

Ballard Library
Seattle
VCP MW2484

Remedial Action Plan for the Former Ballard Library, 5711 24th Avenue NW, Seattle Washington

1.0 INTRODUCTION

1.1 Purpose

The purpose of this remedial action plan (RAP) is to meet the Washington State Department of Ecology's criteria for obtaining "no further action" status for the former Ballard Library site, located at 5711 24th Avenue NW, Seattle Washington (the Property).

1.2 Summary of Proposed Remedial Action

Basalt Environmental Consulting, Inc. (Basalt) proposes accomplish remediation of the site by excavating two areas of petroleum-impacted soils identified by previous evaluations.

2.0 BACKGROUND

The subject site is the location the former Ballard Branch of the Seattle Public Library. The site consists of a rectangular, 0.46-acre parcel improved with a one-story library building constructed in 1962. The building occupies roughly two thirds of the northern part of the site. Additional site improvements include a paved parking area located on the southern portion the site, as well as landscaping surrounding the periphery of the building. The general area is characterized by retail, commercial, and residential uses. Surface topography slopes down gently to the south. A site location map and topographic map are presented as Figures 1 and 2.

According to previous environmental reports conducted by others, past uses of the site include a gas station in the northern portion from approximately 1940 to 1960; an auto repair facility in the southern portion from approximately 1940 to 1960; and a clothes cleaners in the southeast corner from circa 1938 to 1940. The existing building was constructed in 1962 and was in use as a municipal library until 2005. The building is currently unoccupied.

Three prior subsurface evaluations have been conducted on the site: "Phase I and Phase II Site Assessment, Ballard Library, Seattle, Washington" Shannon & Wilson, Inc. (S&W) dated February 2005; "Phase II Site Assessment, Former Ballard Library Property, 5711 24th Avenue Northwest," prepared by Geotech Consultants, Inc. (GCI) dated February 6, 2006; and "Limited Phase II Evaluation, Former Ballard Library" prepared by Basalt, dated June 15, 2011.

The three evaluations included a total of 21 direct-push borings, including four inside the building, and laboratory analysis of 29 soil samples. Additionally, S&W encountered perched groundwater in six locations. Groundwater was not encountered during GCI's and Basalt's evaluations. Generally speaking, soils from about 0 to 0.5-feet below ground surface (bgs) were gravelly roadbase or topsoil. Below that depth, soils were typically silty sands and sandy silt, with occasional gravel and cobbles, with density increasing with depth. Geoprobe refusal was encountered at between 9 and 12-feet bgs.

S&W reported one sample from location P7 on the south side of the site contained concentrations of gasoline-range petroleum hydrocarbons exceeding the Model Toxics Control Act (MTCA) Method A cleanup criteria for unrestricted land use. GCI reported mineral spirits (reported as gasoline-range petroleum) in concentrations exceeding MTCA Method A was detected in two soil samples on the east side of the building at about 6-7.5-feet bgs, respectively. The remaining soil samples were below cleanup standards, although concentrations of petroleum below MTCA Method A were detected in some areas. Laboratory analysis of six groundwater samples did not detect analytes above applicable cleanup levels. A summary of sample locations and results is presented in Figure 3.

Based on these results, it appears that petroleum impacts to soil occur in two discrete areas, in the southern portion of the parking area and on the northeast side of the building. It appears that petroleum impacts are limited to the boundaries of the site itself, and off-site impacts are unlikely. Groundwater does not appear to be affected.

3.0 REMEDIAL ACTION PLAN

Basalt proposes to use a qualified and experienced contractor to excavate and dispose of two areas of petroleum-impacted soils identified in the previous evaluations, as well as other areas identified by field screening at the time of property wide excavation. The excavation will be accomplished by front-end loader, or similar mobile equipment. Transportation to the RCRA Subtitle D landfill most likely will be entirely by truck.

We anticipate approximately 285 tons of soils exceeding MTCA method A are located on site. It should be noted that soils exhibiting odors or other indications of contamination often require special disposal requirements. In other words, most disposal facilities require soils exhibiting petroleum odors or staining to be treated as if they are contaminated, regardless of the analytical results. For purposes of this project, soils with petroleum concentrations below MTCA Method A but still requiring special disposal will be defined as "petroleum affected." We estimate approximately 500 tons of petroleum affected soils are located on site that may require special disposal.

Project plans include demolition of the existing building and property wide excavation to accommodate future underground parking, on the order 10-15 feet below the existing grade. It is anticipated that removal of petroleum affected soils will occur at the same time as demolition of the existing building and property wide excavation. Prior subsurface property evaluations encountered soils exceeding MTCA Method A at a maximum depth of about 7.5-8 feet below existing grade. Therefore, it is anticipated that virtually all the soils exceeding MTCA Method A will be removed from the site at this time. Basalt will observe the excavation contractor and field screen the excavated soils using a photo-ionization detector.


After field screening results indicate petroleum impacted soils have been removed, Basalt will collect confirmation samples for laboratory analysis. We anticipate approximately four to five samples from the floor and sidewalls of each excavation will be collected. Based on prior evaluations we do not anticipate encountering groundwater. However if groundwater is encountered it will be sampled and groundwater conditions will be documented. Actual numbers of samples and locations will be determined based on field conditions, and in accordance with Ecology's field sampling protocols. Samples will be analyzed by method NWTP-G/BTEX by an approved analytical laboratory. Site access will be controlled by temporary fencing in accordance with the health and safety plan until analytical results are received and the excavations can be filled appropriately.

Basalt appreciates the opportunity to be of service on this project. Should you have any questions concerning this report please contact the undersigned at (206) 794-6790.

Respectfully submitted,
Basalt Environmental, LLC,



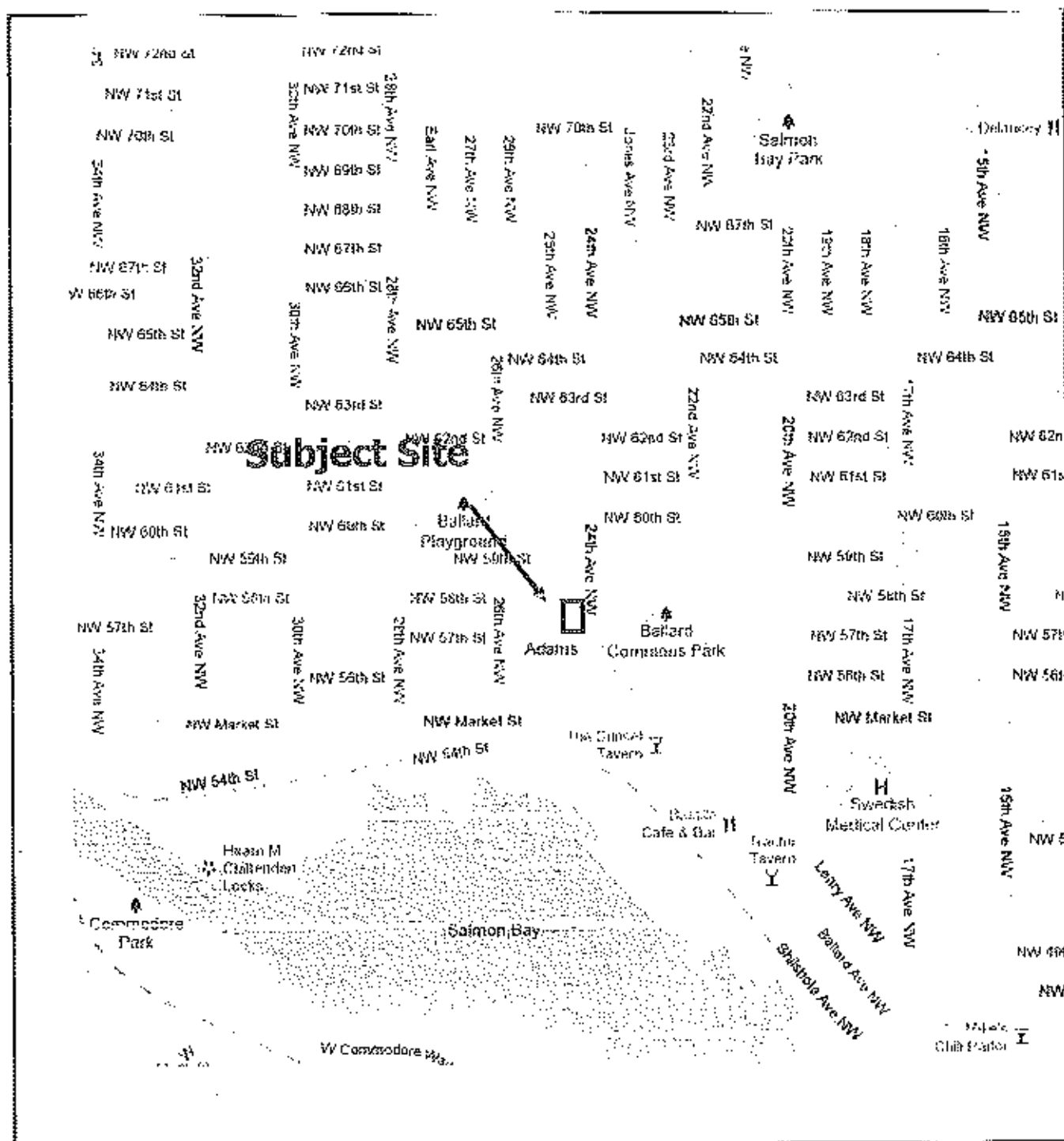
Scott W. Gaulke, PE, LHG
Senior Project Engineer



Gregory S. Peterson
Principal

GSP/SWG/gsp

Figures: Site Vicinity Map
 Topographic Map
 Site and Exploration Plan
 Estimated Limits of Excavation



LOCATION MAP



68 20 36th Ave. NE
Seattle, WA 98115

Source: Google Maps, No scale



Site Name: Former Ballard Library
5711 24th Avenue NW
Seattle, WA
Project Number: 110421-1

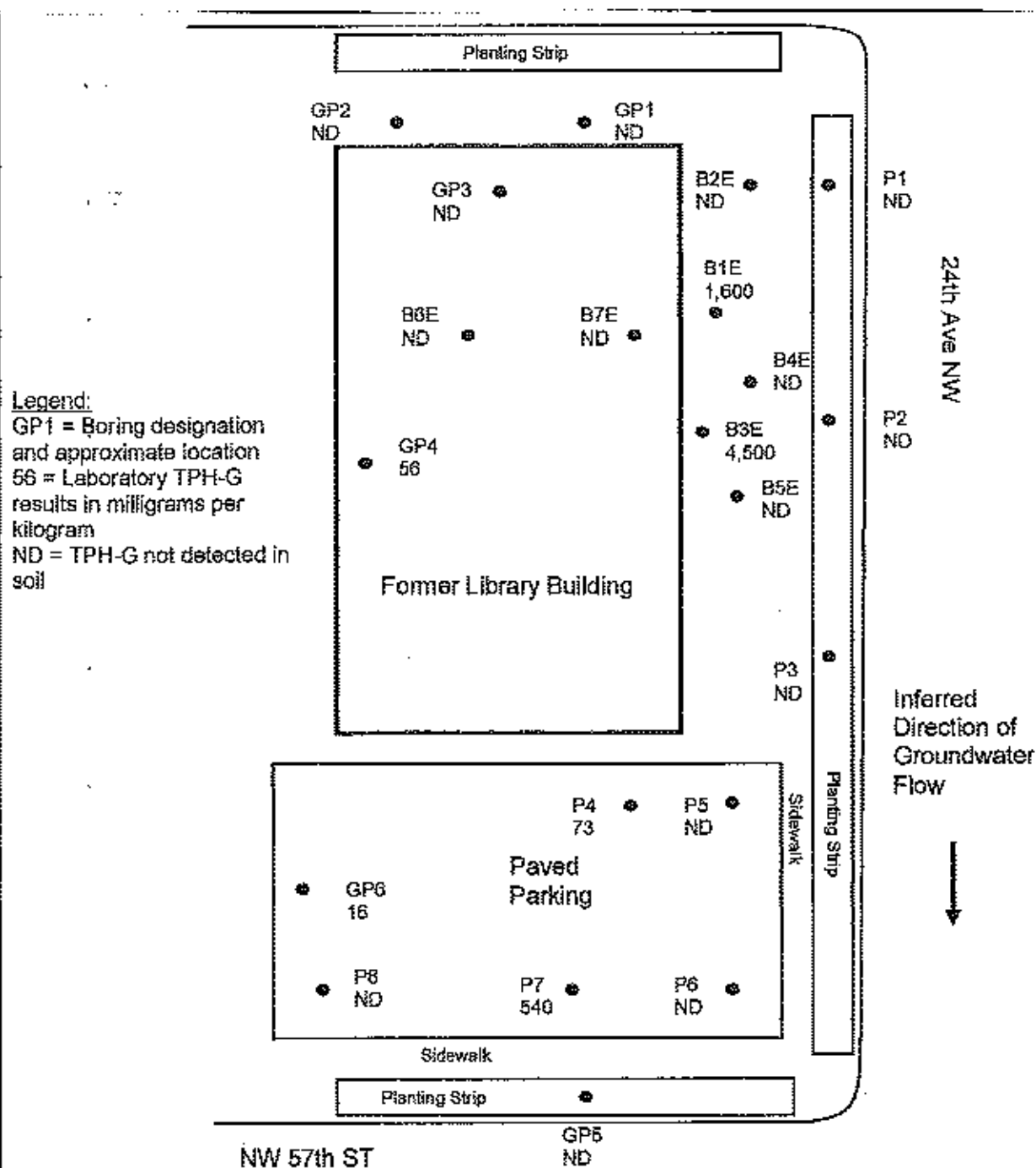


Figure 3 - Site and Exploration Plan

Scale (approx) 40' =

N↑



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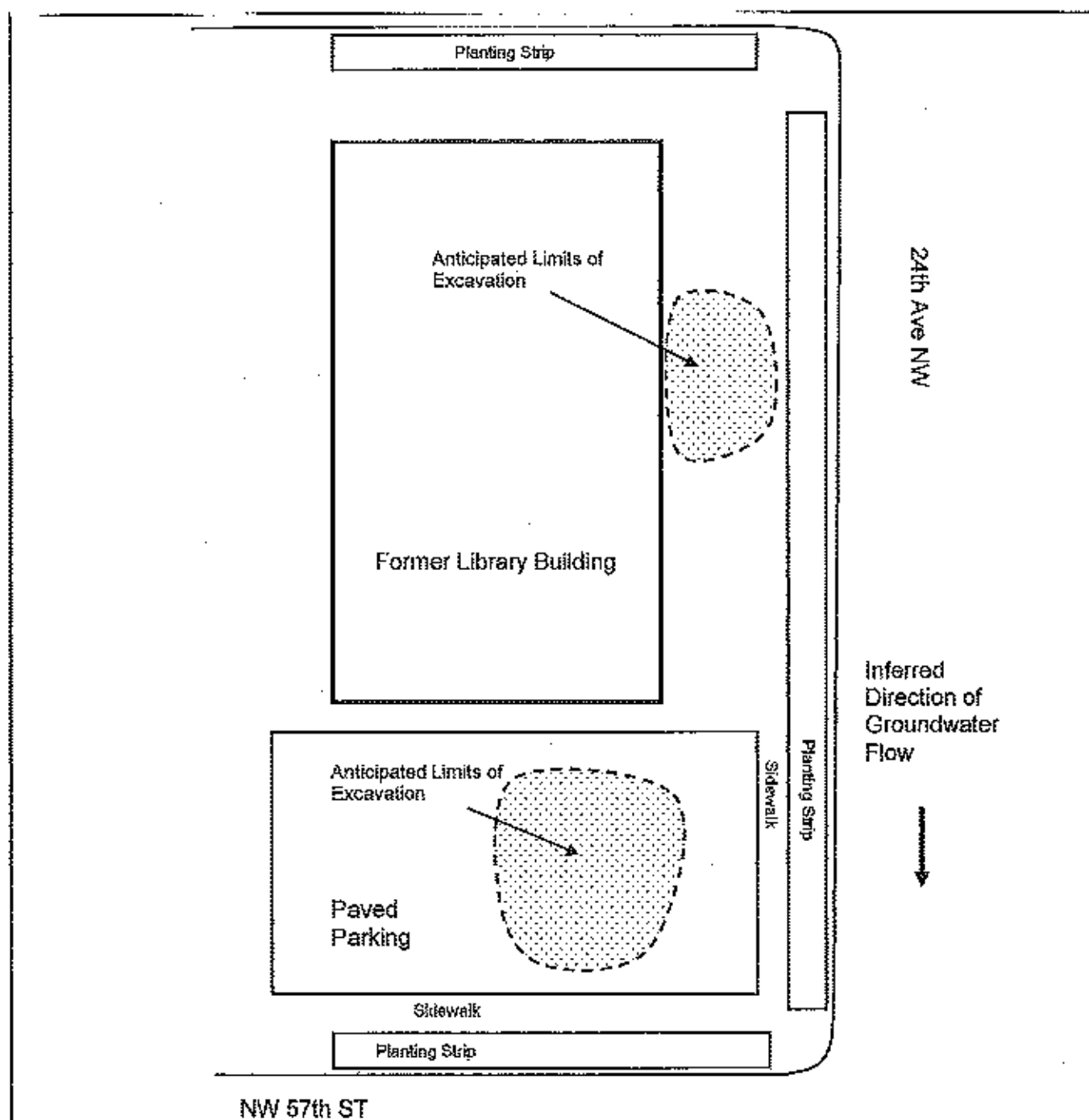


Figure 4 - Estimated Limits of Excavation

Scale (approx) 40' = _____

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References

Basalt Environmental, LLC "Limited Phase II Evaluation, Former Ballard Library," June 15, 2011.

Geotech Consultants, Inc. "Phase II Site Assessment, Former Ballard Library Property, 5711 24th Avenue Northwest," February 6, 2006.

Shannon & Wilson, Inc. "Phase I and Phase II Site Assessment, Ballard Library, Seattle, Washington," February 2005