



PERIODIC REVIEW

**Park 90/5 Office Park,
now Airport Way Office Park
Facility Site ID#: 76316149**

**2203 Airport Way South,
Seattle, Washington**

Northwest Region Office

TOXICS CLEANUP PROGRAM

December 2010

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1.0 INTRODUCTION

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup Site conditions and monitoring data to ensure that human health and the environment are being protected at the Park 90/5 Office Park (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC).

Cleanup activities at this Site were completed under the Voluntary Cleanup Program (VCP). The cleanup actions resulted in concentrations of petroleum hydrocarbons remaining at the Site which exceed MTCA cleanup levels. The MTCA cleanup levels for soil are established under WAC 173-340-740. The MTCA cleanup levels for groundwater are established under WAC 173-340-720. WAC 173-340-420 (2) requires that Ecology conduct a periodic review of a Site every five years under the following conditions:

- (a) Whenever the department conducts a cleanup action
- (b) Whenever the department approves a cleanup action under an order, agreed order or consent decree
- (c) Or, as resources permit, whenever the department issues a no further action opinion, and one of the following conditions exists:
 - 1. Institutional controls or financial assurance are required as part of the cleanup;
 - 2. Where the cleanup level is based on a practical quantitation limit; or
 - 3. Where, in the department's judgment, modifications to the default equations or assumptions using Site-specific information would significantly increase the concentration of hazardous substances remaining at the Site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

- (a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the Site;
- (b) New scientific information for individual hazardous substances of mixtures present at the Site;
- (c) New applicable state and federal laws for hazardous substances present at the Site;
- (d) Current and projected Site use;
- (e) Availability and practicability of higher preference technologies; and
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

The Department shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

2.0 SUMMARY OF SITE CONDITIONS

2.1 Site Description and History

The Park 90/5 Office Park is approximately 10 acres and is located at 2203 Airport Way South in southern Seattle, Washington. Facilities on the Site include five buildings used or previously used for office and warehouse space, biotechnology laboratories, coffee roasting, a doctor's office and communications businesses. The areas surrounding the buildings are asphalt-paved parking lots. The City of Seattle acquired the Park 90/5 Site on August 1, 1996. The Seattle Police Department uses some of the property for training, support, and other purposes.

The Site was originally part of the tide lands near the mouth of the Duwamish River that were filled near the turn of the century. Between the early 1900's and early 1980's, the Site was used for meat packing purposes. Facilities that existed on the Site prior to the mid- 1980's included stock pens, killing rooms, rendering tanks, sausage factory, smokehouse, lard room, tank shed (containing rendering products such as tallow), saw shed, machine shop, engine and boiler rooms, oil house, steam plant, paint shop, and offices. In the mid- 1980's the meat packing facilities were demolished except for the former slaughterhouse (Building A). Building A was remodeled in 1985 and the other four buildings (B to E) were constructed between 1985 and 1987.

Five underground storage tanks (USTs) have existed on the property. Four of the tanks were associated with the meat packing facilities and were reportedly removed during Site demolition and redevelopment. No tank removal data on the condition of the tanks or tank backfill was found to assess whether leakage had occurred, however oily materials were encountered during geotechnical investigations in 1984 near the reported location of one of the tanks. The fifth UST, a waste oil tank used by a property tenant was removed in 1994 in accordance with Washington State UST regulations.

Subsurface materials beneath the Site consist of 10 to 18 feet of fill composed of sandy silts, silty sands, gravely sands and sandy gravels with brick and slag-like fragments, concrete rubble and metal debris that overlie finer grained tidal flat deposits, 5 to 15 feet in thickness. The tidal flat deposits are generally underlain by very fine to fine sands to a depth of 70 feet. The water table lies within the fill deposits at depths of between 6 to 10 feet. Water level elevations measured in July and October 1996 indicate that groundwater flow within the fill deposits is in an easterly direction. However, regionally, groundwater flows in a westerly direction towards the East Waterway.

2.2 Site Investigations and Sample Results

Based on historical information, soil and groundwater quality testing was completed to further assess the environmental conditions beneath the Site. This testing included the drilling and sampling of 11 soil probes and 4 monitoring wells. Analyses were made for petroleum hydrocarbons and metals (arsenic, barium, cadmium, chromium [Cr], lead, mercury, selenium, and silver).

Comparison of soil and groundwater quality data with potential cleanup levels indicates that petroleum hydrocarbons, chromium and arsenic were of potential concern at the Park 90/5 Office Park. Soil data was compared to Method A (where available) and Method C industrial Site cleanup levels under the Model Toxics Control Act (MTCA). This comparison indicated that diesel range or heavy-oil range hydrocarbons exceeded the MTCA cleanup level of 200 milligrams per kilogram (mg/kg) at three locations. A concentration of over 20,000 mg/kg of diesel range hydrocarbons was measured at location P-2, and over 10,000 mg/kg of heavy-oil hydrocarbons were measured at locations P-4 and P-5. Soil analyses for metals indicated that the analyzed constituents were below MTCA cleanup levels except for chromium. Chromium was measured at a concentration of 990 mg/kg at location P-3 which exceeds the MTCA industrial cleanup level of 500 mg/kg.

Cleanup levels for groundwater were based on Washington State Surface Water Quality Standards (Chapter 173-201A WAC), where available, and on MTCA Method A or Method B cleanup levels when surface water cleanup levels were not available. Petroleum hydrocarbons and metals meet the potential cleanup levels except at location P-2 (petroleum hydrocarbons) and P-4 (arsenic). At P-2 the relatively high concentration of diesel range hydrocarbons at 219 milligrams per liter (mg/l) is attributed to free product being entrained in the sample sent to the laboratory. At location P-8, a total arsenic concentration of 0.051 mg/l was measured which exceeds the groundwater cleanup level of 0.036 mg/l. However, according to the environmental consultant, the available data suggest that the source of arsenic in groundwater is “background” concentration arsenic in soil that is being leached in low concentrations because of the geochemical conditions in groundwater. Arsenic concentrations in soil beneath the Site are typical for the Puget Sound region based on work published by Ecology. Low dissolved oxygen concentrations were measured in groundwater samples. Arsenic is relatively soluble in low oxygen (reducing) groundwater conditions.

2.3 Cleanup Actions

A cleanup plan to remediate petroleum containing soils was developed and implemented at three locations (P2, P4, and P5). Remediation consisted of excavating to a practical extent and disposing of soils off-Site that exceeded cleanup levels. Remedial actions were not completed at location P-3 where chromium was detected above cleanup levels. Additional remedial actions are not necessary at this location, in the consultant’s opinion, because of the localized extent of the exceedance, groundwater meets the chromium cleanup level, and because the P-3 area is paved. At location P-2, diesel range hydrocarbon concentrations were reduced from over 20,000 mg/kg to less than 250 mg/kg in the bottom, and east/south sidewalls. Higher petroleum hydrocarbon concentrations (greater than 2,000 mg/kg) remain in the north and west sidewalls where excavation was restricted by an electrical power transformer and lines, and by Building C. At location P-4, heavy-oil range hydrocarbon concentrations were reduced from over 10,000 mg/kg to less than 200 mg/kg in sidewall samples. Higher heavy-oil petroleum hydrocarbon concentrations remain in the excavation bottom where a sample concentration of 813 mg/kg was measured. Deeper excavation was restricted because of geotechnical considerations. At location P-5, heavy-oil range hydrocarbon concentrations were reduced from over 10,000 mg/kg to less than 500 mg/kg in sidewalls and to less than 1,000 mg/kg in the excavation

bottom. The confirmation bottom sample also had diesel range hydrocarbon concentration of approximately 440 mg/kg. Additional excavation in both the sidewalls and bottom was restricted because of geotechnical considerations.

Remediation of Site soils had been completed at that time to a practical extent. Available groundwater quality data indicate that groundwater meets cleanup levels except for petroleum hydrocarbons in the immediate vicinity of location P-2, and arsenic. Water quality data from soil probes and wells indicate that petroleum constituents are not migrating from location P-2. No source of arsenic has been discovered at the Site and the arsenic concentrations in groundwater appear to be representative of regional conditions. Because the data, in the opinion of the environmental consultant, indicated little risk to human health and the environment, a "No Further Action" (NFA) was requested from Ecology. Ecology however, did not agree to the NFA at that time. Ecology wanted additional information and in a March of 1997, Joe Garcia (property owner) received a letter from Ecology that stated that an NFA letter could not be issued because certain issues were not resolved. The issues included:

- Groundwater flow (directions)
- Fate and transport of soil contamination
- Metallic concentrations in groundwater
- Delineation of slag and scrap
- Status of underground storage tanks

Ecology advised that additional data was necessary to resolve items 1 to 3 and that existing data could be used to resolve items 4 and 5. Matthew Dalton (Dalton, Olmsted & Fuglevand, Inc. - DOF) discussed the issues with Ecology to determine the scope of additional testing to resolve issues 1 to 3 listed above. DOF submitted a proposed scope of work to Ecology on April 7, 1997. Ecology responded with a letter dated April 15, 1997 that outlined the additional work which is summarized below:

- Install three additional monitor wells at determined locations,
- Survey the well heads and measure water levels in all (Site) wells to estimate groundwater flow direction,
- Obtain groundwater samples from new and existing wells using low-flow/low turbidity sampling procedures, and
- Analyze the samples for diesel and heavy-oil range hydrocarbons (using Method WTPH-D extended) and for total and dissolved metals (arsenic, barium, chromium and lead). -

As requested by Ecology, additional field sampling and data analysis was completed at the Park 90/5 office park. The additional work is discussed below. In the consultant's opinion, the additional data resolved the issues raised by Ecology in the March 12, 1997 letter. Some additional discussions occurred, particularly about chromium, before the issues were resolved.

Groundwater samples were collected from the wells (except for MW-4) by Terry Olmsted on August 21 and 22, 1997. The samples were analyzed for petroleum hydrocarbons (WTPH-D

extended) and total and dissolved metals (arsenic, barium, chromium and lead). Samples for dissolved metals analysis were field filtered.

Diesel and heavy-oil range petroleum hydrocarbons were not detected above reporting limits (0.25 mg/l for diesel; 0.75 mg/l for heavy-oil) in upgradient wells MW-2 and MW-3 or in downgradient wells MW-1 and MW-7. Diesel range hydrocarbons were detected at concentrations of 0.32 mg/l in downgradient well MW-5 and 0.56 mg/l in downgradient well MW-6. No heavy-oil range hydrocarbons were detected in wells MW-5 or MW-6. The reported TPH detections are below the Model Toxics Control Act (MTCA) Method A cleanup level of 1 mg/l for petroleum hydrocarbons.

Arsenic concentrations ranged between not detected (less than 0.004 mg/l) to 0.027 mg/l (dissolved) and 0.029 mg/l (total). The highest arsenic concentrations were measured in upgradient well MW-2. Total and dissolved arsenic concentrations were similar and none of the upgradient or downgradient sample concentrations exceeded the cleanup level of 0.036 mg/l. Total barium concentrations ranged between 0.07 and 0.22 mg/l, and dissolved barium ranged between 0.09 and 0.26 mg/l. Total and dissolved concentrations were similar and none of the sample results exceeded the cleanup level of 1.1 mg/l.

Chromium was only detected in the sample from upgradient well MW-3 at a total concentration of 0.01 mg/l. Total and dissolved chromium were not detected in any other wells at a reporting limit of 0.01 mg/l. None of the sample concentrations exceeded the cleanup level of 0.05 mg/l. Total lead was only detected in two well samples; upgradient well MW-2 at 0.006 mg/l and in downgradient well MW-6 at 0.006 mg/l. Samples from the remaining wells had total lead concentrations less than 0.002 mg/l and all the groundwater samples including those from MW-2 and MW-3, had dissolved lead concentrations less than 0.002 mg/l. The two reported total lead detections were only slightly above the cleanup level of 0.0058 mg/l.

Summarizing the remaining soil contamination:

- Chromium was measured at a concentration of 990 mg/kg at location P-3. This chromium concentration exceeds the MTCA industrial cleanup level of 500 mg/kg.
- At location P2, residual diesel-range hydrocarbons greater than 2,000 mg/kg remain in soil. At location P4, residual heavy-oil range hydrocarbons of approximately 800 mg/kg remain in soil and at location P-5, residual diesel-range (437 mg/kg) and heavy-oil range (929 mg/kg) hydrocarbons remain in soil. These concentrations exceed the MTCA Method A soil cleanup level of 200 mg/kg.

The available groundwater quality data indicate that the soil chromium concentration at P-3 and the residual petroleum hydrocarbon concentrations at locations P-2, P-4 and P-5 are not leaching and migrating in groundwater at concentrations that exceed cleanup levels.

Ecology's concern about slag, scrap iron and other material present in the fill soils was that these materials could serve as a potential source of metallic contamination to groundwater. The environmental consultant examined the available groundwater quality data and concluded it

indicated the fill materials that contain the slag, cinders and metal debris are not adversely impacting groundwater quality. The geologic logs of explorations completed on the Site were reviewed to identify locations where these materials are present. The source of the slag and scrap materials is not known. Some of the slag-like or cinder-like materials may have originated as ballast for the railroad beds that were historically present on the Site. Fill material analyses for arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver were completed during the Site characterization and remediation work. Only chromium in one sample (P-3 at 3 to 6 feet) exceeded a soil cleanup level.

The March 1997 Ecology letter recommends that a discrete section be prepared that describes the status of tanks. Historical research by Shannon & Wilson discovered evidence that five underground fuel storage tanks (USTs) formerly were present on the Site. The following table summarizes the evidence, tank sizes and probable locations:

Supporting Evidence	Size (gallons)	Probable Location
1927 Tax Assessor Card	6,000	Office Bldg. On Northeast Corner
1950 Permit (DCLU)	20,000	Gas Pumps
1979 Permit (DCLU)	4,000	Northeast Portion
1987 Earth Consultants Rpt.	Unknown	Engine and boiler rooms
1985 DCLU Permit and Delta Environmental Consultants Rpt.	300	Building E

Notes: DCLU - Department of Construction and Land Use (City Seattle)

No formal tank removal records are available, except for the 300 gallon waste oil tank. Environmental assessment and remediation work completed as part of the real estate sale indicates that the tanks were removed. This work included interviews with people familiar with the Site, a geophysical survey, excavation/drilling of test pits and borings, the drilling and sampling of eleven geoprobes and the remedial excavation of suspected former tank locations (where petroleum hydrocarbons were ultimately detected in soil). The geophysical surveys included electro-magnetic (EM) and ground penetrating radar (GPR). The surveys were completed generally within the parking areas on the eastern half of the Site and the parking area located adjacent to the central portion of Building C. No evidence of underground tanks were discovered by the geophysical surveys. The status of each tank was reexamined and discussed in detail, ultimately to Ecology's satisfaction.

The City of Seattle acquired the Park 90/5 Site on August 1, 1996. An Independent Remedial Action Report (DOF 1996) and a request for a 'No Further Action' (NFA) letter were submitted to the Ecology in December 1996. After review of the DOF 1996 report, Ecology requested additional information, including the collection of additional groundwater data (Ecology 1997), that was provided in a report by DOF (1997). In March 1998, Joe Garcia of the City of Seattle received a letter from Ecology (dated March 9) that indicated Ecology would issue an NFA letter for soil contamination from diesel and heavy-oil provided a Restrictive Covenant was recorded with the King County's auditor's office. The Restrictive Covenant would note that petroleum

hydrocarbon contamination above cleanup levels remained at locations P-2, P-4 and P-5. The Ecology March 9 letter also indicated that the Site would remain on the Confirmed and Suspected Contaminated Sites Report because chromium contamination in soil exceeds the Method C industrial level. The letter indicated that to remove the Site from the list, steps would need to be taken to characterize the nature and extent of chromium at P-3.

These issues with chromium and other details were discussed further and ultimately resolved. Ecology issued an NFA letter June 21, 2001 after a restrictive covenant was recorded with the county.

2.4 Cleanup Levels

Both total and dissolved metals were analyzed in the wells. Total and dissolved total-chromium were not detected (D.L. = 10 ug/l) in any of the wells with the exception of MW-3. In August 1997, total chromium in a sample from MW-3 was detected at the detection limit of 10 ug/l. The results of the groundwater sampling indicate that groundwater beneath the Site meets the total chromium drinking water MCL of 100 ug/l, the Method B Cr(III) chromium cleanup level of 24,000 ug/l and the Cr(VI) Method B cleanup level of 48 ug/l.

The MTCA requires that soil cleanup levels be protective of groundwater quality. Amendments to the MTCA were at the time proposed that provide a conservative means (“three phase model”) to develop soil cleanup levels that will be protective of groundwater quality. Using the then proposed method, Ecology (1999b) developed tables that summarize then proposed changes to the Method A (WAC 173-340-740) lookup table for unrestricted land uses. A Method A soil cleanup level of 2,000 mg/kg was proposed for trivalent chromium and a soil cleanup level of 19 mg/kg was proposed for hexavalent chromium, based on protection of groundwater quality for drinking water purposes. Those regulatory changes occurred.

The Method A cleanup levels for chromium are based on a drinking water criteria. There is little potential that groundwater in the water table zone beneath and in the vicinity of the Site would be used for drinking water purposes for several reasons:

- The water table aquifer is composed of a heterogeneous fill that was placed over tidal flat deposits. In essence, placement of the fill and subsequent recharge “artificially” created the water table zone.
- The area is served by a municipal water supply system; and
- Park 90/5 is located in a heavy commercial/industrial setting and the shallow water table zone is highly susceptible to contamination from surface sources.

Based on the Site conditions, the likely receptor is marine water of the East Waterway. Surface water criteria are contained “Water Quality Standards for Surface Waters of the State of Washington” — Chapter 173-201A WAC (specifically WAC 173-201A-040) and in the MTCA (WAC 173-340-730).

The highest Cr(III) chromium concentration (based on total chromium) measured in Site soils was 3,760 mg/kg from location P12 (0.3 to 3 feet depth)(DOF 1999). This concentration is well below the Cr(III) cleanup level. The highest Cr(VI) chromium concentration was 13.7 mg/kg measured in Site soil at location P14 from 0.3 to 3 feet (DOF 1999). This concentration is below the cleanup level of 19mg/kg. The P14 sample had a total chromium concentration of 2,510 mg/kg, which is below the highest measured concentration of 3,760 mg/kg. To estimate the Cr(VI) at the higher total chromium concentration a simple regression analysis was completed. Data used to complete the analysis is contained in DOF (1999). Using the regression equation, a Cr(VI) concentration of approximately 19 mg/kg was estimated for the highest total chromium concentration sample. Based on the analyses, it was the opinion of the environmental consultant that soils on the Park 90/5 Site meet cleanup levels protective of groundwater quality.

The available data indicate that measured chromium concentrations in soil at the Park 90/5 Site are protective of the soil ingestion and groundwater exposure pathways. The groundwater exposure pathway is based on protection of marine surface waters. Groundwater quality analyses of Site groundwater indicate chromium concentrations meet applicable criteria (including drinking water criteria) for chromium.

2.5 Restrictive Covenant

Based on the Site use, surface cover and cleanup levels, it was determined that the Site was eligible for an NFA determination if a Restrictive Covenant was recorded for the property. A Restrictive Covenant was recorded for the Site in 2001 which imposed the following limitations:

Section 1. A portion of the Property contains petroleum hydrocarbon contaminated soil located under the southeast side of Building C, as shown on attached Figures #4 and #10. The City shall not alter, modify, or remove the existing structure (Building C) in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology.

Section 2. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or creates a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 3. The City must give thirty (30) days advance written notice to Ecology of the City's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the City without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action, if appropriate.

Section 4. The City must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.

Section 5. The City must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 6. The City shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples,

to inspect remedial actions conducted at the Property, and to inspect records that are related to the Remedial Action.

Section 7. The City reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant on the area depicted on Figures #4 and # 10 shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

The Restrictive Covenant is available as Appendix 6.4.

3.0 PERIODIC REVIEW

3.1 Effectiveness of completed cleanup actions

The Restrictive Covenant for the Site was recorded and is in place. This Restrictive Covenant prohibits activities that will result in the release of contaminants at the Site without Ecology's approval, and prohibits any use of the property that is inconsistent with the Covenant. This Restrictive Covenant serves to ensure the long term integrity of the remedy.

Based upon the Site visit conducted on January 3, 2011, the remedy at the Site continues to eliminate exposure to contaminated soils by ingestion and contact. The asphalt appears in satisfactory condition and no repair, maintenance, or contingency actions have been required. The Site is still operating as an office park. A photo log is available as Appendix 6.5.

Soils with TPH concentrations higher than MTCA cleanup levels are still present at the Site. However, the remedy prevents human exposure to this contamination by ingestion and direct contact with soils. The Restrictive Covenant for the property will ensure that the contamination remaining is contained and controlled.

3.2 New scientific information for individual hazardous substances for mixtures present at the Site

There is no new scientific information for the contaminants related to the Site.

3.3 New applicable state and federal laws for hazardous substances present at the Site

The cleanup at the Site was governed by Chapter 173-340 WAC. WAC 173-340-702(12) (c) [2001 ed.] provides that,

“A release cleaned up under the cleanup levels determined in (a) or (b) of this subsection shall not be subject to further cleanup action due solely to subsequent amendments to the provision in this chapter on cleanup levels, unless the department determines, on a case-by-case basis, that the previous cleanup action is no longer sufficiently protective of human health and the environment.”

Although cleanup levels changed for petroleum hydrocarbon compounds as a result of modifications to MTCA in 2001, contamination remains at the Site above the new MTCA Method A and B cleanup levels. Even so, the cleanup action is still protective of human health and the environment, and an attempt was made to use the new levels, which were at the time of cleanup, proposed. A table comparing MTCA cleanup levels from 1991 to 2001 is available below.

Analyte	1991 MTCA Method A Soil Cleanup Level (ppm)	2001 MTCA Method A Soil Cleanup Level (ppm)	1991 MTCA Method A Groundwater Cleanup level (ppb)	2001 MTCA Method A Groundwater Cleanup Level (ppb)
Cadmium	2	2	5	5
Lead	250	250	5	15
TPH	NL	NL	1000	NL
TPH-Gas	100	100/30	NL	1000/800
TPH- Diesel	200	2000	NL	500
TPH-Oil	200	2000	NL	500

NL = None listed

3.4 Current and projected Site use

The Site is currently used for commercial purposes. There have been no changes in current or projected future Site or resource uses.

3.5 Availability and practicability of higher preference technologies

The remedy implemented included containment of hazardous substances, and it continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels

The analytical methods used at the time of the remedial action were capable of detection below selected Site cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

4.0 CONCLUSIONS

The following conclusions have been made as a result of this periodic review:

- The cleanup actions completed at the Site appear to be protective of human health and the environment.
- Soils cleanup levels have not been met at the standard point of compliance for the Site; however, the cleanup action has been determined to comply with cleanup standards since the long-term integrity of the containment system is ensured, and the requirements for containment technologies are being met.
- The Restrictive Covenant for the property is in place and continues to be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this periodic review, the Department of Ecology has determined that the requirements of the Restrictive Covenant continue to be met. No additional cleanup actions are required by the property owner. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the remedy is maintained.

4.1 Next Review

The next review for the Site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

5.0 REFERENCES

- 1) Independent Remedial Action Report Park 90/5 Office Park, Seattle Washington December 1996, Dalton, Olmstead & Fuglevand.
- 2) Letter Report with supplemental information for Remedial Action Report, November 12, 1997, Dalton, Olmstead & Fuglevand.
- 3) Letter Report with additional information and analysis, July 17, 1999, Dalton Olmstead & Fuglevand.
- 4) Letter Report with soil sampling results, November 22, 1999, Dalton, Olmstead & Fuglevand.
- 5) Technical memorandum with chromium analysis results, September 22, 2000, Dalton, Olmstead & Fuglevand.
- 6) Technical memorandum with boundaries of “Duwamish Industrial Area Hydrogeological Pathways Project”, November 16, 2000, Dalton, Olmstead & Fuglevand.
- 7) Fax Memorandum with proposed boundaries of Restrictive Covenant for TPH, November 29, 2000, Dalton, Olmstead & Fuglevand.
- 8) 2001 Restrictive Covenant.
- 9) Ecology, 2011 Site Visit.

6.0 APPENDICES

6.1 Vicinity Map



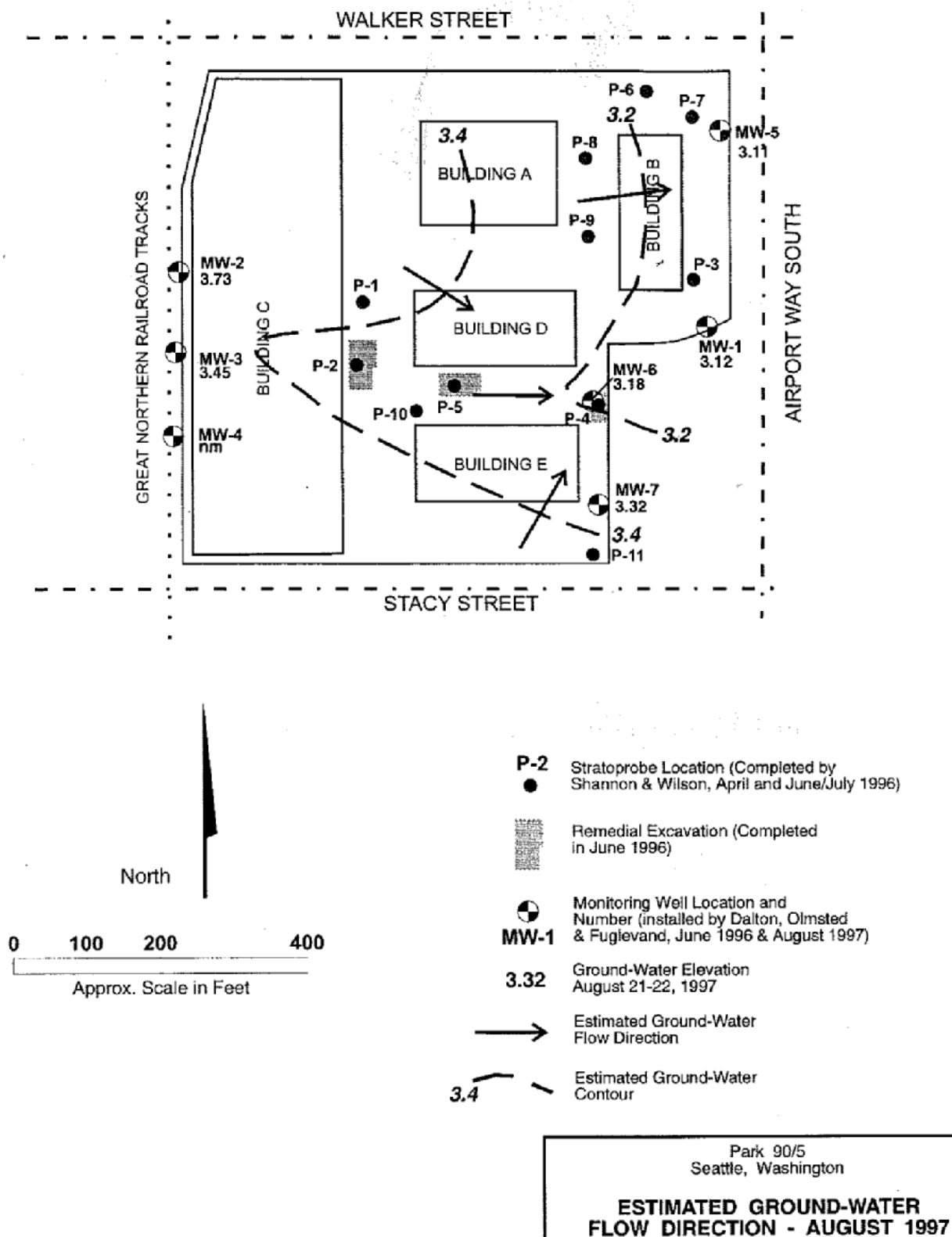
North

0 2400
Scale in Feet

Park 90/5 Office Park
Seattle, Washington

**SITE VICINITY
MAP**

6.2 Site Plan



6.3 TPH-Dx Concentration Map

not available

6.4 Environmental Covenant

FILED for Record at Request of
Name City of Seattle Law Dept.
Address 1600 4th Ave. 10th Floor
City Seattle WA 98104



20010510002681

RESTRICTIVE COVENANT

2203 Airport Way South, Seattle, WA

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by the City of Seattle, a Washington municipal corporation (the "City"), its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

An independent remedial action (hereafter "Remedial Action") occurred at the Property that is the subject of this Restrictive Covenant. The Remedial Action conducted at the Property is described in the following documents. These documents are on file at Ecology's Northwest Regional Office.

1. Independent Remedial Action Report, Park 90/5 Office Park, Seattle, Washington, December 1996, Dalton, Olmstead & Fuglevand;
2. Letter Report with supplemental information for the Remedial Action Report, November 12, 1997, Dalton, Olmstead & Fuglevand;
3. Letter Report with additional information and analysis, July 17, 1999, Dalton, Olmstead & Fuglevand;
4. Letter Report with soil sampling results, November 22, 1999, Dalton, Olmstead & Fuglevand;
5. Technical Memorandum with chromium analysis results, September 22, 2000;
6. Technical Memorandum with boundaries of "Duwamish Industrial Area Hydrogeological Pathways Project", November 16, 2000, Dalton, Olmstead & Fuglevand;
7. Fax Memorandum with proposed boundaries of restrictive covenant for TPH, November 29, 2000, Dalton, Olmstead & Fuglevand.

This Restrictive Covenant is required because the Remedial Action resulted in residual concentrations of petroleum hydrocarbons that exceed the Model Toxics Control Act Method A Cleanup Level for soil established under WAC 173-340-740. Some of this soil extends under the existing building and thus could not be excavated. Attached Figures # 4 and # 10 delineate the geographic area subject to the Restrictive Covenant. Areas on the Property outside of the dashed area shown on Figures #4 and # 10 are not subject to this Restrictive Covenant.

The undersigned, City, is the fee owner of real property (hereafter "Property") in the County of King, State of Washington, that is subject to this Restrictive Covenant. The Property is legally described as follows:

ALL OF BLOCK 242, INCLUDING ALL OF VACATED ALLEY IN SAID BLOCK, EXCEPT THAT PORTION OF THE EAST 170 FEET THEREOF LYING SOUTHERLY OF THE SOUTHERLY LINE OF THE SPURTRACK RIGHT OF WAY GRANTED TO NORTHERN PACIFIC RAILWAY COMPANY BY INSTRUMENT RECORDED MARCH 28, 1950, UNDER RECORDING NUMBER 3998467, AS A LIMITED BOUNDARY LINE;

LOTS 12 TO 22, INCLUSIVE, BLOCK 251;

ALL OF VACATED 8TH AVENUE SOUTH LYING BETWEEN SAID BLOCK 242 AND 251;

LOTS 1 THROUGH 11, INCLUSIVE, BLOCK 251, EXCEPT THE WEST 285 FEET THEREOF;

ALL IN SEATTLE TIDELANDS, IN KING COUNTY, WASHINGTON, AS SHOWN ON THE OFFICIAL MAPS ON FILE IN THE OFFICE OF THE COMMISSIONER OF PUBLIC LANDS AT OLYMPIA, WASHINGTON; AND

EXCEPT ALL THOSE PARTS OF LOTS 1, 2 AND 3, BLOCK 251, SEATTLE TIDELANDS, IN KING COUNTY, WASHINGTON, AS SHOWN ON THE OFFICIAL MAPS ON FILE IN THE OFFICE OF THE COMMISSIONER OF PUBLIC LANDS AT OLYMPIA, WASHINGTON, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTH LINE OF SAID BLOCK 251, 285 FEET EAST AS MEASURED ALONG SAID NORTH LINE FROM THE NORTHWEST CORNER OF SAID BLOCK, SAID POINT BEING IN THE EAST LINE OF THE PROPERTY CONVEYED TO THE GREAT NORTHERN RAILWAY COMPANY BY THE SEATTLE UNION STOCKYARDS BY WARRANTY DEED DATED JUNE 30, 1926, AND RECORDED MARCH 07, 1927, IN VOLUME 1346 OF DEEDS, PAGE 192;

THENCE SOUTH ALONG SAID EAST PROPERTY LINE, BEING PARALLEL WITH AND DISTANT 285 FEET EAST FROM THE WEST LINE OF SAID BLOCK 251, A DISTANCE OF 160 FEET;

THENCE NORTHEASTERLY IN A STRAIGHT LINE 164.92 FEET, MORE OR LESS, TO A POINT IN SAID NORTH LINE OF BLOCK 251, DISTANT 40 FEET EAST AS MEASURED ALONG SAID NORTH LINE, FROM THE POINT OF BEGINNING;

THENCE WEST ALONG SAID NORTH LINE 40 FEET TO THE POINT OF BEGINNING.

The City makes the following declaration as to limitations, restrictions, and uses to which the restricted area of the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property.

Section 1. A portion of the Property contains petroleum hydrocarbon contaminated soil located under the southeast side of Building C, as shown on attached Figures #4 and #10. The City shall not alter, modify, or remove the existing structure (Building C) in any manner that may result in the release or

exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology.

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Section 2. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or creates a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 3. The City must give thirty (30) days advance written notice to Ecology of the City's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the City without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action, if appropriate.

Section 4. The City must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.

Section 5. The City must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 6. The City shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the Property, and to inspect records that are related to the Remedial Action.

Section 7. The City reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant on the area depicted on Figures # 4 and # 10 shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

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CITY OF SEATTLE, a Washington municipal corporation

By [Signature]
Its Director of Fleets and Facilities

5-10-01
DATE

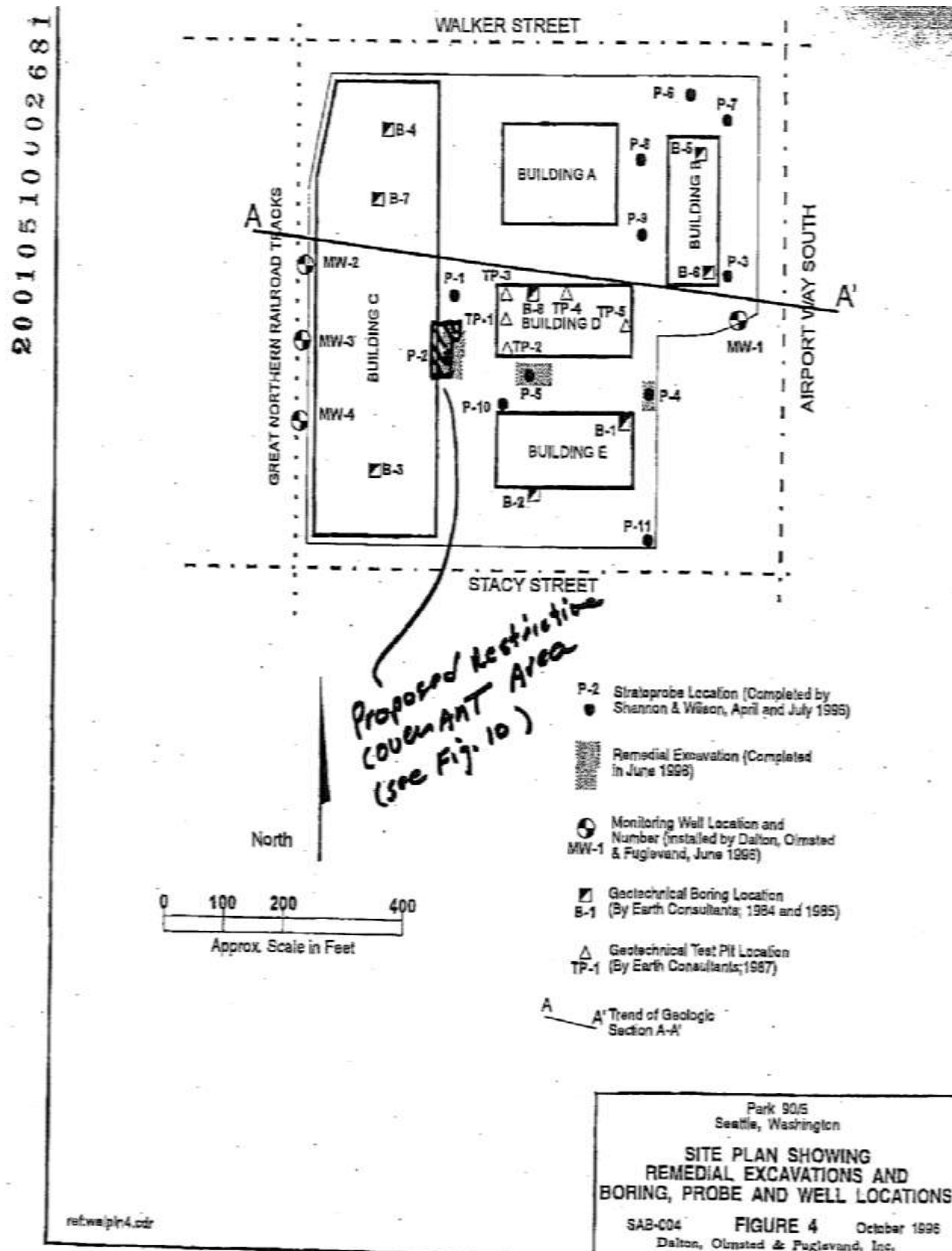
STATE OF WASHINGTON)
)ss.
COUNTY OF KING)

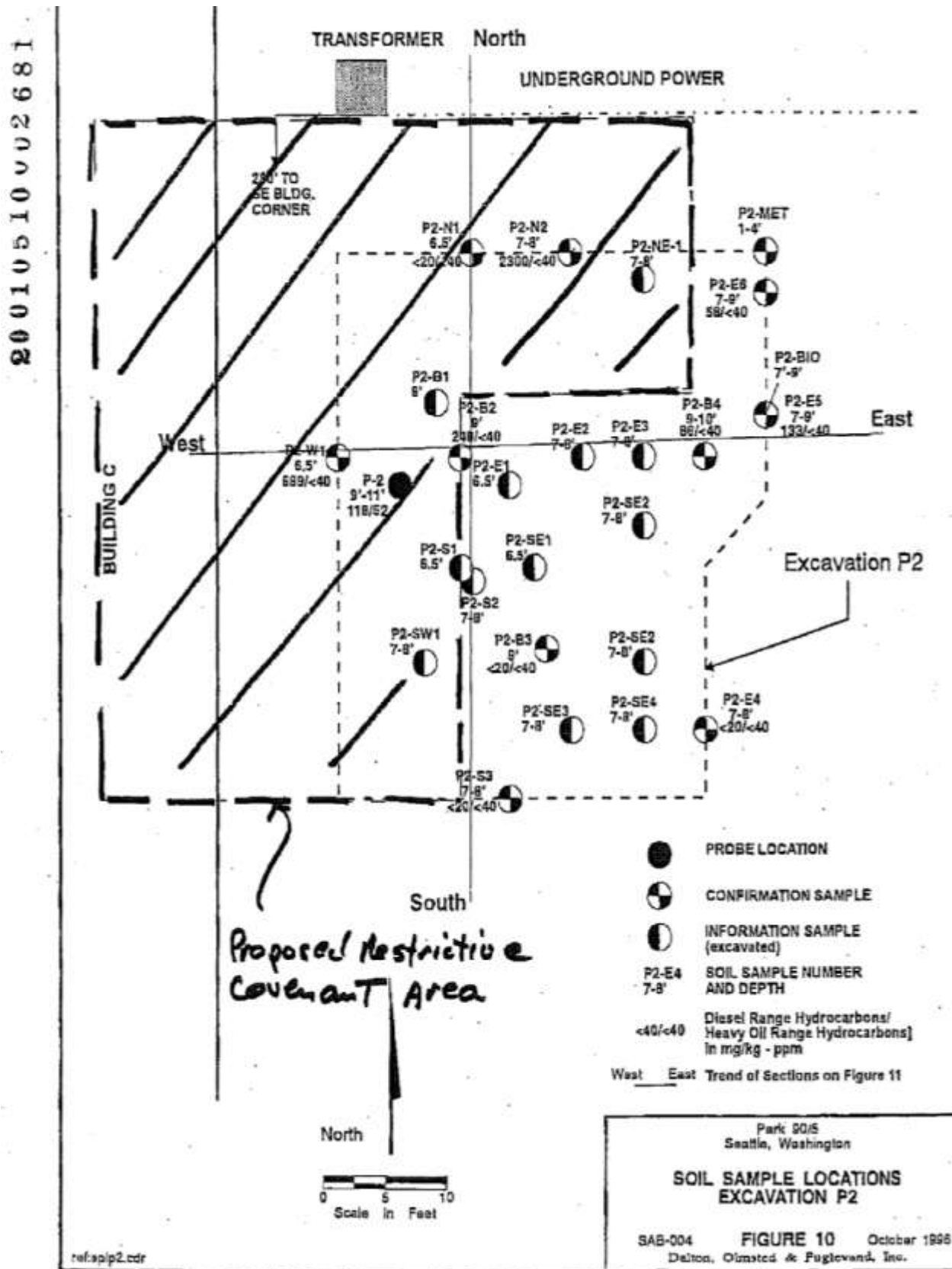
On this 10 day of May, 2001, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared Dwight Dively, to me known to be the Director of Fleets and Facilities for the City of Seattle, a Washington municipal corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said municipal corporation, for the uses and purposes therein mentioned, and on oath stated that he is authorized to execute the said instrument on behalf of the City of Seattle.

WITNESS my hand and official seal hereto affixed the day and year in this certificate above written.



Janet L. Krogh
Printed Name: Janet L. Krogh
NOTARY PUBLIC in and for the State of
Washington, residing at Seattle
My Commission Expires: 4/22/05





6.5 Photo log

Photo 1: Building C, north end - from the east



Photo 2: Building C, covenant area on other side of vegetation - from the southeast



Photo 3: Building C, area covered by covenant - from the southwest corner of Building D



Photo 4: Building C, area covered by covenant – from the east

