-impacted soil, the lateral excavation will not likely extend beyond the boundaries ER property or Barrier West property.

The depth of excavation will be based on the depth of contamination. Since groundwater was encountered between 5 and 7 feet bgs, we do not expect the petroleum impacts to extend below 7 feet bgs.

If, based on field observations, the upper soil on the ER property appears to be clean, it will be segregated from suspected impacted soil and stockpiled separately. This potentially non-impacted soil will be sampled in accordance with Ecology's Guidance for Site Checks and Site Assessments for Underground Storage Tanks (Ecology 2003). Based on current and historical data, most of the excavated impacted soil will be sent off site for disposal at a Subtitle D landfill.

## *3.3 Rationale for Selecting the Cleanup Action*

Section 173-340-360(10) of the MTCA regulation states that the draft CAP should include a preliminary determination that the cleanup action complies with subsections (2) and (3) of WAC 173-340-360. As specified in subsections (2) and (3), the selected cleanup action is designed to accomplish the following.

### 3.3.1 Protection of Human Health and the Environment

Implementation of the preferred remedial alternative will minimize potential exposures from each of the pathways identified as being of potential concern. For the current redevelopment, excavating impacted soil from the ER property and Barrier West property is the most effective alternative for minimizing direct contact. Although not anticipated, containment and isolation of residual impacted soil (if any) on the ER property and Barrier West property is the most reasonable and cost-effective alternative for minimizing direct contact with impacted soil that is left in place. Residual impacted soil on the Barrier Mercedes property is already contained and isolated beneath clean material and paved surface areas.

### 3.3.2 Compliance with Cleanup Standards per WAC 173-340-700 through -760

The goal of this cleanup action is to prevent direct contact with affected soil and maintain and protect groundwater quality by excavating source areas and most of the impacted soil.

*In situ* treatment will be implemented to remediate the residual impacted soil and groundwater at the Site.

### 3.3.3 Use of Permanent Solutions to the Maximum Extent Practicable per WAC 173-340-360 (4), (5), (7), and (8)

Excavation of the source area and impacted soil from the ER property and Barrier West property is the preferred technology because it permanently removes contaminants from the Site. The preferred remedy is protective of human health and the environment, can be effectively implemented, and is cost-effective. It is the most practicable alternative for addressing the primary exposure pathways of concern.

### 3.3.4 Compliance with Applicable State and Federal Laws per WAC 173-340-710

The cleanup action will comply with all relevant laws and requirements, as required in WAC 173-340-710. A detailed analysis of federal, state, and local laws and regulations that pertain to this project is provided in Section 2.9.2.

### 3.3.5 Provide Compliance Monitoring per WAC 173-340-410

During implementation of remedial actions, performance monitoring will be conducted to confirm that cleanup actions have attained cleanup levels and treatment goals. After remedial actions are completed, confirmation monitoring will be conducted to confirm that cleanup actions have attained cleanup levels and performance standards. Protection monitoring will be used to ensure that human health and the environment are being adequately protected during construction and operation of the cleanup actions.

### 3.3.6 Provide for a Reasonable Restoration Time Frame per WAC 173-340-360

The proposed cleanup action provides for a reasonable restoration time frame. Once cleanup activities at the ER and western Barrier properties are completed, the potential exposure pathways for Site soil and groundwater will be either entirely eliminated or effectively controlled.

## 4.0 EXECUTION

The owner will subcontract directly with an environmental construction firm that is experienced in excavating petroleum-contaminated soil. The depth and extent of excavation for impacted soil removal (Figure 2) were estimated by Hart Crowser based on recent and previous soil and groundwater sampling and analysis.

### *4.1 Responsible Parties*

Table 4 presents the responsible parties and their contact information.

**Table 4 - Contact Information for Responsible Parties**

| Party | Address | Contact | Contact Numbers |
|---|---|---|---|
| Owner - Barrier Properties ER LLC | 1533 120th Ave NE, Bellevue, Wa | Mr. Jorge Gonzalez | 425-990-4445 |
| General Contractor - Foushee | | | |
| Hart Crowser - Environmental Representative | 1700 Westlake Avenue North, Suite 200, Seattle, WA | Ross Stainsby | 206-324-9530<br>206-418-8830 (cell) |
| Environmental Contractor | To Be Determined | To Be Determined | To Be Determined |

Note: Additional information will be filled in as information becomes available.

## *4.2 Schedule for Implementing Cleanup Action*

Barrier expects to redevelop the ER property and Barrier West property beginning in mid-December 2013. Remediation would take place immediately after the buildings are demolished, and before construction and redevelopment activities commence. Remediation work is expected to occur in January 2014. ~~Field excavation and backfill activities are expected to be completed within 4~~ weeks.

## *4.3 Permitting*

The general contractor will be responsible for all demolition, non-remediation based excavation and site grading, and construction-related permits. The environmental representative and environmental contractor will be responsible for any permits related to remedial activities.

Prior to field activities, a construction National Pollution Discharge Elimination System (NPDES) permit, a clearing and grading permit, and a State Environmental Protection Act (SEPA) checklist will be completed by the architect.

## *4.4 Soil Excavation and Management*

### 4.4.1 Field Procedures

#### *Soil Excavation*

The environmental contractor will excavate soil in the designated area indicated on Figure 2. A Hart Crowser field representative will oversee and document all excavation work, perform necessary soil field screening and sampling, and will guide management of excavated soil within this area.

Prior to excavation and after demolition of the existing buildings, a limited test pit evaluation will be conducted to further evaluate the limits of the contamination in the areas that are currently under the retail buildings. If these investigations indicate the presence of impacted soil, the excavation boundaries will be enlarged to include these areas.

### *Control of Contaminant Release*

Where excavation of impacted soil is necessary, such excavation shall only be accomplished following field and/or chemical evaluation by the environmental representative. The environmental representative will:

- Determine whether measures may be necessary to mitigate dust emissions, rainfall runoff, fumes, etc., to control the migration of potentially hazardous materials into other areas (cross contamination); and

- Approve the methods identified by the contractor to drain water from soil excavated from below the water table before the soil is transported to the disposal/transfer facility.

The contractor's safety coordinator will determine if:

- Personal protective safety equipment and/or other engineered systems are needed for worker safety; and

- On-site monitoring is needed to detect increased concentrations of potentially hazardous materials.

The need for and extent of any special construction measures to protect the health and safety of workers will depend on the type and amount of suspected hazardous substances encountered during excavation, and the expected or known concentrations of these substances. The Contractor's HASP will define the health and safety measures that will be used at the site to protect site workers and visitors.

The environmental representative will confer with the Contractor about the recommended approach for controlling contaminant releases or minimizing the potential for migration of contaminants.

### *Segregation and Stockpiling*

Excavated contaminated soil will be controlled to prevent it from mixing with non-impacted soil. Most contaminated soil will be loaded directly into trucks for

delivery to the disposal/transfer facility. In the event that soil is stockpiled on-site, the Contractor shall cover all suspected soil stockpiles with plastic sheeting as necessary to prevent wind erosion and runoff during rainfall events. Any free liquids issuing from soil stockpiles will be directed to the excavation or contained with sorbent berms and absorbed by applying granular sorbent or absorbent pads. The Contractor shall further protect the stockpiles as necessary, from disturbance by water, wind, animal, or human contact. No vehicular traffic will be allowed on or between soil stockpiles, as traffic might cause erosion or damage to the stockpiles.

The Contractor shall also handle and protect suspected hazardous materials in a manner to protect workers and the environment. Worker protection during excavation and handling shall be the responsibility of the Contractor.

Prior to commencing site excavation, the environmental representative and Contractor shall identify specific areas on a site plan for temporary stockpiling of suspected or confirmed regulated materials. Suspected materials will be segregated based on their compatibility with other suspected materials, and based on their physical properties using the common sense criteria, field screening instruments, and results of chemical analysis as provided by the environmental representative.

### *Documentation and Recordkeeping*

The environmental representative will keep records specific to the project property to track and document stockpiling of contaminated materials. The notes will include the following information:

- Date and time of newly discovered suspected hazardous material;
- Person or party discovering material;
- Person or party making notification to Barrier;
- Date and time of notification of environmental representative;
- Specific locations of suspected material and stockpile(s) and the unique stockpile number provided by the environmental representative;
- Manner of handling and method of stockpiling;
- Suspected or confirmed types and concentration of constituents, and other pertinent information;

- Disposal decision; and
- Date and time of notification to Contractor regarding disposal notification.

### 4.4.2 Excavation Dewatering

We do not anticipate dewatering the excavation. Suitable backfill material will be determined by the project Geotechnical Engineer and will be used to aid in meeting the compaction requirements. The contractor will drain water from soil excavated below the water table before the soil is transported to the disposal/transfer facility.

### 4.4.3 *In Situ* Infiltration Piping and Vault Installation

Based on the findings during the excavation of contaminated soil, subsurface infiltration piping and vaults may be installed prior to backfilling to allow for *in situ* treatment after the construction of the retail automobile facility is constructed.

The likely subsurface piping locations are shown on Figure 2. The piping likely to be used will be 4-inch-diameter slotted PVC pipe. The pipe will be placed at approximately the groundwater elevation. The vaults will be field located to confirm that their locations do not impact future construction or property use. Final locations and pipe size may be modified following completion of the soil excavation and site specific field conditions observed.

### 4.4.4 Field Screening Methods

The environmental representative will use on-site field instrumentation and screening procedures to supplement the field observations for characterizing and screening suspected hazardous materials.

Excavated soil generated in the identified area will be carefully screened with the PID for petroleum hydrocarbons and VOCs. The PID detects volatile organic vapors released directly from contaminated materials during excavation, and from stockpiled materials. The PID may be used to detect volatile organic vapors accumulating in the headspace of containers filled about one-half full of representative soil samples.

Other field screening procedures may be followed to determine the nature of the suspected material. The environmental representative will collect samples for additional laboratory chemical analysis of suspected materials to verify

contaminant types and concentrations, or to corroborate and confirm screening results.

### 4.4.5 Verification Sampling and Analysis

Excavation will continue until field screening and observations indicate that contamination is no longer present or until the ER property boundaries are met. If no evidence of contamination exists based on field screening, discrete soil samples will be collected from the bottom and walls of the excavation.

Verification sampling will be performed by the environmental representative during excavation. Sampling protocol and analysis will be conducted in general accordance with Ecology Guidance for Site Checks and Site Assessments for Underground Storage Tanks (Ecology 2003). When sampling from an open excavation, a minimum of six inches of soil will be removed to obtain soil samples from an unexposed area to minimize the loss of volatile contaminants. When sampling directly from the backhoe bucket, soil samples will be collected from the middle of the bucket away from the metal sides to minimize cross-contamination. Sample container requirements vary according to analyte and sample matrix. The environmental representative will collect samples using a trowel or hand auger and place them in sample containers. Precleaned sample containers will be obtained from the analytical laboratory. Sample containers shall be cleaned following the requirements described in Specifications and Guidance for Contaminant-Free Sample Containers (EPA 1992).

Selected soil samples will be analyzed for one or more of the following:

- Gasoline-range petroleum hydrocarbons by Northwest Test Method NWTPH-Gx.
- Diesel- and oil-range petroleum hydrocarbons by Northwest Test Method NWTPH-Dx.
- Benzene, ethylbenzene, toluene and total xylenes by EPA Method 8021.
- Volatile organic compounds testing by EPA Test Method 8260.

The soil samples will be submitted to On-Site Environmental of Redmond, Washington for analysis.

Equipment cleaning will likely include brush-scrubbing in a non-phosphate detergent solution, double rinsing in tap water, and final rinsing with deionized water. Chain of custody forms will accompany all collected samples sent to the analytical laboratory.

### 4.4.6 Material Handling

Excavated soil determined to be contaminated will be transported directly to the disposal/transfer facility. If stockpiling of contaminated soil is required, soil will be placed on plastic sheeting. Material handling personal protection will be conducted in accordance with the contractor's HASP.

## *4.5 Construction Contingency Plan*

Prior to remediation activities, the retail buildings and all known aboveground features will have been removed from the areas to be excavated. It is possible that previously unidentified contaminated areas will be encountered. The following construction contingency plan provides an outline of the protocol that will be used to identify and dispose of suspected hazardous materials. Potential constituents of concern include TPH, BTEX, and VOCs.

### 4.5.1 Criteria for Contaminant Identification

The following list provides a common sense guide for identifying materials that may be classified as hazardous or regulated substances under state and federal regulations. Site personnel will use this list to determine whether potential contamination may be present.

Suspected hazardous materials are characterized by a wide range of properties. Soils and other materials encountered during demolition or excavation shall be suspected of containing potentially hazardous or otherwise regulated constituents if they are distinctively characterized by one or more of the following properties.

***Appearance***

- Oily or greasy appearance with visible oil droplets, film, or sheen;
- Tar, chemical sludge, or gummy resinous substance;
- Distinct color changes (red, blue, green, etc.);
- Foam, scum, gel, slime, or soapy liquid material;
- Fibrous material, particularly white or gray;
- Powder, grit, or machine-formed pellets indicative of chemicals;
- Metal containers such as drums and tanks, or pipelines;
- Molten slag with glassy, metallic, rock-like, or clinker appearance;
- Electrical equipment such as transformers, batteries, capacitors, etc.;
- Mist or smoky discharge; or
- Unnatural color flecks or smears in the soil.

***Odors***

- Gasoline;
- Paint thinner;
- Furniture polish;
- "Magic marker" pen;
- Rotten eggs or "skunky" odor;
- Mothballs;
- Sewage; or
- Other solvent or chemical-like odors.

***Sudden Onset of Health Effects***

- Dizziness;
- Nausea;
- Itching skin;
- Headache;
- Eye, nose, or throat irritation or discomfort;
- Blurred vision;
- Burning sensation in nose, throat, or on skin; or
- Other unexpected or unexplainable physical illnesses or symptoms.

While health effects may result from many causes, they must never be relied upon to detect hazardous materials. The above warning signs, if noted with a sudden and unexpected onset, may indicate the potential presence of hazardous materials.

### 4.5.2 Responsibilities

Table 5 describes the responsibilities for notification and follow-up actions required if suspected hazardous/contaminated materials are encountered during general site excavation and construction activities.

**Table 5 - Notification and Follow-Up Actions**

| Action | Responsible Parties |
|---|---|
| 1. Develop site-specific plan for suspected materials, handling, sampling, and disposal. | Environmental Representative<br>Hart Crowser |
| 2. Initiate notification sequence. | Any person who discovers potential environmental issue |
| 3. Field screen suspected materials with PID screening and/or immunoassay procedures. | Environmental Representative |
| 4. Segregate and stockpile suspected materials for observation and sampling (or otherwise isolate area of concern). | Excavation contractor |
| 5. Stake-out and number/label suspected soil stockpiles and collect characterization samples for lab testing. | Environmental Representative |
| 5A. Maintain stockpile in protected manner until transported for disposal. Maintain staked identification number. | Excavation contractor |
| 6. Collect characterization samples to test for presence of petroleum-contaminated soil (PCS) or chemically affected material. | Environmental Representative and testing lab |

### 4.5.3 Notification Process

Previously unknown underground storage tanks, soil, groundwater, debris, or other materials with suspected contamination may be discovered by the Contractor, environmental representative (Hart Crowser), or other site personnel during general excavation activities on the property. The environmental representative shall be notified immediately by whoever makes the discovery. The environmental representative will promptly notify Barrier. The environmental representative will conduct further assessment and/or testing. Barrier or environmental representative will promptly notify the Contractor so that the Contractor is aware of the potential extent of the issue.

Table 1 identifies responsible parties and their contact information. Some environmental conditions could potentially require reporting to the Washington State Department of Ecology (Ecology). These conditions, as further detailed in Ecology's May 25, 1990, Site Discovery - Release Reporting Policy 101(Section 5), include the following:

- Presence of hazardous substances that exceed applicable threshold exposure limits for site personnel or the public, or which could present an explosion hazard;

- Presence of hazardous substances, which could cause an immediate injury to human health or the environment;

- Presence of unconfined free petroleum product or other organic liquids in soil or groundwater;

- Presence of materials that would be designated as a Dangerous Waste under State Dangerous Waste Regulations (Chapter 173-303 WAC);

- Releases of petroleum hydrocarbons from regulated USTs, and removal/closure of regulated USTs; and

- Releases of hazardous substances to surface waters at concentration that exceeds applicable state water quality criteria (Chapter 173-201A WAC) and other applicable regulations.

No persons shall make reports to Ecology, unless specifically directed to do so, in writing, by Barrier. Barrier will notify Ecology if notification is required.

## 5.0 REPORTING

Following completion of the remedial work and construction subsurface excavation work, a final closure report will be prepared for future submittal to Ecology.

## 6.0 REFERENCES

Ecology, 2003. Guidance for Site Checks and Site Assessments for Underground Storage Tanks. Department of Ecology, Underground Storage Tank Program, 2003.

Hart Crowser, Inc., January 4, 1991. Underground Storage Tank Removal and Remediation Activity Report. Prepared for Eastside Rental, Bellevue, Washington.

ICF Kaiser, March 1994. Soil Borings and Monitoring Well Installations. Prepared for Eastside Rental, Bellevue, Washington.

Applied Hydrogeologic Research, Inc., March 2000. Report of Post Source Removal Subsurface Contamination Investigation. Prepared for Eastside Rentals and Equipment, Bellevue, Washington.

Hart Crowser, Inc., November 2, 2010. Groundwater Monitoring Results. Prepared for Barrier Motors, Bellevue, Washington.

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## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-2-S1<br>5/8/2013 | PP-2-S2<br>5/8/2013 | PP-3-S1<br>5/8/2013 | PP-3-S2<br>5/8/2013 | PP-4-S1<br>5/8/2013 |
|---|---|---|---|---|---|---|
| **TPH in mg/kg** | | | | | | |
| Diesel Range Organics | 2000 | | 29 U | 330 | | |
| Lube Oil | 2000 | | 58 U | 1300 | | |
| Gasoline Range Organics | 100/30** | 6.8 U | 5.7 U | 11 U | 5.1 U | 190 |
| **BTEX in mg/kg** | | | | | | |
| Benzene | 0.03 | 0.02 U | | | 0.02 U | 0.21 |
| Ethylbenzene | 6 | 0.068 U | | | 0.051 U | 3.6 |
| Toluene | 7 | 0.068 U | | | 0.051 U | 0.17 |
| m, p-Xylene | | 0.068 U | | | 0.051 U | 19 |
| o-Xylene | | 0.068 U | | | 0.051 U | 5.5 |
| Total Xylenes | 9 | 0.068 U | | | 0.051 U | 24.5 |
| **Volatiles in mg/kg** | | | | | | |
| 1,1,1,2-Tetrachloroethane | | | 0.001 U | 0.06 U | | |
| 1,1,1-Trichloroethane | 2 | | 0.001 U | 0.06 U | | |
| 1,1,2,2-Tetrachloroethane | | | 0.001 U | 0.06 U | | |
| 1,1,2-Trichloroethane | | | 0.001 U | 0.06 U | | |
| 1,1-Dichloroethane | | | 0.001 U | 0.06 U | | |
| 1,1-Dichloroethene | | | 0.001 U | 0.06 U | | |
| 1,1-Dichloropropene | | | 0.001 U | 0.06 U | | |
| 1,2,3-Trichlorobenzene | | | 0.001 U | 0.06 U | | |
| 1,2,3-Trichloropropane | | | 0.001 U | 0.06 U | | |
| 1,2,4-Trichlorobenzene | | | 0.001 U | 0.06 U | | |
| 1,2,4-Trimethylbenzene | | | 0.001 U | 0.06 U | | |
| 1,2-Dibromo-3-chloropropane | | | 0.0051 U | 0.3 U | | |
| 1,2-Dichlorobenzene | | | 0.001 U | 0.06 U | | |
| 1,2-Dichloroethane | 11* | | 0.001 U | 0.06 U | | |
| 1,2-Dichloropropane | | | 0.001 U | 0.06 U | | |
| 1,3,5-Trimethylbenzene | 800* | | 0.001 U | 0.06 U | | |
| 1,3-Dichlorobenzene | | | 0.001 U | 0.06 U | | |
| 1,3-Dichloropropane | | | 0.001 U | 0.06 U | | |
| 1,4-Dichlorobenzene | | | 0.001 U | 0.06 U | | |
| 2,2-Dichloropropane | | | 0.001 U | 0.06 U | | |
| 2-Butanone | | | 0.0051 U | 0.3 U | | |
| 2-Chloroethylvinylether | | | 0.0051 U | 0.3 U | | |
| 2-Chlorotoluene | | | 0.001 U | 0.06 U | | |
| 2-Hexanone | | | 0.0051 U | 0.3 U | | |
| 4-Chlorotoluene | | | 0.001 U | 0.06 U | | |
| Acetone | 72000* | | 0.012 J | 0.3 U | | |
| Benzene | 0.03 | | 0.001 U | *0.06 U* | | |
| Bromobenzene | | | 0.001 U | 0.06 U | | |
| Bromochloromethane | | | 0.001 U | 0.06 U | | |
| Bromoform | | | 0.001 U | 0.06 U | | |
| Bromomethane | | | 0.001 U | 0.06 U | | |
| Carbon Disulfide | 8000* | | 0.001 U | 0.06 U | | |
| Carbon Tetrachloride | | | 0.001 U | 0.06 U | | |
| CFC-11 | | | 0.001 U | 0.06 U | | |
| CFC-12 | | | 0.001 U | 0.06 U | | |
| Chlorobenzene | | | 0.001 U | 0.06 U | | |
| Chloroethane | | | 0.0051 U | 0.3 U | | |
| Chloroform | | | 0.001 U | 0.06 U | | |
| Chloromethane | | | 0.0051 U | 0.3 U | | |
| Cis-1,2-Dichloroethene | | | 0.001 U | 0.06 U | | |
| Cis-1,3-Dichloropropene | | | 0.001 U | 0.06 U | | |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-2-S1<br>5/8/2013 | PP-2-S2<br>5/8/2013 | PP-3-S1<br>5/8/2013 | PP-3-S2<br>5/8/2013 | PP-4-S1<br>5/8/2013 |
|---|---|---|---|---|---|---|
| Dibromochloromethane | | | 0.001 U | 0.06 U | | |
| Dibromomethane | | | 0.001 U | 0.06 U | | |
| Dichlorobromomethane | | | 0.001 U | 0.06 U | | |
| Ethylbenzene | 6 | | 0.001 U | 0.06 U | | |
| Ethylene dibromide | 0.005 | | 0.001 U | *0.06 U* | | |
| Hexachlorobutadiene | | | 0.0051 U | 0.3 U | | |
| Isopropylbenzene | 8000* | | 0.001 U | 0.06 U | | |
| Methyl Iodide | | | 0.0051 U | 0.3 U | | |
| Methyl Isobutyl Ketone | | | 0.0066 U | 0.39 U | | |
| Methyl t-Butyl Ether | 0.1 | | 0.001 U | 0.06 U | | |
| Methylene Chloride | 0.02 | | 0.0067 U | *0.39 U* | | |
| Naphthalene | 5 | | 0.001 U | 0.06 U | | |
| n-Butylbenzene | | | 0.001 U | 0.39 | | |
| n-Propylbenzene | 8000* | | 0.001 U | 0.11 | | |
| p-Isopropyltoluene | | | 0.001 U | 0.06 U | | |
| sec-Butylbenzene | | | 0.001 U | 0.2 | | |
| Styrene | | | 0.001 U | 0.06 U | | |
| tert-Butylbenzene | | | 0.001 U | 0.06 U | | |
| Tetrachloroethene | 0.05 | | 0.001 U | *0.06 U* | | |
| Toluene | 7 | | 0.0051 U | 0.3 U | | |
| Trans-1,2-Dichloroethene | | | 0.001 U | 0.06 U | | |
| Trans-1,3-Dichloropropene | | | 0.001 U | 0.06 U | | |
| Trichloroethene | 0.03 | | 0.001 U | *0.06 U* | | |
| Vinyl Acetate | | | 0.0051 U | 0.3 U | | |
| Vinyl Chloride | | | 0.001 U | 0.06 U | | |
| m, p-Xylene | | | 0.0021 U | 0.12 U | | |
| o-Xylene | | | 0.001 U | 0.06 U | | |
| Total Xylenes | 9 | | 0.0021 U | 0.12 U | | |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-4-S2<br>5/8/2013 | PP-5-S1<br>5/8/2013 | PP-5-S2<br>5/8/2013 | PP-6-S1<br>5/9/2013 | PP-6-S2<br>5/9/2013 |
|---|---|---|---|---|---|---|
| **TPH in mg/kg** | | | | | | |
| Diesel Range Organics | 2000 | 29 U | 810 | | 530 U | |
| Lube Oil | 2000 | 78 | 3500 | | 7900 | |
| Gasoline Range Organics | 100/30** | 13 U | 870 | 5.5 U | 57 U | 6.3 U |
| **BTEX in mg/kg** | | | | | | |
| Benzene | 0.03 | | | 0.99 | | 0.02 U |
| Ethylbenzene | 6 | | | 0.055 U | | 0.063 U |
| Toluene | 7 | | | 0.055 U | | 0.063 U |
| m, p-Xylene | | | | 0.28 | | 0.063 U |
| o-Xylene | | | | 0.055 U | | 0.063 U |
| Total Xylenes | 9 | | | 0.28 | | 0.063 U |
| **Volatiles in mg/kg** | | | | | | |
| 1,1,1,2-Tetrachloroethane | | 0.00085 U | 1.1 U | | 0.0093 U | |
| 1,1,1-Trichloroethane | 2 | 0.00085 U | 1.1 U | | 0.0093 U | |
| 1,1,2,2-Tetrachloroethane | | 0.00085 U | 1.1 U | | 0.57 U | |
| 1,1,2-Trichloroethane | | 0.00085 U | 1.1 U | | 0.0093 U | |
| 1,1-Dichloroethane | | 0.00085 U | 1.1 U | | 0.0093 U | |
| 1,1-Dichloroethene | | 0.00085 U | 1.1 U | | 0.0093 U | |
| 1,1-Dichloropropene | | 0.00085 U | 1.1 U | | 0.0093 U | |
| 1,2,3-Trichlorobenzene | | 0.00085 U | 1.1 U | | 0.57 U | |
| 1,2,3-Trichloropropane | | 0.00085 U | 1.1 U | | 0.57 U | |
| 1,2,4-Trichlorobenzene | | 0.00085 U | 1.1 U | | 0.57 U | |
| 1,2,4-Trimethylbenzene | | 0.00085 U | 33 | | 0.57 U | |
| 1,2-Dibromo-3-chloropropane | | 0.0042 U | 5.6 U | | 2.9 U | |
| 1,2-Dichlorobenzene | | 0.00085 U | 1.1 U | | 0.57 U | |
| 1,2-Dichloroethane | 11* | 0.00085 U | 1.1 U | | 0.0093 U | |
| 1,2-Dichloropropane | | 0.00085 U | 1.1 U | | 0.012 U | |
| 1,3,5-Trimethylbenzene | 800* | 0.00085 U | 9.9 | | 0.57 U | |
| 1,3-Dichlorobenzene | | 0.00085 U | 1.1 U | | 0.57 U | |
| 1,3-Dichloropropane | | 0.00085 U | 1.1 U | | 0.012 U | |
| 1,4-Dichlorobenzene | | 0.00085 U | 1.1 U | | 0.57 U | |
| 2,2-Dichloropropane | | 0.00085 U | 1.1 U | | 0.0093 U | |
| 2-Butanone | | 0.0042 U | 5.6 U | | 0.47 | |
| 2-Chloroethylvinylether | | 0.0042 U | 5.6 U | | 0.046 U | |
| 2-Chlorotoluene | | 0.00085 U | 1.1 U | | 0.57 U | |
| 2-Hexanone | | 0.0042 U | 5.6 U | | 0.059 U | |
| 4-Chlorotoluene | | 0.00085 U | 1.1 U | | 0.57 U | |
| Acetone | 72000* | 0.0056 J | 5.6 U | | 3 | |
| Benzene | 0.03 | 0.0049 | 21 | | 0.0093 U | |
| Bromobenzene | | 0.00085 U | 1.1 U | | 0.57 U | |
| Bromochloromethane | | 0.00085 U | 1.1 U | | 0.0093 U | |
| Bromoform | | 0.00085 U | 1.1 U | | 0.0093 U | |
| Bromomethane | | 0.00085 U | 1.1 U | | 0.0093 U | |
| Carbon Disulfide | 8000* | 0.00085 U | 1.1 U | | 0.0093 U | |
| Carbon Tetrachloride | | 0.00085 U | 1.1 U | | 0.0093 U | |
| CFC-11 | | 0.00085 U | 1.1 U | | 0.0093 U | |
| CFC-12 | | 0.00085 U | 1.1 U | | 0.0093 U | |
| Chlorobenzene | | 0.00085 U | 1.1 U | | 0.0093 U | |
| Chloroethane | | 0.0042 U | 5.6 U | | 0.046 U | |
| Chloroform | | 0.00085 U | 1.1 U | | 0.0093 U | |
| Chloromethane | | 0.0042 U | 5.6 U | | 0.059 U | |
| Cis-1,2-Dichloroethene | | 0.00085 U | 1.1 U | | 0.0093 U | |
| Cis-1,3-Dichloropropene | | 0.00085 U | 1.1 U | | 0.0093 U | |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-4-S2<br>5/8/2013 | PP-5-S1<br>5/8/2013 | PP-5-S2<br>5/8/2013 | PP-6-S1<br>5/9/2013 | PP-6-S2<br>5/9/2013 |
|---|---|---|---|---|---|---|
| Dibromochloromethane | | 0.00085 U | 1.1 U | | 0.0093 U | |
| Dibromomethane | | 0.00085 U | 1.1 U | | 0.0093 U | |
| Dichlorobromomethane | | 0.00085 U | 1.1 U | | 0.0093 U | |
| Ethylbenzene | 6 | 0.00085 U | 3 | | 0.0093 U | |
| Ethylene dibromide | 0.005 | 0.00085 U | *1.1 U* | | *0.0093 U* | |
| Hexachlorobutadiene | | 0.0042 U | 5.6 U | | 2.9 U | |
| Isopropylbenzene | 8000* | 0.00085 U | 2 | | 0.0093 U | |
| Methyl Iodide | | 0.0042 U | 5.6 U | | 0.046 U | |
| Methyl Isobutyl Ketone | | 0.0054 U | 7.1 U | | 0.063 U | |
| Methyl t-Butyl Ether | 0.1 | 0.00085 U | *1.1 U* | | 0.0093 U | |
| Methylene Chloride | 0.02 | 0.0055 U | *7.2 U* | | *0.064 U* | |
| Naphthalene | 5 | 0.00085 U | 1.5 | | 0.57 U | |
| n-Butylbenzene | | 0.00085 U | 1.1 U | | 0.57 U | |
| n-Propylbenzene | 8000* | 0.0012 | 5.9 | | 0.57 U | |
| p-Isopropyltoluene | | 0.00085 U | 1.1 U | | 0.57 U | |
| sec-Butylbenzene | | 0.00085 U | 1.1 U | | 0.57 U | |
| Styrene | | 0.00085 U | 1.1 U | | 0.0093 U | |
| tert-Butylbenzene | | 0.00085 U | 1.1 U | | 0.57 U | |
| Tetrachloroethene | 0.05 | 0.00085 U | *1.1 U* | | 0.0093 U | |
| Toluene | 7 | 0.0042 U | 5.6 U | | 0.046 U | |
| Trans-1,2-Dichloroethene | | 0.00085 U | 1.1 U | | 0.0093 U | |
| Trans-1,3-Dichloropropene | | 0.00085 U | 1.1 U | | 0.0093 U | |
| Trichloroethene | 0.03 | 0.00085 U | *1.1 U* | | 0.0093 U | |
| Vinyl Acetate | | 0.0042 U | 5.6 U | | 0.046 U | |
| Vinyl Chloride | | 0.00085 U | 1.1 U | | 0.0093 U | |
| m, p-Xylene | | 0.0017 U | 110 | | 0.019 U | |
| o-Xylene | | 0.00085 U | 5 | | 0.0093 U | |
| Total Xylenes | 9 | 0.0017 U | 115 | | 0.019 U | |

# Table 1 - Analytical Results for Soil Samples

| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-7-S1<br>5/9/2013 | PP-7-S2<br>5/9/2013 | PP-8-S1<br>5/9/2013 | PP-8-S2<br>5/9/2013 | PP-8-S3<br>5/9/2013 |
|---|---|---|---|---|---|---|
| **TPH in mg/kg** | | | | | | |
| Diesel Range Organics | 2000 | | 28 U | | 1600 U | |
| Lube Oil | 2000 | | 55 U | | 2900 | |
| Gasoline Range Organics | 100/30** | 4600 | 11 U | 1000 | 2600 | 12 |
| **BTEX in mg/kg** | | | | | | |
| Benzene | 0.03 | 30 | | 1.4 | | 0.66 |
| Ethylbenzene | 6 | 90 | | 10 | | 0.66 |
| Toluene | 7 | 4.6 | | 0.65 U | | 0.091 U |
| m, p-Xylene | | 280 | | 28 | | 2.3 |
| o-Xylene | | 13 | | 4.5 | | 0.091 U |
| Total Xylenes | 9 | 293 | | 32.5 | | 2.3 |
| **Volatiles in mg/kg** | | | | | | |
| 1,1,1,2-Tetrachloroethane | | | 0.0009 U | | 2.3 U | |
| 1,1,1-Trichloroethane | 2 | | 0.0009 U | | 2.3 U | |
| 1,1,2,2-Tetrachloroethane | | | 0.0009 U | | 2.3 U | |
| 1,1,2-Trichloroethane | | | 0.0009 U | | 2.3 U | |
| 1,1-Dichloroethane | | | 0.0009 U | | 2.3 U | |
| 1,1-Dichloroethene | | | 0.0009 U | | 2.3 U | |
| 1,1-Dichloropropene | | | 0.0009 U | | 2.3 U | |
| 1,2,3-Trichlorobenzene | | | 0.0009 U | | 2.3 U | |
| 1,2,3-Trichloropropane | | | 0.0012 U | | 3 U | |
| 1,2,4-Trichlorobenzene | | | 0.0009 U | | 2.3 U | |
| 1,2,4-Trimethylbenzene | | | 0.0014 | | 240 | |
| 1,2-Dibromo-3-chloropropane | | | 0.0045 U | | 12 U | |
| 1,2-Dichlorobenzene | | | 0.0009 U | | 2.3 U | |
| 1,2-Dichloroethane | 11* | | 0.0009 U | | 2.3 U | |
| 1,2-Dichloropropane | | | 0.0012 U | | 3 U | |
| 1,3,5-Trimethylbenzene | 800* | | 0.0044 | | 81 | |
| 1,3-Dichlorobenzene | | | 0.0009 U | | 2.3 U | |
| 1,3-Dichloropropane | | | 0.0012 U | | 3 U | |
| 1,4-Dichlorobenzene | | | 0.0009 U | | 2.3 U | |
| 2,2-Dichloropropane | | | 0.0009 U | | 2.3 U | |
| 2-Butanone | | | 0.0045 U | | 12 U | |
| 2-Chloroethylvinylether | | | 0.0045 U | | 12 U | |
| 2-Chlorotoluene | | | 0.0009 U | | 2.3 U | |
| 2-Hexanone | | | 0.0057 U | | 15 U | |
| 4-Chlorotoluene | | | 0.0009 U | | 2.3 U | |
| Acetone | 72000* | | 0.0091 J | | 12 U | |
| Benzene | 0.03 | | 0.38 | | 91 | |
| Bromobenzene | | | 0.0009 U | | 2.3 U | |
| Bromochloromethane | | | 0.0009 U | | 2.3 U | |
| Bromoform | | | 0.0009 U | | 2.3 U | |
| Bromomethane | | | 0.0009 U | | 2.3 U | |
| Carbon Disulfide | 8000* | | 0.0009 U | | 2.3 U | |
| Carbon Tetrachloride | | | 0.0009 U | | 2.3 U | |
| CFC-11 | | | 0.0009 U | | 2.3 U | |
| CFC-12 | | | 0.0009 U | | 2.3 U | |
| Chlorobenzene | | | 0.0009 U | | 2.3 U | |
| Chloroethane | | | 0.0045 U | | 12 U | |
| Chloroform | | | 0.0009 U | | 2.3 U | |
| Chloromethane | | | 0.0057 U | | 15 U | |
| Cis-1,2-Dichloroethene | | | 0.0009 U | | 2.3 U | |
| Cis-1,3-Dichloropropene | | | 0.0009 U | | 2.3 U | |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-7-S1<br>5/9/2013 | PP-7-S2<br>5/9/2013 | PP-8-S1<br>5/9/2013 | PP-8-S2<br>5/9/2013 | PP-8-S3<br>5/9/2013 |
|---|---|---|---|---|---|---|
| Dibromochloromethane | | | 0.0009 U | | 2.3 U | |
| Dibromomethane | | | 0.0009 U | | 2.3 U | |
| Dichlorobromomethane | | | 0.0009 U | | 2.3 U | |
| Ethylbenzene | 6 | | 0.0079 | | 85 | |
| Ethylene dibromide | 0.005 | | 0.0009 U | | *2.3 U* | |
| Hexachlorobutadiene | | | 0.0045 U | | 12 U | |
| Isopropylbenzene | 8000* | | 0.0047 | | 9.5 | |
| Methyl Iodide | | | 0.0045 U | | 12 U | |
| Methyl Isobutyl Ketone | | | 0.0061 U | | 16 U | |
| Methyl t-Butyl Ether | 0.1 | | 0.0009 U | | *2.3 U* | |
| Methylene Chloride | 0.02 | | 0.0062 U | | *16 U* | |
| Naphthalene | 5 | | 0.0009 U | | 31 | |
| n-Butylbenzene | | | 0.0009 U | | 2.3 U | |
| n-Propylbenzene | 8000* | | 0.0026 | | 41 | |
| p-Isopropyltoluene | | | 0.0009 U | | 3.2 | |
| sec-Butylbenzene | | | 0.0009 U | | 2.3 U | |
| Styrene | | | 0.0009 U | | 2.3 U | |
| tert-Butylbenzene | | | 0.0009 U | | 2.3 U | |
| Tetrachloroethene | 0.05 | | 0.0009 U | | *2.3 U* | |
| Toluene | 7 | | 0.0072 | | *12 U* | |
| Trans-1,2-Dichloroethene | | | 0.0009 U | | 2.3 U | |
| Trans-1,3-Dichloropropene | | | 0.0009 U | | 2.3 U | |
| Trichloroethene | 0.03 | | 0.0009 U | | *2.3 U* | |
| Vinyl Acetate | | | 0.0045 U | | 12 U | |
| Vinyl Chloride | | | 0.0009 U | | 2.3 U | |
| m, p-Xylene | | | 0.05 | | 330 | |
| o-Xylene | | | 0.0016 | | 4.9 | |
| Total Xylenes | 9 | | 0.0516 | | 334.9 | |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-9-S1<br>5/8/2013 | PP-9-S2<br>5/8/2013 | PP-10-S1<br>5/8/2013 | PP-10-S2<br>5/8/2013 | PP-11-S1<br>5/8/2013 |
|---|---|---|---|---|---|---|
| **TPH in mg/kg** | | | | | | |
| Diesel Range Organics | 2000 | 540 | | 29 U | | 29 U |
| Lube Oil | 2000 | 1300 | | 58 U | | 58 U |
| Gasoline Range Organics | 100/30** | 3500 | 18 | 6 U | 5.5 U | 6 U |
| **BTEX in mg/kg** | | | | | | |
| Benzene | 0.03 | | 0.049 | | 0.02 U | |
| Ethylbenzene | 6 | | 0.46 | | 0.055 U | |
| Toluene | 7 | | 0.05 U | | 0.055 U | |
| m, p-Xylene | | | 1.8 | | 0.055 U | |
| o-Xylene | | | 0.05 U | | 0.055 U | |
| Total Xylenes | 9 | | 1.8 | | 0.055 U | |
| **Volatiles in mg/kg** | | | | | | |
| 1,1,1,2-Tetrachloroethane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,1,1-Trichloroethane | 2 | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,1,2,2-Tetrachloroethane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,1,2-Trichloroethane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,1-Dichloroethane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,1-Dichloroethene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,1-Dichloropropene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,2,3-Trichlorobenzene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,2,3-Trichloropropane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,2,4-Trichlorobenzene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,2,4-Trimethylbenzene | | 140 | | 0.00093 U | | 0.00092 U |
| 1,2-Dibromo-3-chloropropane | | 4 U | | 0.0047 U | | 0.0046 U |
| 1,2-Dichlorobenzene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,2-Dichloroethane | 11* | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,2-Dichloropropane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,3,5-Trimethylbenzene | 800* | 47 | | 0.00093 U | | 0.00092 U |
| 1,3-Dichlorobenzene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,3-Dichloropropane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 1,4-Dichlorobenzene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 2,2-Dichloropropane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 2-Butanone | | 4 U | | 0.0047 U | | 0.0046 U |
| 2-Chloroethylvinylether | | 4 U | | 0.0047 U | | 0.0046 U |
| 2-Chlorotoluene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| 2-Hexanone | | 4 U | | 0.0047 U | | 0.0046 U |
| 4-Chlorotoluene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Acetone | 72000* | 4 U | | 0.033 J | | 0.0046 U |
| Benzene | 0.03 | 2.7 | | 0.0015 | | 0.00092 U |
| Bromobenzene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Bromochloromethane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Bromoform | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Bromomethane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Carbon Disulfide | 8000* | 0.79 U | | 0.00093 U | | 0.00092 U |
| Carbon Tetrachloride | | 0.79 U | | 0.00093 U | | 0.00092 U |
| CFC-11 | | 0.79 U | | 0.00093 U | | 0.00092 U |
| CFC-12 | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Chlorobenzene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Chloroethane | | 4 U | | 0.0047 U | | 0.0046 U |
| Chloroform | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Chloromethane | | 4 U | | 0.0047 U | | 0.0046 U |
| Cis-1,2-Dichloroethene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Cis-1,3-Dichloropropene | | 0.79 U | | 0.00093 U | | 0.00092 U |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-9-S1<br>5/8/2013 | PP-9-S2<br>5/8/2013 | PP-10-S1<br>5/8/2013 | PP-10-S2<br>5/8/2013 | PP-11-S1<br>5/8/2013 |
|---|---|---|---|---|---|---|
| Dibromochloromethane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Dibromomethane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Dichlorobromomethane | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Ethylbenzene | 6 | 53 | | 0.00093 U | | 0.00092 U |
| Ethylene dibromide | 0.005 | *0.79 U* | | 0.00093 U | | 0.00092 U |
| Hexachlorobutadiene | | 4 U | | 0.0047 U | | 0.0046 U |
| Isopropylbenzene | 8000* | 6.6 | | 0.00093 U | | 0.00092 U |
| Methyl Iodide | | 4 U | | 0.0047 U | | 0.0046 U |
| Methyl Isobutyl Ketone | | 5.1 U | | 0.006 U | | 0.0059 U |
| Methyl t-Butyl Ether | 0.1 | *0.79 U* | | 0.00093 U | | 0.00092 U |
| Methylene Chloride | 0.02 | *5.1 U* | | 0.0061 U | | 0.006 U |
| Naphthalene | 5 | 29 | | 0.00093 U | | 0.00092 U |
| n-Butylbenzene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| n-Propylbenzene | 8000* | 27 | | 0.00093 U | | 0.00092 U |
| p-Isopropyltoluene | | 1.4 | | 0.00093 U | | 0.00092 U |
| sec-Butylbenzene | | 1.8 | | 0.00093 U | | 0.00092 U |
| Styrene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| tert-Butylbenzene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Tetrachloroethene | 0.05 | *0.79 U* | | 0.00093 U | | 0.00092 U |
| Toluene | 7 | 4 U | | 0.0047 U | | 0.0046 U |
| Trans-1,2-Dichloroethene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Trans-1,3-Dichloropropene | | 0.79 U | | 0.00093 U | | 0.00092 U |
| Trichloroethene | 0.03 | *0.79 U* | | 0.00093 U | | 0.00092 U |
| Vinyl Acetate | | 4 U | | 0.0047 U | | 0.0046 U |
| Vinyl Chloride | | 0.79 U | | 0.00093 U | | 0.00092 U |
| m, p-Xylene | | 260 | | 0.0019 U | | 0.0018 U |
| o-Xylene | | 80 | | 0.00093 U | | 0.00092 U |
| Total Xylenes | 9 | 340 | | 0.0019 U | | 0.0018 U |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-11-S2<br>5/8/2013 | PP-12-S1<br>5/9/2013 | PP-12-S2<br>5/9/2013 | PP-12-S3<br>5/9/2013 | PP-13-S1<br>5/8/2013 |
|---|---|---|---|---|---|---|
| **TPH in mg/kg** | | | | | | |
| Diesel Range Organics | 2000 | | | 270 U | | 600 |
| Lube Oil | 2000 | | | 160 | | 430 |
| Gasoline Range Organics | 100/30** | 5.2 U | 430 | 890 | 4.6 U | 78 |
| **BTEX in mg/kg** | | | | | | |
| Benzene | 0.03 | 0.16 | 6.6 | | 0.05 | |
| Ethylbenzene | 6 | 0.052 U | 8.5 | | 0.046 U | |
| Toluene | 7 | 0.052 U | 0.95 | | 0.046 U | |
| m, p-Xylene | | 0.052 U | 16 | | 0.046 U | |
| o-Xylene | | 0.052 U | 13 | | 0.046 U | |
| Total Xylenes | 9 | 0.052 U | 29 | | 0.046 U | |
| **Volatiles in mg/kg** | | | | | | |
| 1,1,1,2-Tetrachloroethane | | | | 0.6 U | | 0.057 U |
| 1,1,1-Trichloroethane | 2 | | | 0.6 U | | 0.057 U |
| 1,1,2,2-Tetrachloroethane | | | | 0.6 U | | 0.057 U |
| 1,1,2-Trichloroethane | | | | 0.6 U | | 0.057 U |
| 1,1-Dichloroethane | | | | 0.6 U | | 0.057 U |
| 1,1-Dichloroethene | | | | 0.6 U | | 0.057 U |
| 1,1-Dichloropropene | | | | 0.6 U | | 0.057 U |
| 1,2,3-Trichlorobenzene | | | | 0.6 U | | 0.057 U |
| 1,2,3-Trichloropropane | | | | 0.6 U | | 0.057 U |
| 1,2,4-Trichlorobenzene | | | | 0.6 U | | 0.057 U |
| 1,2,4-Trimethylbenzene | | | | 33 | | 1.9 |
| 1,2-Dibromo-3-chloropropane | | | | 3 U | | 0.28 U |
| 1,2-Dichlorobenzene | | | | 0.6 U | | 0.057 U |
| 1,2-Dichloroethane | 11* | | | 0.6 U | | 0.057 U |
| 1,2-Dichloropropane | | | | 0.6 U | | 0.057 U |
| 1,3,5-Trimethylbenzene | 800* | | | 11 | | 0.72 |
| 1,3-Dichlorobenzene | | | | 0.6 U | | 0.057 U |
| 1,3-Dichloropropane | | | | 0.6 U | | 0.057 U |
| 1,4-Dichlorobenzene | | | | 0.6 U | | 0.057 U |
| 2,2-Dichloropropane | | | | 0.6 U | | 0.057 U |
| 2-Butanone | | | | 3 U | | 0.28 U |
| 2-Chloroethylvinylether | | | | 3 U | | 0.28 U |
| 2-Chlorotoluene | | | | 0.6 U | | 0.057 U |
| 2-Hexanone | | | | 3 U | | 0.28 U |
| 4-Chlorotoluene | | | | 0.6 U | | 0.057 U |
| Acetone | 72000* | | | 3 U | | 0.28 U |
| Benzene | 0.03 | | | 3.6 | | *0.057 U* |
| Bromobenzene | | | | 0.6 U | | 0.057 U |
| Bromochloromethane | | | | 0.6 U | | 0.057 U |
| Bromoform | | | | 0.6 U | | 0.057 U |
| Bromomethane | | | | 0.6 U | | 0.057 U |
| Carbon Disulfide | 8000* | | | 0.6 U | | 0.057 U |
| Carbon Tetrachloride | | | | 0.6 U | | 0.057 U |
| CFC-11 | | | | 0.6 U | | 0.057 U |
| CFC-12 | | | | 0.6 U | | 0.057 U |
| Chlorobenzene | | | | 0.6 U | | 0.057 U |
| Chloroethane | | | | 3 U | | 0.28 U |
| Chloroform | | | | 0.6 U | | 0.057 U |
| Chloromethane | | | | 3 U | | 0.28 U |
| Cis-1,2-Dichloroethene | | | | 0.6 U | | 0.057 U |
| Cis-1,3-Dichloropropene | | | | 0.6 U | | 0.057 U |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-11-S2<br>5/8/2013 | PP-12-S1<br>5/9/2013 | PP-12-S2<br>5/9/2013 | PP-12-S3<br>5/9/2013 | PP-13-S1<br>5/8/2013 |
|---|---|---|---|---|---|---|
| Dibromochloromethane | | | | 0.6 U | | 0.057 U |
| Dibromomethane | | | | 0.6 U | | 0.057 U |
| Dichlorobromomethane | | | | 0.6 U | | 0.057 U |
| Ethylbenzene | 6 | | | 12 | | 0.27 |
| Ethylene dibromide | 0.005 | | | *0.6 U* | | *0.057 U* |
| Hexachlorobutadiene | | | | 3 U | | 0.28 U |
| Isopropylbenzene | 8000* | | | 1.2 | | 0.06 |
| Methyl Iodide | | | | 3 U | | 0.28 U |
| Methyl Isobutyl Ketone | | | | 3 U | | 0.36 U |
| Methyl t-Butyl Ether | 0.1 | | | *0.6 U* | | 0.057 U |
| Methylene Chloride | 0.02 | | | *3 U* | | *0.37 U* |
| Naphthalene | 5 | | | 6.5 | | 0.3 |
| n-Butylbenzene | | | | 0.6 U | | 0.057 U |
| n-Propylbenzene | 8000* | | | 5.4 | | 0.23 |
| p-Isopropyltoluene | | | | 0.6 U | | 0.083 |
| sec-Butylbenzene | | | | 0.6 U | | 0.088 |
| Styrene | | | | 0.6 U | | 0.057 U |
| tert-Butylbenzene | | | | 0.6 U | | 0.057 U |
| Tetrachloroethene | 0.05 | | | *0.6 U* | | *0.057 U* |
| Toluene | 7 | | | 3 U | | 0.28 U |
| Trans-1,2-Dichloroethene | | | | 0.6 U | | 0.057 U |
| Trans-1,3-Dichloropropene | | | | 0.6 U | | 0.057 U |
| Trichloroethene | 0.03 | | | *0.6 U* | | *0.057 U* |
| Vinyl Acetate | | | | 3 U | | 0.28 U |
| Vinyl Chloride | | | | 0.6 U | | 0.057 U |
| m, p-Xylene | | | | 76 | | 0.9 |
| o-Xylene | | | | 29 | | 0.44 |
| Total Xylenes | 9 | | | 105 | | 1.34 |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-13-S2<br>5/8/2013 | PP-14-S1<br>5/8/2013 | PP-14-S2<br>5/8/2013 | PP-15-S1<br>8/14/2012 | PP-16-S1<br>8/14/2012 |
|---|---|---|---|---|---|---|
| **TPH in mg/kg** | | | | | | |
| Diesel Range Organics | 2000 | | 28 U | | 28 U | 28 U |
| Lube Oil | 2000 | | 100 | | 56 U | 56 U |
| Gasoline Range Organics | 100/30** | 5 U | 5.3 U | 5.4 U | 4.6 U | 4.2 U |
| **BTEX in mg/kg** | | | | | | |
| Benzene | 0.03 | 0.02 U | | 0.02 U | 0.02 U | 0.02 U |
| Ethylbenzene | 6 | 0.05 U | | 0.054 U | 0.046 U | 0.042 U |
| Toluene | 7 | 0.05 U | | 0.054 U | 0.046 U | 0.042 U |
| m, p-Xylene | | 0.05 U | | 0.054 U | 0.046 U | 0.042 U |
| o-Xylene | | 0.05 U | | 0.054 U | 0.046 U | 0.042 U |
| Total Xylenes | 9 | 0.05 U | | 0.054 U | 0.046 U | 0.042 U |
| **Volatiles in mg/kg** | | | | | | |
| 1,1,1,2-Tetrachloroethane | | | 0.0012 U | | | |
| 1,1,1-Trichloroethane | 2 | | 0.0012 U | | | |
| 1,1,2,2-Tetrachloroethane | | | 0.0012 U | | | |
| 1,1,2-Trichloroethane | | | 0.0012 U | | | |
| 1,1-Dichloroethane | | | 0.0012 U | | | |
| 1,1-Dichloroethene | | | 0.0012 U | | | |
| 1,1-Dichloropropene | | | 0.0012 U | | | |
| 1,2,3-Trichlorobenzene | | | 0.0012 U | | | |
| 1,2,3-Trichloropropane | | | 0.0012 U | | | |
| 1,2,4-Trichlorobenzene | | | 0.0012 U | | | |
| 1,2,4-Trimethylbenzene | | | 0.0012 U | | | |
| 1,2-Dibromo-3-chloropropane | | | 0.0059 U | | | |
| 1,2-Dichlorobenzene | | | 0.0012 U | | | |
| 1,2-Dichloroethane | 11* | | 0.0012 U | | | |
| 1,2-Dichloropropane | | | 0.0012 U | | | |
| 1,3,5-Trimethylbenzene | 800* | | 0.0012 U | | | |
| 1,3-Dichlorobenzene | | | 0.0012 U | | | |
| 1,3-Dichloropropane | | | 0.0012 U | | | |
| 1,4-Dichlorobenzene | | | 0.0012 U | | | |
| 2,2-Dichloropropane | | | 0.0012 U | | | |
| 2-Butanone | | | 0.0059 U | | | |
| 2-Chloroethylvinylether | | | 0.0059 U | | | |
| 2-Chlorotoluene | | | 0.0012 U | | | |
| 2-Hexanone | | | 0.0059 U | | | |
| 4-Chlorotoluene | | | 0.0012 U | | | |
| Acetone | 72000* | | 0.02 J | | | |
| Benzene | 0.03 | | 0.0012 U | | | |
| Bromobenzene | | | 0.0012 U | | | |
| Bromochloromethane | | | 0.0012 U | | | |
| Bromoform | | | 0.0012 U | | | |
| Bromomethane | | | 0.0012 U | | | |
| Carbon Disulfide | 8000* | | 0.0012 U | | | |
| Carbon Tetrachloride | | | 0.0012 U | | | |
| CFC-11 | | | 0.0012 U | | | |
| CFC-12 | | | 0.0012 U | | | |
| Chlorobenzene | | | 0.0012 U | | | |
| Chloroethane | | | 0.0059 U | | | |
| Chloroform | | | 0.0012 U | | | |
| Chloromethane | | | 0.0059 U | | | |
| Cis-1,2-Dichloroethene | | | 0.0012 U | | | |
| Cis-1,3-Dichloropropene | | | 0.0012 U | | | |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-13-S2<br>5/8/2013 | PP-14-S1<br>5/8/2013 | PP-14-S2<br>5/8/2013 | PP-15-S1<br>8/14/2012 | PP-16-S1<br>8/14/2012 |
|---|---|---|---|---|---|---|
| Dibromochloromethane | | | 0.0012 U | | | |
| Dibromomethane | | | 0.0012 U | | | |
| Dichlorobromomethane | | | 0.0012 U | | | |
| Ethylbenzene | 6 | | 0.0012 U | | | |
| Ethylene dibromide | 0.005 | | 0.0012 U | | | |
| Hexachlorobutadiene | | | 0.0059 U | | | |
| Isopropylbenzene | 8000* | | 0.0012 U | | | |
| Methyl Iodide | | | 0.0059 U | | | |
| Methyl Isobutyl Ketone | | | 0.0075 U | | | |
| Methyl t-Butyl Ether | 0.1 | | 0.0012 U | | | |
| Methylene Chloride | 0.02 | | 0.0076 U | | | |
| Naphthalene | 5 | | 0.0012 U | | | |
| n-Butylbenzene | | | 0.0012 U | | | |
| n-Propylbenzene | 8000* | | 0.0012 U | | | |
| p-Isopropyltoluene | | | 0.0012 U | | | |
| sec-Butylbenzene | | | 0.0012 U | | | |
| Styrene | | | 0.0012 U | | | |
| tert-Butylbenzene | | | 0.0012 U | | | |
| Tetrachloroethene | 0.05 | | 0.0012 U | | | |
| Toluene | 7 | | 0.0059 U | | | |
| Trans-1,2-Dichloroethene | | | 0.0012 U | | | |
| Trans-1,3-Dichloropropene | | | 0.0012 U | | | |
| Trichloroethene | 0.03 | | 0.0012 U | | | |
| Vinyl Acetate | | | 0.0059 U | | | |
| Vinyl Chloride | | | 0.0012 U | | | |
| m, p-Xylene | | | 0.0023 U | | | |
| o-Xylene | | | 0.0012 U | | | |
| Total Xylenes | 9 | | 0.0023 U | | | |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-17-S1<br>8/14/2012 | PP-17-S2<br>8/14/2012 | PP-18-S1<br>8/13/2012 | PP-18-S2<br>8/13/2012 | PP-19-S1<br>8/13/2012 |
|---|---|---|---|---|---|---|
| **TPH in mg/kg** | | | | | | |
| Diesel Range Organics | 2000 | 78 U | 29 U | 110 | 28 U | 73 U |
| Lube Oil | 2000 | 160 U | 57 U | 650 | 57 U | 150 U |
| Gasoline Range Organics | 100/30** | 600 | 5.7 U | 7.1 U | 5.4 U | 23 UJ |
| **BTEX in mg/kg** | | | | | | |
| Benzene | 0.03 | | 0.023 | | 0.029 | 0.13 J |
| Ethylbenzene | 6 | | 0.057 U | | 0.054 U | 0.23 UJ |
| Toluene | 7 | | 0.057 U | | 0.054 U | 0.23 UJ |
| m, p-Xylene | | | 0.46 | | 0.054 U | 0.23 UJ |
| o-Xylene | | | 0.057 U | | 0.054 U | 0.23 UJ |
| Total Xylenes | 9 | | 0.46 | | 0.054 U | 0.23 UJ |
| **Volatiles in mg/kg** | | | | | | |
| 1,1,1,2-Tetrachloroethane | | 0.26 U | | 0.0012 U | | |
| 1,1,1-Trichloroethane | 2 | 0.26 U | | 0.0012 U | | |
| 1,1,2,2-Tetrachloroethane | | 0.26 U | | 0.078 U | | |
| 1,1,2-Trichloroethane | | 0.26 U | | 0.0012 U | | |
| 1,1-Dichloroethane | | 0.26 U | | 0.0012 U | | |
| 1,1-Dichloroethene | | 0.26 U | | 0.0012 U | | |
| 1,1-Dichloropropene | | 0.26 U | | 0.0012 U | | |
| 1,2,3-Trichlorobenzene | | 0.26 U | | 0.078 U | | |
| 1,2,3-Trichloropropane | | 0.26 U | | 0.078 U | | |
| 1,2,4-Trichlorobenzene | | 0.26 U | | 0.078 U | | |
| 1,2,4-Trimethylbenzene | | 19 | | 0.078 U | | |
| 1,2-Dibromo-3-chloropropane | | 1.3 U | | 0.39 U | | |
| 1,2-Dichlorobenzene | | 0.26 U | | 0.078 U | | |
| 1,2-Dichloroethane | 11* | 0.26 U | | 0.0012 U | | |
| 1,2-Dichloropropane | | 0.26 U | | 0.0012 U | | |
| 1,3,5-Trimethylbenzene | 800* | 5.7 | | 0.078 U | | |
| 1,3-Dichlorobenzene | | 0.26 U | | 0.078 U | | |
| 1,3-Dichloropropane | | 0.26 U | | 0.0012 U | | |
| 1,4-Dichlorobenzene | | 0.26 U | | 0.078 U | | |
| 2,2-Dichloropropane | | 0.26 U | | 0.0012 U | | |
| 2-Butanone | | 1.3 U | | 0.052 | | |
| 2-Chloroethylvinylether | | 1.3 U | | 0.0059 U | | |
| 2-Chlorotoluene | | 0.26 U | | 0.078 U | | |
| 2-Hexanone | | 1.3 U | | 0.0059 U | | |
| 4-Chlorotoluene | | 0.26 U | | 0.078 U | | |
| Acetone | 72000* | 1.3 U | | 0.17 | | |
| Benzene | 0.03 | 1.2 | | 0.002 | | |
| Bromobenzene | | 0.26 U | | 0.078 U | | |
| Bromochloromethane | | 0.26 U | | 0.0012 U | | |
| Bromoform | | 0.26 U | | 0.0012 U | | |
| Bromomethane | | 0.26 U | | 0.0012 U | | |
| Carbon Disulfide | 8000* | 0.26 U | | 0.002 | | |
| Carbon Tetrachloride | | 0.26 U | | 0.0012 U | | |
| CFC-11 | | 0.26 U | | 0.0012 U | | |
| CFC-12 | | 0.26 U | | 0.0012 U | | |
| Chlorobenzene | | 0.26 U | | 0.0012 U | | |
| Chloroethane | | 1.3 U | | 0.0059 U | | |
| Chloroform | | 0.26 U | | 0.0012 U | | |
| Chloromethane | | 1.3 U | | 0.0059 U | | |
| Cis-1,2-Dichloroethene | | 0.26 U | | 0.0012 U | | |
| Cis-1,3-Dichloropropene | | 0.26 U | | 0.0012 U | | |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-17-S1<br>8/14/2012 | PP-17-S2<br>8/14/2012 | PP-18-S1<br>8/13/2012 | PP-18-S2<br>8/13/2012 | PP-19-S1<br>8/13/2012 |
|---|---|---|---|---|---|---|
| Dibromochloromethane | | 0.26 U | | 0.0012 U | | |
| Dibromomethane | | 0.26 U | | 0.0012 U | | |
| Dichlorobromomethane | | 0.26 U | | 0.0012 U | | |
| Ethylbenzene | 6 | 4.9 | | 0.0021 | | |
| Ethylene dibromide | 0.005 | *0.26 U* | | 0.0012 U | | |
| Hexachlorobutadiene | | 1.3 U | | 0.39 U | | |
| Isopropylbenzene | 8000* | 0.86 | | 0.0012 U | | |
| Methyl Iodide | | 1.3 U | | 0.0059 U | | |
| Methyl Isobutyl Ketone | | 1.3 U | | 0.0059 U | | |
| Methyl t-Butyl Ether | 0.1 | *0.26 U* | | 0.0012 U | | |
| Methylene Chloride | 0.02 | *1.3 U* | | 0.0059 U | | |
| Naphthalene | 5 | 2.8 | | 0.078 U | | |
| n-Butylbenzene | | 0.26 U | | 0.078 U | | |
| n-Propylbenzene | 8000* | 2.8 | | 0.078 U | | |
| p-Isopropyltoluene | | 0.26 U | | 0.078 U | | |
| sec-Butylbenzene | | 0.26 U | | 0.078 U | | |
| Styrene | | 0.26 U | | 0.0012 U | | |
| tert-Butylbenzene | | 0.26 U | | 0.078 U | | |
| Tetrachloroethene | 0.05 | *0.26 U* | | 0.0012 U | | |
| Toluene | 7 | 1.3 | | 0.0059 U | | |
| Trans-1,2-Dichloroethene | | 0.26 U | | 0.0012 U | | |
| Trans-1,3-Dichloropropene | | 0.26 U | | 0.0012 U | | |
| Trichloroethene | 0.03 | *0.26 U* | | 0.0012 U | | |
| Vinyl Acetate | | 1.3 U | | 0.0059 U | | |
| Vinyl Chloride | | 0.26 U | | 0.0012 U | | |
| m, p-Xylene | | 49 | | 0.0084 | | |
| o-Xylene | | 17 | | 0.0047 | | |
| Total Xylenes | 9 | 66 | | 0.0131 | | |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-20-S1<br>8/13/2012 | PP-20-S3<br>8/13/2012 | P22-S1<br>8/13/2012 | PP-24-S2<br>8/13/2012 | PP-25-S1<br>8/14/2012 | PP-25-S2<br>8/14/2012 |
|---|---|---|---|---|---|---|---|
| **TPH in mg/kg** | | | | | | | |
| Diesel Range Organics | 2000 | 56 U | 29 U | 150 U | 28 U | 89 U | 30 U |
| Lube Oil | 2000 | 110 U | 58 U | 290 U | 56 U | 230 | 59 U |
| Gasoline Range Organics | 100/30** | *33 U* | 5.8 U | *58 UJ* | 5.5 U | 180 | 5.3 U |
| **BTEX in mg/kg** | | | | | | | |
| Benzene | 0.03 | | 0.02 U | *0.12 UJ* | 0.02 U | | 0.02 U |
| Ethylbenzene | 6 | | 0.058 U | 0.58 UJ | 0.055 U | | 0.053 U |
| Toluene | 7 | | 0.058 U | 0.58 UJ | 0.055 U | | 0.053 U |
| m, p-Xylene | | | 0.058 U | 0.58 UJ | 0.055 U | | 0.053 U |
| o-Xylene | | | 0.058 U | 0.58 UJ | 0.055 U | | 0.053 U |
| Total Xylenes | 9 | | 0.058 U | 0.58 UJ | 0.055 U | | 0.053 U |
| **Volatiles in mg/kg** | | | | | | | |
| 1,1,1,2-Tetrachloroethane | | 0.0031 U | | | | 0.0052 U | |
| 1,1,1-Trichloroethane | 2 | 0.0031 U | | | | 0.0052 U | |
| 1,1,2,2-Tetrachloroethane | | 0.16 U | | | | 0.29 U | |
| 1,1,2-Trichloroethane | | 0.0031 U | | | | 0.0052 U | |
| 1,1-Dichloroethane | | 0.0031 U | | | | 0.0052 U | |
| 1,1-Dichloroethene | | 0.0031 U | | | | 0.0052 U | |
| 1,1-Dichloropropene | | 0.0031 U | | | | 0.0052 U | |
| 1,2,3-Trichlorobenzene | | 0.16 U | | | | 0.29 U | |
| 1,2,3-Trichloropropane | | 0.16 U | | | | 0.29 U | |
| 1,2,4-Trichlorobenzene | | 0.16 U | | | | 0.29 U | |
| 1,2,4-Trimethylbenzene | | 0.77 | | | | 13 | |
| 1,2-Dibromo-3-chloropropane | | 0.81 U | | | | 1.5 U | |
| 1,2-Dichlorobenzene | | 0.16 U | | | | 0.29 U | |
| 1,2-Dichloroethane | 11* | 0.0031 U | | | | 0.12 | |
| 1,2-Dichloropropane | | 0.0031 U | | | | 0.0052 U | |
| 1,3,5-Trimethylbenzene | 800* | 0.22 | | | | 2.5 | |
| 1,3-Dichlorobenzene | | 0.16 U | | | | 0.29 U | |
| 1,3-Dichloropropane | | 0.0031 U | | | | 0.0052 U | |
| 1,4-Dichlorobenzene | | 0.16 U | | | | 0.29 U | |
| 2,2-Dichloropropane | | 0.0031 U | | | | 0.0052 U | |
| 2-Butanone | | 0.23 | | | | 0.5 | |
| 2-Chloroethylvinylether | | 0.015 U | | | | 0.026 U | |
| 2-Chlorotoluene | | 0.16 U | | | | 0.29 U | |
| 2-Hexanone | | 0.015 U | | | | 0.026 U | |
| 4-Chlorotoluene | | 0.16 U | | | | 0.29 U | |
| Acetone | 72000* | 0.82 | | | | 2.3 | |
| Benzene | 0.03 | 0.028 | | | | 9.8 | |
| Bromobenzene | | 0.16 U | | | | 0.29 U | |
| Bromochloromethane | | 0.0031 U | | | | 0.0052 U | |
| Bromoform | | 0.0031 U | | | | 0.0052 U | |
| Bromomethane | | 0.0031 U | | | | 0.0052 U | |
| Carbon Disulfide | 8000* | 0.0031 U | | | | 0.0052 U | |
| Carbon Tetrachloride | | 0.0031 U | | | | 0.0052 U | |
| CFC-11 | | 0.0031 U | | | | 0.0052 U | |
| CFC-12 | | 0.0031 U | | | | 0.0052 U | |
| Chlorobenzene | | 0.0031 U | | | | 0.0052 U | |
| Chloroethane | | 0.015 U | | | | 0.026 U | |
| Chloroform | | 0.0031 U | | | | 0.0052 U | |
| Chloromethane | | 0.015 U | | | | 0.026 U | |
| Cis-1,2-Dichloroethene | | 0.0031 U | | | | 0.0052 U | |
| Cis-1,3-Dichloropropene | | 0.0031 U | | | | 0.0052 U | |

## Table 1 - Analytical Results for Soil Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-20-S1<br>8/13/2012 | PP-20-S3<br>8/13/2012 | P22-S1<br>8/13/2012 | PP-24-S2<br>8/13/2012 | PP-25-S1<br>8/14/2012 | PP-25-S2<br>8/14/2012 |
|---|---|---|---|---|---|---|---|
| Dibromochloromethane | | 0.0031 U | | | | 0.0052 U | |
| Dibromomethane | | 0.0031 U | | | | 0.0052 U | |
| Dichlorobromomethane | | 0.0031 U | | | | 0.0052 U | |
| Ethylbenzene | 6 | 0.0082 | | | | 0.11 | |
| Ethylene dibromide | 0.005 | 0.0031 U | | | | *0.0052 U* | |
| Hexachlorobutadiene | | 0.81 U | | | | 1.5 U | |
| Isopropylbenzene | 8000* | 0.048 | | | | 0.24 | |
| Methyl Iodide | | 0.015 U | | | | 0.026 U | |
| Methyl Isobutyl Ketone | | 0.015 U | | | | 0.026 U | |
| Methyl t-Butyl Ether | 0.1 | 0.0031 U | | | | 0.0052 U | |
| Methylene Chloride | 0.02 | 0.015 U | | | | *0.026 U* | |
| Naphthalene | 5 | 0.16 U | | | | 1.1 | |
| n-Butylbenzene | | 0.16 U | | | | 0.29 U | |
| n-Propylbenzene | 8000* | 0.16 U | | | | 0.3 | |
| p-Isopropyltoluene | | 0.16 U | | | | 0.29 U | |
| sec-Butylbenzene | | 0.16 U | | | | 0.29 U | |
| Styrene | | 0.0031 U | | | | 0.0052 U | |
| tert-Butylbenzene | | 0.16 U | | | | 0.29 U | |
| Tetrachloroethene | 0.05 | 0.0031 U | | | | 0.0052 U | |
| Toluene | 7 | 0.031 | | | | 0.12 | |
| Trans-1,2-Dichloroethene | | 0.0031 U | | | | 0.0052 U | |
| Trans-1,3-Dichloropropene | | 0.0031 U | | | | 0.0052 U | |
| Trichloroethene | 0.03 | 0.0031 U | | | | 0.0052 U | |
| Vinyl Acetate | | 0.015 U | | | | 0.026 U | |
| Vinyl Chloride | | 0.0031 U | | | | 0.0052 U | |
| m, p-Xylene | | 2.3 | | | | 18 | |
| o-Xylene | | 0.15 | | | | 12 | |
| Total Xylenes | 9 | 2.45 | | | | $\boxed{30}$ | |

* MTCA Method B screening level.
U = Not detected at the reporting limit indicated.
J = Estimated value.
Italic = Reporting limit exceeds cleanup level.
Boxed = Concentration exceeds MTCA Method A/Method B cleanup level
**100 mg/kg for gasoline mixtures without benzene and
30 mg/kg for all other gasoline mixtures.

## Table 2 - Analytical Results for Water Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | ER-2<br>5/8/2013 | ER-3<br>5/9/2013 | MW-1<br>5/8/2013 | MW-2<br>5/8/2013 | WP-1<br>5/9/2013 |
|---|---|---|---|---|---|---|
| **TPH in mg/L** | | | | | | |
| Diesel Range Organics | 0.5 | *0.54 U* | 0.27 U | 0.33 U | *1.3 U* | 0.27 U |
| Lube Oil | 0.5 | 0.42 U | 0.43 U | 0.6 | 0.91 | 0.44 |
| Gasoline Range Organics | 1.0/0.8** | 0.65 | 0.1 U | 0.1 U | 1.8 | 0.14 |
| **BTEX in ug/L** | | | | | | |
| Benzene | 5 | | | | | |
| Ethylbenzene | 700 | | | | | |
| Toluene | 1000 | | | | | |
| m, p-Xylene | | | | | | |
| o-Xylene | | | | | | |
| Total Xylenes | 1000 | | | | | |
| **Volatiles in ug/L** | | | | | | |
| 1,1,1,2-Tetrachloroethane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 1,1,1-Trichloroethane | 200 | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 1,1,2,2-Tetrachloroethane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 1,1,2-Trichloroethane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 1,1-Dichloroethane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 1,1-Dichloroethene | | 0.2 U | 0.2 U | 0.2 U | 0.23 U*** | 0.4 U |
| 1,1-Dichloropropene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 1,2,3-Trichlorobenzene | | 0.2 U | 0.3 U | 0.2 U | 1 U | 0.6 U |
| 1,2,3-Trichloropropane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 1,2,4-Trichlorobenzene | | 0.2 U | 0.26 U | 0.2 U | 1 U | 0.52 U |
| 1,2,4-Trimethylbenzene | | 9.2 | 0.21 | 0.2 U | 1 U | 4.3 |
| 1,2-Dibromo-3-chloropropane | | 1 U | 1 U | 1 U | 5 U | 2 U |
| 1,2-Dichlorobenzene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 1,2-Dichloroethane | 5 | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 1,2-Dichloropropane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 1,3,5-Trimethylbenzene | 80* | 8.9 | 0.2 U | 0.2 U | 3.3 | 0.4 U |
| 1,3-Dichlorobenzene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 1,3-Dichloropropane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 1,4-Dichlorobenzene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 2,2-Dichloropropane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 2-Butanone | | 5 U | 5 U | 5 U | 25 U | 10 U |
| 2-Chloroethylvinylether | | 1 U | 1 U | 1 U | 5 U | 2 U |
| 2-Chlorotoluene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| 2-Hexanone | | 2 U | 2 U | 2 U | 10 U | 4 U |
| 4-Chlorotoluene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Acetone | | 5 U | 5 U | 5 U | 25 U | 10 U |
| Benzene | 5 | 0.42 | 0.38 | 0.2 U | 190 | 91 |
| Bromobenzene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Bromochloromethane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Bromoform | | 1 U | 1 U | 1 U | 5 U | 2 U |
| Bromomethane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Carbon Disulfide | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Carbon Tetrachloride | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| CFC-11 | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| CFC-12 | | 0.2 U | 0.26 U | 0.2 U | 1 U | 0.52 U |
| Chlorobenzene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Chloroethane | | 1 U | 1 U | 1 U | 5 U | 2 U |
| Chloroform | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Chloromethane | | 1 U | 1 U | 1 U | 5 U | 2 U |
| Cis-1,2-Dichloroethene | | 0.2 U | 2.6 | 0.2 U | 0.15 U*** | 0.4 U |
| Cis-1,3-Dichloropropene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |

## Table 2 - Analytical Results for Water Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | ER-2<br>5/8/2013 | ER-3<br>5/9/2013 | MW-1<br>5/8/2013 | MW-2<br>5/8/2013 | WP-1<br>5/9/2013 |
|---|---|---|---|---|---|---|
| Dibromochloromethane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Dibromomethane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Dichlorobromomethane | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Ethylbenzene | 700 | 0.34 | 0.41 | 0.2 U | 2.3 | 15 |
| Ethylene dibromide | 0.01 | *0.2 U* | *0.2 U* | *0.2 U* | *1 U* | *0.4 U* |
| Hexachlorobutadiene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Isopropylbenzene | 800* | 1.3 | 0.2 U | 0.2 U | 12 | 1 |
| Methyl Iodide | | 1.3 U | 1.3 U | 1.3 U | 6.5 U | 2.6 U |
| Methyl Isobutyl Ketone | | 2 U | 2 U | 2 U | 10 U | 4 U |
| Methyl t-Butyl Ether | 20 | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Methylene Chloride | 5 | 1 U | 1 U | 1 U | 5 U | 2 U |
| Naphthalene | 160 | 11 | 1.4 U | 1 U | 5 U | 4.4 |
| n-Butylbenzene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| n-Propylbenzene | 800* | 5.4 | 0.2 U | 0.2 U | 35 | 0.77 |
| p-Isopropyltoluene | | 0.53 | 0.2 U | 0.2 U | 1 U | 0.4 U |
| sec-Butylbenzene | | 1 | 0.2 U | 0.2 U | 6 | 0.4 U |
| Styrene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| tert-Butylbenzene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Tetrachloroethene | 5 | 0.2 U | 22 | 0.2 U | 0.35 U*** | 0.4 U |
| Toluene | 1000 | 1 U | 2.7 | 1 U | 5.3 | 5.8 |
| Trans-1,2-Dichloroethene | | 0.2 U | 0.2 U | 0.2 U | 0.16 U*** | 0.4 U |
| Trans-1,3-Dichloropropene | | 0.2 U | 0.2 U | 0.2 U | 1 U | 0.4 U |
| Trichloroethene | 5 | 0.2 U | 3.7 | 0.2 U | 0.24 U*** | 0.4 U |
| Vinyl Acetate | | 1 U | 1 U | 1 U | 5 U | 2 U |
| Vinyl Chloride | 0.2 | 0.2 U | 0.2 U | 0.2 U | 0.14 U*** | *0.4 U* |
| m, p-Xylene | | 5.7 | 1.9 | 0.4 U | 26 | 10 |
| o-Xylene | | 0.2 U | 0.42 | 0.2 U | 1.5 | 3 |
| Total Xylenes | 1000 | 5.7 | 2.32 | 0.4 U | 27.5 | 13 |

## Table 2 - Analytical Results for Water Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-2<br>5/8/2013 | PP-3<br>5/8/2013 | PP-4<br>5/8/2013 | PP-5<br>5/8/2013 | PP-6<br>5/9/2013 |
|---|---|---|---|---|---|---|
| **TPH in mg/L** | | | | | | |
| Diesel Range Organics | 0.5 | 0.51 | 0.91 | 0.29 U | *0.7 U* | 0.28 |
| Lube Oil | 0.5 | 0.53 | 1.6 | 0.68 | 0.74 | 0.43 U |
| Gasoline Range Organics | 1.0/0.8** | 0.26 | 0.1 U | 0.21 | 2.4 | 0.1 U |
| **BTEX in ug/L** | | | | | | |
| Benzene | 5 | | | | | |
| Ethylbenzene | 700 | | | | | |
| Toluene | 1000 | | | | | |
| m, p-Xylene | | | | | | |
| o-Xylene | | | | | | |
| Total Xylenes | 1000 | | | | | |
| **Volatiles in ug/L** | | | | | | |
| 1,1,1,2-Tetrachloroethane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 1,1,1-Trichloroethane | 200 | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 1,1,2,2-Tetrachloroethane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 1,1,2-Trichloroethane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 1,1-Dichloroethane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 1,1-Dichloroethene | | 0.2 U | 0.2 U | 0.2 U | 4.6 U*** | 0.2 U |
| 1,1-Dichloropropene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 1,2,3-Trichlorobenzene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.3 U |
| 1,2,3-Trichloropropane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 1,2,4-Trichlorobenzene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.26 U |
| 1,2,4-Trimethylbenzene | | 0.2 | 0.6 | 5 | 68 | 0.93 |
| 1,2-Dibromo-3-chloropropane | | 1 U | 1 U | 1 U | 100 U | 1 U |
| 1,2-Dichlorobenzene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 1,2-Dichloroethane | 5 | 0.2 U | 0.2 U | 0.2 U | *20 U* | 0.2 U |
| 1,2-Dichloropropane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 1,3,5-Trimethylbenzene | 80* | 0.2 | 0.2 U | 1.5 | 20 | 0.26 |
| 1,3-Dichlorobenzene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 1,3-Dichloropropane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 1,4-Dichlorobenzene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 2,2-Dichloropropane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 2-Butanone | | 5 U | 5 U | 5 U | 500 U | 5 U |
| 2-Chloroethylvinylether | | 1 U | 1 U | 1 U | 100 U | 1 U |
| 2-Chlorotoluene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| 2-Hexanone | | 2 U | 2 U | 2 U | 200 U | 2 U |
| 4-Chlorotoluene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Acetone | | 5 U | 5 U | 5 U | 500 U | 5 U |
| Benzene | 5 | 1.3 | 0.32 | 37 | 3500 | 1.4 |
| Bromobenzene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Bromochloromethane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Bromoform | | 1 U | 1 U | 1 U | 100 U | 1 U |
| Bromomethane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Carbon Disulfide | | 0.2 U | 0.2 U | 0.32 | 20 U | 0.2 U |
| Carbon Tetrachloride | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| CFC-11 | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| CFC-12 | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.26 U |
| Chlorobenzene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Chloroethane | | 1 U | 1 U | 1 U | 100 U | 1 U |
| Chloroform | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Chloromethane | | 1 U | 1 U | 1 U | 100 U | 1 U |
| Cis-1,2-Dichloroethene | | 0.2 U | 0.2 U | 0.2 U | 3 U*** | 0.2 U |
| Cis-1,3-Dichloropropene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |

## Table 2 - Analytical Results for Water Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-2<br>5/8/2013 | PP-3<br>5/8/2013 | PP-4<br>5/8/2013 | PP-5<br>5/8/2013 | PP-6<br>5/9/2013 |
|---|---|---|---|---|---|---|
| Dibromochloromethane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Dibromomethane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Dichlorobromomethane | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Ethylbenzene | 700 | 0.2 U | 0.3 | 1.5 | 73 | 1.5 |
| Ethylene dibromide | 0.01 | *0.2 U* | *0.2 U* | *0.2 U* | *20 U* | *0.2 U* |
| Hexachlorobutadiene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Isopropylbenzene | 800* | 1.3 | 0.2 U | 0.82 | 20 U | 0.2 U |
| Methyl Iodide | | 1.3 U | 1.3 U | 1.3 U | 130 U | 1.3 U |
| Methyl Isobutyl Ketone | | 2 U | 2 U | 2 U | 200 U | 2 U |
| Methyl t-Butyl Ether | 20 | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Methylene Chloride | 5 | 1 U | 1 U | 1 U | *100 U* | 1 U |
| Naphthalene | 160 | 1 U | 1 U | 1.1 | 100 U | 1.4 U |
| n-Butylbenzene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| n-Propylbenzene | 800* | 0.8 | 0.21 | 2.2 | 20 U | 0.2 |
| p-Isopropyltoluene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| sec-Butylbenzene | | 1.2 | 0.2 U | 0.26 | 20 U | 0.2 U |
| Styrene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| tert-Butylbenzene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Tetrachloroethene | 5 | 0.2 U | 0.2 U | 0.2 U | 6.9 U*** | 0.2 U |
| Toluene | 1000 | 1 U | 1 U | 8.7 | 110 | 11 |
| Trans-1,2-Dichloroethene | | 0.2 U | 0.2 U | 0.2 U | 3.1 U*** | 0.2 U |
| Trans-1,3-Dichloropropene | | 0.2 U | 0.2 U | 0.2 U | 20 U | 0.2 U |
| Trichloroethene | 5 | 0.2 U | 0.2 U | 0.2 U | 4.8 U*** | 0.2 U |
| Vinyl Acetate | | 1 U | 1 U | 1 U | 100 U | 1 U |
| Vinyl Chloride | 0.2 | 0.2 U | 0.2 U | 0.2 U | *2.9 U**** | 0.2 U |
| m, p-Xylene | | 0.47 | 1.5 | 14 | 560 | 6.9 |
| o-Xylene | | 0.31 | 0.51 | 2.7 | 83 | 1.6 |
| Total Xylenes | 1000 | 0.78 | 2.01 | 16.7 | 643 | 8.5 |

## Table 2 - Analytical Results for Water Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-7<br>5/9/2013 | PP-8<br>5/9/2013 | PP-9<br>5/8/2013 | PP-10<br>5/8/2013 | PP-11<br>5/8/2013 |
|---|---|---|---|---|---|---|
| **TPH in mg/L** | | | | | | |
| Diesel Range Organics | 0.5 | *2.6 U* | *2.2 U* | *1.6 U* | 0.97 | 0.31 U |
| Lube Oil | 0.5 | 1.3 | 0.46 U | 0.47 U | 0.65 | 0.49 U |
| Gasoline Range Organics | 1.0/0.8** | 15 | 35 | 17 | 0.23 | 0.1 U |
| **BTEX in ug/L** | | | | | | |
| Benzene | 5 | | | | | |
| Ethylbenzene | 700 | | | | | |
| Toluene | 1000 | | | | | |
| m, p-Xylene | | | | | | |
| o-Xylene | | | | | | |
| Total Xylenes | 1000 | | | | | |
| **Volatiles in ug/L** | | | | | | |
| 1,1,1,2-Tetrachloroethane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 1,1,1-Trichloroethane | 200 | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 1,1,2,2-Tetrachloroethane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 1,1,2-Trichloroethane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 1,1-Dichloroethane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 1,1-Dichloroethene | | 2.3 U*** | 12 U*** | 2.3 U*** | 0.84 | 0.46 U*** |
| 1,1-Dichloropropene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 1,2,3-Trichlorobenzene | | 15 U | 75 U | 10 U | 0.4 U | 2 U |
| 1,2,3-Trichloropropane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 1,2,4-Trichlorobenzene | | 13 U | 65 U | 10 U | 0.4 U | 2 U |
| 1,2,4-Trimethylbenzene | | 530 | 1200 | 390 | 0.4 U | 2 U |
| 1,2-Dibromo-3-chloropropane | | 50 U | 250 U | 50 U | 2 U | 10 U |
| 1,2-Dichlorobenzene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 1,2-Dichloroethane | 5 | *10 U* | *50 U* | *10 U* | 0.4 U | 2 U |
| 1,2-Dichloropropane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 1,3,5-Trimethylbenzene | 80* | 170 | 340 | 89 | 0.4 U | 2 U |
| 1,3-Dichlorobenzene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 1,3-Dichloropropane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 1,4-Dichlorobenzene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 2,2-Dichloropropane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 2-Butanone | | 250 U | 1300 U | 250 U | 10 U | 50 U |
| 2-Chloroethylvinylether | | 50 U | 250 U | 50 U | 2 U | 10 U |
| 2-Chlorotoluene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| 2-Hexanone | | 100 U | 500 U | 100 U | 4 U | 20 U |
| 4-Chlorotoluene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Acetone | | 250 U | 1300 U | 250 U | 10 U | 50 U |
| Benzene | 5 | 1900 | 10000 | 160 | 2.3 | 250 |
| Bromobenzene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Bromochloromethane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Bromoform | | 50 U | 250 U | 50 U | 2 U | 10 U |
| Bromomethane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Carbon Disulfide | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Carbon Tetrachloride | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| CFC-11 | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| CFC-12 | | 13 U | 65 U | 10 U | 0.4 U | 2 U |
| Chlorobenzene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Chloroethane | | 50 U | 250 U | 50 U | 2 U | 10 U |
| Chloroform | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Chloromethane | | 50 U | 250 U | 50 U | 2 U | 10 U |
| Cis-1,2-Dichloroethene | | 3.3 T | 50 U | 1.5 U*** | 18 | 0.3 U*** |
| Cis-1,3-Dichloropropene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |

## Table 2 - Analytical Results for Water Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-7<br>5/9/2013 | PP-8<br>5/9/2013 | PP-9<br>5/8/2013 | PP-10<br>5/8/2013 | PP-11<br>5/8/2013 |
|---|---|---|---|---|---|---|
| Dibromochloromethane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Dibromomethane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Dichlorobromomethane | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Ethylbenzene | 700 | 660 | 1700 | 420 | 0.4 U | 2 U |
| Ethylene dibromide | 0.01 | *10 U* | *50 U* | *10 U* | *0.4 U* | *2 U* |
| Hexachlorobutadiene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Isopropylbenzene | 800* | 32 | 50 U | 15 | 0.4 U | 2 U |
| Methyl Iodide | | 65 U | 330 U | 65 U | 2.6 U | 13 U |
| Methyl Isobutyl Ketone | | 100 U | 500 U | 100 U | 4 U | 20 U |
| Methyl t-Butyl Ether | 20 | 10 U | *50 U* | 10 U | 0.4 U | 2 U |
| Methylene Chloride | 5 | *50 U* | *250 U* | *50 U* | 2 U | *10 U* |
| Naphthalene | 160 | 70 U | *350 U* | 120 | 2 U | 10 U |
| n-Butylbenzene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| n-Propylbenzene | 800* | 84 | 160 | 42 | 0.4 U | 2 U |
| p-Isopropyltoluene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| sec-Butylbenzene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Styrene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| tert-Butylbenzene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Tetrachloroethene | 5 | 3.5 U*** | *17* U*** | 3.5 U*** | 91 | 0.69 U*** |
| Toluene | 1000 | 160 | 2900 | 50 U | 2 U | 10 U |
| Trans-1,2-Dichloroethene | | 10 U | 7.9 U*** | 1.6 U*** | 0.77 | 0.31 U*** |
| Trans-1,3-Dichloropropene | | 10 U | 50 U | 10 U | 0.4 U | 2 U |
| Trichloroethene | 5 | 2.4 U*** | *12* U*** | 2.4 U*** | 23 | 0.48 U*** |
| Vinyl Acetate | | 50 U | 250 U | 50 U | 2 U | 10 U |
| Vinyl Chloride | 0.2 | *1.4* U*** | *7.2* U*** | *1.4* U*** | 0.85 | *0.29* U*** |
| m, p-Xylene | | 2500 | 7000 | 1800 | 0.8 U | 4.4 |
| o-Xylene | | 250 | 1100 | 160 | 0.4 U | 2 U |
| Total Xylenes | 1000 | 2750 | 8100 | 1960 | 0.8 U | 4.4 |

## Table 2 - Analytical Results for Water Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-12<br>5/9/2013 | PP-13<br>5/8/2013 | PP-14<br>5/8/2013 | PP-15<br>8/14/2012 | PP-16<br>8/14/2012 |
|---|---|---|---|---|---|---|
| **TPH in mg/L** | | | | | | |
| Diesel Range Organics | 0.5 | *6.8 U* | 0.35 | 0.46 | 0.28 U | 0.31 U |
| Lube Oil | 0.5 | 0.99 | 0.48 U | 0.46 U | 0.45 U | 0.49 U |
| Gasoline Range Organics | 1.0/0.8** | 68 | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| **BTEX in ug/L** | | | | | | |
| Benzene | 5 | | | | 1 U | 1 U |
| Ethylbenzene | 700 | | | | 1 U | 1 U |
| Toluene | 1000 | | | | 1 U | 1 U |
| m, p-Xylene | | | | | 1 U | 1 U |
| o-Xylene | | | | | 1 U | 1 U |
| Total Xylenes | 1000 | | | | 1 U | 1 U |
| **Volatiles in ug/L** | | | | | | |
| 1,1,1,2-Tetrachloroethane | | 50 U | 0.2 U | 0.2 U | | |
| 1,1,1-Trichloroethane | 200 | 50 U | 0.2 U | 0.2 U | | |
| 1,1,2,2-Tetrachloroethane | | 50 U | 0.2 U | 0.2 U | | |
| 1,1,2-Trichloroethane | | 50 U | 0.2 U | 0.2 U | | |
| 1,1-Dichloroethane | | 50 U | 0.2 U | 0.2 U | | |
| 1,1-Dichloroethene | | 50 U | 0.2 U | 0.2 U | | |
| 1,1-Dichloropropene | | 50 U | 0.2 U | 0.2 U | | |
| 1,2,3-Trichlorobenzene | | 75 U | 0.2 U | 0.2 U | | |
| 1,2,3-Trichloropropane | | 50 U | 0.2 U | 0.2 U | | |
| 1,2,4-Trichlorobenzene | | 65 U | 0.2 U | 0.2 U | | |
| 1,2,4-Trimethylbenzene | | 2400 | 3.8 | 0.2 U | | |
| 1,2-Dibromo-3-chloropropane | | 250 U | 1 U | 1 U | | |
| 1,2-Dichlorobenzene | | 50 U | 0.2 U | 0.2 U | | |
| 1,2-Dichloroethane | 5 | *50 U* | 0.2 U | 0.84 | | |
| 1,2-Dichloropropane | | 50 U | 0.2 U | 0.2 U | | |
| 1,3,5-Trimethylbenzene | 80* | 600 | 0.86 | 0.2 U | | |
| 1,3-Dichlorobenzene | | 50 U | 0.2 U | 0.2 U | | |
| 1,3-Dichloropropane | | 50 U | 0.2 U | 0.2 U | | |
| 1,4-Dichlorobenzene | | 50 U | 0.2 U | 0.2 U | | |
| 2,2-Dichloropropane | | 50 U | 0.2 U | 0.2 U | | |
| 2-Butanone | | 1300 U | 5 U | 5 U | | |
| 2-Chloroethylvinylether | | 250 U | 1 U | 1 U | | |
| 2-Chlorotoluene | | 50 U | 0.2 U | 0.2 U | | |
| 2-Hexanone | | 500 U | 2 U | 2 U | | |
| 4-Chlorotoluene | | 50 U | 0.2 U | 0.2 U | | |
| Acetone | | 1300 U | 5 U | 5 U | | |
| Benzene | 5 | 3000 | 0.23 | 0.2 U | | |
| Bromobenzene | | 50 U | 0.2 U | 0.2 U | | |
| Bromochloromethane | | 50 U | 0.2 U | 0.2 U | | |
| Bromoform | | 250 U | 1 U | 1 U | | |
| Bromomethane | | 50 U | 0.2 U | 0.2 U | | |
| Carbon Disulfide | | 50 U | 0.2 U | 0.2 U | | |
| Carbon Tetrachloride | | 50 U | 0.2 U | 0.2 U | | |
| CFC-11 | | 50 U | 0.2 U | 0.2 U | | |
| CFC-12 | | 65 U | 0.2 U | 0.2 U | | |
| Chlorobenzene | | 50 U | 0.2 U | 0.2 U | | |
| Chloroethane | | 250 U | 1 U | 1 U | | |
| Chloroform | | 50 U | 0.2 U | 0.2 U | | |
| Chloromethane | | 250 U | 1 U | 1 U | | |
| Cis-1,2-Dichloroethene | | 12 T | 0.2 U | 1.6 | | |
| Cis-1,3-Dichloropropene | | 50 U | 0.2 U | 0.2 U | | |

## Table 2 - Analytical Results for Water Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-12<br>5/9/2013 | PP-13<br>5/8/2013 | PP-14<br>5/8/2013 | PP-15<br>8/14/2012 | PP-16<br>8/14/2012 |
|---|---|---|---|---|---|---|
| Dibromochloromethane | | 50 U | 0.2 U | 0.2 U | | |
| Dibromomethane | | 50 U | 0.2 U | 0.2 U | | |
| Dichlorobromomethane | | 50 U | 0.2 U | 0.2 U | | |
| Ethylbenzene | 700 | 1900 | 0.97 | 0.2 U | | |
| Ethylene dibromide | 0.01 | *50 U* | *0.2 U* | *0.2 U* | | |
| Hexachlorobutadiene | | 50 U | 0.2 U | 0.2 U | | |
| Isopropylbenzene | 800* | 85 | 0.2 U | 0.2 U | | |
| Methyl Iodide | | 330 U | 1.3 U | 1.3 U | | |
| Methyl Isobutyl Ketone | | 500 U | 2 U | 2 U | | |
| Methyl t-Butyl Ether | 20 | *50 U* | 0.2 U | 0.2 U | | |
| Methylene Chloride | 5 | *250 U* | 1 U | 1 U | | |
| Naphthalene | 160 | 670 | 1 U | 1 U | | |
| n-Butylbenzene | | 50 U | 0.2 U | 0.2 U | | |
| n-Propylbenzene | 800* | 280 | 0.4 | 0.2 U | | |
| p-Isopropyltoluene | | 50 U | 0.2 U | 0.2 U | | |
| sec-Butylbenzene | | 50 U | 0.2 U | 0.2 U | | |
| Styrene | | 50 U | 0.2 U | 0.2 U | | |
| tert-Butylbenzene | | 50 U | 0.2 U | 0.2 U | | |
| Tetrachloroethene | 5 | *50 U* | 0.2 U | 0.2 U | | |
| Toluene | 1000 | 670 | 1 U | 1 U | | |
| Trans-1,2-Dichloroethene | | 50 U | 0.2 U | 0.2 U | | |
| Trans-1,3-Dichloropropene | | 50 U | 0.2 U | 0.2 U | | |
| Trichloroethene | 5 | *50 U* | 0.2 U | 0.2 U | | |
| Vinyl Acetate | | 250 U | 1 U | 1 U | | |
| Vinyl Chloride | 0.2 | *50 U* | 0.2 U | 1.4 | | |
| m, p-Xylene | | 13000 | 2.6 | 0.4 U | | |
| o-Xylene | | 5000 | 1.1 | 0.2 U | | |
| Total Xylenes | 1000 | 18000 | 3.7 | 0.4 U | | |

## Table 2 - Analytical Results for Water Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-17<br>8/14/2012 | PP-18<br>8/13/2012 | PP-19<br>8/13/2012 | PP-20<br>8/13/2012 | PP-22<br>8/13/2012 |
|---|---|---|---|---|---|---|
| **TPH in mg/L** | | | | | | |
| Diesel Range Organics | 0.5 | *0.81 U* | 0.26 U | 0.29 U | 0.33 U | 0.29 U |
| Lube Oil | 0.5 | 0.47 U | 0.42 U | 0.47 U | 0.42 U | 0.46 U |
| Gasoline Range Organics | 1.0/0.8** | 21 | 0.4 U | 0.4 U | 2.3 | 0.1 U |
| **BTEX in ug/L** | | | | | | |
| Benzene | 5 | | | | | 1.6 |
| Ethylbenzene | 700 | | | | | 1 U |
| Toluene | 1000 | | | | | 1 U |
| m, p-Xylene | | | | | | 1 U |
| o-Xylene | | | | | | 1 U |
| Total Xylenes | 1000 | | | | | 1 U |
| **Volatiles in ug/L** | | | | | | |
| 1,1,1,2-Tetrachloroethane | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,1,1-Trichloroethane | 200 | 10 U | 4 U | 0.2 U | 10 U | |
| 1,1,2,2-Tetrachloroethane | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,1,2-Trichloroethane | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,1-Dichloroethane | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,1-Dichloroethene | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,1-Dichloropropene | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,2,3-Trichlorobenzene | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,2,3-Trichloropropane | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,2,4-Trichlorobenzene | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,2,4-Trimethylbenzene | | 610 | 4 U | 0.68 | 27 | |
| 1,2-Dibromo-3-chloropropane | | 50 U | 20 U | 1 U | 50 U | |
| 1,2-Dichlorobenzene | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,2-Dichloroethane | 5 | *10 U* | 4 U | 0.2 U | *10 U* | |
| 1,2-Dichloropropane | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,3,5-Trimethylbenzene | 80* | 150 | 4 U | 0.2 U | 18 | |
| 1,3-Dichlorobenzene | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,3-Dichloropropane | | 10 U | 4 U | 0.2 U | 10 U | |
| 1,4-Dichlorobenzene | | 10 U | 4 U | 0.2 U | 10 U | |
| 2,2-Dichloropropane | | 10 U | 4 U | 0.2 U | 10 U | |
| 2-Butanone | | 250 U | 100 U | 5 U | 250 U | |
| 2-Chloroethylvinylether | | 50 U | 20 U | 1 U | 50 U | |
| 2-Chlorotoluene | | 10 U | 4 U | 0.2 U | 10 U | |
| 2-Hexanone | | 100 U | 40 U | 2 U | 100 U | |
| 4-Chlorotoluene | | 10 U | 4 U | 0.2 U | 10 U | |
| Acetone | | 250 U | 100 U | 5 U | 250 U | |
| Benzene | 5 | 260 | 640 | 12 | 910 | |
| Bromobenzene | | 10 U | 4 U | 0.2 U | 10 U | |
| Bromochloromethane | | 10 U | 4 U | 0.2 U | 10 U | |
| Bromoform | | 50 U | 20 U | 1 U | 50 U | |
| Bromomethane | | 10 U | 4 U | 0.2 U | 10 U | |
| Carbon Disulfide | | 10 U | 4 U | 0.2 U | 10 U | |
| Carbon Tetrachloride | | 10 U | 4 U | 0.2 U | 10 U | |
| CFC-11 | | 10 U | 4 U | 0.2 U | 10 U | |
| CFC-12 | | 10 U | 4 U | 0.2 U | 10 U | |
| Chlorobenzene | | 10 U | 4 U | 0.2 U | 10 U | |
| Chloroethane | | 50 U | 20 U | 1 U | 50 U | |
| Chloroform | | 10 U | 4 U | 0.2 U | 10 U | |
| Chloromethane | | 50 U | 20 U | 1 U | 50 U | |
| Cis-1,2-Dichloroethene | | 10 U | 4 U | 0.2 U | 10 U | |
| Cis-1,3-Dichloropropene | | 10 U | 4 U | 0.2 U | 10 U | |

## Table 2 - Analytical Results for Water Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-17<br>8/14/2012 | PP-18<br>8/13/2012 | PP-19<br>8/13/2012 | PP-20<br>8/13/2012 | PP-22<br>8/13/2012 |
|---|---|---|---|---|---|---|
| Dibromochloromethane | | 10 U | 4 U | 0.2 U | 10 U | |
| Dibromomethane | | 10 U | 4 U | 0.2 U | 10 U | |
| Dichlorobromomethane | | 10 U | 4 U | 0.2 U | 10 U | |
| Ethylbenzene | 700 | 460 | 4 U | 0.2 U | 64 | |
| Ethylene dibromide | 0.01 | *10 U* | *4 U* | *0.2 U* | *10 U* | |
| Hexachlorobutadiene | | 10 U | 4 U | 0.2 U | 10 U | |
| Isopropylbenzene | 800* | 30 | 4 U | 0.2 U | 10 U | |
| Methyl Iodide | | 50 U | 20 U | 1 U | 50 U | |
| Methyl Isobutyl Ketone | | 100 U | 40 U | 2 U | 100 U | |
| Methyl t-Butyl Ether | 20 | 10 U | 4 U | 0.2 U | 10 U | |
| Methylene Chloride | 5 | *50 U* | *20 U* | 1 U | *50 U* | |
| Naphthalene | 160 | 89 | 20 U | 1 U | 50 U | |
| n-Butylbenzene | | 10 U | 4 U | 0.2 U | 10 U | |
| n-Propylbenzene | 800* | 78 | 4 U | 0.2 U | 10 U | |
| p-Isopropyltoluene | | 10 U | 4 U | 0.2 U | 10 U | |
| sec-Butylbenzene | | 10 U | 4 U | 0.2 U | 10 U | |
| Styrene | | 10 U | 4 U | 0.2 U | 10 U | |
| tert-Butylbenzene | | 10 U | 4 U | 0.2 U | 10 U | |
| Tetrachloroethene | 5 | *10 U* | 4 U | 0.2 U | *10 U* | |
| Toluene | 1000 | 240 | 20 U | 1.3 | 53 | |
| Trans-1,2-Dichloroethene | | 10 U | 4 U | 0.2 U | 10 U | |
| Trans-1,3-Dichloropropene | | 10 U | 4 U | 0.2 U | 10 U | |
| Trichloroethene | 5 | *10 U* | 4 U | 0.2 U | *10 U* | |
| Vinyl Acetate | | 100 U | 40 U | 2 U | 100 U | |
| Vinyl Chloride | 0.2 | *10 U* | *4 U* | 0.2 U | *10 U* | |
| m, p-Xylene | | 3600 | 10 | 1.1 | 240 | |
| o-Xylene | | 1300 | 4 U | 0.4 | 29 | |
| Total Xylenes | 1000 | 4900 | 10 | 1.5 | 269 | |

## Table 2 - Analytical Results for Water Samples

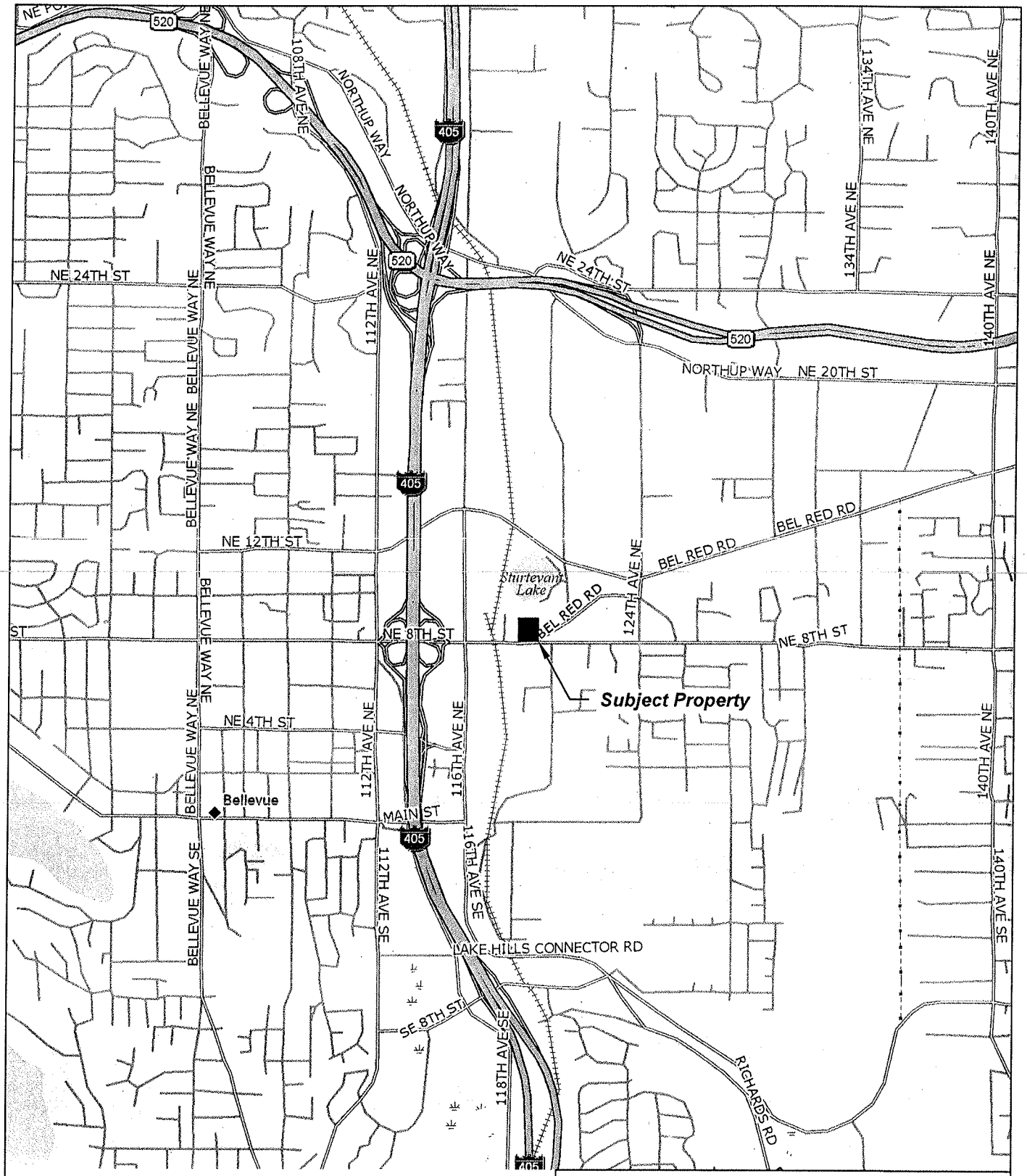
| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-24<br>8/13/2012 | PP-25<br>8/14/2012 |
|---|---|---|---|
| **TPH in mg/L** | | | |
| Diesel Range Organics | 0.5 | 0.26 U | 0.28 U |
| Lube Oil | 0.5 | 0.42 U | 0.46 U |
| Gasoline Range Organics | 1.0/0.8** | 0.1 U | 1.4 |
| **BTEX in ug/L** | | | |
| Benzene | 5 | 1 U | |
| Ethylbenzene | 700 | 1 U | |
| Toluene | 1000 | 1 U | |
| m, p-Xylene | | 1 U | |
| o-Xylene | | 1 U | |
| Total Xylenes | 1000 | 1 U | |
| **Volatiles in ug/L** | | | |
| 1,1,1,2-Tetrachloroethane | | | 4 U |
| 1,1,1-Trichloroethane | 200 | | 4 U |
| 1,1,2,2-Tetrachloroethane | | | 4 U |
| 1,1,2-Trichloroethane | | | 4 U |
| 1,1-Dichloroethane | | | 4 U |
| 1,1-Dichloroethene | | | 4 U |
| 1,1-Dichloropropene | | | 4 U |
| 1,2,3-Trichlorobenzene | | | 4 U |
| 1,2,3-Trichloropropane | | | 4 U |
| 1,2,4-Trichlorobenzene | | | 4 U |
| 1,2,4-Trimethylbenzene | | | 52 |
| 1,2-Dibromo-3-chloropropane | | | 20 U |
| 1,2-Dichlorobenzene | | | 4 U |
| 1,2-Dichloroethane | 5 | | 4 U |
| 1,2-Dichloropropane | | | 4 U |
| 1,3,5-Trimethylbenzene | 80* | | 7.2 |
| 1,3-Dichlorobenzene | | | 4 U |
| 1,3-Dichloropropane | | | 4 U |
| 1,4-Dichlorobenzene | | | 4 U |
| 2,2-Dichloropropane | | | 4 U |
| 2-Butanone | | | 100 U |
| 2-Chloroethylvinylether | | | 20 U |
| 2-Chlorotoluene | | | 4 U |
| 2-Hexanone | | | 40 U |
| 4-Chlorotoluene | | | 4 U |
| Acetone | | | 100 U |
| Benzene | 5 | | 660 |
| Bromobenzene | | | 4 U |
| Bromochloromethane | | | 4 U |
| Bromoform | | | 20 U |
| Bromomethane | | | 4 U |
| Carbon Disulfide | | | 4 U |
| Carbon Tetrachloride | | | 4 U |
| CFC-11 | | | 4 U |
| CFC-12 | | | 4 U |
| Chlorobenzene | | | 4 U |
| Chloroethane | | | 20 U |
| Chloroform | | | 4 U |
| Chloromethane | | | 20 U |
| Cis-1,2-Dichloroethene | | | 4 U |
| Cis-1,3-Dichloropropene | | | 4 U |

## Table 2 - Analytical Results for Water Samples



| Sample ID<br>Sampling Date | MTCA Method A/ Method B Screening Levels | PP-24<br>8/13/2012 | PP-25<br>8/14/2012 |
|---|---|---|---|
| Dibromochloromethane | | | 4 U |
| Dibromomethane | | | 4 U |
| Dichlorobromomethane | | | 4 U |
| Ethylbenzene | 700 | | 4.8 |
| Ethylene dibromide | 0.01 | | *4 U* |
| Hexachlorobutadiene | | | 4 U |
| Isopropylbenzene | 800* | | 4 U |
| Methyl Iodide | | | 20 U |
| Methyl Isobutyl Ketone | | | 40 U |
| Methyl t-Butyl Ether | 20 | | 4 U |
| Methylene Chloride | 5 | | *20 U* |
| Naphthalene | 160 | | 20 U |
| n-Butylbenzene | | | 4 U |
| n-Propylbenzene | 800* | | 4 U |
| p-Isopropyltoluene | | | 4 U |
| sec-Butylbenzene | | | 4 U |
| Styrene | | | 4 U |
| tert-Butylbenzene | | | 4 U |
| Tetrachloroethene | 5 | | 4 U |
| Toluene | 1000 | | 20 U |
| Trans-1,2-Dichloroethene | | | 4 U |
| Trans-1,3-Dichloropropene | | | 4 U |
| Trichloroethene | 5 | | 4 U |
| Vinyl Acetate | | | 40 U |
| Vinyl Chloride | 0.2 | | *4 U* |
| m, p-Xylene | | | 170 |
| o-Xylene | | | 100 |
| Total Xylenes | 1000 | | 270 |

* MTCA Method B screening level.
U = Not detected at the reporting limit indicated.
Italic = Reporting limit exceeds cleanup level.
Boxed = Concentration exceeds MTCA Method A/Method B cleanup level.
**1.0 mg/L for gasoline mixtures without benzene and
0.8 mg/L for all other gasoline mixtures.
***Result reported at method detection limit.




***Source:*** Base map prepared from DeLorme Topo 7.0, 2007.

0 2000 4000

Scale in Feet

N

Barrier Motors
Bellevue, Washington

**Vicinity Map**

2461-02 10/13

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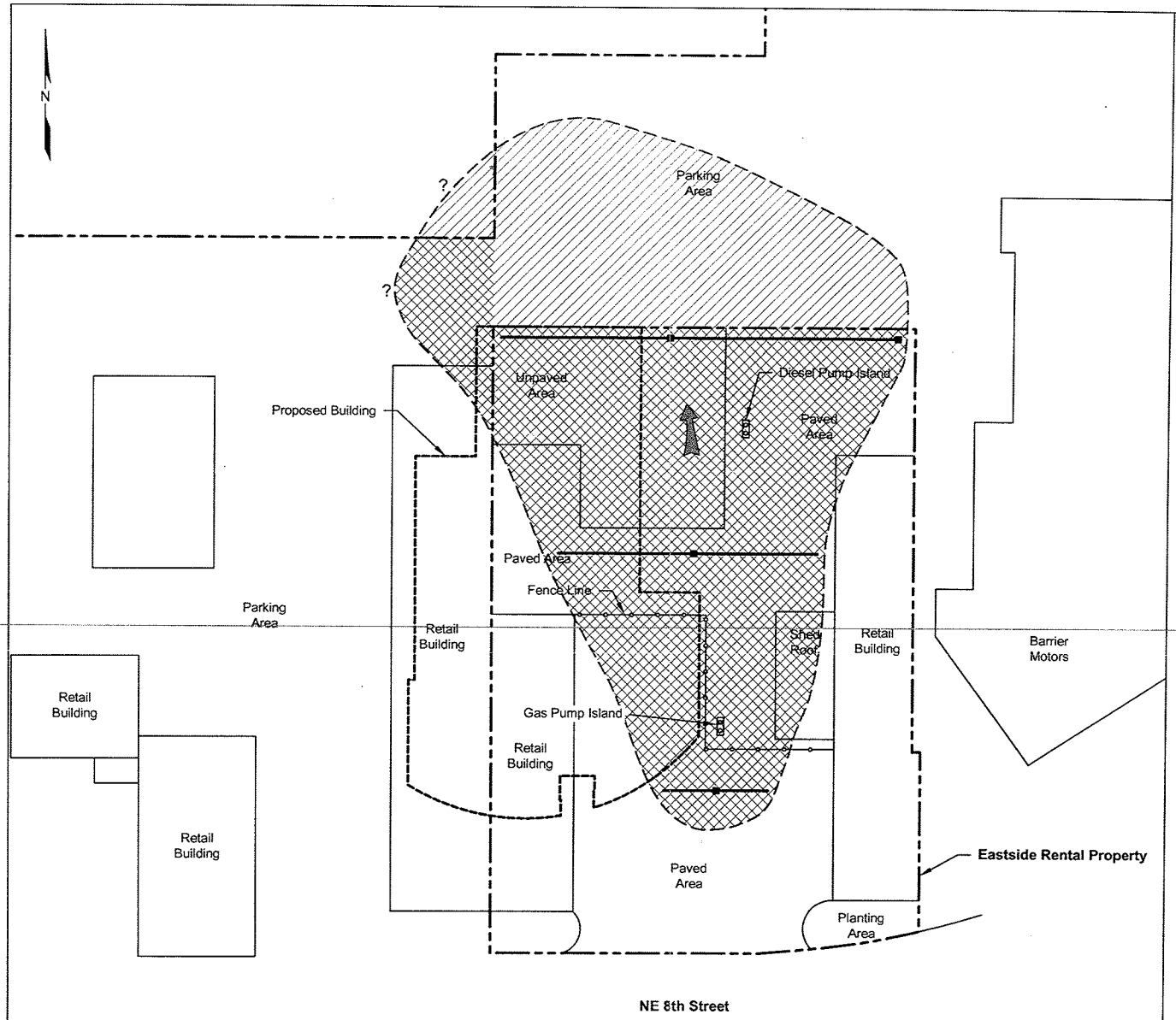
Figure
**1**

EAL 10/1/13 246102-003.dwg




Approximate Area to be Excavated

Approximate Area of Petroleum-Affected Soil (Based on 2012 and 2013 Data)

? Area of Higher Potential for Additional Petroleum-Affected Soil

Inferred Groundwater Gradient

2'x2'x2' Utility Vault

4" Slotted PVC Piping

**Notes:**

1. To be excavated to approximately 7' below ground surface.
2. Excavation to be backfilled with suitable fill and compacted per geotechnical requirements.
3. Approximately 8,182 cy of soil to be removed.
4. Excavation will be sloped 1:1 along property boundaries.
5. Underground storage tanks to be removed per Washington Department of Ecology guidance.

0 50 100
Scale in Feet

Barrier Motors
Bellevue, Washington

**Eastside Rental Remedial Excavation**

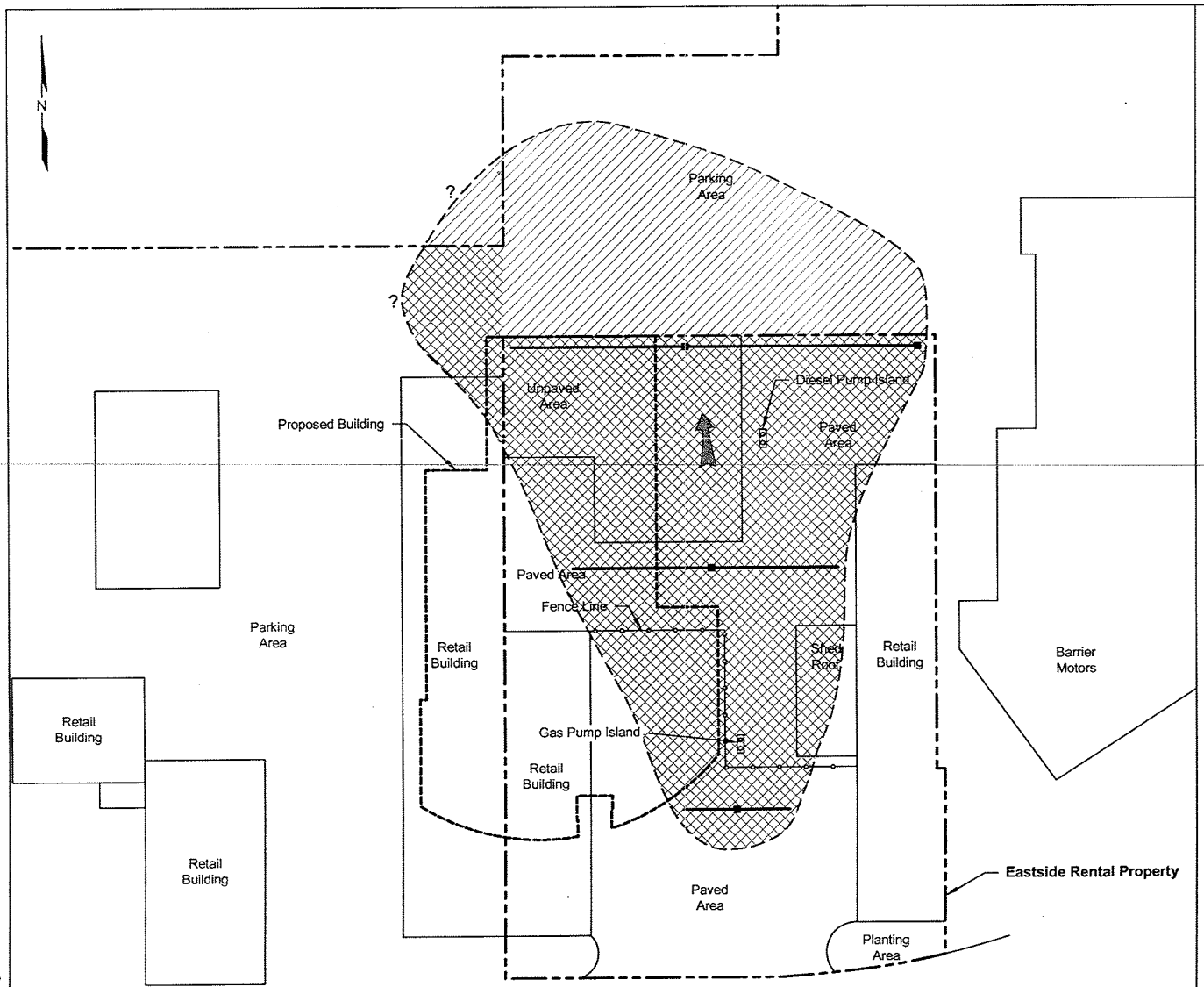
2461-02 10/13

HARTCROWSER

Figure 2

***Source:*** Base map prepared from "Sampling Locations and Extent of Contamination (4'-8'bls)," created by Applied Hydrogeologic Research, Inc. (3/00).

EAL 10/4/13 248102-013.dwg




Approximate Area to be Excavated

Approximate Area of Petroleum-Affected Soil (Based on 2012 and 2013 Data)

? Area of Higher Potential for Additional Petroleum-Affected Soil

Inferred Groundwater Gradient

2'x2'x2' Utility Vault

4" Slotted PVC Piping

**Notes:**

1. To be excavated to approximately 7' below ground surface.
2. Excavation to be backfilled with suitable fill and compacted per geotechnical requirements.
3. Approximately 8,182 cy of soil to be removed.
4. Excavation will be sloped 1:1 along property boundaries.
5. Underground storage tanks to be removed per Washington Department of Ecology guidance.

0 50 100
Scale in Feet

Barrier Motors
Bellevue, Washington

**Eastside Rental Remedial Excavation**

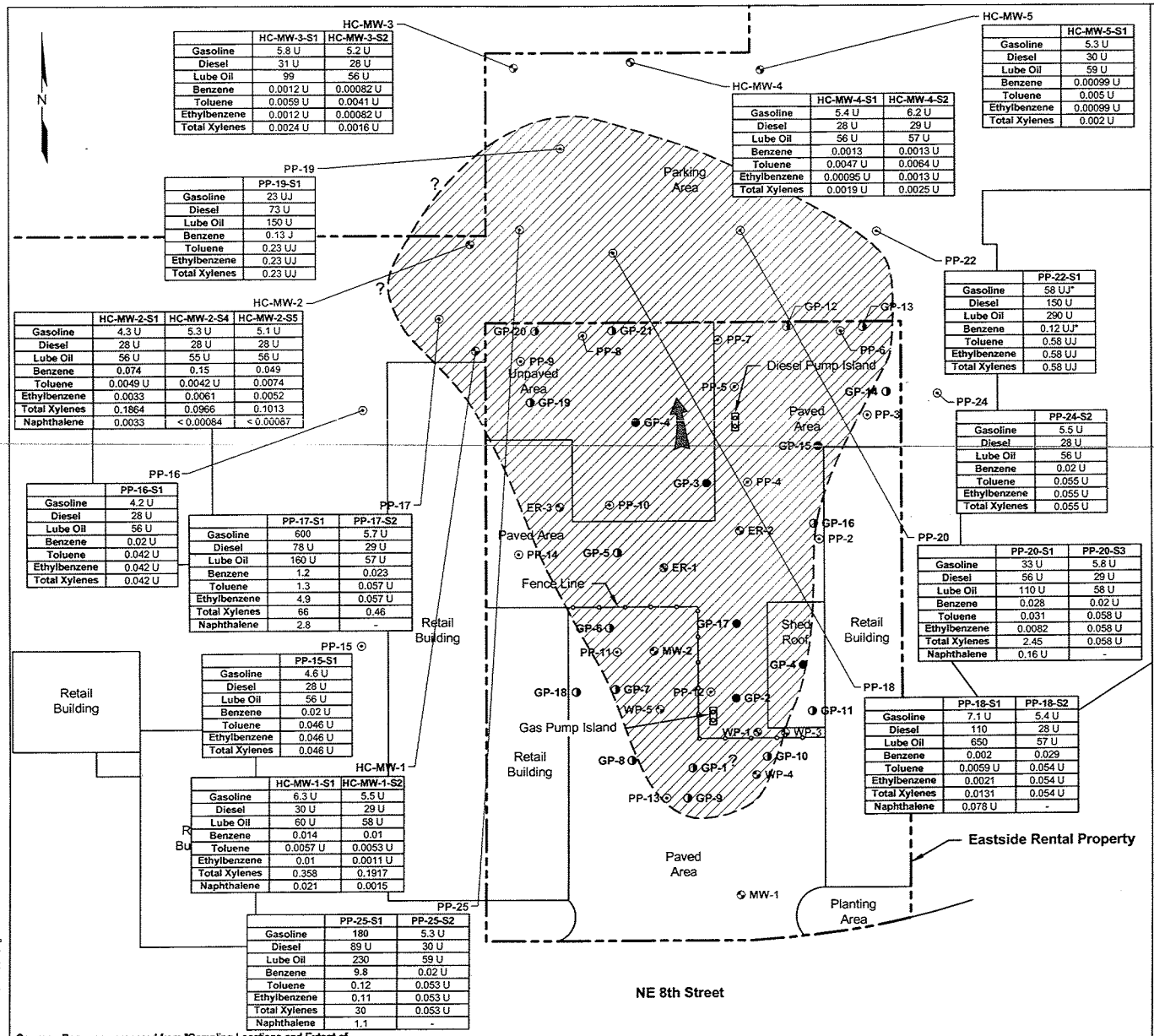
2461-02 10/13

HARTCROWSER

Figure
**2**

***Source:*** Base map prepared from "Sampling Locations and Extent of Contamination (4'-8'bls)," created by Applied Hydrogeologic Research, Inc. (3/00).

EAL 10/4/13 2461/02-013.dwg




| | HC-MW-3-S1 | HC-MW-3-S2 |
|---|---|---|
| Gasoline | 5.8 U | 5.2 U |
| Diesel | 31 U | 28 U |
| Lube Oil | 99 | 56 U |
| Benzene | 0.0012 U | 0.00082 U |
| Toluene | 0.0059 U | 0.0041 U |
| Ethylbenzene | 0.0012 U | 0.00082 U |
| Total Xylenes | 0.0024 U | 0.0016 U |

| | HC-MW-5-S1 |
|---|---|
| Gasoline | 5.3 U |
| Diesel | 30 U |
| Lube Oil | 59 U |
| Benzene | 0.00099 U |
| Toluene | 0.005 U |
| Ethylbenzene | 0.00099 U |
| Total Xylenes | 0.002 U |

| | HC-MW-4-S1 | HC-MW-4-S2 |
|---|---|---|
| Gasoline | 5.4 U | 6.2 U |
| Diesel | 28 U | 29 U |
| Lube Oil | 56 U | 57 U |
| Benzene | 0.0013 | 0.0013 U |
| Toluene | 0.0047 U | 0.0064 U |
| Ethylbenzene | 0.00095 U | 0.0013 U |
| Total Xylenes | 0.0019 U | 0.0025 U |

| | PP-19-S1 |
|---|---|
| Gasoline | 23 UJ |
| Diesel | 73 U |
| Lube Oil | 150 U |
| Benzene | 0.13 J |
| Toluene | 0.23 UJ |
| Ethylbenzene | 0.23 UJ |
| Total Xylenes | 0.23 UJ |

| | PP-22-S1 |
|---|---|
| Gasoline | 58 UJ* |
| Diesel | 150 U |
| Lube Oil | 290 U |
| Benzene | 0.12 UJ* |
| Toluene | 0.58 UJ |
| Ethylbenzene | 0.58 UJ |
| Total Xylenes | 0.58 UJ |

| | HC-MW-2-S1 | HC-MW-2-S4 | HC-MW-2-S5 |
|---|---|---|---|
| Gasoline | 4.3 U | 5.3 U | 5.1 U |
| Diesel | 28 U | 28 U | 28 U |
| Lube Oil | 56 U | 55 U | 56 U |
| Benzene | 0.074 | 0.15 | 0.049 |
| Toluene | 0.0049 U | 0.0042 U | 0.0074 |
| Ethylbenzene | 0.0033 | 0.0061 | 0.0052 |
| Total Xylenes | 0.1864 | 0.0966 | 0.1013 |
| Naphthalene | 0.0033 | < 0.00084 | < 0.00067 |

| | PP-24-S2 |
|---|---|
| Gasoline | 5.5 U |
| Diesel | 28 U |
| Lube Oil | 56 U |
| Benzene | 0.02 U |
| Toluene | 0.055 U |
| Ethylbenzene | 0.055 U |
| Total Xylenes | 0.055 U |

| | PP-16-S1 |
|---|---|
| Gasoline | 4.2 U |
| Diesel | 28 U |
| Lube Oil | 56 U |
| Benzene | 0.02 U |
| Toluene | 0.042 U |
| Ethylbenzene | 0.042 U |
| Total Xylenes | 0.042 U |

| | PP-17-S1 | PP-17-S2 |
|---|---|---|
| Gasoline | 600 | 5.7 U |
| Diesel | 78 U | 29 U |
| Lube Oil | 160 U | 57 U |
| Benzene | 1.2 | 0.023 |
| Toluene | 1.3 | 0.057 U |
| Ethylbenzene | 4.9 | 0.057 U |
| Total Xylenes | 66 | 0.46 |
| Naphthalene | 2.8 | - |

| | PP-20-S1 | PP-20-S3 |
|---|---|---|
| Gasoline | 33 U | 5.8 U |
| Diesel | 56 U | 29 U |
| Lube Oil | 110 U | 58 U |
| Benzene | 0.028 | 0.02 U |
| Toluene | 0.031 | 0.058 U |
| Ethylbenzene | 0.0082 | 0.058 U |
| Total Xylenes | 2.45 | 0.058 U |
| Naphthalene | 0.16 U | - |

| | PP-15-S1 |
|---|---|
| Gasoline | 4.6 U |
| Diesel | 28 U |
| Lube Oil | 56 U |
| Benzene | 0.02 U |
| Toluene | 0.046 U |
| Ethylbenzene | 0.046 U |
| Total Xylenes | 0.046 U |

| | PP-18-S1 | PP-18-S2 |
|---|---|---|
| Gasoline | 7.1 U | 5.4 U |
| Diesel | 110 | 28 U |
| Lube Oil | 650 | 57 U |
| Benzene | 0.002 | 0.029 |
| Toluene | 0.0059 U | 0.054 U |
| Ethylbenzene | 0.0021 | 0.054 U |
| Total Xylenes | 0.0131 | 0.054 U |
| Naphthalene | 0.078 U | - |

| | HC-MW-1-S1 | HC-MW-1-S2 |
|---|---|---|
| Gasoline | 6.3 U | 5.5 U |
| Diesel | 30 U | 29 U |
| Lube Oil | 60 U | 58 U |
| Benzene | 0.014 | 0.01 |
| Toluene | 0.0057 U | 0.0053 U |
| Ethylbenzene | 0.01 | 0.0011 U |
| Total Xylenes | 0.358 | 0.1917 |
| Naphthalene | 0.021 | 0.0015 |

| | PP-25-S1 | PP-25-S2 |
|---|---|---|
| Gasoline | 180 | 5.3 U |
| Diesel | 89 U | 30 U |
| Lube Oil | 230 | 59 U |
| Benzene | 9.8 | 0.02 U |
| Toluene | 0.12 | 0.053 U |
| Ethylbenzene | 0.11 | 0.053 U |
| Total Xylenes | 30 | 0.053 U |
| Naphthalene | 1.1 | - |

*Source:* Base map prepared from "Sampling Locations and Extent of Contamination (4'-8'bls)," created by Applied Hydrogeologic Research, Inc. (3/00).

Exploration Location and Number

- PP-21 ⊙ Push-Probe (Hart Crowser, 2012-2013)
- HC-MW-1 Monitoring Well (Hart Crowser, 2013)
- MW-1 Monitoring Well
- WP-3 Exceeds MTCA Method A for Benzene
- ER-2 Exceeds MTCA Method A for Gasoline
- ER-1 Exceeds MTCA Method A for Gasoline and Benzene
- MW-1 Below MTCA Method A Cleanup Level
- GP-2 ● Geoprobe Sample with Petroleum-Affected Soils Observed (12/99)
- GP-1 ◑ Geoprobe Sample with Petroleum-Affected Soils Not Observed (12/99)
- GP-12 ◑ Groundwater Exceeds MTCA Method A for Benzene
- GP-13 ◑ Groundwater Exceeds MTCA Method A for Diesel
- GP-20 ◑ Groundwater Exceeds MTCA Method A for Gasoline and Benzene
- GP-21 ◑ Groundwater Exceeds MTCA Method A for Benzene, Diesel, and Oil
- Approximate Area of Petroleum-Affected Soil (Based on 2012 and 2013 Data)
- ? Area of Higher Potential for Additional Petroleum-Affected Soil
- Inferred Groundwater Gradient

| | PP-25-S1 |
|---|---|
| Gasoline | 180 |
| Diesel | 89 U |
| Lube Oil | 230 |
| Benzene | 9.8 |
| Toluene | 0.12 |
| Ethylbenzene | 0.11 |
| Total Xylenes | 30 |
| Naphthalene | 1.1 |

Petroleum Hydrocarbon and VOC Concentrations in mg/kg

* Detection limit exceeds cleanup level. Elevated detection limits due to high moisture content.

Bold value exceeds MTCA Method A cleaup levels

0 50 100
Scale in Feet

Barrier Motors
Bellevue, Washington

**Soil Sampling Results - Barrier Motors Property**

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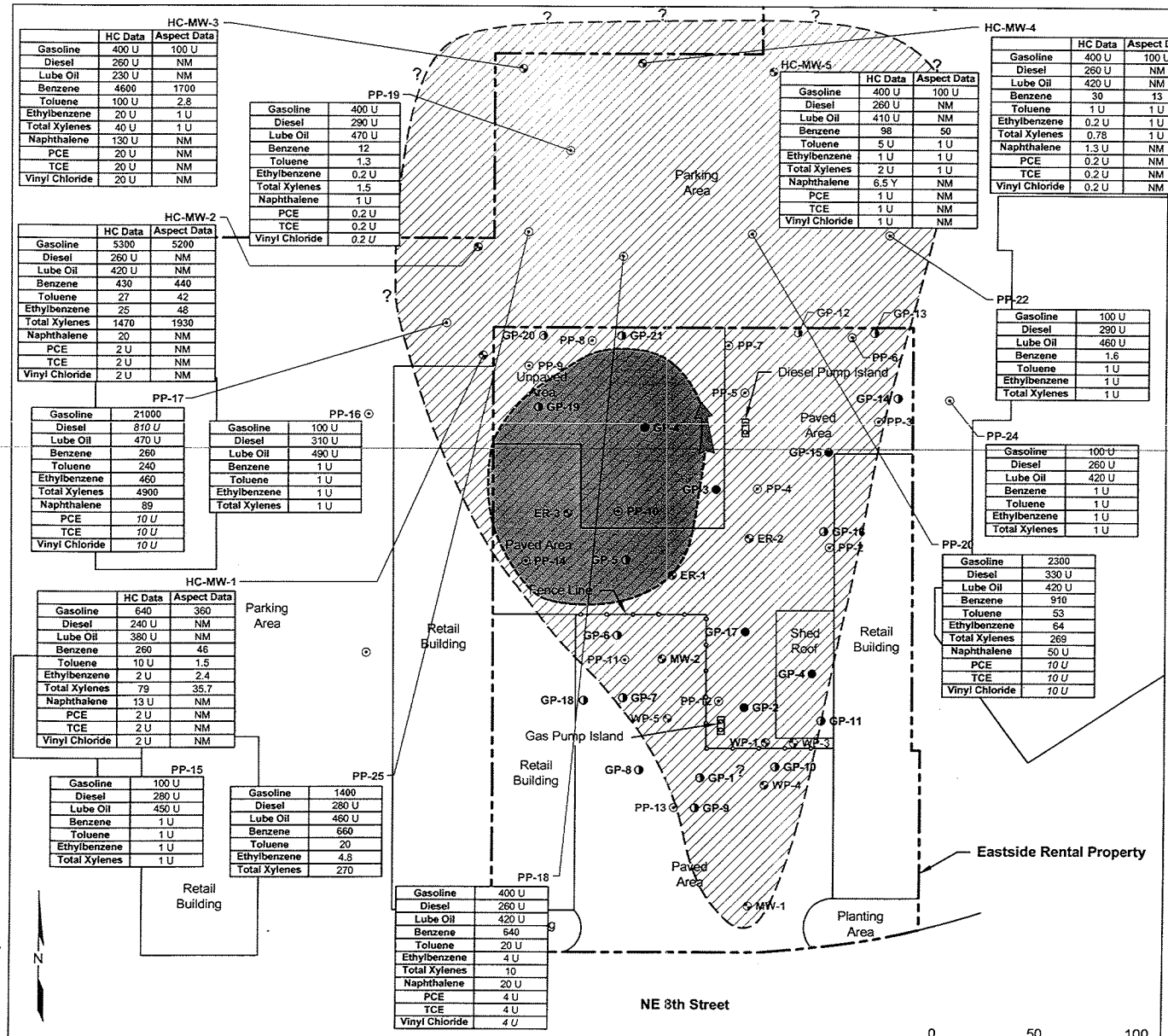
Figure 3A

EAL 10/1/13 246102-007.dwg




| | HC Data | Aspect Data |
|---|---|---|
| Gasoline | 400 U | 100 U |
| Diesel | 260 U | NM |
| Lube Oil | 230 U | NM |
| Benzene | 4600 | 1700 |
| Toluene | 100 U | 2.8 |
| Ethylbenzene | 20 U | 1 U |
| Total Xylenes | 40 U | 1 U |
| Naphthalene | 130 U | NM |
| PCE | 20 U | NM |
| TCE | 20 U | NM |
| Vinyl Chloride | 20 U | NM |

| | HC Data | Aspect Data |
|---|---|---|
| Gasoline | 400 U | 100 U |
| Diesel | 260 U | NM |
| Lube Oil | 420 U | NM |
| Benzene | 30 | 13 |
| Toluene | 1 U | 1 U |
| Ethylbenzene | 0.2 U | 1 U |
| Total Xylenes | 0.78 | 1 U |
| Naphthalene | 1.3 U | NM |
| PCE | 0.2 U | NM |
| TCE | 0.2 U | NM |
| Vinyl Chloride | 0.2 U | NM |

| | HC Data | Aspect Data |
|---|---|---|
| Gasoline | 400 U | 100 U |
| Diesel | 260 U | NM |
| Lube Oil | 410 U | NM |
| Benzene | 98 | 50 |
| Toluene | 5 U | 1 U |
| Ethylbenzene | 1 U | 1 U |
| Total Xylenes | 2 U | 1 U |
| Naphthalene | 6.5 Y | NM |
| PCE | 1 U | NM |
| TCE | 1 U | NM |
| Vinyl Chloride | 1 U | NM |

| | HC Data | Aspect Data |
|---|---|---|
| Gasoline | 5300 | 5200 |
| Diesel | 260 U | NM |
| Lube Oil | 420 U | NM |
| Benzene | 430 | 440 |
| Toluene | 27 | 42 |
| Ethylbenzene | 25 | 48 |
| Total Xylenes | 1470 | 1930 |
| Naphthalene | 20 | NM |
| PCE | 2 U | NM |
| TCE | 2 U | NM |
| Vinyl Chloride | 2 U | NM |

| | HC Data | Aspect Data |
|---|---|---|
| Gasoline | 640 | 360 |
| Diesel | 240 U | NM |
| Lube Oil | 380 U | NM |
| Benzene | 260 | 46 |
| Toluene | 10 U | 1.5 |
| Ethylbenzene | 2 U | 2.4 |
| Total Xylenes | 79 | 35.7 |
| Naphthalene | 13 U | NM |
| PCE | 2 U | NM |
| TCE | 2 U | NM |
| Vinyl Chloride | 2 U | NM |

| | |
|---|---|
| Gasoline | 400 U |
| Diesel | 290 U |
| Lube Oil | 470 U |
| Benzene | 12 |
| Toluene | 1.3 |
| Ethylbenzene | 0.2 U |
| Total Xylenes | 1.5 |
| Naphthalene | 1 U |
| PCE | 0.2 U |
| TCE | 0.2 U |
| Vinyl Chloride | *0.2 U* |

| | |
|---|---|
| Gasoline | 100 U |
| Diesel | 290 U |
| Lube Oil | 460 U |
| Benzene | 1.6 |
| Toluene | 1 U |
| Ethylbenzene | 1 U |
| Total Xylenes | 1 U |

| | |
|---|---|
| Gasoline | 21000 |
| Diesel | *810 U* |
| Lube Oil | 470 U |
| Benzene | 260 |
| Toluene | 240 |
| Ethylbenzene | 460 |
| Total Xylenes | 4900 |
| Naphthalene | 89 |
| PCE | *10 U* |
| TCE | *10 U* |
| Vinyl Chloride | *10 U* |

| | |
|---|---|
| Gasoline | 100 U |
| Diesel | 310 U |
| Lube Oil | 490 U |
| Benzene | 1 U |
| Toluene | 1 U |
| Ethylbenzene | 1 U |
| Total Xylenes | 1 U |

| | |
|---|---|
| Gasoline | 100 U |
| Diesel | 260 U |
| Lube Oil | 420 U |
| Benzene | 1 U |
| Toluene | 1 U |
| Ethylbenzene | 1 U |
| Total Xylenes | 1 U |

| | |
|---|---|
| Gasoline | 2300 |
| Diesel | 330 U |
| Lube Oil | 420 U |
| Benzene | 910 |
| Toluene | 53 |
| Ethylbenzene | 64 |
| Total Xylenes | 269 |
| Naphthalene | 50 U |
| PCE | *10 U* |
| TCE | *10 U* |
| Vinyl Chloride | *10 U* |

| | |
|---|---|
| Gasoline | 100 U |
| Diesel | 280 U |
| Lube Oil | 450 U |
| Benzene | 1 U |
| Toluene | 1 U |
| Ethylbenzene | 1 U |
| Total Xylenes | 1 U |

| | |
|---|---|
| Gasoline | 1400 |
| Diesel | 280 U |
| Lube Oil | 460 U |
| Benzene | 660 |
| Toluene | 20 |
| Ethylbenzene | 4.8 |
| Total Xylenes | 270 |

| | |
|---|---|
| Gasoline | 400 U |
| Diesel | 260 U |
| Lube Oil | 420 U |
| Benzene | 640 |
| Toluene | 20 U |
| Ethylbenzene | 4 U |
| Total Xylenes | 10 |
| Naphthalene | 20 U |
| PCE | 4 U |
| TCE | 4 U |
| Vinyl Chloride | *4 U* |

Exploration Location and Number

- PP-21 Push-Probe (Hart Crowser, 2012-2013)
- HC-MW-1 Monitoring Well (Hart Crowser, 2013)
- MW-1 Monitoring Well
- WP-3 Exceeds MTCA Method A for Benzene
- ER-2 Exceeds MTCA Method A for Gasoline
- ER-1 Exceeds MTCA Method A for Gasoline and Benzene
- MW-1 Below MTCA Method A Cleanup Level
- GP-2 Geoprobe Sample with Petroleum-Affected Soils Observed (12/99)
- GP-1 Geoprobe Sample with Petroleum-Affected Soils Not Observed (12/99)
- GP-12 Groundwater Exceeds MTCA Method A for Benzene
- GP-13 Groundwater Exceeds MTCA Method A for Diesel
- GP-20 Groundwater Exceeds MTCA Method A for Gasoline and Benzene
- GP-21 Groundwater Exceeds MTCA Method A for Benzene, Diesel, and Oil
- Approximate Area of Petroleum-Affected Groundwater (Based on 2012 and 2013 Data)
- ? Area of Higher Potential for Additional Petroleum-Affected Soil
- Inferred Groundwater Gradient
- Approximate Extent of Chlorinated Solvent-Affected Groundwater

| | |
|---|---|
| Gasoline | 1400 |
| Diesel | 280 U |
| Lube Oil | 460 U |
| Benzene | 660 |
| Toluene | 20 |
| Ethylbenzene | 1.8 |
| Total Xylenes | 270 |
| Naphthalene | NM |
| PCE | *10 U* |
| TCE | *10 U* |
| Vinyl Chloride | *10 U* |

- Petroleum Hydrocarbon and VOC Concentrations in ug/L
- Bold value exceeds MTCA Method A or Method B cleanup levels
- Not measured
- Italic value reporting limit exceeds cleanup level

0 50 100
Scale in Feet

*Source:* Base map prepared from "Sampling Locations and Extent of Contamination (4'-8'bls)," created by Applied Hydrogeologic Research, Inc. (3/00).

Barrier Motors
Bellevue, Washington

**Groundwater Sampling Results - Barrier Motors Property**

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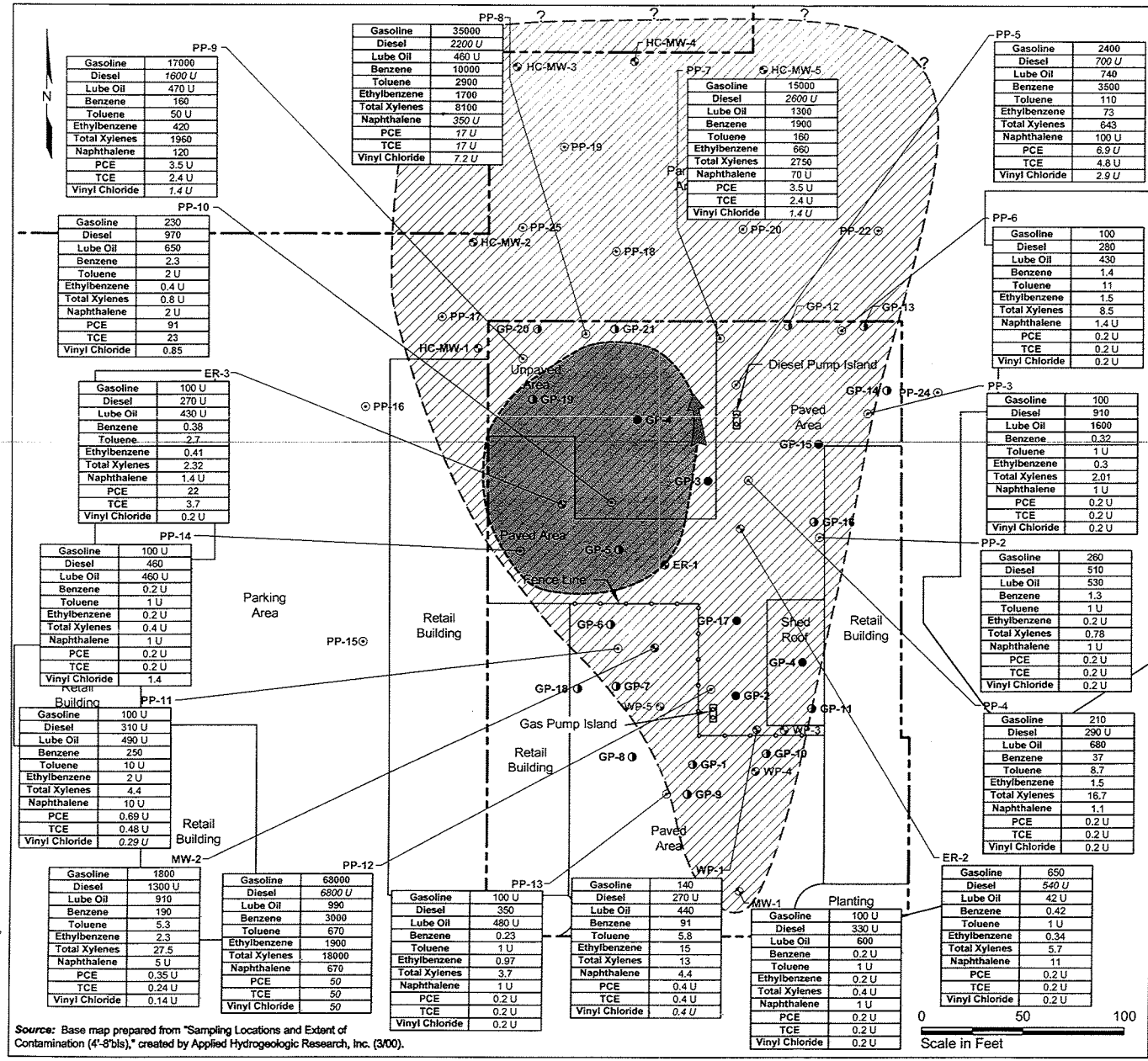
Figure 4A

EAL 10/4/13 2461102-012.dwg




| PP-9 | |
|---|---|
| Gasoline | 17000 |
| Diesel | *1600 U* |
| Lube Oil | 470 U |
| Benzene | 160 |
| Toluene | 50 U |
| Ethylbenzene | 420 |
| Total Xylenes | 1960 |
| Naphthalene | 120 |
| PCE | 3.5 U |
| TCE | 2.4 U |
| Vinyl Chloride | *1.4 U* |

| PP-8 | |
|---|---|
| Gasoline | 35000 |
| Diesel | *2200 U* |
| Lube Oil | 460 U |
| Benzene | 10000 |
| Toluene | 2900 |
| Ethylbenzene | 1700 |
| Total Xylenes | 8100 |
| Naphthalene | *350 U* |
| PCE | *17 U* |
| TCE | *17 U* |
| Vinyl Chloride | *7.2 U* |

| PP-7 | |
|---|---|
| Gasoline | 15000 |
| Diesel | *2600 U* |
| Lube Oil | 1300 |
| Benzene | 1900 |
| Toluene | 160 |
| Ethylbenzene | 660 |
| Total Xylenes | 2750 |
| Naphthalene | 70 U |
| PCE | 3.5 U |
| TCE | 2.4 U |
| Vinyl Chloride | *1.4 U* |

| PP-5 | |
|---|---|
| Gasoline | 2400 |
| Diesel | *700 U* |
| Lube Oil | 740 |
| Benzene | 3500 |
| Toluene | 110 |
| Ethylbenzene | 73 |
| Total Xylenes | 643 |
| Naphthalene | 100 U |
| PCE | *6.9 U* |
| TCE | 4.8 U |
| Vinyl Chloride | *2.9 U* |

| PP-10 | |
|---|---|
| Gasoline | 230 |
| Diesel | 970 |
| Lube Oil | 650 |
| Benzene | 2.3 |
| Toluene | 2 U |
| Ethylbenzene | 0.4 U |
| Total Xylenes | 0.8 U |
| Naphthalene | 2 U |
| PCE | 91 |
| TCE | 23 |
| Vinyl Chloride | 0.85 |

| PP-6 | |
|---|---|
| Gasoline | 100 |
| Diesel | 280 |
| Lube Oil | 430 |
| Benzene | 1.4 |
| Toluene | 11 |
| Ethylbenzene | 1.5 |
| Total Xylenes | 8.5 |
| Naphthalene | 1.4 U |
| PCE | 0.2 U |
| TCE | 0.2 U |
| Vinyl Chloride | 0.2 U |

| ER-3 | |
|---|---|
| Gasoline | 100 U |
| Diesel | 270 U |
| Lube Oil | 430 U |
| Benzene | 0.38 |
| Toluene | 2.7 |
| Ethylbenzene | 0.41 |
| Total Xylenes | 2.32 |
| Naphthalene | 1.4 U |
| PCE | 22 |
| TCE | 3.7 |
| Vinyl Chloride | 0.2 U |

| PP-3 | |
|---|---|
| Gasoline | 100 |
| Diesel | 910 |
| Lube Oil | 1600 |
| Benzene | 0.32 |
| Toluene | 1 U |
| Ethylbenzene | 0.3 |
| Total Xylenes | 2.01 |
| Naphthalene | 1 U |
| PCE | 0.2 U |
| TCE | 0.2 U |
| Vinyl Chloride | 0.2 U |

| PP-14 | |
|---|---|
| Gasoline | 100 U |
| Diesel | 460 |
| Lube Oil | 460 U |
| Benzene | 0.2 U |
| Toluene | 1 U |
| Ethylbenzene | 0.2 U |
| Total Xylenes | 0.4 U |
| Naphthalene | 1 U |
| PCE | 0.2 U |
| TCE | 0.2 U |
| Vinyl Chloride | 1.4 |

| PP-2 | |
|---|---|
| Gasoline | 260 |
| Diesel | 510 |
| Lube Oil | 530 |
| Benzene | 1.3 |
| Toluene | 1 U |
| Ethylbenzene | 0.2 U |
| Total Xylenes | 0.78 |
| Naphthalene | 1 U |
| PCE | 0.2 U |
| TCE | 0.2 U |
| Vinyl Chloride | 0.2 U |

| PP-11 | |
|---|---|
| Gasoline | 100 U |
| Diesel | 310 U |
| Lube Oil | 490 U |
| Benzene | 250 |
| Toluene | 10 U |
| Ethylbenzene | 2 U |
| Total Xylenes | 4.4 |
| Naphthalene | 10 U |
| PCE | 0.69 U |
| TCE | 0.48 U |
| Vinyl Chloride | *0.29 U* |

| PP-4 | |
|---|---|
| Gasoline | 210 |
| Diesel | 290 U |
| Lube Oil | 680 |
| Benzene | 37 |
| Toluene | 8.7 |
| Ethylbenzene | 1.5 |
| Total Xylenes | 16.7 |
| Naphthalene | 1.1 |
| PCE | 0.2 U |
| TCE | 0.2 U |
| Vinyl Chloride | 0.2 U |

| MW-2 | |
|---|---|
| Gasoline | 1800 |
| Diesel | 1300 U |
| Lube Oil | 910 |
| Benzene | 190 |
| Toluene | 5.3 |
| Ethylbenzene | 2.3 |
| Total Xylenes | 27.5 |
| Naphthalene | 5 U |
| PCE | 0.35 U |
| TCE | 0.24 U |
| Vinyl Chloride | 0.14 U |

| PP-12 | |
|---|---|
| Gasoline | 68000 |
| Diesel | *6800 U* |
| Lube Oil | 990 |
| Benzene | 3000 |
| Toluene | 670 |
| Ethylbenzene | 1900 |
| Total Xylenes | 18000 |
| Naphthalene | 670 |
| PCE | *50* |
| TCE | *50* |
| Vinyl Chloride | *50* |

| PP-13 | |
|---|---|
| Gasoline | 100 U |
| Diesel | 350 |
| Lube Oil | 480 U |
| Benzene | 0.23 |
| Toluene | 1 U |
| Ethylbenzene | 0.97 |
| Total Xylenes | 3.7 |
| Naphthalene | 1 U |
| PCE | 0.2 U |
| TCE | 0.2 U |
| Vinyl Chloride | 0.2 U |

| | |
|---|---|
| Gasoline | 140 |
| Diesel | 270 U |
| Lube Oil | 440 |
| Benzene | 91 |
| Toluene | 5.8 |
| Ethylbenzene | 15 |
| Total Xylenes | 13 |
| Naphthalene | 4.4 |
| PCE | 0.4 U |
| TCE | 0.4 U |
| Vinyl Chloride | *0.4 U* |

| MW-1 | |
|---|---|
| Gasoline | 100 U |
| Diesel | 330 U |
| Lube Oil | 600 |
| Benzene | 0.2 U |
| Toluene | 1 U |
| Ethylbenzene | 0.2 U |
| Total Xylenes | 0.4 U |
| Naphthalene | 1 U |
| PCE | 0.2 U |
| TCE | 0.2 U |
| Vinyl Chloride | 0.2 U |

| ER-2 | |
|---|---|
| Gasoline | 650 |
| Diesel | *540 U* |
| Lube Oil | 42 U |
| Benzene | 0.42 |
| Toluene | 1 U |
| Ethylbenzene | 0.34 |
| Total Xylenes | 5.7 |
| Naphthalene | 11 |
| PCE | 0.2 U |
| TCE | 0.2 U |
| Vinyl Chloride | 0.2 U |

0 50 100
Scale in Feet

Exploration Location and Number

- **PP-21** Push-Probe (Hart Crowser, 2012-2013)
- **HC-MW-1** Monitoring Well (Hart Crowser, 2013)
- **MW-1** Monitoring Well
- **WP-3** Exceeds MTCA Method A for Benzene
- **ER-2** Exceeds MTCA Method A for Gasoline
- **ER-1** Exceeds MTCA Method A for Gasoline and Benzene
- **MW-1** Below MTCA Method A Cleanup Level
- **GP-2** Geoprobe Sample with Petroleum-Affected Soils Observed (12/99)
- **GP-1** Geoprobe Sample with Petroleum-Affected Soils Not Observed (12/99)
- **GP-12** Groundwater Exceeds MTCA Method A for Benzene
- **GP-13** Groundwater Exceeds MTCA Method A for Diesel
- **GP-20** Groundwater Exceeds MTCA Method A for Gasoline and Benzene
- **GP-21** Groundwater Exceeds MTCA Method A for Benzene, Diesel, and Oil
- Approximate Area of Petroleum-Affected Groundwater (Based on 2012 and 2013 Data)
- ? Area of Higher Potential for Additional Petroleum-Affected Soil
- Inferred Groundwater Gradient
- Approximate Extent of Chlorinated Solvent-Affected Groundwater

| | |
|---|---|
| Gasoline | 1400 |
| Diesel | 280 U |
| Lube Oil | 460 U |
| Benzene | 660 |
| Toluene | 20 |
| Ethylbenzene | 1.8 |
| Total Xylenes | 270 |
| Naphthalene | 89 |
| PCE | *10 U* |
| TCE | *10 U* |
| Vinyl Chloride | *10 U* |

Petroleum Hydrocarbon and VOC Concentrations in ug/L

Bold value exceeds MTCA Method A or Method B cleanup levels

Italic value reporting limit exceeds cleanup level

*Source:* Base map prepared from "Sampling Locations and Extent of Contamination (4'-8'bls)," created by Applied Hydrogeologic Research, Inc. (3/00).

Barrier Motors
Bellevue, Washington

**Groundwater Sampling Results - Eastside Rental Property**

2461-02 10/13

HARTCROWSER

Figure **4B**

EAL 10/4/13 246102-010.dwg

# *Key to Exploration Logs*

## Sample Description

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:
Density/consistency, moisture, color, minor constituents, MAJOR CONSTITUENT, additional remarks.

## Density/Consistency

Soil density/consistency in borings is related primarily to the Standard Penetration Resistance. Soil density/consistency in test pits and probes is estimated based on visual observation and is presented parenthetically on the logs.

| SAND or GRAVEL Density | Standard Penetration Resistance (N) in Blows/Foot | SILT or CLAY Consistency | Standard Penetration Resistance (N) in Blows/Foot | Approximate Shear Strength in TSF |
|---|---|---|---|---|
| Very loose | 0 to 4 | Very soft | 0 to 2 | <0.125 |
| Loose | 4 to 10 | Soft | 2 to 4 | 0.125 to 0.25 |
| Medium dense | 10 to 30 | Medium stiff | 4 to 8 | 0.25 to 0.5 |
| Dense | 30 to 50 | Stiff | 8 to 15 | 0.5 to 1.0 |
| Very dense | >50 | Very stiff | 15 to 30 | 1.0 to 2.0 |
| | | Hard | >30 | >2.0 |

## Sampling Test Symbols

- 1.5" I.D. Split Spoon
- Grab (Jar)
- 3.0" I.D. Split Spoon
- Shelby Tube (Pushed)
- Bag
- Cuttings
- Core Run

## SOIL CLASSIFICATION CHART

| MAJOR DIVISIONS | | | SYMBOLS GRAPH | SYMBOLS LETTER | TYPICAL DESCRIPTIONS |
|---|---|---|---|---|---|
| COARSE GRAINED SOILS | GRAVEL AND GRAVELLY SOILS | CLEAN GRAVELS (LITTLE OR NO FINES) | | GW | WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES |
| | | | | GP | POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES |
| | MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE | GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES) | | GM | SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES |
| | | | | GC | CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES |
| MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE | SAND AND SANDY SOILS | CLEAN SANDS (LITTLE OR NO FINES) | | SW | WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES |
| | | | | SP | POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES |
| | MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE | SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES) | | SM | SILTY SANDS, SAND - SILT MIXTURES |
| | | | | SC | CLAYEY SANDS, SAND - CLAY MIXTURES |
| FINE GRAINED SOILS | SILTS AND CLAYS | LIQUID LIMIT LESS THAN 50 | | ML | INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY |
| | | | | CL | INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS |
| | | | | OL | ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY |
| MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE | SILTS AND CLAYS | LIQUID LIMIT GREATER THAN 50 | | MH | INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS |
| | | | | CH | INORGANIC CLAYS OF HIGH PLASTICITY |
| | | | | OH | ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS |
| HIGHLY ORGANIC SOILS | | | | PT | PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS |

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

## Moisture

| | |
|---|---|
| Dry | Little perceptible moisture |
| Damp | Some perceptible moisture, likely below optimum |
| Moist | Likely near optimum moisture content |
| Wet | Much perceptible moisture, likely above optimum |

## Minor Constituents

| Minor Constituents | Estimated Percentage |
|---|---|
| Trace | <5 |
| Slightly (clayey, silty, etc.) | 5 - 12 |
| Clayey, silty, sandy, gravelly | 12 - 30 |
| Very (clayey, silty, etc.) | 30 - 50 |

## Laboratory Test Symbols

| | |
|---|---|
| GS | Grain Size Classification |
| CN | Consolidation |
| UU | Unconsolidated Undrained Triaxial |
| CU | Consolidated Undrained Triaxial |
| CD | Consolidated Drained Triaxial |
| QU | Unconfined Compression |
| DS | Direct Shear |
| K | Permeability |
| PP | Pocket Penetrometer<br>Approximate Compressive Strength in TSF |
| TV | Torvane<br>Approximate Shear Strength in TSF |
| CBR | California Bearing Ratio |
| MD | Moisture Density Relationship |
| AL | Atterberg Limits<br>Water Content in Percent<br>Liquid Limit<br>Natural<br>Plastic Limit |
| PID | Photoionization Detector Reading |
| CA | Chemical Analysis |
| DT | In Situ Density in PCF |
| OT | Tests by Others |

## Groundwater Indicators

- Groundwater Level on Date or (ATD) At Time of Drilling
- Groundwater Seepage (Test Pits)

## Sample Key

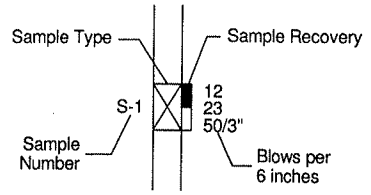



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Figure A-1

KEY SHEET 246102-BL-6-13.GPJ HC_CORP.GDT 10/4/13

# Push Probe Log PP-2

Location: 47.617985 -122.181604
Approximate Ground Surface Elevation: ~150 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| | | Concrete. | 0 | | |
| FILL | | Damp, dark gray-brown, silty, sandy GRAVEL. (FILL) | | PP-2-S1 | (<0.1) NS/No odor |
| PT | | Moist, dark brown PEAT. | | | |
| SW-SM | | Moist to wet, gray, silty, gravelly SAND. | 5 ATD | PP-2-S2 | (<0.1) NS/No odor |
| | | Bottom of Probe at 10.0 Feet. Started 05/08/13. Completed 05/08/13. | 10 | | |
| | | | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-2

# Push Probe Log PP-3

Location: 47.618125 -122.181500
Approximate Ground Surface Elevation: ~149 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| | | Concrete. | 0 | | |
| FILL | | Damp to moist, gray, gravelly SAND with scattered debriw including wood and bricks. (FILL) | 5 | PP-3-S1 | (<0.1) NS/No odor; (20) NS/Slight odor |
| | | | ATD | | |
| PT | | Moist, dark brown PEAT with slight petroleum-like odor. | | | |
| SW | | Wet, gray, slightly silty, gravelly SAND. | 10 | PP-3-S2 | (<0.1) NS/No odor |
| | | Bottom of Probe at 15.0 Feet. Started 05/08/13. Completed 05/08/13. | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-3

# Push Probe Log PP-4

Location: 47.618046 -122.181720
Approximate Ground Surface Elevation: ~148 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| | | Concrete. | 0 | | |
| GW | | Damp, gray, sandy GRAVEL. (FILL) | | | |
| SW | | Moist, brown to dark brown, silty, gravelly SAND with scattered debris and moderate petroleum-like odor. (FILL) | | PP-4-S1 | (20) NS/Mod. odor |
| PT | | Moist, dark brown PEAT. | ATD 5 | | |
| | | | | PP-4-S2 | (2.1) NS/No odor |
| SW | | Wet, gray, gravelly SAND, trace silt. | 10 | | |
| | | Bottom of Probe at 10.0 Feet.<br>Started 05/08/13.<br>Completed 05/08/13. | 15<br>20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-4

# Push Probe Log PP-5

Location: 47.618180 -122.181781
Approximate Ground Surface Elevation: ~148 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| | | Concrete. | 0 | | |
| FILL SW | | Damp, gray-brown, sandy GRAVEL to gravelly SAND with black staining and scattered zones with mild petroleum-like odors. (FILL) | 5 | | (83) NS/Slight odor |
| PT | | Moist, dark brown PEAT. | ATD | PP-5-S1 | |
| ML | | Moist, gray SILT. | | | |
| SW | | Wet, gray, sandy GRAVEL. | 10 | | (101) NS/Slight odor |
| | | No recovery. | | | |
| | | Wet, gray, slightly gravelly SAND to gravelly SAND with slight petroleum-like odor. | 15 | PP-5-S2 | (20) NS/Slight odor |
| | | Bottom of Probe at 17.0 Feet. Started 05/08/13. Completed 05/08/13. | 20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-5

# Push Probe Log PP-6

Location: 47.618290 -122.181565
Approximate Ground Surface Elevation: ~149 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| GW | | Damp, gray and brown, slightly silty GRAVEL with scattered debris, including asphalt and concrete. | 0 | | (<0.1) NS/No odor |
| | | | 5 | | |
| PT | | Moist, dark brown PEAT. | | PP-6-S1 | (<0.1) NS/No odor |
| | | | ATD | | |
| SW SP | | Wet, gray, slightly silty, gravelly SAND. | 10 | PP-6-S2 | (<0.1) NS/No odor |
| | | Bottom of Probe at 14.0 Feet. Started 05/08/13. Completed 05/08/13. | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-6

# Push Probe Log PP-7

Location: 47.618286 -122.181863
Approximate Ground Surface Elevation: ~149 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| | | Concrete. | 0 | | |
| GW | | Damp, gray-brown, sandy GRAVEL with scattered debris, including asphalt, brick, and wood. | | | |
| SW GW | | Moist, gray with brown mottling, sandy GRAVEL to gravelly SAND, trace silt. | | | (<0.1) |
| | | Petroleum-like odor observed. | 5 | | |
| PT | | Moist to wet, dark brown PEAT with strong petroleum-like odor. | ATD | PP-7-S1 | (890) HS/Strong odor |
| SW GW | | Wet, gray, slightly silty, gravelly SAND to sandy GRAVEL with slight petroleum-like odor. | | | (4.2) NS/Slight odor |
| | | | 10 | | |
| | | Very slight petroleum-like odor observed. | | PP-7-S2 | (3.2) NS/No odor |
| | | Bottom of Probe at 13.0 Feet. Started 05/08/13. Completed 05/08/13. | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-7

# Push Probe Log PP-8

Location: 47.618277 -122.182072
Approximate Ground Surface Elevation: ~149 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|
| GW | Damp, gray-brown, silty, sandy GRAVEL with scattered debris, including asphalt and concrete. | 0 | | |
| | Moderate petroleum-like odor and slight sheen. | | PP-8-S1 | (120) SS/Mod. odor |
| SM | | | | |
| SW GW | Damp, dark brown, silty SAND with occasional roots and moderate petroleum-like odor. | | | |
| | Damp to moist, gray, sandy GRAVEL to gravelly SAND with moderate petroleum-like odor. | 5 ATD | | |
| PT | Moist, dark brown PEAT with strong petroleum-like odor and moderate sheen. | | | |
| SM/ML | Wet, gray-black SILT and sandy SILT. | | PP-8-S2 | (400) MS/Mod. to strong odor |
| SW SP | Wet, gray, gravelly SAND with slight petroleum-like odor. | 10 | | |
| | | | | (12) NS/No odor |
| | Very slight petroleum-like odor. | 15 | PP-8-S3 | |
| | Bottom of Probe at 16.0 Feet. Started 05/08/13. Completed 05/08/13. | 20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-8

# Push Probe Log PP-9

Location: 47.618251 -122.182178
Approximate Ground Surface Elevation: ~149 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| GW SW | | Gray, damp, sandy GRAVEL to gravelly SAND, trace silt, with scattered debris. (FILL) | 0 | | |
| SW | | Damp to moist, brown, silty, gravelly SAND with scattered wood. | 5 | PP-9-S1 | (12) NS/Slight odor |
| PT | | Wet, dark brown PEAT with moderate petroleum-like odor. | ATD | | |
| | | Wet, gray-brown, gravelly SAND, trace silt, with slight petroleum-like odor. | 10 | PP-9-S2 | (90) NS/Mod. odor |
| | | Very slight petroleum-like odor. | | | (7) NS/Slight odor |
| | | Bottom of Probe at 13.0 Feet. Started 05/08/13. Completed 05/08/13. | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-9

# Push Probe Log PP-10

Location: 47.618037 -122.182025
Approximate Ground Surface Elevation: ~148 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| GW SW FILL | | Damp, gray-brown, gravelly SAND to sandy GRAVEL with occasional brick fragments. (FILL) | 0 | | |
| PT | | Damp, dark brown PEAT. | | | |
| SW | | Wet, gray, silty, gravelly SAND with very slight petroleum-like odor. | | PP-10-S1 | (0.5) NS/Slight odor |
| SW-SM | | Moist to wet, gray with orange mottling, silty, gravelly SAND. | 5 ATD | | |
| | | | | PP-10-S2 | (0.9) NS/No odor |
| | | | 10 | | |
| | | Material stuck in sampler. | | | (2.4) NS/No odor |
| | | Bottom of Probe at 13.0 Feet. Started 05/08/13. Completed 05/08/13. | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-10

# Push Probe Log PP-11

Location: 47.617844 -122.182018
Approximate Ground Surface Elevation: ~148 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| GW | | Dry, brown-gray, sandy GRAVEL, trace silt, with brick and asphalt. | 0 | | |
| SW | | Medium dense, damp, gray, silty, gravelly SAND. | | | |
| | | Becomes wet and gray with orange mottling. | | PP-11-S1 | (<0.1) NS/No odor |
| | | | 5 | | |
| | | Becomes moist, dark-brown to gray with debris, ilncluding asphalt and brick. | ATD | | |
| SM | | Moist to damp, gray, slightly silty, gravelly SAND. | | | |
| | | Becomes wet. | 10 | PP-11-S2 | (0.3) SS/Possible slight odor (<0.1) NS/No odor |
| | | Increase in soil density. | | | |
| | | Bottom of Probe at 14.0 Feet. Started 05/08/13. Completed 05/08/13. | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-11

# Push Probe Log PP-12

Location: 47.617745 -122.181807
Approximate Ground Surface Elevation: ~148 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| | | Damp, gray, black and brown, sandy GRAVEL with frequent debris includeing brick, asphalt and concrete. | 0 | | |
| PT | | Moist, dark brown PEAT with slight petroleum-like odor. | | | |
| SM/ML | | Moist to wet, ray SILT and SAND with strong petroleum-like odor. | | PP-12-S1 | (410) MS/Slight odor |
| | | Wet, gray to blue-green-gray, silty, gravelly SAND with strong petroleum-like odor. | 5 ATD | | |
| | | Becomes gray. | | PP-12-S2 | (485) MS/Slight odor |
| | | | 10 | | |
| | | Possible slight petroleum-like odor. | | | (6.5) |
| | | | | PP-12-S3 | |
| | | | | | (<0.1) |
| | | Bottom of Probe at 14.0 Feet. Started 05/09/13. Completed 05/09/13. | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-12

# Push Probe Log PP-13

Location: 47.617636 -122.181877
Approximate Ground Surface Elevation: ~148 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| | | Asphalt. | 0 | | |
| GW | | Damp, gray and brown, slightly silty, sandy GRAVEL with scattered debris including wood, asphalt, and concrete. Moderate petroleum-like odor and sheen from 1.5 to 2.5 feet. | | PP-13-S1 | (50) MS/Mod. odor |
| GP | | Pea Gravel. | | | |
| SW | | Moist, gray-brown with orange mottling, silty, gravelly SAND. ATD | 5 | | |
| | | Becomes wet. | | PP-13-S2 | (<0.1) NS/No odor |
| | | Bottom of Probe at 10.0 Feet. Started 05/08/13. Completed 05/08/13. | 10 | | |
| | | | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-13

# Push Probe Log PP-14

Location: 47.617985 -122.182176
Approximate Ground Surface Elevation: ~148 Feet
Horizontal Datum: WGS84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| | | Asphalt. | 0 | | |
| SW GW | | Damp, gray and brown, sandy GRAVEL to gravelly SAND with scattered debris including concrete and brick. | | | |
| | | Very slight petroleum-like odor and sheen from 1.75 to 2.75 feet. | | PP-14-S1 | (4) SS/Slight odor |
| SW | | Damp, gray with orange mottling, silty, gravelly SAND. | 5 ATD | | |
| | | Becomes gray with no mottling. | | PP-14-S2 | (<0.1) NS/No odor |
| | | | 10 | | |
| | | Bottom of Probe at 13.0 Feet. Started 05/08/13. Completed 05/08/13. | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP-5-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-14

# Push Probe Log PP-15

Location: Latitude: 47.617871 Longitude: -122.182485
Approximate Ground Surface Elevation: ~148 Feet
Horizontal Datum: WGS 84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| SW-SM | | Asphalt | 0 | | |
| | | Dry to damp, gray-brown with orange mottling, silty, gravelly SAND. (FILL) | | | (<0.1) NS/No odor |
| SW | | Dry, black, gravelly SAND. | | | |
| | | Becomes damp and red-brown with trace silt. | 5 | | |
| SW-SM | | Moist, gray-brown with orange mottiling, silty, gravelly SAND. | ATD | PP-15-S1 | |
| | | Becomes wet. | | | (<0.1) NS/No odor |
| | | Material becomes denser. | | | (<0.1) |
| | | Bottom of Probe at 10.0 Feet. | 10 | | |
| | | Started 08/14/12. | | | |
| | | Completed 08/14/12. | | | |
| | | Alternating zones of moist and wet soil observed in lower SP/SM unit. | | | |
| | | | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Figure A-15

# Push Probe Log PP-16

Location: Latitude: 47.618163 Longitude: -122.182478
Approximate Ground Surface Elevation: ~147 Feet
Horizontal Datum: WGS 84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| SW | | Asphalt | 0 | | |
| | | Dry, gray-brown, very sandy GRAVEL with trace silt. | | | |
| PT | | | | | |
| SW-SM | | Damp to moist, dark brown PEAT with trace sand and gravel. | | | |
| | | Damp to moist, gray, silty, gravelly SAND. | | | (<0.1) NS/No odor |
| | | Becomes moist to wet and brown-gray. | 5 | PP-16-S1 | |
| | | Becomes wet and gray. | ATD | | |
| | | Material becomes denser. | | | (<0.1) NS/No odor |
| | | | | | (<0.1) NS/No odor |
| | | Bottom of Probe at 10.0 Feet. | 10 | | |
| | | Started 08/14/12. | | | |
| | | Completed 08/14/12. | | | |
| | | Alternating zones of moist and wet soil observed in lower SP/SM unit. | | | |
| | | | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

2461-02 8/12

Figure A-16

# Push Probe Log PP-17

Location: Latitude: 47.618281 Longitude: -122.182314
Approximate Ground Surface Elevation: ~146 Feet
Horizontal Datum: WGS 84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|
| SW-SM | Asphalt<br>Damp, gray and brown, silty, gravelly SAND with scattered organic material. (FILL) | 0 | | |
| PT | Moist, brown and dark brown PEAT with scattered wood fragments.<br>Mild petroleum odor from 2.75 to 3.5 feet. | ATD | PP-17-S1 | (<0.1) NS/No odor<br>(2.0) NS/Mild PHC-like odor |
| SW-SM | Wet, gray, silty, gravelly SAND. | 5 | PP-17-S2 | (<0.1) NS/No odor |
| | Bottom of Probe at 8.0 Feet.<br>Started 08/14/12.<br>Completed 08/14/12. | 10<br>15<br>20 | | |

PUSH PROBE LOG-ENV 246102-PP.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

2461-02 8/12

Figure A-17

# Push Probe Log PP-18

Location: Latitude: 47.618383 Longitude: -122.182034
Approximate Ground Surface Elevation: ~149 Feet
Horizontal Datum: WGS 84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|
| SW-SM | Asphalt<br>Damp, brown, gravelly, silty SAND. (FILL) | 0 | | |
| SP | Damp to moist, gray, silty, very sandy GRAVEL. | | | (<0.1) NS/No odor |
| | Possible wood layer. Limited sample recovery. | 5 | | (<0.1) NS/No odor |
| | | ATD | | |
| PT | Moist, dark brown PEAT with occasional wood fragments. | | PP-18-S1 | |
| GW-GM | Moist, gray, silty, sandy GRAVEL.<br>Becomes wet at 10.5 feet. | 10 | PP-18-S2 | (<0.1) NS/No odor |
| SW GW | Wet, gray, slightly silty, gravelly SAND to sandy GRAVEL. | | | (<0.1) NS/No odor |
| | Bottom of Probe at 15.0 Feet.<br>Started 08/13/12.<br>Completed 08/13/12.<br><br>Alternating zones of moist and wet soil observed below peat layer. | 15<br>20 | | |

PUSH PROBE LOG-ENV 246102-PP.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

2461-02 8/12

Figure A-18

# Push Probe Log PP-19

Location: Latitude: 47.618519 Longitude: -122.182101
Approximate Ground Surface Elevation: ~148 Feet
Horizontal Datum: WGS 84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| GW | | Asphalt | 0 | | |
| | | Dry, brown, sandy GRAVEL. | | | |
| | | Wood, including sawdust and wood fragments. | | | (<0.1) NS/No odor |
| PT | | Moist, dark brown PEAT with frequent wood fragments. | 5 | PP-19-S1 | |
| | | ATD | | | (0.1) NS/No odor |
| | | Scattered wood fragments from 8 to 8.5 feet. | | | |
| SP-SM | | Wet, gray, silty, gravelly SAND. | 10 | | (<0.1) NS/No odor |
| | | Bottom of Probe at 12.0 Feet. Started 08/13/12. Completed 08/13/12. | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

2461-02 8/12

Figure A-19

# Push Probe Log PP-20

Location: Latitude: 47.618412 Longitude: -122.181732
Approximate Ground Surface Elevation: ~149 Feet
Horizontal Datum: WGS 84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| GW | | Asphalt | 0 | | |
| | | Dry, gray, sandy GRAVEL with trace silt. (FILL) | | | |
| | | Wood, including sawdust and wood fragments. | | | NS/No odor |
| | | | 5 | | |
| | | | ATD | | |
| PT | | Moist, dark brown and brown, slightly sandy PEAT with frequent wood fragments. | | PP-20-S1 | (6.7) NS/Slight PHC-like odor |
| | | Slight petroleum-like odor in peat. | | | |
| SW-SM | | Wet, gray, silty, gravelly SAND with scattered wood fragments. | 10 | PP-20-S3 | (<0.1) NS/No odor |
| | | | 15 | | |
| | | Bottom of Probe at 16.0 Feet. Started 08/13/12. Completed 08/13/12. | | | |
| | | Alternating zones of moist and wet material observed below water table. | 20 | | |

PUSH PROBE LOG-ENV 246102-PP.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

2461-02 8/12

Figure A-20

# Push Probe Log PP-22

Location: Latitude: 47.618408 Longitude: -122.181457
Approximate Ground Surface Elevation: ~148 Feet
Horizontal Datum: WGS 84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| GW | | Asphalt<br>Dry to damp, gray, sandy GRAVEL. (FILL) | 0 | | |
| | | Wood, including wood chips and sawdust.<br>No recovery from 4 to 8 feet. | 5 | | (<0.1) NS/No odor |
| PT | | Moist, dark brown PEAT. | | PP-22-S1 | |
| SM | | Wet, gray, silty SAND and gravelly, silty SAND.<br>Becomes more dense. | 10 ATD<br>15 | | NS/No odor<br>NS/No odor |
| | | Bottom of Probe at 16.0 Feet.<br>Started 08/13/12.<br>Completed 08/13/12.<br>Alternating zones of moist and wet. | 20 | | |

PUSH PROBE LOG-ENV 246102-PP.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

2461-02 8/12

Figure A-21

# Push Probe Log PP-24

Location: Latitude: 47.618181 Longitude: -122.181336
Approximate Ground Surface Elevation: ~148 Feet
Horizontal Datum: WGS 84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| GW | | Asphalt | 0 | | |
| | | Damp, brown, sandy GRAVEL. (FILL) | | | |
| GP-GM | | Damp, moist, brown, sandy, silty GRAVEL. | | | (<0.1) NS/No odor |
| GW | | Moist, gray and brown, sandy GRAVEL. | | | |
| | | | 5 ATD | PP-24-S2 | |
| | | Becomes wet. | | | (<0.1) NS/No odor |
| | | | 10 | | NS/No odor |
| | | Bottom of Probe at 12.0 Feet. Started 08/13/12. Completed 08/13/12. | | | |
| | | | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

2461-02 8/12

Figure A-22

# Push Probe Log PP-25

Location: Latitude: 47.618407 Longitude: -122.182171
Approximate Ground Surface Elevation: ~149 Feet
Horizontal Datum: WGS 84
Vertical Datum: MSL

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: P. Cordell Reviewed By: R. Stainsby

| USCS Class | Graphic Log | Soil Descriptions | Depth in Feet | Sample | LAB TESTS & (PID) |
|---|---|---|---|---|---|
| SW-SM | | Asphalt | 0 | | |
| | | Damp, gray-brown, silty, gravelly SAND with occasional debris. (FILL) | | | (<0.1) NS/No odor |
| | | Wood, including woodchips/sawdust. | | | |
| PT | | Moist, dark brown PEAT. | 5 | | |
| SW-SM | | Mild petroleum-like odor in peat. | | PP-25-S1 | (2.0) NS/Mild PHC odor |
| SW-SM | | Wet, gray, silty, gravelly SAND. | | PP-25-S2 | (<0.1) NS/No odor |
| | | | 10 | | |
| | | Bottom of Probe at 11.0 Feet.<br>Started 08/15/12.<br>Completed 08/15/12.<br><br>Alternating zones of moist and wet soil observed in lower SP/SM unit. | | | |
| | | | 15 | | |
| | | | 20 | | |

PUSH PROBE LOG-ENV 246102-PP.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

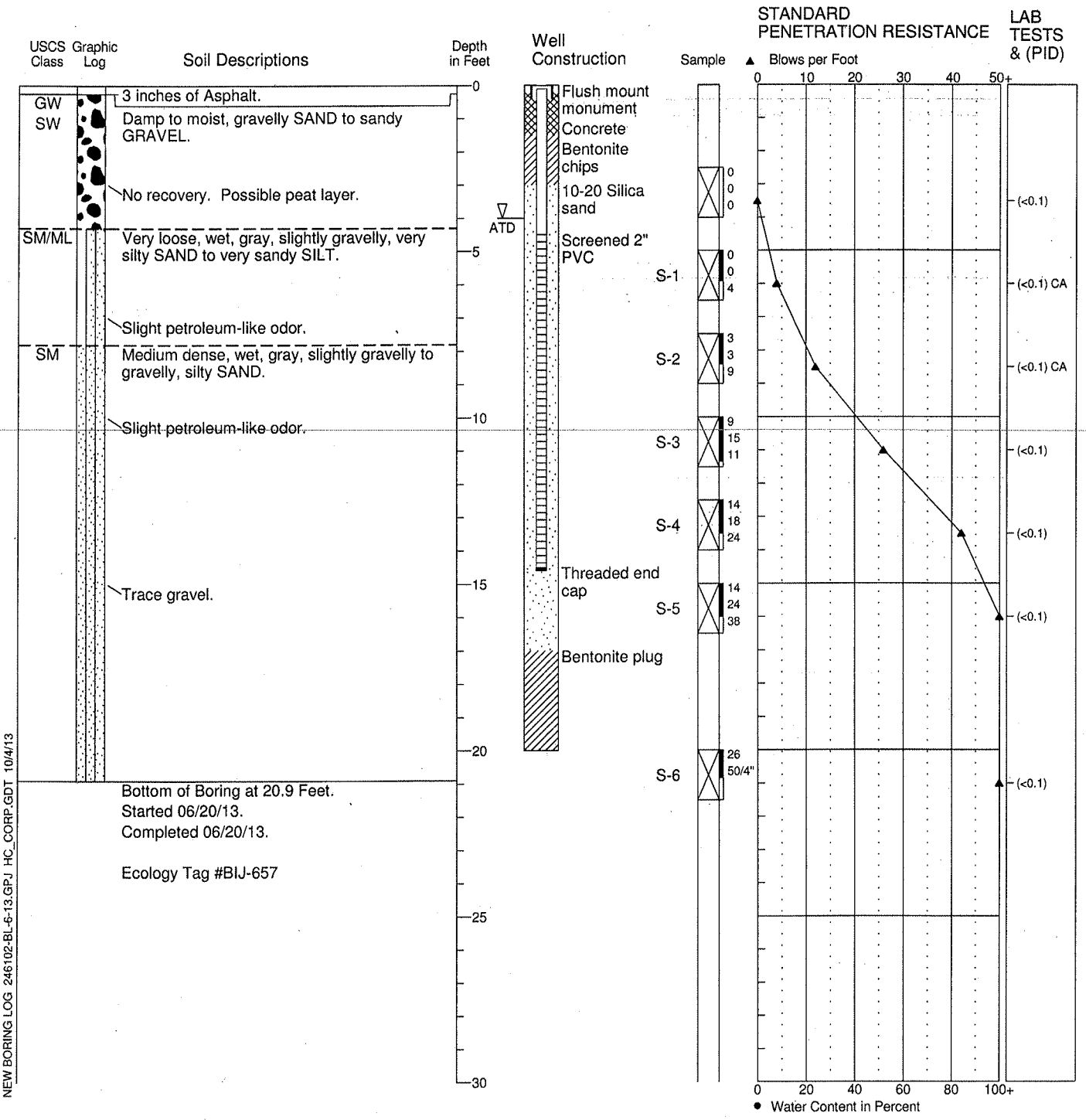
2461-02 8/12

Figure A-23

# Boring Log & Construction Data for Monitoring Well HC-MW-01

Location: 47.618245 -122.182275
Approximate Ground Surface Elevation: 147 Feet
Horizontal Datum: WGS 84
Vertical Datum: MSL

Drill Equipment: Hollow Stem Auger
Hammer Type: SPT
Hole Diameter: inches
Logged By: S. Faubl/P. Cordell Reviewed By: R. Stainsby




NEW BORING LOG 246102-BL-6-13.GPJ HC_CORP.GDT 10/4/13

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

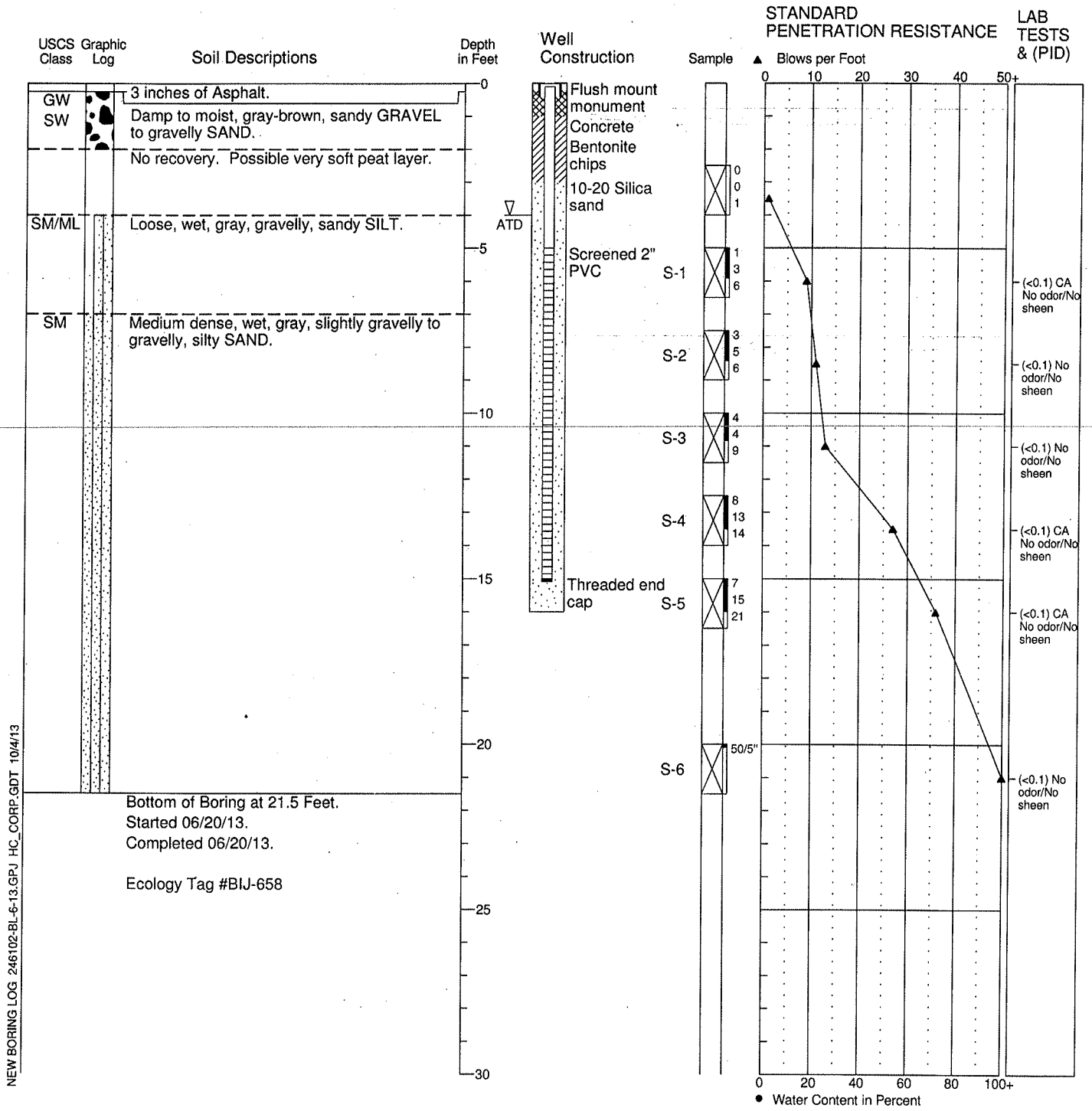
2461-02 6/13

Figure A-24

# Boring Log & Construction Data for Monitoring Well HC-MW-02

Location: 47.618393 -122.182293
Approximate Ground Surface Elevation: 145 Feet
Horizontal Datum: WGS 84
Vertical Datum: MSL

Drill Equipment: Hollow Stem Auger
Hammer Type: SPT
Hole Diameter: inches
Logged By: S. Faubl/P. Cordell Reviewed By: R. Stainsby




1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

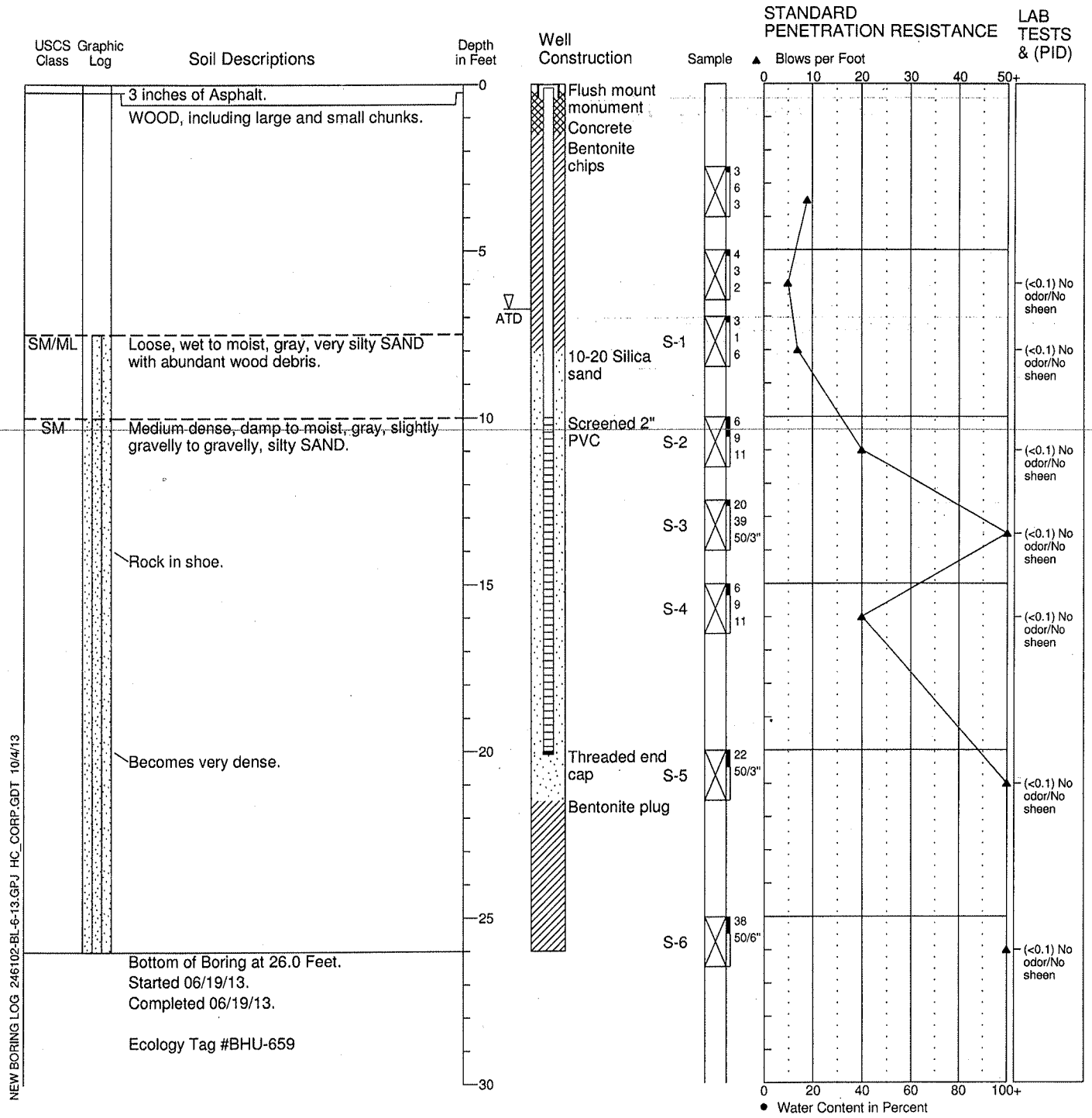
2461-02 6/13

Figure A-25

# Boring Log & Construction Data for Monitoring Well HC-MW-03

Location: 47.618598 -122.182178
Approximate Ground Surface Elevation: 147 Feet
Horizontal Datum: WGS 84
Vertical Datum: MSL

Drill Equipment: Hollow Stem Auger
Hammer Type: SPT
Hole Diameter: inches
Logged By: S. Faubl/P. Cordell Reviewed By: R. Stainsby




1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER

2461-02 6/13

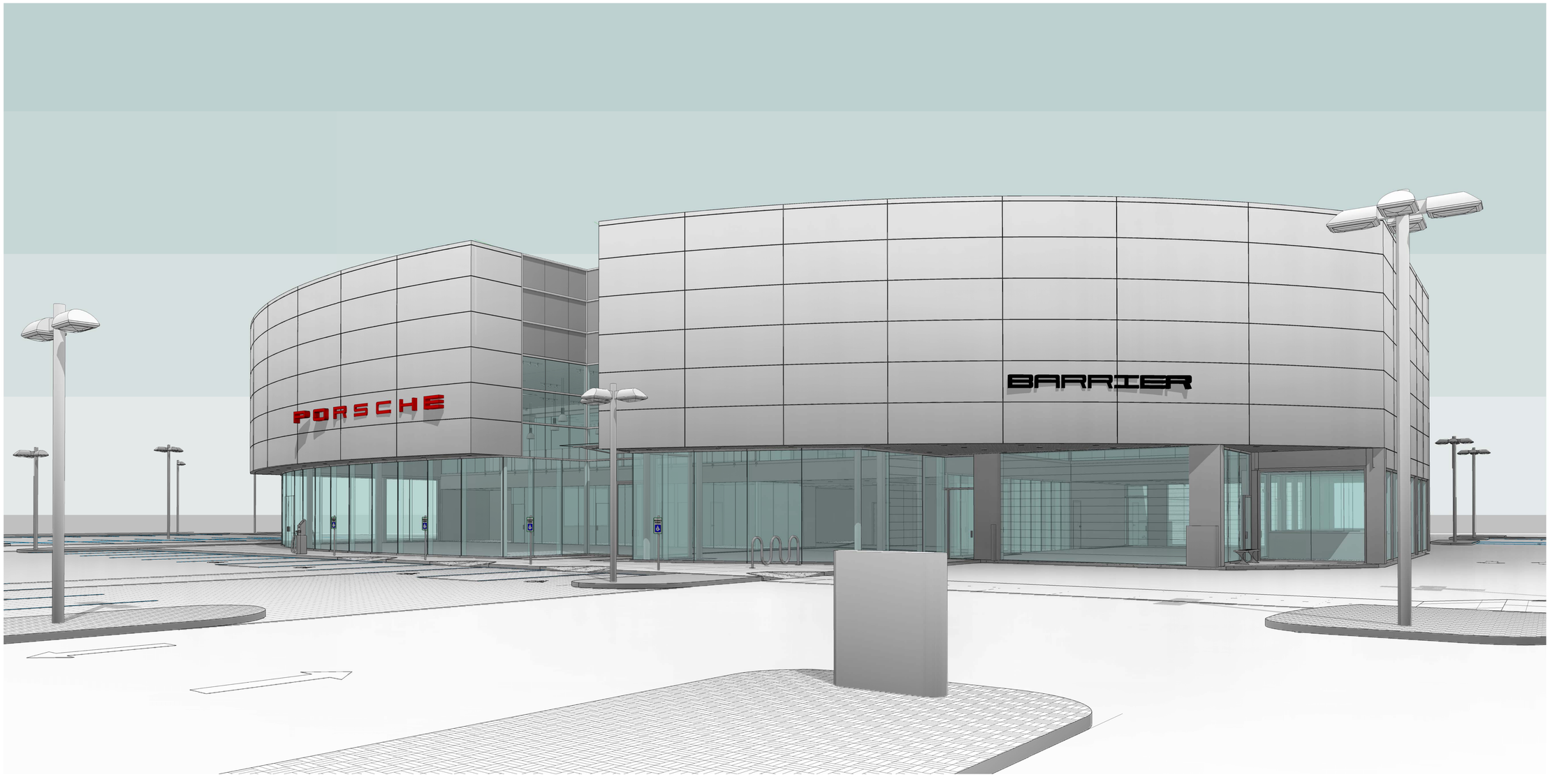
Figure A-26

11/7/2013 10:27:12 AM

# BARRIER PORSCHE

11830 NE 8TH STREET, BELLEVUE WA 98005

13-119197 LM: PERMIT RE-SUBMITTAL




1 BARRIER PORSCHE - LOOKING NORTH
WEST FROM NE 8TH STREET

| No. | Description | Date |
|---|---|---|
| | PERMIT SET | 6/28/13 |

12-019
job no.

SMC
drawn

SMC
checked

10/1/12
date

BARRIER PROPERTIES LBSC, LLC.

BARRIER PORSCHE

11830 NE 8TH STREET, BELLEVUE WA, 98005

LANCE MUELLER & ASSOCIATES
ARCHITECTS AIA
130 LAKESIDE SUITE 250 SEATTLE, WA 98122 (206) 325-2553

COVER SHEET

sheet

A0.0

11/7/2013 9:22:50 AM

**GENERAL INFORMATION**

| | | |
|---|---|---|
| **SITE AREA:** | **137,205 SF** | **100%** |
| BUILDING FOOTPRINT: | 27,000 SF | 20% |
| PAVEMENT: | 72,848 SF | 53% |
| LANDSCAPE: | 21,517 SF | 15.5% |
| PERVIOUS PAVERS: | 15,840 SF | 11.5% |
| PERVIOUS LANDSCAPE: | 10,847 SF | 8% |
| TOTAL PERVIOUS: | 37,357 SF | 27% |

CITY REQ. 25% PERVIOUS = OK

**PARKING STALLS:**
PARKING REQ.
MIN PARKING REQ.
OFFICE: 4,501,000 @ 13,223 SF = 60
SALES: 1.0 PER EMPLOYEE = 7
PARTS: 1.5/1000 @ 7,307 SF = 11
SERVICE BAYS: 1.0 PER BAY = 17
TOTAL REQ. 95
PROPOSED 178

**TOTAL BUILDING AREA:**
FLOOR AREA = 25,023 SF
DRIVE THROUGH = 1,977 SF
MEZZANINE LEVEL = 11,327 SF
TOTAL = 38,327 SF

- SITE LIGHTING IS SHOWN FOR DESIGN INTENT ONLY. ALL FIXTURES MUST BE DESIGNED TO PREVENT LIGHT SPILLAGE TO ADJACENT PROPERTIES. PLEASE COORDINATE WITH ELECTRICAL DRAWINGS UNDER SEPARATE PERMIT. POLE HEIGHT TO BE 20' HIGH UNLESS OTHERWISE NOTED ON ELECTRICAL DRAWINGS. POLE DETAILS SHOWN ON A1.2.
- PROTECTION OF PEDESTRIANS - PEDESTRIANS SHALL BE PROTECTED DURING CONSTRUCTION AD DEMOLITION ACTIVITIES AS REQUIRED BY IBC SECTION 3306 AND TABLE 3306.1 (THIS IS A DEFERRED SUBMITTAL).

12 SITE PLAN
1" = 20'-0"

| No. | Description | Date |
|---|---|---|
| | PERMIT SET | 6/28/13 |
| 1 | RESPONSE TO CITY COMMENTS | 9/11/13 |
| 2 | CLIENT REVISIONS | 11/7/13 |

12-019 job no.
SMC drawn
SMC checked
10/1/12 date

REGISTERED ARCHITECT
STATE OF WASHINGTON
AMY S. MUELLER
AIA

BARRIER PROPERTIES LBSC, LLC.

# BARRIER PORSCHE

11830 NE 8TH STREET, BELLEVUE WA, 98005

SITE PLAN - PROPOSED WORK


LANCE MUELLER & ASSOCIATES
ARCHITECTS AIA
130 LAKESIDE, SUITE 250 SEATTLE, WA 98122 (206) 325-2553


sheet
A1.1

11/7/2013 9:22:29 AM

**GENERAL INFORMATION**

| | | |
|---|---|---|
| SITE AREA: | 137,205 SF | 100% |
| BUILDING FOOTPRINT: | 27,000 SF | 20% |
| PAVEMENT: | 72,848 SF | 53% |
| LANDSCAPE: | 21,517 SF | 15.5% |
| PERVIOUS PAVERS: | 15,840 SF | 11.5% |
| TOTAL IMPERVIOUS: | 99,848 SF | 73% |
| TOTAL PERVIOUS | 37,357 SF | 27% |

CITY REQ. 25% PERVIOUS = OK

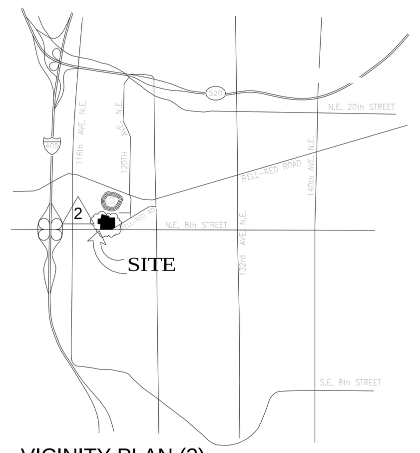
**PARKING STALLS:**

| | |
|---|---|
| PARKING REQ : | |
| MIN PARKING REQ : | |
| OFFICE: 4.5/1,000 @ 13,223 SF = | 60 |
| SALES: 1.0 PER EMPLOYEE = | 7 |
| PARTS: 1.5/1000 @ 7,307 SF = | 11 |
| SERVICE BAYS: 1.0 PER BAY = | 17 |
| TOTAL REQ: | 95 |
| PROPOSED: | 178 |

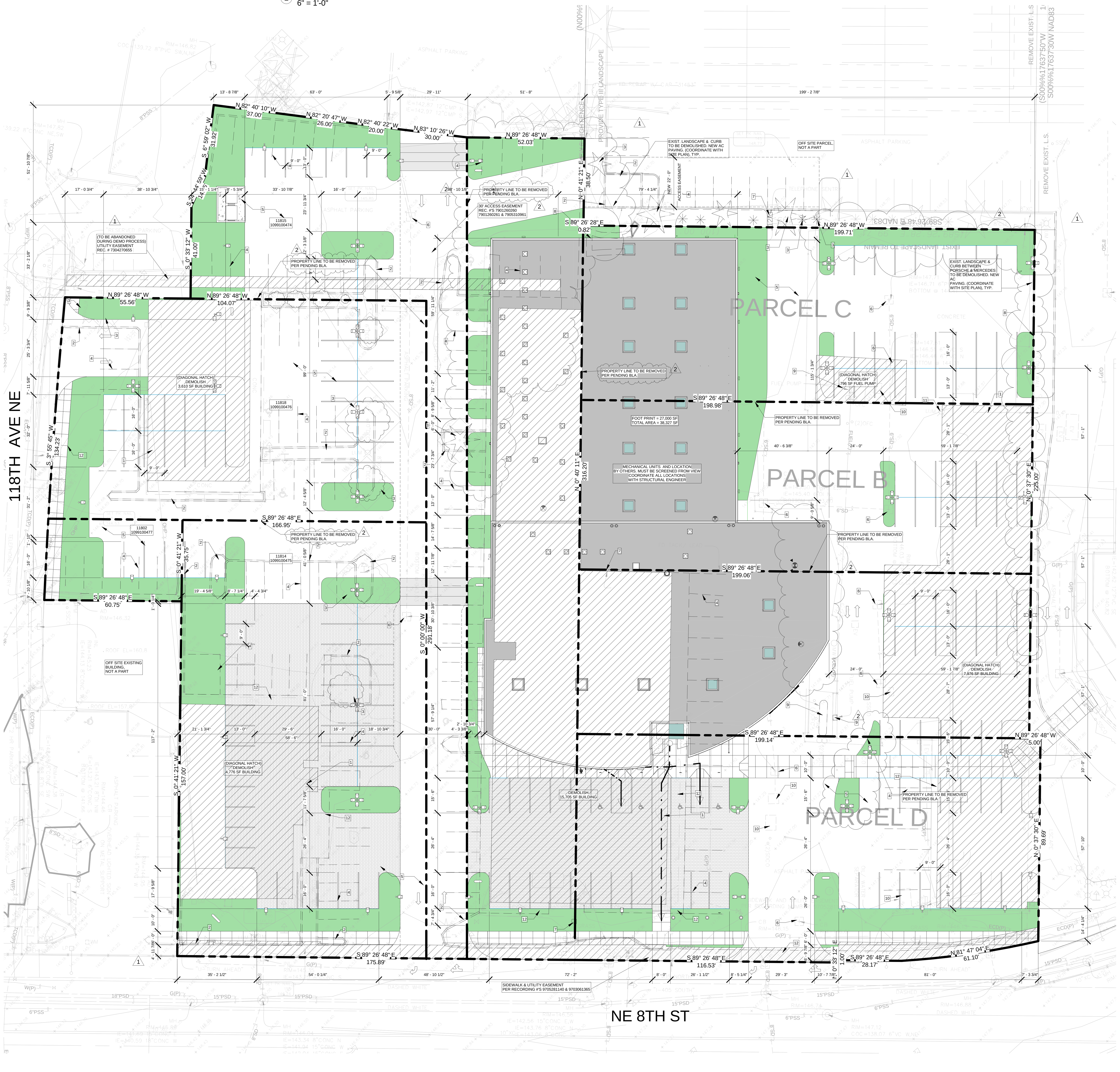
**TOTAL BUILDING AREA:**

| | |
|---|---|
| FLOOR AREA | = 25,023 SF |
| DRIVE THROUGH | = 1,977 SF |
| MEZZANINE LEVEL | = 11,327 SF |
| TOTAL | = 38,327 SF |

- SITE LIGHTING IS SHOWN FOR DESIGN INTENT ONLY. ALL FIXTURES MUST BE DESIGNED TO PREVENT LIGHT SPILLAGE TO ADJACENT PROPERTIES. PLEASE COORDINATE WITH ELECTRICAL DRAWINGS UNDER SEPARATE PERMIT. POLE HEIGHT TO BE 20' HIGH UNLESS OTHERWISE NOTED ON ELECTRICAL DRAWINGS. POLE DETAILS SHOWN ON A1.2.
- PROTECTION OF PEDESTRIANS - PEDESTRIANS SHALL BE PROTECTED DURING CONSTRUCTION AD DEMOLITION ACTIVITIES AS REQUIRED BY IBC SECTION 3306 AND TABLE 3306.1 (THIS IS A DEFERRED SUBMITTAL).




2 VICINITY PLAN (2)
6" = 1'-0"




1 SITE PLAN - B
1" = 20'-0"

# LEGAL DESCRIPTION

SITE ADDRESS:
11830 NORTHEAST BELLEVUE-REDMOND ROAD
11830 NORTHEAST 8TH STREET
11824 NORTHEAST 8TH STREET
11822 NORTHEAST 8TH STREET
11810 NORTHEAST 8TH STREET
11814 NORTHEAST 8TH STREET
11816 NORTHEAST 8TH STREET
11818 NORTHEAST 8TH STREET
810 118TH AVENUE NORTHEAST
BELLEVUE, WASHINGTON 98005

TAX PARCEL NUMBER:
11810 NE 8TH ST=109910-0463-08
11814 NE 8TH ST=109910-0475-04
11816 NE 8TH ST=109910-0474-05
11818 NE 8TH ST=109910-0476-03
11822 NORTHEAST 8TH STREET=109910-0465-06
11824 NORTHEAST 8TH STREET=109910-0442-04
11830 NORTHEAST 8TH STREET=109910-0445-01
11830 NORTHEAST BELLEVUE-REDMOND ROAD=109910-0440-06
810 118TH AVENUE NORTHEAST=109910-0477-02

ZONING:
GC = COMMERCIAL

FLOOD MAP:
LOCATED IN ZONE "X" AND IS OUTSIDE 500 YEAR FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 53033C0656F, DATED MAY 16, 1995.

AREA:
TOTAL SITE AREA IS 137,194.97 SQUARE FEET OR 3.1496 ACRES.

METHOD OF SURVEY:
INSTRUMENTATION FOR THIS SURVEY WAS A LEICA TOTAL STATION UNIT. PROCEDURES USED IN THIS SURVEY WERE DIRECT AND REVERSE ANGLES, NO CORRECTION NECESSARY. MEETS WASHINGTON STATE STANDARDS SET BY WAC 332-130-090.

UNDERGROUND UTILITIES:
BURIED UTILITIES SHOWN BASED ON RECORDS FURNISHED BY OTHERS AND VERIFIED WHERE POSSIBLE IN THE FIELD. GEODIMENSIONS ASSUMES NO LIABILITY FOR THE ACCURACY OF THOSE RECORDS OR ACCEPT RESPONSIBILITY FOR UNDERGROUND LINES WHICH ARE NOT MADE PUBLIC RECORD. FOR THE FINAL LOCATION OF EXISTING UTILITIES IN AREAS CRITICAL TO DESIGN CONTACT THE UTILITY OWNER/AGENCY. AS ALWAYS, CALL 1-800-424-5555 BEFORE CONSTRUCTION.

BASIS OF BEARING:
THEORETICAL SECTION LINE BETWEEN COB 0079 AND COB 0080 BEARS S89°26'53"E

LEGAL DESCRIPTION:

PARCEL A:
THE NORTH 269 FEET OF THE SOUTH 379 FEET OF THE WEST 0.82 FEET OF THE EAST HALF OF LOT 87, THE WEST HALF OF LOT 87, ALL OF LOTS 88 AND 89, AND THAT PORTION OF LOT 90 LYING EASTERLY OF 118TH AVENUE NORTHEAST, ALL IN BRIERWOOD PARK, ACCORDING
TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE(S) 18, IN KING COUNTY, WASHINGTON;
EXCEPT THAT PORTION DESCRIBED AS FOLLOWS:
BEGINNING AT THE SOUTHWEST CORNER OF SAID TRACT;
THENCE EAST ALONG THE SOUTH LINE THEREOF 60.86 FEET;
THENCE NORTH PARALLEL WITH THE WEST LINE OF LOT 89, A DISTANCE OF 167.00 FEET;
THENCE WEST PARALLEL WITH THE SOUTH LINE OF SAID LOT 89 A DISTANCE OF 60 FEET, MORE OR LESS, TO THE EASTERLY MARGIN OF 118TH AVENUE NORTHEAST;
THENCE SOUTHERLY ALONG SAID MARGIN 167.00 FEET, MORE OR LESS, TO THE POINT OF BEGINNING;
EXCEPT THE SOUTH 10 FEET FOR STREET;
AND EXCEPT THAT PORTION LYING NORTHERLY OF THE FOLLOWING DESCRIBED LINE:
BEGINNING AT THE SOUTHWEST CORNER OF LOT 1, LAKE BELLEVUE, DIV. 2, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 109 OF PLATS, PAGES 34 AND 35, IN KING COUNTY, WASHINGTON;
THENCE NORTH 00°41'41" EAST ALONG SAID WEST LINE 36.51 FEET TO THE TRUE POINT OF BEGINNING OF SAID LINE;
THENCE NORTH 89°18'19" WEST 55.56 FEET; THENCE SOUTH 84°29'06" WEST 34.86 FEET;
THENCE NORTH 82°53'05" WEST 20.00 FEET; THENCE SOUTH 86°55'23" WEST 20.32 FEET;
THENCE NORTH 82°57'50" WEST 40.00 FEET; THENCE SOUTH 12°59'28" WEST 17.88 FEET;
THENCE SOUTH 00°33'31" WEST 55.00 FEET;
THENCE NORTH 89°26'28" WEST 55.56 FEET TO THE EASTERLY MARGIN OF 188TH AVENUE NORTHEAST AND THE TERMINUS OF SAID LINE;
ALSO EXCEPT ANY PORTION WITHIN SAID LAKE BELLEVUE, DIV. 2 AND 3.
PARCEL B:
THAT PORTION OF LOTS 87, 88 AND 89, BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE(S) 18, IN KING COUNTY, WASHINGTON, LYING SOUTHERLY AND EASTERLY OF LAKE BELLEVUE, DIV. 3, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 117 OF PLATS, PAGES 67 AND 68, IN KING COUNTY, WASHINGTON, LYING WESTERLY OF LAKE BELLEVUE, DIV. 2, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 109 OF PLATS, PAGES 34 AND 35, IN KING COUNTY, WASHINGTON, AND NORTHERLY OF THE ABOVE-DESCRIBED PARCEL A.

REFERENCE:
LEGAL DESCRIPTION BASED ON TITLE REPORT FURNISHED BY CHICAGO TITLE COMPANY, ORDER NUMBER 1267061, DATED JUNE 4, 2008.

EXCEPTIONS:

1. UNDERGROUND UTILITY EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
GRANTEE: PUGET SOUND POWER & LIGHT COMPANY, A WASHINGTON CORPORATION
PURPOSE: ELECTRIC TRANSMISSION AND/OR DISTRIBUTION SYSTEM TOGETHER WITH ALL NECESSARY OR CONVENIENT APPURTENANCES
AREA AFFECTED: NORTHERLY PORTION OF SAID PREMISES LYING WITHIN A STRIP OF LAND 5 FEET IN WIDTH
RECORDED: APRIL 27, 1973
RECORDING NUMBER: 7304270655

CONTAINS COVENANT PROHIBITING STRUCTURES OVER SAID EASEMENT OR OTHER ACTIVITIES
WHICH MIGHT ENDANGER THE UNDERGROUND SYSTEM.
2. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
PURPOSE: ACCESS
AREA AFFECTED: THE DESCRIPTION CONTAINED THEREIN IS NOT SUFFICIENT TO DETERMINE ITS EXACT LOCATION WITHIN THE PROPERTY HEREIN DESCRIBED.
RECORDED: JANUARY 5, 1979
RECORDING NUMBER: 7901050780

3. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
DISCLOSED BY: STATUTORY WARRANTY DEED
PURPOSE: VEHICULAR AND PEDESTRIAN ACCESS
(INGRESS AND EGRESS) AND UTILITIES AFFECTS: PORTION OF SAID PREMISES AND OTHER PROPERTY, AS DESCRIBED IN DOCUMENT
RECORDED: JANUARY 26, 1979
RECORDING NUMBER: 7901260260

SAID EASEMENT(S) ALSO ARE DISCLOSED BY DOCUMENTS RECORDED UNDER RECORDING NUMBERS 7901260261 AND 7905310961.

4. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
DISCLOSED BY: DEED AND PURCHASER'S ASSIGNMENT OF REAL ESTATE CONTRACT
PURPOSE: VEHICULAR AND PEDESTRIAN ACCESS
(INGRESS AND EGRESS) AND UTILITIES AFFECTS: PORTION OF SAID PREMISES AND OTHER PROPERTY, AS DESCRIBED IN DOCUMENT
RECORDED: MARCH 5, 1981
RECORDING NUMBER: 8103050642

5. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
DISCLOSED BY: DEED AND PURCHASER'S ASSIGNMENT OF REAL ESTATE CONTRACT
PURPOSE: VEHICULAR AND PEDESTRIAN ACCESS
(INGRESS AND EGRESS) AND UTILITIES AFFECTS: PORTION OF SAID PREMISES AND OTHER PROPERTY, AS DESCRIBED IN DOCUMENT
RECORDED: MARCH 5, 1981
RECORDING NUMBER: 8103050953

6. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
DISCLOSED BY: STATUTORY WARRANTY DEED
PURPOSE: VEHICULAR AND PEDESTRIAN ACCESS
(INGRESS AND EGRESS) AND UTILITIES AFFECTS: PORTION OF SAID PREMISES AND OTHER PROPERTY, AS DESCRIBED IN DOCUMENT
RECORDED: MARCH 5, 1981
RECORDING NUMBER: 8103050954

7. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
DISCLOSED BY: STATUTORY WARRANTY DEED
PURPOSE: VEHICULAR AND PEDESTRIAN ACCESS
(INGRESS AND EGRESS) AND UTILITIES AFFECTS: PORTION OF SAID PREMISES AND OTHER PROPERTY, AS DESCRIBED IN DOCUMENT
RECORDED: APRIL 25, 1983
RECORDING NUMBER: 8304250794

SAID EASEMENT(S) ALSO ARE DISCLOSED BY DOCUMENT RECORDED UNDER RECORDING NUMBER 8407160462.

8. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
GRANTEE: CITY OF BELLEVUE, A MUNICIPAL CORPORATION
PURPOSE: PUBLIC SIDEWALK AND PEDESTRIAN USE, AND FOR CONSTRUCTING, INSTALLING, RECONSTRUCTING, REPLACING, REPAIRING, MAINTAINING AND OPERATING STREET UTILITIES AND LIGHTING AND ALL NECESSARY CONNECTIONS AND APPURTENANCES THERETO
AREA AFFECTED: A SOUTHERLY PORTION OF SAID PREMISES
RECORDED: MARCH 6, 1997
RECORDING NUMBER: 9703061365

9. MATTERS DISCLOSED BY SURVEY BY GEODIMENSIONS DATED DECEMBER 16, 2004, AS JOB NUMBER 4244, AS FOLLOWS:
A) ENCROACHMENT OF SIGN BORDER BY 1.3 FEET OVER WESTERLY PROPERTY LINE INTO RIGHT OF WAY FOR 118TH STREET.
B) ENCROACHMENT OF BUILDING LOCATED ON THE SOUTHWESTERLY ADJOINER BY 0.3 FEET
ONTO SUBJECT PROPERTY.
C) ENCROACHMENT OF SUBJECT PROPERTY BUILDING (#11814) ONTO THE SOUTHWESTERLY
ADJOINER BY UP TO 1.1 FEET.
D) ENCROACHMENT OF RETAINING WALL INTO UTILITY EASEMENT.
E) ENCROACHMENT OF BUILDING LOCATED ON EASTERLY ADJOINER BY UP TO 1.7 FEET ONTO
SUBJECT PROPERTY.

NOTE: SAID MATTERS ALSO ARE DISCLOSED BY RECITALS CONTAINED IN STATUTORY WARRANTY DEED RECORDED UNDER RECORDING NUMBER 20050104001361.

LEGAL DESCRIPTION (CONT):

PARCEL A:
THE NO.RTH 72.79 FEET OF THE SOUTH 182.79 FEET OF LOTS 85 AND 86, AND ALSO THE NORTH 72.79 FEET OF THE SOUTH 182.79 FEET OF LOT 87 LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE EAST HALF OF SAID LOT 87;
THENCE NORTH ALONG THE WEST LINE OF SAID EAST HALF 110.00 FEET;
THENCE EAST 0.82 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED LINE;
THENCE NORTH 72.70 FEET, MORE OR LESS, TO A POINT ON THE NORTH LINE OF SAID SOUTH 182.79 FEET, WHICH POINT LIES 0.82 FEET EAST OF THE NORTHWEST CORNER OF THE SOUTH 182.79 FEET OF THE EAST HALF OF SAID LOT 87;

ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, IN KING COUNTY, WASHINGTON.

PARCEL B:
THE NORTH 75 FEET OF THE SOUTH 257.79 FEET OF LOTS 85 AND 86, AND ALSO THE NORTH 75 FEET OF
THE SOUTH 257.79 FEET OF LOT 87, LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE EAST HALF OF SAID LOT 87;
THENCE NORTH ALONG THE WEST LINE OF SAID EAST HALF 110.00 FEET;
THENCE EAST 0.82 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED
LINE;
THENCE NORTH 147.79 FEET, MORE OR LESS, TO A POINT ON THE NORTH LINE OF SAID SOUTH 257.79 FEET, WHICH POINT LIES 0.82 FEET EAST OF THE NORTHWEST CORNER OF THE SOUTH 257.79 FEET OF THE EAST HALF OF SAID LOT 87;

ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, IN KING COUNTY, WASHINGTON.

PARCEL C:
THE NORTH 77.21 FEET OF THE SOUTH 335 FEET OF LOTS 85 AND 86, AND ALSO THE NORTH 77.21 FEET OF THE SOUTH 335 FEET OF LOT 87, LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE EAST HALF OF SAID LOT 87;
THENCE NORTH ALONG THE WEST LINE OF SAID EAST HALF 257.79 FEET;
THENCE EAST 0.82 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED LINE;
THENCE NORTH 77.21 FEET, MORE OR LESS, TO A POINT ON THE NORTH LINE OF SAID SOUTH 335 FEET, WHICH POINT LIES 0.82 FEET EAST OF THE NORTHWEST CORNER OF THE SOUTH 335 FEET OF THE EAST HALF OF SAID LOT 87;

ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, IN KING COUNTY, WASHINGTON.

PARCEL D:
THAT PORTION OF THE SOUTH 110 FEET OF THE WEST 5 FEET OF TRACT 84, THAT PORTION OF THE SOUTH 110 FEET OF TRACTS 85 AND 86, AND THAT PORTION OF THE SOUTH 110 FEET OF THE EAST HALF OF TRACT 87, ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, IN KING COUNTY, WASHINGTON, LYING NORTH OF BELLEVUE-REDMOND REVISION ROAD AS CONVEYED TO KING COUNTY BY DEED RECORDED UNDER RECORDING NUMBER 2544485;

EXCEPT THOSE PORTIONS CONVEYED TO THE CITY OF BELLEVUE BY DEED RECORDED UNDER RECORDING NUMBER 6654157 AND 9705281139.
REFERENCE:
LEGAL DESCRIPTION BASED ON TITLE REPORT FURNISHED BY CHICAGO TITLE COMPANY, ORDER NUMBER 1354048, DATED APRIL 18, 2013.

1. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
GRANTEE: THE CITY OF BELLEVUE, A WASHINGTON MUNICIPAL CORPORATION
PURPOSE: SIDEWALK AND UTILITIES
AREA AFFECTED: SOUTHERLY PORTIONS OF THE PROPERTY HEREIN DESCRIBED
RECORDED: MAY 28, 1997
RECORDING NUMBER: 9705281140

2. COVENANTS, CONDITIONS AND RESTRICTIONS CONTAINED IN INSTRUMENT, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW:
RECORDED: JANUARY 17, 1967
RECORDING NUMBER: 6128929

3. COVENANTS, CONDITIONS AND RESTRICTIONS CONTAINED IN INSTRUMENT, BUT
OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE,
COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL
STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF
INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO
THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY
APPLICABLE LAW:
RECORDED: JANUARY 7, 1972
RECORDING NUMBER: 7201070145

4. AGREEMENT AND THE TERMS AND CONDITIONS THEREOF:
BETWEEN: EDWARD A. RAUSCHER AND BARBARA G. RAUSCHER
AND: THE CITY OF BELLEVUE
RECORDED: MAY 25, 1978
RECORDING NUMBER: 7805250944

0' 10' 20' 40' 80'

| No. | Description | Date |
|---|---|---|
| | PERMIT SET | 6/28/13 |
| 1 | RESPONSE TO CITY COMMENTS | 9/11/13 |
| 2 | CLIENT REVISIONS | 11/7/13 |

12-019 job no.
SMC drawn
SMC checked
10/1/12 date

REGISTERED ARCHITECT 2396 LANCE P. MUELLER STATE OF WASHINGTON

BARRIER PROPERTIES LBSC, LLC.

BARRIER PORSCHE

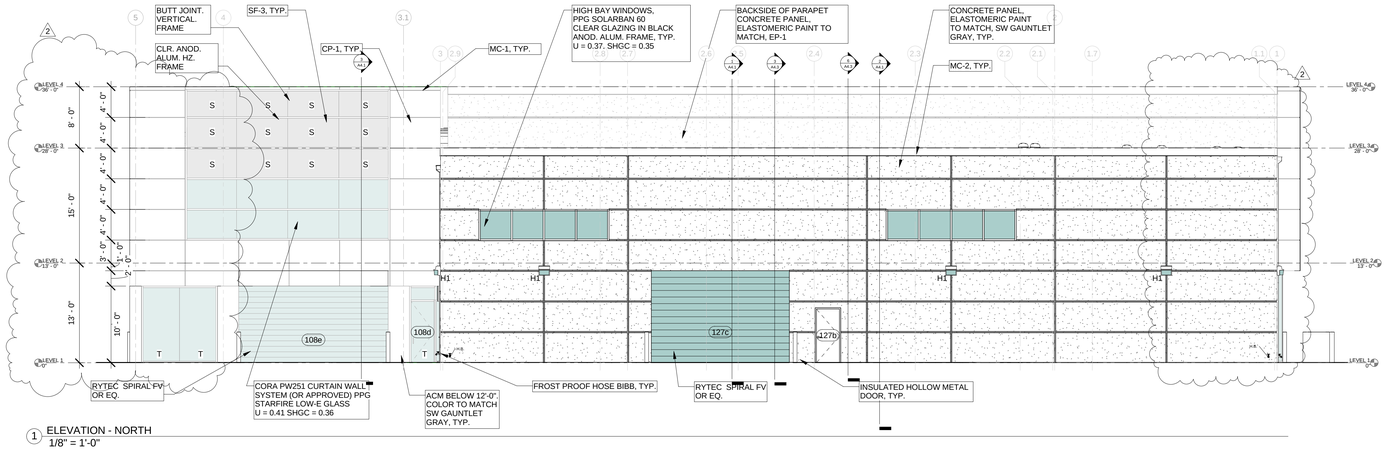
11830 NE 8TH STREET, BELLEVUE WA, 98005

LANCE MUELLER & ASSOCIATES
ARCHITECTS AIA
130 LAKESIDE SUITE 250 SEATTLE, WA 98122 (206) 325-2553

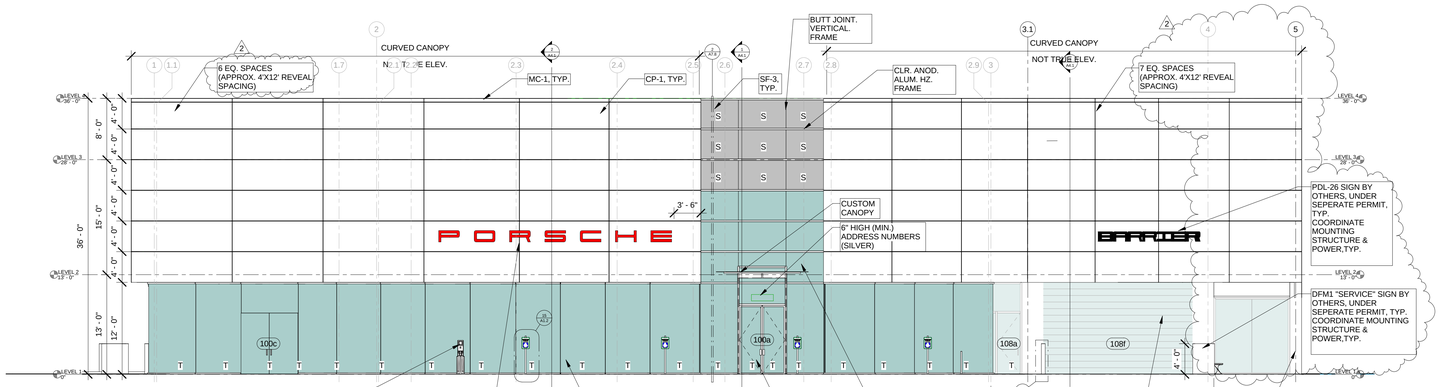
SITE PLAN B - EXISTING & PROPOSED WORK

sheet
A1.1 (B)

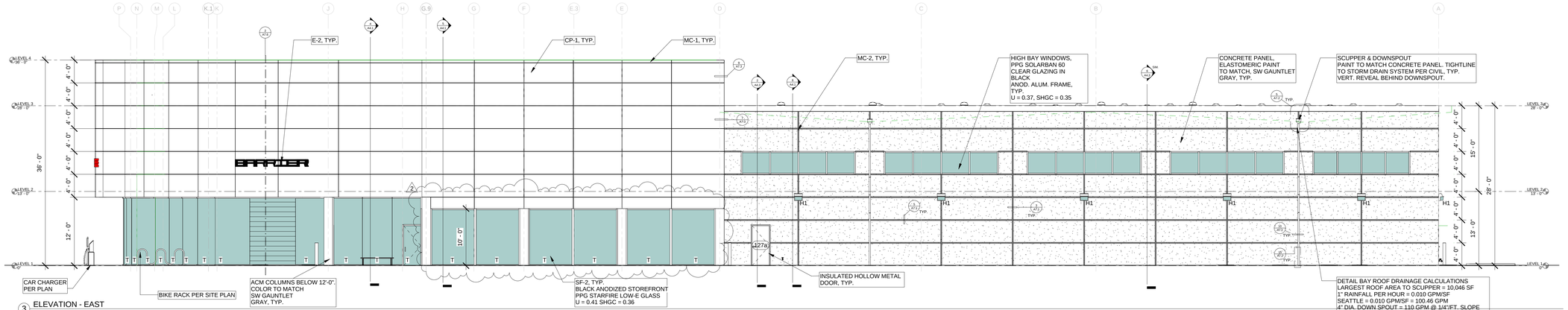
11/7/2013 9:23:03 AM



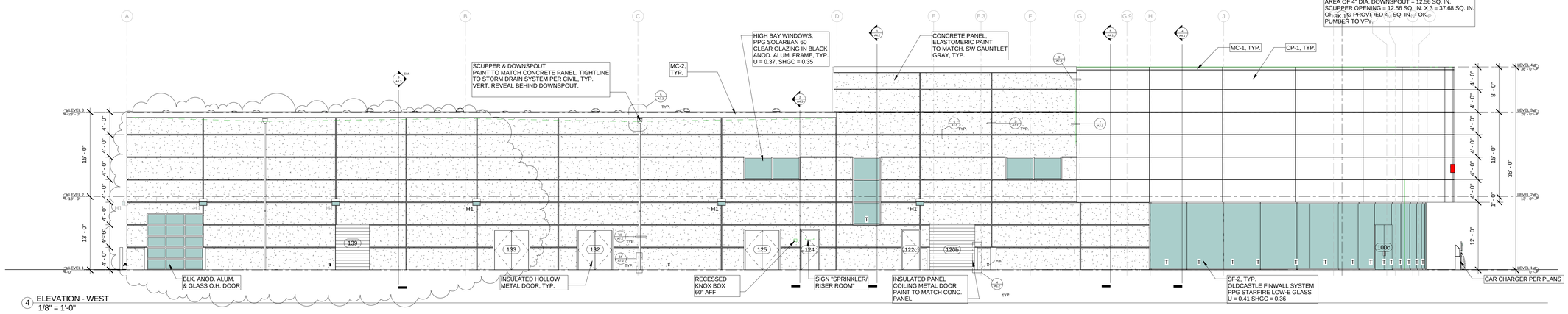

1 ELEVATION - NORTH
1/8" = 1'-0"




2 ELEVATION - SOUTH
1/8" = 1'-0"




3 ELEVATION - EAST
1/8" = 1'-0"




4 ELEVATION - WEST
1/8" = 1'-0"

0' 4' 8' 16' 32'

NOTE:

1. ALL MECHANICAL ROOF TOP UNITS ARE DEFERRED SUMBITTAL AND BIDDER DESIGNED.
2. ALL ROOFTOP UNITS SHALL BE SCREENED FROM VIEW PER CITY OF BELLEVUE. SCREEN MATERIAL TO BE ATTACHED TO EACH UNIT AND NOT PENETRATE THE ROOF. SCREEN TO BE PROVIEDED BY "CITY SCAPES HORIZONTAL ENVISOR" OR APPROVED. COLOR TO MATCH CP-1. ARCHITECT TO APPROVE

| No. | Description | Date |
|---|---|---|
| | PERMIT SET | 6/28/13 |
| 2 | CLIENT REVISIONS | 11/7/13 |

12-019 job no.
SMC drawn
SMC checked
10/1/12 date

BARRIER PROPERTIES LBSC, LLC.

BARRIER PORSCHE

11830 NE 8TH STREET, BELLEVUE WA, 98005

EXTERIOR ELEVATIONS

LANCE MUELLER & ASSOCIATES

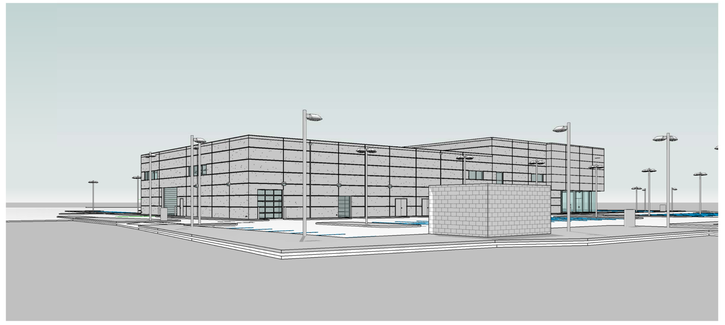
ARCHITECTS AIA

130 LAKESIDE SUITE 250 SEATTLE, WA 98122 (206) 325-2553

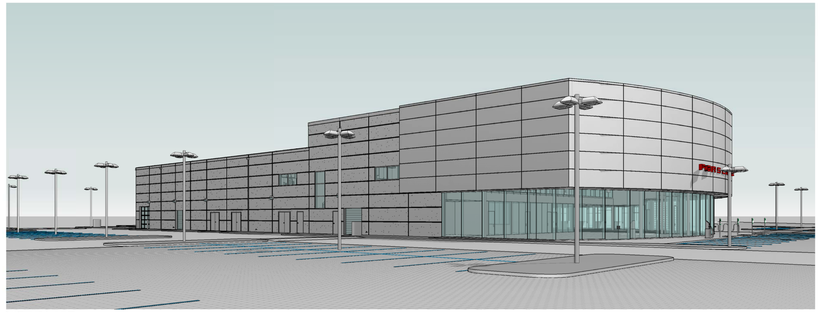
sheet

A3.1

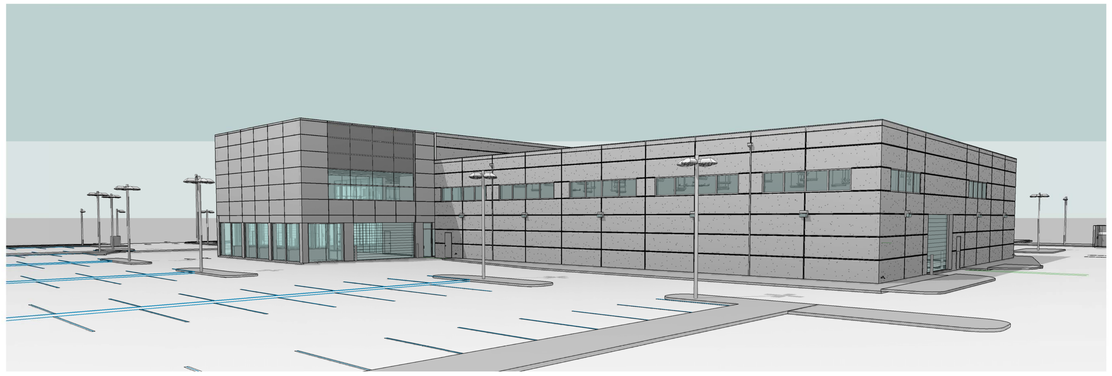
11/7/2013 9:25:41 AM



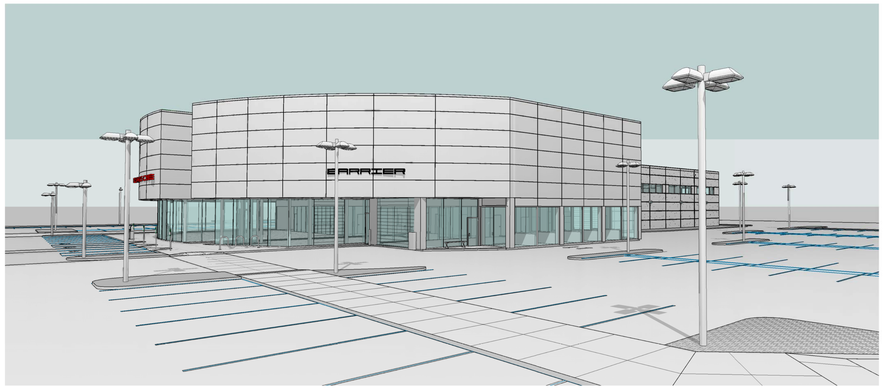
1 3D NW CORNER



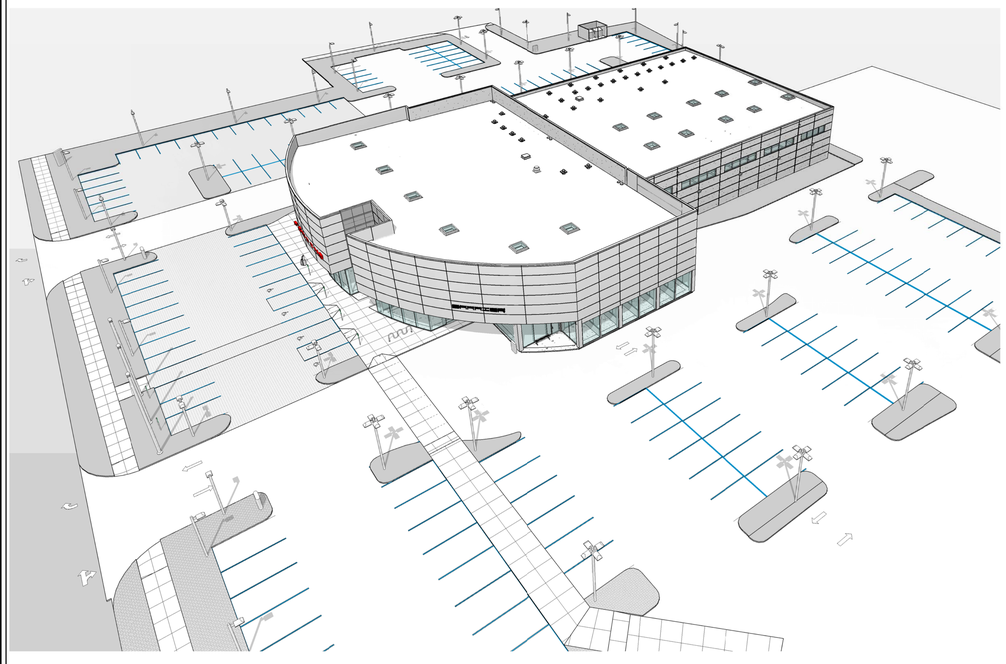
2 3D SW CORNER



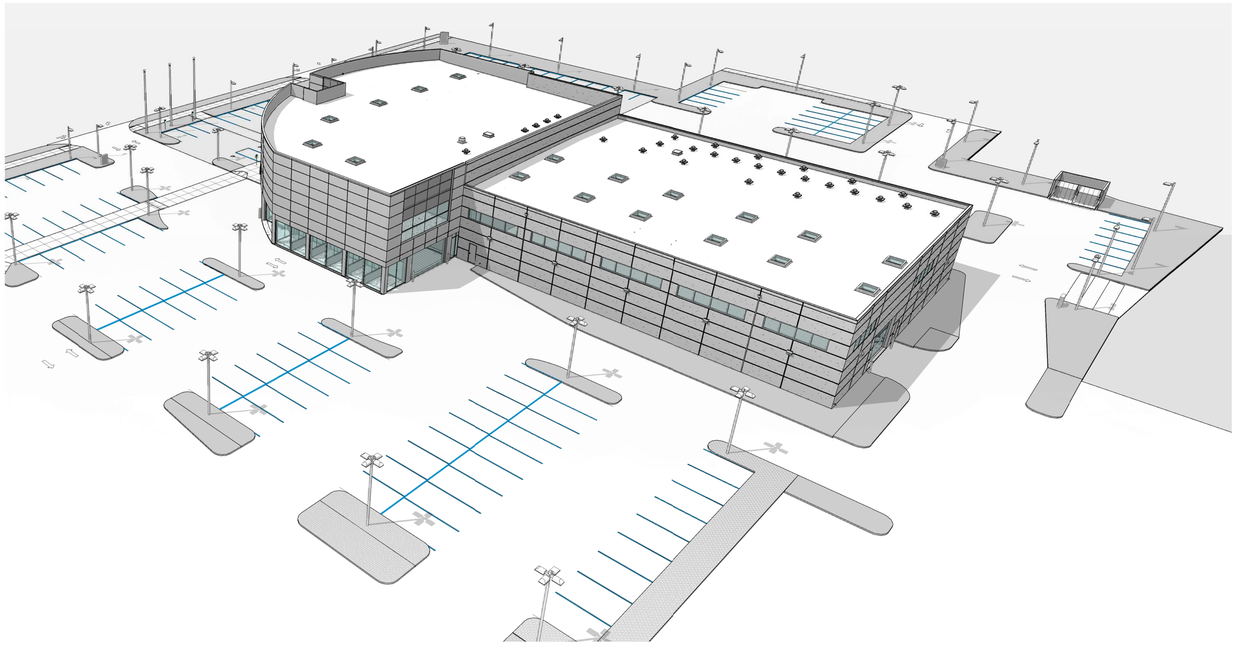
3 3D NE CORNER



4 3D SE Corner



5 3D SE ISOMETRIC



6 3D NE ISOMETRIC

| No. | Description | Date |
|---|---|---|
| | PERMIT SET | 6/28/13 |

12-019
job no.

SMC
drawn

SMC
checked

10/1/12
date

BARRIER PROPERTIES LBSC, LLC.

# BARRIER PORSCHE

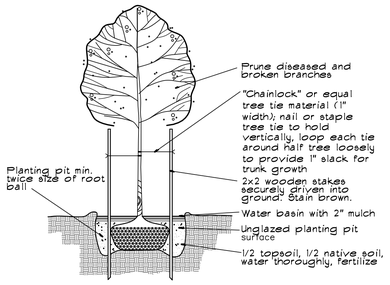
11830 NE 8TH STREET, BELLEVUE WA, 98005

EXTERIOR PERSPECTIVES

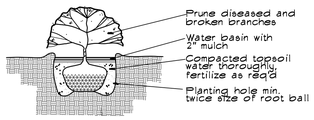
LANCE MUELLER & ASSOCIATES
ARCHITECTS AIA
130 LAKESIDE SUITE 250 SEATTLE, WA 98122 (206) 325-2553

sheet

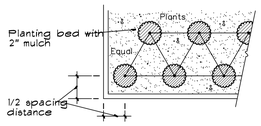
A9.1




TREE PLANTING DETAIL
No Scale




SHRUB PLANTING DETAIL
No Scale



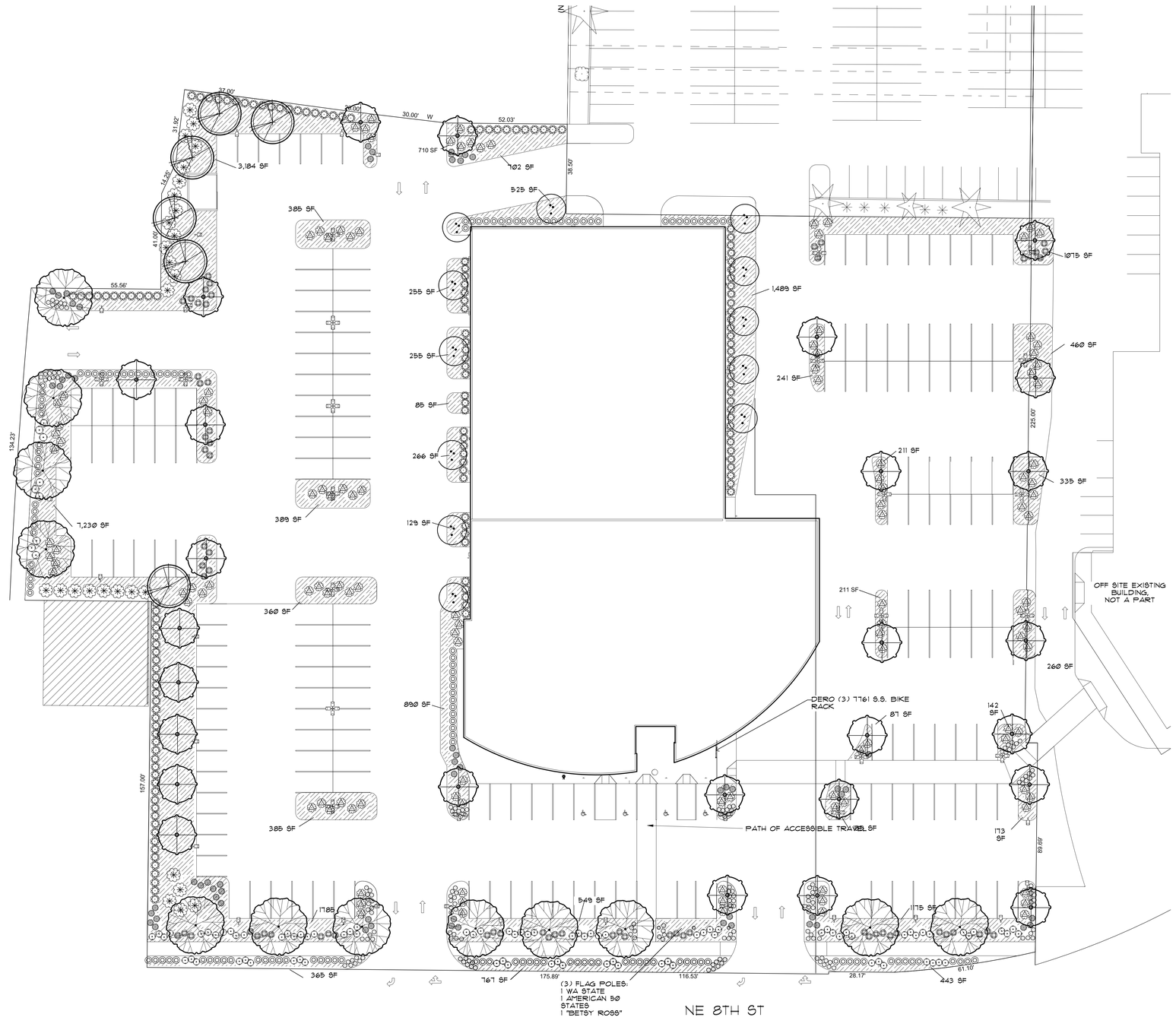

GROUND COVER SPACING DETAIL
No Scale- Triangular Spacing

PLANT LIST

| SYMBOL | BOTANICAL / COMMON | QUANTITY* | SIZE | SPACING | CONDITION |
|---|---|---|---|---|---|
| | Acer rubrum 'Bow Hall' / Bow Hall Red Maple | 12 | 2" Caliper | per plan | B&B |
| | Pyrus calleryana 'Chanticleer' / Chanticleer Flowering Pear | 27 | 2" Caliper | per plan | B&B |
| | Pinus nigra / Black Pine | 6 | 8' | per plan | B&B |
| | Acer palmatum 'Bloodgood' / Bloodgood Japanese Maple | 12 | 8' | per plan | B&B |
| | Ceanothus Victoria / Victoria Ceonothus | | 5 gallon | per plan | full & bushy' |
| | Viburnum davidii / David Viburnum | | 2 gallon | 4' o.c. | full & bushy' |
| | Viburnun Tinus 'Spring Bouquet' / Spring Bouquet Viburnum | | 5 gallon | per plan | full & bushy' |
| | Prunus L. 'Otto Luyken' / Otto Luyken Laurel | | 21" | 3' o.c. | full & bushy |
| | Cornus kelseyi / Kelseyi Dogwood | | 2 gallon | | full & bushy |
| | Nandina domestica 'Moon Bay / Moon Bay Heavenly Bamboo' | | 2 gallon | 2.5' | full & bushy |
| | Pennisetum alopecuroides / Fountain Grass | | 2 gallon | 2.5' | full & bushy |
| | Hemerocallis 'Stella de Oro' / Daylily. | | 1 gallon | 2' | full |
| | Arctostaphylos uva-ursi / kinnickinnik | | 4" pots | 18" | full |

NOTES

1. Subgrades, including berms, to within 1 1/10th foot provided by General Contractor unless otherwise noted.
2. Subgrade shall be scarified or rototilled if conditions require.
3. 4" depth 3-way topsoil or equal in all planting areas.
4. 2" depth fine grade bark mulch in all planting beds.
5. All plant material shall be healthy, full and conform to USA standard nursery stock, latest edition.
6. Plant material or size or kind not available may be substituted only with approval of Landscape Architect or Owner.
7. All mass plantings shall have triangular spacing.
8. All tree pits shall be inspected to insure proper drainage.
9. Positive drainage shall be maintained. Mound planting areas minimum 6".
10. Landscape Contractor shall maintain site until final inspection and acceptance by Owner.




LANDSCAPE PLAN
1" = 20'
0 10 20 40 60

MAIN STREET DESIGN
LANDSCAPE ARCHITECTURE
9402 Tidal Court
Bainbridge Is., WA 98110
(206) 842-7886

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
Ken Loney
KEN LONEY
CERTIFICATE No. 263

NOT FOR CONSTRUCTION

| no. | revision | date |
|---|---|---|
| 2 | SITE PLAN REVISIONS | 11/6/13 |
| 1 | SITE PLAN REVISIONS | 9/24/13 |
| | PERMIT SET | 6/28/13 |

11-178
job no.
KL
drawn
checked
6/28/13
date

BARRIER MOTORS
BARRIER PORSCHE
11810 NE 8TH STREET, BELLEVUE WA, 98005

LANDSCAPE PLAN

LANCE MUELLER & ASSOCIATES
ARCHITECTS . AIA
130 LAKESIDE SEATTLE, WA 98122 206 325 2563

sheet
L-1

## IRRIGATION SCHEDULE

| SYMBOL F | SYMBOL 3Q | SYMBOL H | SYMBOL Q | DESCRIPTION | RADIUS | GPM | PSI |
|---|---|---|---|---|---|---|---|
| ○ | ○ | ○ | ○ | RAINBIRD 1800 MPR 15' SERIES POP-UP, 4" LAWN, 6" G.C. | 15' | 1.85H | 30 |
| ◎ | ◎ | ◎ | ◎ | RAINBIRD 1800 MPR 12' SERIES POP-UP, 4" LAWN, 6" G.C. | 12' | 1.30H | 30 |
| ◐ | ◐ | ◐ | ◐ | RAINBIRD 1800 MPR 10' SERIES POP-UP, 4" LAWN, 6" G.C. | 10' | 0.79H | 30 |
| ◑ | ◑ | ◑ | ◑ | RAINBIRD 1800 MPR 8' SERIES POP-UP, 4" LAWN, 6" G.C. | 8' | 0.52H | 30 |
| ⊙ | ⊙ | ⊙ | ⊙ | RAINBIRD 1800 MPR 5' SERIES POP-UP, 4" LAWN, 6" G.C. | 5' | 0.2H | 30 |
| | | | □ | RAINBIRD 1800 MPR SIDE STRIP POP-UP, 4" LAWN, 6" G.C. | 9'X18' | 1.73 | 30 |
| | | | ▧ | RAINBIRD 1800 MPR SIDE STRIP POP-UP, 4" LAWN, 6" G.C. | 4'X30' | 1.21 | 30 |
| | | | ⊠ | RAINBIRD 1800 MPR END STRIP POP-UP, 4" LAWN, 6" G.C. | 4'X15' | 0.61 | 30 |

RAINBIRD PEB SERIES PLASTIC VALVES

C — RAINBIRD ESP-LX MODULAR SERIES 16 STATION CONTROLLER (CONFIRM LOCATION ) WITH RAINBIRD RAINCHECK AUTOMATIC RAIN SHUTOFF

⊠ — POINT OF CONNECTION: 1" & 3/4" IRRIGATION METER
1" FEBCO 825 SERIES DOUBLE CHECK VALVE
1" QUICK COUPLER VALVE

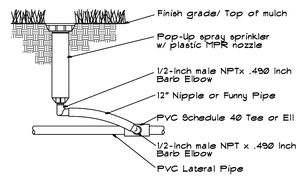
1 / 27 — STATION / GPM

1-1/2" MAINLINE, PVC SCHEDULE 40

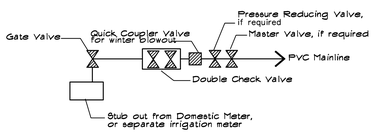
LATERAL LINE, PVC CLASS 200

SLEEVING, PVC CLASS 200

- CONFIRM EXACT LOCATION OF P.O.C., CONTROLLER, AND WATER PRESSURE AT P.O.C.
- ALL VALVES IN 'AMETEK', OR 'CARSON', BOXE, OR EQUAL, SET AT FINISHED GRADE.
- ALL WORK PER PLANS, LOCAL CODES AND MANUFACTURER'S SPECS.
- PRESSURE TEST BEFORE BACKFILLING.
- PLAN IS DIAGRAMMATIC. ADJUST LINE AND HEAD LOCATIONS AS NECESSARY TO ASSURE PROPER COVERAGE AND CONFORM WITH ACCEPTED CONSTRUCTION PRACTICES.




POP-UP SPRAY SPRINKLER
No Scale




POINT OF CONNECTION
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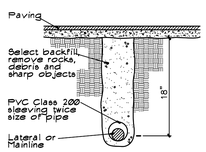


SLEEVING DETAIL
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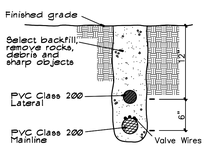


TRENCHING DETAIL
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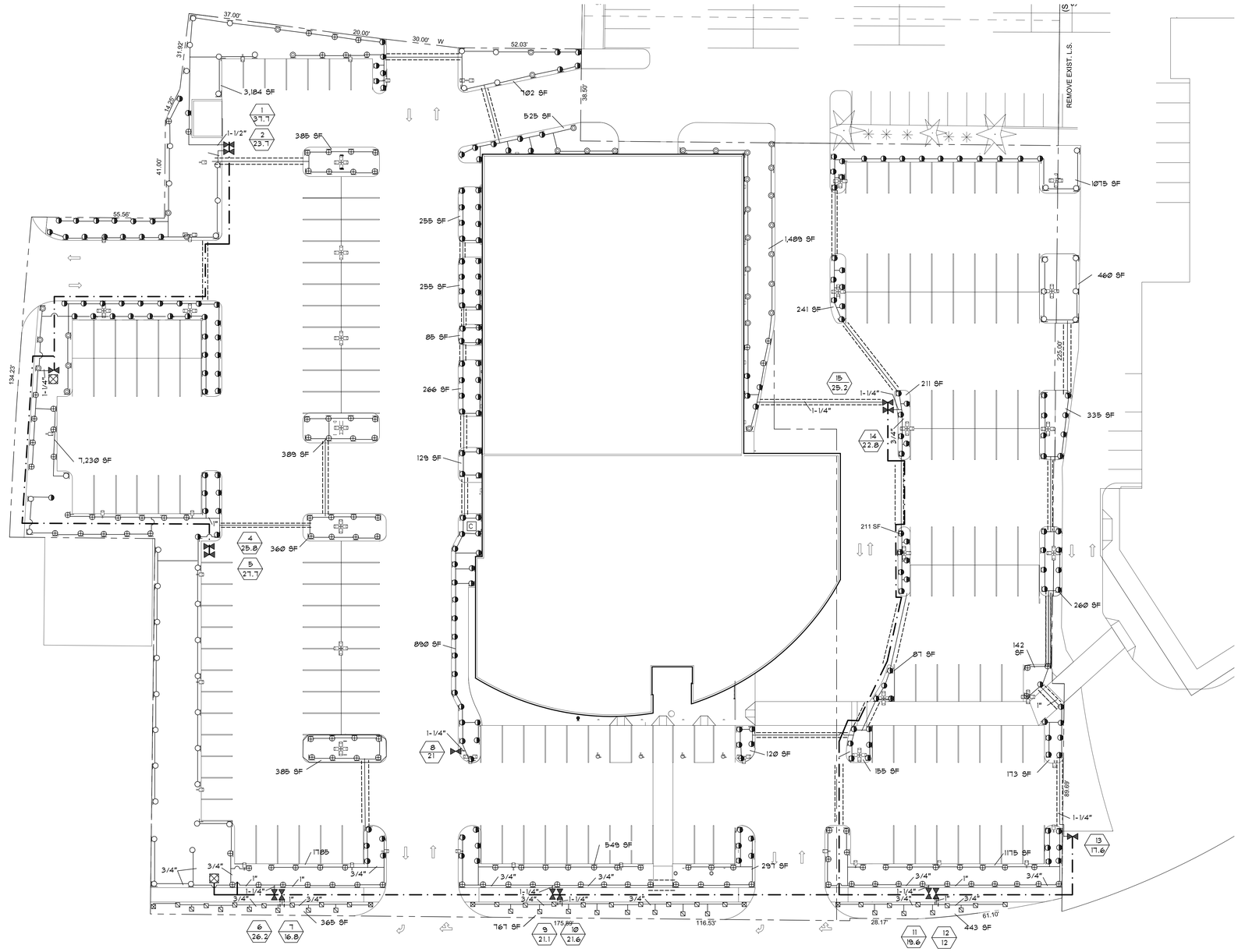



IRRIGATION PLAN
1"=20'
0 10 20 40 60

MAIN STREET DESIGN
LANDSCAPE ARCHITECTURE
9402 Tidal Court
Bainbridge Is., WA 98110
(206) 842-7886

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
KEN LONEY
CERTIFICATE No. 263

NOT FOR CONSTRUCTION

| no. | revision | date |
|---|---|---|
| 2 | SITE PLAN REVISIONS | 11/6/13 |
| 1 | SITE PLAN REVISIONS | 9/24/13 |
| | PERMIT SET | 6/28/13 |

| | |
|---|---|
| job no. | 11-178 |
| drawn | KL |
| checked | |
| date | 6/28/13 |

BARRIER MOTORS
BARRIER PORSCHE
11810 NE 8TH STREET, BELLEVUE WA, 98005

LANCE MUELLER & ASSOCIATES
ARCHITECTS . AIA
130 LAKESIDE SEATTLE, WA 98122 206 325 2563

IRRIGATION PLAN

sheet
L-2

SW 1/4 OF THE SW 1/4 SEC. 28, TWP. 25 N., RGE 5 E., W.M.

# BARRIER PORSCHE
# 11830 N.E. 8th ST., BELLEVUE

## CLEARING AND GRADING STANDARD NOTES:

1. ALL CLEARING & GRADING CONSTRUCTION MUST BE IN ACCORDANCE WITH CITY OF BELLEVUE (COB) CLEARING & GRADING CODE, CLEARING & GRADING EROSION CONTROL STANDARD DETAILS (EC–1 THROUGH EC–23), DEVELOPMENT STANDARDS, LAND USE CODE, UNIFORM BUILDING CODE, PERMIT CONDITIONS, AND ALL OTHER APPLICABLE CODES, ORDINANCES, AND STANDARDS. THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THESE REQUIREMENTS. ANY VARIANCE FROM ADOPTED EROSION CONTROL STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY OF BELLEVUE DEPARTMENT OF PLANNING & COMMUNITY DEVELOPMENT (PCD) PRIOR TO CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT AND THE PROFESSIONAL CIVIL ENGINEER TO CORRECT ANY ERROR, OMISSION, OR VARIATION FROM THE ABOVE REQUIREMENTS FOUND IN THESE PLANS. ALL CORRECTIONS SHALL BE AT NO ADDITIONAL COST OR LIABILITY TO THE COB. ALL DETAILS FOR STRUCTURAL WALLS, ROCKERIES OVER FOUR FEET IN HEIGHT, GEOGRID REINFORCED ROCKERIES AND GEOGRID REINFORCED MODULAR BLOCK WALLS, MUST BE STAMPED BY A PROFESSIONAL ENGINEER.

2. A COPY OF THE APPROVED PLANS MUST BE ON–SITE DURING CONSTRUCTION. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER REQUIRED OR RELATED PERMITS PRIOR TO BEGINNING CONSTRUCTION.

3. ALL LOCATIONS OF EXISTING UTILITIES HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED ONLY APPROXIMATE AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS AND TO DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.

4. THE AREA TO BE CLEARED AND GRADED MUST FLAGGED BY THE CONTRACTOR AND APPROVED BY THE CLEARING AND GRADING INSPECTOR PRIOR TO BEGINNING ANY WORK ON THE SITE.

5. A REINFORCED SILT FENCE MUST BE INSTALLED IN ACCORDANCE WITH COB EC–5 AND SHALL BE LOCATED AS SHOWN ON THE APPROVED PLANS OR PER THE CLEARING AND GRADING INSPECTOR, ALONG SLOPE CONTOURS AND DOWN SLOPE FROM THE BUILDING SITE.

6. A HARD–SURFACE CONSTRUCTION ACCESS PAD IS REQUIRED PER CLEARING & GRADING STANDARD DETAIL EC–1 OR EC–2. THIS PAD MUST REMAIN IN PLACE UNTIL PAVING IS INSTALLED.

7. CLEARING SHALL 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.

8. ANY EXCAVATED MATERIAL REMOVED FROM THE CONSTRUCTION SITE AND DEPOSITED ON PROPERTY WITHIN THE CITY LIMITS MUST BE DONE IN COMPLIANCE WITH A VALID CLEARING & GRADING PERMIT. LOCATIONS FOR THE MOBILIZATION AREA AND STOCKPILED MATERIAL MUST BE APPROVED BY THE CLEARING AND GRADING INSPECTOR AT LEAST 24 HOURS IN ADVANCE OF ANY STOCKPILING.

9. 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 CLEARING AND GRADING 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 CLEARING AND GRADING INSPECTOR.
   - INSTALL CATCH BASIN INSERTS AS REQUIRED BY THE CLEARING AND GRADING INSPECTOR OR PERMIT CONDITIONS OF APPROVAL.
   - INSTALL A TEMPORARY SEDIMENT POND, A SERIES OF SEDIMENTATION TANKS, TEMPORARY FILTER VAULTS, OR OTHER SEDIMENT CONTROL FACILITIES. INSTALLATION OF EXPOSED AGGREGATE SURFACES REQUIRES A SEPARATE EFFLUENT COLLECTION POND ONSITE.

10. FINAL SITE GRADING MUST DIRECT DRAINAGE AWAY FROM ALL BUILDING STRUCTURES AT A MINIMUM 2% SLOPE, PER THE UNIFORM BUILDING CODE.

11. THE CONTRACTOR MUST MAINTAIN A SWEEPER ON SITE DURING EARTHWORK AND IMMEDIATELY REMOVE SOIL THAT HAS BEEN TRACKED ONTO PAVED AREAS AS RESULT OF CONSTRUCTION.

12. A PUBLIC INFORMATION SIGN LISTING 24–HOUR EMEGENCY PHONE NUMBERS FOR THE CITY AND THE CONTRACTOR MAY BE PROVIDED TO THE APPLICANT AT THE TIME THE CLEARING & GRADING PERMIT IS ISSUED. THE APPLICANT MUST POST THE SIGN AT THE PROJECT SITE IN FULL VIEW OF THE PUBLIC AND THE CONTRACTORS, AND IT MUST REMAIN POSTED UNTIL FINAL SIGN–OFF BY THE CLEARING & GRADING INSPECTOR.

13. TURBIDITY MONITORING MAY BE REQUIRED AS A CONDITION OF CLEARING AND GRADING PERMIT APPROVAL. IF REQUIRED, TURBIDITY MONITORING MUST BE PERFORMED IN ACCORDANCE WITH THE APPROVED TURBIDITY MONITORING PLAN AND AS DIRECTED BY THE CLEARING AND GRADING INSPECTOR. MONITORING MUST CONTINUE DURING SITE (EARTHWORK) CONSTRUCTION UNTIL THE FINAL SIGN–OFF BY THE CLEARING AND GRADING INSPECTOR.

14. ANY PROJECT THAT IS SUBJECT TO RAINY SEASON RESTRICTIONS WILL NOT BE ALLOWED TO PERFORM CLEARING AND GRADING ACTIVITIES WITHOUT WRITTEN APPROVAL FROM THE PCD DIRECTOR. THE RAINY SEASON EXTENDS FROM NOVEMBER 1ST THROUGH APRIL 30TH, AS DEFINED IN SECTION 23.76.093A OF THE CLEARING AND GRADING CODE.

## GENERAL ENGINEERING NOTES:

1. EXISTING UTILITIES AND UNDERGROUND STRUCTURES SHOWN ON THE PLAN ARE BASED UPON FIELD SURVEY & THE BEST AVAILABLE PUBLIC RECORDS AND/OR PRIVATE RECORDS AS SUPPLIED BY THE PROJECT OWNER AND/OR DATA OBTAINED VERBALLY FROM OWNERS OR OFFICIALS ASSOCIATED WITH THE PARTICULAR UTILITY. NEITHER THE OWNER OR THE ENGINEER GUARANTEE THE ACCURACY OR COMPLETENESS OF THIS INFORMATION AND ASSUME NO RESPONSIBILITY FOR IMPROPER LOCATIONS OR FAILURE TO SHOW UTILITY LOCATIONS ON THE CONSTRUCTION PLANS. OTHER UNDERGROUND FACILITIES NOT SHOWN ON THE DRAWINGS MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL INVERT ELEVATIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

2. IF CHANGED CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PROMPTLY OF (1) PREEXISTING SUBSURFACE CONDITIONS DIFFERING FROM THOSE INDICATED IN THE PLANS, OR (2) PREEXISTING UNKNOWN SUBSURFACE CONDITIONS, OF AN UNUSUAL NATURE, DIFFERING MATERIALLY FROM THOSE ORDINARILY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE CONTRACT. THE CONTRACTOR AND/OR THE OWNER SHALL MAKE NO CLAIMS TO THE ENGINEER FOR COMPENSATION FOR EXTRA WORK RESULTING FROM CHANGED CONDITIONS UNLESS THE ENGINEER HAS APPROVED THE WORK IN WRITING. (WSDOT SEC 1–04.7)

3. THE CONTRACTOR SHALL CALL THE UTILITIES UNDERGROUND LOCATION CENTER FOR FIELD LOCATION OF ALL UTILITIES AND SHALL NOT BEGIN EXCAVATION UNTIL ALL KNOWN UNDERGROUND FACILITIES IN THE VICINITY OF THE PROPOSED WORK HAVE BEEN LOCATED AND MARKED. IF THE UTILITY IS NOT A SUBSCRIBER OF THE UNDERGROUND LOCATION CENTER, THEN THE CONTRACTOR SHALL GIVE INDIVIDUAL NOTICE TO THAT UTILITY. (WSDOT SEC. 1–07.17 AWPA SUPPLEMENT.)

4. THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTIONS AND EXERCISE SOUND ENGINEERING AND CONSTRUCTION PRACTICES IN CONDUCTING THE WORK. THE CONTRACTOR SHALL PROTECT EXISTING PUBLIC AND PRIVATE UTILITIES FROM DAMAGE DURING CONSTRUCTION. IF EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE ENGINEER. THE CONTRACTOR SHALL RESTORE THE UTILITY TO ITS EXISTING CONDITION. (WSDOT SECTION 1–07.17 APWA SUPPLEMENT.) THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION FOR DESIGNS SHOWN ON THESE PLANS.

5. WHERE THE PLANS CALL FOR UTILITIES TO BE RELOCATED BY OTHERS, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY AND COORDINATE HIS WORK SO AS TO AVOID CONFLICTS.

6. ALL EXCAVATION, TRENCHING, SUBGRADE PREPARATION, FILL PLACEMENT AND COMPACTION AND ALL SOIL WORK IN GENERAL SHALL BE CONDUCTED IN COMPLIANCE WITH THE RECOMMENDATIONS OF THE PROJECT SOIL ENGINEER AND THE CURRENT GEOTECHNICAL ENGINEERING REPORT.

7. ENGINEERING DESIGN AND APPROVAL FOR STRUCTURES SUCH AS WALLS AND VAULTS MUST BE PREPARED BY THE APPROPRIATE PROFESSIONAL ENGINEER AND IS NOT A PART OF THESE PLANS.

8. CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING A PROFESSIONAL LAND SURVEYOR TO REFERENCE EXISTING MONUMENTS ON OR ADJOINING THE SITE PRIOR TO DEMOLITION OR CONSTRUCTION AND TO RE–ESTABLISH SAID POINTS AT PROJECT COMPLETION. THIS RE–ESTABLISHMENT SHALL BE DOCUMENTED BY RECORD OF SURVEY OR CORNER RECORD AS DESCRIBED IN W.A.C. 332–120.

## LEGAL DESCRIPTION

PARCEL A

THE NORTH 269 FEET OF THE SOUTH 379 FEET OF THE WEST 0.82 FEET OF THE EAST HALF OF LOT 87, THE WEST HALF OF LOT 87, ALL OF LOTS 88 AND 89, AND THAT PORTION OF LOT 90 LYING EASTERLY OF 118TH AVENUE NORTHEAST, ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, RECORDS OF KING COUNTY, WASHINGTON; EXCEPT THAT PORTION DESCRIBED SO FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF SAID TRACT; THENCE EAST ALONG THE SOUTH LINE THEREOF 60.86 FEET; THENCE NORTH PARALLEL WITH THE WEST LINE OF LOT 89, A DISTANCE OF 167.00 FEET; THENCE WEST PARALLEL WITH THE SOUTH LINE OF SAID LOT 89 A DISTANCE OF 60 FEET, MORE OR LESS, TO THE EASTERLY MARGIN OF 118TH AVENUE NORTHEAST; THENCE SOUTHERLY ALONG SAID MARGIN 167.00 FEET, MORE OR LEES, TO THE POINT OF BEGINNING; EXCEPT THE SOUTH 10 FEET FOR STREET; AND EXCEPT THAT PORTION LYING NORTHERLY OF THE FOLLOWING DESCRIBED LINE; BEGINNING AT THE SOUTHWEST CORNER OF LOT 1, LAKE BELLEVUE DIVISION 2, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 109 OF PLATS, PAGES 34 AND 35, RECORDS OF KING COUNTY, WASHINGTON; THENCE NORTH 0°41'41" EAST ALONG SAID WEST LINE 36.51 FEET TO THE TRUE POINT OF BEGINNING OF SAID LINE; THENCE NORTH 89°18'19" WEST 55.56 FEET; THENCE SOUTH 84°29'06" WEST 34.86 FEET; THENCE NORTH 82°53'05" WEST 20.00 FEET; THENCE SOUTH 86°55'23" WEST 20.32 FEET; THENCE NORTH 82°57'50" WEST 40.00 FEET; THENCE SOUTH 12°59'28" WEST 17.89 FEET; THENCE SOUTH 00°33'31" WEST 55.00 FEET; THENCE NORTH 89°26'28" WEST 55.56 FEET TO THE EASTERLY MARGIN OF 188TH AVENUE NORTHEAST AND THE TERMINUS OF SAID LINE; ALSO EXCEPT ANY PORTION WITHIN SAID LAKE BELLEVUE DIVISION 2 AND 3. SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

*PARCEL B*

*THAT PORTION OF LOTS 87, 88 AND 89 OF BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, RECORDS OF KING COUNTY, WASHINGTON, LYING SOUTHERLY AND EASTERLY OF LAKE BELLEVUE. DIV 3, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 117 OF PLATS, PAGES 67 AND 68, RECORDS OF KING COUNTY, WASHINGTON. LYING WESTERLY OF LAKE BELLEVUE, DIV 2, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 109 OF PLATS, PAGES 34 AND 35, RECORDS OF KING COUNTY WASHINGTON, AND NORTHERLY OF THE ABOVE DESCRIBED PARCEL A, SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.*

## GEOTECHNICAL NOTES:

THE PROJECT GEOTECHNICAL ENGINEER OF RECORD OR HIS REPRESENTATIVE MUST BE ONSITE DURING CRITICAL EARTHWORK OPERATIONS. THE GEOTECHNICAL ENGINEER SHALL OBSERVE ALL EXCAVATIONS AND FILL AREAS. IN ADDITION, THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SOIL CUTS PRIOR TO CONSTRUCTION OF THE ROCKERIES AND INSPECT THE COMPACTION IN FILL AREAS. THE GEOTECHNICAL ENGINEER MUST SUBMIT FIELD REPORTS IN WRITING TO THE PCD INSPECTOR FOR SOILS VERIFICATION AND FOUNDATION CONSTRUCTION. ALL EARTHWORK SHOULD BE IN CONFORMANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT.

THE GEOTECHNICAL ENGINEER MUST BE PRESENT AT THE PRE–CONSTRUCTION MEETING. IN ADDITION, THE FOLLOWING CONSTRUCTION STAGES MUST BE INSPECTED, MONITORED, AND TESTED AS NECESSARY BY THE GEOTECHNICAL ENGINEER OF RECORD:

1. SITE CLEARING AND STRIPPING OF ORGANIC TOPSOIL FOR ALL AREAS TO RECEIVE STRUCTURAL FILL, PAVEMENTS, OR FOUNDATIONS.
2. CUT SLOPES OVER FOUR FEET HIGH.
3. BENCHING FOR FILL TO BE PLACED ON SLOPES.
4. INSPECTION OF PROPOSED IMPORT FILL MATERIAL, PRIOR TO PLACEMENT.
5. PLACEMENT OF STRUCTURAL FILL, INCLUDING OBSERVATION OF PROPER MOISTURE CONTENT, LIFT THICKNESS, AND MINIMUM COMPACTION.
6. SUBGRADES FOR RETAINING WALLS, FOUNDATIONS, AND FOR THE BASE OF ROCKERIES.
7. INSTALLATION OF SUBSURFACE DRAINAGE FACILITIES.
8. UTILITY TRENCH BEDDING AND BACKFILL, INCLUDING OBSERVATION OF PROPER MOISTURE CONTENT, LIFT THICKNESS, AND MINIMUM COMPACTION.
9. UTILITIES ON STEEP SLOPES; SLOPE ANCHORS AND/OR BACKFILL SLOPE STABILIZATION.
10. ANY UNUSUAL SEEPAGE, SLOPE, OR SUBGRADE CONDITION AS DELINEATED IN THE GEOTECHNICAL REPORT OR DISCOVERED IN THE FIELD.

AT THE END OF THE CONSTRUCTION, THE GEOTECHNICAL ENGINEER SHALL SUBMIT A FINAL SUMMARY LETTER VERIFYING THAT CRITICAL STAGES OF THE CONSTRUCTION HAVE BEEN INSPECTED AND ARE IN CONFORMANCE WITH GEOTECHNICAL REPORT.

## CONSTRUCTION NOISE NOTES

CONSTRUCTION NOISE OUTSIDE THE ALLOWABLE HOURS IS PROHIBITED PER BCC 9.18.040. TO BE CONSIDERED A VIOLATION, THE CONSTRUCTION–RELATED NOISE MUST BE AUDIBLE ACROSS A PROPERTY LINE OR AT LEAST 75 FEET FROM THE SOURCE. ANY VIOLATION IS A CIVIL INFRACTION AND THE CITY MAY ASSESS A MONETARY PENALTY TO THE INDIVIDUAL CREATING NOISE. THE PENALTIES ARE:

- A WARNING WILL BE ISSUED IF NO CONSTRUCTION NOISE VIOLATION HAS BEEN COMMITTED BY THE SAME PERSON WITHIN THE PREVIOUS TWO YEARS AT ANY LOCATION WITHIN THE CITY.
- A CITATION WILL BE ISSUED AND A $125 FINE IMPOSED IF ONE PREVIOUS VIOLATION HAS BEEN COMMITTED BY THE SAME PERSON WITHIN THE PREVIOUS TWO YEARS AT ANY LOCATION WITHIN THE CITY.
- A CITATION WILL BE ISSUED AND A $250 FINE IMPOSED IF TWO OR MORE PREVIOUS VIOLATION HAVE BEEN COMMITTED BY THE SAME PERSON WITHIN THE PREVIOUS TWO YEARS AT ANY LOCATION WITHIN THE CITY.

## FOR ALL COMMERCIAL, MULTI–FAMILY, AND NEW SINGLE–FAMILY HOMES:

| CONSTRUCTION–RELATED NOISE IS ALLOWED: | CONSTRUCTION –RELATED NOISE IS NOT ALLOWED: |
|---|---|
| * 7 AM TO 6 PM ON WEEKDAYS | * OUTSIDE OF ALLOWABLE HOURS |
| * 9 AM TO 6 PM ON SATURDAYS | * LEGAL HOLIDAYS |
| | * SUNDAYS |

## TRANSPORTATION DEPARTMENT CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF BELLEVUE DESIGN MANUAL, APPLICABLE CITY CODES, AND THE 2008 WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION.
2. THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THE LATEST EDITION OF THE CITY OF BELLEVUE DESIGN MANUAL. THIS APPROVAL IS SUBJECT TO FIELD INSPECTION; OVERSIGHT OR VIOLATION OF CITY ORDINANCES IS NOT INCLUDED IN THIS APPROVAL. VARIANCES TO THESE STANDARDS ARE BY APPROVAL OF THE TRANSPORTATION DEPARTMENT REVIEW ENGINEER AND INSPECTOR.
3. APPROVAL OF THIS ROAD, GRADING, AND/OR DRAINAGE PLAN DOES NOT CONSTITUTE AN APPROVAL OF ANY OTHER CONSTRUCTION (E.G., DOMESTIC WATER CONVEYANCE, SEWER CONVEYANCE, GAS, ELECTRICAL, ETC.).

## SHEET INDEX:


| | |
|---|---|
| COVER | C1.1 |
| TEMP. EROSION & SEDIMENTATION CONTROL PLAN | C1.2 |
| TEMP. EROSION CONTROL DETAILS | C1.3 |
| GRADING PLAN | C1.4 |
| GRADING DETAILS | C1.5 |
| ABBREVIATED UTILITY PLAN | C1.6 |


## MOBILIZATION/STOCKPILE AREA NOTES:

ANY EXCAVATED MATERIAL REMOVED FROM THE CONSTRUCTION SITE AND DEPOSITED ON PROPERTY WITHIN THE CITY LIMITS MUST BE DONE IN COMPLIANCE WITH A VALID CLEARING & GRADING PERMIT. LOCATIONS FOR THE MOBILIZATION AREA AND STOCKPILED MATERIAL MUST BE APPROVED BY THE PCD INSPECTOR AT LEAST 24 HOURS IN ADVANCE OF ANY DUMPING.

**STREET SWEEPING NOTE:**

CONTRACTOR SHALL IMMEDIATELY SWEEP THE PAVED CITY RIGHT–OF–WAY WHEN DIRT OR OTHER CONSTRUCTION RELATED DEBRIS IS DEPOSITED.

**DUST SUPPRESSION:**

DUST FROM CLEARING, GRADING, AND OTHER CONSTRUCTION ACTIVITIES SHALL BE MINIMIZED AT ALL TIMES. ANY DUST SUPPRESSANTS USED SHALL BE APPROVED BY THE DIRECTOR. PETROCHEMICAL DUST SUPPRESSANTS ARE PROHIBITED. WATERING THE SITE TO SUPPRESS DUST IS ALSO PROHIBITED UNLESS IT CAN BE DONE IN A WAY THAT KEEPS SEDIMENT OUT OF THE PUBLIC DRAINAGE SYSTEM.

**DESIGN CHANGES AFTER PERMIT ISSUANCE:**

IF UTILITIES DESIGN CHANGES RESULT IN CHANGES TO THE CLEARING LIMITS SHOWN ON THESE PLANS, THE APPLICANT MUST SUBMIT A REVISION TO THE CLEARING AND GRADING PERMIT THAT INDICATES THE LOCATION OF THE NEW CLEARING LIMITS.

## BASIS OF BEARING

THEORETICAL SECTION LINE BETWEEN COB 0079 AND COB 0080
BEARS S89°26'53"E

## VERTICAL DATUM

(NAVD 1988)
CITY OF BELLEVUE BENCH MARK NO. 22 FOUND "X" IN TOP OF NORTHEAST BOLT IN TRAFFIC SIGNAL POLE BASE, LOCATED IN THE TRAFFIC ISLAND AT THE INTERSECTION OF NE 8TH STREET AND BELLEVUE–REDMOND ROAD.
ELEVATION = 149.48'

## UTILITY PROVIDERS:

**WATER:**
CITY OF BELLEVUE UTILITIES DEPARTMENT
450 110TH AVE N.E.
BELLEVUE, WA 98009–9012
PHONE: (425) 452–6864

**SANITARY SEWER:**
CITY OF BELLEVUE UTILITIES DEPARTMENT
450 110TH AVE N.E.
BELLEVUE, WA 98009–9012
PHONE: (425) 452–6864

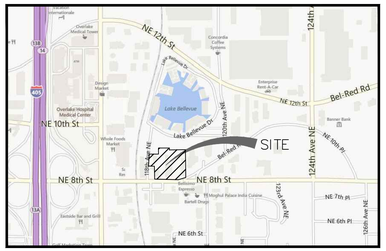
**STORM DRAINAGE:**
CITY OF BELLEVUE UTILITIES DEPARTMENT
450 110TH AVE N.E.
BELLEVUE, WA 98009–9012
PHONE: (425) 452–6864

**POWER:**
PUGET SOUND ENERGY
13230 SE 32ND STREET
BELLEVUE, WA 98005
CONTACT: MYLISSA TYKSINSKI
PHONE: (425) 748–6331

**NATURAL GAS:**
PUGET SOUND ENERGY
13230 SE 32ND STREET
BELLEVUE, WA 98005
CONTACT: CONSTRUCTION SERVICES
PHONE: (888) 321–7779

**TELEPHONE:**
QWEST
14808 SE 16TH STREET
BELLEVUE, WA 98007
CONTACT: JULIE REEVES
PHONE: (206) 346–7489

**CABLE:**
COMCAST
CONTACT: JILL LOOK
PHONE: (425) 263–5346




VICINITY MAP
NO SCALE

## LEGAL DESCRIPTION

PARCEL A:

THE NO.RTH 72.79 FEET OF THE SOUTH 182.79 FEET OF LOTS 85 AND 86, AND ALSO THE NORTH 72.79 FEET OF THE SOUTH 182.79 FEET OF LOT 87 LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE EAST HALF OF SAID LOT 87;

THENCE NORTH ALONG THE WEST LINE OF SAID EAST HALF 110.00 FEET;

THENCE EAST 0.82 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED LINE;

THENCE NORTH 72.70 FEET, MORE OR LESS, TO A POINT ON THE NORTH LINE OF SAID SOUTH 182.79 FEET, WHICH POINT LIES 0.82 FEET EAST OF THE NORTHWEST CORNER OF THE SOUTH 182.79 FEET OF THE EAST HALF OF SAID LOT 87; ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, IN KING COUNTY, WASHINGTON.

PARCEL B:

THE NORTH 75 FEET OF THE SOUTH 257.79 FEET OF LOTS 85 AND 86, AND ALSO THE NORTH 75 FEET OF

THE SOUTH 257.79 FEET OF LOT 87, LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE EAST HALF OF SAID LOT 87;

THENCE NORTH ALONG THE WEST LINE OF SAID EAST HALF 110.00 FEET;

THENCE EAST 0.82 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED LINE; THENCE NORTH 147.79 FEET, MORE OR LESS, TO A POINT ON THE NORTH LINE OF SAID SOUTH 257.79 FEET, WHICH POINT LIES 0.82 FEET EAST OF THE NORTHWEST CORNER OF THE SOUTH 257.79 FEET OF THE EAST HALF OF SAID LOT 87; ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, IN KING COUNTY, WASHINGTON.

PARCEL C:

THE NORTH 77.21 FEET OF THE SOUTH 335 FEET OF LOTS 85 AND 86, AND ALSO THE NORTH 77.21 FEET OF THE SOUTH 335 FEET OF LOT 87, LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE EAST HALF OF SAID LOT 87;

THENCE NORTH ALONG THE WEST LINE OF SAID EAST HALF 257.79 FEET;

THENCE EAST 0.82 FEET TO THE TRUE POINT OF BEGINNING OF THE HEREIN DESCRIBED LINE;

THENCE NORTH 77.21 FEET, MORE OR LESS, TO A POINT ON THE NORTH LINE OF SAID SOUTH 335 FEET, WHICH POINT LIES 0.82 FEET EAST OF THE NORTHWEST CORNER OF THE SOUTH 335 FEET OF THE EAST HALF OF SAID LOT 87; ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, IN KING COUNTY, WASHINGTON.

PARCEL D:

THAT PORTION OF THE SOUTH 110 FEET OF THE WEST 5 FEET OF TRACT 84, THAT PORTION OF THE SOUTH 110 FEET OF TRACTS 85 AND 86, AND THAT PORTION OF THE SOUTH 110 FEET OF THE EAST HALF OF TRACT 87, ALL IN BRIERWOOD PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 17 OF PLATS, PAGE 18, IN KING COUNTY, WASHINGTON, LYING NORTH OF BELLEVUE–REDMOND REVISION ROAD AS CONVEYED TO KING COUNTY BY DEED RECORDED UNDER RECORDING NUMBER 2544485; EXCEPT THOSE PORTIONS CONVEYED TO THE CITY OF BELLEVUE BY DEED RECORDED UNDER RECORDING NUMBER 6654157 AND 9705281139.

REFERENCE:

LEGAL DESCRIPTION BASED ON TITLE REPORT FURNISHED BY CHICAGO TITLE COMPANY, ORDER NUMBER 1354048, DATED APRIL 18, 2013.

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1-800-424-5555
Utilities Underground Location Center
(ID,MT,ND,OR,WA)

CLEARING &
GRADING: 13–119200 GD

## CONTACTS:


**OWNER:**
BARRIER MOTORS
1533 120TH AVE. N.E.
BELLEVUE, WA 98005
CONTACT: JORGE GONZALEZ
PH: (425) 990–4445

**ENGINEERING**
DECKER CONSULTING ENGINEERS
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SEATTLE, WA, 98104
CONTACT: JAY DECKER P.E.
PH: (206) 403–0933

**ARCHITECT:**
LANCE MUELLER ASSOCIATES
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**SURVEYOR**
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10801 MAIN ST., SUITE 1002
BELLEVUE, WA 98004
CONTACT: KEN GREEN, PLS
PH: (465) 458–4488

DECKER
Consulting Engineers
911 Western Ave,
suite 301
Seattle, WA. 98104
ph 206.403.0933


BARRIER PORSCHE
11830 NE 8TH ST
CLEARING AND GRADING PLANS
COVER

BELLEVUE WASHINGTON
SCALE: 1" = 20'
PROJECT NO. 2013007
DRAWING FILE NAME: 2013007-Grading Plan Set.dwg

JAY D. DECKER
STATE OF WASHINGTON
31195
REGISTERED
PROFESSIONAL ENGINEER
11/05/13

| | | | |
|---|---|---|---|
| DESIGNED BY: PEG | CHECKED BY: JDD | | |
| DRAWN BY: PEG | APPROVED BY: JDD | | |
| LAST EDIT: 11/05/13 | PLOT DATE: | | |

| DATE | BY | REV# | REVISION | CK'D | APPR. |
|---|---|---|---|---|---|
| 11/05/13 | HCS | 1 | PER CITY COMMENTS | | |

SHEET
C1.1

11/05/13 - 2:39pm 2013007-Grading Plan Set.dwg

SW 1/4 OF THE SW 1/4 SEC. 28, TWP. 25 N., RGE 5 E., W.M.

## EXCAVATION/REMEDIATION LEGEND

- APPROXIMATE AREA TO BE EXCAVATED
- 2'x2'x2' UTILITY VAULT
- 4" SLOTTED PVC PIPING

## PETROLEUM CONTAMINATED SOILS NOTES:

1. LOCATION OF STOCKPILE AND TRUCK LOADING AREA TO BE DETERMINED BY CONTRACTOR BASED ON THEIR OPERATIONS.
2. DIRECT LOADING OF EXCAVATED SOIL TO TRUCKS IS PREFERRED. TEMPORARY, SHORT-TERM STORAGE OF EXCAVATED SOILS MAY BE ACCEPTABLE GIVEN ANTICIPATED WEATHER CONDITIONS AND BY COVERING IMMEDIATELY WITH PLASTIC SHEETING.

## COMPOST/SOIL AMENDMENTS – BMP T5.13

ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY, OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION DEMONSTRATE THE FOLLOWING:

A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE ORIGINAL UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. PLANTING BEDS SHALL BE MUST BE MULCHED WITH 2-INCHES OF ORGANIC MATERIAL. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST THAT MEETS THE DEFINITION OF "COMPOSTED MATERIALS" IN WAC 173-350-220.

SILT FENCE
PUMP HOSE CONNECT TO BAKER TANK
SEDIMENT TRAP
BOTTOM DIM.= 10'x15'
TOP DIM.= 31'x36'
SIDE SLOPE= 3(H):1(V) TOTAL
DEPTH= 4.50' SEDIMENT
STORAGE DEPTH= 1.50'
BAKER TANK
DISCHARGE HOSE CONNECT TO CATCH BASIN
EXISTING PRIVATE CATCH BASIN: BACKGROUND & DOWNSTREAM TURBIDITY MONITORING LOCATION. (LOCATED JUST PRIOR TO DISCHARGE INTO LAKE BELLEVUE)
SILT FENCE (TYP)
REMEDIATION VAULT RIM=148.75 IE=142.50
REMEDIATION VAULT RIM=149.60 IE=142.50
CONTRACTOR SHALL PHASE EXCAVATION SO THAT EXPOSURE OF CONTAMINATED SOILS IS MINIMIZED PRIOR TO CLEAN BACKFILL.
STABILIZED CONSTRUCTION ENTRANCE PER SHEET C1.3
TEMPORARY 37LF~12" CULVERT @ 0.5% (MIN)
CONSTRUCTION LIMITS
PROPERTY LINE (TYP.)
ALTERNATIVE BMPS
- STRAW WATTLES
- STORMWATER FILTERATION
- TRIANGULAR SILT DIKE
- TEMPORARY AND PERMANENT SEEDING

PETROLEUM CONTAMINATED SOIL EXCAVATION AREA ~ 9,000 CY±
TRUCK LOAD AREA: LOAD CONTAMINATED SOILS DIRECTLY INTO TRUCKS-SEE NOTES.
REMEDIATION VAULT RIM=148.60 IE=142.50
PROPERTY LINE (TYP.)
CONSTRUCTION/CLEARING LIMITS (TYP)
INTERCEPTOR SWALES AROUND STOCKPILES DIRECT STORMWATER FROM CONTAMIATION STOCKPILE TO EXCAVATION AREA
SHORT TERM PETROLEUM CONTAMINATED STORAGE AREA-COVER WITH PLASTIC SHEETING IMMEDIATELY.
FF = 148.75 PROPOSED BUILDING FOOTPRINT
REMEDIATION VAULT RIM=148.45 IE=142.50
CONSTRUCTION/CLEARING LIMITS (TYP)
SILT FENCE (TYP.) SEE DETAIL SHT. C1.3
SILT FENCE (TYP.)
118TH AVE. N.E.
PLUG EXISTING CB OR DEMO EXISTING CBs & DRAINS PER SHEET C2.2 PRIOR TO CONTAMINATED SOIL EXCAVATION.
CATCH BASIN PROTECTION (TYP.) (SEE DETAIL ON SHEET C1.3)
GRAPHIC SCALE 1" = 20'
DOWNSTREAM TURBIDITY MONITORING LOCATION AT CB#75-4521.
UPSTREAM TURBIDITY MONITORING LOCATION AT SDMH #75-4527.
CATCH BASIN INLET PROTECTION (TYP.) SEE DETAIL SHT. C1.3
N.E. 8TH ST.

CLEARING & GRADING: 13-119200 GD

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DECKER Consulting Engineers
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BARRIER PORSCHE
11830 NE 8TH ST
BELLEVUE WASHINGTON

# CLEARING AND GRADING PLANS
# TEMP. EROSION & SEDIMENTATION CONTROL PLAN

SCALE: 1" = 20'
DRAWING FILE NAME: 2013007-Grading Plan Set.dwg
PROJECT NO. 2013007

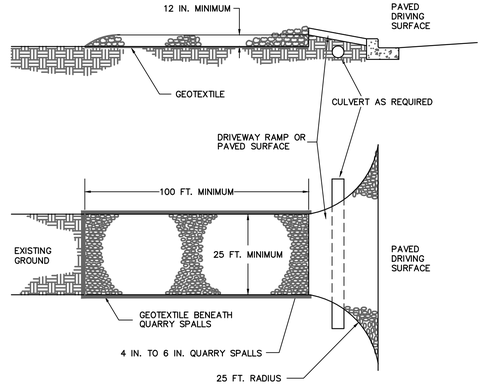
JAY D. DECKER — STATE OF WASHINGTON — 31195 — REGISTERED PROFESSIONAL ENGINEER
11/05/13

| DESIGNED BY: PEG | CHECKED BY: JDD |
|---|---|
| DRAWN BY: PEG | APPROVED BY: JDD |
| LAST EDIT: 11/05/13 | PLOT DATE: |

| DATE | BY | REV# | REVISION | CKD | APPR. |
|---|---|---|---|---|---|
| 11/05/13 | HCS | 1 | PER CITY COMMENTS | | |

SHEET C1.2

SW 1/4 OF THE SW 1/4 SEC. 28, TWP. 25 N., RGE 5 E., W.M.




PLAN

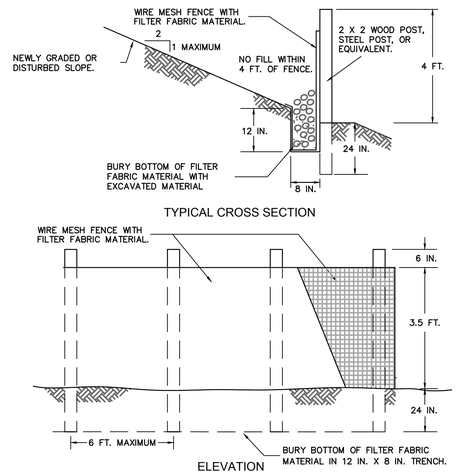
NOTES:

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.

City of Bellevue — NO SCALE

TITLE: TEMPORARY CONSTRUCTION EXIT – PLAT/COMMERCIAL

REV. DATE 10/2000 — NO. EC–1




TYPICAL CROSS SECTION




ELEVATION

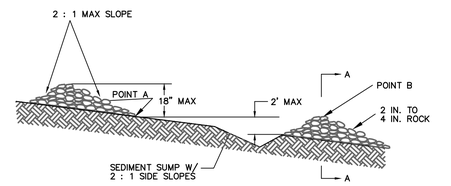
NOTES:

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.

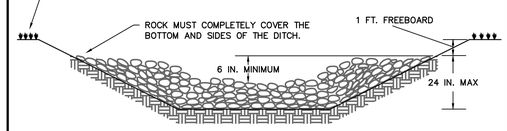
City of Bellevue — NO SCALE

TITLE: REINFORCED SILT FENCE

REV. DATE 10/2000 — NO. EC–5




CHECK DAM SPACING




SECTION AA

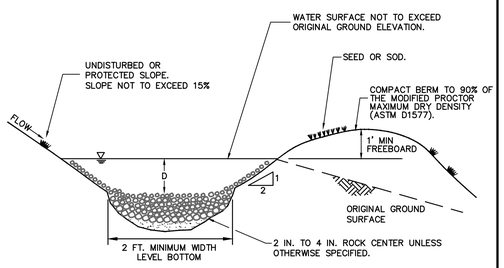
NOTES :

1. 50 FT MAXIMUM SPACING BETWEEN CHECK DAMS.
2. ANY SEDIMENT DEPOSTION 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.

City of Bellevue — NO SCALE

TITLE: ROCK CHECK DAM

REV. DATE 10/2000 — NO. EC–10



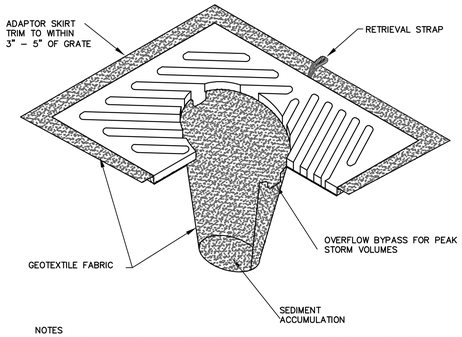

NOTES:

1. SEE DETAIL EC–10 FOR CHECK DAM REQUIREMENTS
2. DIMENSIONS: 1 FT. MINIMUM DEPTH (D) BY 2 FT. MINIMUM BOTTOM WIDTH.
3. SWALE GRADES SHOULD NOT EXCEED 5%. SIDE SLOPES SHOULD BE 2:1 OR LESS.
4. OUTLET SHALL CONSIST OF RIPRAP DISCHARGING TO STABILIZED OUTLET, SEDIMENT POND OR LEVEL SPREADER.
5. IF DESIGNED AS A PERMANENT DRAINAGE FEATURE, MAY BE USED IN COMBINATION WITH INTERCEPTOR DRAIN. SEE DETAIL EC–11.

City of Bellevue — NO SCALE

TITLE: TEMPORARY INTERCEPTOR SWALE

REV. DATE 10/2000 — NO. EC–9




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.

City of Bellevue — NO SCALE

TITLE: CATCH BASIN INLET PROTECTION INSERT

REV. DATE 10/2000 — NO. EC–06

## CONSTRUCTION SEQUENCE

THIS SEQUENCE PROVIDES GENERAL GUIDANCE TO THE CONTRACTOR FOR EROSION CONTROL PHASING. THE CONTRACTOR SHALL DEVELOP A DETAILED CONSTRUCTION SEQUENCE.

1. AT PERMIT ISSUANCE, INSTALL EMERGENCY PHONE NUMBER SIGN.
2. ARRANGE AND ATTEND PRE–CONSTRUCTION MEETINGS WITH CITY OF BELLEVUE INSPECTORS.
3. FLAG CONSTRUCTION CLEARING LIMITS.
4. INSTALL SILT FENCE ALONG THE PERIMETER OF THE PROPERTY.
5. INSTALL CB FILTERS.
6. INSTALL TEMPORARY CONSTRUCTION ENTRANCE/EXIT.
7. INSTALL BMPS AS NECESSARY TO MEET DISCHARGE STANDARDS.
8. CONSTRUCT INTERCEPTOR SWALES, AS NECESSARY.
9. DEMO EXISTING BUILDINGS, CURBING & PAVING ON SITE PER DEMOLITION PLAN, SEE SHEET A1.1(D).
10. STRIP SITE AND DEMO SITE UTILITIES PER UTILITIES ENGINEERING STANDARDS & SHEET C2.2.
11. REMOVE PETROLEUM CONTAMINATED SOILS PER HART CROWSER REPORT "CLEANUP ACTION PLAN (CAP)/CONSTRUCTION CONTINGENCY PLAN (CCP), EASTSIDE RENTAL PROPERTY, BELLEVUE, WASHINGTON", SWPPP, AND EROSION CONTROL PLAN SHEET C1.2. CONTRACTOR SHALL PHASE EXCAVATION SO THAT EXPOSURE OF CONTAMINATED SOILS IS MINIMIZED PRIOR TO CLEAN BACKFILL.
12. DIRECT LOADING OF EXCAVATED CONTAMINATED SOIL TO TRUCKS IS PREFERRED. TEMPORARY, SHORT–TERM STORAGE OF EXCAVATED SOILS MAY BE ACCEPTABLE GIVEN ANTICIPATED WEATHER CONDITIONS AND BY COVERING IMMEDIATELY WITH PLASTIC SHEETING. BACKFILL WITH CLEAN FILL AS SOON AS POSSIBLE.
13. THIRD–PARTY CONSULTANT (EARTH SOLUTIONS NW) SHALL SAMPLE PH AND TURBIDITY IN ACCORDANCE WITH SWPPP AT 3 LOCATIONS SHOWN ON PLAN. THE CONTRACTOR SHALL MAKE ADJUSTMENTS TO EROSION CONTROL MEASURES AS REQUIRED.
14. RELOCATE EROSION CONTROL MEASURES & ADD ADDITIONAL MEASURES PER ON–SITE CESCL AS CONSTRUCTION & EXCAVATION PROGRESSES SO THAT PH AND TURBIDITY LIMITS ARE NOT EXCEEDED.
15. FILL AND EXCAVATE SITE TO DESIGN GRADES.
16. CONSTRUCT BUILDINGS & UTILITIES.
17. HYDROSEED SLOPES NOT COVERED BY THE BUILDING OR NEW PLANTING.
18. REMOVE REMAINING T.E.S.C. FACILITIES ONLY AFTER SITE HAS STABILIZED.
19. CLEAN STORM DRAINAGE SYSTEM. DO NOT FLUSH SEDIMENT OFF SITE INTO THE PERMANENT STORM SYSTEM.

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BELLEVUE WASHINGTON

# CLEARING AND GRADING PLANS
# TEMP. EROSION & SEDIMENTATION CONTROL DETAILS

PROJECT NO. 2013007 — DRAWING FILE NAME: 2013007-Grading Plan Set.dwg — SCALE: 1" = 20'

JAY D. DECKER — STATE OF WASHINGTON — 31195 — REGISTERED PROFESSIONAL ENGINEER
11/05/13

DESIGNED BY: PEG — CHECKED BY: JDD
DRAWN BY: PEG — APPROVED BY: JDD
LAST EDIT: 11/05/13 — PLOT DATE:

| DATE | BY | REV# | REVISION | CKD | APPR. |
|---|---|---|---|---|---|
| 11/05/13 | HCS | 1 | PER CITY COMMENTS | | |

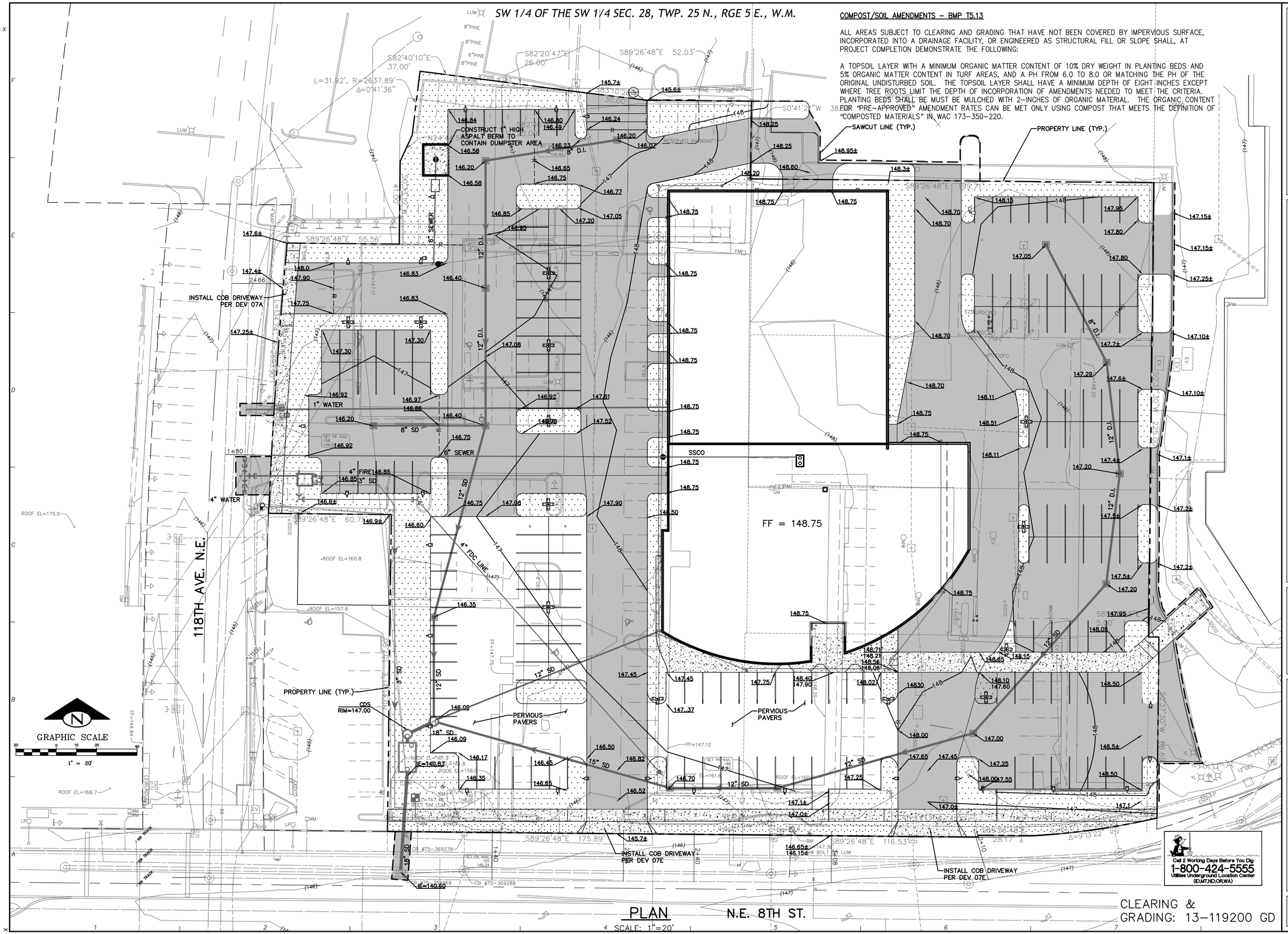
SHEET C1.3

SW 1/4 OF THE SW 1/4 SEC. 28, TWP. 25 N., RGE 5 E., W.M.

## COMPOST/SOIL AMENDMENTS – BMP T5.13

ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY, OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION DEMONSTRATE THE FOLLOWING:

A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE ORIGINAL UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. PLANTING BEDS SHALL BE MUST BE MULCHED WITH 2–INCHES OF ORGANIC MATERIAL. THE ORGANIC CONTENT FOR "PRE–APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST THAT MEETS THE DEFINITION OF "COMPOSTED MATERIALS" IN WAC 173–350–220.




PLAN

SCALE: 1"=20'

CLEARING & GRADING: 13–119200 GD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Consulting Engineers
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Seattle, WA. 98104
ph 206.403.0933


BARRIER PORSCHE
11830 NE 8TH ST
CLEARING AND GRADING PLANS
GRADING PLAN

BELLEVUE WASHINGTON

SCALE: 1" = 20'

DRAWING FILE NAME: 2013007-Grading Plan Set.dwg

PROJECT NO. 2013007

JAY D. DECKER — STATE OF WASHINGTON — 31195 — REGISTERED PROFESSIONAL ENGINEER

11/05/13

| DESIGNED BY: | PEG | CHECKED BY: | JDD |
|---|---|---|---|
| DRAWN BY: | PEG | APPROVED BY: | JDD |
| LAST EDIT: | 11/05/13 | PLOT DATE: | |

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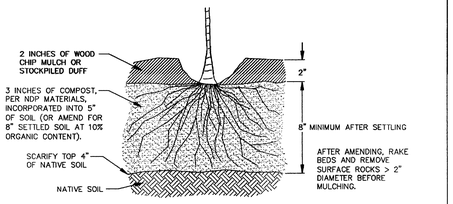
|---|---|---|---|---|---|
| 11/05/13 | HCS | 1 | PER CITY COMMENTS | | |

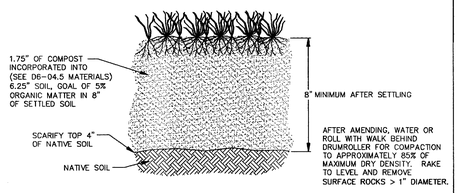
SHEET C1.4

SW 1/4 OF THE SW 1/4 SEC. 28, TWP. 25 N., RGE 5 E., W.M.

## AMENDMENT FOR LANDSCAPED AREAS




## SOIL AMENDMENT FOR GRASS OR TURF AREAS




NOTES:

1. AMEND SOILS PER ECOLOGY MANUAL, VOL. V, 5.3.1, BMP T5.13, (2005 OR CURRENT) OR WWW.SOILSFORSALMON.ORG.
2. DO NOT AMEND SOILS IN AREAS WITH UNDISTURBED SOIL AND NATIVE VEGETATION.
3. OPTIONAL ALTERNATIVE: STOCKPILE NATIVE TOPSOIL ONSITE, AMEND IF NEEDED, AND REPLACE BEFORE PLANTING.
4. OPTIONAL ALTERNATIVE: IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET REQUIREMENTS.

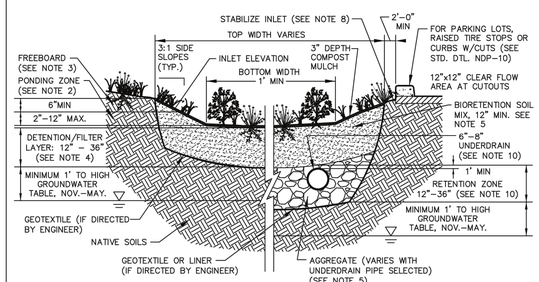
JANUARY 2010 NO SCALE

City of Bellevue — STORM AND SURFACE WATER UTILITY

TITLE: AMENDED SOILS

NO. NDP-1

## WITHOUT UNDERDRAIN / WITH UNDERDRAIN




NOTES:

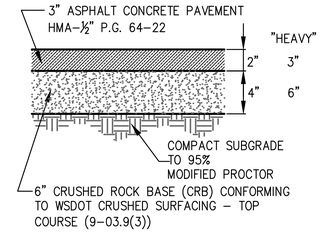
1. PROVIDE PROTECTION FROM ALL VEHICLE TRAFFIC, EQUIPMENT STAGING, AND FOOT TRAFFIC IN PROPOSED INFILTRATION AREAS PRIOR TO, DURING, AND AFTER CONSTRUCTION.
2. DIMENSIONS:
   A. PONDING ZONE (FROM TOP OF GROWING MEDIUM TO OVERFLOW ELEVATION): 2"-6" MINIMUM AND 12" MAXIMUM DEPENDING ON INFILTRATION RATE AND DEVELOPMENT TYPE.
   B. FLAT BOTTOM WIDTH: 1' MINIMUM.
   C. PLANTED SIDE SLOPES OF BASIN: 2.5:1 MAXIMUM ADJACENT TO SIDEWALK, 4:1 MAXIMUM FOR SHEET FLOW INLET.
3. OVERFLOW:
   A. OVERFLOW REQUIRED (PIPE OR OVERLAND) SEE STANDARD DETAILS NDP-6, 7 & 8.
   B. INLET ELEVATION MUST ALLOW FOR 6" OF FREEBOARD, MINIMUM.
   C. PROTECT OVERFLOW INLET FROM DEBRIS AND SEDIMENT WITH STRAINER OR GRATE (PIPE ONLY).
   D. DISCHARGE PER CITY OF BELLEVUE ENGINEERING STANDARDS.
4. BIORETENTION SOIL MIX:
   A. 18" MINIMUM DEPTH, FOR MR 5 ONLY OR RUNOFF TREATMENT.
   B. 12" MINIMUM DEPTH FOR FLOW CONTROL.
   C. COMPACT SUBSOILS MUST BE SCARIFIED TO 6" BELOW THE BIORETENTION SOIL LAYER.
5. SEE CHAPTER D6-04 HEREIN FOR ALL MATERIALS AND SPECIFICATIONS.
6. GEOTECHNICAL ANALYSIS AND STORM DRAINAGE REPORT REQUIRED PER SUBMITTAL REQUIREMENTS, CHAPTER D2 HEREIN.
7. VEGETATION:
   A. FLOOR OF PLANTING ISLAND SHOULD BE PLANTED WITH ZONE 1 TREES, SHRUBS AND GROUND COVER. SEE APPENDIX 3 IN THE *LID TECHNICAL GUIDANCE MANUAL FOR PUGET SOUND* (JANUARY 2005, OR AS AMENDED) OR *"RAIN GARDEN HANDBOOK FOR HOMEOWNERS"* FOR A PLANT LIST.
   B. SIDE SLOPES SHOULD BE PLANTED WITH ZONE 2 OR 3 PLANTS.
   C. USE AT LEAST 3 SPECIES OF EACH PLANT COVER TYPE, NOT INCLUDING TREES.
8. INSTALL APPROXIMATELY 6" THICK LAYER WASHED DRAIN ROCK OR STREAMED COBBLE PER WSDOT 9-03.11(2) (2"-4" MIN) TO TRANSITION FROM INLET OR SPLASH PAD TO BIORETENTION SOIL MIX TO DISSIPATE ENERGY AND/OR DISPERSE FLOW.
9. INSTALL OBSERVATION PORT PER STANDARD DETAIL NDP-9, IF FLOW CONTROL (MR7)AND OR RUNOFF TREATMENT (MR6) IS REQUIRED.
10. RETENTION ZONE OPTIONAL - REQUIRED WITH UNDERDRAIN AND IF NATIVE SOIL INFILTRATION RATE IS LESS THAN 0.25"/HOUR. SEE NDP CHAPTER AND STANDARD DETAIL NDP-3, DETAIL A.

JANUARY 2013 NO SCALE

City of Bellevue — STORM AND SURFACE WATER UTILITY

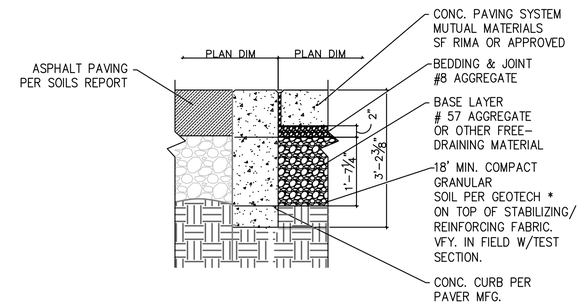
TITLE: RAIN GARDEN

NO. NDP-2




**ON SITE ASPHALT PAVEMENT SECTION**

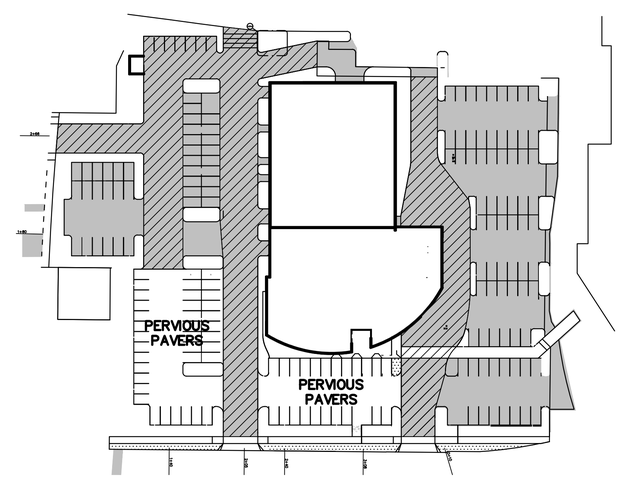
NOT TO SCALE




* COMPACT TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR (ASTM D1557) TEST METHOD AND THE SUB-GRADE SHOULD BE IN A DENSE, NON-YIELDING CONDITION

**ON SITE PERVIOUS PAVER SECTION**

NOT TO SCALE




**ON SITE ASPHALT PAVING AREAS**

NOT TO SCALE

HEAVY ASPHALT SECTION

STD. ASPHALT SECTION

Call 2 Working Days Before You Dig
1-800-424-5555
Utilities Underground Location Center
(ID,MT,ND,OR,WA)

CLEARING & GRADING: 13-119200 GD


DECKER Consulting Engineers
911 Western Ave, suite 301
Seattle, WA. 98104
ph 206.403.0933


BARRIER PORSCHE
11830 NE 8TH ST
CLEARING AND GRADING PLANS
GRADING DETAILS

BELLEVUE WASHINGTON

DRAWING FILE NAME: 2013007-Grading Plan Set.dwg

PROJECT NO. 2013007

SCALE: 1" = 20'

JAY D. DECKER — STATE OF WASHINGTON — 31195 — REGISTERED PROFESSIONAL ENGINEER

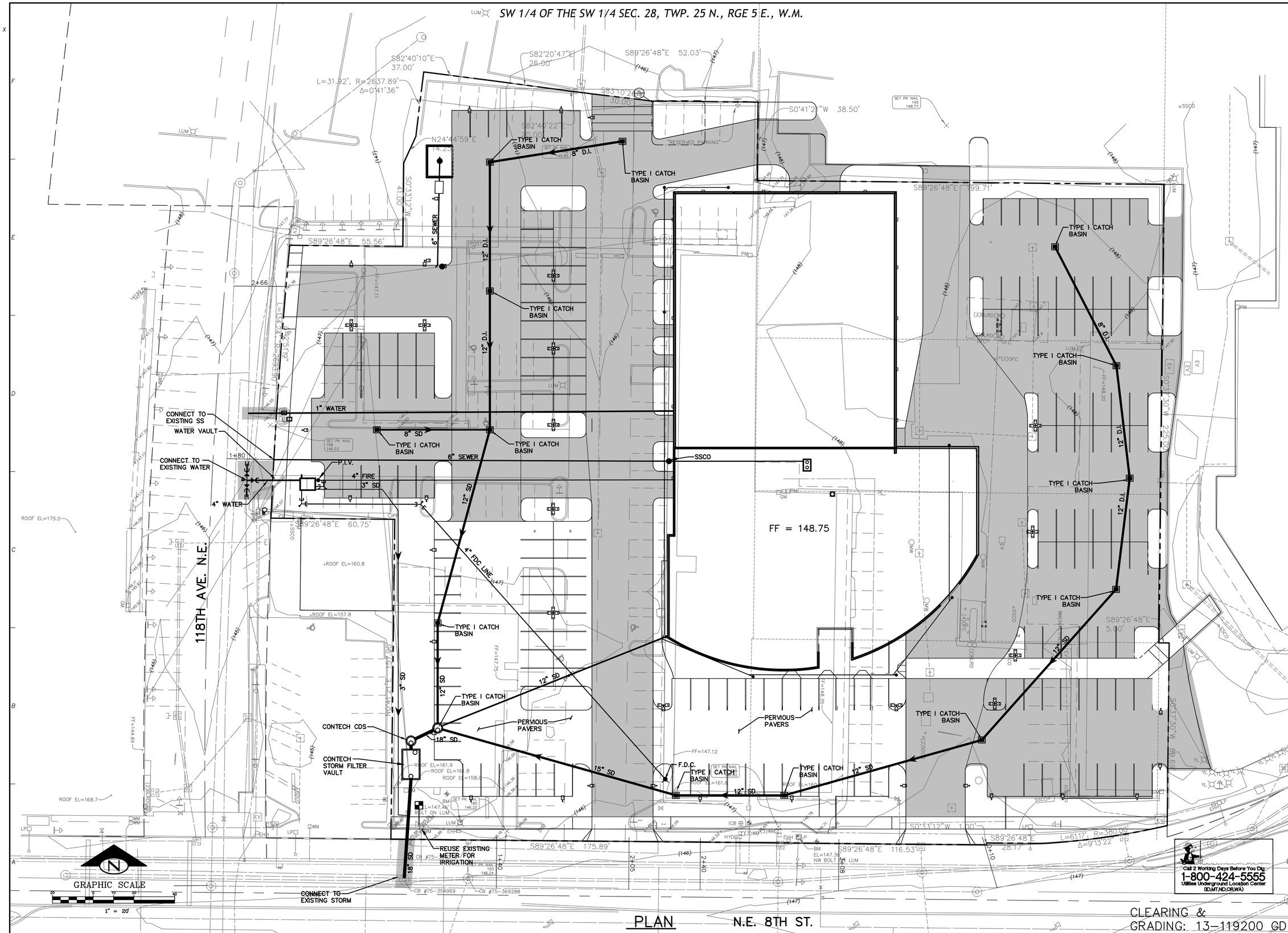
11/05/13

DESIGNED BY: PEG
DRAWN BY: PEG
LAST EDIT: 11/05/13

CHECKED BY: JDD
APPROVED BY: JDD
PLOT DATE:

| DATE | BY | REV# | REVISION | CKD | APPR. |
|---|---|---|---|---|---|
| 11/05/13 | HCS | 1 | PER CITY COMMENTS | | |

SHEET C1.5





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ph 206.403.0933


BARRIER PORSCHE
11830 NE 8TH ST

# CLEARING AND GRADING PLANS
# ABBREVIATED UTILITY PLAN

BELLEVUE WASHINGTON

SCALE: 1" = 20'

DRAWING FILE NAME: 2013007-Grading Plan Set.dwg

PROJECT NO. 2013007

JAY D. DECKER
STATE OF WASHINGTON
31195
REGISTERED PROFESSIONAL ENGINEER
11/05/13

| | | | |
|---|---|---|---|
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| DATE | BY | REV# | REVISION | CK'D | APPR. |
|---|---|---|---|---|---|
| 11/05/13 | HCS | 1 | PER CITY COMMENTS | | |

SHEET
C1.6