

Appendix D

Field Sampling Plan

FIELD SAMPLING PLAN

EBENEZER PLAZA 1

NYSDEC BCP Site 2242420

This field sampling plan was prepared by Chazen in conjunction with the REMEDIAL ACTION WORK PLAN for Ebenezer Plaza 1 BCP site. The frequency of environmental media screening and sampling and analysis to be performed in order to complete the remedial action for the Site are discussed below.

WASTE CHARACTERIZATION

A total of five waste characterization samples were collected and submitted for totals and TCLP analysis for TCL-VOC, TCL-SVOC, TAL Metals, PCBs, Pesticides, Herbicides, and Toxicity Characteristics. The results are included in the supplemental Remedial Investigation Report.

WC samples were submitted with full Quality Control Samples for Class B data deliverables, validated by a third party chemist, and Data Usability Summary Reports prepared and submitted to NYSDEC.

Additional profiles will be collected during the implementation phase of the RAWP as needed to satisfy the requirements of the selected off-site disposal facilities.

FIELD SCREENING

Field screening will be performed with a handheld portable X-ray Fluorescent (XRF) meter and a photoionization detector to assess the presence of lead and VOCs in the soils prior to excavation activity and during the removal action to direct the removal of impacted soil hotspots.

The site is divided into 90 grid blocks. Each grid block contains an area of approximately 625 ft² (25 ft by 25 ft). A Grid Layout Map is included as **Figure 2**.

One XRF screen (a total of 90) and a PID headspace sample collected at the center of each grid block. Additional screening within each block will be performed as needed to delineate hotspots if the results of the initial screening exceed the action levels.

One soil sample will be collected and submitted for laboratory analysis for lead only for every ten screening samples. The results will be compared to the XRF screening results and used to adjust the action level for lead “hotspot” removal during the excavation activity.

During the removal action, continuous work zone monitoring with the PID and periodic XRF screening and PID headspace monitoring will be used to direct excavation activities and segregate excavated materials into the identified waste streams. Excavation will continue until all screening sample results are below the action thresholds.

Post-Excavation Soil Sampling

Post excavation soil samples will be collected to confirm that the residual undisturbed soils meet the remedial action goals for the site. As specified in the RAWP.

One post excavation confirmatory sample will be collected from the base of the excavation for each 900 ft² if urban fill remains on-site. The representative post-excavation screening grid and sample points are included in Figure 2.

If warranted and approved by NYSDEC, the frequency of base sampling may be decreased to one sample per 2,500 square feet of excavation in areas where all urban fill has been removed and no hot spots were identified and removed.

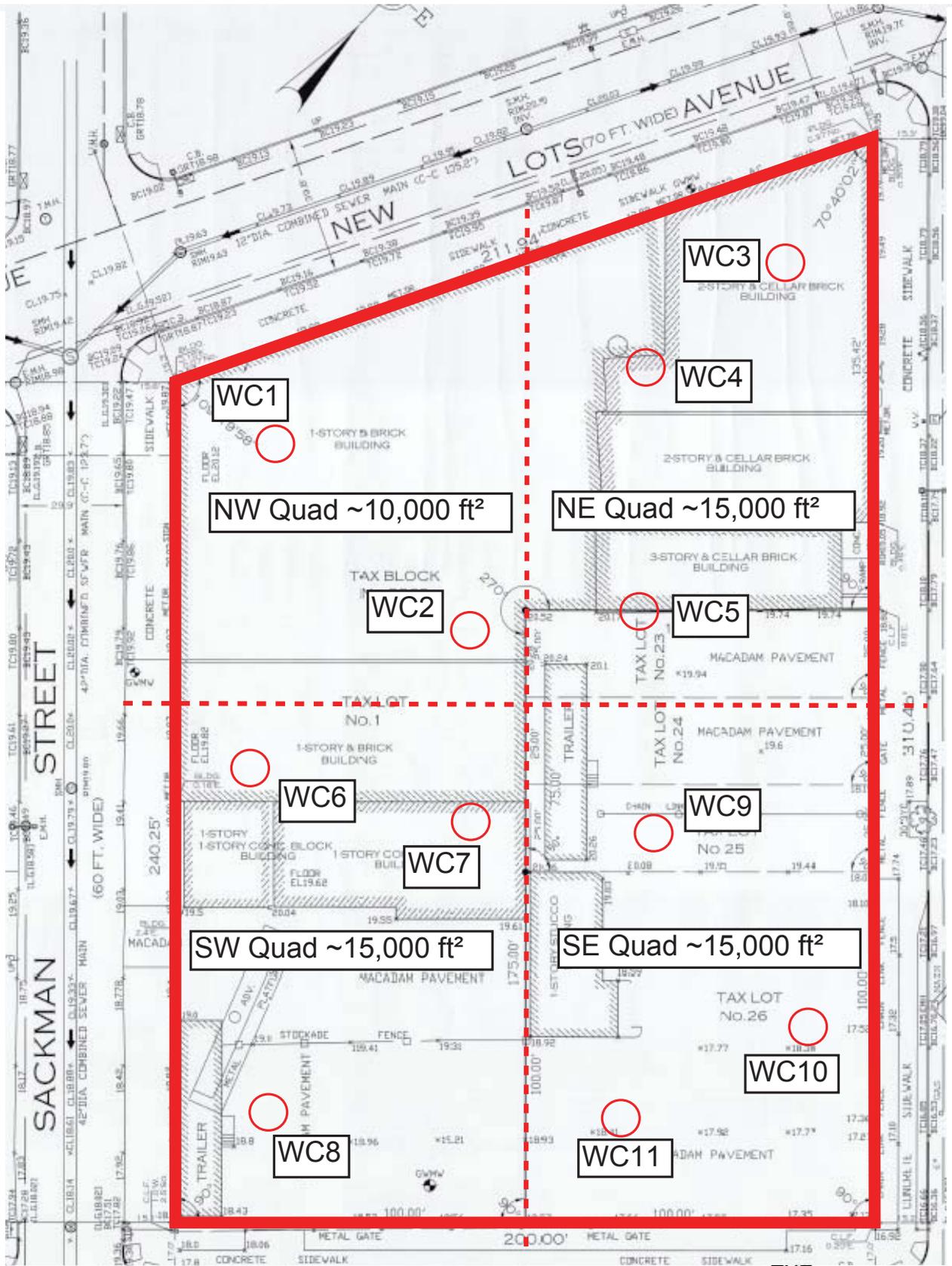
Sidewall samples may also be collected for excavations advanced more than two feet below grade to chase “hotspots” and confirm that the lateral extent of impacts have been removed. Excavation sidewall samples will be collected for each 30 linear feet of excavation along the exterior perimeter of the site to document site boundary conditions if possible. Sheet piling may be needed to shore the perimeter effectively preventing sidewall sampling in some locations. Additional side wall samples will be collected from unshored deeper excavations advanced to remove hotspots.

All post excavation samples will be collected following the same procedures used for the waste profile samples.

Post-excavation samples will be analyzed for VOCs by 8260C, SVOCs by 8270D, and Priority Pollutant metals by 6010C. Post excavation samples will be collected and submitted for Class B deliverables and validated by a third party chemist.

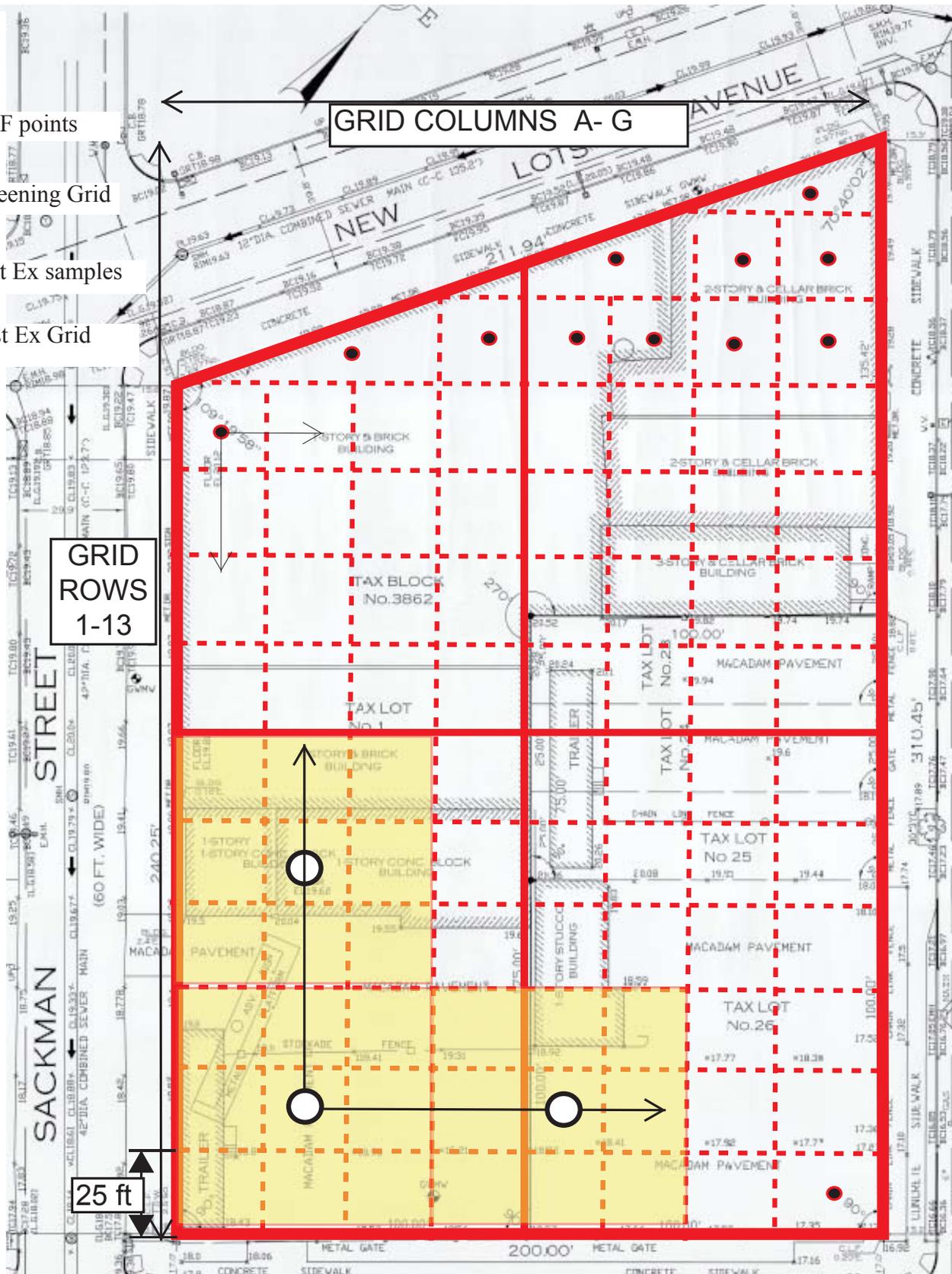
Other Sampling

Additional samples (interim sampling, extend depth base samples, sidewall, etc) may be collected and analyzed for targeted suites of parameters based on the potential impacts identified by technical oversight personnel.



Ebenezer Plaza 1
 FSP
 Figure 1
 Waste Characterization Sample Location Map

-  XRF points
-  Screening Grid
-  Post Ex samples
-  Post Ex Grid

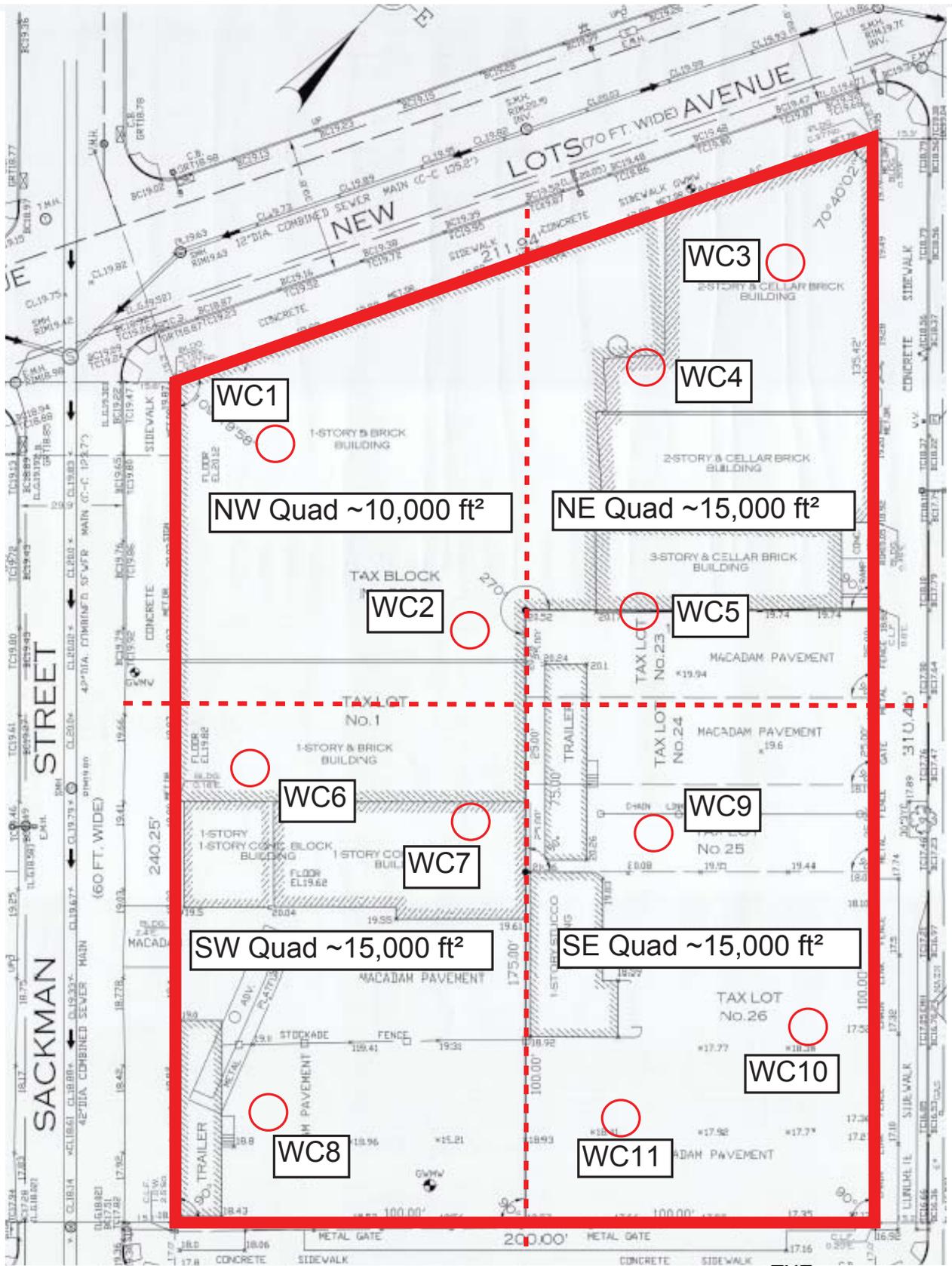


Ebenezer Plaza 1
 FSP
 Figure 2
 Screening and Sampling Grid

-  XRF points
-  Screening Grid
-  Post Ex samples
-  Post Ex Grid



Ebenezer Plaza 1
FSP
Figure 2
Screening and Sampling Grid



Ebenezer Plaza 1
 FSP
 Figure 1
 Waste Characterization Sample Location Map