ATTACHMENT 3
PA DEP APPROVED CLEAN UP PLAN

RT Environmental Services, Inc.

May 10, 2013

Mr. Christopher Falkler
Soil Scientist 2 – Environmental Cleanup and Brownfields
Pennsylvania Department of the Environmental Protection
Southeast Regional Office
2 East Main Street
Norristown, Pennsylvania 19401
(484) 250-5960 / Fax: (484) 250-5943

RE: SUBMITTAL CLEANUP PLAN
THE BAST PROPERTY
(A PORTION OF THE FORMER NICOLET INDUSTRIES PROPERTY)
SOUTH MAPLE WAY, BOROUGH OF AMBLER
MONTGOMERY COUNTY, PENNSYLVANIA
RT PROJECT #70461-10

Dear Mr. Falkler:

RT Environmental Services, Inc., (RT) is pleased to submit the enclosed Cleanup Plan for the above referenced site. Extensive environmental investigation work has been conducted at the site historically by varies entities. Ambler Crossings Development Partners, LP (Developer and Remediator) has retained RT to continue the Act 2 process for the Site. As such, we are submitting the enclosed Cleanup Plan which indicates attainment of the Site Specific Standard will be achieved through Engineering and Institutional controls as part of site redevelopment. The Report Submittal Notice newspaper publications, municipal notifications, and certified mail receipts for the municipal notifications are attached to the Cleanup Plan in Attachment 2 and Attachment 3.

Additionally, the report review fee is attached to this letter.

If you have any questions, please do not hesitate to call me at (610) 265-1510 ex. 238.

Very truly yours,

RT ENVIRONMENTAL SERVICES, INC.

Walter H. Hungarter, III
General Manager

cc: John Zaharchuk – Summit Realty Advisors, LLC
C. Herr, G. Brown, K. Eden - RT

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E-Mail RTENV@AOL.COM ■ Web Address http://www.RTENV.COM

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Land Recycling Program
Transmittal Sheet for Plan/Report Submission

Instructions: Please provide all requested information in each of the four sections. This transmittal sheet shall accompany any plan/report submitted to the Department under the Land Recycling Program. Proper completion of the Transmittal Sheet will assist Department review and may avoid a finding of plan/report deficiency. The Facility ID number can be obtained from the Department's Environmental Cleanup Program in the region where the site is located.

Section 1 - Site Identification

eFACTS Facility ID 743384

Site Name Ambler Crossing - Bast Property

Site Address SOUTH MAPLE WAY,

Municipality and County BOROUGH OF AMBLER, MONTGOMERY COUNTY

Section 2 - Remediation Standard . . Plan/Report . . Fees

Identify the remediation standard being pursued and the type of plan/report being submitted. Please note required Department fees follow each type of plan/report.

Check the relevant standard and the type of plan/report being submitted.

- ☐ Background Standard
  Final Report ($250 fee)
- ☒ Site-Specific Standard
  - ☐ Remedial Investigation Report ($250 fee)
  - ☐ Risk Assessment Report ($250 fee)
  - ☒ Cleanup Plan ($250 fee)
  - ☐ Final Report ($500 fee)
- ☐ Statewide Health Standard
  Final Report ($250 fee)
- ☐ Special Industrial Area
  - ☐ Work Plan (no fee)
  - ☐ Baseline Environmental Report (no fee)

Ensure your check covers all required fees and is made payable to the **Commonwealth of Pennsylvania**.

Section 3 - Municipal/Public Notice Confirmation

There are two stages in the Land Recycling Program where municipal and public notices are required. Read the information associated with each stage. You will be asked to confirm that information establishing your compliance with these notification requirements has been included with this submission.

☐ Check here if you are planning to meet the Background or Statewide Health Standard and your Final Report has been submitted within 90 days of the release.

Indicate date of release here _____

No further completion of this section is required if your Final Report for these two standards conforms to the 90 day time frame.

Stage 1 - Notice of Intent to Remediate (NIR)

☒ Check here to confirm you have included proof that a copy of your NIR was provided to each municipality where your site is located. Proof will be a copy of your cover letter and a copy of a signed certified mail receipt slip from the municipality.

☒ Check here to confirm a copy of a proof of publication document from a newspaper serving the area of your site has been included with this submission.

☐ Check here to indicate that a Site-Specific Standard or a Special Industrial Area is involved and a municipal request was received for development of a public involvement plan. The plan/report submission shall include municipality and public comments, which were submitted, and your responses to those comments.

Stage 2 - Cleanup Plan/Report Submission

April 30, 2013 Place date here that each municipality was notified of any plan or report submitted under any of the three remediation standards.

Ambler Gazette May 5, 2013 Place the newspaper name and date that your notice of your plan/report submission was published.

Section 4 - Project Contact

On the lines below, place the name, company, and business phone number of the individuals who can be contacted regarding this submission:

Watler H. Hungarter, III
610-265-1510 x 238
RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

Gary R. Brown, P.E.
610-265-1510 x 234

ACT 2 LAND RECYCLING PROGRAM

CLEANUP PLAN

BAST PROPERTY
SOUTH MAPLE WAY
BOROUGH OF AMBLER,
MONTGOMERY COUNTY, PENNSYLVANIA

RT PROJECT #70461-10

PREPARED FOR:

AMBLER CROSSINGS DEVELOPMENT PARTNERS, LP
201 SOUTH MAPLE AVENUE
SUITE 100
AMBLER, PA 19002

SUBMITTED BY:

RT ENVIRONMENTAL SERVICES, INC.
215 WEST CHURCH ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406

MAY 2013

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1.0 INTRODUCTION

This Act 2 Land Recycling Program Cleanup Plan has been prepared by RT Environmental Services, Inc. (RT) at the request of Ambler Crossings Development Partners, LP (ACDP) in support of redevelopment plans for the Bast Property located at South Maple Way and Chestnuts Streets in the Borough of Ambler, Montgomery County, Pennsylvania (Site). A site location map is included as **Figure 1**. A site Re-development Plan is included as **Figure 2**. A recent aerial photograph, which indicates current Site conditions, is included as **Figure 3**. ACDP plans to develop this Site with low rise residential apartments. Site re-development activities include site grading, filling of subsurface cavities/basements, mixing of a subsurface magnesia layer with other materials for additional strength (if needed), focused removal of asbestos and impacted soil, installation of subsurface utilities to the residential use, subsurface building foundation work including the installation of pilings, and the installation of appropriate cap throughout the Site as discussed within this Cleanup Plan. The Site has been subject to extensive environmental investigations historically and it is known that asbestos and impacted soils are present throughout the Site.

The Bast Property Site is only a portion of the Former Nicolet Industries site where asbestos products were manufactured. In addition to the historic asbestos manufacturing operations, prior site operations involved production of magnesia materials. The historic investigation work has documented areas of magnesia which are present at the Site. Additionally, historic fill material is present at the Site and there are detections of arsenic above the most stringent PADEP medium specific health standards. The Bast Property is described as an inactive waste disposal site regulated by National Emissions Standard for Hazardous Air Pollutants (NESHAP) 40 CFR 61.151. Additionally, the extent of magnesia materials present on the Site is depicted in **Figure 4.** Geotechnical analysis was recently completed to determine final design parameters for site structures taking into account the presence of asbestos, impacted soil, and the extent of magnesia materials.

A Notice of Intent to Remediate (NIR) was submitted to the PADEP on March 7, 2013. The PADEP acknowledged receipt of the NIR on March 15, 2013. A copy of the NIR and correspondences are included as **Appendix 1**. A copy of the Ambler Gazette legal notice is included as **Appendix 2.** Copies of the Report Submittal Notices to the Borough of Ambler and

the Ambler Gazette are included as **Appendix 3.** A copy of the 45-day notice letter associated with the recent geotechnical analysis is included as **Appendix 4**. A meeting was held on April 11, 2013 between ACDP, RT, and representatives of the Pennsylvania Department of Environment Protection (PADEP) to discuss the Cleanup Plan for remediation and redevelopment of the Site.

The presence of asbestos has been identified in the soil within the limits of proposed redevelopment. The asbestos and impacted soils are expected to be excavated during redevelopment activities will be consolidated in designated locations and/or be subject to focused removal and offsite disposal. These designated consolidation areas included the basements of former buildings and locations requiring fill to meet design grades. All asbestos and arsenic impacted soils will ultimately be covered with building foundations, asphalt roadways, concrete, and/or a minimum of a two foot clean soil cap.

This Cleanup Plan has been prepared in accordance with the requirements of the Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2) of 1995 – known as the Land Recycling Program, as part of the process for achieving cleanup liability relief under the program. The Cleanup Plan will be implemented in accordance with applicable Federal, State, and local regulations as well as asbestos regulations. Site constituents of concern in soil include asbestos and arsenic. Act 2 Liability Protection is being sought for asbestos and arsenic present in historic fill above the applicable statewide health standards. A Site Specific Standard with engineering and institutional controls to preclude the exposure pathway is to be used to meet the Site Specific Standard for asbestos and arsenic in soils.

The sections that follow provide a description of the remedial actions and Site redevelopment activities including the procedures which will be followed.

This report is structured as follows:

- Section 2.0 Presents a description and brief history of the Site;
- Section 3.0 Presents a description of the scope of work and procedures to be implemented for the handling of asbestos and impacted soils are s;
- Section 4.0 Presents a description of water controls to prevent uncontrolled releases

of surface runoff from the Site;

- Section 5.0 Presents a description of the procedures to be implemented during handling of the asbestos and impacted soils are ;
- Section 6.0 Presents a description of final Site grading and capping of asbestos and impacted soils are ;
- Section 7.0 Presents a description of the Health and Safety requirements to be implemented during the handling of asbestos and impacted soils are s;
- Section 8.0 Presents a description of the construction oversight to be performed during redevelopment activities;
- Section 9.0 Presents a description of the Final Report to be generated to summarize the remedial actions and redevelopment activities;
- Section 10.0 Post Remedial Care Plan
- Section 11.0 Contacts
- Section 12.0 References

2.0 SITE DESCRIPTION & HISTORY

The Site consists of one parcel in the Borough of Ambler – Tax Block 28, Lot A which as an area of 4.61 acres, see **Figure 2**. The Bast property, as well as the adjacent Ambler Asbestos Piles Site (former Superfund site), were once part of the Nicolet Industries facility, where asbestos and magnesia products were manufactured. The Site is located north of the former Superfund site, south of commercial properties and SEPTA parking lot on South Maple Way, east of residential properties along Chestnut Street, and west of SEPTA commuter railroad tracks.

The former manufacturing buildings and associated smaller sheds have all been demolished during previous redevelopment attempts. The former industrial buildings were constructed of a combination of stone, concrete, brick, and steel walls with concrete slab on grade floors in most areas. A basement was present in portions of several buildings. An underground tunnel was also connected to industrial structures on an adjacent property to the south. Additionally, there is an existing underground culvert beneath the Site oriented generally in an east-west configuration.

The Site is covered by the remains of the former manufacturing buildings, small areas of grass and vegetation, asphalt, and concrete paved areas. Two abandoned railroad sidings were present on the Site, which since have been removed. The former sidings entered the Site from the east, with one extending to a loading dock located along the east side of the former buildings. The second siding extended to the west along the southern property boundary. The sidings were predominately located within asphalt paved areas of the Site. A concrete pad is located on the southwestern portion of the Site.

As stated above, previous investigation activities performed at the Site have identified the presence of asbestos in the soil across the entire Site. Areas of asbestos are presented in **Figures 4, 5,** and **6**. Additionally, the extent of magnesia materials present on the Site were investigated historically and the extent of magnesia materials is depicted in **Figure 7.**

3.0 SCOPE OF WORK

Ambler Crossings Development Partners, LP plans to redevelop the Bast Property Site with low rise residential apartments. Site re-development activities will include site grading, filling of subsurface cavities/basements, mixing of a subsurface magnesia layer with other materials for additional strength (if needed), focused removal of asbestos and impacted soil, installation of subsurface "clean" utility corridors to the residential buildings, subsurface building foundation work including the installation of pilings, and the installation of appropriate cap throughout the Site as discussed within this Cleanup Plan. The Site has been subject to extensive environmental investigations historically and it is known that asbestos and impacted soils are present throughout the Site.

3.1 ASBESTOS AND IMPACTED SOILS

Site re-development activities will include site grading, filling of subsurface cavities/basements, mixing of a subsurface magnesia layer with other materials for additional strength (if needed), focused removal of asbestos and impacted soil, installation of subsurface "clean" utility corridors to the residential buildings, subsurface building foundation work including the installation of pilings, and the installation of appropriate cap throughout the Site where asbestos and impacted soils have been documented.

The presence of asbestos in the soil presents a potential exposure issue for construction personnel performing the activities directly related to Site development, off-Site receptors (nearby residential areas), and for individuals using or responsible for maintaining the Site. The primary exposure risk for asbestos is inhalation. As such, procedures will be implemented to minimize the potential inhalation exposure route. The implementation of these procedures will act to eliminate and reduce the generation of visible emissions during the Site development activities, which involve the handling of asbestos and impacted soils. Visible emissions means any emission, which is visually detectable without the aid of air monitoring instruments, coming from activities related to handling of asbestos and impacted soils. This does not include condensed, uncombined water vapor (40 CFR 61.141).

Section 61.151 of the asbestos NESHAP 40 CFR Section 61.151, requires that the owner or

operator of an inactive waste disposal site regulated by this section provide certain notices and other information in writing to the U.S. Environmental Protection Agency (EPA) (or the delegated state agency) at least 45 days prior to excavating or otherwise disturbing any asbestos containing waste material deposited at such a site. RT submitted letters to the PADEP air quality program and EPA Region 3 asbestos program documenting initial Geotechnical investigation work in accordance with section 61.151. A copy of this letter is included as **Appendix 4**.

Currently, the developers are planning a tentative start date in early August 2013 and completion date for the planned earth disturbance and capping activities by January 2014. These activities will begin following approval of the Cleanup Plan, receipt of other necessary governmental approvals for the proposed redevelopment, (and closing on the transaction to acquire the Site from its current owners.) Once these events occur and the redevelopers are able to identify start and completion dates for the earth disturbance work, they will provide written notice to the Department's environmental cleanup and air quality programs and EPA Region 3's asbestos program, at least 45 days prior to the anticipated start date.

3.2 ARSENIC CONTAINING SOILS

Arsenic is present on the eastern side and in an isolated area of the Site between proposed Building 1 and existing railroad right-of-way. Arsenic was detected at a concentration of 15.5 mg/kg in SB-75A-007 at a depth of 1.5 – 2 feet below ground surface. Arsenic impacted soils will ultimately be covered with an asphalt roadway in this area of the Site. Arsenic impacted soils are included as **Figure 8**.

3.3 SITE PREPARATION

Site Preparation activities will include the following:

- Securing of the Site;
- Establishing work zones;
- Setup of air monitoring stations;
- Removal of debris piles and former foundation structures where applicable; and

- Site clearing and grubbing.

Prior to performing any work on Site, the perimeter will be secured by installation of temporary fencing. No trespassing and asbestos work signs, as required by regulations, will be posted on the perimeter fence line.

Initially the entire Site will be considered to contain asbestos and impacted soils and therefore will designated as an exclusion zone. Definitions of the various work zones are described in more detail in Section 7.6. The contaminant reduction zone will be established at the exit/entrance to the Site with the clean/support zones outside the fenced perimeter of the Site. The contaminant reduction zone will include facilities for decontamination of both personnel and equipment. The support zone will initially be located outside of the perimeter fencing at the main entrance to the Site. The main entrance to the Site is shown on the Grading Plan / Soil Erosion and Sediment Control Plan included as **Appendix 5**.

A wind sock will be installed in a location that is visible from as much of the Site as practical. The wind sock will be used to determine upwind and downwind locations for the daily air monitoring program. Air monitoring stations will also be constructed around the perimeter of the Site. Perimeter air monitoring will be conducted during the Site development activities in which asbestos and impacted soils are handled or relocated on site to monitor Site perimeter air quality. The air monitoring program is discussed in detail in Section 7.7.

Potable water will be provided to the contaminant reduction zone for the decontamination of personnel and equipment as well as dust control in the exclusion zone during the performance of Site development activities. The nearest hydrant will be used to supply the potable water required during Site development activities. If an emergency supply of water is needed for dust suppression, then a water tanker will be brought to the Site to supply potable water.

Grubbing of the vegetation will be performed as required for the performance of Site redevelopment activities. Brush and tress (if any) will be cut down, chipped, and disposed off-Site. Large stumps will be removed and all soil on these stumps will be removed using a fire hose to wash off the soil. Wash waster will be handled as described in Section 4.0.

The following is the sequence in which work is expected to be conducted on the Site:

1. Site preparation activities to include, securing site perimeter boundaries, establishing work zones and air monitoring stations.

2. Site grading will be conducted prior to the installation of the foundations for the buildings and asphalt paving as per Section 3.3. The soil with the highest amount of asbestos (i.e. the courtyard area), see **Figures 4 – 6**, will be placed in the basements of the former buildings adjacent to the courtyard area.

3. Demolition of existing building foundations as per Section 3.4.

4. Installation of the subsurface utility lines will be required to support the final residential development of the Site. These utility lines will consist of, but not limited to, sanitary sewer line, stormwater lines, municipal water service, and natural gas. In order to eliminate the risk of exposure to asbestos and impacted soils at the Site during the initial utility installation and any future utility line maintenance, asbestos-free utility corridors will be established. Section 3.5 provides more detail for this task.

5. Construction of new building foundations is described in Section 3.6.

6. Placement of clean fill, minimal two (2) foot concrete and/or asphalt as appropriate, cap over soil surfaces. All clean fill imported to the Site will adhere to the PADEP Management of Fill Policy (Document No. 258-2182-773). Sampling of clean fill source maybe required as detailed in Section 3.7.

3.4 SITE GRADING

The presence of asbestos mixed throughout the soil at the Site requires that the entire Site be classified as an exclusion zone. The effort to perform all Site redevelopment activities under the requirements of an asbestos exclusion zone would increase the level of effort required, decrease productivity, and increase the risk of potential worker exposure to airborne asbestos. In order to minimize the size of the exclusion zone, pre-grading of the Site will be performed. Pre-grading will involve excavation of soils from cut areas and relocation of the soil to the fill

areas (i.e. basements of demolished buildings). A copy of the grading plan is included as **Appendix 5**.

Grading of the Site will initially be performed adjacent to the paved roadways. Unpaved areas of the Site at which final grade is to be lower than existing grade (Cut Areas) will excavated to the anticipated sub-grade elevation based on the final proposed surface cover over the area. The excavated soil will be placed in areas in which the final grade is to be higher than the existing grade (Fill Areas) or as fill in basements of demolished buildings. The excavation and handling of asbestos and impacted soils will be performed in accordance with protocols described in Section 5.0.

After the excavation of the soil to the pre-grade elevation is completed, all residual soil will be cleaned from the adjacent or nearby paved surfaces by rinsing the roadways with potable water using a spray nozzle. Mechanical removal of the soil will be used if required to effectively remove all soil from the paved surfaces. Water used to clean the paved surfaces will be allowed to infiltrate surface soils.

Additionally, the Site grading activities may include focused soil removal work for magnesia and impacted soils to facilitate the development activities. Any excavated materials planned for offsite disposal at permitted facilities will be managed in accordance with all federal, state, and local requirements.

3.5 DEMOLISHED BUILDING FOUNDATIONS

The demolition debris from the remaining walls and floor slabs of the former buildings, in addition to excavated asbestos and impacted soils, will be used as fill in the basements of these buildings on Site. In order to minimize the void space, imported clean fill will be mixed with the concrete/stone debris. Asbestos testing of these materials to be crushed has been completed and found <u>not</u> to contain asbestos. However, air monitoring, in accordance with Section 7.7, will be performed to monitor dust generation and possible asbestos fiber release during the handling of the demolished building debris. If additional fill is required to achieve pre-grade elevations, the concrete and stone debris will be covered with Site soil obtained from the cut areas. The fill placed in the basements will ultimately be capped in accordance within this

Cleanup Plan.

3.6 SUBSURFACE UTILITY CORRIDORS

The installation of subsurface utility lines will be required to support the final residential development of the Site. These utility lines will consist of, but not limited to, sanitary sewer line, stormwater lines, municipal water service, and natural gas. The proposed locations of utility lines are included as **Appendix 6**.

In order to preclude the risk of exposure to asbestos and impacted soils at the Site during the initial utility installation and any future utility line maintenance, asbestos-free utility corridors will be established. Any existing Site soils within the alignment of the proposed utility corridors will be excavated to approximately two (2) feet below the anticipated depth of the deepest utility line. The width of the excavation will be approximately two (2) feet beyond the anticipated width required to contain all utilities anticipated to be installed in each corridor. Excavated soils will be consolidated to designated fill areas of the Site and/or removed and properly disposed at a permitted facility using procedures described in Section 5.0. The walls and bottom of the utility excavation will then be lined with a geotextile filter fabric and the excavation will be filled with imported clean fill.

In areas where the utility corridors are routed within the basements of the former buildings, the perimeter of the utility corridor will be backfilled with approved demolition debris or soil removed from the cut areas of the Site. The walls and bottom of the utility corridor will then be lined with a geotextile filter fabric and the utility corridor will be backfilled with clean imported backfill to pre-grade elevations.

3.7 NEW BUILDING FOUNDATIONS

The new building foundations will be supported by pilings. In order to preclude the risk of exposure to asbestos and impacted soils are at the Site, when installing the foundations and pilings, excavation of the asbestos and impacted soils are will be performed to approximately six (6) inches below the bottom elevation of the foundation structures and three (3) feet beyond the foot print of the buildings. Excavated soils will be consolidate to designated fill areas of the

Site and/or removed and properly disposed at a permitted facility using procedures described in Section 5.0. After removal of the asbestos and impacted soils to the desired excavation limits, the bottom of the excavation will be backfilled with 6-inches of imported stone. The side walls of the foundation excavation will be lined with polyethylene sheeting or geotextile fabric to prevent exposure of the soils to the air and to construction workers. The foundation work can then be performed using standard construction health and safety protocols.

In areas where the footprints of the proposed new buildings are within the footprint of the basements of the demolished buildings, the existing basement will be backfilled with approved demolition debris or soil removed from cut areas of the Site to the required pre-grade elevations. The basement will then be backfilled with 6-inches of imported stone. The side walls of the foundation excavation will be lined with polyethylene sheeting or geotextile fabric to prevent exposure of the soil to air. The foundation work can then be performed using standard construction health and safety protocols.

In order to maintain the area as non-asbestos work areas, it will be imperative not to expose any soil which potentially contains asbestos. Therefore, pilings will be driven or vibrated into place so that asbestos and impacted soils are not brought up to the clean stone surface. If it is necessary to excavate or auger a pilot hole in any manner, the work zone will be classified as an exclusion zone in accordance with Section 7.6.

3.8 CLEAN FILL & CAPPING

All clean fill imported to the Site will adhere to the PADEP Management of Fill Policy (Document No. 258-2182-773). Samples, if necessary, will be collected and analyzed for VOCs, SVOCs, Priority Pollutant Metals, PCBs, pesticides/herbicides, and asbestos for each 3,000 cubic yards of imported clean fill in accordance with the policy. A copy of a sample clean fill certification is included as **Appendix 7.**

Additional capping measures to be installed include asphalt roads, parking areas, concrete sidewalks, and foundations. Clean Fill cap construction will be a minimum of two (2) feet in thickness. The Remediation Plan is included as **Figure 9**.

4.0 STORMWATER CONTROL

Water generated at the Site which must be controlled to minimize the release of asbestos fibers includes water used for dust suppression and storm water runoff from areas of the Site where asbestos and impacted soils are excavated. The application of water to minimize the generation of dust will be controlled to minimize the generation of runoff to as great an extent as possible while still effectively minimizing the generation of dust. Wherever possible, water used for dust suppression and water from precipitation events will be allowed to infiltrate to the existing ground. However, large rainfall events or dust suppression under certain conditions could produce surface runoff. Runoff control features such as temporary diversion ditches and collection sumps or ponds will be utilized to control surface water runoff during Site redevelopment activities. Proposed water and sediment controls are illustrated on in the E & S Plan included as **Appendix 5**.

A stormwater and erosion control plan (SWECP) has been developed in accordance with Federal, State, and local regulations. Any potentially asbestos impacted sediment removed from the E &S controls as part of operations & maintenance during construction would be reused on site to the extent possible or otherwise will be properly disposed off-site at a permitted facility. As necessary, ponded will be discharged through standard dirt bag filtration devices to prevent sediment from leaving the Site. Additionally, perimeter E & S controls will be maintained throughout the project and will be properly disposed off-site at a permitted facility at the completion of the project.

4.1 DUST CONTROL

Dust suppression during idle time may be achieved by one or more of the following methods:

- Compacting of soil areas that have been disturbed prior to the end of the work day;
- Covering the disturbed areas with geotextile fabric, which would then be weighted down to keep in place;
- Extensive misting of disturbed areas prior to the end of the workday; and/or,
- Misting of disturbed areas, as necessary, 24 hours a day.

Should additional or alternative methods of dust control be needed, they will be evaluated and implemented accordingly.

5.0 ASBESTOS AND IMPACTED SOILS RELOCATION

Asbestos and impacted soils will be deposited in areas designated as cut areas during excavation of utility corridors and during excavation for the construction of foundations for proposed buildings. Since much of the soil at the Site contains asbestos, appropriate health and safety procedures need to be followed in the areas at which ground intrusive activities are being performed. In order to limit potential worker exposure to asbestos fibers, an exclusion zone will be established around the active area of excavation of asbestos and impacted soils as described in Section 7.6. The limits of the exclusion zone will be established by the Site Health and Safety Officer (HSO).

Soil will be excavated using standard soil excavation equipment (i.e. backhoe, front end loader, track hoe). Appropriate care will be exercised during excavation activities so as to minimize soil agitation to the greatest extent practicable. Buckets on excavation equipment will not be overfilled such that soil is falling from the bucket when then bucket is swinging to the location of placement. Whether placing soil in a haulage vehicle, directly into the designated fill area, or on the ground surface adjacent to the excavation, the soil will be carefully released from the excavation equipment. The length of drop will be as short as possible to minimize agitation of the soil and the potential release of dust and asbestos fibers.

Misting systems will be employed to further reduce potential dust emissions during the excavation activities.

The development of the Site will require transportation of asbestos and impacted soils from the cut areas to the fill areas. Transportation will be performed in a manner that will minimize agitation of the soil and the generation of dust and potential release of asbestos fibers. If dump trucks are used, the trucks will be equipped with tarps that will be placed over the beds of the haulage units during transport of the asbestos and impacted soils. If equipment such as a front end loader and/or back hoe is used to transport asbestos and impacted soils, the soil will be completely contained within the bucket and the bucket will not be overfilled such that soil can spill out during transport. Speed of onsite haulage vehicles will also be controlled since the typical types of equipment used to haul soil in off-road conditions tend to bounce on construction haul roads causing release of soil and dust from the transportation vehicles.

When placing soil in the consolidation area, the soil will be carefully placed. The method of placement will minimize the length of drop and the agitation of soil so as to minimize the potential for the generation of dust and release of asbestos fibers.

During all activities associated with the relocation of asbestos and impacted soils, engineering controls will be implemented to minimize the generation of visible emissions. The preferred and primary engineering control will be the application of water to all excavated soil. All waste areas to be disturbed (i.e., excavated, graded, etc.) will be thoroughly pre-wetted with water prior to any disturbance. Water application rates will be monitored to avoid excessive wetting of the material being disturbed. As required during material handling operations, water misting systems will be utilized in the area of work to assist in control of visible emissions. Misting systems will be capable of applying a fine airborne aqueous mist evenly and consistently over the area of material handling without excessive wetting of the wasted materials. If wind or other conditions render misting systems or other emission suppression technique ineffective, then work will cease until selected emission control technique are capable of effectively controlling visible emissions or alternate emissions controls are identified.

Other emission control methods included:

- Minimize the handling of impacted material to the greatest extent possible;
- Roads accessed for construction will be developed as clean areas and maintained as clean (i.e., haul roads) or will have emission control measures such as applying water to the roadways;
- Slow, controlled rate of excavation will be maintained; and;
- The speed limit for all vehicles on the Site will posted at 10 mph.

If conditions occur for which the above emission control techniques are not effective the additional engineering controls will be identified, evaluated, and implemented as appropriate.

6.0 ENGINEERING AND INSTITUTIONAL CONTROLS

The fill areas will be backfilled with asbestos and impacted soils to final pre-grade elevations. Cut areas will be excavated to final pre-grade elevations. The final cover will be dependent on the final use of the area as designated by the final grading plan. The final cover will consist of either an impervious layer such as concrete or asphalt in building roads and sidewalks, parking areas, or at least a two (2) feet of clean imported soil with a vegetative cover established in open green spaces. The cap will constructed to prevent direct contact with the contaminated soil and potential inhalation of asbestos fibers by the future users of the Site.

During placement of imported clean fill material, care will be exercised so that the imported material is not with Site asbestos and impacted soils or cross-contaminated by trucks or equipment previously used to handle Site asbestos and impacted soils. Prior to use for the placement of imported fill material, all equipment which had been used to relocate or in any way handle asbestos and impacted soils are at the Site will be decontaminated at the equipment decontamination facility. Cleaning of equipment will be approved by the HSO prior to returning equipment to be used in the placement of clean imported fill material.

An Environmental Covenant will be prepared which will indicate the final location of all asbestos impacted soil and will identify the presence of the engineering controls placed at the property. The Environmental Covenant will also contain reference to a Post-Remediation Care Plan which will describe requirements for future inspection and maintenance of the installed engineering controls.

7.0 HEALTH AND SAFETY

7.1 GENERAL REQUIREMENTS

This section presents the required elements that must be included in the Site specific Health and Safety Plan (HASP) of the construction contractor who will conduct the excavation, relocation, and capping of the asbestos and impacted soils are . A copy of the Site Specific HASP is included as **Appendix 8**. These elements will include:

- All NESHAP requirements for construction work as presented in 40 CFR Part 61, Subpart M;
- All OSHA requirements for construction workers as presented in 29 CFR 1926.1101;
- All OSHA requirements for all workers as presented in29 CFR 1910.134;
- Proper personal protective equipment (PPE);
- Proper employee monitoring; and
- Proper decontamination after completion of work.

All work will be conducted in accordance with all applicable local, state, OSHA, DOT, RCRA, NESHAP, and CERCLA rules and regulations for industrial construction and waste handling (each where applicable). A written, Site specific HASP will be developed in compliance with the references included in Section 12.0. Prior to commencing any on-Site work, the HASP will be prepared and approved. This HASP will be implemented, maintained, and enforced until final demobilization from the Site has occurred. The HASP, as a minimum, will address the regulations contained in this section.

The health and safety guidelines contained herein are intended to provide for a safe and risk-free work environment for on-Site personnel and to minimize the impact of activities involving contract with any hazardous materials on the general public and surrounding environment.

Personnel will utilize Level C personal protective equipment in the exclusion zone (as defined in Section 7.6) until it has been determined by the air monitoring program that a downgrade in personal protection is feasible. Level C will include the following:

- Air-purifying respirator equipped with P-100 filters;

- Disposable protective coveralls (Tyvek);
- Disposable inner nitrile gloves and outer leather work gloves;
- High-visibility vests;
- Disposal latex overboots;
- Safety glasses;
- Steel toe boots; and,
- Hard hats.

As activities progress, protective equipment requirements may be upgraded or downgraded base on Site conditions/environmental concerns. At a minimum, Site personnel will wear hard hat, safety glasses, high visibility vest, and steel toe boots.

Suitable emergency and first aid equipment will be available in an appropriate location at the Site. Emergency and first aid equipment will include:

- First Aid kit sized to accommodate the number of Site personnel;
- Portable emergency eye wash station;
- A suitable number of fire extinguishers; and
- An emergency hand-held siren/air horn.

At least one certified first aid technician will be on the Site at all times when work is being performed at the Site. This technician may perform other duties but will be available to render first aid when necessary.

Emergency phone numbers will be posted near the Site telephones and select personnel will be furnished with 2-way radios.

Detailed decontamination procedures for both equipment and personnel, including collection and disposal of wash waters, sediments, and spent PPE will be discussed with all personnel working or visiting the Site. A figure of a decontamination pad large enough to accommodate the largest piece of equipment which will contact impacted soils will be provided in the Site specific HASP. All exterior parts of all vehicles, including vehicle tires and vehicle undersides, will be cleaned visibly free of surface contamination prior to leaving the Site.

Some tasks may have the potential for increased exposure and will require closer monitoring. A task hazard assessment for each task will be developed, addressing physical and chemical hazards of concern and including safe work procedures to ensure the safety and health of all personnel. The task hazard assessments will be included as part of the Site specific HASP.

7.2 PROOF OF TRAINING

Site personnel who will be working within any exclusion zone or contamination reduction zone will be required to submit proof of 32-hour (or 40-hour for supervisory personnel) asbestos training, in accordance with AHERA. In addition, site personnel will be required to submit proof of Occupational Safety and Health Administration (OSHA) 40-hour safety training as required under OSHA 29 CFR 1910.120 and 29 CFR 1926.65. Additionally, personnel who will be working in a supervisory capacity will be required to possess documentation of receiving an additional 8 hours of training for supervisory personnel in accordance with OSHA 29 CFR 1910.120 and 29 CFR 1926.65.

The Pennsylvania Department of Labor and Industry will be notified prior to work activities, pursuant to the Pennsylvania's Asbestos Occupations Accreditation and Certification Act of 1990 (Act 194 and 161).

Personnel not in possession of current training will be furnished the required training before being assigned to a task or entering the Site. The majority of this training is covered during the Site specific training and the 40-hour HAZWOPER training and/or asbestos training, as applicable; however, task specific training will be conducted on an as needed basis. Additional information that is to be included as part of the Site specific training, includes the relationship between asbestosis and smoking and the contents of 29 CFR 1923.1101 – Asbestos.

7.3 MEDICAL SURVEILLANCE

Site personnel will be required to comply with medial surveillance requirements as outlined in 29 CFR 1910.120 (f), 29 CFR 1910.134, and their corporate medical surveillance and respiratory protection programs.

7.4 HEALTH & SAFETY OFFICER

A competent and authorized representative herein referred to as the Health & Safety Officer (HSO) will be at the Site during all work activities involving the disturbance of asbestos and impacted soils. The HSO will possess the following minimum qualifications:

- Have a minimum of 2 years working experience specific to the activities being conducted;
- Have a basic working knowledge of state and federal occupational health and safety regulations; and
- Have formal education and/or training in occupational health and safety.

The HSO will have STOP WORK authority when it is necessary or advisable to cease on Site operations. The HSO will conduct daily safety meetings for the on Site personnel. These meeting will include refresher training regarding existing or new equipment and protocols, review ongoing safety issues and procedures, and examination of new Site conditions as they are encountered. Additional safety meeting will be held on an as-needed basis.

A corporate Safety Manager will oversee operations as necessary to ensure that project activities are performed in accordance with the Site specific HASP.

7.5 AUTHORIZATION TO ENTER

All personnel and visitors entering work areas at the Site must have completed appropriate training and medical surveillance (as described in Sections 7.2 and 7.3, respectively) in order to conduct the work activities with which they will be involved. Personnel without such training or medical certification will be to remain in the Support Zone. The HSO will maintain a list of authorized persons; only personnel on the authorized persons list will be allowed within the Site work zones. Visitors must be escorted within the work areas at all times. Visitors expecting to enter exclusion zones must possess current training applicable to the area to be visited and must current medical clearance as well as appropriate training to wear a respirator.

No person will be allowed into the general work area during Site operations without first being given a Site orientation and hazard briefing. This orientation will be presented by the HSO, and

will consist of a review of the Site specific HASP. This review must cover the chemical, physical, and biological hazards, PPE, safe work practices, and emergency procedures for the project. In addition to this meeting, Daily Safety Meetings will be held each day before work begins. All people on the Site, including visitors, must document their attendance to this briefing as well as the Daily Safety Meetings. The information presented in the Daily Safety Meetings may be provided to a visitor during their general Site orientation.

7.6 WORK ZONES DESIGNATION

To minimize the exposure of Site workers and equipment and prevent the transfer of contamination by personnel and equipment to clean areas of off-Site locations, work zones will be established.

The designation of appropriate work zones ensures that (1) Site personnel are properly protected against the hazards, (2) work activities and contamination are confined to specific areas, and (3) personnel can be located, notified, and evacuated in an emergency. The distance between the zones and the size and shape of each zone is based on the conditions specific to the Site. Zone planning should assure that the distance between zone boundaries are large enough for the required operations, provide adequate distance to limit or prevent transfer of contamination, and eliminate the potential of injury due to explosions or fires. Each zone is defined as follows.

Exclusion Zone: This zone is the innermost of the three zones and is the area where personnel and equipment will come into contact with contamination. All personnel within the exclusion zone will wear the specified level of protective clothing and equipment. The primary activity conducted within the exclusion zone will be the excavation and placement of asbestos-impacted Site soil. Depending on the progress of the work, there may be multiple exclusion zones established at the Site at any one time.

Different exclusion zones may contain higher or lower concentrations of hazardous substances, require different levels of worker protection, and preset varying degrees of hazard. Establishing such sub-areas within the exclusion zone allows more flexibility in safety procedures, operations, personnel and equipment decontamination, and use of resources.

Contamination Reduction Zone (CRZ): This zone is a transition area separating the contaminated area (exclusion zone) from the clean area (support zone). The CRS is designed to reduce the probability that the support zone will be affected by contamination of other Site hazards. The concentration within the CRZ decreases as personnel end equipment moves from the edge of the exclusion area to the support zone.

The outer boundary of the CRZ is the Contamination Control Line. Access Control Points regulate the movement of personnel and equipment from the support zone into the CRZ. Personnel entering the CRZ will wear the specified PPO for activities within this zone. Prior to re-entry into the support zone, workers must decontaminate and exit via the established Access Control Point. The design of the CRZ must facilitate personnel and equipment decontamination, emergency response operations, equipment re-supply, sample preparation and packaging, worker temporary resting within predetermined areas, and drainage and collection of water or other liquids used for decontamination. The CRZ may be set up to handle single or multiple exclusion zones.

Support Zone: Non-contaminated outermost zone of the Site. This zone contains needed support equipment and administrative functions. Important factors to consider in the location of the support zone activities are accessibility of roads, highways, railroad tracks, etc; resources such as power lines, telephone, water, visibility to all zones, and distance of the site; wind direction so that it is not downwind of the exclusion zone; and distances maximum possible from Exclusion Zone.

The support zone facilities and functions include:

a) Command post: Headquarters for the daily supervision and management of Site operations. The post functions are:

- Maintenance of communications;
- Site Security;
- Recordkeeping;
- Reference Center;
- Conferences; and

- Sanitation Facilities.

b) Medical station: The station's functions are:
   - First Aid;
   - Emergency Medical Response;
   - Periodic Medical Surveillance; and
   - Sanitation Facilities.

c) Equipment and supply center: Maintenance, repair, and supply of all Site equipment, vehicles, and consumables.

7.7 AIR MONITORING PROGRAM

An air monitoring program will be developed to monitor potential exposure to asbestos during the performance of redevelopment activities where asbestos impacted soil is disturbed. An air monitoring program will be developed as part of the Site-specific HASP. At minimum, the air monitoring program must meet the following requirements and applicable local, state, and federal regulations. The air monitoring program sampling and analysis must be administered at the Site by trained, experience technicians. Offsite analysis will be performed by an accredited laboratory. In accordance with NESHAP, no visible asbestos emissions will be permitted during work activities.

7.8 PRE-CONSTRUCTION AIR MONITORING

Background air quality will be established prior to the start of construction activities. Background air quality will be established by the collection of air samples at the upwind and downwind property lines prior to the start of any construction. The purpose of this sampling is to establish a base line of concentrations of asbestos fibers in the ambient air.

A total of 8 samples (including 2 field blanks) will be collected at a pumping rate of 10 liters per minute (Lpm) for a minimum of 120 minutes (for a total of 1,200 liters of air) using a high volume air pump and sampling cassette (0.45 micrometer cellulose ester membrane). Air sampling pumps adhering to the National Institute for Occupational Safety and Health (NIOSH) will be

used. Samples will be submitted to EMSL Analytical Laboratories in Plymouth Meeting, Pennsylvania and will be analyzed using Transmission Electron Microscopy (TEM) to identify asbestos fibers in the air. Local meteorological conditions, such as wind speed, precipitation, humidity, cloud cover, and surface soil moisture will be recorded.

7.9 AIR MONITORING-PERIMETER

When site soils are being disturbed through activities such as excavation, transportation, and consolidation, perimeter air monitoring will be performed. A windsock will be used to establish wind direction during the work day. The HSO will document the wind direction in the log book on a daily basis. Air sampling pumped adhering to NIOSH Method 7402 will be used. A sufficient volume will be collected at six locations, four located on the north south east and west property boundaries and two roaming locations based on prevailing winds and dust monitor results, when work involving asbestos impacted material is occurring. Two additional samples for Quality Assurance/Quality Control (QA/QC will be collected. Samples will be submitted on the same day to EMSL Analytical Laboratories. Samples will be analyzed on an expedited turnaround (i.e., results next morning). The samples will be analyzed using TEM to identify asbestos fibers in the air.

A real time dust monitor will be placed at the downwind side and moved manually across the downwind side of the property line to determine the maximum concentration of dust. One of the six samplers will be moved with the dust monitor to establish a correlation between dust level and average asbestos fiber concentrations if there is a correlation. Any correlation will be used to site samplers in the location that will monitor maximum asbestos fiber concentrations.

Air monitoring results will be evaluated throughout the project and appropriate adjustments will be made to work activities when needed. Additionally, should asbestos emissions be identified, which would constitute an off-site release, monitoring results will be provided to the Borough of Ambler as well as neighboring communities as appropriate (Upper Dublin, Whitpain, Lower Gwynedd).

7.10 AIR MONITORING - PERSONNEL

During tasks where there is potential for exposure to asbestos contaminated materials, at a minimum, the following air sampling strategy will be employed:

- One maximum risk employee out of every four similarly assigned employees from each job designation/assignment will be sampled daily;
- One work shift sample and one 30-minute excursion sample will be collected on the maximum risk employee. The limit for any 30-minute excursion is 1.0 fibers per cubic centimeter;
- Sample analysis will be performed daily by an accredited laboratory; and
- Sampling and analysis will be performed in accordance with the NIOSH Method 7402.

Employees will be required to utilize Level C protection until the results of time-weighted average (TWA) air sampling demonstrate that the engineering controls implemented are effective in controlling fiber emissions. Protocols for the modifications of the levels of PPE will be included in the Site-specific HASP.

The results of all TWA aid sampling will be reviewed by the HSO and Site Superintendent up receipt and appropriate corrective actions will be taken if necessary. Results will be reported to the HSO within 24 hours of receipt.

8.0 CONSTRUCTION OVERSIGHT

The RT-designated representative(s) will oversee all handling of asbestos and impacted soils to ensure that best management practices (BMPs) are employed during the excavation, relocation, and capping of the asbestos-contaminated soils and that proper safety measures are used to ensure the worker safety for all activities.

9.0 REPORTING

A Final Report will be prepared upon the completion of the property redevelopment activities. This report will document all activities conducted to address the identified impacts and the remediation measure conducted. Documentation presenting the details of the installed engineering controls will be provided. A Post-Remediation Care Plan will be included in the Final Report which describes the future activities to be conducted to inspect and properly maintain the engineering controls.

10.0 POST-REMEDIAL CARE PLAN

A post-remedial care (PRC) plan consisting of the following items will be used at the Site to maintain attainment of the Site-Specific Standard and the nonresidential Site use.

- The recording of the Environmental Covenant – The Environmental Covenant will document the use of the Site Specific Standard for the soil media. The Environmental Covenant will document the Engineering and Institutional Controls for the property which include:

    (1) The Engineering Controls (the cap) must be maintained during and after any redevelopment of any portion of the Property contained within the excavation exclusion area (the whole of the real property). The Owner shall inspect the Engineering Controls annually and the Owner shall repair any cracks and other defects in the Engineering Controls in a timely manner;

11.0 CONTACTS

Site contacts are as follows:

Remediator:

AMBLER CROSSINGS DEVELOPMENT PARTNERS, LP
C/O John Zaharchuk
201 South Maple Avenue
Ambler, PA 19002
484-532-7830 x10 / Fax: 484-532-7833

Consultant:

RT ENVIRONMENTAL SERVICES, INC.

Walter H. Hungarter, III
General Manager
RT Environmental Services, Inc.
215 West Church Rd.; Suite 301
King of Prussia, PA 19406
(610) 265-1510 x 238

Gary Brown, P.E.
President
RT Environmental Services, Inc
215 West Church Rd.; Suite 301
King of Prussia, PA 19406
(610) 265-1510 x 234

12.0 REFERENCES

Pennsylvania Act 2 Cleanup Plan by Conestoga-Rovers & Associates, Inc., dated 12/2007, Ref. No. 043950(1)

Langan Engineering & Environmental Service, 2006, Act 2 Remedial Investigation Report, April 28,2006.

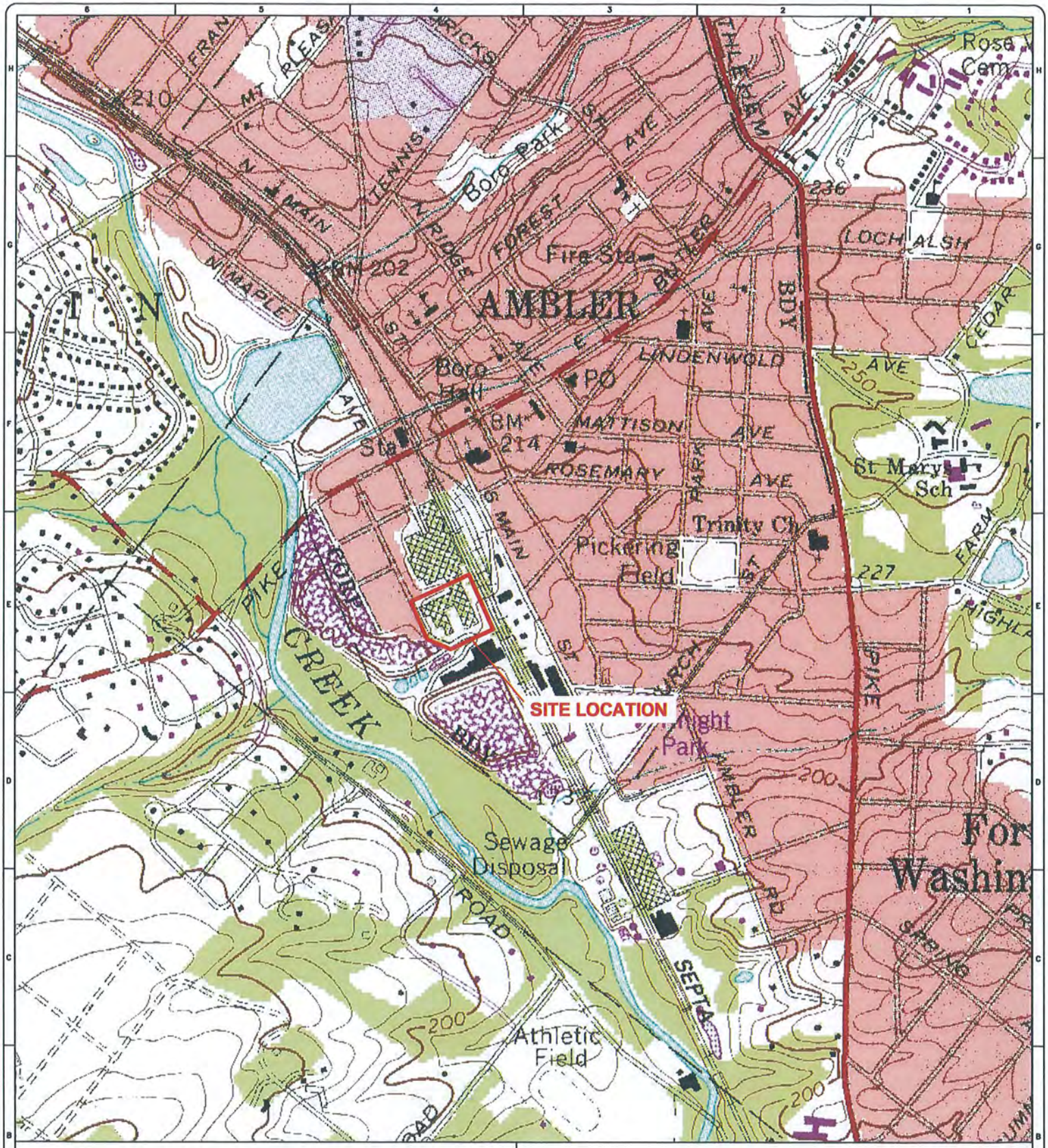
United States Federal Government – Code of Federal Regulations (CFR)

1. 29 CFR 1910.120 – Hazardous Waste Operations and Emergency Response (HAZWOPER).
2. 29 CFR 1910.134 – Respiratory Protection
3. 29 CFR 1910.1200 – Hazard Communication
4. 29 CFR 1926.65 – HAZWOPER
5. 29 CFR 1926 – Subpart P Excavations
6. 29 CFR 1926.1101 – Asbestos
7. 40 CFR Part 61 Subpart M Asbestos National Emission Standard of Hazardous Air Pollutants.

FIGURES

FIGURE 1

SITE LOCATION MAP



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RT ENVIRONMENTAL SERVICES, INC.
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KING OF PRUSSIA, PA 19406

FIGURE 1
SITE LOCATION MAP
AMBLER CROSSINGS

For:

AMBLER CROSSINGS DEVELOPMENT PARTNERS, LP.
SUMMIT REALTY ADVISORS, LLC
201 S. MAPLE ROAD
AMBLER, PA 19002

CHARGE	ENGINEER	DESIGNER	DRAFTSPERSON
70461-09	GRB		ESV

SCALE	DRAWING NUMBER	REVISION
1"=1000'	\\RTENVFILESERVER\VOL1\RT PROJECTS\70400 SERIES\70461-10\DRAWINGS\FIGURES	
DATE 3/7/13		

FIGURE 2

SITE DEVELOPMENT PLAN

BAST PROPERTY

66' WIDE CONRAIL EASEMENT

EXISTING BOILER HOUSE
36,400 SF
(USABLE BUSINESS AREA)

EXISTING
UNDERGROUND
CULVERT

TOTAL PARKING 216 (1.96 RATIO)

BUILDING 1
59 UNITS

BUILDING 3
1 STORY
4,200 SQ.FT.

PATIO/POOL

BUILDING 2
56 UNITS

VILLAGE GREEN
22,600 SQ.FT.

20' SIDE YARD
SETBACK

CHESTNUT STREET

NOTE: REFERENCE LANGAN ENGINEERING & ENVIRONMENTAL SERVICES DRAWING CP-7 DATED DECEMBER 10, 2012.

0 30 60 120

SCALE: 1'=60'

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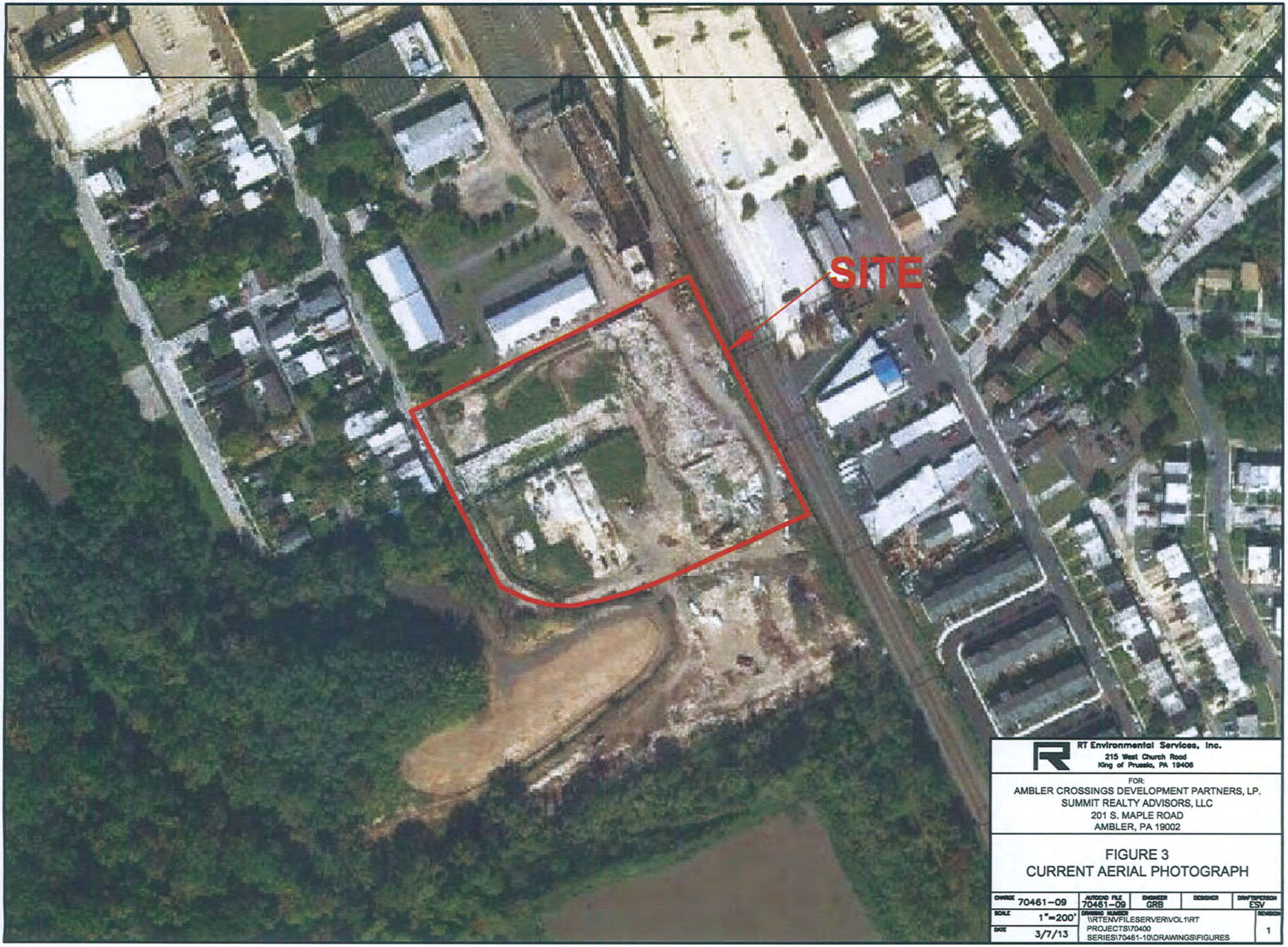
FOR:
AMBLER CROSSINGS DEVELOPMENT PARTNERS, L.P.
SUMMIT REALTY ADVISORS, LLC
201 S. MAPLE ROAD
AMBLER, PA 19002

FIGURE 2
SITE DEVELOPMENT PLAN
BAST PROPERTY

CHARGE	70461-09	AUTOCAD FILE	ENGINEER GRB	DESIGNER	DRAFTSPERSON ESV
SCALE	1"=60'	DRAWING NUMBER \\RTENVFILESERVER\VOL1\RT PROJECTS\70400 SERIES\70461-10\DRAWINGS\FIGURES.DWG			REVISION 0
DATE	3/7/13				

FIGURE 3

CURRENT AERIAL PHOTOGRAPH



RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

FOR:
AMBLER CROSSINGS DEVELOPMENT PARTNERS, LP.
SUMMIT REALTY ADVISORS, LLC
201 S. MAPLE ROAD
AMBLER, PA 19002

FIGURE 3
CURRENT AERIAL PHOTOGRAPH

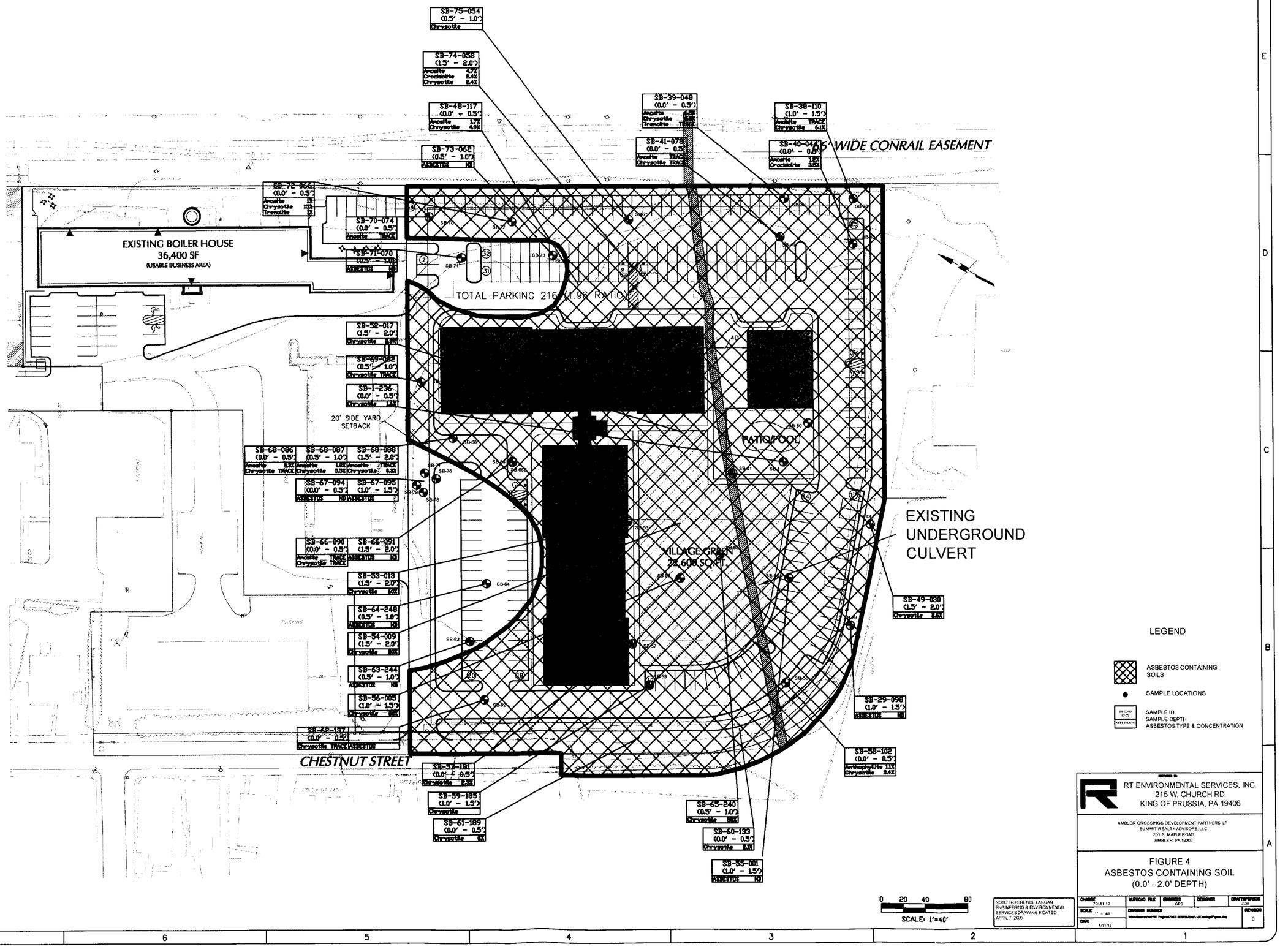
CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
70461-09	70461-09	GRB		ESV

SCALE	DRAWING NUMBER	REVISION
1"=200'	\\RTENVFILESERVER\VOL1\RT PROJECTS\70400 SERIES\70461-10\DRAWINGS\FIGURES	1
DATE: 3/7/13		

FIGURE 4

ASBESTOS IMPACTED SOILS

(0.0' – 2.0' DEPTH)



NOTE: REFERENCE LANGAN ENGINEERING & ENVIRONMENTAL SERVICES DRAWING 8 DATED APRIL 7, 2006

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AMBLER CROSSINGS DEVELOPMENT PARTNERS LP
SUMMIT REALTY ADVISORS, LLC
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AMBLER, PA 19002

FIGURE 4
ASBESTOS CONTAINING SOIL
(0.0' - 2.0' DEPTH)

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	CRAFTSPERSON
70481-10		DRS		JDH
SCALE 1" = 40'	DRAWING NUMBER			REVISION
DATE 4/11/13				0

FIGURE 5

ASBESTOS IMPACTED SOILS

(2.0' – 10.0' DEPTH)

EXISTING BOILER HOUSE
36,400 SF
(USABLE BUSINESS AREA)

TOTAL PARKING 216 (1.96 RATIO)

66' WIDE CONRAIL EASEMENT

PATIO/POOL

VILLAGE GREEN
22,600 SQ.FT.

EXISTING
UNDERGROUND
CULVERT

CHESTNUT STREET

SB-75-055 (5.0' - 5.5') ASBESTOS ND Chrysotile 12%
SB-75-056 (8.5' - 9.0') ASBESTOS ND Chrysotile 12%
SB-74-059 (4.0' - 4.5') Chrysotile 8.4%
SB-74-060 (8.5' - 9.0') Chrysotile 1.9%
SB-48-118 (2.5' - 3.0') Anosite 2% Crocidolite 1% Chrysotile 12%
SB-48-119 (4.5' - 5.0') ASBESTOS ND
SB-73-063 (5.0' - 5.5') ASBESTOS ND Chrysotile 1.8%
SB-72-067 (2.0' - 2.5') ASBESTOS ND
SB-72-068 (7.5' - 8.0') ASBESTOS ND
SB-72-069 (9.5' - 10.0') ASBESTOS ND
SB-70-075 (2.0' - 2.5') ASBESTOS ND
SB-70-076 (5.5' - 6.0') ASBESTOS ND
SB-70-077 (8.0' - 8.5') ASBESTOS ND
SB-71-071 (6.0' - 6.5') ASBESTOS ND Chrysotile 5.3%
SB-71-072 (8.0' - 8.5') ASBESTOS ND
SB-71-073 (9.0' - 9.5') ASBESTOS ND
SB-50-026 (2.0' - 2.5') Chrysotile 5%
SB-50-027 (5.0' - 5.5') Chrysotile 12%
SB-50-028 (9.0' - 9.5') ASBESTOS ND
SB-52-018 (5.0' - 5.5') Chrysotile 2%
SB-52-019 (9.0' - 8.5') Chrysotile 1.8%
SB-69-083 (3.0' - 3.5') Chrysotile 1.3%
SB-69-084 (4.5' - 5.0') Chrysotile 1.1%
SB-69-085 (6.0' - 6.5') ASBESTOS ND
SB-1-237 (4.0' - 4.5') ASBESTOS ND
SB-1-238 (8.0' - 8.5') Chrysotile 2.8%
SB-51-021 (2.0' - 2.5') ASBESTOS ND
SB-51-022 (5.5' - 6.0') Chrysotile TRACE
SB-51-023 (9.0' - 9.5') Chrysotile TRACE
SB-68-089 (4.0' - 4.5') ASBESTOS ND
SB-67-096 (4.0' - 4.5') ASBESTOS ND
SB-67-097 (6.5' - 7.0') Chrysotile 2%
SB-66-092 (4.0' - 4.5') Chrysotile TRACE
SB-66-093 (8.0' - 8.5') ASBESTOS ND
SB-53-014 (5.0' - 5.5') Chrysotile 1.4%
SB-53-015 (9.0' - 9.5') Chrysotile 7.8%
SB-64-249 (2.0' - 2.5') ASBESTOS ND
SB-64-250 (4.0' - 4.5') ASBESTOS ND
SB-64-251 (7.5' - 8.0') ASBESTOS ND
SB-54-010 (6.0' - 6.5') ASBESTOS ND
SB-54-011 (9.5' - 10.0') Chrysotile 3%
SB-63-245 (4.0' - 4.5') ASBESTOS ND
SB-56-006 (3.5' - 6.0') ASBESTOS ND
SB-57-182 (5.5' - 6.0') Chrysotile 5.4%
SB-57-183 (9.0' - 9.5') ASBESTOS ND
SB-59-186 (5.0' - 5.5') Chrysotile 3%
SB-59-187 (8.0' - 8.5') ASBESTOS ND
SB-38-111 (4.0' - 4.5') ASBESTOS ND
SB-38-112 (8.0' - 8.5') Chrysotile TRACE
SB-40-045 (4.0' - 4.5') ASBESTOS ND
SB-40-046 (9.0' - 9.5') ASBESTOS ND
SB-39-049 (5.0' - 5.5') ASBESTOS ND
SB-41-079 (4.0' - 4.5') Chrysotile 1.5%
SB-29-099 (3.0' - 3.5') Chrysotile 1.3%
SB-29-100 (8.0' - 8.5') ASBESTOS ND
SB-58-103 (4.0' - 4.5') ASBESTOS ND
SB-65-241 (4.0' - 4.5') ASBESTOS ND
SB-65-242 (8.0' - 8.5') Chrysotile TRACE
SB-55-002 (4.5' - 5.0') ASBESTOS ND
SB-55-003 (9.5' - 10.0') ASBESTOS ND

LEGEND

- ASBESTOS CONTAINING SOILS
- SAMPLE LOCATIONS
- SB-0000 (2'-0') ASBESTOS % — SAMPLE ID, SAMPLE DEPTH, ASBESTOS TYPE & CONCENTRATION

0 20 40 80
SCALE: 1"=40'

NOTE: REFERENCE LANGAN ENGINEERING & ENVIRONMENTAL SERVICES DRAWING 9 DATED APRIL 7 2006

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FOR
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SUMMIT REALTY ADVISORS, LLC
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AMBLER, PA 19002

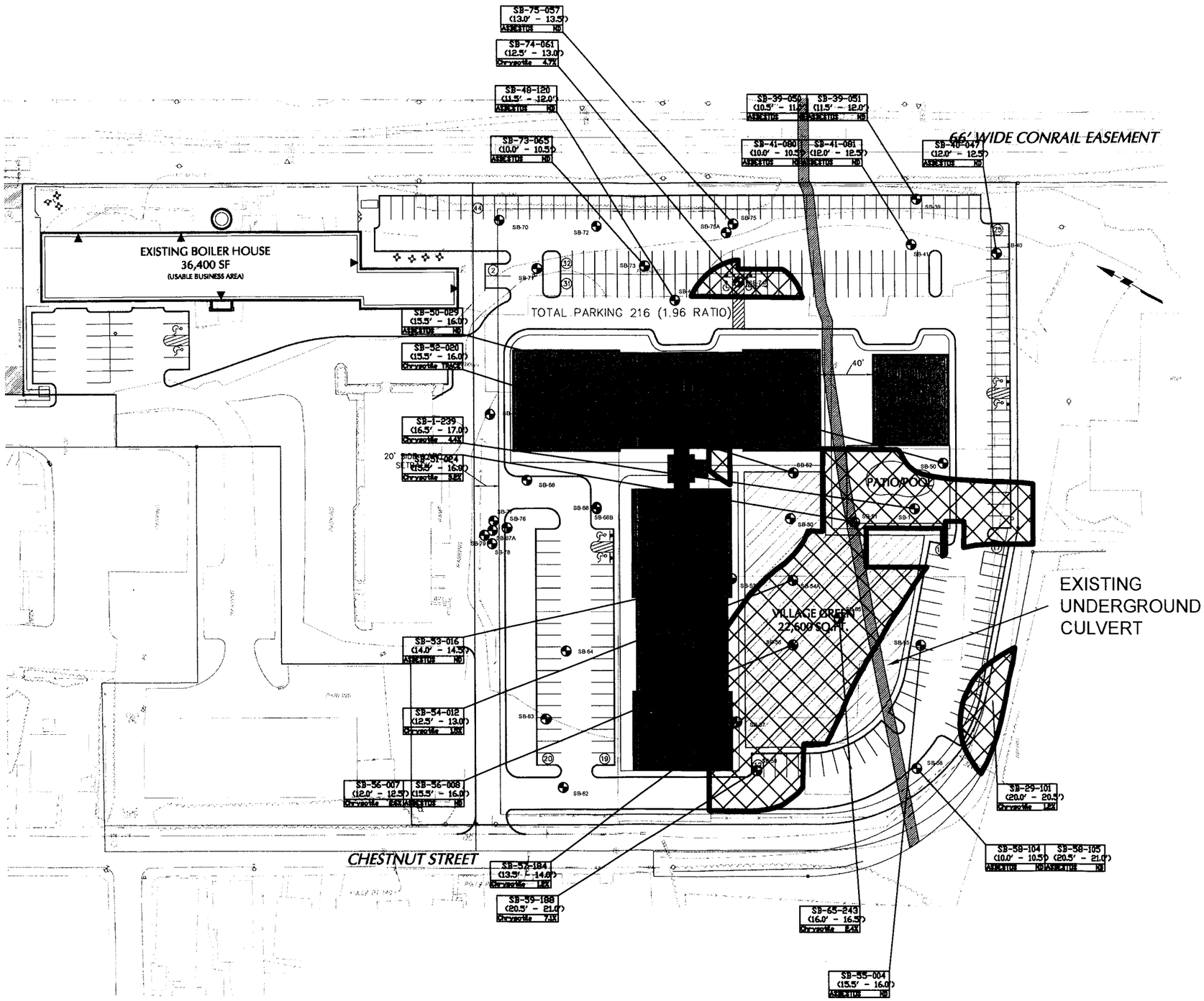
FIGURE 5
ASBESTOS CONTAINING SOIL
(2.0' - 10.0' DEPTH)

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
70461-10		GRB		JDH
SCALE: 1" = 40'	DRAWING NUMBER			REVISION
DATE: 4/11/13				0

FIGURE 6

ASBESTOS IMPACTED SOILS

(GREATER THAN 10.0' DEPTH)



LEGEND

- ASBESTOS CONTAINING SOILS
- SAMPLE LOCATIONS
- SB-00-00 (7.0) ASBESTOS % — SAMPLE ID, SAMPLE DEPTH, ASBESTOS TYPE & CONCENTRATION

NOTE: REFERENCE LANGAN ENGINEERING & ENVIRONMENTAL SERVICES DRAWING 10 DATED APRIL 7, 2006

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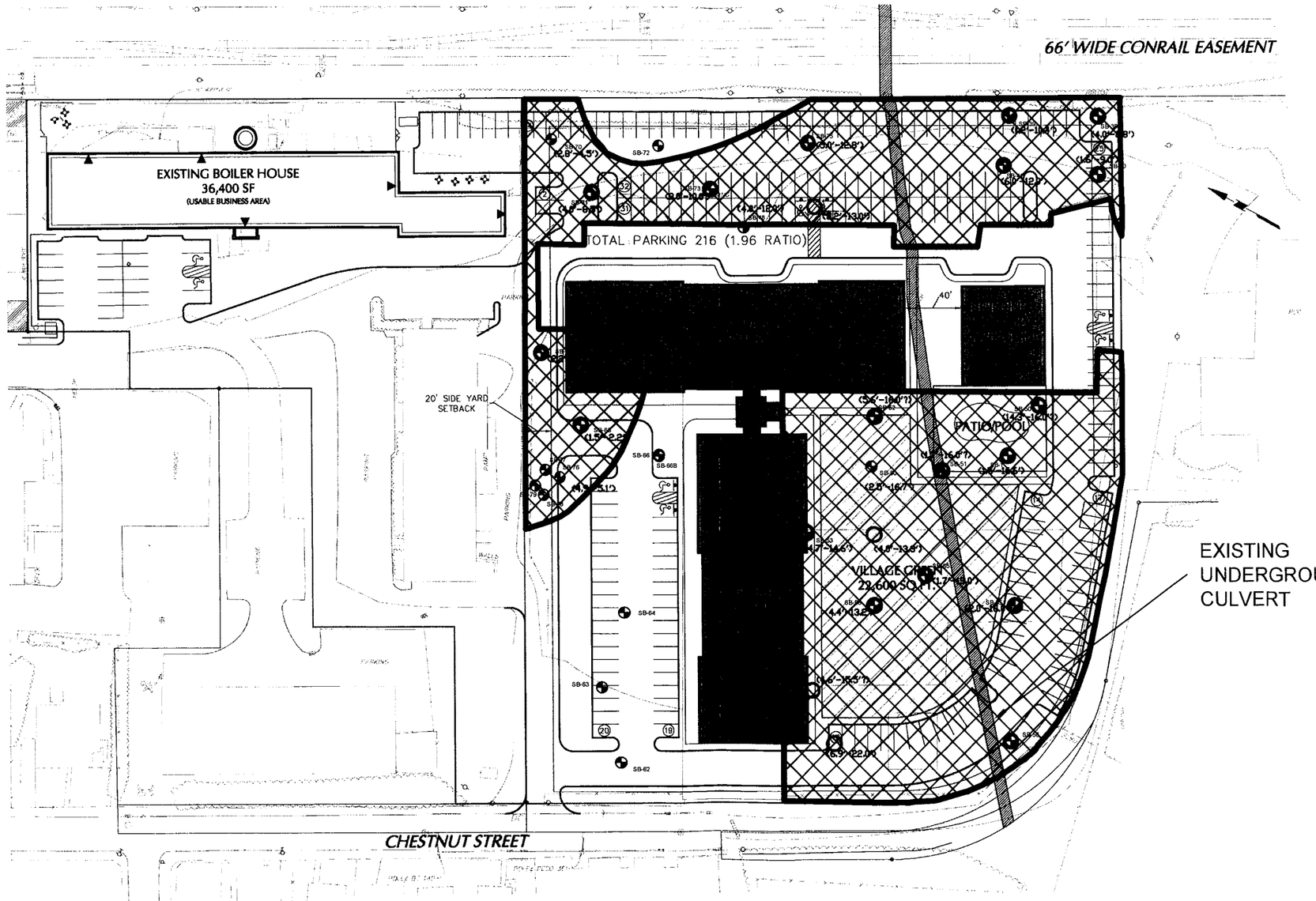
FIGURE 6
ASBESTOS CONTAINING SOIL (GREATER THAN 10.0' DEPTH)

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
70481.10		DRB		JD+
SCALE 1" = 40'	DRAWING NUMBER			REVISION
DATE 4/11/13				0

FIGURE 7

EXTENT OF MAGNESIA



0 20 40 80
SCALE: 1'=40'

NOTE: REFERENCE LANGAN ENGINEERING & ENVIRONMENTAL SERVICES DRAWING CP-7A DATED DECEMBER 10, 2012

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SUMMIT REALTY ADVISORS, LLC
201 S. MAPLE ROAD
AMBLER, PA 19002

FIGURE 7
EXTENT OF MAGNESIA

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
70461-10		GRB		JDH

SCALE	DRAWING NUMBER	REVISION
1" = 40'		0

DATE
4/11/13

FIGURE 8

ARSENIC IMPACTED SOILS

66' WIDE CONRAIL EASEMENT

EXISTING UNDERGROUND CULVERT

EXISTING BOILER HOUSE
36,400 SF
(USABLE BUSINESS AREA)

SB-75A-007
(1.5-2.0)
Arsenic 15.5 mg/kg
SB-75A

TOTAL: PARKING 216 (1.96 RATIO)

BUILDING 1
59 UNITS.
240'
78'

BUILDING 3
1 STORY
4,200 SQ.FT.
60'
70'

40'

PATIO/POOL

BUILDING 2
56 UNITS
216'
78'

VILLAGE GREEN
22,600 SQ.FT.

20' SIDE YARD SETBACK

PARKING

RAMP

WALLS

DECK

CULV

CHESTNUT STREET

NOTE: REFERENCE LANGAN ENGINEERING & ENVIRONMENTAL SERVICES DRAWING CP-7 DATED DECEMBER 10, 2012.

LEGEND

15.5 - SOIL CONCENTRATION (mg/kg)

SB-75A - SB-75A/(1.5-2.0') SOIL BORING LOCATION/DEPTH

0 30 60 120

SCALE: 1'=60'

PREPARED BY:
RT ENVIRONMENTAL SERVICES, INC.
215 W. CHURCH RD.
KING OF PRUSSIA, PA 19406

FOR:
AMBLER CROSSINGS DEVELOPMENT PARTNERS, LP.
SUMMIT REALTY ADVISORS, LLC
201 S. MAPLE ROAD
AMBLER, PA 19002

FIGURE 8
ARSENIC IMPACTED SOILS

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
70461-09		GRB		ESV
SCALE 1"=60'	DRAWING NUMBER Q:\RT PROJECTS\70400 SERIES\70461-10\DRAWINGS\FIGURES.DWG			REVISION 0
DATE 4/30/13				

FIGURE 9

REMEDIATION PLAN

CAP SECTIONS

8-1

VEGETATION

MINIMUM 2' CLEAN FILL

IMPACTED SOIL

SOIL CAP DETAIL (TYP)

8-2

ASPHALT BASE COARSE 3" MIN.

CRUSH STONE VARYING DEPTH

IMPACTED SOIL

ASPHALT CAP DETAIL (TYP)

EXTENT OF CAPPED AREA

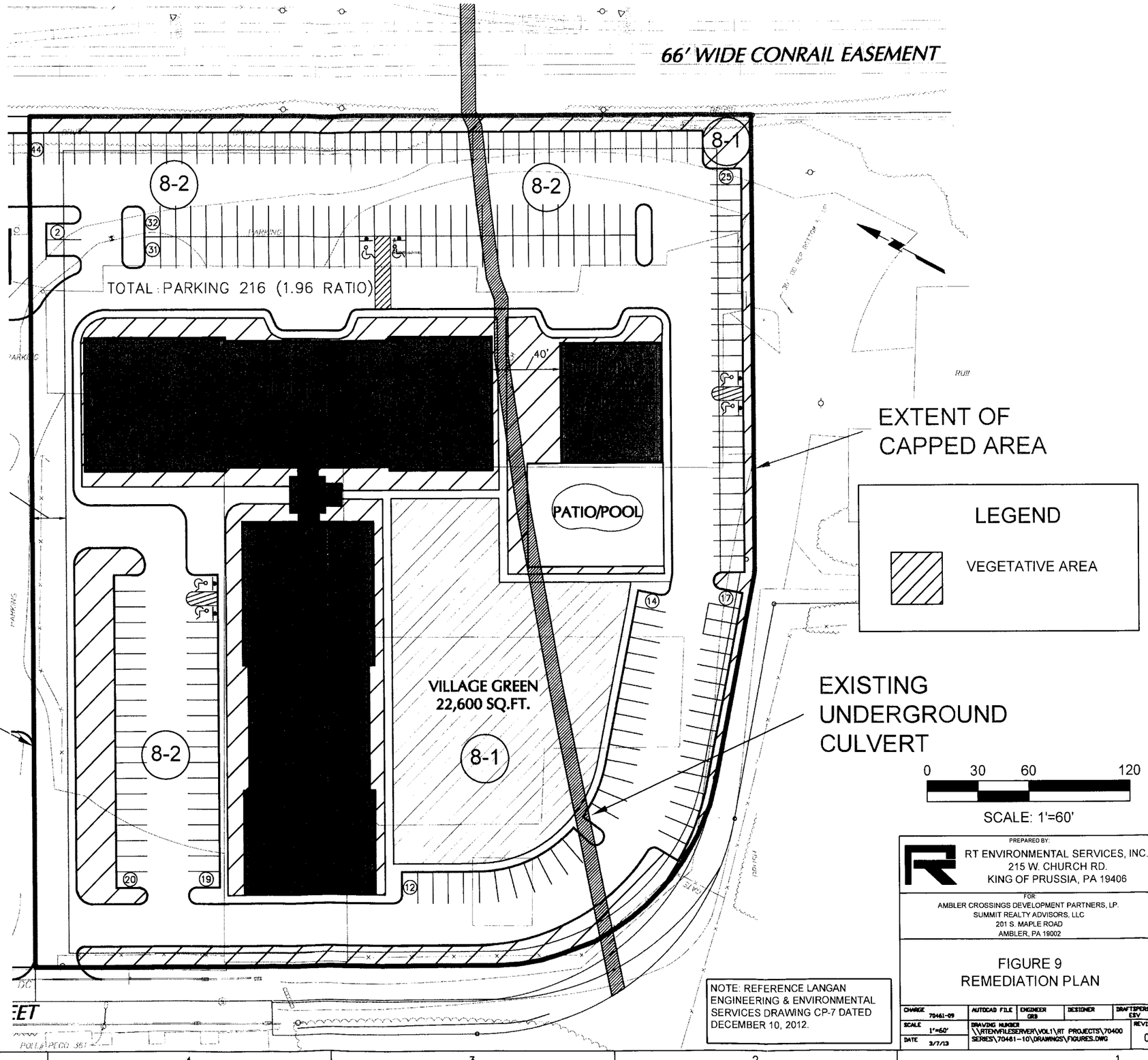
8-3

CONCRETE CAP 4-6"

CRUSH STONE VARYING DEPTH

IMPACTED SOIL

CONCRETE CAP DETAIL (TYP)



NOTE: REFERENCE LANGAN ENGINEERING & ENVIRONMENTAL SERVICES DRAWING CP-7 DATED DECEMBER 10, 2012.

PREPARED BY:
RT ENVIRONMENTAL SERVICES, INC.
215 W. CHURCH RD.
KING OF PRUSSIA, PA 19406

FOR:
AMBLER CROSSINGS DEVELOPMENT PARTNERS, LP.
SUMMIT REALTY ADVISORS, LLC
201 S. MAPLE ROAD
AMBLER, PA 19002

FIGURE 9
REMEDIATION PLAN

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
70461-09		GRB		ESV
SCALE 1"=50'	DRAWING NUMBER \\RTENVFILESERVER\VOL1\RT PROJECTS\70400 SERIES\70461-10\DRAWINGS\FIGURES.DWG			REVISION 0
DATE 3/7/13				

APPENDIX 1

NOTIFICATION OF INTENT TO REMEDIATE (NIR)

&

CORRESPONDENCES

RT Environmental Services, Inc.

March 7, 2013

Mr. Walter Payne, P.G.
Special Projects Section
Pennsylvania Department of the Environmental Protection
Southeast Regional Office
2 East Main Street
Norristown, Pennsylvania 19401
(484) 250-5960 / Fax: (484) 250-5943

RE: SUBMITTAL OF NOTICE OF INTENT TO REMEDIATE
THE BAST PROPERTY
(A PORTION OF THE FORMER NICOLET INDUSTRIES PROPERTY)
SOUTH MAPLE WAY, BOROUGH OF AMBLER
MONTGOMERY COUNTY, PENNSYLVANIA
RT PROJECT #70461-09

Dear Mr. Payne:

RT Environmental Services, Inc., (RT) is pleased to submit this letter notifying you that the Notice of Intent to Remediate (NIR) form is enclosed for the above-referenced site and was also submitted to the Borough of Ambler. Extensive environmental investigation work has been conducted at the site historically by varies entities. Ambler Crossings Development Partners, LP (Developer and Remediator) has retained RT to continue the Act 2 process for the Site. As such, we are submitting the enclosed NIR which indicates attainment of the Site Specific Standard will be achieved through Engineering and Institutional controls as part of site redevelopment. The NIR summary newspaper publication, municipal notification, and certified mail receipt for the municipal notification are attached, as well as the NIR.

If you have any questions, please do not hesitate to call me at (610) 265-1510 ex. 238.

Very truly yours,

RT ENVIRONMENTAL SERVICES, INC.

Walter Hungarter/KSE
Walter H. Hungarter, III
General Manager

cc: John Zaharchuk – Summit Realty Advisors, LLC
C. Herr, G. Brown, K. Eden - RT

G:\RT Projects\70400 SERIES\70461-09\DEP NIR CLEAN UP PLAN NOTICE.doc

8000-FM-CRLG0010 Rev. 9/2010

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
COMMUNITY REVITALIZATION AND LOCAL GOVERNMENT SUPPORT

For DEP Use Only
PF #_____
Rem ID #_____

NOTICE OF INTENT TO REMEDIATE

Act 1995-2 requires four general information items to be included in the NIR: the general location, listing of contaminants, intended use of property, and proposed remediation measures. In addition, indicate the standard(s) to be obtained (if known) and attach a scaled site map (if available).

Property Name Ambler Crossings - Bast Property

Former Name(s) / AKA Portion of Former Nicolet Industries Property

Address / Location South Maple Way

City Borough of Ambler Zip Code 19002

Municipality(s)_____ County(ies) Montgomery

Latitude 40 ° (deg). 09 ' (min) 1.8 " (sec) Longitude -75 ° (deg). 13 ' (min) 25.7 " (sec)

Horizontal Collection Method Google Earth

Horizontal Reference Datum WGS84 Reference Point Center of Site

☐ Wish to participate in the DEP/EPA MOA. Contact Troy Conrad at tconrad@state.pa.us for details.

EPA ID#, if known _____

DEP ID#(s), if known _____
(i.e., eFACTS site ID#, storage tank facility ID#, water quality permit #, watershed permit, air quality permit #, etc.)

Date Release Occurred (if known) _____

Provide a brief description of the site contamination in plain language (e.g. fuel oil spill, historical chemical industrial area contamination), the names of any know primary contaminants to be addressed, and the intended future use of the property.

Notice is hereby given that Ambler Crossings Development Partners, LP (the Developer) has submitted to the Pennsylvania Department of Environmental Protection a Notice of Intent to Remediate (NIR) for the Bast Property (a portion of the former Nicolet Industries Property) located at South Maple Way, Ambler, Montgomery County (the Site). The site has been found to contain historic fill impacted with asbestos and arsenic. The Site will be redeveloped as a multi-family residential development. Impacted materials will be consolidated and capped on site. Institutional controls will be implemented upon redevelopment. The Developer has indicated that the remediation measures proposed will attain compliance with the Site Specific Standards established under the Land Recycling and Environmental Remediation Standards Act.

Provide a general description of proposed remediation measures.

The Developer plans to use the site-specific standard at the site. The Act provides for a 30-day public comment period for site-specific standard remediation projects. The 30-day comment period is hereby initiated with the publication of this notice. During the 30 day comment period, the Borough of Ambler may submit a request to the Developer to be involved in the development of the remediation and reuse plans for the site. The Borough of Ambler may also submit a request to the Developer during this 30-day comment period to develop and implement a public involvement plan. Copies of these requests and of any comments should also be submitted to the Pennsylvania Department of Environmental Protection, Southeast Regional Office, Environmental Cleanup, 2 East Main Street, Norristown, PA 19401, Attention: Mr. Walter Payne

Remediation Standard(s) planned (if known at this time):

☐ Unknown at this time	☐ Soil	☐ Groundwater
☐ Background Contaminants:	☐ Soil	☐ Groundwater
☐ Statewide Health - Residential Contaminants:	☐ Soil	☐ Groundwater
☐ Statewide Health – Non-Residential Contaminants:	☐ Soil	☐ Groundwater
☒ Site Specific Contaminants: Arsenic and Asbestos	☒ Soil	☐ Groundwater
☐ Special Industrial Area* Contaminants:	☐ Soil	☐ Groundwater

*NOTE: Specific standard or Special Industrial Area require a 30-day municipal comment period

Remediator / Property Owner / Consultant. Complete the form below for *each* recipient obtaining a release of liability upon approval of the final report. Attach additional sheets as necessary.

Remediator

Contact Person/Title: John Zaharchuk - President
eFACTS Client ID*: 201913
Relationship to Site: Developer
Client Type*: LP
(e.g. owner, remediator, participant in cleanup, consultant, etc.)
Phone Number: 484-532-7830 x 10
Email Address: jzaharchuk@summitrealtyadvisors.com
Company Name: Ambler Crossing Development Partners, LP
EIN or Federal ID #: 27-1170001
Address (street, city, state, zip): 201 S. Maple Avenue, Suite 100, Ambler, PA 19002

Property Owner

Contact Person/Title: Robert (Bob) Bast
eFACTS Client ID*:
Relationship to Site:
Client Type*: LLP
(e.g. owner, remediator, participant in cleanup, consultant, etc.)
Phone Number: 215.620.9768
Email Address: bobbast@catbow.com
Company Name: Maple Ave Park Partners, LLP
EIN or Federal ID #:
Address (street, city, state, zip): 110 Spruce Lane, Ambler, PA 19002

Consultant

Contact Person/Title: Walter H. Hungarter, III - General Manager
eFACTS Client ID*:
Relationship to Site: Consultant
Client Type*:
(e.g. owner, remediator, participant in cleanup, consultant, etc.)
Phone Number: 610-265-1510 x 238
Email Address: whungarter@rtenv.com
Company Name: RT Environmental Services
EIN or Federal ID #: 23 253 4548
Address (street, city, state, zip): 215 W. Church Road, King of Prussia, PA 19406

*Include eFACTS Client ID (if known) – "Client Types" below:

Association/Organization	Limited Liability company	Partnership-General
Authority	Limited Liability Partnership	Partnership-Limited
County	Municipality	School District
Estate/Trust	Non-Pennsylvania Government	Sole Proprietorship
Federal Agency	Other (Non-Government)	State Agency
Individual	Pennsylvania Corporation	

Preparer of Notice of Intent to Remediate

Name: Ken S. Eden
Title: Project Manager
Phone Number: 610-265-1510 x 241
Email Address: keden@rtenv.com
Company Name: RT Environmental Services
eFACTS Client ID:
Address (street, city, state, zip): 215 W. Church Rd, King of Prussia, PA 19406

RT Environmental Services, Inc.

March 5, 2013

CERTIFIED MAIL

Mrs. Mary Aversa
Borough Manager
Borough of Ambler
122 East Butler Avenue
Ambler, PA 19002
215-646-1000 x106

**RE: NOTICE OF INTENT TO REMEDIATE FOR THE BAST PROPERTY (A PORTION OF THE FORMER NICOLET INDUSTRIES PROPERTY)
SOUTH MAPLE WAY, BOROUGH OF AMBLER
MONTGOMERY COUNTY, PENNSYLVANIA
RT PROJECT #70461-09**

Dear Mrs. Aversa:

RT Environmental Services, Inc. (RT) is pleased to submit this letter notifying you that the Notice of Intent to Remediate (NIR) for the above-referenced site is being submitted to the PA DEP. Act 2 provides that when a site is being remediated to a Site-Specific Standard, the municipality is afforded a 30-day comment period. In accordance with the provisions of the Act, we are formally notifying you of our intent to remediate the subject site. A copy of the NIR, which has been sent to the Department of Environmental Protection ("DEP"), is enclosed. This notice will be published in the Pennsylvania Bulletin, and a summary of the notice will appear in the Ambler Gazette, on Sunday, March 10, 2013.

Publication of this notice in a local newspaper initiates a 30-day public and municipal comment period. During this time, your municipality may request to become involved in the development of the remediation for the site. If the municipality wishes to become involved in this project, please forward your comments to me.

This notice is made under the provision of the Land Recycling and Environmental Standards Act, the Act of May 19, 1995, P.L. 4, No. 2.

Please feel free to contact me if you have any questions at 610/265-1510 ext.238.

Sincerely,

RT ENVIRONMENTAL SERVICES, INC.

Walter Hungarter /KSE
Walter H. Hungarter, III
General Manager

G:\RT Projects\70400 SERIES\70461-09\70461-09 Municipal NIR.docx

c: John Zaharchuk - Summit Realty Advisors, LLC
C. Herr, G. Brown, K. Eden – RT

215 West Church Road ■ King of Prussia, PA 19406 ■ (610) 265-1510 ■ Fax: (610) 265-0687
E-Mail RTENV@AOL.COM ■ Web Address http://www.RTENV.COM

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

Article Addressed to:

Mary Aversa
Borough of Ambler
122 E. Butler Ave.
Ambler, PA 19002

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

AMBLER PA MAR 8 2013 USPS 19002

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☑ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7009 1680 0000 8403 4905

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •
70161-09/KE

RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406-3207

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHEAST REGIONAL OFFICE

RECEIVED
MAR
BY:

March 15, 2013

Mr. Robert Bast
Maple Avenue Park Partners, LLP
110 Spruce Lane
Ambler, PA 19002

Re: ECP - Special Projects - Act 2
Receipt of Background/SWHS NIR
Ambler Crossing–Bast Property
eFACTS No. 743384
South Maple Way
Borough of Ambler
Montgomery County
Latitude: 40 09 1.8
Longitude: -75 13 25.7

Dear Mr. Bast:

This letter acknowledges receipt of your Notice of Intent to Remediate (NIR) on March 8, 2013, pertaining to the subject site and submitted in accordance with the Land Recycling and Environmental Remediation Standards Act (Act 2).

The procedures set forth in Act 2 must be followed in order for your site to qualify for the liability protection provided by the Act. Please ensure that proper municipal and public notifications of your NIR submission have been completed. If in the future you choose to utilize either the Site-Specific Standard or the special industrial area cleanup provisions, you will need to resubmit the NIR and follow the requirements relating to public involvement plan coordination with the local municipality. I will be happy to advise you on this issue.

The Department of Environmental Protection (Department) and the county conservation districts (CCD) have implemented a coordinated effort in their respective reviews of Act 2 Remediation and Erosion and Sedimentation (E&S) Plans to ensure compliance with Chapter 102, Post-Construction Stormwater Management (PCSM), and the National Pollutant Discharge Elimination System (NPDES) permitting requirements. Certain earthmoving activities associated with concurrent Act 2 remediation, demolition, and site redevelopment need to be regulated to ensure the prevention of sediment pollution and release of contaminants to area waterways. These activities include:

- Where earthmoving activities are less than 5,000 square feet, Best Management Practices will be followed.

- Earthmoving impacting less than one acre requires an approved E&S Plan meeting the requirements of Chapter 102 and the E&S Manual.

- Earthmoving impacting or disturbing more than one acre requires an NPDES Stormwater Permit and E&S Plan approvals.

NPDES permit applications for site remediation/redevelopment conducted under Act 2 are to be submitted to the respective CCD in which the site is located and copied to the Environmental Cleanup Program. Permit applications for sites located within the City of Philadelphia are to be submitted to Mr. Domenic Rocco, Chief, Stormwater Section, Southeast Regional Office. Plan reviews for Erosion Control and PCSM within the City of Philadelphia will also be coordinated with the Philadelphia Water Department (PWD). As a reminder, any project requiring a Department permit will need to go through a Pennsylvania Natural Diversity Index (PNDI) screening and have any potential conflicts with threatened and endangered species resolved prior to submitting an application.

Attach a copy of this letter to Plans/Permit applications being submitted to the Watershed Management Program or the CCD.

In addition to earthmoving activities, there are certain permits/approvals required for activities encroaching and impacting surface waters of the Commonwealth.

- Activities directly associated with Act 2 remediation do not require a Chapter 105 Water Obstruction and Encroachment Permit (WOEP). However, the substantive requirements contained in the Chapter 105 regulations must be met, including mitigation for impacts to regulated waters and wetlands.

- Activities associated with redevelopment or access to the remediation site requires a WOEP. Contact the Watershed Management Program, Dams and Waterways Section for information at 484.250.5970.

- The U.S. Army Corps of Engineers, Regulatory Branch, should be contacted at 215.656.6728 regarding Federal 404 authorization for filling waters of the United States.

Further guidance can be located on the program's website address located in the first page footer.

Upon completion of remediation, please submit your Final Report to the Department accompanied by the required fee and documentation verifying compliance with the public notification requirements.

I am the case manager assigned to your project and look forward to working with you towards the remediation of your site. I will be calling either you or your environmental consultant in the coming days to introduce myself, discuss your tentative schedule for this project, and to suggest a framework for providing advice, conducting intermediate project reviews, addressing problems that may occur, and assisting in the goal of making your project a success. In part, we measure our success as a public service agency on the ultimate success of projects such as yours. Our Department has resources to assist the remediator in financial, transactional, and intra and inter state agency coordination of activities related to your project. We encourage frequent contact between your representatives and our staff throughout this process. Please note the web address below, as a resource for technical and program information at http://www.dep.state.pa.us/dep/deputate/airwaste/wm/landrecy/Vol_Clnup.htm . On this web page is a link to FORMS AND LISTS that includes a link to the online Final Report summary form, which we ask that you complete on-line at the time of your Final Report submittal. The forms and lists link also includes optional checklists helpful to assuring that your reports are complete before submittal. Whether or not you choose to use the checklists, our office will perform a technical completeness check (based on the checklists) when the Final Report is submitted.

If you have any questions or need further clarifications of our procedures, please contact me at the phone number located in the first page footer.

Sincerely,

Christopher H. Falkler

Christopher H. Falkler
Soil Scientist 2
Environmental Cleanup and Brownfields

cc: Mr. Zaharchuk (Ambler Crossing Development Partner's LLP)
Mr. Hungarter, III (RT Environmental Services)
Mr. Eden (RT Environmental Services)
Dr. DiMino (Montgomery County Health Department)
Mr. Kadwill (Montgomery County Conservation District)
Mr. Patterson

Ms. Fries
Mrs. Warren
Mr. Payne
Ms. Bass
Re 30 (cb13ecb) 72.3

APPENDIX 2

AMBLER GAZETTE LEGAL NOTICE

Proof of Publication of Notice

THE AMBLER GAZETTE

State of Pennsylvania,
County of Montgomery *ss:*

Bernard N. DeAngelis, Finance Director of MONTGOMERY NEWSPAPERS LLC, a corporation of the County and State aforesaid, being duly sworn, deposes and says that THE AMBLER GAZETTE is a weekly newspaper published at Ambler, County and State aforesaid, which was established in the year 1879, since which date said newspaper has been regularly issued in said County, and that a copy of the printed notice of publication is attached hereto exactly as the same was printed and published in the regular editions and issues of the said weekly newspaper on the following dates, viz:

NOTICE OF INTENT TO REMEDIATE TO AN ENVIRONMENTAL STANDARD

Notice is hereby given that Ambler Crossings Development Partners, LP (the Developer) has submitted to the Pennsylvania Department of Environmental Protection a Notice of Intent to Remediate (NIR) for the Bast Property (a portion of the former Nicolet Industries Property) located at South Maple Way, Ambler, Montgomery County (the Site). The site has been found to contain historic fill impacted with asbestos and arsenic. The Site will be redeveloped as a multi-family residential development. Impacted materials will be consolidated and capped on site. Institutional controls will be implemented upon redevelopment. The Developer has indicated that the remediation measures proposed will attain compliance with the Site Specific Standards established under the Land Recycling and Environmental Remediation Standards Act.

The Developer plans to use the site-specific standard at the site. The Act provides for a 30-day public comment period for site-specific standard remediation projects. The 30-day comment period is hereby initiated with the publication of this notice. During the 30 day comment period, the Borough of Ambler may submit a request to the Developer to be involved in the development of the remediation and reuse plans for the site. The Borough of Ambler may also submit a request to the Developer during this 30-day comment period to develop and implement a public involvement plan. Copies of these requests and of any comments should also be submitted to the Pennsylvania Department of Environmental Protection, Southeast Regional Office, Environmental Cleanup, 2 East Main Street, Norristown, PA 19401, Attention: Mr. Walter Payne.

This notice is made under the provisions of the Land Recycling and Environmental Remediation Standards Act, the Act of May 19, 1995, P.L. #4, No. 2.

Gaz-Mar 10-1A

and the 10th day of March A.D 2013

Affiant further deposes he is duly authorized by Montgomery Newspapers LLC, a corporation publisher of The Ambler Gazette, a weekly newspaper, to verify the foregoing statement under oath and also declares the affiant is not interested in the subject matter of the aforesaid notice or publication, and that all allegations in the foregoing statement as to time, place and character of publication are true.

Bernard N DeAngelis

Finance Director, Montgomery Newspapers LLC, a Corporation

Sworn to and subscribed by me this 20th day of March 2013

Maureen Schmid

Notary Public

My Commission Expires: 3/31/2017

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
MAUREEN SCHMID, Notary Public
Upper Dublin Twp., Montgomery County
My Commission Expires March 31, 2017

APPENDIX 3

BOROUGH OF AMBLER & AMBLER GAZETTE

REPORT SUBMITTAL NOTICES

RT Environmental Services, Inc.

April 30, 2013

CERTIFIED MAIL

Mrs. Mary Aversa
Borough Manager
Borough of Ambler
122 East Butler Avenue
Ambler, PA 19002
215-646-1000 x106

RE: NOTICE OF CLEANUP PLAN REPORT SUBMITTAL FOR THE BAST PROPERTY (A PORTION OF THE FORMER NICOLET INDUSTRIES PROPERTY) ACT 2 LAND RECYCLING PROJECT SOUTH MAPLE WAY, BOROUGH OF AMBLER MONTGOMERY COUNTY, PENNSYLVANIA RT PROJECT #70461-10

Dear Mrs. Aversa:

RT Environmental Services, Inc. (RT) is pleased to submit this letter notifying you that the Cleanup Plan Report for the above-referenced site is being submitted to the PA DEP. The previously PA DEP approved NIR was submitted and this report describes the remediation and cleanup steps for soils at the Site.

This notice is made under the provision of the Land Recycling and Environmental Standards Act, the Act of May 19, 1995, P.L. 4, No. 2.

Please feel free to contact me if you have any questions at 610/265-1510 ext.238.

Sincerely,

RT ENVIRONMENTAL SERVICES, INC.

Walter H. Hungarter, III
General Manager

G:\RT Projects\70400 SERIES\70461-10\70461-10 Municipal Final Notice.docx

c: John Zaharchuk - Summit Realty Advisors, LLC
K. Eden, C. Herr, G. Brown – RT

215 West Church Road ■ King of Prussia, PA 19406 ■ (610) 265-1510 ■ Fax: (610) 265-0687
E-Mail RTENV@AOL.COM ■ Web Address http://www.RTENV.COM

ENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mary Aversa
Borough Manager
Borough of Ambler
122 E. Butler Ave.
Ambler, PA 19002

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addresse

B. Received by (Printed Name) | C. Date of Delive

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7009 1680 0000 8403 4967

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

UNITED STATES POSTAL SERVICE

RECEIVED
MAY 02 2013

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •
10461-10/WH

RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406-3207

Proof of Publication of Notice

THE AMBLER GAZETTE

State of Pennsylvania,
County of Montgomery *ss:*

Bernard N. DeAngelis, Finance Director of MONTGOMERY NEWSPAPERS LLC, a corporation of the County and State aforesaid, being duly sworn, deposes and says that THE AMBLER GAZETTE is a weekly newspaper published at Ambler, County and State aforesaid, which was established in the year 1879, since which date said newspaper has been regularly issued in said County, and that a copy of the printed notice of publication is attached hereto exactly as the same was printed and published in the regular editions and issues of the said weekly newspaper on the following dates, viz:

NOTICE OF REPORT SUBMITTAL

Notice is hereby given that Ambler Crossings Development Partners, LP (the Developer) has submitted to the Pennsylvania Department of Environmental Protection a Cleanup Plan for a site located at South Maple Way, Ambler, Montgomery County (the Site). The Site has been found to contain historic fill impacted with asbestos and arsenic. The Site will be redeveloped as a multi-family residential development. Impacted materials will be consolidated and capped on site. Institutional controls will be implemented upon redevelopment. The Developer has indicated that the remediation measures proposed will attain compliance with the Site Specific Standards established under the Land Recycling and Environmental Remediation Standards Act.

This notice is made under the provision of the Land Recycling and Environmental Remediation Standards Act, the Act of May 19, 1995, P.L. #4, No.2.

Gaz-May 5-1A

and the 5th day of May A.D 2013

Affiant further deposes he is duly authorized by Montgomery Newspapers LLC, a corporation publisher of The Ambler Gazette, a weekly newspaper, to verify the foregoing statement under oath and also declares the affiant is not interested in the subject matter of the aforesaid notice or publication, and that all allegations in the foregoing statement as to time, place and character of publication are true.

Bernard N DeAngelis

Finance Director, Montgomery Newspapers LLC, a Corporation

Sworn to and subscribed by me this 8th day of May 2013

Maureen Schmid

Notary Public

My Commission Expires: 3/31/2017

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
MAUREEN SCHMID, Notary Public
Upper Dublin Twp., Montgomery County
My Commission Expires March 31, 2017

APPENDIX 4

45-DAY NOTICE LETTER - DATED

JULY 5, 2011

RT Environmental Services, Inc.

July 5, 2011

Ms. Fatima ElAbdaoui
US EPA – Region 3
Asbestos NESHAP Coordinator (3WC32)
1650 Arch Street
Philadelphia, PA 19103

Ms. Jillian Gallagher
PA Department of Environmental Protection
Southeast Regional Office
2 East Main Street | Norristown, PA 19401
Phone: 484.250.7503 | Fax: 484.250.5920

RE: NOTIFICATION UNDER 40 CFR 61.151(d)
BAST PROPERTY
MAPLE AVENUE
RT PROJECT #70461-07

Dear Ms. ElAbdaoui and Ms. Gallagher:

RT Environmental Services, Inc. (RT) is pleased to submit this notice in accordance with 40 CFR 61.151 (d) on behalf of our client Ambler BH Development Partners, LLC, for the Bast Property (Formerly Nicolet Industries Property) located on Maple Ave in Ambler, Pennsylvania. As you are aware Ambler BH Development Partners, LLC is proceeding with redevelopment work on the Ambler Boiler House located adjacent to the Bast Property. As part of the Boiler House redevelopment, several activities which involve earth movement will take place on the Bast Property. These activities are summarized herein.

Overview of Site Activities

Removal of a former rail spur embankment in the portion of the Bast Property which will be used as a future parking area for the redevelopment of the Boiler House. It is noted that a portion of the rail spur embankment is located on the Ambler BH Development Partners, LLC property as well as the Bast Property. The embankment removal will include removal of an elevated brick wall, asbestos abatement of transite piping located just below surface grade of the embankment. A portion of the embankment materials will be staged on the Bast Propert for future use as fill material and a portion will be used as fill material and capped within the Boiler House beneath a new floor slab. Brick, block and/or concrete from the wall removal will be staged on the Bast Property for future use as fill material. The project area is shown in Figure 1.

Task 1 Removal a portion of the brick wall to allow access for abatement of the traniste pipe located just below surface grade of the rail spur embankment. Abatement of ~250 LF of transite piping located along the rail spur embankment. To access the piping, hand shovels will be used to remove approximately 6" of overburden soil from the pipe. This material will be staged directly adjacent to the pipe. The transite piping will be broke at bushing locations taking care not to disturb asbestos containing material. Glovebag techniques will be used to abate friable asbestos located in the vicinity of the bushings within the transite piping. Steel pipes located within the traniste piping will be cut following Glovebag removal work. The end sections of transite piping will be bagged,

labeled and placed into a lined rolloff for disposal. It is anticipated that some incidental soil will also be loaded into the lined rolloff container as well. A copy of the 10 day notification which was submitted for the abatement at each property is included in Attachment 1.

Task 2 Following abatement of the transite piping, exploratory test pits will be installed throughout the rail spur embankment. The top of the former rail spur embankment will be cleared of vegetation and grubbed. Clearing and grubbing materials will be disposed offsite. The purpose of the test pits will be to determine if any additional traniste piping is present at depth throughout the rail spur embankment. A trac-hoe will be used to install test pits from on top of the rail spur embankment. Excavated materials will be staged adjacent to the test pit and will be used as back fill to bring the test pit back to its original grade.

Task 3 Removal of brick, block and concrete from the rail spur embankment wall will commenced. Brick, block and concrete will be staged on the Bast Property for future use as fill. A trac-hoe will be used to break up the wall sections. A frontend loader and dump truck will be used to transport the brick, block and concrete to stockpile locations on the Bast Property for future use as fill.

Task 4 A portion of the soil from the rail spur embankment will be moved into the Boiler House and used as fill material to establish a new floor slab grade and a portion will be staged at the Bast Propertyfor future use as fill. Soil from the rail spur embankment will be loaded into dump trucks, moved with bobcats and/or frontend loaders. `Following soil movement, Ambler BH Development Partners, LLC will implement the PA DEP Act 2 Clean-up Plan approved for the site and install the permanent cap (a new concrete floor slab).

Project Status

On June 7, 2011, a 10 day notification was submitted for the work related to abatement of the transite pipe discussed in Task 1 above. There was one notice for the Boiler House Property and a second notice for the vacant project adjacent to the Boiler House (Bast Property). On June 15, 2011, Marcor was informed by PA DEP that the Bast Property was classified as an in-active asbestos disposal facility. This information was immediately communicated to the Ambler BH Development Partners, LLC project team and all work on the Bast Property ceased.

RT met with PA DEP on the Bast Property on June 16, 2011 and completed an inspection of work which was implemented. As of June 16, 2011, the upper portion of the wall had been demolished to gain access to the transite pipe. The brick, block, and concrete from the wall was staged at the bottom of the wall. RT collected five soil samples in the vicinity of the transite pipe to determine if asbestos was present in soils from the former rail spur embankment which was disturbed. Four soil samples were collected from the former rail spur embankment and one soil sample was collected from a debris pile located near a concrete abutment along the wall. Soil samples were analyzed by EMSL Laboratories for asbestos content via EPA 600/R-93/116 Method with CARB 435 Prep. (milling) Level B for 0.1% Target Analytical Sensitivity. Laboratory results indicate that there was no detected asbestos in the former rail spur embankment soil samples, asbestos was detected in the debris pile at a concentration of 0.2%. Analytical results are included in Attachment 2.

As an additional task, Ambler BH Development Partners, LLC requested that RT collect four samples from brick, block and concrete which is proposed to be used on the Bast property as fill material. The purpose of the sampling was to document that the brick, block and concrete qualified as Clean Fill in accordance with the PA DEP Management of Fill Policy following the completion of asbestos abatement activities at the Boiler House. Four samples were collected and submitted to Test America Laboratories, Inc. Samples were analyzed for VOCs (8260B), SVOCs (8270C), pesticides (8081A), PCBs (8082) and RCRA -8 metals (6010B/7471A). Based on the analytical results, the brick, block and concrete from the Boiler House qualified as Clean Fill using the 75% 2x Rule. This material will be staged on the Bast property with the brick, block, concrete from the wall removal associated with the former rail spur embankment and used as Clean Fill on the Bast Property. It is noted that Ambler BH Development Partners, LLC is only staging material on the Bast Property and movement will be by others.

Planned work on the Bast Property will re-commence in accordance with the schedule indicated in this notification.

Procedures to Control Emissions

1. Visual inspection during excavation of materials will be completed during excavation work. The visual inspection will be used to determine if asbestos containing materials are present. Should asbestos be observed during excavation work, additional water will be used to control emissions. Should asbestos be observed, further investigation work will be completed to determine the extent. Once the extent is determined, asbestos impacted soils will be staged on plastic on the Bast site and covered for future management by the property owner.

2. During soil disturbance activities, care will be taken by the equipment operators to minimize the potential for dust generation during soil movements. Operators will control reduce the speed of activities where practical which will minimize the potential for dust generation. Operators will be given a daily briefing from the site superintendent prior to implementation of work on the Bast Property and review procedures to minimize dust generation during soil movements.

3. A water misting system will be employed during soil movement activities to reduce the potential for dust generation during soil movements. The number of misting systems will be sufficient to prevent dust generation without saturating the soil. During the soil movement activities, the inspector will observe soil transport locations for evidence of visual emissions of dust. Should visual emission of dust be observed, operations may be altered in the field to minimize emissions and/or additional misting system may be employed.

4. Additionally, air monitoring will be completed during the earth disturbance activities. The inspector will document the prevailing wind direction each day. The inspector will collect up to four air samples each day, an upgradient location (based on wind direction) and three downgradient locations. Air samples will be submitted to EMSL Laboratories for analysis. All air samples will be analyzed via transmission electron microscopy (TEM) via NIOSH method 7402. The TEM method allows for higher resolution and better identification of asbestos fibers. Analytical results will be turned around in 48 hours.

Schedule Update

Task 1 is planned to begin on July 25, 2011 and be completed on July 29, 2011.
Task 2 is planned to begin on July 27, 2011 and be completed on August 5, 2011.
Task 3 is planned to begin on August 8, 2011and be completed on August 11, 2011.
Task 4 is planned to begin on August 11, 2011 and be completed on August 26, 2011.

It is noted that should the start dates listed above need to be changed that an updated 10 day notice will be provide to the Administrator at least 10 working days before excavation work would commence. Further, work will not proceed prior to the dates listed above.

Future Anticipated Earth Disturbance Activities – Bast Property

As the Ambler BH Development Partners, LLC project continues, future anticipated earth disturbance activities will take place on the Bast Property. These activities will be related to installation of a paved parking lot and landscaping features. This work is the subject of a major modification to NPDES #PAI019607002 which is currently being revised by the applicant. It is noted that once schedules for these activities are firmed up, a new notification under 40 CFR 61.151(d) will be provided a minimum of 45 days prior to commencement of activities.

We appreciate your consideration in this matter and look forward to continuing to work with both the Agency and the Department to continue to implement the redevelopment of the Boiler House property. Should you have any questions, please contact me at (610) 265-1510 ext. 238.

Very truly yours,

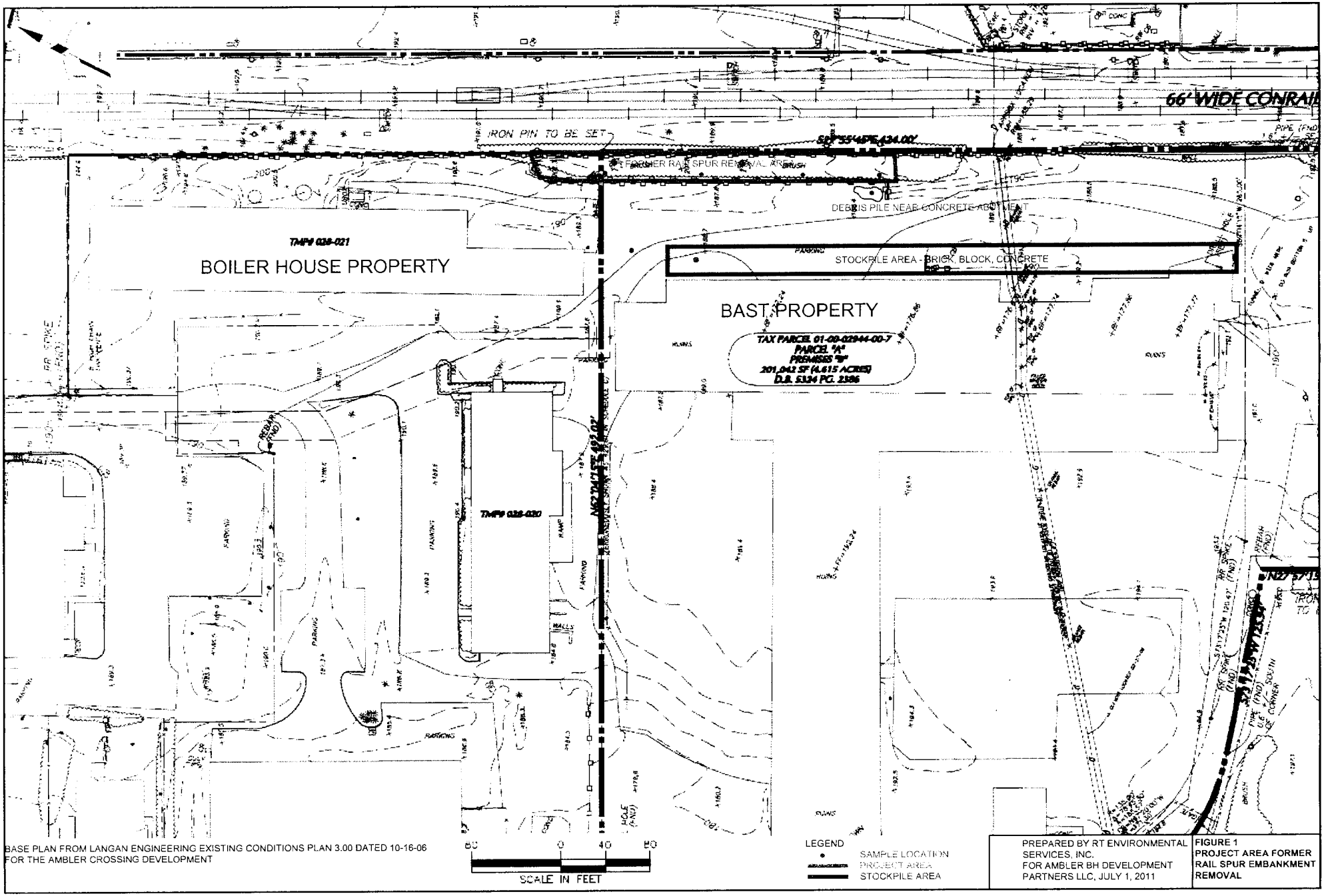
RT ENVIRONMENTAL SERVICES, INC.

Walter H. Hungarter, III
General Manager

CC: Asbestos Notification (Overnight/Express Mail)
DEP Bureau of Air Quality
400 Market Street
Harrisburg, PA 17101

Gary R. Brown – RT
J. Zaharchuk – Ambler BH Development Partners, LLC
Brian Fecondo – Domus
Faye Leonard – Marcor

ATTACHMENT 1 – 10 Day Notification Forms Boiler House and Bast Properties
ATTACHMENT 2 – Soil Sampling Results Former Rail Spur Embankment/Debris Pile
ATTACHMENT 3 – Brick, Block, Concrete Analysis from Boiler House Materials



BASE PLAN FROM LANGAN ENGINEERING EXISTING CONDITIONS PLAN 3.00 DATED 10-16-06 FOR THE AMBLER CROSSING DEVELOPMENT

PREPARED BY RT ENVIRONMENTAL SERVICES, INC.
FOR AMBLER BH DEVELOPMENT PARTNERS LLC, JULY 1, 2011

FIGURE 1
PROJECT AREA FORMER RAIL SPUR EMBANKMENT REMOVAL

ATTACHMENT 1
10 DAY NOTIFICATION FORMS BOILER HOUSE AND BAST PROPERTIES

2700-FM-AQ0021 Rev. 10/2002 COMMONWEALTH OF PENNSYLVANIA

ASBESTOS ABATEMENT AND DEMOLITION/RENOVATION NOTIFICATION FORM

For Official Use Only

Postmark Date: _____

Project ID#: _____

Permit #: _____

Other #: _____

Inspector: _____

Date Received 1

Date Received 2

REFER TO THE ATTACHED INSTRUCTIONS FOR INFORMATION AND REQUIREMENTS.

1. TYPE OF NOTIFICATION **(check one):** ☐ Initial ☐ Annual Notification
   ☒ Revision **(highlight here, and changes)** ☐ Phase of Annual Notification
   ☐ Postponement ☐ Cancellation
   Date of Initial Notification or, if previously revised, date of last revision: 06/07/11

2. PROJECT LOCATION **(check one):**
   ☐ Allegheny County ☐ City of Philadelphia ☒ Other Location in PA **(specify county):** Montgomery

3. **For Allegheny County and City of Philadelphia projects only:**
   A. Does this project require a permit? ☐ Yes ☒ No (If Yes is checked, a permit application must be submitted along with this notification and approved prior to the start of the project.)
   B. For City of Philadelphia projects requiring a permit:
   Asbestos project inspector: _____ Certification #: _____
   Company name: _____
   Address: _____
   City: _____ State: _____ Zip: _____ Phone: _____

4. WILL ALTERNATIVE METHODS TO ANY OF THE APPLICABLE REGULATIONS BE USED? ☐ **Yes** ☒ **No**
   (If Yes is checked, approval must be obtained prior to the start of the project. Please contact the appropriate DEP regional office or local government agency (see reverse of Instruction Sheet for contact list).

5. TYPE OF OPERATION **(check one):** ☐ Abatement prior to Demolition
   ☐ Demolition ☐ Ordered Demolition ☒ Renovation ☐ Emergency Renovation

6. FACILITY DESCRIPTION: Job No.: _____ **(see instructions)**
   Facility Name: Former Ambler Boiler House
   Street/Rural Address: 250 South Maple Street
   City: Ambler State: PA Zip Code: 19002
   Present use: Vacant Manufacturing Prior use: Manufacturing
   Will the facility be occupied during the abatement activity? ☐ Yes ☒ No
   Facility size in square feet: 50,000+/- # of floors: 2 Age in years: 50+

7. ABATEMENT CONTRACTOR:
   Company name: MARCOR Environmental, LP
   Allegheny County or City of Philadelphia License # (if applicable): _____
   Street/Rural/POB Address: 395 Turner Industrial Way
   City: Aston State: PA Zip: 19014
   Contact: Jack Bally Telephone No. (between 8:00 & 4:30): 484-480-8931

8. DEMOLITION CONTRACTOR:
Company name: Geppert Bros., Inc.
Street/Rural/POB Address: 3101 Trewigtown Road
City: Colmar State: PA Zip: 18915
Contact: Ed Burns Telephone No. (between 8:00 & 4:30): 215-822-7900

9. FACILITY OWNER:
Owner name: Ambler BH Development Partners, L.P.
Street/Rural/POB Address: 8 Devonshires Court
City: Blue Bell State: PA Zip: 19422
Contact: John Zaharchuk Telephone No. (between 8:00 & 4:30): 302-740-6429

10. FACILITY INSPECTION (**required for renovation and demolition projects**):
Building inspector: Anthony R. Alessandrini Certification # 036434
Date of inspection: July 30, 2003 Is any material assumed to be asbestos? ☒ Yes ☐ No
Procedure, including analytical method, if appropriate, used to detect the presence of asbestos material:
PLM 600 Method

☐ Building is ID and in danger of collapse. An asbestos investigator will be on site during demolition. (Philadelphia only)

11. IS ANY TYPE OF ASBESTOS PRESENT ☒ Yes ☐ No If Yes, please list in #12

12. TYPE OF ACM, DESCRIPTION & LOCATION OF MATERIAL, APPROXIMATE AMOUNT OF ACM, TYPE OF ABATEMENT AND FINAL AIR CLEARANCE METHOD.

PROVIDE INFORMATION IN THE SPACES BELOW, THEN CONTINUE ON ANOTHER SHEET, IF NECESSARY, USING THE SAME FORMAT.

Code *	Description of material	Location of material (room/floor/area)	Amount of ACM	Code **	Code ***	Code ****
NF2	Debris & Rubble	Throughout, Basement Vault	8000	CF	REM	PCM
FRI	Roofing Debris	Pitched Roof	1200	SF	REM	PCM
NFI	Built Up Roof	Flat Garage Roof	2100	SF	REM	PCM
FRI	Pipe Insulation	Throughout	290	LF	REM	PCM
NFII	Transite Panels	Top of Flat Roof & Chute, Basement Ceiling	750	SF	REM	PCM
FRI	Pipe insulation	at retaining wall in soil	55	LF	REM	PCM

Code *
Type of ACM
FRI - Friable ACM
NF1 - Cat I nonfriable ACM
NF2 - Cat II nonfriable ACM
(Note: Allegheny County treats all ACM as friable)

Code **
Units
LF - Linear ft.
SF - Square ft.
CF - Cubic ft.

Code ***
Type of abatement
REM - Removal
CAP - Encapsulation
CLO - Enclosure
NON - None

Code ****
Final Clearance
PCM - Phase contrast microscopy
TEM - Transmission electron microscopy

13. Is this project regulated by NESHAP ☒ Yes ☐ No
A project that includes the demolition of any defined "facility" is regulated by NESHAP. A renovation project is also regulated by NESHAP when the amounts of friable ACM, or ACM that may be rendered friable, are as follows: 260 LF or 160 SF or 35 CF.

8. DEMOLITION CONTRACTOR:
Company name: Geppert Bros., Inc.
Street/Rural/POB Address: 3101 Trewigtown Road
City: Colmar State: PA Zip: 18915
Contact: Ed Burns Telephone No. (between 8:00 & 4:30): 215-822-7900

9. FACILITY OWNER:
Owner name: Ambler BH Development Partners, L.P.
Street/Rural/POB Address: 8 Devonshires Court
City: Blue Bell State: PA Zip: 19422
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Final Clearance
PCM - Phase contrast microscopy
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A project that includes the demolition of any defined "facility" is regulated by NESHAP. A renovation project is also regulated by NESHAP when the amounts of friable ACM, or ACM that may be rendered friable, are as follows: 260 LF or 160 SF or 35 CF.

14. OPERATION SCHEDULE(S) (as applicable)

A. Asbestos abatement: Start Date: 3/14/11 Completion Date: 8/31/11
Daily hours of operation: 7:00 ☒ am ☐ pm to 5:00 ☐ am ☒ pm
Days of week (check) ☒ Mo ☒ Tu ☒ We ☒ Th ☒ Fr ☐ Sa ☐ Su

B. Demolition: Start Date: 06/01/11 Completion Date: 08/31/11
Daily hours of operation: 7:00 ☒ am ☐ pm to 5:00 ☐ am ☒ pm
Days of week (check) ☒ Mo ☒ Tu ☒ We ☒ Th ☒ Fr ☐ Sa ☐ Su

C. Renovation: Start Date: _____ Completion Date: _____
Daily hours of operation: _____ ☐ am ☐ pm to _____ ☐ am ☐ pm
Days of week (check) ☐ Mo ☐ Tu ☐ We ☐ Th ☐ Fr ☐ Sa ☐ Su

COMMENTS:
Asbestos work remaining is limited to the pipe at the top of the retaining wall. That work will commence on 7/25/11.

15. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK:
Abatement Prior to Demolition. Abatement of pipe prior to any soil movement or retaining wall demolition.

16. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO REMOVE ACM AND TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
Wet methods for friable work and debris/soil movement, all work in segregated areas, Industrial Hygienist inspection & air tests prior to removal of segregation barriers. Glovebag method where pipe insulation is intact. Pipe will be removed in sections, wrapped, and placed in a lined waste transportation container. **In the event that soil must be moved to access pipe at the retaining wall: the soil will be moved manually with spades. Moved soil will be staged immediately adjacent to the location it was removed from.

17. WASTE TRANSPORTER(S)

A. Transporter #1 name: Service Transport
Street/Rural Address: 58 Pyles Lane
City: New Castle State: DE Zip: 19720
Contact: Randy Bridges Telephone: 877-999-9559

B. Transporter #2 name: _____
Street/Rural Address: _____
City: _____ State: _____ Zip: _____
Contact: _____ Telephone: _____

18. WASTE DISPOSAL SITE(S): (any asbestos containing material)

A. Landfill name: Minerva Landfill DEP permit #: 15-1292
Street/Rural Address: 9000 Minerva Rd.
City: Waynesboro State: OH Zip: 44688
Contact: Telephone: 330-866-3435

B. Landfill name: DEP permit #:
Street/Rural Address:
City: State: Zip:
Contact: Telephone:

19. AIR MONITORING FIRM(S)

A. Company name/individual: RT Environmental Services, Inc.
Street/Rural Address: 215 West Church Road
City: King of Prussia State: PA Zip: 19406
Contact: Walter Hungarter III Telephone: 610-265-1510 ext. 238

B. Final clearance firm: (if different than 19A) Same
Street/Rural Address:
City: State: Zip:
Contact: Telephone:

Final clearance firm was hired by (check one) ☐ Contractor ☒ Owner
☐ Other Explain

20. AIR SAMPLE FIRM(S) (City of Philadelphia projects only)

A. PCM company name/individual: Certification #:
Street/Rural Address:
City: State: Zip:
Contact: Telephone:

B. TEM company name: Certification #:
Street/Rural Address:
City: State: Zip:
Contact: Telephone:

21. FOR EMERGENCY RENOVATIONS:

Date of emergency (mm/dd/yy): Hour of emergency: ☐ am ☐ pm

Description of the sudden, unexpected event:

Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden as a consequence of complying with the 10 working day notification requirement:

22. FOR ORDERED DEMOLITIONS (attach copy of order):

Government agency that ordered: _____

Name of Individual who ordered: _____ Title: _____

Date of order (mm/dd/yy): _____ Date ordered to begin (mm/dd/yy): _____

23. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER:

Stop work immediately, secure area, wet material, notify regulatory agencies, cleanup in accordance with all applicable regulations. Perform air monitoring.

24. PENNSYLVANIA CERTIFICATIONS/LICENSES:

Project designer: _____ Certification #: _____

Contractor (Individual): David Jungers Certification #: 044583

Supervisor: TBD Certification #: _____

Contractor (Firm) NCM Demolition and Remediation, LP Certification #: C0646A

* * * * * SIGN BOTH STATEMENTS * * * * *

25. **I HEREBY CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF 40 CFR PART 61 SUBPART M (if applicable) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING ALL WORKING HOURS, AND I CERTIFY THAT ALL WORK WILL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL AGENCY RULES AND REGULATIONS.**

Jack Bally 06/30/11

(Original Signature of Owner/Operator) (Date)

Printed Name of Owner/Operator: Jack Bally Title: Project Manager

26. **I HEREBY CERTIFY THAT THE FOREGOING STATEMENTS AND THE INFORMATION CONTAINED IN THIS NOTIFICATION FORM ARE TRUE. THIS CERTIFICATION IS MADE SUBJECT TO THE PENALTIES SET FORTH IN 18 PA C.S. §4904 RELATING TO UNSWORN FALSIFICATION TO AUTHORITIES.**

Jack Bally 06/30/11

(Original Signature of Owner/Operator) (Date)

Printed Name of Owner/Operator: Jack Bally Title: Project Manager

FOR OFFICIAL USE ONLY

2700-FM-AQ0021 Rev. 10/2002 COMMONWEALTH OF PENNSYLVANIA

ASBESTOS ABATEMENT AND DEMOLITION/RENOVATION NOTIFICATION FORM

For Official Use Only

Postmark Date: _____

Project ID#: _____

Permit #: _____

Other #: _____

Inspector: _____

Date Received 1	Date Received 2

REFER TO THE ATTACHED INSTRUCTIONS FOR INFORMATION AND REQUIREMENTS.

1. TYPE OF NOTIFICATION **(check one):** ☐ Initial ☐ Annual Notification
   ☒ Revision **(highlight here, and changes)** ☐ Phase of Annual Notification
   ☐ Postponement ☐ Cancellation
   Date of Initial Notification or, if previously revised, date of last revision: 06/24/11

2. PROJECT LOCATION **(check one):**
   ☐ Allegheny County ☐ City of Philadelphia ☒ Other Location in PA **(specify county):** Montgomery

3. **For Allegheny County and City of Philadelphia projects only:**
   A. Does this project require a permit? ☐ Yes ☒ No (If Yes is checked, a permit application must be submitted along with this notification and approved prior to the start of the project.)
   B. For City of Philadelphia projects requiring a permit:
   Asbestos project inspector: _____ Certification #: _____
   Company name: _____
   Address: _____
   City: _____ State: _____ Zip: _____ Phone: _____

4. WILL ALTERNATIVE METHODS TO ANY OF THE APPLICABLE REGULATIONS BE USED? ☐ Yes ☒ No
   (If Yes is checked, approval must be obtained prior to the start of the project. Please contact the appropriate DEP regional office or local government agency (see reverse of Instruction Sheet for contact list).

5. TYPE OF OPERATION **(check one):** ☐ Abatement prior to Demolition
   ☐ Demolition ☐ Ordered Demolition ☒ Renovation ☐ Emergency Renovation

6. FACILITY DESCRIPTION: Job No.: _____ **(see instructions)**
   Facility Name: Vacant Property Adjacent to Former Ambler Boiler House
   Street/Rural Address: 201 South Maple Street
   City: Ambler State: PA Zip Code: 19002
   Present use: Abandoned Pipe Buried Outside Prior use: Part of Industrial Complex
   Will the facility be occupied during the abatement activity? ☐ Yes ☒ No
   Facility size in square feet: N/A # of floors: N/A Age in years: _____

7. ABATEMENT CONTRACTOR:
   Company name: MARCOR Environmental, LP
   Allegheny County or City of Philadelphia License # (if applicable): _____
   Street/Rural/POB Address: 395 Turner Industrial Way
   City: Aston State: PA Zip: 19014
   Contact: Jack Bally Telephone No. (between 8:00 & 4:30): 484-480-8931

8. DEMOLITION CONTRACTOR:
Company name: N/A
Street/Rural/POB Address:
City: State: Zip:
Contact: Telephone No. (between 8:00 & 4:30):

9. FACILITY OWNER:
Owner name: Maple Avenue Park Partners, LLP
Street/Rural/POB Address: 110 Spruce Lane
City: Ambler State: PA Zip: 19002
Contact: Robert Bast Telephone No. (between 8:00 & 4:30): 215-793-6000

10. FACILITY INSPECTION **(required for renovation and demolition projects)**:
Building Inspector: Joshua Hagadorn Certification # 042403
Date of Inspection: May 31, 2011 Is any material assumed to be asbestos? ☒ Yes ☐ No
Procedure, including analytical method, if appropriate, used to detect the presence of asbestos material:
Assumed

☐ Building is ID and in danger of collapse. An asbestos investigator will be on site during demolition. (Philadelphia only)

11. IS ANY TYPE OF ASBESTOS PRESENT ☒ Yes ☐ No If Yes, please list in #12

12. TYPE OF ACM, DESCRIPTION & LOCATION OF MATERIAL, APPROXIMATE AMOUNT OF ACM, TYPE OF ABATEMENT AND FINAL AIR CLEARANCE METHOD.

PROVIDE INFORMATION IN THE SPACES BELOW, THEN CONTINUE ON ANOTHER SHEET, IF NECESSARY, USING THE SAME FORMAT.

Code *	Description of material	Location of material (room/floor/area)	Amount of ACM	Code **	Code ***	Code ****
FRI	Transite Pipe with TSI within	Below Surface Soil in Retaining Wall	250	LF	REM	TEM

Code *
Type of ACM
FRI - Friable ACM
NF1 - Cat I nonfriable ACM
NF2 - Cat II nonfriable ACM
(Note: Allegheny County treats all ACM as friable)

Code **
Units
LF - Linear ft.
SF - Square ft.
CF - Cubic ft.

Code ***
Type of abatement
REM - Removal
CAP - Encapsulation
CLO - Enclosure
NON - None

Code ****
Final Clearance
PCM - Phase contrast microscopy
TEM - Transmission electron microscopy

13. Is this project regulated by NESHAP ☒ Yes ☐ No
A project that includes the demolition of any defined "facility" is regulated by NESHAP. A renovation project is also regulated by NESHAP when the amounts of friable ACM, or ACM that may be rendered friable, are as follows: 260 LF or 160 SF or 35 CF.

14. OPERATION SCHEDULE(S) (as applicable)

A. Asbestos abatement: Start Date: 07/25/11 Completion Date: 08/31/11
Daily hours of operation: 7:00 ☒ am ☐ pm to 5:00 ☐ am ☒ pm
Days of week (check) ☒ Mo ☒ Tu ☒ We ☒ Th ☒ Fr ☐ Sa ☐ Su

B. Demolition: Start Date: _____ Completion Date: _____
Daily hours of operation: _____ ☐ am ☐ pm to _____ ☐ am ☐ pm
Days of week (check) ☐ Mo ☐ Tu ☐ We ☐ Th ☐ Fr ☐ Sa ☐ Su

C. Renovation: Start Date: _____ Completion Date: _____
Daily hours of operation: _____ ☐ am ☐ pm to _____ ☐ am ☐ pm
Days of week (check) ☐ Mo ☐ Tu ☐ We ☐ Th ☐ Fr ☐ Sa ☐ Su

COMMENTS:

Abatement of newly discovered material outside any building foot print.

15. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK:

Remove asbestos transite w/ TSI within.

16. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO REMOVE ACM AND TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:

Wet methods for friable work and debris/soil movement, all work in segregated areas, Industrial Hygienist inspection & air tests prior to removal of segregation barriers. Glovebag method where pipe insulation is intact. Pipe will be removed in sections, wrapped, and placed in a lined wast transportation container. **In the event that soil must be moved to access pipe at the retaining wall: the soil will be moved manually with spades. Moved soil will be staged immediately adjacent to the location it was removed from.

17. WASTE TRANSPORTER(S)

A. Transporter #1 name: Service Transport
Street/Rural Address: 58 Pyles Lane
City: New Castle State: DE Zip: 19720
Contact: Randy Bridges Telephone: 877-999-9559

B. Transporter #2 name: Same as #1
Street/Rural Address: _____
City: _____ State: _____ Zip: _____
Contact: _____ Telephone: _____

18. WASTE DISPOSAL SITE(S): **(any asbestos containing material)**

A. Landfill name: Minerva Landfill DEP permit #: 15-1292
Street/Rural Address: 9000 Minerva Rd.
City: Waynesboro State: OH Zip: 44688
Contact: Telephone: 330-866-3435

B. Landfill name: DEP permit #:
Street/Rural Address:
City: State: Zip:
Contact: Telephone:

19. AIR MONITORING FIRM(S)

A. Company name/individual: RT Environmental Services, Inc.
Street/Rural Address: 215 West Church Road
City: King of Prussia State: PA Zip: 19406
Contact: Walter Hungarter III Telephone: 610-265-1510 ext. 238

B. Final clearance firm: (if different than 19A) Same
Street/Rural Address:
City: State: Zip:
Contact: Telephone:
Final clearance firm was hired by (check one) ☒ Contractor ☐ Owner
☐ Other Explain

20. AIR SAMPLE FIRM(S) **(City of Philadelphia projects only)**

A. PCM company name/individual: Certification #:
Street/Rural Address:
City: State: Zip:
Contact: Telephone:

B. TEM company name: Certification #:
Street/Rural Address:
City: State: Zip:
Contact: Telephone:

21. FOR EMERGENCY RENOVATIONS:

Date of emergency (mm/dd/yy): Hour of emergency: ☐ am ☐ pm

Description of the sudden, unexpected event:

Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden as a consequence of complying with the 10 working day notification requirement:

22. FOR ORDERED DEMOLITIONS (attach copy of order):

Government agency that ordered: _____

Name of individual who ordered: _____ Title: _____

Date of order (mm/dd/yy): _____ Date ordered to begin (mm/dd/yy): _____

23. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER:

Stop work immediately, secure area, wet material, notify regulatory agencies, cleanup in accordance with all applicable regulations. Perform air monitoring.

24. PENNSYLVANIA CERTIFICATIONS/LICENSES:

Project designer: _____ Certification #: _____

Contractor (Individual): David Jungers Certification #: 044583

Supervisor: TBD Certification #: _____

Contractor (Firm) NCM Demolition and Remediation, LP Certification #: C0646A

* * * * * SIGN BOTH STATEMENTS * * * * *

25. **I HEREBY CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF 40 CFR PART 61 SUBPART M (if applicable) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING ALL WORKING HOURS, AND I CERTIFY THAT ALL WORK WILL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL AGENCY RULES AND REGULATIONS.**

_____ 06/30/11

(Original Signature of Owner/Operator) **(Date)**

Printed Name of Owner/Operator: Jack Bally Title: Project Manager

26. **I HEREBY CERTIFY THAT THE FOREGOING STATEMENTS AND THE INFORMATION CONTAINED IN THIS NOTIFICATION FORM ARE TRUE. THIS CERTIFICATION IS MADE SUBJECT TO THE PENALTIES SET FORTH IN 18 PA C.S. §4904 RELATING TO UNSWORN FALSIFICATION TO AUTHORITIES.**

_____ 06/30/11

(Original Signature of Owner/Operator) **(Date)**

Printed Name of Owner/Operator: Jack Bally Title: Project Manager

FOR OFFICIAL USE ONLY

ATTACHMENT 2
SOIL SAMPLING RESULTS FORMER RAIL SPUR EMBANKMENT/DEBRIS PILE

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone: (800) 220-3675 Fax: (856) 786-0974 Email: westmontaslab@EMSL.com

Attn: **Walter Hungarter**
RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

Fax: (610) 265-0687 Phone: (610) 265-151038
Project: **AMBLER BH**

Customer ID: RTES49
Customer PO: 70461-01
Received: 06/16/11 7:00 PM
EMSL Order: 041115812

EMSL Proj:
Analysis Date: 6/17/2011

Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling). Level B for 0.1% Target Analytical Sensitivity

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
PL (S-1) *041115812-0001*	SOIL-PROPERTY LINE	Black Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
S-2 *041115812-0002*	SOIL-75 FEET FROM PL	Black Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
S-3 *041115812-0003*	SOIL-150 FEET FROM PL	Black Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
S-4 *041115812-0004*	SOIL-CONCRETE END	Brown/Black Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
FP (S-5) *041115812-0005*	SOIL-FILL PILE CONCRETE END	Brown/Black Non-Fibrous Homogeneous	3.00% Cellulose	96.80% Non-fibrous (other)	**0.20% Chrysotile**

Initial report from 06/17/2011 18:30:44

Analyst(s)
Garret Vliet (5)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

This report relates only to the samples listed above and may not be reproduced except in full, without EMSL's written approval. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for sample collection activities or method limitations. Some samples may contain asbestos fibers below the resolution limit of PLM. EMSL recommends that samples reported as none detected or less then the limit of detection undergo additional analysis via TEM. Samples received in good condition unless otherwise noted.
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ

THIS IS THE LAST PAGE OF THE REPORT.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone: (800) 220-3675 Fax: (856) 786-5974 Email: westmontaslab@EMSL.com

Attn: **Walter Hungarter**
RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406
Fax: (610) 265-0687 Phone: (610) 265-151038
Project: **AMBLER BH**

Customer ID: RTES49
Customer PO: 70461-01
Received: 06/16/11 7:00 PM
EMSL Order: 041115812
EMSL Proj:
Analysis Date: 6/17/2011

Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling). Level B for 0.1% Target Analytical Sensitivity

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
PL (S-1) *041115812-0001*	SOIL-PROPERTY LINE	Black Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
S-2 *041115812-0002*	SOIL-75 FEET FROM PL	Black Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
S-3 *041115812-0003*	SOIL-150 FEET FROM PL	Black Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
S-4 *041115812-0004*	SOIL-CONCRETE END	Brown/Black Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
FP (S-5) *041115812-0005*	SOIL-FILL PILE CONCRETE END	Brown/Black Non-Fibrous Homogeneous	3.00% Cellulose	96.80% Non-fibrous (other)	**0.20% Chrysotile**

Initial report from 06/17/2011 18:30:44

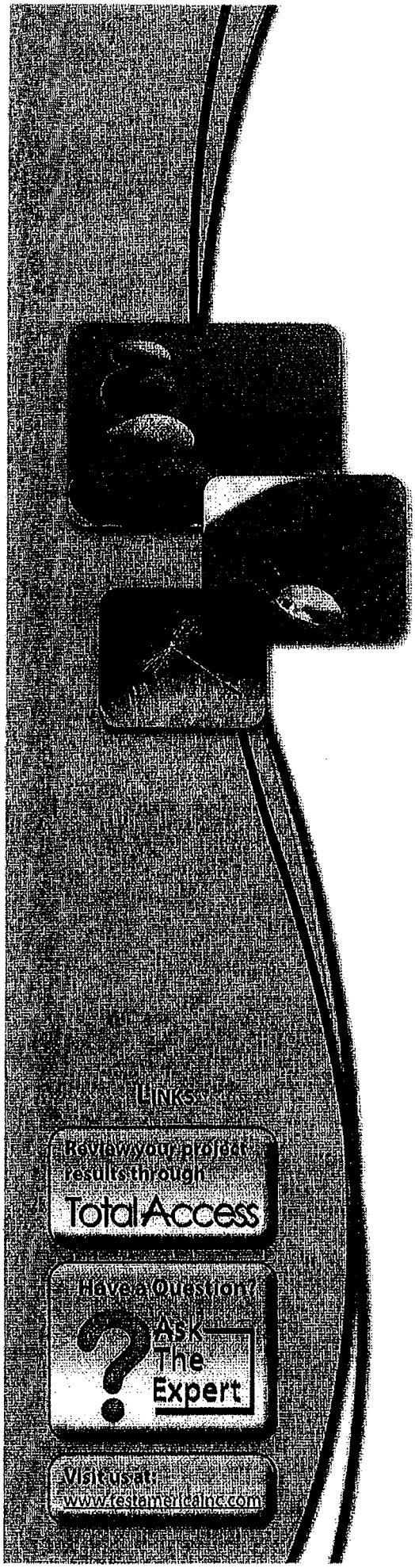
Analyst(s)
Garret Vliet (5)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

This report relates only to the samples listed above and may not be reproduced except in full, without EMSL's written approval. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for sample collection activities or method limitations. Some samples may contain asbestos fibers below the resolution limit of PLM. EMSL recommends that samples reported as none detected or less then the limit of detection undergo additional analysis via TEM. Samples received in good condition unless otherwise noted.
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ

THIS IS THE LAST PAGE OF THE REPORT.

ATTACHMENT 3
BRICK, BLOCK, CONCRETE ANALYSIS FROM BOILER HOUSE MATERIALS



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica King Of Prussia
1008 West Ninth Avenue
King of Prussia, PA 19406
Tel: 610.337.9992

TestAmerica Job ID: KUF0338
Client Project/Site: 70461-07
Client Project Description: Ambler BH-CD

For:
RT ENVIRONMENTAL
215 West Church Road
King of Prussia, PA 19406

Attn: Walter Hungarter

Authorized for release by:
06/23/2011 01:43:01 PM
Crystal Pollock
Lab Director
crystal.pollock@testamericainc.com

Designee for

Jill Miller
Project Manager
jill.miller@testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC requirements for accredited parameters, exceptions are noted in this report. Pursuant to NELAC, this report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Table of Contents

Sample Summary

Client: RT ENVIRONMENTAL
Project/Site: 70461-07

TestAmerica Job ID: KUF0338

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
KUF0338-01	CD-1	Soil	06/15/11 11:45	06/15/11 13:40
KUF0338-02	CD-2	Soil	06/15/11 11:55	06/15/11 13:40
KUF0338-03	CD-3	Soil	06/15/11 12:00	06/15/11 13:40
KUF0338-04	CD-4	Soil	06/15/11 12:10	06/15/11 13:40

Qualifiers

Semivolatiles, 8270

Qualifier	Qualifier Description
RL1	Reporting limit raised due to sample matrix effects.
RL8	Reporting limit adjusted to reflect sample amount received and/or analyzed.

Semivolatiles, pest/pcb

Qualifier	Qualifier Description
C4	Calibration Verification recovery was below the method control limit for this analyte.
L1	Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above acceptance limits.
R1	The RPD between the primary and confirmatory analysis exceeded 40%. Per method 8000B, the higher value was reported.
RL7	Sample required dilution due to high concentrations of target analyte.
Z5	Due to sample matrix effects, the surrogate recovery was outside acceptance limits. Secondary surrogate recovery was within the acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Client Sample ID: CD-1
Date Collected: 06/15/11 11:45
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-01
Matrix: Soil
Percent Solids: 94.9

Method: EPA 8260B - Volatile Organic Compounds by EPA Method 5035/8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
1,3,5-Trimethylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97.3*		*83 - 122*	*06/16/11 12:41*	*06/16/11 23:57*	*1.0*

Method: EPA 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
1,1,2,2-Tetrachloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
1,1,2-Trichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
1,1-Dichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
1,1-Dichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
1,2-Dichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
1,2-Dichloropropane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
2-Butanone	ND		0.10		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
2-Hexanone	ND		0.010		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
4-Methyl-2-pentanone	ND		0.010		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Acetone	ND		0.10		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Benzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Bromodichloromethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Bromoform	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Bromomethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Carbon disulfide	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Carbon tetrachloride	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Chlorobenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Chlorodibromomethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Chloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Chloroform	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Chloromethane	ND		0.010		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
cis-1,2-Dichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
cis-1,3-Dichloropropene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Ethylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Isopropylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Methyl tert-butyl ether	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Methylene chloride	ND		0.0060		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Styrene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Tetrachloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Toluene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
trans-1,2-Dichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
trans-1,3-Dichloropropene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Trichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Trichlorofluoromethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Vinyl chloride	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0
Xylenes (total)	ND		0.012		mg/kg dry	☼	06/16/11 12:41	06/16/11 23:57	1.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*102*		*85 - 122*	*06/16/11 12:41*	*06/16/11 23:57*	*1.0*
1,2-Dichloroethane-d4	*108*		*85 - 130*	*06/16/11 12:41*	*06/16/11 23:57*	*1.0*
Toluene-d8	*101*		*89 - 111*	*06/16/11 12:41*	*06/16/11 23:57*	*1.0*
Toluene-d8	*101*		*89 - 111*	*06/16/11 12:41*	*06/16/11 23:57*	*1.0*

Client Sample ID: CD-1
Date Collected: 06/15/11 11:45
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-01
Matrix: Soil
Percent Solids: 94.9

Method: EPA 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97.3		83 - 122	06/16/11 12:41	06/16/11 23:57	1.0

Method: EPA 8270C - Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
1,2-Dichlorobenzene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
1,3-Dichlorobenzene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
1,4-Dichlorobenzene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2,4,5-Trichlorophenol	ND	RL1 RL8	12		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2,4,6-Trichlorophenol	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2,4-Dichlorophenol	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2,4-Dimethylphenol	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2,4-Dinitrophenol	ND	RL1 RL8	12		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2,4-Dinitrotoluene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2,6-Dinitrotoluene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2-Chloronaphthalene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2-Chlorophenol	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2-Methylnaphthalene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2-Methylphenol	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2-Nitroaniline	ND	RL1 RL8	12		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
2-Nitrophenol	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
3&4-Methylphenol	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
3,3'-Dichlorobenzidine	ND	RL1 RL8	12		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
3-Nitroaniline	ND	RL1 RL8	12		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
4,6-Dinitro-2-methylphenol	ND	RL1 RL8	12		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
4-Bromophenyl-phenyl ether	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
4-Chloro-3-methylphenol	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
4-Chloroaniline	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
4-Chlorophenyl phenyl ether	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
4-Nitroaniline	ND	RL1 RL8	12		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
4-Nitrophenol	ND	RL1 RL8	12		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Acenaphthene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Acenaphthylene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Aniline	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Anthracene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Benzo (a) anthracene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Benzo (a) pyrene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Benzo (b) fluoranthene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Benzo (g,h,i) perylene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Benzo (k) fluoranthene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Benzoic acid	ND	RL1 RL8	12		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Benzyl alcohol	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Bis(2-chloroethoxy)methane	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Bis(2-chloroethyl)ether	ND	RL1 RL8	1.2		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Bis(2-chloroisopropyl)ether	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Bis(2-ethylhexyl)phthalate	ND	RL1 RL8	7.8		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Butyl benzyl phthalate	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Chrysene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Dibenz (a,h) anthracene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Dibenzofuran	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10

Client Sample ID: CD-1
Date Collected: 06/15/11 11:45
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-01
Matrix: Soil
Percent Solids: 94.9

Method: EPA 8270C - Semivolatile Organic Compounds by EPA Method 8270C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Dimethyl phthalate	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Di-n-butyl phthalate	ND	RL1 RL8	7.8		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Di-n-octyl phthalate	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Diphenylamine	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Fluoranthene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Fluorene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Hexachlorobenzene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Hexachlorobutadiene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Hexachlorocyclopentadiene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Hexachloroethane	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Indeno (1,2,3-cd) pyrene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Isophorone	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Naphthalene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Nitrobenzene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
N-Nitrosodi-n-propylamine	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Pentachlorophenol	ND	RL1 RL8	12		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Phenanthrene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Phenol	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10
Pyrene	ND	RL1 RL8	2.4		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:08	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*85.6*	*RL1 RL8*	*36 - 111*	*06/17/11 00:00*	*06/18/11 03:08*	*10*
Phenol-d6	*88.4*	*RL1 RL8*	*48 - 108*	*06/17/11 00:00*	*06/18/11 03:08*	*10*
Nitrobenzene-d5	*95.1*	*RL1 RL8*	*47 - 106*	*06/17/11 00:00*	*06/18/11 03:08*	*10*
2-Fluorobiphenyl	*97.0*	*RL1 RL8*	*54 - 106*	*06/17/11 00:00*	*06/18/11 03:08*	*10*
2,4,6-Tribromophenol	*74.6*	*RL1 RL8*	*37 - 122*	*06/17/11 00:00*	*06/18/11 03:08*	*10*
Terphenyl-d14	*95.1*	*RL1 RL8*	*64 - 118*	*06/17/11 00:00*	*06/18/11 03:08*	*10*

Method: EPA 8081A - Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
alpha-BHC	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
beta-BHC	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
delta-BHC	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
gamma-BHC (Lindane)	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
Chlordane (tech)	ND	C4	0.020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
alpha-Chlordane	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
gamma-Chlordane	**0.018**	**C4 R1**	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
4,4'-DDD	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
4,4'-DDE	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
4,4'-DDT	**0.042**	**C4**	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
Dieldrin	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
Endosulfan I	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
Endosulfan II	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
Endosulfan sulfate	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
Endrin	**0.0046**	**C4 R1**	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
Endrin aldehyde	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
Endrin ketone	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
Heptachlor	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
Heptachlor epoxide	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0

Client Sample ID: CD-1
Date Collected: 06/15/11 11:45
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-01
Matrix: Soil
Percent Solids: 94.9

Method: EPA 8081A - Organochlorine Pesticides by EPA Method 8081A (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	ND	C4	0.020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0
Toxephene	ND	C4	0.080		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:00	1.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-meta-xylene	*55.6*	*C4*	*33 - 111*	*06/17/11 00:00*	*06/20/11 17:00*	*1.0*
Decachlorobiphenyl	*17.1*	*C4 Z5*	*30 - 119*	*06/17/11 00:00*	*06/20/11 17:00*	*1.0*

Method: EPA 8082 - Polychlorinated Biphenyls by EPA Method 8082 - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	RL7 L1	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:05	10
PCB-1221	ND	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:05	10
PCB-1232	ND	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:05	10
PCB-1242	ND	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:05	10
PCB-1248	ND	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:05	10
PCB-1254	0.72	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:05	10
PCB-1260	ND	RL7 L1	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:05	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-meta-xylene	*52.0*	*RL7*	*21 - 119*	*06/21/11 10:14*	*06/22/11 07:05*	*10*
Decachlorobiphenyl	*48.0*	*RL7*	*10 - 144*	*06/21/11 10:14*	*06/22/11 07:05*	*10*

Method: EPA 6010B - Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.6		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:35	2.0
Barium	99		1.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:35	2.0
Cadmium	ND		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:35	2.0
Chromium	18		5.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:35	2.0
Lead	480		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:35	2.0
Selenium	ND		8.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:35	2.0
Silver	ND		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:35	2.0

Method: EPA 7471A - Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.300		0.100		mg/kg dry	☼	06/21/11 08:11	06/21/11 13:37	1.00

Client Sample ID: CD-2
Date Collected: 06/15/11 11:55
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-02
Matrix: Soil
Percent Solids: 94.4

Method: EPA 8260B - Volatile Organic Compounds by EPA Method 5035/8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
1,3,5-Trimethylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97.0*		*83 - 122*	*06/16/11 12:41*	*06/17/11 00:27*	*1.0*

Method: EPA 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
1,1,2,2-Tetrachloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
1,1,2-Trichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0

Client Sample ID: CD-2
Date Collected: 06/15/11 11:55
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-02
Matrix: Soil
Percent Solids: 94.4

Method: EPA 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
1,1-Dichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
1,2-Dichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
1,2-Dichloropropane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
2-Butanone	ND		0.10		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
2-Hexanone	ND		0.010		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
4-Methyl-2-pentanone	ND		0.010		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Acetone	ND		0.10		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Benzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Bromodichloromethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Bromoform	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Bromomethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Carbon disulfide	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Carbon tetrachloride	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Chlorobenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Chlorodibromomethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Chloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Chloroform	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Chloromethane	ND		0.010		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
cis-1,2-Dichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
cis-1,3-Dichloropropene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Ethylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Isopropylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Methyl tert-butyl ether	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Methylene chloride	ND		0.0080		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Styrene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Tetrachloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Toluene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
trans-1,2-Dichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
trans-1,3-Dichloropropene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Trichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Trichlorofluoromethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Vinyl chloride	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0
Xylenes (total)	ND		0.012		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:27	1.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*103*		*85 - 122*	*06/16/11 12:41*	*06/17/11 00:27*	*1.0*
1,2-Dichloroethane-d4	*113*		*85 - 130*	*06/16/11 12:41*	*06/17/11 00:27*	*1.0*
Toluene-d8	*101*		*88 - 111*	*06/16/11 12:41*	*06/17/11 00:27*	*1.0*
Toluene-d8	*101*		*88 - 111*	*06/16/11 12:41*	*06/17/11 00:27*	*1.0*
4-Bromofluorobenzene	*97.0*		*83 - 122*	*06/16/11 12:41*	*06/17/11 00:27*	*1.0*

Method: EPA 8270C - Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
1,2-Dichlorobenzene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
1,3-Dichlorobenzene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
1,4-Dichlorobenzene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
2,4,5-Trichlorophenol	ND	RL1	5.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
2,4,6-Trichlorophenol	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
2,4-Dichlorophenol	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10

Client Sample ID: CD-2
Date Collected: 06/15/11 11:55
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-02
Matrix: Soil
Percent Solids: 94.4

Method: EPA 8270C - Semivolatile Organic Compounds by EPA Method 8270C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
2,4-Dinitrophenol	ND	RL1	5.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
2,4-Dinitrotoluene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
2,6-Dinitrotoluene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
2-Chloronaphthalene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
2-Chlorophenol	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
2-Methylnaphthalene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
2-Methylphenol	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
2-Nitroaniline	ND	RL1	5.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
2-Nitrophenol	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
3&4-Methylphenol	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
3,3'-Dichlorobenzidine	ND	RL1	5.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
3-Nitroaniline	ND	RL1	5.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
4,6-Dinitro-2-methylphenol	ND	RL1	5.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
4-Bromophenyl-phenyl ether	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
4-Chloro-3-methylphenol	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
4-Chloroaniline	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
4-Chlorophenyl phenyl ether	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
4-Nitroaniline	ND	RL1	5.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
4-Nitrophenol	ND	RL1	5.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Acenaphthene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Acenaphthylene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Aniline	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Anthracene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Benzo (a) anthracene	**1.1**	**RL1**	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Benzo (a) pyrene	**1.2**	**RL1**	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Benzo (b) fluoranthene	**1.7**	**RL1**	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Benzo (g,h,i) perylene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Benzo (k) fluoranthene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Benzoic acid	ND	RL1	5.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Benzyl alcohol	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Bis(2-chloroethoxy)methane	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Bis(2-chloroethyl)ether	ND	RL1	0.50		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Bis(2-chloroisopropyl)ether	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Bis(2-ethylhexyl)phthalate	ND	RL1	3.3		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Butyl benzyl phthalate	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Chrysene	**1.4**	**RL1**	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Dibenz (a,h) anthracene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Dibenzofuran	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Diethyl phthalate	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Dimethyl phthalate	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Di-n-butyl phthalate	ND	RL1	3.3		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Di-n-octyl phthalate	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Diphenylamine	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Fluoranthene	**2.9**	**RL1**	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Fluorene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Hexachlorobenzene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Hexachlorobutadiene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Hexachlorocyclopentadiene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Hexachloroethane	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10

Client Sample ID: CD-2
Date Collected: 06/15/11 11:55
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-02
Matrix: Soil
Percent Solids: 94.4

Method: EPA 8270C - Semivolatile Organic Compounds by EPA Method 8270C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno (1,2,3-cd) pyrene	1.0	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Isophorone	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Naphthalene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Nitrobenzene	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
N-Nitrosodi-n-propylamine	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Pentachlorophenol	ND	RL1	5.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Phenanthrene	2.3	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Phenol	ND	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10
Pyrene	2.4	RL1	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 03:35	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*84.9*	*RL1*	*36 - 111*	*06/17/11 00:00*	*06/18/11 03:35*	*10*
Phenol-d6	*91.5*	*RL1*	*48 - 106*	*06/17/11 00:00*	*06/18/11 03:35*	*10*
Nitrobenzene-d5	*87.8*	*RL1*	*47 - 106*	*06/17/11 00:00*	*06/18/11 03:35*	*10*
2-Fluorobiphenyl	*94.2*	*RL1*	*54 - 106*	*06/17/11 00:00*	*06/18/11 03:35*	*10*
2,4,6-Tribromophenol	*74.2*	*RL1*	*37 - 122*	*06/17/11 00:00*	*06/18/11 03:35*	*10*
Terphenyl-d14	*97.8*	*RL1*	*64 - 118*	*06/17/11 00:00*	*06/18/11 03:35*	*10*

Method: EPA 8081A - Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
alpha-BHC	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
beta-BHC	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
delta-BHC	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
gamma-BHC (Lindane)	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
Chlordane (tech)	ND	C4	0.020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
alpha-Chlordane	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
gamma-Chlordane	0.0057	C4 R1	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
4,4'-DDD	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
4,4'-DDE	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
4,4'-DDT	0.057	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
Dieldrin	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
Endosulfan I	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
Endosulfan II	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
Endosulfan sulfate	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
Endrin	0.0047	C4 R1	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
Endrin aldehyde	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
Endrin ketone	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
Heptachlor	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
Heptachlor epoxide	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
Methoxychlor	ND	C4	0.020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0
Toxaphene	ND	C4	0.060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:15	1.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-meta-xylene	*60.2*	*C4*	*33 - 111*	*06/17/11 00:00*	*06/20/11 17:15*	*1.0*
Decachlorobiphenyl	*14.6*	*C4 Z5*	*30 - 119*	*06/17/11 00:00*	*06/20/11 17:15*	*1.0*

Method: EPA 8082 - Polychlorinated Biphenyls by EPA Method 8082 - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	RL7 L1	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:31	10
PCB-1221	ND	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:31	10

Client Sample ID: CD-2 — **Lab Sample ID: KUF0338-02**
Date Collected: 06/15/11 11:55 — Matrix: Soil
Date Received: 06/15/11 13:40 — Percent Solids: 94.4

Method: EPA 8082 - Polychlorinated Biphenyls by EPA Method 8082 - RE1 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	ND	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:31	10
PCB-1242	ND	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:31	10
PCB-1248	ND	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:31	10
PCB-1254	**1.2**	**RL7**	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:31	10
PCB-1260	ND	RL7 L1	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:31	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-meta-xylene	*64.0*	*RL7*	*21 - 119*	*06/21/11 10:14*	*06/22/11 07:31*	*10*
Decachlorobiphenyl	*59.0*	*RL7*	*10 - 144*	*06/21/11 10:14*	*06/22/11 07:31*	*10*

Method: EPA 6010B - Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.7**		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:38	2.0
Barium	**200**		1.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:38	2.0
Cadmium	ND		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:38	2.0
Chromium	**17**		5.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:38	2.0
Lead	**120**		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:38	2.0
Selenium	ND		8.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:38	2.0
Silver	ND		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:38	2.0

Method: EPA 7471A - Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.266		0.100		mg/kg dry	☼	06/21/11 08:11	06/21/11 13:38	1.00

Client Sample ID: CD-3 — **Lab Sample ID: KUF0338-03**
Date Collected: 06/15/11 12:00 — Matrix: Soil
Date Received: 06/15/11 13:40 — Percent Solids: 96.8

Method: EPA 8260B - Volatile Organic Compounds by EPA Method 5035/8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
1,3,5-Trimethylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*83 - 122*	*06/16/11 12:41*	*06/17/11 00:58*	*1.0*

Method: EPA 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
1,1,2,2-Tetrachloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
1,1,2-Trichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
1,1-Dichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
1,1-Dichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
1,2-Dichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
1,2-Dichloropropane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
2-Butanone	ND		0.10		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
2-Hexanone	ND		0.010		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
4-Methyl-2-pentanone	ND		0.010		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Acetone	ND		0.10		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Benzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Bromodichloromethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0

Client Sample ID: CD-3
Date Collected: 06/15/11 12:00
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-03
Matrix: Soil
Percent Solids: 96.8

Method: EPA 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Bromomethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Carbon disulfide	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Carbon tetrachloride	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Chlorobenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Chlorodibromomethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Chloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Chloroform	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Chloromethane	ND		0.010		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
cis-1,2-Dichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
cis-1,3-Dichloropropene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Ethylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Isopropylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Methyl tert-butyl ether	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Methylene chloride	ND		0.0080		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Styrene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Tetrachloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Toluene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
trans-1,2-Dichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
trans-1,3-Dichloropropene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Trichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Trichlorofluoromethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Vinyl chloride	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0
Xylenes (total)	ND		0.012		mg/kg dry	☼	06/16/11 12:41	06/17/11 00:58	1.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*106*		*85 - 122*	*06/16/11 12:41*	*06/17/11 00:58*	*1.0*
1,2-Dichloroethane-d4	*118*		*85 - 130*	*06/16/11 12:41*	*06/17/11 00:58*	*1.0*
Toluene-d8	*95.1*		*88 - 111*	*06/16/11 12:41*	*06/17/11 00:58*	*1.0*
Toluene-d8	*95.1*		*88 - 111*	*06/16/11 12:41*	*06/17/11 00:58*	*1.0*
4-Bromofluorobenzene	*102*		*83 - 122*	*06/16/11 12:41*	*06/17/11 00:58*	*1.0*

Method: EPA 8270C - Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
1,2-Dichlorobenzene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
1,3-Dichlorobenzene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
1,4-Dichlorobenzene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2,4,5-Trichlorophenol	ND	RL1 RL8	10		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2,4,6-Trichlorophenol	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2,4-Dichlorophenol	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2,4-Dimethylphenol	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2,4-Dinitrophenol	ND	RL1 RL8	10		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2,4-Dinitrotoluene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2,6-Dinitrotoluene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2-Chloronaphthalene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2-Chlorophenol	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2-Methylnaphthalene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2-Methylphenol	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2-Nitroaniline	ND	RL1 RL8	10		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
2-Nitrophenol	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10

Client Sample ID: CD-3
Date Collected: 06/15/11 12:00
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-03
Matrix: Soil
Percent Solids: 96.8

Method: EPA 8270C - Semivolatile Organic Compounds by EPA Method 8270C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3&4-Methylphenol	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
3,3'-Dichlorobenzidine	ND	RL1 RL8	10		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
3-Nitroaniline	ND	RL1 RL8	10		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
4,6-Dinitro-2-methylphenol	ND	RL1 RL8	10		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
4-Bromophenyl-phenyl ether	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
4-Chloro-3-methylphenol	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
4-Chloroaniline	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
4-Chlorophenyl phenyl ether	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
4-Nitroaniline	ND	RL1 RL8	10		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
4-Nitrophenol	ND	RL1 RL8	10		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Acenaphthene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Acenaphthylene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Aniline	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Anthracene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Benzo (a) anthracene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Benzo (a) pyrene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Benzo (b) fluoranthene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Benzo (g,h,i) perylene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Benzo (k) fluoranthene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Benzoic acid	ND	RL1 RL8	10		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Benzyl alcohol	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Bis(2-chloroethoxy)methane	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Bis(2-chloroethyl)ether	ND	RL1 RL8	1.0		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Bis(2-chloroisopropyl)ether	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Bis(2-ethylhexyl)phthalate	ND	RL1 RL8	6.9		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Butyl benzyl phthalate	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Chrysene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Dibenz (a,h) anthracene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Dibenzofuran	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Diethyl phthalate	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Dimethyl phthalate	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Di-n-butyl phthalate	ND	RL1 RL8	6.9		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Di-n-octyl phthalate	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Diphenylamine	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Fluoranthene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Fluorene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Hexachlorobenzene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Hexachlorobutadiene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Hexachlorocyclopentadiene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Hexachloroethane	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Indeno (1,2,3-cd) pyrene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Isophorone	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Naphthalene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Nitrobenzene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
N-Nitrosodi-n-propylamine	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Pentachlorophenol	ND	RL1 RL8	10		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Phenanthrene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Phenol	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10
Pyrene	ND	RL1 RL8	2.1		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:01	10

Client Sample ID: CD-3
Date Collected: 06/15/11 12:00
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-03
Matrix: Soil
Percent Solids: 96.8

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	83.4	RL1 RL8	36 - 111	06/17/11 00:00	06/18/11 04:01	10
Phenol-d6	85.7	RL1 RL8	48 - 106	06/17/11 00:00	06/18/11 04:01	10
Nitrobenzene-d5	89.5	RL1 RL8	47 - 106	06/17/11 00:00	06/18/11 04:01	10
2-Fluorobiphenyl	90.7	RL1 RL8	54 - 106	06/17/11 00:00	06/18/11 04:01	10
2,4,6-Tribromophenol	53.3	RL1 RL8	37 - 122	06/17/11 00:00	06/18/11 04:01	10
Terphenyl-d14	91.6	RL1 RL8	64 - 118	06/17/11 00:00	06/18/11 04:01	10

Method: EPA 8081A - Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
alpha-BHC	ND	C4 R1	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
beta-BHC	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
delta-BHC	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
gamma-BHC (Lindane)	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
Chlordane (tech)	ND	C4	0.020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
alpha-Chlordane	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
gamma-Chlordane	**0.0072**	**C4**	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
4,4'-DDD	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
4,4'-DDE	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
4,4'-DDT	**0.023**	**C4**	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
Dieldrin	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
Endosulfan I	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
Endosulfan II	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
Endosulfan sulfate	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
Endrin	**0.0026**	**C4 R1**	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
Endrin aldehyde	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
Endrin ketone	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
Heptachlor	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
Heptachlor epoxide	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
Methoxychlor	ND	C4	0.020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0
Toxaphene	ND	C4	0.080		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:31	1.0

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-meta-xylene	67.7	C4	33 - 111	06/17/11 00:00	06/20/11 17:31	1.0
Decachlorobiphenyl	15.9	C4 Z5	30 - 119	06/17/11 00:00	06/20/11 17:31	1.0

Method: EPA 8082 - Polychlorinated Biphenyls by EPA Method 8082 - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	RL7 L1	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:58	10
PCB-1221	ND	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:58	10
PCB-1232	ND	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:58	10
PCB-1242	ND	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:58	10
PCB-1248	ND	RL7	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:58	10
PCB-1254	**0.52**	**RL7**	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:58	10
PCB-1260	ND	RL7 L1	0.50		mg/kg dry	☼	06/21/11 10:14	06/22/11 07:58	10

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-meta-xylene	81.0	RL7	21 - 119	06/21/11 10:14	06/22/11 07:58	10
Decachlorobiphenyl	72.0	RL7	10 - 144	06/21/11 10:14	06/22/11 07:58	10

Client Sample ID: CD-3
Date Collected: 06/15/11 12:00
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-03
Matrix: Soil
Percent Solids: 96.8

Method: EPA 6010B - Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:41	2.0
Barium	130		1.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:41	2.0
Cadmium	ND		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:41	2.0
Chromium	24		5.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:41	2.0
Lead	310		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:41	2.0
Selenium	ND		8.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:41	2.0
Silver	ND		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:41	2.0

Method: EPA 7471A - Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.410		0.100		mg/kg dry	☼	06/21/11 08:11	06/21/11 13:40	1.00

Client Sample ID: CD-4
Date Collected: 06/15/11 12:10
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-04
Matrix: Soil
Percent Solids: 95.5

Method: EPA 8260B - Volatile Organic Compounds by EPA Method 5035/8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
1,3,5-Trimethylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96.5*		*83 - 122*	*06/16/11 12:41*	*06/17/11 01:29*	*1.0*

Method: EPA 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
1,1,2,2-Tetrachloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
1,1,2-Trichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
1,1-Dichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
1,1-Dichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
1,2-Dichloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
1,2-Dichloropropane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
2-Butanone	ND		0.10		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
2-Hexanone	ND		0.010		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
4-Methyl-2-pentanone	ND		0.010		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Acetone	ND		0.10		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Benzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Bromodichloromethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Bromoform	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Bromomethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Carbon disulfide	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Carbon tetrachloride	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Chlorobenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Chlorodibromomethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Chloroethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Chloroform	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Chloromethane	ND		0.010		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
cis-1,2-Dichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
cis-1,3-Dichloropropene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Ethylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0

Client Sample ID: CD-4
Date Collected: 06/15/11 12:10
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-04
Matrix: Soil
Percent Solids: 95.5

Method: EPA 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Methyl tert-butyl ether	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Methylene chloride	ND		0.0080		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Styrene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Tetrachloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Toluene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
trans-1,2-Dichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
trans-1,3-Dichloropropene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Trichloroethene	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Trichlorofluoromethane	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Vinyl chloride	ND		0.0040		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0
Xylenes (total)	ND		0.012		mg/kg dry	☼	06/16/11 12:41	06/17/11 01:29	1.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*107*		*85 - 122*	*06/16/11 12:41*	*06/17/11 01:29*	*1.0*
1,2-Dichloroethane-d4	*122*		*85 - 130*	*06/16/11 12:41*	*06/17/11 01:29*	*1.0*
Toluene-d8	*97.5*		*88 - 111*	*06/16/11 12:41*	*06/17/11 01:29*	*1.0*
Toluene-d8	*97.5*		*88 - 111*	*06/16/11 12:41*	*06/17/11 01:29*	*1.0*
4-Bromofluorobenzene	*96.5*		*83 - 122*	*06/16/11 12:41*	*06/17/11 01:29*	*1.0*

Method: EPA 8270C - Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
1,2-Dichlorobenzene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
1,3-Dichlorobenzene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
1,4-Dichlorobenzene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2,4,5-Trichlorophenol	ND	RL1 RL8	8.5		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2,4,6-Trichlorophenol	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2,4-Dichlorophenol	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2,4-Dimethylphenol	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2,4-Dinitrophenol	ND	RL1 RL8	8.5		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2,4-Dinitrotoluene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2,6-Dinitrotoluene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2-Chloronaphthalene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2-Chlorophenol	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2-Methylnaphthalene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2-Methylphenol	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2-Nitroaniline	ND	RL1 RL8	8.5		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
2-Nitrophenol	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
3&4-Methylphenol	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
3,3'-Dichlorobenzidine	ND	RL1 RL8	8.5		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
3-Nitroaniline	ND	RL1 RL8	8.5		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
4,6-Dinitro-2-methylphenol	ND	RL1 RL8	8.5		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
4-Bromophenyl-phenyl ether	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
4-Chloro-3-methylphenol	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
4-Chloroaniline	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
4-Chlorophenyl phenyl ether	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
4-Nitroaniline	ND	RL1 RL8	8.5		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
4-Nitrophenol	ND	RL1 RL8	8.5		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Acenaphthene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Acenaphthylene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10

Client Sample ID: CD-4
Date Collected: 06/15/11 12:10
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-04
Matrix: Soil
Percent Solids: 95.5

Method: EPA 8270C - Semivolatile Organic Compounds by EPA Method 8270C (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Anthracene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Benzo (a) anthracene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Benzo (a) pyrene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Benzo (b) fluoranthene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Benzo (g,h,i) perylene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Benzo (k) fluoranthene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Benzoic acid	ND	RL1 RL8	8.5		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Benzyl alcohol	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Bis(2-chloroethoxy)methane	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Bis(2-chloroethyl)ether	ND	RL1 RL8	0.85		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Bis(2-chloroisopropyl)ether	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Bis(2-ethylhexyl)phthalate	ND	RL1 RL8	5.6		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Butyl benzyl phthalate	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Chrysene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Dibenz (a,h) anthracene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Dibenzofuran	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Diethyl phthalate	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Dimethyl phthalate	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Di-n-butyl phthalate	ND	RL1 RL8	5.6		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Di-n-octyl phthalate	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Diphenylamine	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Fluoranthene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Fluorene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Hexachlorobenzene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Hexachlorobutadiene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Hexachlorocyclopentadiene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Hexachloroethane	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Indeno (1,2,3-cd) pyrene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Isophorone	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Naphthalene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Nitrobenzene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
N-Nitrosodi-n-propylamine	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Pentachlorophenol	ND	RL1 RL8	8.5		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Phenanthrene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Phenol	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10
Pyrene	ND	RL1 RL8	1.7		mg/kg dry	☼	06/17/11 00:00	06/18/11 04:27	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*77.9*	*RL1 RL8*	*36 - 111*	*06/17/11 00:00*	*06/18/11 04:27*	*10*
Phenol-d6	*79.0*	*RL1 RL8*	*48 - 106*	*06/17/11 00:00*	*06/18/11 04:27*	*10*
Nitrobenzene-d5	*79.6*	*RL1 RL8*	*47 - 108*	*06/17/11 00:00*	*06/18/11 04:27*	*10*
2-Fluorobiphenyl	*83.3*	*RL1 RL8*	*54 - 106*	*06/17/11 00:00*	*06/18/11 04:27*	*10*
2,4,6-Tribromophenol	*57.1*	*RL1 RL8*	*37 - 122*	*06/17/11 00:00*	*06/18/11 04:27*	*10*
Terphenyl-d14	*83.3*	*RL1 RL8*	*64 - 118*	*06/17/11 00:00*	*06/18/11 04:27*	*10*

Method: EPA 8081A - Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
alpha-BHC	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
beta-BHC	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0

Client Sample ID: CD-4
Date Collected: 06/15/11 12:10
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-04
Matrix: Soil
Percent Solids: 95.5

Method: EPA 8081A - Organochlorine Pesticides by EPA Method 8081A (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND	C4 R1	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
gamma-BHC (Lindane)	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
Chlordane (tech)	ND	C4	0.020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
alpha-Chlordane	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
gamma-Chlordane	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
4,4'-DDD	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
4,4'-DDE	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
4,4'-DDT	**0.025**	**C4**	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
Dieldrin	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
Endosulfan I	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
Endosulfan II	ND	C4	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
Endosulfan sulfate	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
Endrin	ND	C4 R1	0.0020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
Endrin aldehyde	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
Endrin ketone	ND	C4	0.0060		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
Heptachlor	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
Heptachlor epoxide	ND	C4	0.0010		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
Methoxychlor	ND	C4	0.020		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0
Toxaphene	ND	C4	0.080		mg/kg dry	☼	06/17/11 00:00	06/20/11 17:46	1.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-meta-xylene	*59.1*	*C4*	*33 - 111*	*06/17/11 00:00*	*06/20/11 17:46*	*1.0*
Decachlorobiphenyl	*12.3*	*C4 Z5*	*30 - 119*	*06/17/11 00:00*	*06/20/11 17:46*	*1.0*

Method: EPA 8082 - Polychlorinated Biphenyls by EPA Method 8082 - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	RL7 L1	0.20		mg/kg dry	☼	06/21/11 10:14	06/22/11 08:24	4.0
PCB-1221	ND	RL7	0.20		mg/kg dry	☼	06/21/11 10:14	06/22/11 08:24	4.0
PCB-1232	ND	RL7	0.20		mg/kg dry	☼	06/21/11 10:14	06/22/11 08:24	4.0
PCB-1242	ND	RL7	0.20		mg/kg dry	☼	06/21/11 10:14	06/22/11 08:24	4.0
PCB-1248	ND	RL7	0.20		mg/kg dry	☼	06/21/11 10:14	06/22/11 08:24	4.0
PCB-1254	**0.50**	**RL7**	0.20		mg/kg dry	☼	06/21/11 10:14	06/22/11 08:24	4.0
PCB-1260	ND	RL7 L1	0.20		mg/kg dry	☼	06/21/11 10:14	06/22/11 08:24	4.0

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-meta-xylene	*77.2*	*RL7*	*21 - 119*	*06/21/11 10:14*	*06/22/11 08:24*	*4.0*
Decachlorobiphenyl	*64.4*	*RL7*	*10 - 144*	*06/21/11 10:14*	*06/22/11 08:24*	*4.0*

Method: EPA 6010B - Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.1**		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:43	2.0
Barium	**82**		1.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:43	2.0
Cadmium	ND		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:43	2.0
Chromium	**17**		5.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:43	2.0
Lead	**170**		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:43	2.0
Selenium	ND		8.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:43	2.0
Silver	ND		2.0		mg/kg dry	☼	06/16/11 08:13	06/16/11 13:43	2.0

Method: EPA 7471A - Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.427**		0.100		mg/kg dry	☼	06/21/11 08:11	06/21/11 13:45	1.00

Client Sample ID: CD-1
Date Collected: 06/15/11 11:45
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-01
Matrix: Soil
Percent Solids: 94.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B (P/T)		0.99	11F0370_P	06/16/11 12:41	JAD	TAL KOP
Total	Analysis	EPA 8260B		1.0	U001202	06/16/11 23:57	JAD	TAL KOP
Total	Prep	EPA 3550B		2.4	11F0374_P	06/17/11 00:00	JLE	TAL KOP
Total	Analysis	EPA 8270C		10	11F0374	06/18/11 03:08	ADO	TAL KOP
Total	Prep	EPA 3550B		0.99	11F0375_P	06/17/11 00:00	JLE	TAL KOP
Total	Analysis	EPA 8081A		1.0	11F0375	06/20/11 17:00	GMA	TAL KOP
Total	Prep	EPA 3550B	RE1	0.99	11F0456_P	06/21/11 10:14	MS	TAL KOP
Total	Analysis	EPA 8082	RE1	10	11F0456	06/22/11 07:05	MS	TAL KOP
Total	Prep	EPA 7471A		1.00	11F0450_P	06/21/11 08:11	PAM	TAL KOP
Total	Analysis	EPA 7471A		1.00	U001246	06/21/11 13:37	MR	TAL KOP
Total	Prep	EPA 3050B Soil		0.92	11F0359_P	06/16/11 08:13	PAM	TAL KOP
Total	Analysis	EPA 6010B		2.0	U001206	06/16/11 13:35	MKR	TAL KOP
Total	Prep	General Prep WC		1.00	11F0458_P	06/21/11 10:54	DRH	TAL KOP
Total	Analysis	EPA 160.3		1.00	11F0458	06/21/11 11:11	DRH	TAL KOP

Client Sample ID: CD-2
Date Collected: 06/15/11 11:55
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-02
Matrix: Soil
Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B (P/T)		0.88	11F0370_P	06/16/11 12:41	JAD	TAL KOP
Total	Analysis	EPA 8260B		1.0	U001202	06/17/11 00:27	JAD	TAL KOP
Total	Prep	EPA 3550B		1.0	11F0374_P	06/17/11 00:00	JLE	TAL KOP
Total	Analysis	EPA 8270C		10	11F0374	06/18/11 03:35	ADO	TAL KOP
Total	Prep	EPA 3550B		0.99	11F0375_P	06/17/11 00:00	JLE	TAL KOP
Total	Analysis	EPA 8081A		1.0	11F0375	06/20/11 17:15	GMA	TAL KOP
Total	Prep	EPA 3550B	RE1	0.99	11F0456_P	06/21/11 10:14	MS	TAL KOP
Total	Analysis	EPA 8082	RE1	10	11F0456	06/22/11 07:31	MS	TAL KOP
Total	Prep	EPA 7471A		1.00	11F0450_P	06/21/11 08:11	PAM	TAL KOP
Total	Analysis	EPA 7471A		1.00	U001246	06/21/11 13:38	MR	TAL KOP
Total	Prep	EPA 3050B Soil		1.1	11F0359_P	06/16/11 08:13	PAM	TAL KOP
Total	Analysis	EPA 6010B		2.0	U001206	06/16/11 13:38	MKR	TAL KOP
Total	Prep	General Prep WC		1.00	11F0458_P	06/21/11 10:54	DRH	TAL KOP
Total	Analysis	EPA 160.3		1.00	11F0458	06/21/11 11:11	DRH	TAL KOP

Client Sample ID: CD-3
Date Collected: 06/15/11 12:00
Date Received: 06/15/11 13:40

Lab Sample ID: KUF0338-03
Matrix: Soil
Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B (P/T)		1.0	11F0370_P	06/16/11 12:41	JAD	TAL KOP
Total	Analysis	EPA 8260B		1.0	U001202	06/17/11 00:58	JAD	TAL KOP
Total	Prep	EPA 3550B		2.1	11F0374_P	06/17/11 00:00	JLE	TAL KOP
Total	Analysis	EPA 8270C		10	11F0374	06/18/11 04:01	ADO	TAL KOP
Total	Prep	EPA 3550B		1.0	11F0375_P	06/17/11 00:00	JLE	TAL KOP

Client Sample ID: CD-3 — **Lab Sample ID: KUF0338-03**
Date Collected: 06/15/11 12:00 — Matrix: Soil
Date Received: 06/15/11 13:40 — Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Analysis	EPA 8081A		1.0	11F0375	06/20/11 17:31	GMA	TAL KOP
Total	Prep	EPA 3550B	RE1	1.0	11F0456_P	06/21/11 10:14	MS	TAL KOP
Total	Analysis	EPA 8082	RE1	10	11F0456	06/22/11 07:58	MS	TAL KOP
Total	Prep	EPA 7471A		1.00	11F0450_P	06/21/11 08:11	PAM	TAL KOP
Total	Analysis	EPA 7471A		1.00	U001246	06/21/11 13:40	MR	TAL KOP
Total	Prep	EPA 3050B Soil		1.1	11F0359_P	06/16/11 08:13	PAM	TAL KOP
Total	Analysis	EPA 6010B		2.0	U001206	06/16/11 13:41	MKR	TAL KOP
Total	Prep	General Prep WC		1.00	11F0464_P	06/21/11 14:50	DRH	TAL KOP
Total	Analysis	EPA 160.3		1.00	11F0464	06/21/11 15:13	DRH	TAL KOP

Client Sample ID: CD-4 — **Lab Sample ID: KUF0338-04**
Date Collected: 06/15/11 12:10 — Matrix: Soil
Date Received: 06/15/11 13:40 — Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	EPA 5030B (P/T)		0.93	11F0370_P	06/16/11 12:41	JAD	TAL KOP
Total	Analysis	EPA 8260B		1.0	U001202	06/17/11 01:29	JAD	TAL KOP
Total	Prep	EPA 3550B		1.7	11F0374_P	06/17/11 00:00	JLE	TAL KOP
Total	Analysis	EPA 8270C		10	11F0374	06/18/11 04:27	ADO	TAL KOP
Total	Prep	EPA 3550B		0.99	11F0375_P	06/17/11 00:00	JLE	TAL KOP
Total	Analysis	EPA 8081A		1.0	11F0375	06/20/11 17:46	GMA	TAL KOP
Total	Prep	EPA 3550B	RE1	0.99	11F0456_P	06/21/11 10:14	MS	TAL KOP
Total	Analysis	EPA 8082	RE1	4.0	11F0456	06/22/11 08:24	MS	TAL KOP
Total	Prep	EPA 7471A		1.00	11F0450_P	06/21/11 08:11	PAM	TAL KOP
Total	Analysis	EPA 7471A		1.00	U001246	06/21/11 13:45	MR	TAL KOP
Total	Prep	EPA 3050B Soil		1.0	11F0359_P	06/16/11 08:13	PAM	TAL KOP
Total	Analysis	EPA 6010B		2.0	U001206	06/16/11 13:43	MKR	TAL KOP
Total	Prep	General Prep WC		1.00	11F0458_P	06/21/11 10:54	DRH	TAL KOP
Total	Analysis	EPA 160.3		1.00	11F0458	06/21/11 11:11	DRH	TAL KOP

Laboratory References:
TAL KOP = TestAmerica King Of Prussia, 1008 West Ninth Avenue, King of Prussia, PA 19406, TEL 610.337.9992

Certification Summary

Client: RT ENVIRONMENTAL
Project/Site: 70461-07

TestAmerica Job ID: KUF0338

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica King Of Prussia	Maryland	State Program	3	253
TestAmerica King Of Prussia	New Jersey	NELAC	2	PA004
TestAmerica King Of Prussia	Pennsylvania	NELAC	3	46-00505
TestAmerica King Of Prussia	USDA	USDA		P330-10-00327

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY REPORT

1008 W. Ninth Avenue
King of Prussia, PA 19406
(610) 337-9992
FAX (610) 337-9939

06/23/2011

Client: RT Environmental Services Inc. | Bill To: Same | TAT: STD. 5 DAY 4 DAY 3 DAY 2 DAY 1 DAY <24 HRS.

Address: 215 W. Church Road | Address: | Received: ice / ambient | DATE RESULTS NEEDED: 6/22

King of Prussia, PA 19406 | Terms: Net 30 days | Deliverable Package: NO YES | Temp. Upon Receipt: 7.3°C

Report to: | Phone #: (610) 265-1900 | State & Program: PA- | Phone #: ( ) | If Yes, please explain:

E-mail: wbwagner@rtenv.com | Fax #: ( ) x238 | Fax #: ( )

Project Name: Amber BH- CD

Project #/PO#: 7046-07

Sampler: WHW

	PID:	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	# of Bottles Preserved: MeOH	DI	HCl	HNO3	H2SO4	NaOH	NONE	TOTAL # OF BOTTLES	SAMPLES FIELD FILTERED ☐YES ☐NO	ANALYSIS TYPE: RT Client Full List (See note)	SAMPLE CONTROL: CRACKED/BROKEN	IMPROPERLY SEALED	LABORATORY ID NUMBER
1 CD-1	—	6/15/11	11:45	Soil	1	2					2	5		✓			KUF0338-01
2 CD-2	—		11:55		1	2					2	5		✓			02
3 CD-3	—		12:00		1	2					2	5		✓			03
4 CD-4	—		12:10		1	2					2	5		✓			04
5																	
6																	
7																	
8																	
9																	
10																	

RELINQUISHED	DATE / TIME	RECEIVED	DATE / TIME	RELINQUISHED	DATE / TIME	RECEIVED	DATE / TIME
[signature]	6/15/11	[signature] Tedett	6/15 13:40				
RELINQUISHED	DATE / TIME	RECEIVED	DATE / TIME	RELINQUISHED	DATE / TIME	RECEIVED	DATE / TIME

COMMENTS: Note: Report Full Va., Full SOC
Received from field on ice NF 6-15-11

PAGE 1 OF 1

TAL-4124-450 (0509)

Cooler Receipt Form

WORK ORDER #: KVF0338

Client: KT Environmental Project: Ambler BH-CD

Temperature Upon Receipt by IR: 7.3 °C

Cooler received from: TA Courier (Client) FedEx UPS Other: _____

For Received Shipments only:

Number of Coolers: 1 2 3+ Custody Seals Intact? Y N

Ice Present? Y N N/A Melted Packing Material: Bubble Wrap Other None

For Samples to be Subcontracted after reciept only:

ALL preserved containers (except VOA) checked for correct pH and are acceptable? Y N N/A

If Samples need preservation: Preservative/lot#: _____

Ensure that Preservation Stickers are affixed to each container.

Residual Chlorine checks done on each container that needs it? Y N N/A

Vca Vials have air bubbles > 6mm? Y N (N/A)

Sufficient volume for all analyses? (Y) N

All Sample Containers Intact: (Y) N All Sample Containers labeled: (Y) N

All Sample Containers received: (Y) N All Container labels match COC: (Y) N

List Discrepancies below if indicated:

Review COC against Sample Acceptance Checklist:

1. Client Name & Address present	(Yes)	No
2. Project Name and/or Number included	(Yes)	No
3. Field Sampler Name listed	(Yes)	No
4. Field ID - one sample per line	(Yes)	No
5. Date collected (for each sample)	(Yes)	No
6. Time collected (for each sample)	(Yes)	No
7. Matrix (for each sample)	(Yes)	No
8. Number & Types of bottles per sample (and preservation type)	(Yes)	No
9. Analysis Requested	(Yes)	No
10. Sign & Date in the Relinquished Box	(Yes)	No

Discrepancies: _____

Sample Location (State): (PA) NJ DE Other_____

State Listed on COC ☒ or Ongoing Project ☐

PM or Client contacted? Y N N/A

Spec Sheet/CAR#: _____

Signature: Nick Fedette Date/Time: 6-15-11

APPENDIX 5

GRADING PLAN / E & S CONTROL PLAN
(LANGAN)

66' WIDE CONRAIL EASEMENT

APPROXIMATE PROPOSED SAW CUT LINE

EXISTING BOILER HOUSE
36,400 SF
(USABLE BUSINESS AREA)

BUILDING 1
59 UNITS
4 - STORIES
18,070 SF (FOOTPRINT)
FF=±191'

BUILDING 3
1 STORY
5,250 SF
FF=±191.50'

PATIO/POOL

VILLAGE GREEN
26184 SQ.FT.

BUILDING 2
56 UNITS
4 - STORIES
16,340 SF
(FOOTPRINT)
FF=±191

570 LF RETAINING WALL

CHESTNUT STREET

SCALE IN FEET
30 0 15 30

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

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Bethlehem, PA. 18018
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www.langan.com

NEW JERSEY PENNSYLVANIA NEW YORK CONNECTICUT FLORIDA
NEVADA VIRGINIA CALIFORNIA

NJ Certificate of Authorization No. 24GA27996400

Project
AMBLER CROSSINGS
AMBLER BOROUGH
MONTGOMERY COUNTY PENNSYLVANIA

Drawing Title
CONCEPTUAL GRADING PLAN

Project No.	240025501
Date	3-28-13
Scale	1"=30'
Drn. By	JKM
Last Revised	

Drawing No.
CG-101

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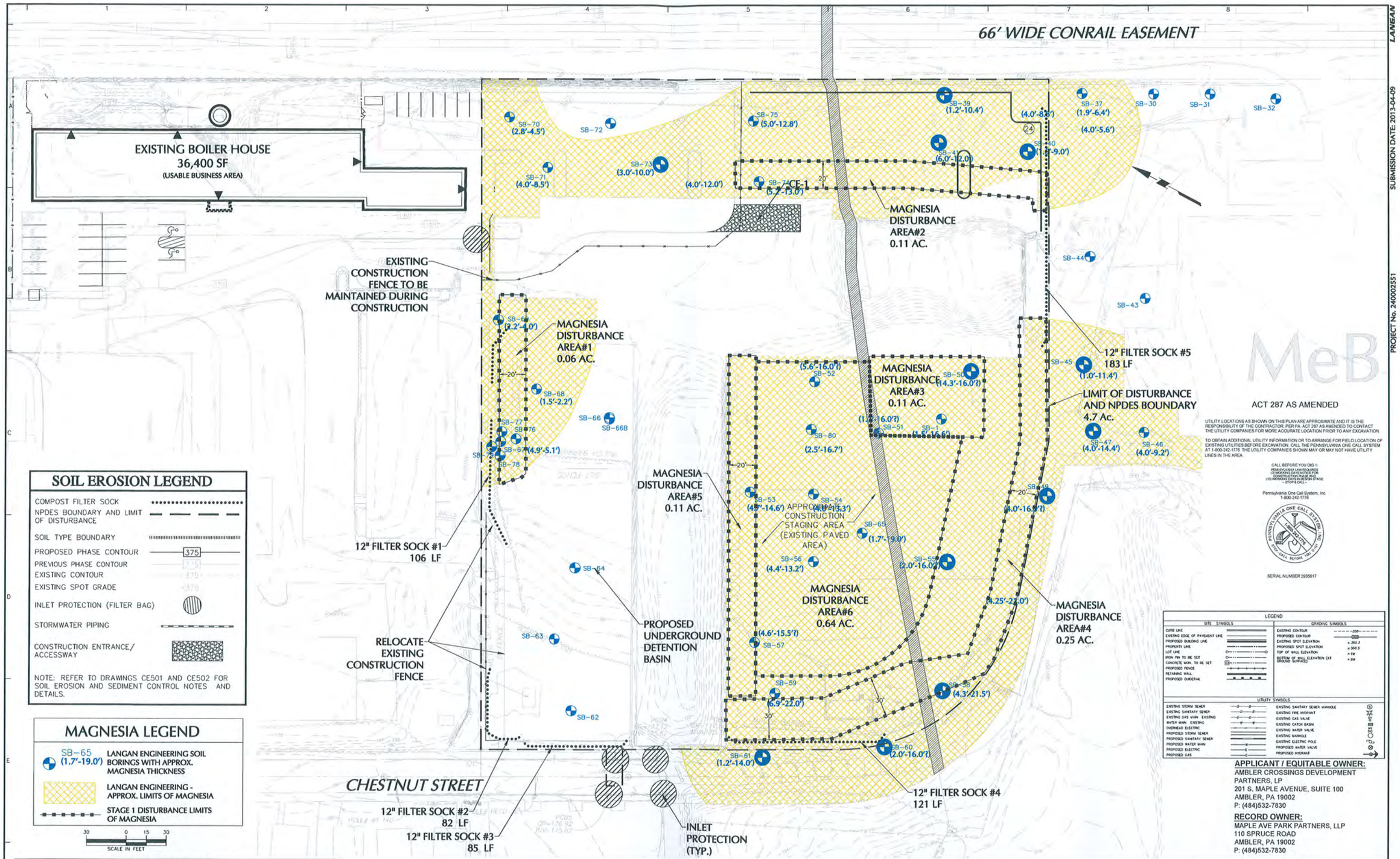
Filename: \\langan.com\data\UE\data5\240025501\Cadd Data - 240025501\SheetFiles\240025501-CG101-0101.dwg Date: 3/28/2013 Time: 17:27 User: jmanighoff Style Table: Langan.stb Layout: CG-101



SOIL EROSION LEGEND

- COMPOST FILTER SOCK
- NPDES BOUNDARY AND LIMIT OF DISTURBANCE
- SOIL TYPE BOUNDARY
- PROPOSED PHASE CONTOUR (375)
- PREVIOUS PHASE CONTOUR
- EXISTING CONTOUR
- EXISTING SPOT GRADE
- INLET PROTECTION (FILTER BAG)
- STORMWATER PIPING
- CONSTRUCTION ENTRANCE/ ACCESSWAY

NOTE: REFER TO DRAWINGS CE501 AND CE502 FOR SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.

MAGNESIA LEGEND

- SB-65 (1.7'-19.0') LANGAN ENGINEERING SOIL BORINGS WITH APPROX. MAGNESIA THICKNESS
- LANGAN ENGINEERING - APPROX. LIMITS OF MAGNESIA
- STAGE 1 DISTURBANCE LIMITS OF MAGNESIA

30 0 15 30
SCALE IN FEET

APPLICANT / EQUITABLE OWNER:
AMBLER CROSSINGS DEVELOPMENT PARTNERS, LP
201 S. MAPLE AVENUE, SUITE 100
AMBLER, PA 19002
P: (484)532-7830

RECORD OWNER:
MAPLE AVE PARK PARTNERS, LLP
110 SPRUCE ROAD
AMBLER, PA 19002
P: (484)532-7830

AMBLER BOILER HOUSE
SOIL TYPE DESCRIPTIONS AND LIMITATIONS

Map Symbol	Soil	Hydrological Soil Group	Depth to Seasonally High Water Table (Ft)	Depth to Bedrock (Ft)	Soil Limitations
MeB	Man made, Shale and Sandstone Materials, Sloping	C	variable	variable	Variable Conditions, Possible Seasonal High water table

Notes: 1. For areas where seasonal high water table is a limitation, ponded water shall be pumped through a "filter bag" or to the the sediment basin/trap.

Date	Description	No.
REVISIONS		

DRAFT

JASON ENGELHARDT
PROFESSIONAL ENGINEER PA Lic. No. PE-057145-E

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Langan Engineering and Environmental Services, Inc.
Langan International LLC
Collectively known as Langan

Project	AMBLER CROSSINGS
	AMBLER BOROUGH MONTGOMERY COUNTY PENNSYLVANIA
Drawing Title	SOIL EROSION AND SEDIMENT CONTROL PLAN-MAGNESIA EXCAVATION-DISPOSAL STAGE 1
Project No.	240025501
Date	4-9-13
Scale	1"=30'
Drawn By	JKM
Drawing No.	CE-101
	Sheet 20 of 22

Filename: \\langan.com\data\BE\data5\240025501\Cadd Data - 240025501\SheetFiles\240025501-CE101-0101.dwg Date: 4/25/2013 Time: 15:26 User: cmacintyre Style Table: Langan.stb Layout: CE-101
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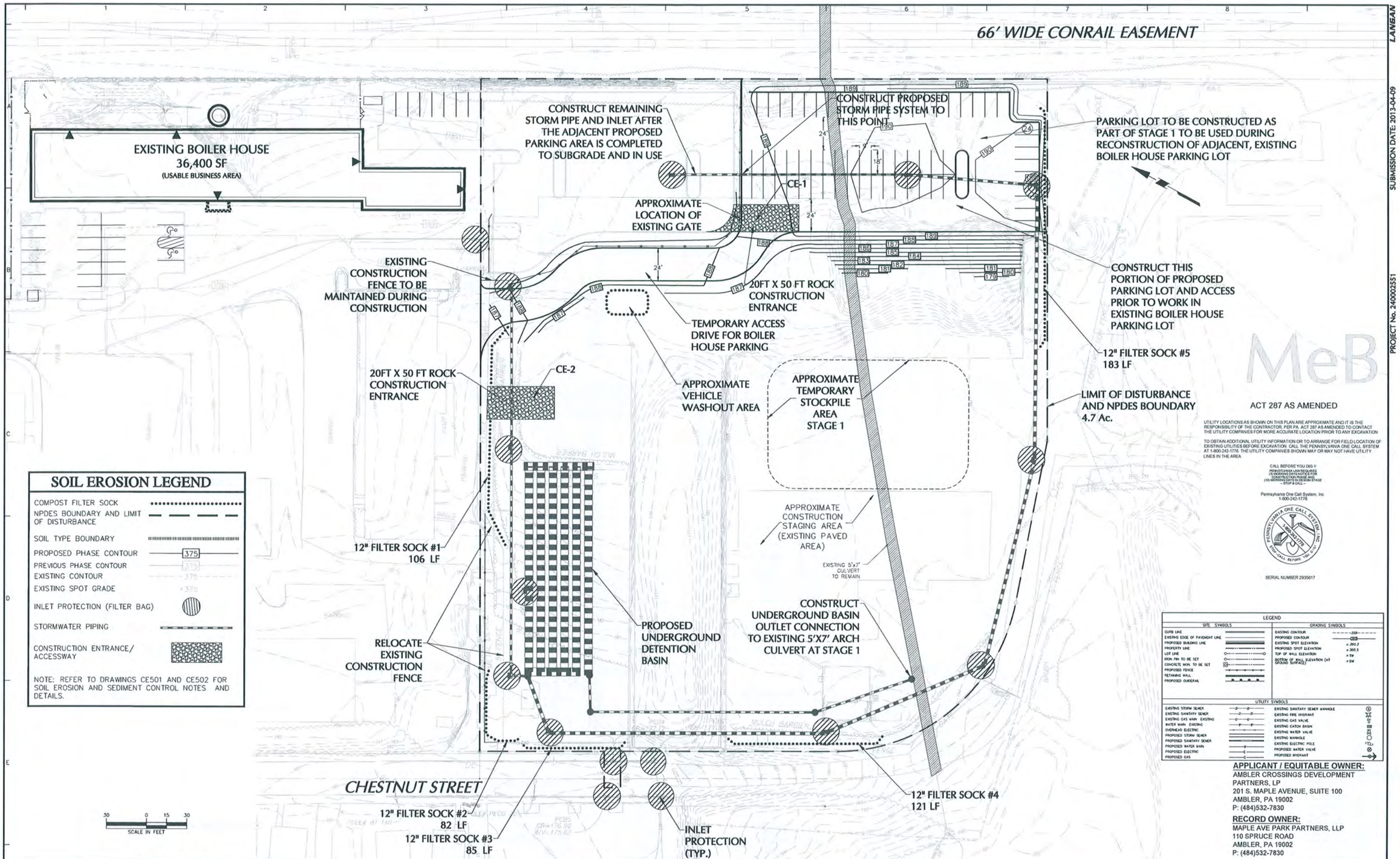

SOIL EROSION LEGEND

- COMPOST FILTER SOCK
- NPDES BOUNDARY AND LIMIT OF DISTURBANCE
- SOIL TYPE BOUNDARY
- PROPOSED PHASE CONTOUR (375)
- PREVIOUS PHASE CONTOUR (375)
- EXISTING CONTOUR (376)
- EXISTING SPOT GRADE (+375)
- INLET PROTECTION (FILTER BAG)
- STORMWATER PIPING
- CONSTRUCTION ENTRANCE/ ACCESSWAY (SURFACE)

NOTE: REFER TO DRAWINGS CE501 AND CE502 FOR SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.

30 0 15 30
SCALE IN FEET

AMBLER BOILER HOUSE
SOIL TYPE DESCRIPTIONS AND LIMITATIONS

Map Symbol	Soil	Hydrological Soil Group	Depth to Seasonally High Water Table (Ft)	Depth to Bedrock (Ft)	Soil Limitations
MeB	Man made, Shale and Sandstone Materials, Sloping	C	variable	variable	Variable Conditions, Possible Seasonal High water table

Notes: 1. For areas where seasonal high water table is a limitation, ponded water shall be pumped through a "filter bag" or to the the sediment basin/trap.

LEGEND

SITE SYMBOLS	GRADING SYMBOLS
CURB LINE	EXISTING CONTOUR
EXISTING EDGE OF PAVEMENT LINE	PROPOSED CONTOUR
PROPOSED BUILDING LINE	EXISTING SPOT ELEVATION
PROPERTY LINE	PROPOSED SPOT ELEVATION
LOT LINE	TOP OF WALL ELEVATION
IRON PIN TO BE SET	BOTTOM OF WALL ELEVATION (AT GROUND SURFACE)
CONCRETE MON. TO BE SET	
PROPOSED FENCE	
RETAINING WALL	
PROPOSED GUIDERAIL	

UTILITY SYMBOLS	
EXISTING STORM SEWER	EXISTING SANITARY SEWER MANHOLE
EXISTING SANITARY SEWER	EXISTING FIRE HYDRANT
EXISTING GAS MAIN EXISTING	EXISTING GAS VALVE
WATER MAIN EXISTING	EXISTING CATCH BASIN
OVERHEAD ELECTRIC	EXISTING WATER VALVE
PROPOSED STORM SEWER	EXISTING MANHOLE
PROPOSED SANITARY SEWER	EXISTING ELECTRIC POLE
PROPOSED WATER MAIN	PROPOSED WATER VALVE
PROPOSED ELECTRIC	PROPOSED HYDRANT
PROPOSED GAS	

UTILITY LOCATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR, PER PA. ACT 287 AS AMENDED TO CONTACT THE UTILITY COMPANIES FOR MORE ACCURATE LOCATION PRIOR TO ANY EXCAVATION.

TO OBTAIN ADDITIONAL UTILITY INFORMATION OR TO ARRANGE FOR FIELD LOCATION OF EXISTING UTILITIES BEFORE EXCAVATION CALL THE PENNSYLVANIA ONE CALL SYSTEM AT 1-800-242-1776. THE UTILITY COMPANIES SHOWN MAY OR MAY NOT HAVE UTILITY LINES IN THE AREA.

CALL BEFORE YOU DIG !!
PENNSYLVANIA LAW REQUIRES THREE WORKING DAYS NOTICE BEFORE CONSTRUCTION (NOT INCLUDING DAYS IN DESIGN STAGE)
~ STOP & CALL ~

Pennsylvania One Call System, Inc
1-800-242-1776

SERIAL NUMBER 2935617

APPLICANT / EQUITABLE OWNER:
AMBLER CROSSINGS DEVELOPMENT PARTNERS, LP
201 S. MAPLE AVENUE, SUITE 100
AMBLER, PA 19002
P: (484)532-7830

RECORD OWNER:
MAPLE AVE PARK PARTNERS, LLP
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AMBLER, PA 19002
P: (484)532-7830

Date	Description	No.
REVISIONS		

DRAFT

JASON ENGELHARDT
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Langan Engineering and Environmental Services, Inc.
Langan International LLC
Collectively known as Langan

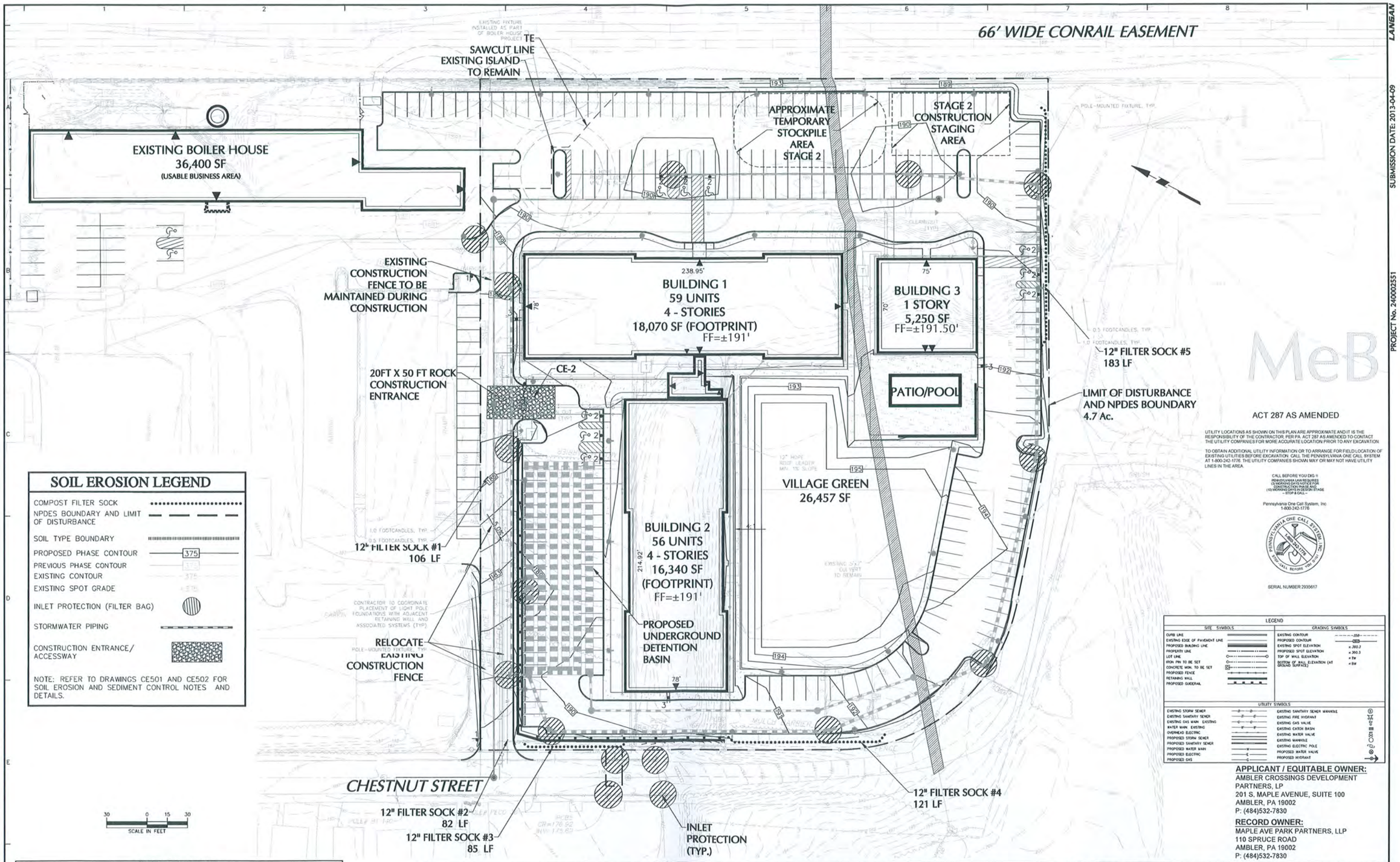
Project: AMBLER CROSSINGS
AMBLER BOROUGH
MONTGOMERY COUNTY PENNSYLVANIA

Drawing Title: SOIL EROSION AND SEDIMENT CONTROL PLAN STAGE 2

Project No.	240025501
Date	4-9-13
Scale	1"=30'
Drawn By	JKM

Drawing No. CE-102
Sheet 20 of 22

Filename: \\langan.com\data\BE\data5\240025501\Cadd Data – 240025501\SheetFiles\240025501-CE101-0101.dwg Date: 4/25/2013 Time: 15:19 User: cmackeye Style Table: Langan.stb Layout: CE-102



APPLICANT / EQUITABLE OWNER:
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RECORD OWNER:
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110 SPRUCE ROAD
AMBLER, PA 19002
P: (484)532-7830

AMBLER BOILER HOUSE
SOIL TYPE DESCRIPTIONS AND LIMITATIONS

Map Symbol	Soil	Hydrological Soil Group	Depth to Seasonally High Water Table (Ft)	Depth to Bedrock (Ft)	Soil Limitations
MeB	Man made, Shale and Sandstone Materials, Sloping	C	variable	variable	Variable Conditions, Possible Seasonal High water table

Notes: 1. For areas where seasonal high water table is a limitation, ponded water shall be pumped through a "filter bag" or to the sediment basin/trap.

Date	Description	No.
REVISIONS		

DRAFT
JASON ENGELHARDT
PROFESSIONAL ENGINEER PA Lic. No. PE-057145-E

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Langan Engineering and Environmental Services, Inc.
Langan International LLC
Collectively known as Langan

Project: AMBLER CROSSINGS
AMBLER BOROUGH
MONTGOMERY COUNTY PENNSYLVANIA

Drawing Title: SOIL EROSION AND SEDIMENT CONTROL PLAN STAGE 3

Project No.	240025501
Date	4-9-13
Scale	1"=30'
Drawn By	JKM

Drawing No. CE-103
Sheet 20 of 22

SUBMISSION DATE: 2013-04-09
PROJECT No. 240025501
LANGAN

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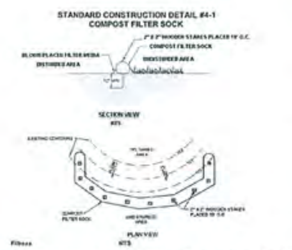
SUBMISSION DATE: 2013-04-09

PROJECT No. 240025501

COMPOST FILTER SOCKS

STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK



Sock fabric shall meet standards of Table 4.1. Compost shall meet the standards of Table 4.2.

Compost filter sock shall be placed at existing level grade. Both ends of the sock shall be extended at least 8 feet up slope at 45 degrees to the main sock alignment (Figure 4.1). Maximum slope length above any sock shall not exceed that shown on Figure 4.2. Stakes may be installed immediately downslope of the sock if so specified by the manufacturer.

Traffic shall not be permitted to cross filter socks.

Accumulated sediment shall be removed when it reaches half the aboveground height of the sock and disposed in the manner described elsewhere in the plan.

Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection.

Biodegradable filter socks shall be replaced after 6 months; photodegradable socks after 1 year. Polypropylene socks shall be replaced according to manufacturer's recommendations.

Upon stabilization of the area tributary to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed. In the latter case, the mesh shall be cut open and the mulch spread as a soil supplement.

TABLE 4.1
Compost Sock Fabric Minimum Specifications

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
Two-ply systems					
Inner Containment Netting			HDPE biaxial net Continuously wound Fusion welded junctures 3/4" X 3/4" Max. aperture size		
Outer Filtration Mesh			Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch) 3/16" Max. aperture size		
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.					

Filtrexx & JSD

353-2134-008 / March 31, 2012 / Page 63

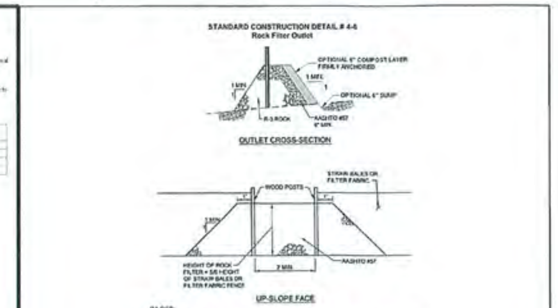
TABLE 4.2
Compost Standards

Filtrexx

353-2134-008 / March 31, 2012 / Page 64

ROCK FILTER OUTLET

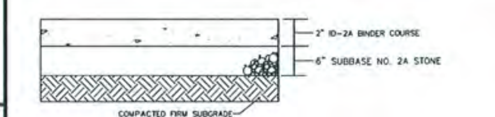
STANDARD CONSTRUCTION DETAIL # 4-6
Rock Filter Outlet



A rock filter outlet shall be installed where failure of a silt fence or straw bale barrier has occurred due to concentrated flow. Anchored compost layer shall be used on upslope face in HQ and EV watersheds.

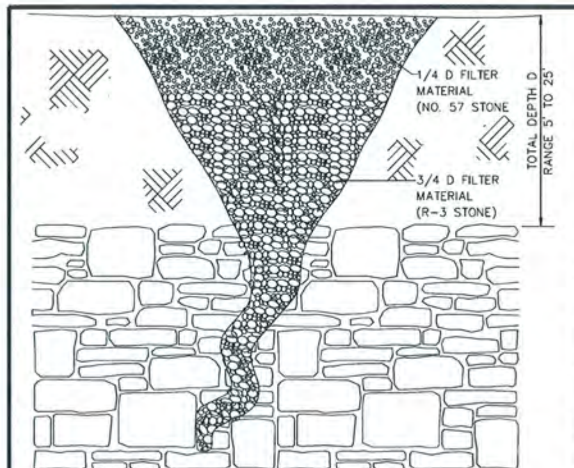
Sediment shall be removed when accumulations reach 1/3 the height of the outlet.

TEMPORARY ACCESS DRIVE PAVING

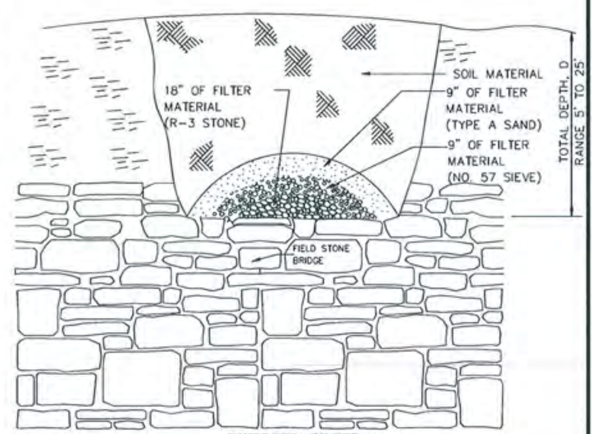


*TEMPORARY PAVEMENT SECTION SHALL BE COORDINATED WITH THE GEOTECHNICAL REPORT

SINKHOLE TREATMENT



INVERTED FILTER 2
(DRAINAGE AREA 5-15 ACRES)

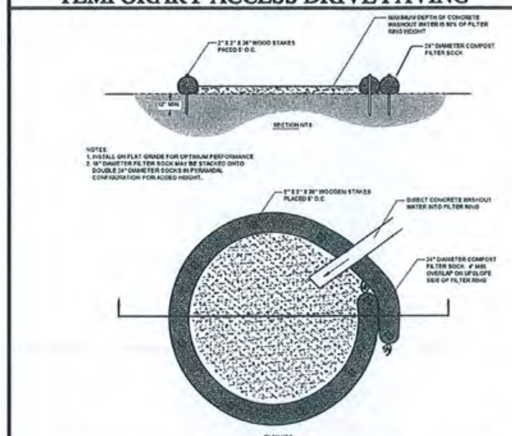


INVERTED FILTER 1
(DRAINAGE AREA LESS THAN 5 ACRES)

NOTE: SEE SINKHOLE REMEDIATION NOTES IN EROSION AND SEDIMENT POLLUTION CONTROL REPORT PREPARED BY LANGAN ENGINEERING & ENVIROMENTAL SERVICES.

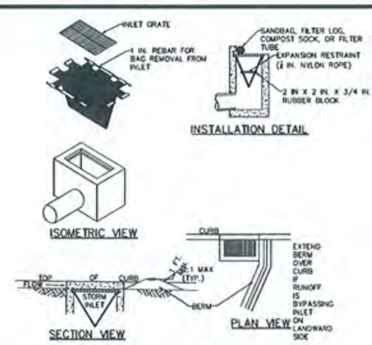
NOTE: SEE SINKHOLE REMEDIATION NOTES IN EROSION AND SEDIMENT POLLUTION CONTROL REPORT PREPARED BY LANGAN ENGINEERING & ENVIROMENTAL SERVICES.

CONCRETE WASHOUT DETAIL



A suitable impervious geomembrane shall be placed at the location of the washout prior to installing the socks.
Adapted from Filtrexx

INLET PROTECTION (FILTER BAG) CURBED ROADWAY



PADOT TYPE 'C' INLET

NOTES:

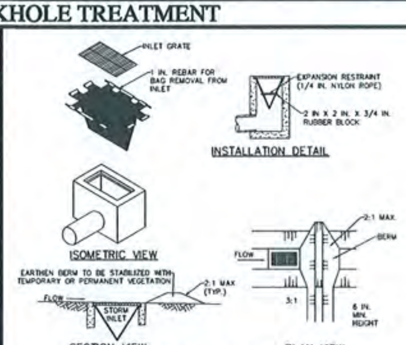
MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.



PADOT TYPE 'M' INLET

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

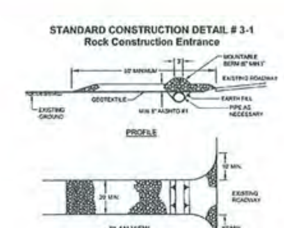
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

ROCK CONSTRUCTION ENTRANCE

STANDARD CONSTRUCTION DETAIL # 3-1
Rock Construction Entrance



Modified from Maryland DOE

Remove topsoil prior to installation of rock construction entrance. Extend rock over full width of entrance.

Runoff shall be diverted from roadway to a suitable sediment removal BMP prior to entering rock construction entrance.

Mountable berm shall be installed wherever optional culvert pipe is used and proper pipe cover as specified by manufacturer is not otherwise provided. Pipe shall be sized appropriately for size of ditch being crossed.

MAINTENANCE: Rock construction entrance thickness shall be constantly maintained to the specified dimensions by adding rock. A stockpile shall be maintained on site for this purpose. All sediment deposited on paved roadways shall be removed and returned to the construction site immediately. If excessive amounts of sediment are being deposited on roadway, extend length of rock construction entrance by 50 foot increments until condition is alleviated or install wash rack. Washing the roadway or sweeping the deposits into roadway ditches, sewers, culverts, or other drainage courses is not acceptable.

MAINTENANCE INSPECTION

MAINTENANCE PROGRAM

THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION STABILIZATION, AND MAINTENANCE OF ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AND RELATED ITEMS INCLUDED WITHIN THIS PLAN. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR THE PROPER CONSTRUCTION AND STABILIZATION OF PERMANENT CONTROL MEASURES AND RELATED ITEMS INCLUDED WITHIN THIS PLAN.

THE OWNER WILL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL PERMANENT CONTROL MEASURES.

SOIL SEDIMENT REMOVED FROM ANY TEMPORARY CONTROL MEASURE DURING REGULAR MAINTENANCE WILL BE INCORPORATED BACK INTO THE EARTHWORK AS FILL ON THE SITE IN ACCORDANCE WITH THE APPROVED PADEP CLEAN UP PLAN FOR THE PROJECT.

AS NECESSARY, SOIL SEDIMENT MATERIAL SHALL BE DISTRIBUTED ON-SITE WITHOUT CHANGING DRAINAGE PATTERNS DURING A SPECIFIC CONSTRUCTION STAGE.

COMPOST FILTER SOCK INSTALLED ON THE PROJECT SITE SHALL BE MAINTAINED AS FOLLOWS:

1. THE SOCK CONDITION WILL BE INSPECTED ONCE A WEEK OR AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED OF PROPERLY.
3. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
4. ANY MANUFACTURER'S RECOMMENDATIONS WILL BE ADHERED TO FOR REPLACING THE SOCK DUE TO WEATHERING.

THE CONSTRUCTION ENTRANCE WILL BE INSPECTED AT THE END OF EACH WORK DAY. THE THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSION BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE.

SEDIMENT ACCUMULATION IN THE SEDIMENTATION BASIN AND TRAPS SHALL BE INSPECTED ONCE A WEEK OR AFTER EVERY STORM EVENT, WHICHEVER COMES FIRST. SEDIMENT ACCUMULATION WILL BE MONITORED WITH A CLEARLY MARKED GAUGE POLE. SEDIMENT WILL BE REMOVED FROM THE BASIN WHEN IT REACHES THE SPECIFIED SEDIMENT CLEAN OUT ELEVATION.

AT THE END OF EACH CONSTRUCTION DAY, ANY SEDIMENT DEPOSITED ON PUBLIC ROADWAYS, WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAY WITH WATER WILL NOT BE PERMITTED.

NOTE: THE CONTRACTOR SHALL HAVE ON SITE A WRITTEN REPORT DOCUMENTING INSPECTION AND REPAIRS.

UTILITY TRENCH NOTES

UTILITY TRENCH EXCAVATION GUIDELINES

1. Construction requirements –
   a. Limit advance clearing and grubbing operations to a distance equal to two times the length of pipe installation that can be completed in one day.
   b. Work crews and equipment for trenching, placement of pipe, plug construction and backfilling will be self contained and separate from clearing and grubbing and site restoration and stabilization operations.
   c. Limit daily trench excavation to the length of pipe placement, plug installation and backfilling that can be completed the same day.
   d. Trench plugs will be spaced and be constructed of the materials shown on Drawing 27.01.
      (1) At all crossings of waters of the Commonwealth, trench plugs will be installed at the banks after trench excavation. The plugs may be temporarily removed when placing the pipe, but then replaced.
      (2) Construction of the crossing will be in accordance with the requirements of PADER.
   e. Water which accumulates in the open trench will be completely removed by pumping, as required, to a facility for removal of sediment in accordance with PADER guidelines.
   f. On the day following pipe placement and trench backfilling, the disturbed area will be graded to final contours and appropriate temporary erosion and sediment pollution control measures/facilities will be installed. Seeding and mulching of all disturbed areas will be done at the end of each week.
2. Exceptions – In certain cases trenches cannot be backfilled until the pipe is hydrostatically tested, or anchors and other permanent features are installed in these cases, all of the requirements listed under item 1 will remain in effect with the following exceptions:
   2c. Daily backfilling of the trench may be delayed for six days. All pressure testing and the complete backfilling of the open trench must be completed by the seventh working day.
   2f. If daily backfilling is delayed, the disturbed area will be graded to final contours, appropriate temporary erosion and sediment control measures/facilities will be installed, and the areas seeded and mulched within the next two calendar days.

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Date	Description	No.

REVISIONS

DRAFT

JASON ENGELHARDT
PROFESSIONAL ENGINEER PA Lic. No. PE-057145-E

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Collectively known as Langan

Project: AMBLER CROSSINGS
AMBLER BOROUGH
MONTGOMERY COUNTY
PENNSYLVANIA

Drawing Title: SOIL EROSION AND SEDIMENT CONTROL DETAILS

Project No.	240025501
Date	4-9-13
Scale	N.T.S.
Drawn By	JKM
Drawing No.	CE-501

Filename: \\langan.com\data\BE\data5\240025501\Cadd Data - 240025501\SheetFiles\240025501-CE501-0101.dwg Date: 4/25/2013 Time: 14:57 User: cmacintyre Style Table: Langan.stb Layout: CE-501

TABLE 11.3
Plant Tolerances of Soil Limitation Factors

Species	Growth Habit[1]	Tolerates				Minimum Seed Specifications[3]				
		Wet Soil	Dry Site	Low Fertility	Acid Soil (Ph 5-5.5)[2]	Purity (%)	Ready Germ (%)	Hard Seed (%)	Total Germ (%)	Seeds/lb (1,000s)
Warm-Season Grasses										
Deertongue	bunch	yes	yes	yes	yes	95	75		75	250
Weeping lovegrass	bunch	no	yes	yes	yes	97	75		75	1,500
Switchgrass[4]	bunch	yes	yes	yes	yes		(60 PLS)			390
Big bluestem	bunch	no	yes	yes	yes		(60 PLS)			150
Cool-Season Grasses										
Tall Fescue	bunch	yes	no	yes	no	95	80		80	227
Redtop	sod	yes	yes	yes	yes	92	80		80	5,000
Fine fescues	sod	no	no	yes	no	95	80		80	400
Perennial ryegrass	bunch	yes	no	no	no	95	85		85	227
Annual ryegrass	bunch	yes	no	yes	no	95	85		85	227
Kentucky bluegrass	sod	no	no	no	no	85	75		75	2,200
Reed canarygrass	sod	yes	yes	yes	no	95	70		70	570
Orchardgrass	bunch	yes	yes	yes	yes	95	80		80	654
Timothy	bunch	yes	no	yes	yes	95	80		80	1,230
Smooth bromegrass	sod	no	yes	yes	no	95	80		80	156
Legumes[5]										
Crownvetch	sod	no	yes	yes	no	98	40	30	65	120
Birdsfoot trefoil[6]	bunch	yes	no	yes	yes	98	60	20	80	400
Flatpea	sod	no	no	yes	yes	98	55	20	75	10
Sericea lespedeza	bunch	no	yes	yes	yes	98	60	20	80	335
Cereals										
Winter wheat	bunch	no	no	no	no	98	85		85	15
Winter rye	bunch	no	no	yes	yes	98	85		85	18
Spring oats	bunch	no	no	no	no	98	85		85	13
Sundangrass	bunch	no	yes	no	no	98	85		85	55
Japanese millet	bunch	yes	no	yes	yes	98	80		80	155

[1] Growth habit refers to the ability of the species to either form a dense sod by vegetative means (stolons, rhizomes, or roots) or remain in a bunch or single plant form. If seeded heavily enough, even bunch formers can produce a very dense stand. This is sometimes called a sod, but not in the sense of a sod formed by vegetative means.

[2] Once established, plants may grow at a somewhat lower Ph, but cover generally is only adequate at Ph 6.0 or above.

[3] *Minimum seedlots are truly minimum, and seedlots to be used for revegetation purposes should equal or exceed these standards.* Thus, deertongue grass should germinate 75% or better. Crownvetch should have at least 40% readily germinable seed and 30% hard seed. Commonly, seedlots are available that equal or exceed minimum specifications. Remember that disturbed sites are adverse for plant establishment. Ready germination refers to seed that germinates during the period of the germination test and that would be expected, if conditions are favorable, to germinate rapidly when planted. The opposite of ready germination is dormant seed, of which hard seed is one type.

[4] Switchgrass seed is sold only on the basis of pure live seed (PLS).

[5] Need specific legume inoculant. Inoculant suitable for garden peas and sweetpeas usually is satisfactory for flatpea.

[6] Birdsfoot trefoil is adapted over the entire state, except in the extreme southeast where crown and root rots may injure stands.

Penn State, "Erosion Control & Conservation Plantings on Noncropland,"

TABLE 11.6
Mulch Application Rates

Mulch Type	Application Rate (Min.) Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yd.	Notes
Straw	3 tons	140 lb.	1,240 lb.	Either wheat or oat straw, free of weeds, not chopped or finely broken
Hay	3 tons	140 lb.	1,240 lb.	Timothy, mixed clover and timothy or other native forage grasses
Wood Chips	4 - 6 tons	185 – 275 lb.	1,650 – 2,500 lb.	May prevent germination of grasses and legumes
Hydromulch	1 ton	47 lb.	415	See limitations above

by dry weight) of man-made foreign matter. The compost product should not resemble the raw material from which it was derived. Wood and bark chips, ground construction debris or reprocessed wood products are not acceptable as the organic component of the mix.

The physical parameters of the compost should comply with the standards in Table 4.2. The standards contained in the PennDOT Publication 408 are an acceptable alternative.

TABLE 4.2
COMPOST STANDARDS

Organic Matter Content	25% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.5
Moisture Content	30% - 60%
Particle Size	30% - 50% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum

TABLE 11.5
Recommended Seed Mixtures for Stabilizing Disturbed Areas

Site Condition	Nurse Crop	Seed Mixture (Select one mixture)
Slopes and Banks (not mowed)		
Well-drained	1 plus	3, 5, 8, or 12[1]
Variable drainage	1 plus	3 or 7
Slopes and Banks (mowed)		
Well-drained	1 plus	2 or 10
Slopes and Banks (grazed/hay)		
Well-drained	1 plus	2, 3, or 13
Gullies and Eroded Areas	1 plus	3, 5, 7, or 12[1]
Erosion Control Facilities (BMPs)		
Sod waterways, spillways, frequent water flow areas	1 plus	2, 3, or 4
Drainage ditches		
Shallow, less than 3 feet deep	1 plus	2, 3, or 4
Deep, not mowed	1 plus	5 or 7
Pond banks, dikes, levees, dams, diversion channels, And occasional water flow areas		
Mowed areas	1 plus	2 or 3
Non-mowed areas	1 plus	5 or 7
For hay or silage on diversion channels and occasional water flow areas	1 plus	3 or 13
Highways [2]		
Non-mowed areas		
Pure crownvetch[3]	1 plus	5 or 6
Well-drained	1 plus	5, 7, 8, 9, or 10
Variable drained	1 plus	3 or 7
Poorly drained	1 plus	3 or 4
Areas mowed several times per year	1 plus	2, 3, or 10
Utility Right-of-way		
Well-drained	1 plus	5, 8, or 12[1]
Variable drained	1 plus	3 or 7
Well-drained areas for grazing/hay	1 plus	2, 3, or 13
Effluent Disposal Areas	1 plus	3 or 4
Sanitary Landfills	1 plus	3, 5, 7, 11[4], or 12[1]
Stripmines		
Spoils, mine wastes, fly ash, slag, settling basin Residues and other severely disturbed areas (lime to soil test)	1 plus	3, 4, 5, 7, 8, 9, 11[4], or 12[1]
Severely disturbed areas for grazing/hay	1 plus	3 or 13

Penn State, "Erosion Control & Conservation Plantings on Noncropland"

1. For see mixtures 11 and 12, only use spring oats or weeping lovegrass (included in mix) as nurse crop.
2. Contact the Pennsylvania Department of Transportation district roadside specialist for specific suggestions on treatment techniques and management practices.
3. Seed mixtures containing crown vetch should not be used in areas adjacent to wetlands or stream channels due to the invasive nature of this species.

TABLE 11.1
Cubic Yards of Topsoil Required for Application to Various Depths

Depth (in)	Per 1,000 Square Feet	Per Acre
1	3.1	134
2	6.2	268
3	9.3	403
4	12.4	537
5	15.5	672
6	18.6	806
7	21.7	940
8	24.8	1,074

Adapted from VA DSWC

TABLE 11.2
Soil Amendment Application Rate Equivalents

Soil Amendment	Permanent Seeding Application Rate Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yd.	Notes
Agricultural lime	6 tons	240 lb.	2,480 lb.	Or as per soil test; may not be required in agricultural fields
10-10-20 fertilizer	1,000 lb.	25 lb.	210 lb.	Or as per soil test; may not be required in agricultural fields
	Temporary Seeding Application Rate			
Agricultural lime	1 ton	40 lb.	410 lb.	Typically not required for topsoil stockpiles
10-10-10 fertilizer	500 lb.	12.5 lb.	100 lb.	Typically not required for topsoil stockpiles

Adapted from Penn State, "Erosion Control & Conservation Plantings on Noncropland,"

NOTE: A compost blanket which meets the standards of this chapter may be substituted for the soil amendments shown in Table 11.2.

TABLE 11.4
Recommended Seed Mixtures

Mixture Number	Species	Seeding Rate - Pure Live Seed [1] Most Sites	Adverse Sites
1 [2]	Spring oats (spring), or Annual ryegrass (spring or fall), or Winter wheat (fall), or Winter rye (fall)	64 10 90 56	96 15 120 112
2 [3]	Tall fescue, or Fine fescue, or Kentucky bluegrass, plus Redtop[4], or Perennial ryegrass	60 35 25 3 15	75 40 30 3 20
3	Birdsfoot trefoil, plus Tall fescue	6 30	10 35
4	Birdsfoot trefoil, plus Reed canarygrass	6 10	10 15
5[5]	Crownvetch, plus Tall fescue, or Perennial ryegrass	10 20 20	15 25 25
6 [3,5]	Crownvetch, plus Annual ryegrass	10 20	15 25
7[5]	Birdsfoot trefoil, plus Crownvetch, plus Tall fescue	6 10 20	10 15 30
8	Flatpea, plus Tall fescue, or Perennial ryegrass	20 20 20	30 30 25
9 [6]	Sericea lespedeza, plus Tall fescue, plus Redtop[4]	10 20 3	20 25 3
10	Tall fescue, plus Fine fescue	40 10	60 15
11	Deertongue, plus Birdsfoot trefoil	15 6	20 10
12 [7]	Switchgrass, or Big Bluestem, plus Birdsfoot trefoil	15 15 6	20 20 10
13	Orchardgrass, or Smooth bromegrass, plus Birdsfoot trefoil	20 25 6	30 35 10

Penn State, "Erosion Control and Conservation Plantings on Noncropland"

1. PLS is the product of the percentage of pure seed times percentage germination divided by 100. For example, to secure the actual planting rate for switchgrass, divide 12 pounds PLS shown on the seed tag. Thus, if the PLS content of a given seed lot is 35%, divide 12 PLS by 0.35 to obtain 34.3 pounds of seed required to plant one acre. All mixtures in this table are shown in terms of PLS.
2. If high-quality seed is used, for most sites seed spring oats at a rate of 2 bushels per acre, winter wheat at 11.5 bushels per acre, and winter rye at 1 bushel per acre. If germination is below 90%, increase these suggested seeding rates by 0.5 bushel per acre.
3. This mixture is suitable for frequent mowing. Do not cut shorter than 4 inches.
4. Keep seeding rate to that recommended in table. These species have many seeds per pound and are very competitive. To seed small quantities of small seeds such as weeping lovegrass and redtop, dilute with dry sawdust, sand, rice hulls, buckwheat hulls, etc.
5. Use for highway slopes and similar sites where the desired species after establishment is crownvetch.

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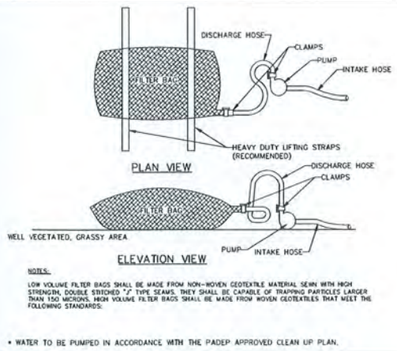

NOTES:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. ROLL WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

* WATER TO BE PUMPED IN ACCORDANCE WITH THE PADEP APPROVED CLEAN UP PLAN.

STABILIZATION METHODS AND STANDARDS

SEDIMENT FILTER BAG FOR PUMPED WATER

Sequence of Construction

1. Each stage of the sequence of construction must be completed prior to initiation of the next stage of the sequence of construction. Construction activities within each stage may overlap provided that work within each area is carried out in sequence. The Montgomery County Soil Conservation District must be notified by the contractor in writing 72 hours prior to any land disturbances. A pre-construction meeting is to be held with the District, on site, prior to disturbance. An owner representative, the site contractor representative, project engineer, and any other pertinent personnel should attend. The borough shall be notified of said meeting.
2. The "Ambler Crossings" project shall be constructed in accordance with plans approved by the Borough of Ambler, erosion and sediment pollution control plans approved by the Montgomery County Conservation District and the PADEP approved Clean Up Plan under the Land Recycling Act 2 Program.
3. All blasting activity, if required, should be done in accordance with the local, state and federal regulations. Contractor should notify Owner and all regulatory agencies in writing prior and obtain any necessary permits prior to any blasting activities.

STAGE 1

1. Install a gravel buffer of AASHTO No. 1 rock, 8 inches deep at the construction entrance (CE-1) immediately before initial disturbances as per standards on drawings. Gravel buffer to be underlain by filter fabric as indicated on the detail plans. All construction traffic should use only this area for ingress and egress. As conditions warrant, these locations may be modified with the prior approval from the Montgomery County Soil Conservation district.
2. Install construction entrance, compost filter socks and adjust existing perimeter fence as indicated on Drawing CE-102 & CE-103. Method of installation and maintenance in accordance with PADEP requirements and as indicated on the detail plans. The installation of the construction entrances, compost filter socks, and existing perimeter fence relocations at the indicated location should be done prior to any other earth disturbances.
3. Excavate and dispose of material in the magnesia disturbance areas, delineated on sheet CE-101, in accordance with the PADEP approved Clean Up Plan.

STAGE 2

1. Clear and grub area of proposed disturbance.
2. Crush concrete rubble onsite and stockpile where indicated on Drawing CE-102.
3. Install underground basin connection to existing 5'x7' arch culvert. Install storm pipe from this connection to the underground basin.
4. Install the remaining storm sewer system from the most downstream manhole at the proposed underground detention basin to the fence line at the existing Boiler House parking lot as shown on drawing CE-102. Install the underground detention basin. Install permanent storm sewer pipes and associated drainage structures at the Ambler Crossings site. The storm sewer systems shall be installed from downstream to upstream. As catch basins are constructed, place inlet protection filter bags inside and maintain as indicated on Drawing CE-102.
5. Install a gravel buffer of AASHTO No. 1 rock, 8 inches deep at the construction entrance (CE-2). Gravel buffer to be underlain by filter fabric as indicated on the detail plans. All construction traffic should use only this area for ingress and egress. As conditions warrant, these locations may be modified with the prior approval from the Montgomery County Soil Conservation district. Remove construction entrance CE-1.
6. Construct permanent northeast parking area to subbase elevation to be utilized for temporary Boiler House parking. Construct temporary access to new parking area. Place topsoil and excess fill material in areas designated on the plan and in accordance with the PADEP approved Clean Up Plan.
7. Install remaining section of storm pipe and structure. Place inlet filter bag in catch basin. Rebuild remaining section of Boiler House parking to proposed subbase elevation.

STAGE 3

1. Remove temporary access drive after Boiler House parking is rebuilt and connected to new northeast parking area.
2. Construct retaining wall at eastern corner of site and along Chestnut Street.
3. Excavate for building foundations, remove or dispose of material in accordance with PADEP approved Clean Up Plan.
4. Begin construction of on-site utilities including roof leaders. On site subsurface utilities shall consist of gas, electric, telephone, cable, water, and sanitary sewers. Advance trench excavation shall be limited to the length of pipe that can be completed in the same day. On the day following utility installation, the trench area shall be graded to subgrade elevation. Hydroseeding and/or liquid mulching of all disturbed areas shall be completed at the end of each work day. All water, sewer, gas mains and other underground facilities shall be installed prior to paving.
5. Construct curbing along paved areas and roadways as indicated on Drawing CS-101.
6. Construct sidewalks as indicated on Drawing CS-101.
7. Place gravel subbase and bituminous subbase course in areas of proposed pavement.
8. Commence vertical construction of proposed buildings and pool. Schedule determined by Contractors.
9. Complete final site grading and landscape of all appropriate areas. Stabilize with permanent seed and mulch.
10. Complete final surface course paving.
11. Construction entrances, compost filter socks, perimeter fence, and inlet protection shall be maintained until all improvements to the site are completed, road and parking areas are paved, and 70% uniform permanent vegetative coverage has been established.
12. Once all permanent measures have been installed, clean out accumulated silt from the compost filter socks, remove the construction entrances, compost filter socks, perimeter fence, and inlet protection. All disturbed areas caused by the removal of temporary sediment pollution control devices must be permanently stabilized.

LANGAN

SUBMISSION DATE: 2013-04-09

PROJECT No. 240025501

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MAPLE AVE PARK PARTNERS, LLP
110 SPRUCE ROAD
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Date	Description	No.
	REVISIONS	

DRAFT

JASON ENGELHARDT
PROFESSIONAL ENGINEER PA Lic. No. PE-057145-E

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Langan Engineering and Environmental Services, Inc.
Langan International LLC
Collectively known as Langan

Project: AMBLER CROSSINGS
AMBLER BOROUGH
MONTGOMERY COUNTY PENNSYLVANIA

Drawing Title: SOIL EROSION AND SEDIMENT CONTROL DETAILS

Project No.	240025501
Date	4-9-13
Scale	N.T.S.
Drawn By	JKM
Drawing No.	CE-502
	Sheet 22 of 22

Filename: \\langan.com\data\BE\data5\240025501\Cadd Data - 240025501\SheetFiles\240025501-CE502-0101.dwg Date: 4/25/2013 Time: 14:50 User: cmackenzie Style Table: Langan.stb Layout: CE-502

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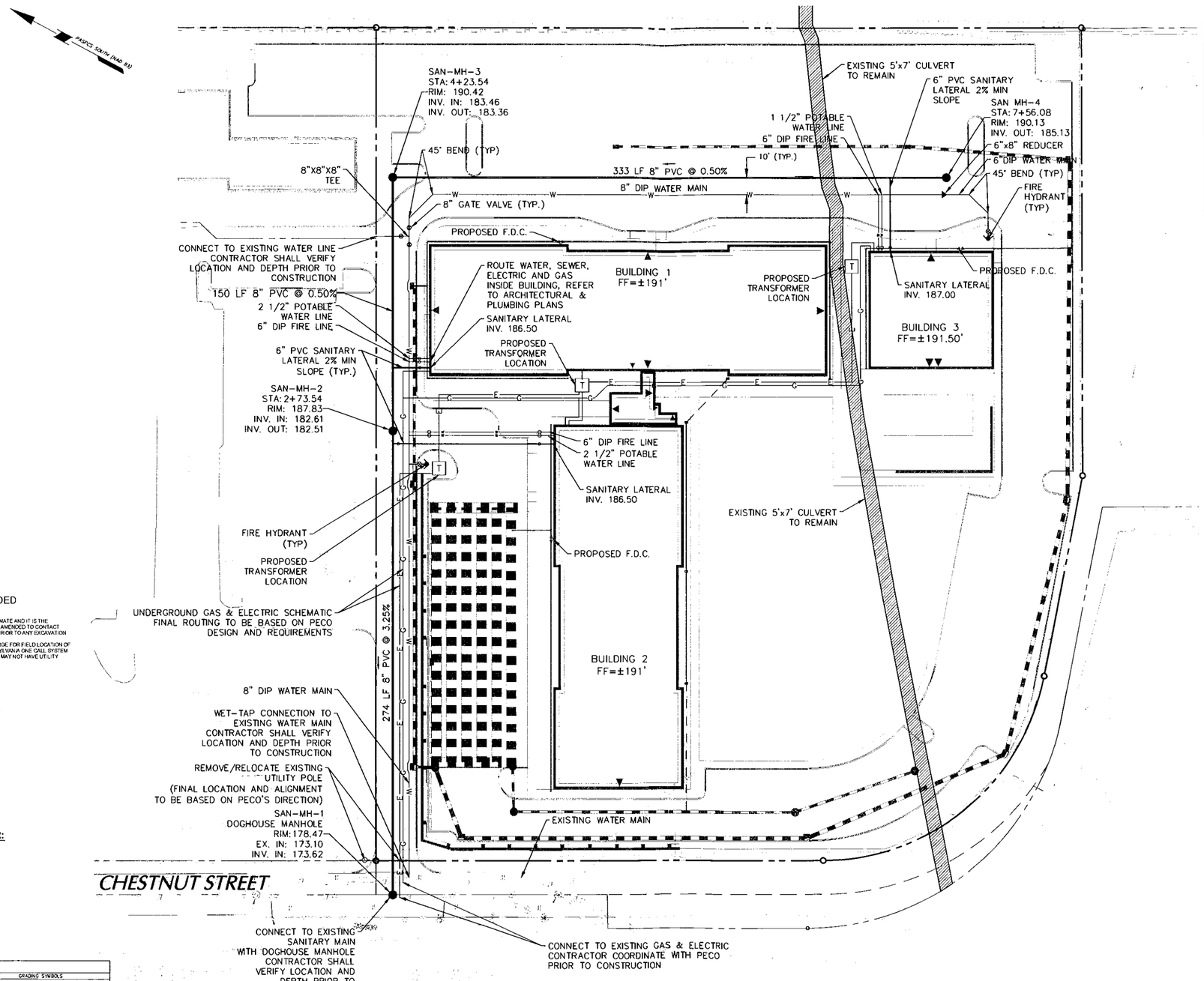
APPENDIX 6

UTILITY CORRIDOR LAYOUT



ACT 287 AS AMENDED

UTILITY LOCATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR, PER PA. ACT 287 AS AMENDED TO CONTACT THE UTILITY COMPANIES FOR MORE ACCURATE LOCATION PRIOR TO ANY EXCAVATION

TO OBTAIN ADDITIONAL UTILITY INFORMATION OR TO ARRANGE FOR FIELD LOCATION OF EXISTING UTILITIES BEFORE EXCAVATION, CALL THE PENNSYLVANIA ONE CALL SYSTEM AT 1-800-242-1776. THE UTILITY COMPANIES SHOWN MAY OR MAY NOT HAVE UTILITY LINES IN THE AREA

CALL BEFORE YOU DIG !!!
PENNSYLVANIA LAW EXPANDS (3) WORKING DAYS NOTICE FOR CONSTRUCTION (PHASE AND) (10) WORKING DAYS IN DESIGN STAGE
- STOP & CALL -

Pennsylvania One Call System, Inc
1-800-242-1776

SERIAL NUMBER 2935617

APPLICANT / EQUITABLE OWNER:
AMBLER CROSSINGS DEVELOPMENT PARTNERS, LP
201 S. MAPLE AVENUE, SUITE 100
AMBLER, PA 19002
P: (484)532-7830

RECORD OWNER:
MAPLE AVE PARK PARTNERS, LLP
110 SPRUCE ROAD
AMBLER, PA 19002
P: (484)532-7830

LEGEND

SITE SYMBOLS	GRADING SYMBOLS
CURB LINE	EXISTING CONTOUR
EXISTING EDGE OF PAVEMENT LINE	PROPOSED CONTOUR
PROPOSED BUILDING LINE	EXISTING SPOT ELEVATION
PROPERTY LINE	PROPOSED SPOT ELEVATION
LOT LINE	TOP OF WALL ELEVATION
IRON PIN TO BE SET	BOTTOM OF WALL ELEVATION (AT GROUND SURFACE)
CONCRETE MON. TO BE SET	
PROPOSED FENCE	
RETAINING WALL	
PROPOSED GUIDERAIL	

UTILITY SYMBOLS	
EXISTING STORM SEWER	EXISTING SANITARY SEWER MANHOLE
EXISTING SANITARY SEWER	EXISTING FIRE HYDRANT
EXISTING GAS MAIN EXISTING	EXISTING GAS VALVE
WATER MAIN EXISTING	EXISTING CATCH BASIN
OVERHEAD ELECTRIC	EXISTING WATER VALVE
PROPOSED STORM SEWER	EXISTING MANHOLE
PROPOSED SANITARY SEWER	EXISTING ELECTRIC POLE
PROPOSED WATER MAIN	PROPOSED WATER VALVE
PROPOSED ELECTRIC	PROPOSED HYDRANT
PROPOSED GAS	

30 0 15 30
SCALE IN FEET

UTILITY NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS IN A MANNER WHICH WILL NOT NEGATIVELY AFFECT ANY EXISTING USERS OF THESE UTILITIES.
2. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY (WATER, SEWER, GAS, ELECTRIC, TELEPHONE AND CABLE) LOCATIONS, INVERTS AND CONDITIONS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN ON THE DRAWINGS AND REQUIRING MODIFICATIONS TO THE SITE DESIGN SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE CONSTRUCTION. DIFFERING UTILITY CONDITIONS THAT ARE ENCOUNTERED BY THE CONTRACTOR, THAT REQUIRE MODIFICATION OF SITE DESIGN AND THAT ARE NOT BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT AT HIS SOLE COST.
3. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
4. THE LOCATION OF EXISTING GAS MAINS ARE APPROXIMATE. THE CONTRACTOR MUST CONSULT THE LOCAL UTILITY COMPANIES FOR ADDITIONAL INFORMATION. ALL PROPOSED GAS WORK AND OTHER ASSOCIATED APPURTENANCES WILL BE IN CONFORMANCE WITH APPLICABLE LOCAL COUNTY, STATE AND FEDERAL GUIDELINES AND REQUIREMENTS.
5. THE LOCATION OF EXISTING ELECTRIC LINES ARE APPROXIMATE. THE CONTRACTOR MUST CONSULT THE LOCAL UTILITY COMPANIES FOR ADDITIONAL INFORMATION. ALL PROPOSED ELECTRICAL WORK, TRANSFORMER PADS, AND ASSOCIATED APPURTENANCES WILL BE IN CONFORMANCE WITH APPLICABLE LOCAL, COUNTY, STATE AND FEDERAL GUIDELINES AND REQUIREMENTS.
6. ALL GAS WORK AND OTHER ASSOCIATED APPURTENANCES WILL BE IN CONFORMANCE WITH APPLICABLE LOCAL COUNTY, STATE AND FEDERAL GUIDELINES AND REQUIREMENTS.
7. ALL ELECTRICAL WORK, TRANSFORMER PADS, AND ASSOCIATED APPURTENANCES WILL BE IN CONFORMANCE WITH APPLICABLE LOCAL, COUNTY, STATE AND FEDERAL GUIDELINES AND REQUIREMENTS. MIN. DEPTH OF COVER OVER ELECTRIC, GAS, AND CABLE SHALL BE 2 FT.
8. ALL WATER MAIN WORK SHALL BE IN ACCORDANCE WITH THE AMBLER BOROUGH WATER DEPARTMENT STANDARDS AND SPECIFICATIONS. SEE CONSTRUCTION NOTES BELOW.
9. THE CONTRACTOR SHALL COORDINATE THE SANITARY SEWER WORK WITH AMBLER BOROUGH.
10. A MINIMUM EIGHTEEN (18) INCHES VERTICAL CLEARANCE MUST BE MAINTAINED BETWEEN WATER MAIN AND ALL OTHER UTILITIES. WHERE CLEARANCE CANNOT BE MAINTAINED, THEN WATER MAIN SHALL BE ENCASED IN CONCRETE 10 FEET ON EACH SIDE OF THE CROSSING. IN CASES WHERE THE UTILITY IS A SANITARY OR STORM SEWER MAIN OR LATERAL AND THE CLEARANCE CANNOT BE MAINTAINED, THEN THE SEWER SHALL ALSO BE ENCASED.
11. THE CONTRACTOR MUST CONTACT AMBLER BOROUGH ONE WEEK PRIOR TO WATER MAIN CONSTRUCTION, AND 72 HOURS PRIOR TO EXCAVATION NEAR AND CONNECTION TO EXISTING WATER AND SEWER MAIN.
12. ALL WATER MAIN FITTINGS AND VALVES SHALL BE MECHANICAL JOINT (RESTRAINED) AND THE FITTINGS SHALL BE PROVIDED WITH THRUST BLOCKING. REFER TO DETAILS FOR THRUST BLOCK DETAILS AND FITTING SCHEDULES.
13. ALL FIRE HYDRANTS AND VALVES SHALL OPEN RIGHT (CLOCKWISE).
14. SANITARY LATERALS SHALL BE INSTALLED ACCORDING TO THE TYPICAL SANITARY SEWER LATERAL DETAIL.
15. ALL PROPOSED SANITARY SEWER LINES AND APPURTENANCES ARE PRIVATELY OWNED AND SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.
18. ALL UTILITIES SHALL BE LOCATED UNDERGROUND UNLESS REQUIRED BY PROVIDER.
19. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF UTILITIES WITH APPROVED BUILDING PLANS.
20. WATER LINE SIZE TO BE VERIFIED BY PLUMBING ENGINEER BASED ON FIXTURE COUNT, FIRE FLOW REQUIREMENTS AND FIRE FLOW TESTING.
21. F.D.C. = FIRE DEPARTMENT CONNECTION.

UTILITY TRENCH EXCAVATION GUIDELINES

1) CONSTRUCTION REQUIREMENTS
   a) WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
   a) LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
   b) ALL DISTURBED AREAS ARE TO BE RESTORED AND STABILIZED WITHIN TWENTY (20) DAYS IN ACCORDANCE WITH THE STABILIZATION METHODS APPLICABLE TO THE AREA OF DISTURBANCE (I.E. SWALES WITH LINER, ROAD WITH BASE COARSE)
2) EXCEPTIONS – IN CERTAIN CASES TRENCHES CANNOT BE BACKFILLED UNTIL THE PIPE IS HYDROSTATICALLY TESTED, OR ANCHORS AND OTHER PERMANENT FEATURES ARE INSTALLED IN THESE CASES, ALL OF THE REQUIREMENTS LISTED UNDER ITEM 1 WILL REMAIN IN EFFECT WITH THE FOLLOWING EXCEPTIONS:
   a) DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR SIX DAYS. ALL PRESSURE TESTING AND THE COMPLETE BACKFILLING OF THE OPEN TRENCH MUST BE COMPLETED BY THE SEVENTH WORKING DAY.
3) IF DAILY BACKFILLING IS DELAYED, THE DISTURBED AREA WILL BE GRADED TO FINAL SUBGRADE ELEVATION, AND THE AREAS SEEDED AND MULCHED WITHIN THE NEXT TWO CALENDAR DAYS.

WATER SYSTEM CONSTRUCTION NOTES

A. WATER SYSTEM CONSTRUCTION IS SUBJECT TO INSPECTION BY AMBLER BOROUGH WATER DEPARTMENT.
B. ALL WATER LINES SHALL HAVE A MINIMUM OF 4' OF COVER.
C. ALL WATER LINES SHALL BE DUCTILE IRON PIPE CLASS 52.
D. VALVES SHALL BE SET 5' FROM A FITTING.
E. MEGALUGS SHALL BE USED TO RESTRAIN MECHANICAL JOINT FITTINGS AND FIELD LOCK GASKETS TO RESTRAIN PUSH-ON JOINTS WITHIN 40' OF BOTH HORIZONTAL AND VERTICAL BENDS IN WATER LINES 12" IN DIAMETER AND SMALLER.
F. A 5' MINIMUM HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER LINES AND TREE PLANTING.
G. ALL FITTINGS AND HYDRANTS SHALL BE PROVIDED WITH CONCRETE THRUST BLOCKS.
H. FIRE HYDRANT LINES SHALL BE 6" DIAMETER, WITH 6" DIAMETER SHUT OFF VALVES.

SANITARY SYSTEM CONSTRUCTION NOTES

A. ALL PRECAST SANITARY MANHOLES SHALL RECEIVE TWO INTERIOR COATS (6 MIL DFT. EACH) OF A WHITE EPOXY COATING.
B. MANHOLES NOT LOCATED WITHIN A PAVED AREA SHALL RECEIVE A WATERTIGHT FRAME AND COVER.
C. MANHOLES IN PAVING SHALL BE PROVIDED WITH A DEEP BOWL INSERT WITH VENTILATION HOLES.
D. CLEANOUTS LOCATED IN PAVED AREAS SHALL BE PROVIDED WITH A CAST IRON LID AND BOX ASSEMBLY.

Date	Description	No.
REVISIONS		

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER JASON SCOTT ENGELHARDT
JASON ENGELHARDT
PROFESSIONAL ENGINEER PA Lic. No. PE-057145-E

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Langan International LLC
Collectively known as Langan

Project	AMBLER CROSSINGS
	AMBLER BOROUGH MONTGOMERY COUNTY PENNSYLVANIA
Drawing Title	UTILITY PLAN
Project No.	240025501
Date	4-9-13
Scale	1"=30'
Drawn By	JKM
Drawing No.	CU-101
Sheet	14 of 22

Filename: \\langan.com\data\BE\data5\240025501\Cadd Data – 240025501\SheetFiles\240025501-CU101-0101.dwg Date: 4/9/2013 Time: 10:38 User: jmarlinghoff Style Table: Langan.stb Layout: CU-101

PROJECT No. 240025501 | SUBMISSION DATE: 2013-04-09 | LANGAN

APPENDIX 7

CLEAN FILL CERTIFICATION

2500-FM-BWM0008 Rev. 8/2010

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM FP-001 - CERTIFICATION OF CLEAN FILL

Prior to completing this form and signing this certification, please review the entire Management of Fill policy (#258-2182-773), including the certification requirements. Please note that historic fill, as defined in the Management of Fill policy, may meet the definition of clean fill if the material is limited to uncontaminated soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and recognizable as such.

Instructions: Sections 1 and 2 of this form must be completed by the person making the determination of clean fill at the site of origin. Section 3 must be completed by the person using the material as clean fill. Both the person determining clean fill and the user of the clean fill are responsible for maintaining copies of this completed form on site for a period of five (5) years for Department inspection.

Section 1: Person Determining Clean Fill

Name (Print): _____ Title: _____ Date: _____

Company Name: _____

Street Address: _____ City: _____ State: _____ Zip Code: _____

Telephone Number: _____ E-mail Address: _____

Clean Fill Material originated on the following property:

Site Name: _____

Street Address: _____ City: _____ State: _____ Zip Code: _____

Section 2: Site Characterization

Check the following that applies:

☐ **A. IF the site of origin for the fill material has undergone or is undergoing cleanup or remediation pursuant to a local state or federal regulatory program that requires site characterization, provide the following information along with a copy of the entire site characterization and laboratory analysis for the material to be used as clean fill.**

Name of local, state, or federal agency: _____

Identification number assigned to the project: _____

Name of the local, state, or federal contact person: _____

Telephone Number: _____ E-mail Address: _____

Name of the Laboratory that conducted the analysis: _____

Laboratory Accreditation Number: _____

☐ **B. IF the material proposed to be used as clean fill has otherwise been subject to analytical testing or other procedure identified in the definition of "environmental due diligence" contained in the Management of Fill policy, provide or attach the following:**

Copies of **ALL** lab analytical testing performed as part of environmental due diligence (see Management of Fill policy, #258-2182-773).

Name of the Laboratory that conducted the analysis: _____

Laboratory Accreditation Number: _____

☐ C. **IF the proposed material to be used as clean fill was subject to environmental due diligence procedures as defined in the Management of Fill policy other than those listed in A and B, describe those procedures.**

_____

_____

I, the undersigned, certify under penalty of law (18 Pa. C.S.A. §4904) that the information provided in Sections 1 and 2 of this form is true and correct to the best of my knowledge, information and belief.

Signature: _____

Section 3: Person Receiving or Placing Clean Fill

Name and address of person completing this form:

Name (Print): _____ Date: _____

Mailing Address: _____ City: _____ State: _____ Zip Code: _____

Telephone Number: _____ E-mail Address: _____

Fill material that has been determined to be clean fill will be placed on the following property solely for property improvement or construction purposes:

Property Address: _____ City: _____ State: _____ Zip Code: _____

Current Owner of Property: _____

Telephone Number: _____ E-mail Address: _____

The quantity of clean fill to be placed on the property is:

☐ <3,000 cubic yards ☐ 3,000 cubic yards to 20,000 cubic yards ☐ >20,000 cubic yards

I, the undersigned, certify under penalty of law (18 Pa. C.S.A. §4904) that the information provided is true and correct to the best of my knowledge, information and belief.

Signature: _____

* * * * *

Prior to placement of the clean fill, the owner of the property receiving fill material shall provide a copy of this completed form and attachments to the DEP Regional Office serving the county in which the receiving site is located. If a property receives fill from multiple sources, a separate Form FP-001 is required for each source.

APPENDIX 8

HEALTH & SAFETY PLAN

SITE SPECIFIC HEALTH AND SAFETY PLAN

BAST PROPERTY
MAPLE AVENUE
AMBLER, PA 19002

RT PROJECT # 70461-09

PREPARED FOR:

AMBLER CROSSING DEVELOPMENT PARTNERS, LP
210 S. MAPLE AVENUE, SUITE 100
AMBLER, PA 19002

SUBMITTED BY:

RT ENVIRONMENTAL SERVICES, INC.
510 HERON DRIVE, SUITE 306
P.O. BOX 521
BRIDGEPORT, NEW JERSEY 08014

FEBRUARY 2013

TABLE OF CONTENTS

TABLES

ATTACHMENTS

1.0 WORK DESCRIPTION

This Site Specific Health and Safety Plan (HASP) has been prepared for remedial investigation (RI) and design activities at the Bast Property located on Maple Avenue in Ambler, Pennsylvania. Site activities include the advancement of soil borings throughout the site. The purpose of this Health & Safety (H&S) Plan is to provide health and safety information for site workers during RI activities.

If other potential environmental, health and/or safety issues are discovered during field activities at the site that are not covered in this HASP, work should cease until the issues are evaluated and incorporated into this HASP, as deemed necessary.

1.1 GENERAL HEALTH & SAFETY PRACTICES

Section A - General

It is the intent of RT to establish and implement a Health and Safety Program for its employees and any subcontractors as part of its commitment to providing safe working conditions in general and at this site particularly. This program conforms with Federal and State Statutes including 29 CFR 1910.120, 40 CFR 265.16, 34 PA Code Chapter 303, 29 CFR 1910.1200.

Section B - RCRA Training and Compliance

(NOT USED)

Section C - OSHA Training and Compliance for Hazardous Waste Operations

In accordance with 29 CFR 1910.120 the following Health and Safety Program shall be in effect at this site, whether they be in the investigative or construction phase.

1) Site Characterization and Analysis

The site has been extensively studied as related to historic operations and disposal of asbestos containing soils. The site is designed by EPA and DEP as an in-active asbestos disposal site. RT has prepared on behalf of the developer the proper notifications to EPA and DEP prior to implementation of the RI investigation field activities (45 day notice). In that notice, we have documented the historic information developed for the site related to the asbestos containing soil in the 0 to 2' below ground surface (bgs), the 2' to 10' bgs and >10' bgs. The RI investigation field activities will consist of installation of soil borings at specific locations throughout the site. Soil generated during the investigation will be returned to the borehole.

A total of twelve borings will be completed for this investigation to evaluate the subsurface conditions at the site. Four borings are proposed in the vicinity of proposed Building 1, four borings in the vicinity of proposed Building 2, one boring in the vicinity of proposed Building 3, one boring in the proposed patio area and two borings in potential retaining wall areas. The borings will be drilled to a depth to adequately characterize the subsurface conditions for various foundation alternatives. An average drill depth of twenty five feet has been assumed for this subsurface investigation. Samples of the soil will be recovered and the Standard Penetration Resistance Test (SPT) values will be recorded at suitable intervals. Groundwater elevations will be recorded at each boring location, together with the date and hour that the measurement was taken. Supervision and monitoring of the test boring operations will be performed by a qualified geotechnical representative. The geotechnical representatives will be on-site full time throughout the field operation to efficiently manage the project scope and to document the field operations. All test borings will be advanced to depths required to adequately analyze the subsurface strata.

Following sample collected, any remaining excavated soils will be used to backfill the test borings.

Between each boring the augers will be washed down to remove particulate matter. The decontamination water will be infiltrated to the ground to prevent the transportation between locations. All vehicles which enter the site will be required to

wash off particulates prior to leaving the property. This decontamination will include at a minimum the tires and wheel wells of the vehicle, but will also include any visible mud/soil from the vehicles.

The activities proposed for this investigation have limited potential to generate dust impacted with asbestos due to the type of drilling to be implemented. However, the following procedures will be implemented to control potential emissions during the work.

1. Visual inspection during subsurface investigation work will be completed. Should dust be observed during drilling, water will be used to control emissions.

2. During drilling activities, care will be taken by the equipment operators to minimize the potential for dust generation during the work. Operators will control dust by reducing speed of vehicles where practical which will minimize the potential for dust generation. Operators will be given a daily briefing from the site superintendent prior to implementation of work on the Site and review procedures to minimize dust generation during drilling activities.

3. Air monitoring will be completed during the earth disturbance activities. The inspector will document the prevailing wind direction each day. The inspector will collect up to three air samples each day, an upgradient location (based on wind direction) and two downgradient locations. Air samples will be submitted to EMSL Laboratories for analysis. All air samples will be analyzed via transmission electron microscopy (TEM) via NIOSH method 7402. The TEM method allows for higher resolution and better identification of asbestos fibers. Analytical results will be turned around in 48 hours.

2) Site Controls

A site control program to prevent the spread of soil boring cuttings on-site shall be implemented. Drill cuttings will be place back into the borehole following completion of investigation activities. All personnel protection equipment will be removed,

containerized prior to personnel leaving the site to prevent potential spread of asbestos containing soils.

3) Training

All staff who will be involved with excavation work or sub-surface investigations at this site will have received training prior to working in restricted areas. The training will consist of a review of this Health and Safety Plan, 40-hr HAZWOPER and attend a 2-hour asbestos awareness course.

A review of the HASP each day prior to the start of work will be completed, including the basic concepts of time, distance, contamination control and avoidance, and how to properly handle asbestos contaminated soil.

4) Engineering Controls, Work Practices, PPE

Staff shall be made familiar with and have an understanding of the Engineering Controls, Safe Work Practices, Standard Operation Procedures, and personal protective equipment selection and use, to minimize or reduce personal exposure to permissible levels. The training required to achieve these objectives is included in the HASP. Training requirements shall be reviewed whenever site operations change significantly.

5) Monitoring

Site monitoring will consist of a visual inspection to verify that impacted soil is not being tracked off-site and minimal dust is generated during RI activities. An asbestos inspector will collect 3 air samples each day, an upgradient location (based on wind direction) and two downgradient locations. Air samples will be submitted to EMSL Laboratories for analysis. All air samples will be analyzed via transmission electron microscopy (TEM) via NIOSH method 7402.

6) Information

RT, contractors and subcontractors shall be informed as to the nature of the hazards

present at the work site. Contractors and subcontractors will be responsible to supply their employees with the proper personal protective equipment. No personnel may enter the site without executing the form shown in **Table 1**.

7) Decontamination

Between each boring the augers will be washed down to remove particulate matter. The decontamination water will be infiltrated to the ground to prevent the transportation between locations. All vehicles which enter the site will be required to wash off particulates prior to leaving the property. This decontamination will include at a minimum the tires and wheel wells of the vehicle, but will also include any visible mud/soil from the vehicles.

8) Emergency Response

A plan to deal with emergencies at this site has been developed and incorporated into the site Health and Safety Plan (HASP). The HASP Plan includes all local emergency phone numbers (Police, Fire, Emergency Response, Hospital), safety meetings and plan modification procedures.

A copy of the HASP will be given to all contractors and subcontractors. Those contractors and subcontractors will be responsible for their employee's compliance with the Plans when the employees are assigned to excavation and/or intrusive activities; these personnel will sign off that they have read and understood the Plans (See **Table 1**). The asbestos inspector will monitor contractor and subcontractor conformance routinely.

Contractors and subcontractors will be responsible for their employees' training. Any contractor or subcontractor by receiving the HASP and supplying workers to RT for work site activities thereby certifies that their personnel are in full compliance with all federal, state and local statutes regarding such activities.

1.2 SAFETY RULES AND POLICY STATEMENT

Safe work habits prevent serious injuries that are painful and costly. Keep your mind on the job. Lack of attention is a major cause of accidents, do your part in preventing them by learning, observing and practicing these safety rules and regulations.

1) Report all accidents, injuries and unsafe or unsanitary conditions and practices to your supervisor. Supervisors must insure that all injuries are reported immediately, and in turn report them to the Health and Safety Director.

2) Whenever working with impacted material, the proper procedures outlined at the site by the supervisor, or specified in the Health and Safety Plan, must be followed.

3) Wash hands and clean thoroughly under fingernails before handling food or drink when working with impacted material.

4) Do not drink water from any source that has not been designated as "Potable Water".

5) Dress safely for the job, otherwise you may be in danger. Do not wear loose clothing. Shirt and long pants are required.

6) Watches and bracelets shall not be worn around moving machinery. It is urged that rings be removed to prevent serious injury. Medallions and necklaces must be worn inside clothing.

7) All employees are held responsible for the cleanliness of their work areas and are expected to cooperate in maintaining the orderliness of sites and work areas. No food is allowed in the immediate work areas.

8) Safety hard hats shall be worn when the extent of the hazard warrants their use. Hard hats areas are identified to employees by respective supervisors. Hard hat use is mandatory during all drilling and test pit (excavation) activities.

9) All individuals who work in the field must wear a minimum of coveralls and a dust filtering respirator to protect the site workers from asbestos exposure at all times

when work is in progress.

10) All individuals who work in the field must wear safety shoes (steel-toed boots) at all times when work is in progress.

11) No employee may enter a confined space or trench greater than four feet deep without a Confined Space work permit. Permits must be in writing and may be issued only by the Health and Safety Director or Director's designee(s). Confined spaces include tanks, pits, manholes, catch basins, piping tunnels, and deep holes. Confined space can be devoid of oxygen and entry without proper precaution can result in death. Entering deep trenches which are not properly shored or supported can result in serious injury or death due to collapse of trench walls. Work permits issued for confined space and trench entry shall contain pre-entry test methods and inspection criteria, as well as safe work practices, during the entry.

12) Always use pedestrian walkways when available. Watch out for moving vehicles. Pedestrians have the right-of-way, but not the right to tempt accidents.

Individuals moving heavy equipment shall be given the right-of-way and adequate clearance to insure personnel safety in the event of possible mishap.

13) Only trained and authorized employees shall be permitted to operate any power vehicle. Passengers may not ride on vehicles unless proper seating is provided.

14) Only qualified employees are permitted to repair, enter or operate electrical equipment of any kind.

15) Safeguards must be in place before starting equipment. Never remove a guard except for necessary repairs.

16) No employee is permitted to operate any piece of machinery or equipment unless authorized by the supervisor of the department.

17) Use tools and equipment properly and only for the job they were made to perform. Never use broken or dangerously worn tools or equipment.

18) Before using ladders or scaffolding, make sure they are in safe condition and firmly in place. Ladders must be equipped with safety shoes and must be of nonconductive construction. Both hands should be free to go up and down. Use of buckets, pouches, rope, etc. is required for moving materials to the work location on the ladder or scaffold.

19) All employees are required to observe regulations pertaining to smoking.

20) Welding and burning must be done with proper supervision and fire precautions. No welding or burning may be performed without a written Hot Work permit for areas restricting these activities as designated by the Site Supervisor.

SAFETY POLICY

RT considers its employees and contractors and subcontractors to be its most important asset. The safety of every employee is responsibility of all supervisors, a responsibility for which they are directly accountable.

RT has an obligation to provide safe working conditions, to implement safe work practices, and to prepare employees to work safely.

It is the responsibility of every employee, contractor and subcontractor to follow safe practices, including the use of protective equipment as designated. Adherence to established safe work practices is a condition of employment, and unsafe conduct is cause for discipline.

RT believes that maximum productivity should never be at the expense of personal safety, but instead should result from safe performance.

All employees regardless of level have the responsibility to be aware of health and safety hazards. In the event of a situation where personal injury or death may result, work should safely cease and the Site Supervisor immediately notified.

1.3 EXCAVATED SOILS MANAGEMENT

This HASP assumes that soil from soil borings will be placed back into soil borings onsite upon completion of each soil boring activity. Groundwater is anticipated to be discovered during RI activities; however, is not planned to be managed during the RI field activities.

1.4 Site Control Program

Odor & Gas Control

No odor or gas controls are anticipated to be required; however, if odor or gas is discovered, the RI area should be evacuated and the Health and Safety Director or Director's designee(s) should be immediately notified.

Rodent, Insect, Fire, Dust and Litter Controls

Rodent, insect, fire, dust and litter are not anticipated to be of issue during the RI activities. If warranted, rodent, insect, fire, dust and litter controls may be considered based on field observations of the soil material.

2.0 POTENTIAL HAZARDS

A. Chemical Hazards:

The site is designed by EPA and DEP as an in-active asbestos disposal site. RT has prepared on behalf of the developer the proper notifications to EPA and DEP prior to implementation of the RI investigation field activities (45 day notice). In that notice, we have documented the historic information developed for the site related to the asbestos containing soil in the 0 to 2' below ground surface (bgs), the 2' to 10' bgs and >10' bgs. Additionally, magnesia materials may be encountered in site soils related to historic operations at the site prior to asbestos operations.

B. Physical Hazards:

The excavation activities pose a physical hazard, and also a slip, trip and fall hazard.

The use of excavating equipment poses a physical hazard to workers in the work area. The limited visibility of the equipment operator should be taken into account by all workers near the work area.

Potential noise hazards exist in the work area due to the use of heavy equipment during excavation and drilling work.

3. Biological Hazards:

At the time of the preparation of the Health and Safety Plan, no biological hazards had/have been identified. If biological hazards are identified prior or during the excavation activities, the hazard must be identified in this Health and Safety Plan and each employee working under this Health and Safety Plan must be informed of the hazard.

3.0 HAZARD ANALYSIS

1. Chemical Hazards – Asbestos containing soils; magnesia containing soils

    1. Routes of Exposure

        Ingestion - from smoking, eating or drinking without washing
        Inhalation - if high airborne levels (dust) are generated

    2. Hazard Elimination

        Personnel Protection Equipment will be primary protection. Workers shall be prepared to begin work with Level C protection including:

        Hard hats
        Long sleeves
        Coveralls (disposable tyvek suites)
        Gloves (disposable)
        Steel tipped safety shoes
        Dust filtering respirator

2. Physical Hazards - Slip, Trip and Fall

    1. Routes of Exposure

        Slip, trip and fall due to the excavation and drilling work and the topography of the Site. Miscellaneous debris and construction equipment may be present around work areas and cause and/or add to any slip, trip and fall hazards.

    2. Hazard Elimination

        All personnel involved with excavation and/or drilling work shall wear steel tipped safety shoes with sufficient treads and hard hats.

        All personnel must use caution around any excavation perimeters during

working hours.

Workers shall also be aware of heavy equipment used in the drilling activities.

3. Physical Hazard - Weather Conditions

1. Routes of Exposure

Working in weather conditions for extended periods

2. Hazard Elimination

All personnel will dress appropriately for work in various weather conditions.

All personnel to be aware of indications of weather hazards (i.e. a sunburn or frostbite)

4.0 LEVEL OF PROTECTION

1. Soil Investigation

Hard hats
Long sleeves
Coveralls (disposable tyvek suites)
Gloves (disposable)
Steel tipped safety shoes
Dust filtering respirator

5.0 MONITORING EQUIPMENT

1. Air Sampling

A Gillian BDX-II abatement air sampler pump will be utilized to collect asbestos air samples. Air samples will be collected at 3 liter per minute (lpm) during the duration

of the drilling each shift. TEM cassette media will be utilized to collect the air samples to submit to an approved laboratory via NIOSH method 7402.

6.0 EMERGENCY CONTACTS

1. Emergency Information:

Dial 911 to report all emergencies

LOCAL HOSPITAL NAME AND ADDRESS:

North Penn Hospital
1 North Street
Ambler, PA 19002
215-361-4659

See driving directions provided as **Attachment A**

NEAREST TELEPHONE: Cellular phones are available.

2. Key Contacts:

Refer to the Key Contacts listed in **Attachment B**.

ATTACHMENT A

HOSPITAL MAP

mapquest

Trip to:

1 North St
Ambler, PA 19002-4625
0.96 miles / 3 minutes

Notes

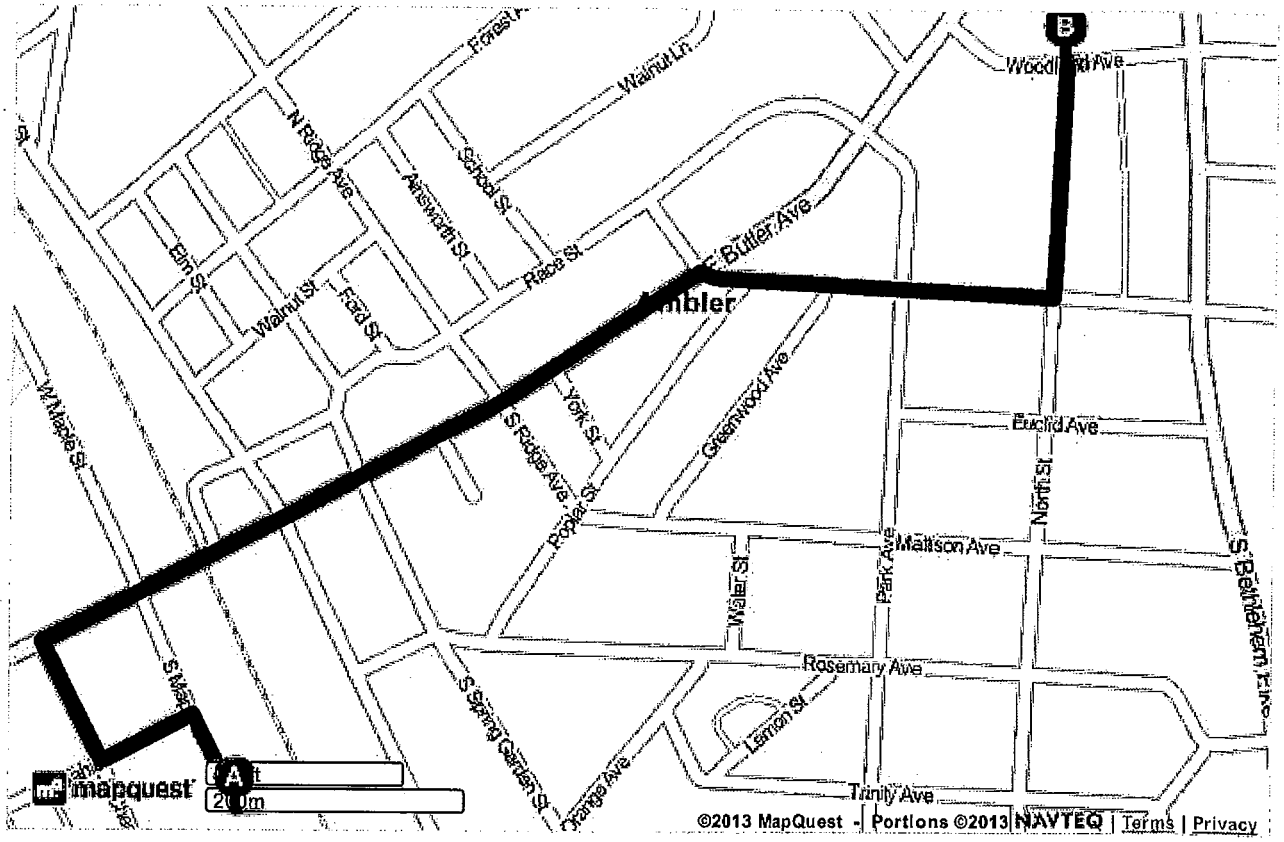
North Penn Hospital
1 North St
Ambler, PA 19002
(215) 361-4659

298 S Maple St, Ambler, PA 1900240.151371,-75.224335
(Address is approximate)

●	1. Start out going **northwest** on **S Maple St** toward **Wissahickon Ave.** Map	**0.06 Mi**
↰	2. Take the 1st **left** onto **Wissahickon Ave.** Map	**0.06 Mi**
↱	3. Take the 1st **right** onto **S Chestnut St.** Map	**0.07 Mi**
↱	4. Turn **right** onto **W Butler Ave.** Map	**0.4 Mi**
↗	5. Turn **slight right** onto **Lindenwold Ave.** Map	**0.2 Mi**
↰	6. Take the 2nd **left** onto **North St.** Map	**0.1 Mi**
■	7. **1 NORTH ST** is on the **right.** Map	

1 North St, Ambler, PA 19002-4625

Total Travel Estimate: **0.96 miles - about 3 minutes**



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ATTACHMENT B

KEY CONTACTS

KEY CONTACT LIST

SITE NAME: BAST PROPERTY

Onsite Emergency Contact

Mr. Tony Alessandrini	(484) 680-1389

Alternate Emergency Contact

Mr. Walter Hungarter	(610) 952-8824
Mr. Glenn Graham	(610) 316-6025

Emergency Response

Fire / Ambulance / Police:..... **911**

Hospital

North Penn Hospital.....215-361-4659

TABLE 1

ACKNOWLEDGMENT OF HEALTH
AND
SAFETY PLAN REVIEW

THIS IS TO CONFIRM THAT I HAVE READ AND UNDERSTAND:

Health and Safety Plan for:
Bast Property
Maple Ave
Ambler, PA 19002
February, 2013

DATE _____
TIME _____
Print Name _____
SIGNATURE _____
EMPLOYER _____