BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

September 9, 2013

Mr. Anthony Lopes
NYS Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203

Re: Pre-IRM Test Pitting and Soil Sampling
295 Maryland Street - Buffalo, NY Site

Dear Anthony:

Benchmark Environmental Engineering & Science, PLLC (Benchmark) has prepared this sampling and analysis plan for the above referenced Site to better define the quantities of soil/fill that need to be excavated and removed from the site as well as disposal options as detailed further below.

BACKGROUND

The Brownfield Cleanup Program (BCP) Site consists of 1.495 acres of contiguous property at 295 Maryland Street and 129 West Avenue. Benchmark prepared an Interim Remedial Measures (IRM) work plan that was accepted by the New York State Department of Environmental Conservation (NYSDEC). The IRM work will be performed for the purpose of expeditiously remediating impacted soil/fill to levels acceptable for redevelopment of the property in an unrestricted or restricted residential use capacity. 295 Maryland, LLC intends to integrate the remedial work with construction of a residential apartment complex comprised of approximately 54 living units in a three-story building.

Soils/fills at the Site typically consist of the following in descending order:

- Topsoil and fill materials (brick, ash, wood, steel, concrete, etc). Typically 0 to 1 foot thick, but ranging to 6 feet thick.
- Concrete slabs from historic structures including possibly basements.
- Native clays and silts reworked with the fill. Typically 0 to 1 foot thick.
- Native clays and silts with occasional layer(s) of sand.

SCOPE OF WORK

Benchmark intends to perform test pitting and soil/fill sampling to:

- Better define the quantities of impacted soils that will need to be sent off-site for disposal at a landfill based on visual observations;
- Assess the chemical quality of soils that reside beneath obviously impacted fill materials. These soils may be acceptable for reuse (subject to NYSDEC approval) on an alternate BCP site that can import soils exceeding the restricted residential criteria but still meeting commercial soil clean-up criteria. This work will also include estimation of the potential quantity of these materials; and
- Assess for the presence of basements at the locations of former dwellings on the site, and if present visually assess the nature of the fill materials used for backfill.

Benchmark will utilize an excavator to dig the test pits. We have identified 23 test pit locations as shown on Figure 1 attached. These locations may be adjusted in the field based upon the findings as the work proceeds. Samples will be collected in accordance to the protocols in the IRM Work Plan. Using our engineering judgment and experience, approximately 10 samples will be selected from the area of reworked soil/fill beneath the obvious fill materials for analyses.

Eight samples will be analyzed by a NYS ASP-CLP certified analytical laboratory for site-related constituents of concern including: PCBs via USEPA Method 8082; polynuclear aromatic hydrocarbons (PAHs); and inorganics listed below.

PAHs (Method 8270)	Inorganic Compounds (Method 6010/7470)
Benzo(a)anthracene	Arsenic
Benzo(a)pyrene	Barium
Benzo(b)fluoranthene	Cadmium
Benzo(k)fluoranthene	Copper
Chrysene	Lead
Dibenz(a,h)anthracene	Mercury
indeno(1,2,3)pyrene	Silver
	Zinc

In order to assess the feasibility of reusing the soil at another BCP site such as Tecumseh Redevelopment Site in Lackawanna, New York, 7 samples will be analyzed for VOCs via Method 8260, 2 samples for SVOCs via Method 8270, 2 samples for herbicides via Method 8151, 2 samples for pesticides via 8081, and 2 samples for TAL Metals via Method 6101/7470.

In addition to the samples, quality control sampling for the reuse samples will include a blind duplicate, a matrix spike and matrix spike duplicate which is required for each test method. Sample results will be validated and a data usability report prepared.

Report

Benchmark will prepare a letter report of our findings and will revise our quantity estimates based on the anticipated destination of soils/fills (e.g., Tecumseh Site, landfill).

Schedule

We intend to commence this work within the next two weeks. The field work will be completed in approximately 1 to 2 days. A report will be prepared and submitted to the Department within two weeks from receipt of the analytical data.

Please contact us if you have any questions or require additional information.

Sincerely,
Benchmark Environmental Engineering & Science, PLLC

Raymond F. Laport, P.E.
Project Manager

cc: Tom Forbes
Anthony LoRusso

File: 0222-013-100

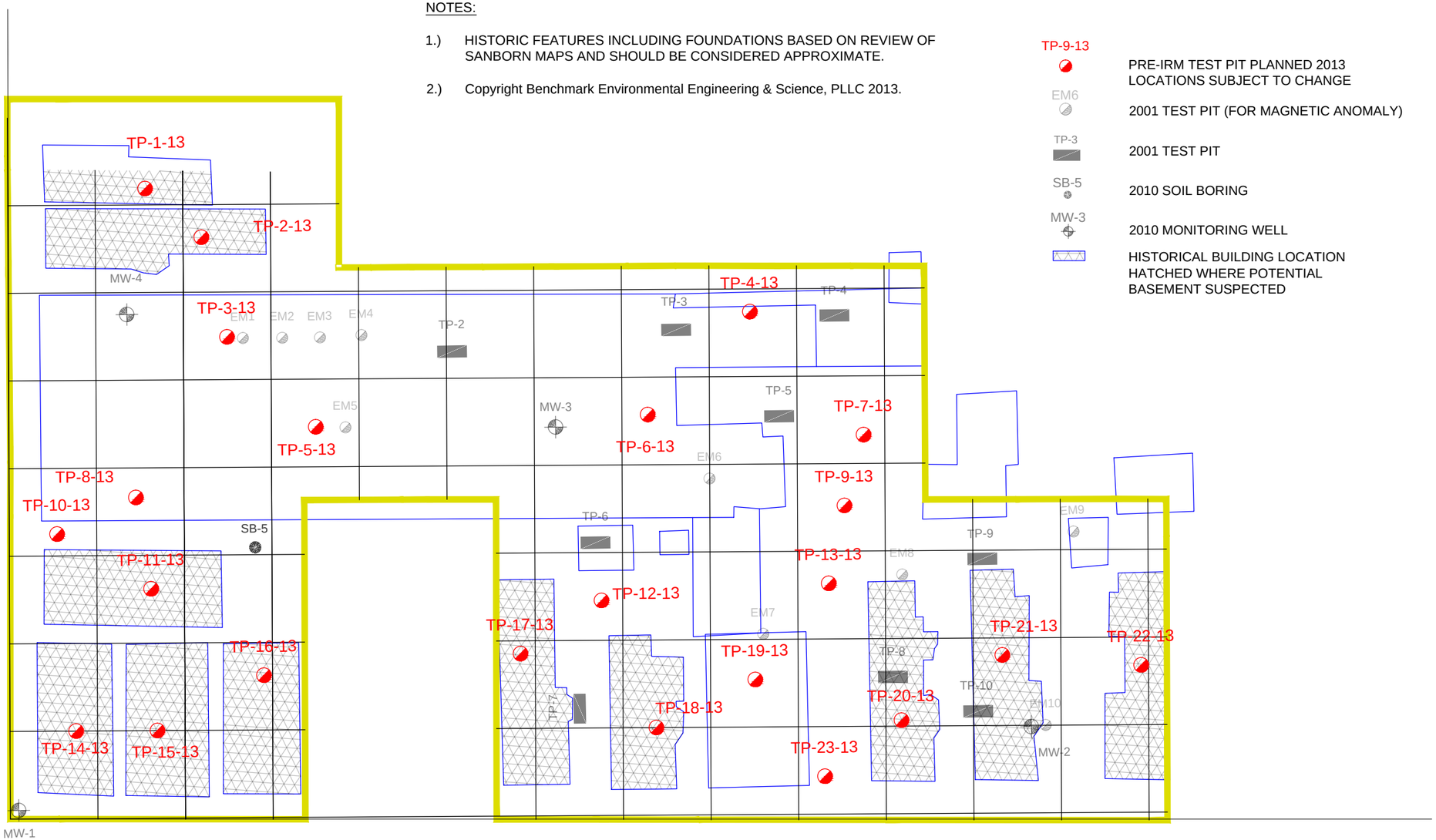
FIGURE

F:\CAD\Benchmark\295 Maryland\Pre-IRM Work Plan\Figure 1; Pre-IRM Sample Locations.dwg

NOTES:

1.) HISTORIC FEATURES INCLUDING FOUNDATIONS BASED ON REVIEW OF SANBORN MAPS AND SHOULD BE CONSIDERED APPROXIMATE.

2.)



TP-9-13 — PRE-IRM TEST PIT PLANNED 2013 LOCATIONS SUBJECT TO CHANGE

EM6 — 2001 TEST PIT (FOR MAGNETIC ANOMALY)

TP-3 — 2001 TEST PIT

SB-5 — 2010 SOIL BORING

MW-3 — 2010 MONITORING WELL

HISTORICAL BUILDING LOCATION HATCHED WHERE POTENTIAL BASEMENT SUSPECTED

N

40' 0' 40' 80'

SCALE: 1 INCH = 40 FEET
SCALE IN FEET
(approximate)

DATE: MAY 2013
DRAFTED BY: REL

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SOIL/FILL SAMPLING & TESTING PLAN

PRE-IRM TESTING

295 MARYLAND
BUFFALO, NEW YORK

PREPARED FOR
295 MARYLAND, LLC

FIGURE 1