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DEPARTMENT OF ECOLOGY
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February 27, 2018

Ms. Mary Logue
Kelly-Moore Paint Company
301 West Hurst Drive
Hurst, TX 76053

Re: Opinion on Proposed Cleanup of the following Site:

- **Site Name:** Kelly Moore Paint Company
- **Site Address:** 5410 Airport Way South, Seattle, WA 98108
- **Facility/Site No.:** 2163
- **VCP Project No.:** NW2305
- **Cleanup Site ID:** 5064

Dear Ms. Logue:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your proposed independent cleanup of the Kelly Moore Paint Company facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Upon completion of the proposed cleanup, will further remedial action likely be necessary to clean up contamination at the Site?

YES. Ecology has determined that, upon completion of your proposed cleanup, further remedial action will likely be necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following releases:

- Gasoline, diesel, and heavy-oil range petroleum hydrocarbons (TPHg, TPHd, and TPHo), volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, xylenes (BTEX), trichloroethylene (TCE), n-propylbenzene, non-carcinogenic polycyclic aromatic hydrocarbons (PAHs) including naphthalene and dibenzofuran, carcinogenic PAHs (cPAHs), metals including arsenic, cadmium, copper, lead, mercury, and zinc into the Soil.

- TPHg, TPHd, TPHo, VOCs including BTEX, TCE, vinyl chloride (VC), acetone, 1,2,4-trimethylbenzene, and 1,3,5- trimethylbenzene, naphthalene, cPAHs, metals including arsenic, chromium, copper, lead, mercury, nickel, and zinc into the Ground Water.

Enclosure A includes a detailed description and diagram of the Site, as currently known to Ecology.

Please note that a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. Amec Foster Wheeler Environment & Infrastructure, Inc., *Limited Phase II Environmental Site Assessment Report*, November 12, 2009.

2. Amec Foster Wheeler Environment & Infrastructure, Inc., *Remedial Investigation and Feasibility Study*, October 2011.

3. Amec Foster Wheeler Environment & Infrastructure, Inc., *Underground Storage Tank Removal and Site Assessment Report*, May 2015.

4. Amec Foster Wheeler Environment & Infrastructure, Inc., *PCB Closure Report*, July 2015.

5. Amec Foster Wheeler Environment & Infrastructure, Inc., *Revised Remedial Investigation*, January 2016.

6. Amec Foster Wheeler Environment & Infrastructure, Inc., *Revised Remedial Investigation, Feasibility Study, and Disproportionate Cost Analysis*, March 2017.

Those documents are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by calling the NWRO resource contact at 425-649-7235 or sending an email to: nwro_public_request@ecy.wa.gov.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that, upon completion of your proposed cleanup, **further remedial action** will likely be necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A.**

Ecology has previously issued opinion letters dated February 19, 2014 and May 4, 2016; both letters indicated the extent of contamination has not been fully delineated. Ecology reviewed the latest reports including the 2017 *Revised Remedial Investigation, Feasibility Study, and Disproportionate Cost Analysis (RI, FS, and DCA)* report, and determined the extent of contamination in soil and ground water remains not delineated:

- The horizontal extent of soil contamination is not delineated. Total petroleum hydrocarbons (TPH) contamination in soil at the Site appears to have migrated across the Property boundaries to the north, east, and west. BTEX contamination in soil appears to have also migrated across Property boundaries to the east and west. Chlorinated solvent (TCE) contamination in soil is present at the north end of the Property and off-Property to the north. The non-carcinogenic PAHs contamination in soil appears to be present on the north-central and northeastern portions of the Property, and has likely migrated across the eastern Property boundary. cPAH contamination in soil appears to have migrated across Property boundaries to the north and east, and potentially to the west. The metal contamination in soil is present throughout the Property and off-Property to the north and east, and potentially to the west and south. None of these areas of soil contamination have been fully delineated.

- The vertical extent of the soil contamination is not delineated in multiple areas, including soil boring locations across the Property, former underground storage tank (UST) excavations, former piping trench excavations, current remediation piping trench excavations, and remedial excavations around previous borings (KM-19, KM-30, KM-32, KM-39, and KM-41).

- The extent of ground water contamination is not delineated. The west, east and south

extents of the TPH, VOCs, cPAHs, and metal ground water plumes are not fully delineated. Among them, the TPH and metal ground water plumes appear to have migrated across the western Property boundary to Airport Way south and beyond. The historic chlorinated solvent (TCE and VC) ground water plume on the north end of the Property has not been adequately investigated and characterized.

Additional Site characterization is required to fully delineate the horizontal and vertical extent for each contaminant in Site soil and ground water. A planned indoor air evaluation (proposed in the 2017 *RI, FS, and DCA* report) needs to be incorporated into the Site characterization.

Two former monitoring wells (KMW-03 and KMW-05) on the northern portion of the Property appear to have been destroyed during Property redevelopment in 2015. Additional work is required to locate and decommission these two monitoring wells in accordance with WAC 173-160-460. Please contact Noel Philip at 425-649-7044 or noel.philip@ecy.wa.gov for questions regarding locating and decommissioning the monitoring wells.

In addition, Figures 3-1, 3-2, and 3-3 in the 2017 *RI, FS, and DCA* report need to be updated to include all USTs, soil and ground water sampling locations. Currently, some former UST and sampling locations are missing on these figures.

2. Establishment of cleanup standards.

Ecology has determined the cleanup levels and points of compliance you established for the Site do not meet the substantive requirements of MTCA.

a. Cleanup levels.

As stated in Ecology's opinion letter dated May 4, 2016, the Property does not meet the MTCA definition of an industrial property (WAC 173-340-745(1)(a)(i)). Because the Site is not fully characterized, it is premature to determine cleanup levels. However, preliminary screening levels can be established.

The 2017 *RI, FS, and DCA* report proposed preliminary screening levels based primarily on MTCA Method B cleanup levels. However, the proposed Method B cleanup levels were not established in accordance with the procedure specified in WAC 173-340-720(4)(b) for ground water and WAC 173-340-740(3)(b) for soil. Furthermore, the correct values of the Method B cleanup levels available in Ecology's *Cleanup Levels and Risk Calculation (CLARC)* database were not used. Therefore, Ecology does not accept the preliminary screening levels provided in the 2017 *RI, FS, and DCA* report.

Because the Site is located near the eastern boundary of the Duwamish valley and close to the Duwamish Waterway, the Lower Duwamish Waterway Preliminary Cleanup Levels (PCULs) can be used as the preliminary screening levels for soil and ground water on the Site. The PCULs are available at https://fortress.wa.gov/ecy/gsp/CleanupSiteDocuments.aspx?csid=1643. The soil and ground water cleanup levels can be determined after the Site is fully characterized.

The Terrestrial Ecological Evaluation (TEE) provided in the 2017 *RI, FS, and DCA* report needs to be revised to indicate the area of contiguous undeveloped land on the Site and within the 500-foot radius of the Site is greater than 2 acres. A TEE form located at https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation needs to be completed based on the revised TEE. The soil cleanup levels may be revised based on the completion of the revised TEE.

b. Points of compliance.

Soil:

The standard point of compliance for soil based on the protection of ground water is throughout the Site and may extend below the water table. This is the appropriate point of compliance for the Site.

If further Site characterization determines certain exposure pathways are incomplete, the point of compliance may be revised.

Ground Water:

The standard point of compliance for ground water is throughout the Site from the uppermost level of the unsaturated zone extending vertically to the lowest most depth which could potentially be affected. This is the appropriate point of compliance for the Site unless further Site characterization determines use of a conditional point of compliance is needed.

3. Selection of cleanup action.

Ecology has determined that the incomplete Site characterization does not allow a determination as to whether the cleanup action you selected for the Site meets the substantive requirements of MTCA.

An appropriate cleanup action can be selected only after the Site is fully characterized and cleanup levels have been developed. The cleanup action selected must meet the minimum requirements in WAC 173-340-360(2). Ecology does not recognize the current

FS and DCA due to the incomplete Site characterization. Until this is done satisfactorily, this Site will not make progress in Ecology's Voluntary Cleanup Program (VCP).

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you proposed will be substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. Opinion is limited to proposed cleanup.

This letter does not provide an opinion on whether further remedial action will actually be necessary at the Site upon completion of your proposed cleanup. To obtain such an opinion, you must submit a report to Ecology upon completion of your cleanup and request an opinion under the VCP.

4. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up your Property under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may resubmit your proposal for our review. Please

do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me at 425-649-7109 or jing.song@ecy.wa.gov.

Sincerely,

Jing Song
Site Manager
NWRO Toxics Cleanup Program

Enclosure (1): A – Description of the Site

cc: Kathleen Goodman, Amec Foster Wheeler Environment & Infrastructure, Inc.,
Sonia Fernandez, VCP Coordinator, Ecology

Enclosure A

Description and Diagram of the Site

Site Description

This section provides Ecology's understanding and interpretation of Site conditions, and is the basis for the opinions expressed in the body of the letter.

Site: The Site is defined by the following releases:

- TPHg, TPHd, TPHo, BTEX, TCE, n-propylbenzene, naphthalene, dibenzofuran, cPAHs, arsenic, cadmium, copper, lead, mercury, and zinc into the soil.
- TPHg, TPHd, TPHo, BTEX, TCE, VC, acetone, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, naphthalene, cPAHs, arsenic, chromium, copper, lead, mercury, nickel, and zinc into the ground water.

The releases occurred on two King County tax parcel numbers 386840-0270 and 386840-0271, which are 1.26 and 1.49 acres in size respectively, for a total of 2.75 acres (Property). The Property is located on the east side of Airport Way South; South Lucile Street intersects with Airport Way South immediately west of the Property. The Property has a street address range of 5400-5580 Airport Way South in Seattle, Washington (Figure 1). The Site consists of the Property and surrounding parcels that are affected or potentially affected by the releases. Currently, the Site boundary is not fully defined.

Area and Property Description: The Property is located in a general industrial use area in the Georgetown neighborhood in south Seattle. The Property is bordered on the north by BNSF Railway Company (BNSF) tracks and the Olympic Foundry, on the west by Airport Way South and the Airport Way South overpass, on the east by BNSF tracks and a steep hillside, and on the south by an Interstate 5 connector ramp overpass. Interstate 5 parallels the Property's eastern border approximately 350 feet to the east.

The current Property layout is depicted on Figure 2 of the Site Diagrams. The southern portion is owned by JST GeorgeTown, LLC, and the northern portion is owned by NCD GeorgeTown, LLC. A large warehouse building is located on the southern portion of the Property with a paved parking lot surrounded by landscaping. A new warehouse building built in 2015 currently occupies the northern portion of the Property. The southern portion is leased by Elysian Brewing (a beer manufacturer), who moved into the warehouse in 2011 to add bottling to its operations. Elysian Brewing is also the primary tenant of the new building on the northern portion of the Property which is also used for brewing beer. The buildings are not open to the public.

Site History and Current Use: The Property has been used for industrial purposes since the early 1900s. The southern portion of the Property was used as an auto garage, wrecking yard, and service station from the 1920s through the 1940s. It was then used as a machinist union hall until the 1990s. The northern portion of the Property was used by Pacific Coast Coal Company in the 1940s, and by the Preservative Paints Factory and Asphaltum Products Roofs and Mineral Paints dating back to 1929. Between the 1920s and 1950s, the Property was used for industrial purposes and the presence of USTs is documented.

Kelly Moore Painting Company (Kelly Moore) acquired the Property in 1994. Portions of the Property were then used as a paint manufacturing plant that blended paints and pigments until 2008. By 2009, Kelly Moore was no longer using the Property and was leasing the buildings to various commercial tenants. Kelly Moore sold the southern portion of the Property in 2011 and the northern portion in 2014. The former Property layout during Kelly Moore's operation is depicted on Figure 3 of the Site Diagrams. A large warehouse building has been present on the southern portion of the Property since 1997, which is still present on the Property and used for beer manufacturing. A large conglomeration of buildings of various ages had been present on the northern portion of the Property in some form between the 1920s and 2015. Usage of the former buildings on the northern portion of the Property prior to the cessation of manufacturing in 2008 are listed as following:

- Building 1 – Used for warehousing but reportedly was formerly used as a tooling area.
- Building 2 – Used for warehousing.
- Building 3 – Used for warehousing but a maintenance shop was reportedly located here in the past.
- Building 4 – Used for warehousing.
- Building 5 – Used for warehousing. A door formerly opened to the east side of the Site and an outdoor dumpster. This area was formerly used for outdoor storage and was not enclosed as part of the building conglomeration until after 1985.
- Building 5A – Used for product storage tanks; a long strip floor drain in the building was routed into a 6-foot-deep sump.
- Building 6 – Two-story building used for paint manufacturing.
- Building 7 – Used for paint manufacturing. A former maintenance shop was reportedly located here in the past. A small electrical room (confined space) located upstairs in this building was accessible only by ladder.
- Building 8 – Used for paint manufacturing. A smaller former retail area located on the west side of the building also included a second story that was used for manufacturing.
- Building 9 – Used for warehousing; office space and restrooms were included on the west side of the building.
- Building 10 – Used for warehousing. This building did not have an exterior wall on the east side and was open to the outdoor loading dock area on this side.
- Building 12 – Used for office space.

A series of USTs were present on the Property; these USTs were periodically replaced and removed in 1985, 1987, 1989, 1997, 1998, and 2009. The documented former USTs were located on the central portion of the Property between the southern warehouse and the northern building conglomeration. Two additional previously unknown USTs were found and removed in 2015. These two USTs were also located on the central portion of the Property.

Sources of Contamination: Contamination at the Site are believed to be a result of a combination of multiple sources. Specific sources of contamination include the following:

- Leaks or spills related to a series of former USTs and associated piping located on the central portion of the Property, including piping that ran underground into the buildings north of the

former UST area, are believed to be sources of contamination.

- Leaks or spills during historical operations before the storage areas were paved, or via sumps and catch basins are also potential sources of contamination. It is unknown when the Property was fully paved and the sumps and catch basins were covered.
- Releases could have migrated from the neighboring rail line property situated slightly uphill and hydraulically up-gradient of the Site. There may be other up-gradient sources.
- Various imported fill materials have been observed during borings and excavations activities and could be sources of contamination.
- Air depositional contributions are suspected to be a source of contamination as the Site is located in a heavily industrial area between an interstate freeway, a major city arterial, and an active rail yard.
- Activities by former owners and operators at the Property prior to paint manufacturing may have contributed to the contamination.

Physiographic Setting: The Property is located immediately west of Beacon Hill and along the eastern boundary of the Duwamish Valley. The Duwamish Valley floor contains the floodplain of the formerly meandering Duwamish River, which historically has been partially filled to prevent and control flooding, straightened and channelized to create the Duwamish Waterway. The Duwamish Waterway is located approximately 5,000 feet west of the Property.

Surface/Storm Water System: The nearest surface water body is the Duwamish Waterway approximately 5,000 feet west of the Property. Surface water prior to 2015 infiltrated into the soil in unpaved areas of the Property. Some storm water may have discharged to the City of Seattle storm sewer system via a connection on Airport Way South. The Property is currently completely paved; a new storm water system is present on Property connecting to the City of Seattle storm sewer system.

Ecological Setting: The land surface of the Property is covered by two buildings and asphalt or concrete pavement. Other surrounding areas in the vicinity of the Property are covered by asphalt or buildings. Georgetown Playfield, a 5.13-acre city park, is located approximately 300 feet southwest of the Property and contains grassy areas that could attract wildlife.

Geology: The Site lies at the western base of Beacon Hill, in an area consisting of fluvial deposits made up of interbedded layers of sands, silts, and silty sands. The sand and silt layers in the vicinity of the Site are present to depths of at least 50 to 60 feet below ground surface (bgs). Overlying the fluvial deposits is fill material that was placed throughout the local region early in the twentieth century and as part of the channelization of the Duwamish River into what is now the Duwamish Waterway, when industrial development began in the area. Fill materials typically used in the region may have included dredged Duwamish River sediments, but also other types of fill such as construction and wood debris.

Soils encountered at the Site consists of mostly poorly-graded sand, silt, and occasional gravel fill. Other fill materials encountered at the Site included brick and wood fragments, blackened or potentially burned materials and crushed concrete. The maximum depth explored was 16 feet bgs.

Ground Water: Ground water occurs in a poorly-graded sand and silt layer between 5.5 and 11.5 feet bgs at the Site. Shallow ground water generally flows to the west with a gradient of less than 0.5 feet per foot across the Site.

A total of 12 ground water monitoring wells (KMW-01 through KMW-10, KMW-02R, and KMW-03R) have been installed at the Site. These wells were advanced to total depths ranging from 13.5 to 15 feet bgs, and installed with 10-foot screens located between depths of 3.25 and 15 feet bgs. Eight monitoring wells (KMW-04, KMW-07 through KMW-10, KMW-02R, and KMW-03R) are still active. Two monitoring wells (KMW-01, KMW-02) were properly decommissioned in February 2015. The other two monitoring wells (KMW-03 and KMW-05) appear to have been destroyed during the demolition and new building construction in 2015. Additional work is required to locate the two destroyed monitoring wells using surface geophysical methods. After being located, the two monitoring wells should be decommissioned properly according to the requirements provided in WAC 173-160-460.

Water Supply: The Property's drinking water is supplied by City of Seattle, which is sourced primarily from two watersheds including the Cedar River and Tolt River watersheds. According to Ecology's *Well Log* database, there is no water well within 0.5-mile radius of the Property.

Release and Extent of Soil and Ground Water Contamination: Due to the number of industrial activities that have occurred at the Property, multiple environmental investigations and interim remedial actions have been completed. The bullets below summarize the major investigations and interim remedial activities known to Ecology that have taken place at the Site. Please note a record of every UST removal and a summary of the specific findings has not been provided to Ecology. In addition, Ecology does not recognize the preliminary screening levels provided in the 2017 *RI, FS, and DCA* report. Because adequate screening levels have not yet been determined, the description below is generic and preliminary, which is subject to change.

- In 1985, six USTs used to store paint manufacturing components were removed. These USTs were reportedly in the same area as later UST removal activities conducted in 1997; however, no additional information is available.

- One diesel UST was removed from the southern portion of the Property around 1987, and a Bunker C heating oil UST was removed from the southern portion of the Property around 1989. The locations and other information for these USTs are not available.

- In February 1994, 250 gallons of toluene reportedly leaked to soil around one of the USTs at the Site. Soil borings were completed near the release, and soil samples collected from a depth of 3 to 6 feet bgs showed toluene concentrations of 91 to 95 mg/kg in soil. Additional information including the location of the release and soil samples is not provided to Ecology.

- In 1997, a 300-gallon UST was found under the northern building conglomeration during a demolition project and was removed. No other information is available.

- An additional 14 USTs used to store paint manufacturing components, including several USTs that had been replaced during the 1985 UST removal, were removed in 1997 and 1998. When the USTs were removed, soil around the perimeter of the excavation was darker than the soil surrounding the USTs and emitted a hydrocarbon-like odor, indicating a potential release(s). However, because of the lighter soil surrounding the USTs and the good condition of the USTs, the soil staining was deemed to be likely the result of leaks from the previous USTs that were removed from these areas in the mid-1980s. More than 1,000 tons of contaminated soil were reportedly excavated and disposed of off-Site. The excavation did not extend below the water table; but information on the depth of the water table encountered in the excavation is not provided to Ecology. Soil contaminated with TPH as mineral spirits/Stoddard solvent and VOCs including toluene, ethylbenzene, total xylenes, and naphthalene remained at the bottom and sidewalls of the excavations. The excavation limits and soil sampling locations are depicted on Figure 4 of the Site Diagrams. Seven new USTs were installed in the open paved area between the northern building conglomeration and the southern warehouse building, leaving a total of nine USTs on the Property. The purpose of these new USTs was to store paint manufacturing components.

- In October and November 2009, nine USTs (seven 8,000-gallon product USTs and two 7,000-gallon containment USTs) and associated piping were removed from the Site, along with other historical piping associated with former USTs. Seven of the USTs were installed in 1997 and contained a variety of products used in the paint manufacturing process to liquid depths of approximately 8 to 12 inches. The remnant products were removed. The other two USTs are containment tanks used to contain fire suppression water and spill overflow from the manufacturing facility. All USTs were observed to be undamaged, with no pitting, staining, or holes. However, several sets of older piping were identified that were not associated with the USTs being removed, thus indicating that other USTs had been in that location previously. Wherever possible, older piping was removed, including a 65-foot section that was located beneath Building 7. Over-excavation of contaminated soil was performed in several areas; soil was excavated to a depth of 9.5 to 10.5 feet bgs in most portions of the excavation and was disposed of off Site. Soil and ground water samples were collected from the sidewalls and bottom of the final extent of the excavation. Soil contaminated with TPHg, ethylbenzene, xylenes, dibenzofuran, cPAHs, and metals remained in some areas. The UST excavation limits and soil sampling locations are depicted on Figure 5 of the Site Diagrams.

- In November 2009, four test pits were excavated after the UST removal in order to locate the source of the contaminated soil. Three test pits (TP-1 through TP-3) were excavated west of the seven product UST excavation. Soil or ground water samples were not collected from these test pits; however, field indicators suggested that a sidewall free of contaminants would not have been attained with additional westward excavation. The fourth test pit (TP-4) was excavated south of the two containment UST excavation. A soil sample collected at 8 feet bgs from the test pit indicated presence of TPHg contamination on the south sidewall of the test pit. Detailed information about the test pit excavation is not provided to Ecology. The TP-4 location is depicted on Figure 5 of the Site Diagrams.

- Between August 2009 and August 2010, three phases of a Phase II investigation were

completed to provide an evaluation of soil and ground water conditions at the Site. A total of 29 direct-push soil borings (KM-1 through KM-29) were advanced throughout the Site to total depths ranging from 2 to 15 feet bgs. Ground water was encountered in the soil borings at depths of 6 to 8 feet bgs. Soil samples were collected from 25 of the soil borings between 1.5 and 11.5 feet bgs; grab ground water samples were collected from 18 of the soil borings. Soil and/or ground water samples contaminated with TPH, BTEX, and PAHs were detected in the vicinity of the former USTs on the central portion of the Property; soil and/or ground water samples contaminated with TPH, PAHs and metals were detected on the southern portion of the Property (beneath the southern warehouse building and at the parking lot south of the building); soil and/or ground water samples contaminated with metals, cPAHs and chlorinated solvents (TCE and VC) were detected at the north end of the Property (north of the northern building conglomeration). The soil boring locations from which soil samples were collected are depicted on Figure 5 (northern portion) and Figure 6 (southern portion) of the Site Diagrams. The soil boring locations from which grab ground water samples were collected are depicted on Figure 7 of the Site Diagrams.

- Between 2008 and 2015, a polychlorinated biphenyl (PCB) cleanup within the interior of certain buildings was completed. In 2008, several areas of concrete flooring in Buildings 6 and 7 were scarified to remove the PCBs. Analytical results of samples from the scarified concrete surfaces in Buildings 6 and 7 showed PCB concentrations less than the MTCA Method A soil cleanup level of 1 milligram per kilogram (mg/kg) in the remaining concrete flooring material. Areas of flooring and scale pits in Building 8 showed PCB concentrations greater than 1 mg/kg. As a result of these findings, institutional controls were established as an interim action for Building 8. Building 8 was sealed off, and signage was installed to indicate that building materials remained present with PCBs above the regulatory limit. In 2015, a final removal of PCB-impacted materials was completed during the demolition of Building 8. The aboveground structures were demolished, previously-identified PCB-containing building materials were segregated, the southern portion of concrete slab inside former Building 8 was removed, over-excavation was conducted based on the soil sampling results, and several floor scale pits along with surrounding soil were removed. Following building demolition and soil removal, all confirmation samples collected at the Site were below the MTCA Method A soil cleanup level (1 mg/kg). The final sampling locations and results for Building 8 are depicted on Figure 8 of the Site Diagrams.

- In March 2011, fourteen direct-push soil borings (KM-30 through KM-43) were advanced at the Site to total depths of 7 to 16 feet bgs. Soil and/or ground water contaminated with TPH, BTEX, and cPAHs were detected throughout the northern portion of the Property. Ground water contaminated with TCE was detected at the northern end of the Property at boring KM-31. The soil boring locations are depicted on Figure 5 (northern portion) and Figure 6 (southern portion) of the Site Diagrams.

- In March 2011, five monitoring wells (KMW-01 to KMW-05) were installed on the northern portion of the Property to total depths between 13.5 and 14.5 feet bgs. Soil contaminated with cPAHs was detected in well KMW-02 at 5 to 5.5 feet bgs. Ground water samples collected from wells KMW-03 and KMW-04 were contaminated with arsenic, TPHg, BTEX,

naphthalene, and/or cPAHs.

- Two of the five monitoring wells (KMW-01 and KMW-02) were properly decommissioned in February 2015. Two monitoring wells (KMW-03 and KMW-05) were not able to be located since 2015; it is assumed they were accidentally destroyed during the construction of the new building foundation on the northern half of the Property. The monitoring well locations are depicted on Figure 7 of the Site Diagrams.

- In March 2015, nine direct-push borings (KM-44 through KM-52) were advanced to a total depth of 10 feet bgs on the central and northern portions of the Property. Soil samples were not collected from these borings. Grab ground water samples were collected from each boring via a 4-foot temporary well screen from 5 to 9 feet bgs. TPHg contamination was detected in ground water from all nine borings. The nine soil boring locations are depicted on Figure 7 of the Site Diagrams.

- In February and March 2015, soil excavations were conducted in six areas after the former building conglomeration on the northern portion of the Property were demolished. The excavation limits and soil sampling locations are depicted on Figure 5 of the Site Diagrams.

  Five of the excavation areas were identified by historic boring locations (KM-19, KM-30, KM-32, KM-39, and KM-41). The KM-19, KM-30, KM-32, KM-39 excavations were completed to a 10 feet by 10 feet extent to total depths of 7, 5.5, 2.5, and 4.5 feet bgs, respectively. The KM-41 excavation was completed to an extent of 15 feet wide (east-west) by 18 feet long (north-south) to a total depth of 6 feet bgs. Approximately 55.7 cubic yards of soil were removed from the KM-19, KM-30 and KM-32 excavations. The KM-39 and KM-41 excavations were located within the former Building 8 footprint and soil removed from these excavations was not documented. Confirmation soil samples were collected from the sidewalls and bottoms of the five excavations. Soil contaminated with TPHg, benzene, and/or cPAHs remained at the bottoms and sidewalls of all five excavations.

  The sixth excavation area was the piping trench located between former Buildings 7 and 8 where underground piping was discovered and partially excavated in October 2009. Two intersecting trenches were initially excavated to approximately 6 feet wide by approximately 120 feet in total length with depths ranging between 4.5 feet and 5 feet. A previously unknown 500-gallon UST was discovered at the north end; the UST was removed and the northern 60 feet of the original trench was expanded to the east by 8 feet, and extended to depths ranging from 5.0 to 5.5 feet bgs. The southern 25 feet of the original trench was also expanded to the east by 8 feet, and extended to the depth of approximately 5 feet bgs. A total of approximately 285 cubic yards of soil was removed from the piping trench excavation. Soil contaminated with TPH, BTEX, naphthalene, and cPAHs remained at the bottom and sidewalls of the piping trench excavation.

- Between June and December 2015, remediation piping was installed on the northern portion of the Property. The intended uses of the remediation piping was to conduct soil vapor extraction, air sparging, or possibly chemical oxidation. The remediation piping was placed

above the water table in two trenches, including an eastern trench under the footprint of the new building and a western trench under the footprint of the new parking lot. A second, previously unknown 500-gallon steel UST was discovered in the eastern trench. The UST was removed, but soil contaminated with TPHg, TPHd, benzene, and naphthalene remained in the vicinity of the UST. No soil sampling results were available for the other portion of the eastern trench. Soil samples (KM-R01 through KM-R13) collected from the western trench indicated soil contaminated with TPHg and benzene remained along the western trench. An additional approximately 241 tons or approximately 180 cubic yards of contaminated soil were excavated during the trenching work. The excavation limits and soil sampling locations are depicted on Figure 5 of the Site Diagrams. The remediation piping layout is depicted on Figure 2 of the Site Diagrams.

- A vapor barrier was installed beneath the warehouse building on the southern portion of the Property in 1997. Some photographs are available showing the placement of the vapor barrier during construction of the warehouse; however, as-built construction records were not available. In July 2015, a vapor barrier was installed under the new building on the northern portion of the Property. The location of the vapor barriers are depicted on Figure 9 of the Site Diagrams.

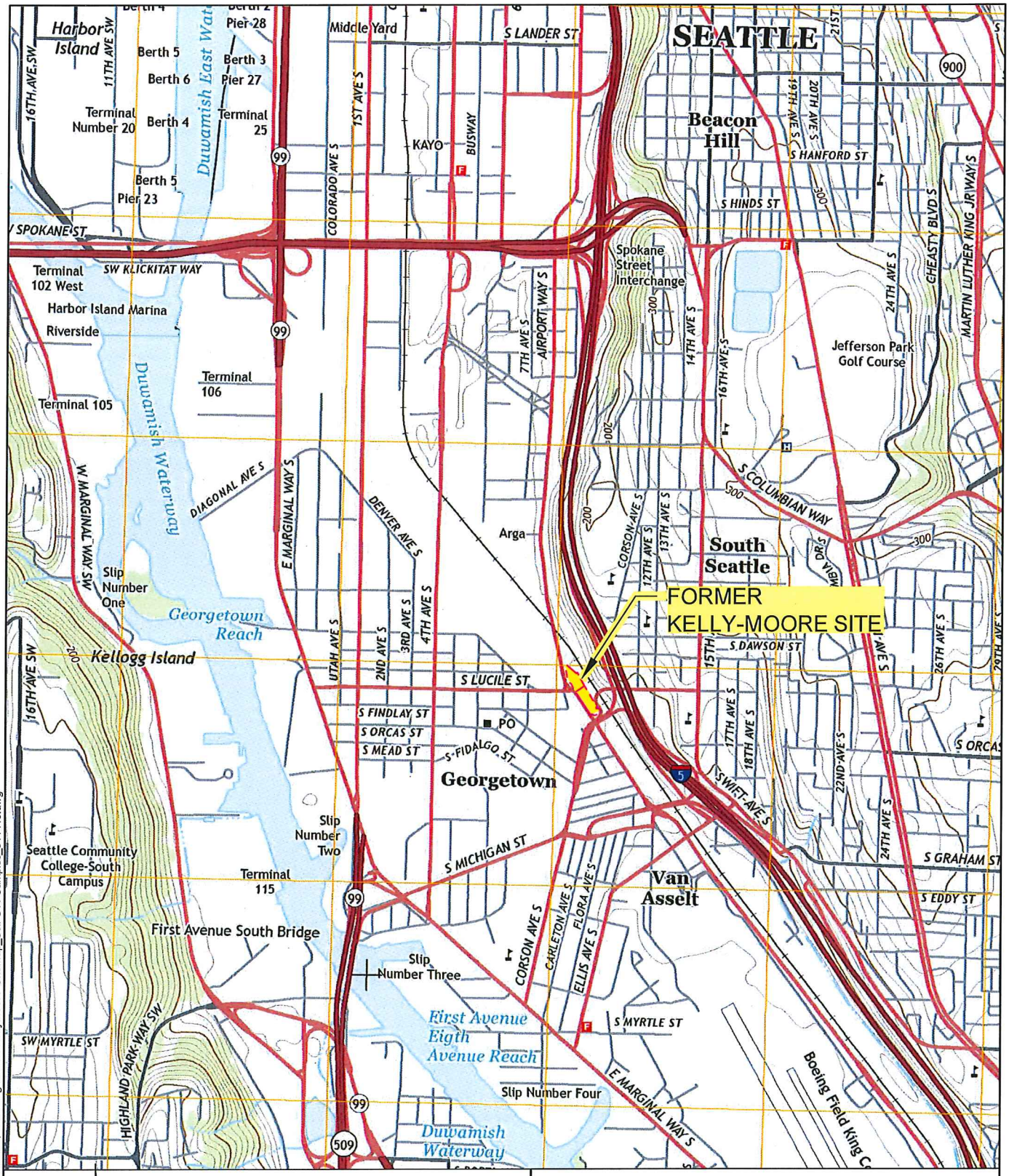
- In August 2016, three direct push soil borings (KM-53 through KM-55) were advanced to total depths of 15 feet bgs to the north of the western remediation piping trench on the northwestern portion of the Property. Soil contaminated with cPAHs and/or metals were encountered in all three borings. The three soil boring locations are depicted on Figure 5 of the Site Diagrams.

- In June 2016, five monitoring wells (KMW-02R, KMW-03R, and KMW-06 through KMW-08) were installed to replace former monitoring wells (KMW-01, KMW-02, KMW-03, and KMW-05). Soil contaminated with TPHg, TPHd, naphthalene, dibenzofuran, and cPAHs were encountered in well KMW-08 located on the northeastern portion of the Property. Soil contaminated with metals were encountered in well KMW-03R located on the northern portion of the Property. Soil contaminated with TPHg were encountered in wells KMW-03R, KMW-06, and KMW-07 on the northern portion of the Property. In November 2016, two off-Property monitoring wells (KMW-10 and KMW-11) were installed west of the Property at downgradient locations. The ground water monitoring well locations are depicted on Figure 7 of the Site Diagrams. The current ground water monitoring results are described below.

- Ground water monitoring at the Site has been conducted since 2011. Eight monitoring wells (KMW-04, KMW-07 through KMW-10, MW-02R, and KMW-03R) are currently active. Currently, TPH contamination in ground water are still present in wells KMW-03R, KMW-04, KMW-06, KMW-08, KMW-09, and KMW-10; VOCs contamination in ground water are still present in wells KMW-03R and KMW-04; naphthalene and cPAHs contamination in ground water are still present in wells KMW-03R, KMW-04, KMW-06, and KMW-08; metal contamination in ground water is still present in wells KMW-04, KMW-06, and KMW-10. None of these plumes are fully delineated.

Site Diagrams

Enclosure A: Figure 1



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PROJECT LOCATION
Kelly-Moore Paint Company
Seattle, Washington

By: APS	Date: 01/21/16	Project No. 14697
Amec Foster Wheeler Environment & Infrastructure, Inc.		Figure 2-1

Plot Date: 01/21/16 - 12:40pm, Plotted by: adam.stenberg
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Enclosure A: Figure 2

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Drawing Path: C:\Users\adam.stenberg\appdata\local\temp\AcPublish_1488\, Drawing Name: KellyMoore-SiteMap_Soil-GW-Samples_021517.dwg

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CURRENT SITE LAYOUT
Kelly-Moore Paint Company
Seattle, Washington

By: APS	Date: 03/03/17	Project No. 14697
Amec Foster Wheeler Environment & Infrastructure, Inc.		Figure **2-3**

Enclosure A: Figure 3

EXPLANATION

- KMW-04 — MONITORING WELL LOCATION
- PROPERTY LINE
- PARCEL LINE
- BLDG 7 — FORMER BUILDING NUMBER

JUNE 2010 AERIAL COURTESY OF GOOGLE EARTH

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SITE LAYOUT PRIOR TO BUILDING DEMOLITION
ON NORTHERN PARCEL
Kelly-Moore Paint Company
Seattle, Washington

By: APS	Date: 03/08/17	Project No. 14697
Amec Foster Wheeler Environment & Infrastructure, Inc.		Figure 2-2

Plot Date: 03/08/17 - 11:27am, Plotted by: adam.stenberg
Drawing Path: C:\Users\adam.stenberg\appdata\local\temp\AcPublish_4596\, Drawing Name: KellyMoore-SiteMap_Soil-GW-Samples_021517.dwg

Enclosure A: Figure 4

EXPLANATION

- S1 ● HISTORICAL SOIL SAMPLE LOCATION (1997)
- FLOOR DRAIN
- —— X —— FENCE LINE
- 7 BUILDING NUMBER

0 20 40
APPROXIMATE SCALE IN FEET

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HISTORIC SOIL SAMPLE
LOCATIONS AND SUMMARY RESULTS - NORTH
Former Kelly-Moore Manufacturing Facility
Seattle, Washington

By: APS	Date: 03/27/17	Project No. 14697
Amec Foster Wheeler Environment & Infrastructure, Inc.		Figure 2

Plot Date: 03/27/17 - 3:54pm, Plotted by: adam.stenberg
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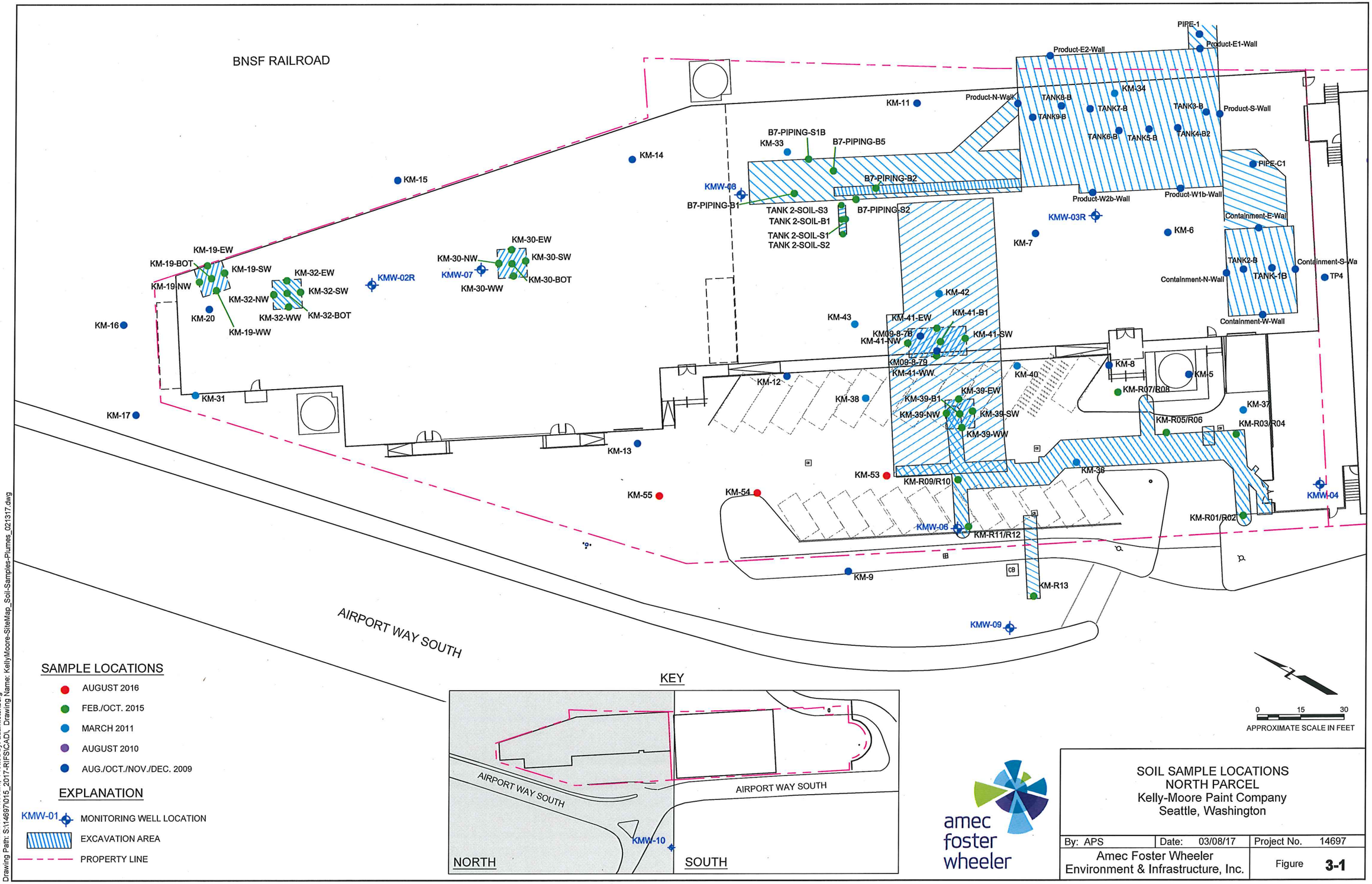
Enclosure A: Figure 5



SAMPLE LOCATIONS

- AUGUST 2016
- FEB./OCT. 2015
- MARCH 2011
- AUGUST 2010
- AUG./OCT./NOV./DEC. 2009

EXPLANATION

- KMW-01 MONITORING WELL LOCATION
- EXCAVATION AREA
- PROPERTY LINE

KEY

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SOIL SAMPLE LOCATIONS
NORTH PARCEL
Kelly-Moore Paint Company
Seattle, Washington

By: APS	Date: 03/08/17	Project No. 14697
Amec Foster Wheeler Environment & Infrastructure, Inc.		Figure 3-1

Plot Date: 03/08/17 - 11:00am, Plotted by: adam.stenberg
Drawing Path: S:\14697\015_2017-RIFS\CAD\, Drawing Name: KellyMoore-SiteMap_Soil-Samples-Plumes_021317.dwg

Enclosure A: Figure 6

BNSF RAILROAD

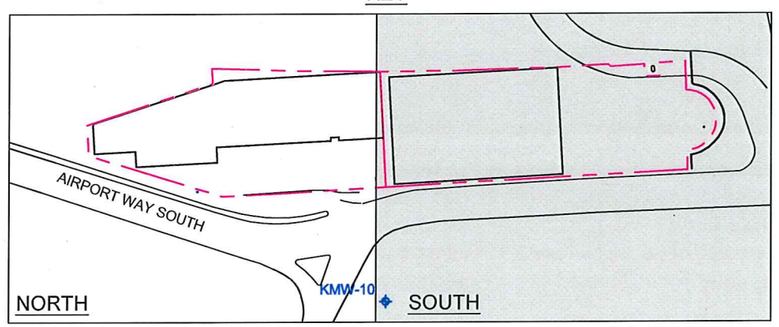
KM-29
KM-26
KM-24
KM-35
Containment-S-Wall
TP4
KM-28
KM-23
KM-22
KM-25
KM-27
KMW-04
LOADING DOCK
KM-2
KM-1
PARKING LOT

AIRPORT WAY SOUTH

SAMPLE LOCATIONS
- MARCH 2011
- AUGUST 2010
- AUG./OCT./NOV. 2009

EXPLANATION
- KMW-04 MONITORING WELL LOCATION
- PROPERTY LINE

KEY



0 15 30
APPROXIMATE SCALE IN FEET

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SOIL SAMPLE LOCATIONS
SOUTH PARCEL
Kelly-Moore Paint Company
Seattle, Washington

By: APS	Date: 03/08/17	Project No. 14697
Amec Foster Wheeler Environment & Infrastructure, Inc.		Figure **3-2**

Plot Date: 03/08/17 - 11:01am, Plotted by: adam.stenberg
Drawing Path: S:\14697\015_2017-RIFS\CAD\, Drawing Name: KellyMoore-SiteMap_Soil-Samples-Plumes_021317.dwg

Enclosure A: Figure 7

Plot Date: 03/03/17 - 11:18am, Plotted by: adam.stenberg
Drawing Path: C:\Users\adam.stenberg\appdata\local\temp\AcPublish_1488\, Drawing Name: KellyMoore-SiteMap_Soil-GW-Samples_021517.dwg

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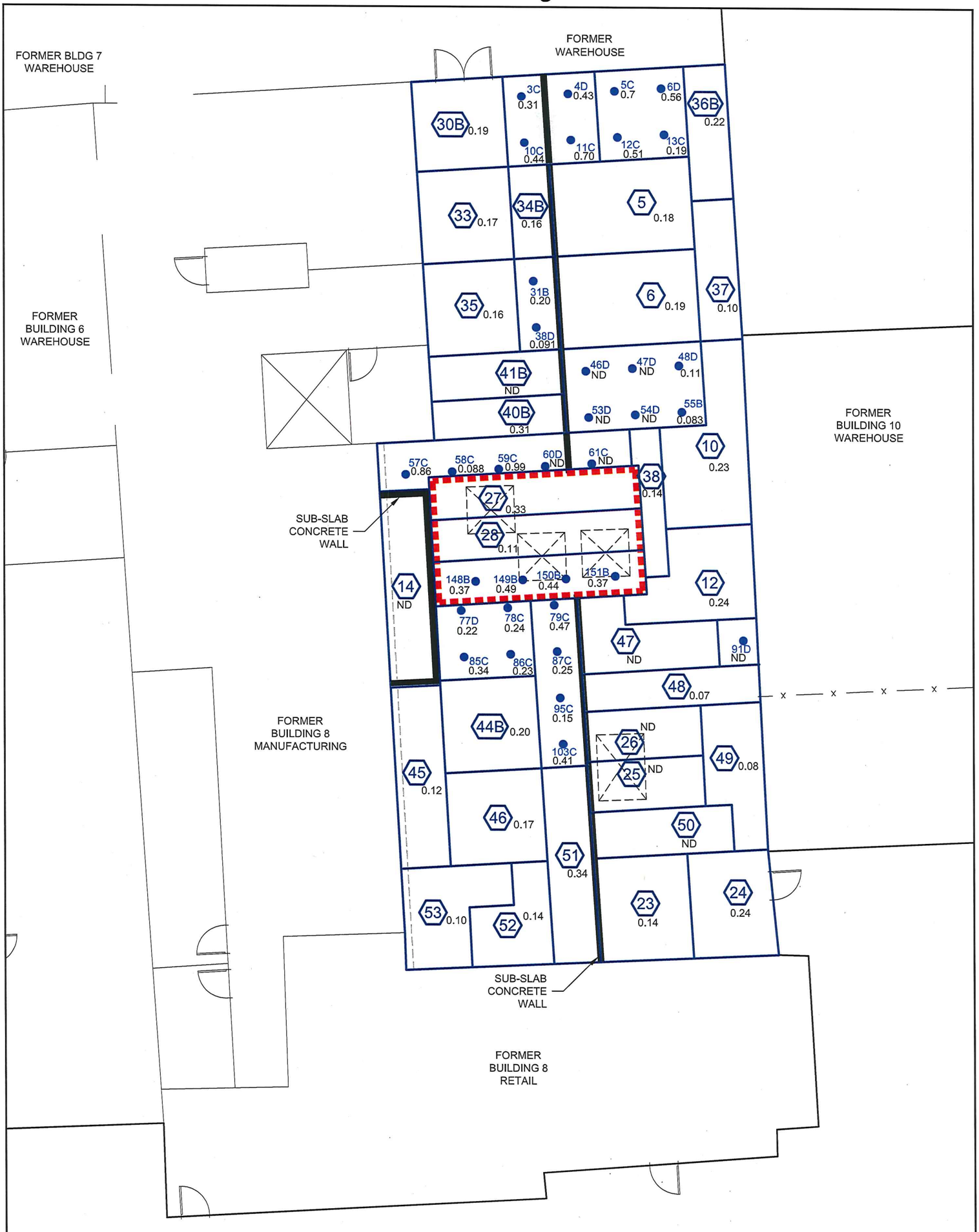
GROUNDWATER SAMPLE LOCATIONS
Kelly-Moore Paint Company
Seattle, Washington

By: APS	Date: 03/03/17	Project No. 14697
Amec Foster Wheeler Environment & Infrastructure, Inc.		Figure **3-3**

Enclosure A: Figure 8



EXPLANATION

- PCB PRIMARY SAMPLE LOCATION WITH PCB CONCENTRATION IN mg/kg
- 24 0.24 — COMPOSITE SAMPLE AREA AND DESIGNATION WITH PCB CONCENTRATION IN mg/kg
- EXTENT OF SCALE PIT EXCAVATION
- FORMER FLOOR SCALE PITS

NOTE:
ND = PCBs NOT DETECTED

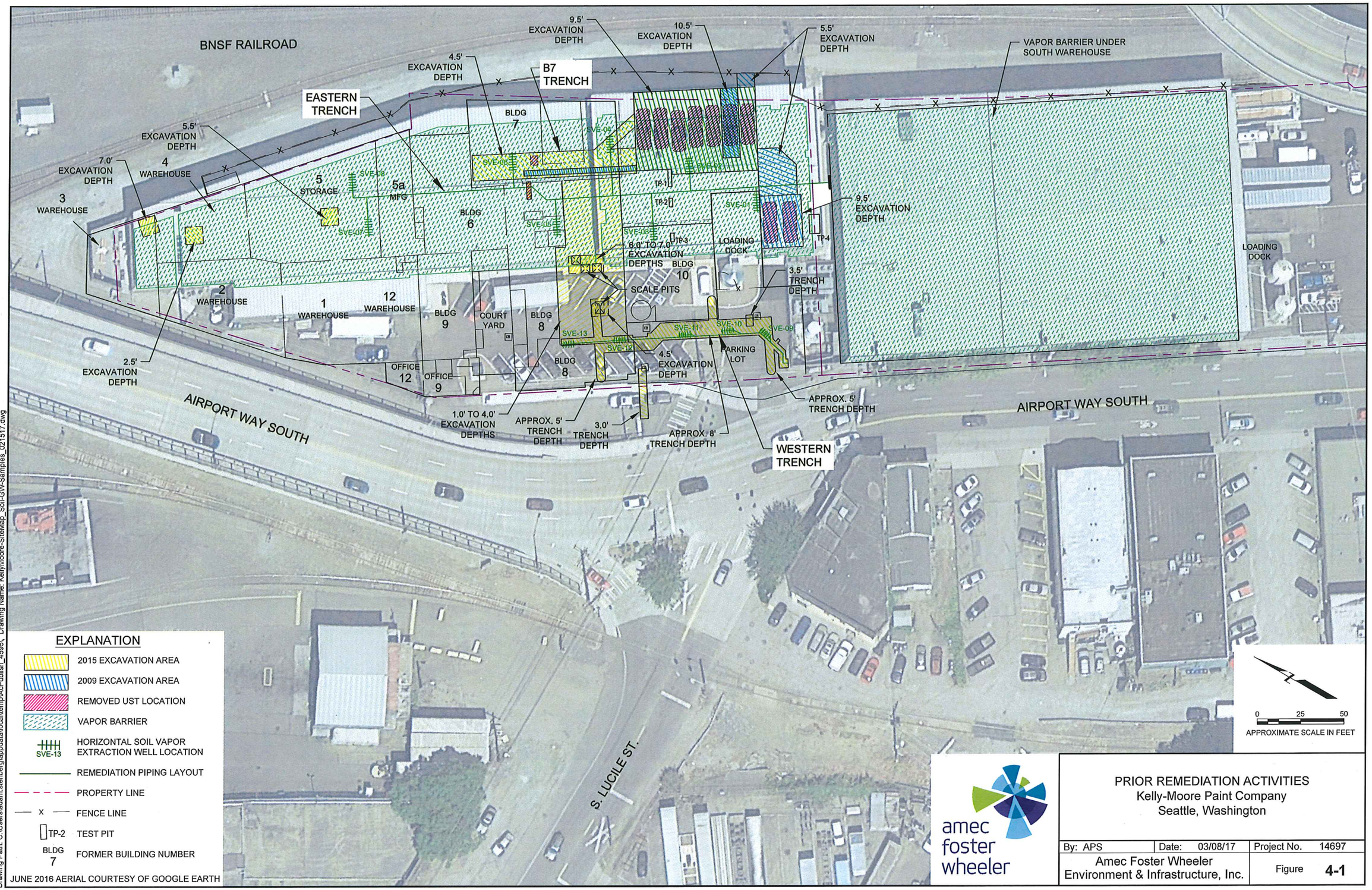
0' 5' 10' 15'
1" = 10'

CLIENT: NEW CORE DEVELOPMENT		PROJECT: 5410 Airport Way South, Seattle, Washington	DATE: MAY 2015
Amec Foster Wheeler Environment & Infrastructure, Inc. 600 University Street, Suite 600 Seattle, WA 98101	amec foster wheeler	TITLE: BUILDING 8 EXCAVATION FINAL PCB SAMPLE RESULTS	SCALE: 1" = 10'
			PROJECT NO.: 16110
			FIGURE: 4

DRAWN BY: AFS CHECKED BY:AM

3\16110\001_KM_Building8_Excav_050415.dwg - Fig4 Bldg8 - May. 14, 2015 1:06pm - adam.stenberg

Enclosure A: Figure 9



PRIOR REMEDIATION ACTIVITIES
Kelly-Moore Paint Company
Seattle, Washington

By: APS	Date: 03/08/17	Project No. 14697
Amec Foster Wheeler Environment & Infrastructure, Inc.		Figure 4-1

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Plot Date: 03/08/17 - 11:30am, Plotted by: adam.stenberg
Drawing Path: C:\Users\adam.stenberg\appdata\local\temp\AcPublish_4596\, Drawing Name: KellyMoore-SiteMap_Soil-GW-Samples_021517.dwg