

**Pre-Design Investigation Report
Phase 1 Properties
Former Geneva Foundry Site
Operable Unit 3
Geneva, New York
Volume 1**

Site Number C835027A

September 2018

Prepared for:

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List of Abbreviations and Acronyms

DER	Division of Environmental Remediation
DUSR	Data Usability Summary Report
E & E	Ecology and Environment Engineering and Geology, P.C.
EEPC	Ecology and Environment Engineering, P.C.
EPA	(United States) Environmental Protection Agency
IDW	investigation-derived waste
LaBella	LaBella Associates, LLC
mg/kg	milligrams per kilogram
MS/MSD	matrix spike/matrix spike duplicate
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OU	operable unit
PDI	pre-design investigation
PDS	post-digestion spike
QA	quality assurance
QC	quality control
QAPP	Quality Assurance Project Plan
RPD	relative percent difference
SOP	standard operating procedure
TestAmerica	TestAmerica Laboratories

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Introduction

Pursuant to Work Assignment Number D007617-43, Ecology and Environment Engineering and Geology, P.C. (E & E) prepared this pre-design investigation (PDI) report for work performed at the residential property parcels within the Phase 1 properties in Geneva, New York. These properties are associated with the former Geneva Foundry Site (Site Number C835027A). The Geneva Foundry, which burned coal and coke to melt iron for the casting of iron products for over a century, is located in the city of Geneva, Ontario County, New York (see Figure 1-1). This report was prepared on behalf of the New York State Department of Environmental Conservation (NYSDEC), Division of Environmental Remediation (DER).

The primary objective of this report is to assess the extent of arsenic and lead in surface and subsurface soils in order to determine excavation areas and depths required for remediation of each property parcel within the investigation area (Phase 1 properties; see Figure 1-1). The property parcels included in this report were selected for investigation and remediation by the DER and the New York State Department of Health (NYSDOH) and are part of Operable Unit (OU) 3 of the Geneva Foundry site. Past operations at the Geneva Foundry resulted in arsenic and lead contamination of soils within OU-3. The Record of Decision for OU-1, -2, and -3, issued in January 2017, requires the remediation of off-site residential and commercial properties contaminated by air deposition (NYSDEC 2017). A description of historical analytical results for properties included in this report are included in the Former Geneva Foundry Offsite RI report (NYSDEC 2015).

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Investigation Summary

The PDI for Phase 1 consisted of investigating the level and extent of arsenic and lead contamination in surficial soils. Activities included boundary, base map, and topographic surveys of individual property parcels; installation of 307 soil borings across 30 parcels; collection of surface and subsurface soil samples from the borings; and laboratory analysis of soil samples.

The initial PDI sampling event was conducted from April 3 to May 11, 2017. After the initial sampling, preliminary excavation limits were drafted and data gaps were identified. Supplemental sampling events occurred in June and December 2017 in order to fill in these data gaps and refine the design excavation limits. The remedial designs for properties that were sampled in 2017 were prepared under five phases (phases 1A, 1B, 1C, 1D, and 1E) spanning the 2017 and 2018 construction seasons.

A summary of the field procedures and modifications to the planned field investigation is provided in the following subsections. Sample locations are shown on individual parcel figures in Appendix A.

2.1 Pre-Field Investigation Activities

In order to notify local residents of the investigation, NYSDEC mailed a public factsheet to residents within OU-3 in March 2017. Also in March 2017, a letter describing the purpose of sampling and an access agreement were mailed to the owners of properties within Phase 1. During the months of April, May, and June 2017, NYSDEC, NYSDOH, and E & E personnel met with the Phase 1 property owners to discuss the sampling activities and obtain access to the parcels.

Prior to initiating on-site activities, E & E contacted each property owner with a written agreement for sampling activities by phone and/or email to inform them of the proposed sampling date, discuss any property access restrictions (such as opening gates when dogs are present), and determine whether any private utilities were present on their property. In the case of tenants, E & E obtained tenant contact information from the property owner before contacting the tenant. E & E's drilling subcontractor also contacted Dig Safely New York to request mark-outs of underground utilities prior to beginning intrusive activities.

Proposed sampling locations were initially determined by employing a statistical approach based on a random rectangular grid with a 95% confidence level that all

contaminated areas of more than 900 square feet would be detected. The size of the grid meets the requirements of NYSDEC's DER-10 Guidance, Section 5.4(b), which calls for post-excavation confirmation sampling on a grid no larger than 900 square feet (NYSDEC 2010). Initially sampling locations were selected at random. These random locations were manually moved on individual properties based on the presence of historical sampling locations, structures, or surface obstructions. E & E personnel marked the proposed sampling locations in the field with paint or flags, and made some additional adjustments based on actual conditions encountered on the property, including utility locations that were identified by the Dig Safely New York mark-out. The sample locations were surveyed by a licensed land surveyor, Popli Design Group of Penfield, New York.

For the supplemental sampling events, proposed sampling locations were determined based on data gaps observed following the initial investigation. These gaps were typical of areas between two different design excavation depths in order to determine the extent of excavation, and at locations near specific property features (i.e., trees, driveways, porches/decks) where a determination on removal or preservation of a property feature was needed.

2.2 Direct-Push Soil Borings

A total of 307 soil borings were installed on 30 property parcels during the PDI. During some of the supplemental sampling events, previous soil boring locations were revisited and deeper samples were collected where the vertical extent of contamination had not been previously determined. The boring locations are shown on the property figures in Appendix A.

Soil borings were labeled with the abbreviated address of the property sampled (e.g., 42JAC) as well as the sample location on property (e.g., -01, -02). Soil borings advanced on properties with no address were labeled with a three-digit identifier, followed by the street name (e.g., 999STA).

Following completion of soil sampling, the direct-push borings in grass areas were backfilled with bentonite chips and at least 3 inches of topsoil, while borings in asphalt were backfilled with bentonite chips and sealed at the top with 3 inches of cold patch.

During the sampling events, the majority of the soil boring locations were sampled to a depth of 4 feet below grade and up to four soil samples were collected from each boring from the following depth intervals: 0 to 6 inches, 6 to 12 inches, 12 to 18 inches, and 18 to 24 inches. Soil below 24 inches (potential intervals include 24 to 30 inches, 30 to 36 inches, 36 to 42 inches, and 42 to 48 inches) was archived within the sampling tube, capped at both ends and stored in cardboard boxes on-site until needed for further sampling or discarded after determining additional samples were not required for a given borehole.

For Phase 1 PDI sampling, soil borings were installed by LaBella Associates, LLC (LaBella) of Rochester, New York, using a Geoprobe Model 5400 direct-

2 Investigation Summary

push machine attached to a skid-steer and 2½-inch-diameter Macro-Core® probing rods with 1½-inch-diameter, dedicated sleeves. For areas that were inaccessible by the skid-steer-mounted Geoprobe, the borings were installed with a hand-driven 1½-inch-diameter Macro-Core with dedicated sleeves or with a hand auger.

For soil borings installed using dedicated Macro-Core sleeves, the only portion of the direct-push tooling that came into contact with the soil samples besides the sleeves was the cutting shoe of the Macro-Core casing. The shoe and the casing itself were decontaminated before each use. When used, hand augers were also decontaminated before each use. All equipment, including stainless-steel bowls and spoons used for mixing soil samples was decontaminated by scrubbing with a laboratory-grade detergent (e.g., Alconox) solution, rinsing the equipment with potable water, rinsing with 10% nitric acid solution, and, finally, rinsing with de-ionized water.

Soils encountered during soil boring installation were generally comprised of top-soil with organics and underlain by sub-soils that mostly consisted of brown to reddish brown silt with varying proportions of sand, clay, gravel, and wood. Suspected or possible fill material, indicated by the presence of black angular material, white and grey ash, and coal fragments, was observed at many locations between the topsoil and silt sub-soil. Soil boring logs are provided in Appendix B.

Soil samples were collected from the sampling device using decontaminated stainless-steel spoons. The soil from specific depth intervals was placed in a disposable paper bowl and mixed with the spoon prior to transfer to the laboratory container.

All sample analyses were conducted by a NYSDEC-contracted laboratory, TestAmerica Laboratories, of Amherst, New York (TestAmerica), and analyzed for total arsenic and lead at either their Amherst, New York, St. Louis, Missouri, or Burlington, Vermont, laboratories.

Based on review of the initial sample results, NYSDEC, NYSDOH, and E & E determined that deeper intervals were needed for selected borings, which were tested for total arsenic and/or lead analysis. This process continued until the total arsenic or lead concentrations detected in the sample intervals was less than the soil cleanup objective of 16 milligrams per kilogram (mg/kg) for arsenic and 400 mg/kg for lead.

2.3 Investigation-Derived Waste Management

The following types of investigation-derived waste (IDW) were generated during this investigation: unused soil from macro-cores; macro-core plastic sleeves; de-contamination water; and spent personal protective equipment, primarily gloves. Excess soil cuttings generated during soil boring installation were containerized in four 32-gallon plastic garbage cans and stored at the site staging area pending analysis and disposal. Decontamination water was also stored on-site in four 32-

gallon plastic garbage cans. All IDW will be disposed of by NYSDEC's remediation contractor, LaBella, during construction activities. Other non-hazardous solid wastes were bagged and disposed of off-site as non-regulated solid waste.

2.4 Sample Handling and Analysis

Soil samples were collected in containers provided by TestAmerica. All samples were labeled with unique location codes and sample codes and stored on ice pending pick up from the laboratory.

Soil sample analyses were performed by TestAmerica. All samples were tested for total arsenic and lead using United States Environmental Protection Agency (EPA) SW-846 Method 6010C (inductively coupled plasma). Reports were consistent with NYSDEC Analytical Services Protocol Category B deliverable requirements, and data were provided in NYSDEC EQuIS electronic data deliverables for review by E & E. Laboratory reports are provided in Appendix C.

2.5 Quality Assurance/Quality Control

Quality assurance/quality control (QA/QC) samples, including field duplicates, rinsate blanks, and matrix spike/matrix spike duplicate (MS/MSD) sample sets were collected in accordance with the specifications of E & E's Master Quality Assurance Project Plan (QAPP) for NYSDEC projects (Ecology and Environment Engineering, P.C. [E & E] 2011). For the initial phase of soil sample analysis, field duplicates and MS/MSD samples were collected at the rate of one per 20 field samples. Due to the small sample size required for testing, only one extra container was submitted to provide additional volume for MS/MSD analyses. The laboratory was also typically able to perform these QC analyses from the original sample jar, if enough volume was available, which allowed the selection of additional QC samples as archive samples to be tested. Rinsate blanks were collected at a rate of one per day to test the decontamination procedures used on reusable sampling equipment.

Duplicate samples provide insight into the homogeneity of the sample matrix and establish a degree of confidence in the precision of the field sampling and analytical method. Soil duplicates were collected by homogenizing the sample matrix then filling additional laboratory jars. A review of the duplicate sample results is provided in the data usability summary reports (DUSRs) provided in Appendix C. Where the relative percent difference (RPD) between the original and duplicate sample results exceeded data review guidelines, "J" flags were added to indicate that the results are estimated. Overall, the samples exhibited good precision between duplicate/replicate sample preparations, and there were no significant impacts on data usability associated with the field duplicate/replicate sample results.

In addition to analytical error introduced by machinery and sample handling, error can also occasionally result from analytical process interference by a sample matrix. This can result in the reporting of analytes at concentrations higher or lower than the true concentrations. Laboratory duplicates or MSDs are aliquots of the same sample that are split prior to analysis and are treated exactly the same

throughout the analytical method. The RPDs between the MS and MSD samples or between the normal and the laboratory duplicate indicate the precision of the analytical method. There were several instances where the native concentration in the soil sample was greater than four times the spiking concentration; therefore, the recovery of the spike could not be accurately determined. In instances where the MS or MSD failed recovery criteria, the post-digestion spike (PDS) was found to be acceptable, indicating that matrix interference was present and laboratory precision was not an issue. In these cases, the results in the parent samples were qualified “J” as estimated.

Rinsate blanks were collected daily during the sampling events by pouring laboratory grade metals-free water over decontaminated sample equipment. Rinsate blanks were analyzed for total arsenic and lead; neither compound was detected in any of the blanks.

2.6 Data Review

All laboratory deliverables were reviewed in accordance with the QAPP (EEPC 2011). The data were qualified following general guidelines in the EPA Region 2 standard operating procedure (SOP), Hazardous Waste Support Section, EPA Region 2 standard operating procedure (SOP) HW-2a (EPA 2012). DUSRs were prepared for each phase of sample analysis as specified in Appendix 2B of NYSDEC’s *Technical Guidance for Site Investigation and Remediation* (NYSDEC 2010). The data review included an evaluation of the following:

- Holding times;
- Initial and continuing calibration;
- Reporting limits/dilutions;
- Calibration blanks and method blanks;
- MS/MSD/PDS samples;
- Laboratory control samples;
- Field duplicates; and
- Interference checks.

DUSRs were prepared by E & E’s data validation chemist for all of Phase 1 sampling events (see Appendix C). Any deviations from acceptable QC specifications are discussed in the DUSRs. Qualifiers were added to the data, if appropriate, to indicate potential concerns with data usability and these qualifiers were transferred to the data summary tables presented in Appendix C. There were no significant impacts on data usability.

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Analytical Results

This section presents the analytical results for the soil sampling activities in order to provide an understanding of the extent of soil contamination at the PDI Phase 1 properties.

Arsenic was detected in all samples collected from the Phase 1 residential properties (with the exception of one sample that was diluted and had elevated detection limits). Arsenic was detected in the range of 1 to 119 mg/kg. Lead was also detected in all Phase 1 samples in the range of 6.4 to 38,000 mg/kg. Approximately 25% of the total number of discrete soil samples collected during Phase 1 PDI contained arsenic and/or lead at concentration above the remedial goals of 16 mg/kg for arsenic and 400 mg/kg for lead. As reported in the Record of Decision (NYSDEC 2017), other sources of lead and arsenic that are not site-related (e.g., lead-based paint, coal ash, and other industrial operations) may contribute to off-site lead and arsenic concentrations detected on the Phase 1 properties. Total arsenic and lead concentrations reported in all samples collected during this investigation are provided on the property figures in Appendix A.

Soil samples were also collected at two City-owned properties designated for use as staging areas. One property was on State Street located within OU-3 and the other was on Lehigh Street about a mile from OU-3. The State Street property will be remediated upon the completion of the project. Post-project confirmation samples will be collected at the Lehigh Street property and results will be compared with the pre-construction results to determine if remediation is necessary on this property.

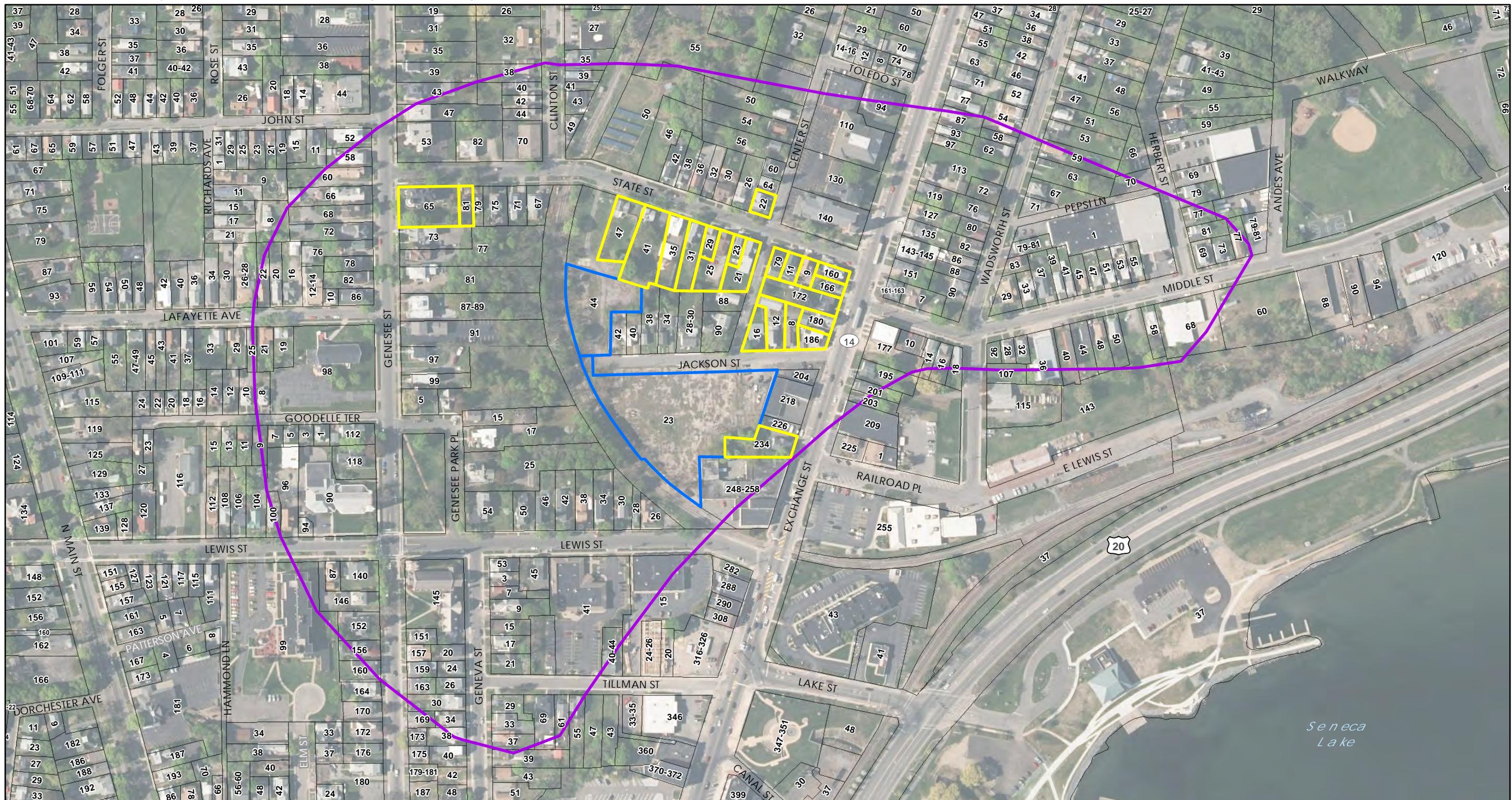
The analytical results, as well as the figures provided in Appendix A, were used to develop the property-specific preliminary remedial excavation plans that were presented to NYSDEC and NYSDOH during development of remedial excavation site plans.

4

References

- Ecology and Environment Engineering, P.C. (EEPC). 2011. *Master Quality Assurance Project Plan (QAPP) for New York State Department of Environmental Conservation Projects*. Prepared for New York State Department of Environmental Conservation, Albany, New York, April 2011.
- New York State Department of Environmental Conservation (NYDEC). 2010. *DER-10, Technical Guidance for Site Investigation and Remediation*, Division of Environmental Remediation, Albany, New York, May 2010.
- _____. 2015. *Former Geneva Foundry, Offsite Surface Soil Sampling – 2015, Environmental Restoration Program, Site #B00019*. Prepared by Division of Remediation, NYSDEC Region 8, Avon, New York, August 2016.
- _____. 2017. *Record of Decision, Former Geneva Foundry Site, Environmental Restoration Project, Operable Units 1, 2 and 3, Geneva (C), Ontario County, Site No. B00019*. Prepared by Division of Environmental Remediation, Albany, New York, January 2017.
- U.S. Environmental Protection Agency (EPA) Region 2. 2012. *Standard Operating Procedure (SOP), Hazardous Waste Support Section, SOP No. HW-2a Revision 15, ICP-AES Data Validation*. New York, New York, December 2012.

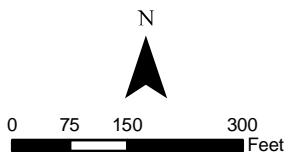
Figure



- Phase 1 Design Parcels
- Former Geneva Foundry Site
- Off-site Air Deposition Remedial Boundary
- Tax Parcels

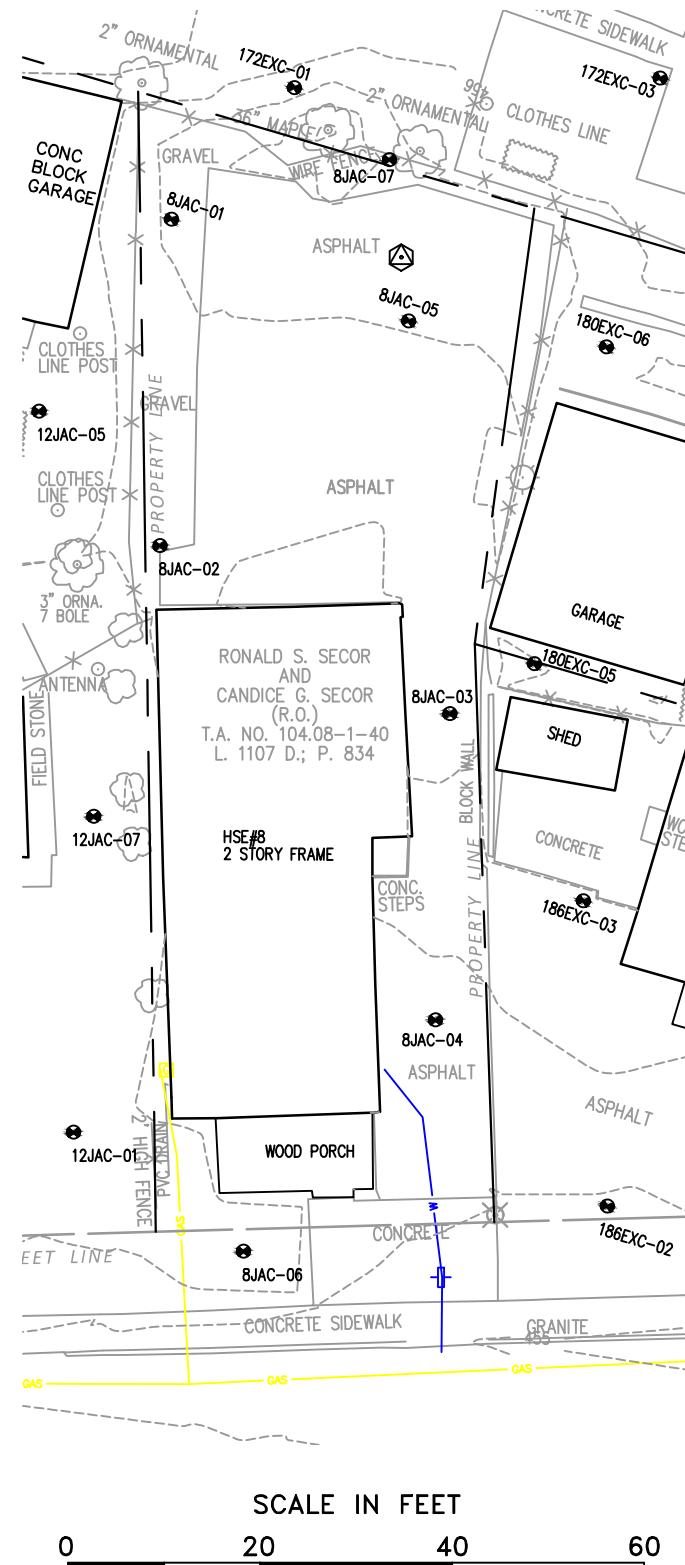
Map Updated: 9/24/2018

Figure 1-1 Phase 1 Design Parcels
Former Geneva Foundry Site Site No. C835027A
Geneva, Ontario County, New York



A

Analytical Results Figures for Phase 1 Properties



LEGEND

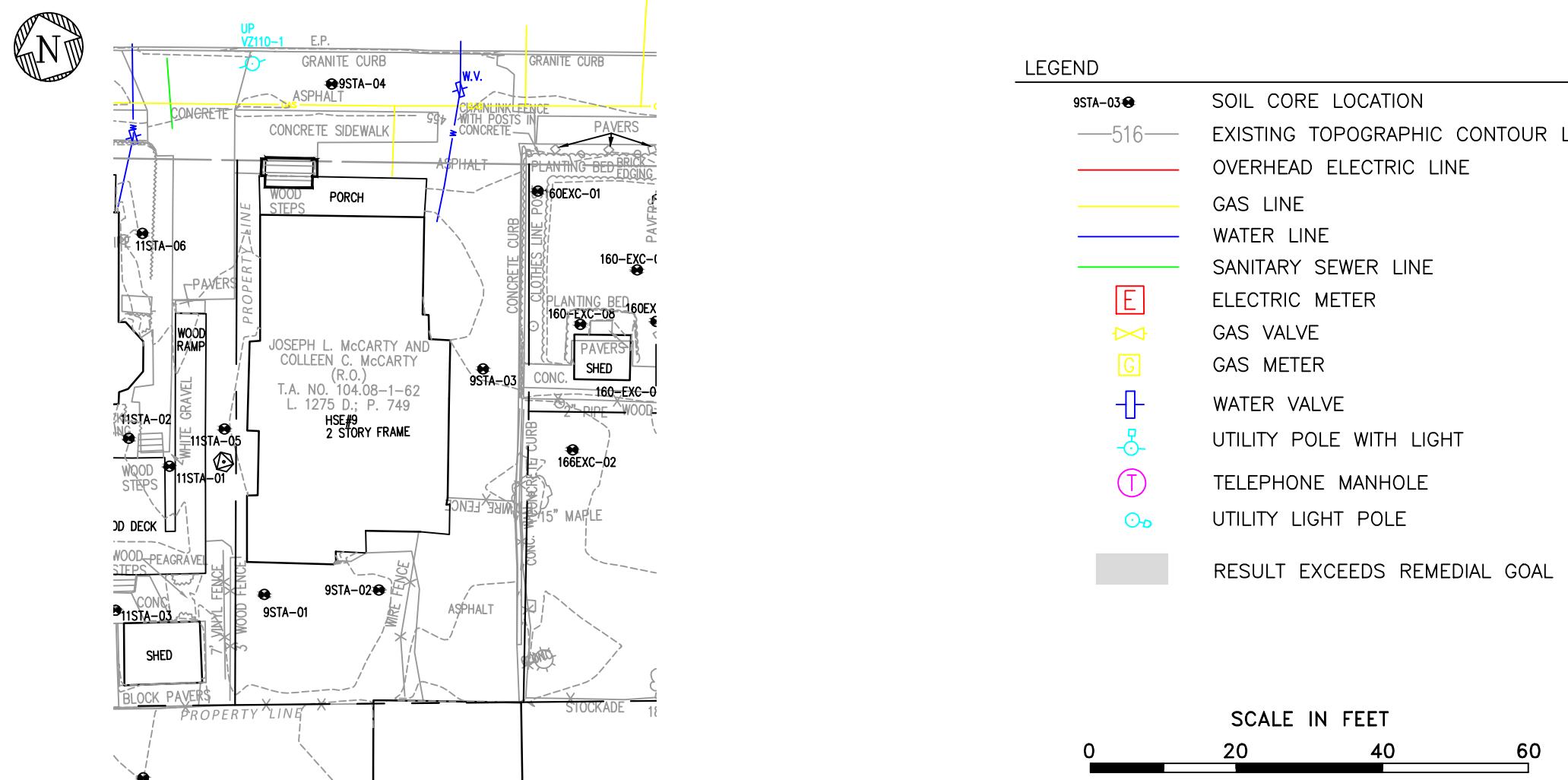
8JAC-02	SOIL CORE LOCATION
— 516 —	EXISTING TOPOGRAPHIC CONTOUR LINE
_____	OVERHEAD ELECTRIC LINE
_____	GAS LINE
_____	WATER LINE
_____	SANITARY SEWER LINE
[E]	ELECTRIC METER
[X]	GAS VALVE
[G]	GAS METER
[W]	WATER VALVE
[P]	UTILITY POLE WITH LIGHT
(T)	TELEPHONE MANHOLE
(L)	UTILITY LIGHT POLE
	RESULT EXCEEDS REMEDIAL GOAL

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
 2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
 3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
 4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTES FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

Analytical Results for 8 Jackson Street

1. LEAD RESULT FOR 8JAC-04 DEPTH 0-6" IS FROM THE FIELD DUPLICATE SAMPLE.



Analytical Results for 9 State Street									
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)							
		9STA-01		9STA-02		9STA-03		9STA-04	
		Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	40.0	543	11.1	276	2.9 J	47.4	N/A	N/A
6	12	25.3	208	24.4	416	7.5	553	13.4	117
12	18	8.5	163 J	11.1	249	6.6	402	4.3	292
18	24	7.7	58.9	5.7 J	178	4.1 J	22.7	3.2	72.1

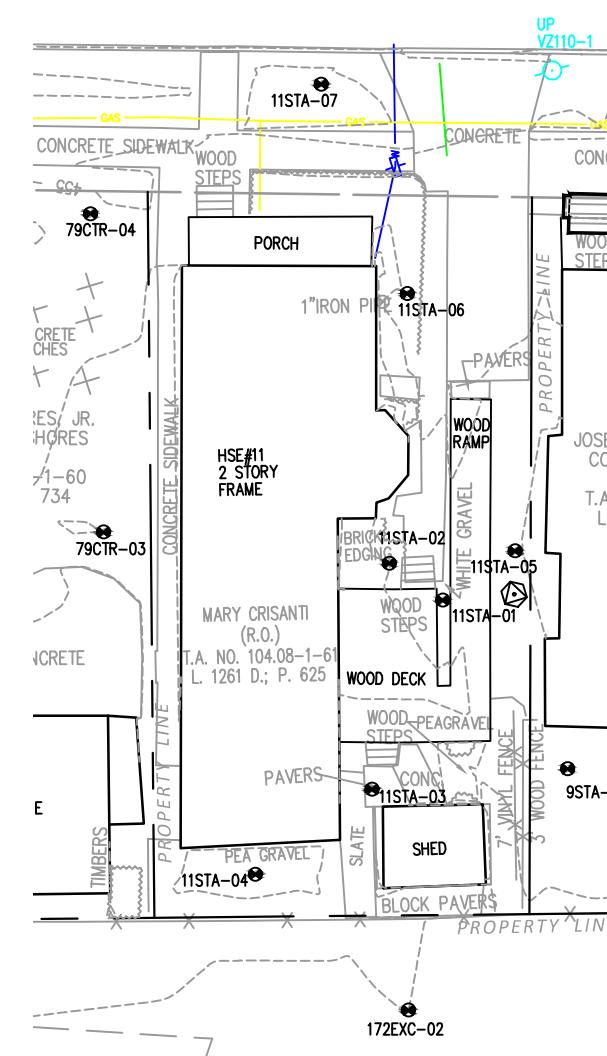
1. N/A = A SAMPLE COULD NOT BE COLLECTED AT THIS LOCATION/DEPTH.
 2. ARSENIC AND LEAD RESULTS FOR 9STA-01 DEPTH 0-6" ARE FROM THE FIELD DUPLICATE SAMPLES.

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
 2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
 3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
 4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTES FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.



STATE



LEGEND

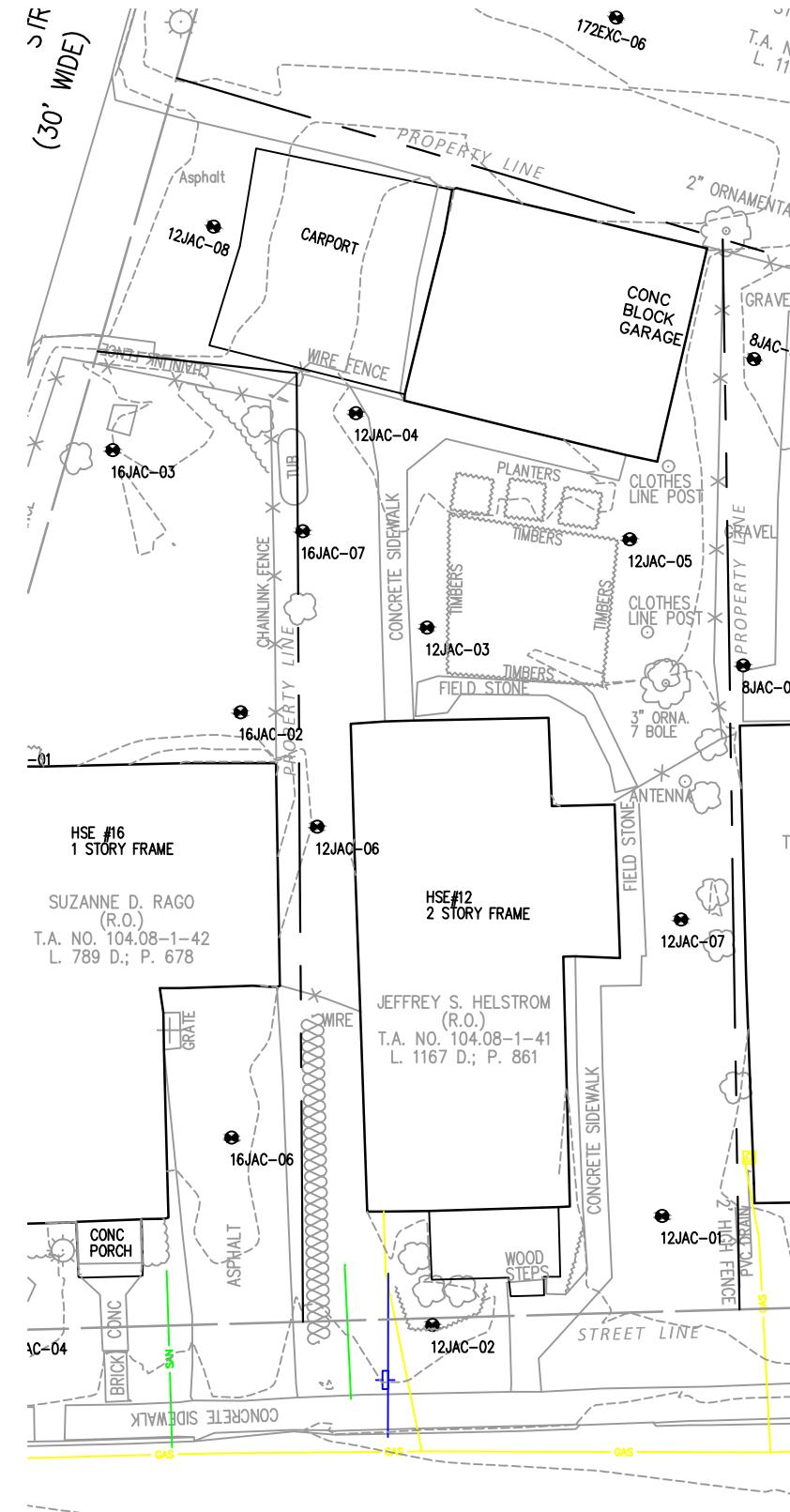
11STA-07●	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
—RED—	OVERHEAD ELECTRIC LINE
—YEL—	GAS LINE
—BLU—	WATER LINE
—GRN—	SANITARY SEWER LINE
[E]	ELECTRIC METER
[X]	GAS VALVE
[G]	GAS METER
[W]	WATER VALVE
[U]	UTILITY POLE WITH LIGHT
[T]	TELEPHONE MANHOLE
[O]	UTILITY LIGHT POLE
[■]	RESULT EXCEEDS REMEDIAL GOAL

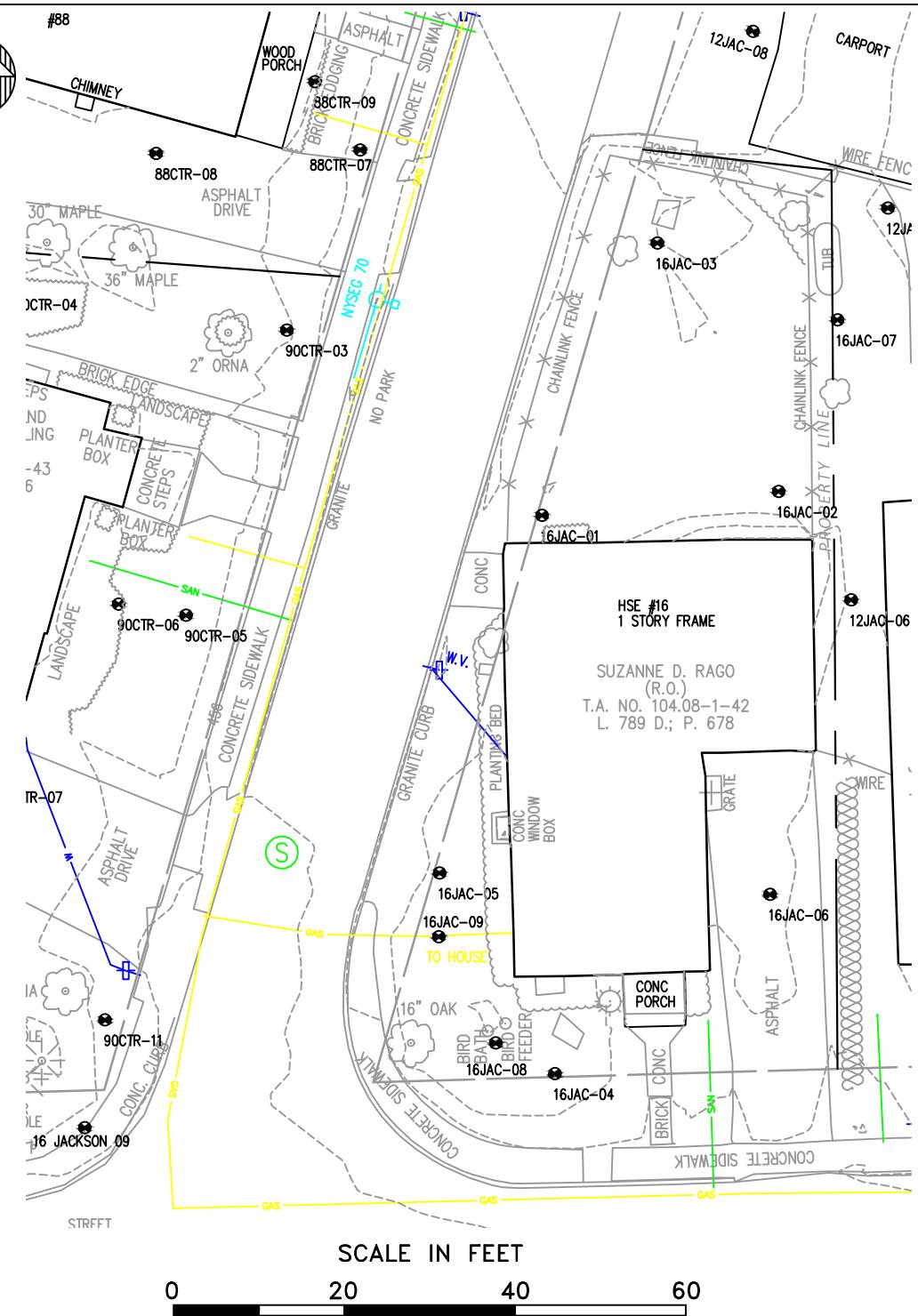
SCALE IN FEET
0 20 40 60

Analytical Results for 11 State Street

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)											
		11STA-01		11STA-02		11STA-03		11STA-04		11STA-05		11STA-06	
		Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	18.7	492	30.8	1190	49.5	854	18.8	762	15.0	537	9.8	288
6	12	12.6	299	15.5	1120	20.2	601	13.0	296	15.4	441	26.0	409 J
12	18	6.1	117	6.3	88.5	7.1 J	89.8	4.0 J	117	7.8	121	9.8	273
18	24	6.2	52.5	5.7	89.7	6.3	37.1	4.8 J	8.9	6.1	160	7.1	186 J
												7.4	72.9

1. Arsenic and lead results for 11STA-03 depth 12–18" are from the field duplicate samples.





A horizontal scale bar consisting of a thin black line with numerical markings at 0, 20, 40, and 60.

LEGEND

16JAC-01	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
_____	OVERHEAD ELECTRIC LINE
_____	GAS LINE
_____	WATER LINE
_____	SANITARY SEWER LINE
E	ELECTRIC METER
ꝝ	GAS VALVE
G	GAS METER
+	WATER VALVE
○	UTILITY POLE WITH LIGHT
T	TELEPHONE MANHOLE
○	UTILITY LIGHT POLE
	RESULT EXCEEDS REMEDIAL GOAL

NOTE

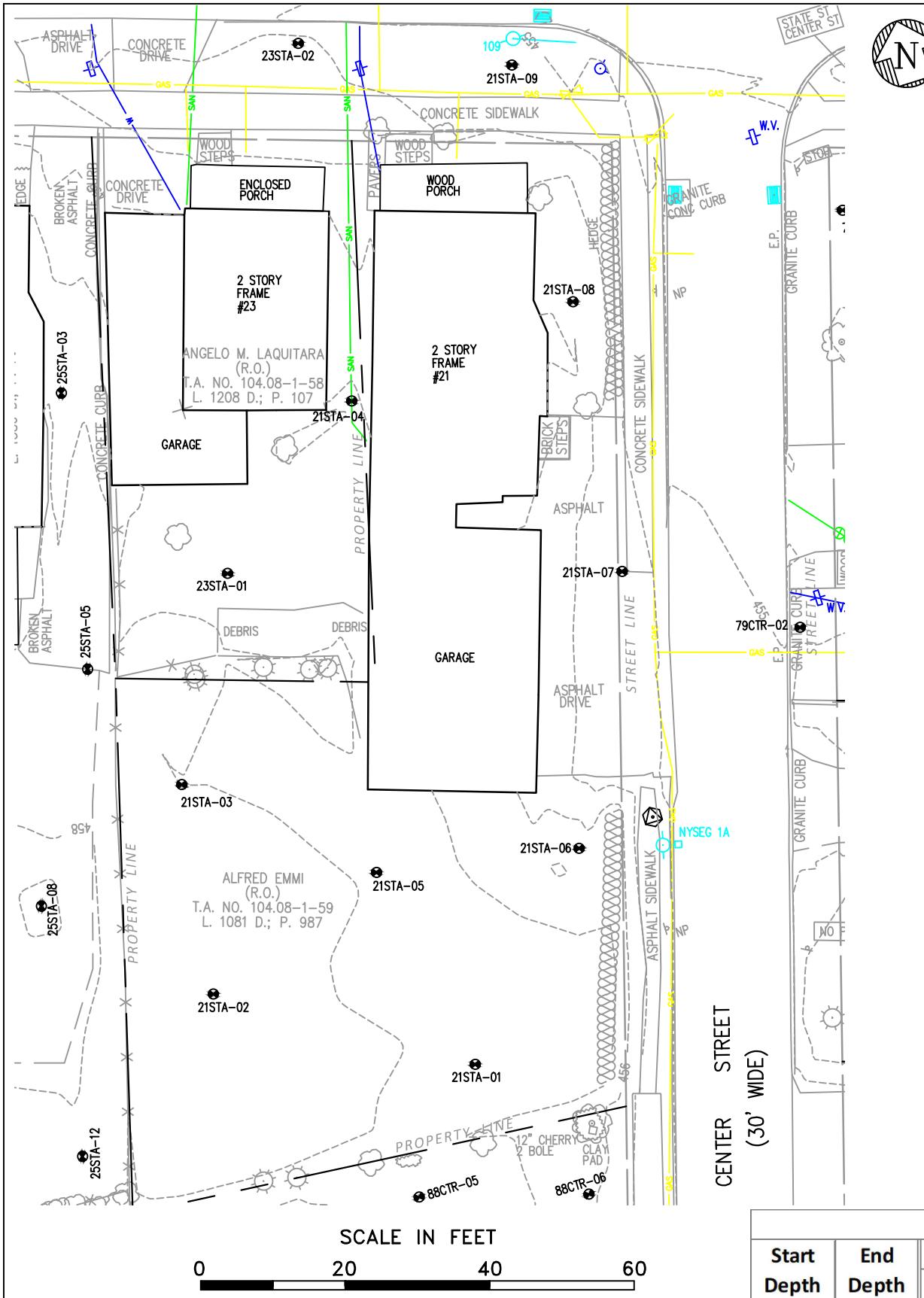
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ANALYTES FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

Analytical Results for 16 Jackson Street

		Analytical Results for 16 Jackson Street																	
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																	
		16JAC-01		16JAC-02		16JAC-03		16JAC-04		16JAC-05		16JAC-06		16JAC-07		16JAC-08		16JAC-09	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead		
0	6	71.4	780	27.1	697	14.8	689	11.0	568	19.8	393	2.4	13.3	15.2	727	25.2	364	15.3	381
6	12	64.8	953	19.2	586	10	270	13.2	3000	18.3	278	3.2	19.7	24.3	673	58.1	519	15.4	306
12	18	14.6	390	7.0	133	6.7	120	4.2	373	3.4	48.3	N/A	N/A	28.9	765	17.0	170	9.8	315
18	24	8.5	250	4.2	31.8	4.7	91.8	4.4	98.3	5.0	14.1	N/A	N/A	18.2	897	N/A	N/A	N/A	N/A
24	30	4.6	23.1											12.9	164				
30	36	4.5	11.7											7.1	74.6				

1. N/A = A SAMPLE COULD NOT BE COLLECTED AT THIS LOCATION/DEPTH
2. LEAD RESULT FOR 16JAC-09 DEPTH 0-6" IS FROM THE FIELD DUPLICATE SAMPLE





LEGEND

21STA-08	SOIL CORE LOCATION
— 516 —	EXISTING TOPOGRAPHIC CONTOUR LINE
— RED —	OVERHEAD ELECTRIC LINE
— YELLOW —	GAS LINE
— BLUE —	WATER LINE
— GREEN —	SANITARY SEWER LINE
E	ELECTRIC METER
G	GAS METER
W.V.	WATER VALVE
UPL	UTILITY POLE WITH LIGHT
T	TELEPHONE MANHOLE
O	UTILITY LIGHT POLE
[Grey Box]	RESULT EXCEEDS REMEDIAL GOAL

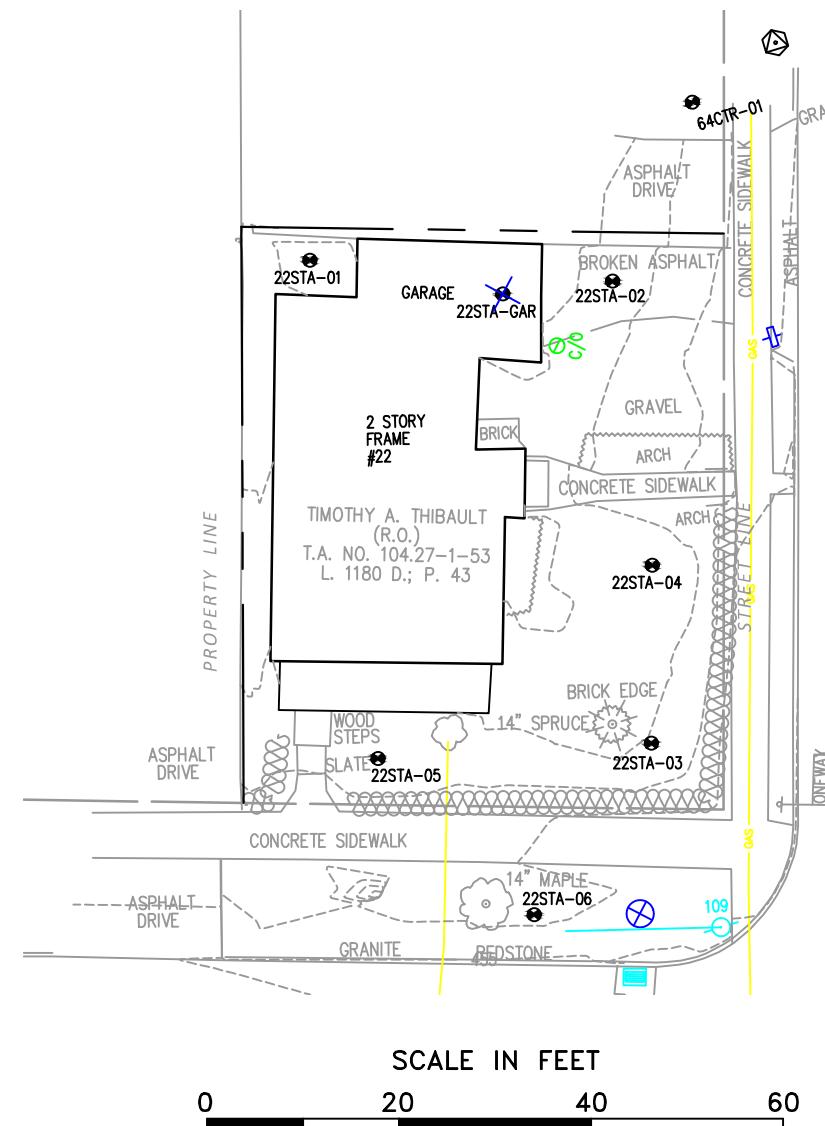
NOTES

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Analytical Results for 21 State Street

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)															
		21STA-01		21STA-02		21STA-03		21STA-04		21STA-05		21STA-06		21STA-07		21STA-08	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	21.4 J	302	14.4	284	14.3	283	27.5	438	16.3	292	16.0	235	3.9	33.6	42.8	502
6	12	20.2	339	14.5	1700	15.3	261	26.9	215	11.8	261	8.6	107	6.5	66.3	17.6	145
12	18	7.4	85.1	9.9	238	16.9	162	13.1	103	7.6	101	4.5	27.6	8.0	167 J	7.7	333
18	24	5.1	15.8	7.1	62.6	7.9	34.4	7.7	38.3	7.2	16.1	4.4	19.7	4.1 J	8.8 J	6.2	18.4

1. ARSENIC AND LEAD RESULTS FOR 21STA-07 DEPTH 12-18" ARE FROM THE FIELD DUPLICATE SAMPLES.



LEGEND

22STA-02	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
—	OVERHEAD ELECTRIC LINE
—	GAS LINE
—	WATER LINE
—	SANITARY SEWER LINE
E	ELECTRIC METER
Y	GAS VALVE
G	GAS METER
W	WATER VALVE
UPL	UTILITY POLE WITH LIGHT
T	TELEPHONE MANHOLE
UL	UTILITY LIGHT POLE
■	RESULT EXCEEDS REMEDIAL GOAL

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C. ANALYTES FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE IN THE SAMPLE.

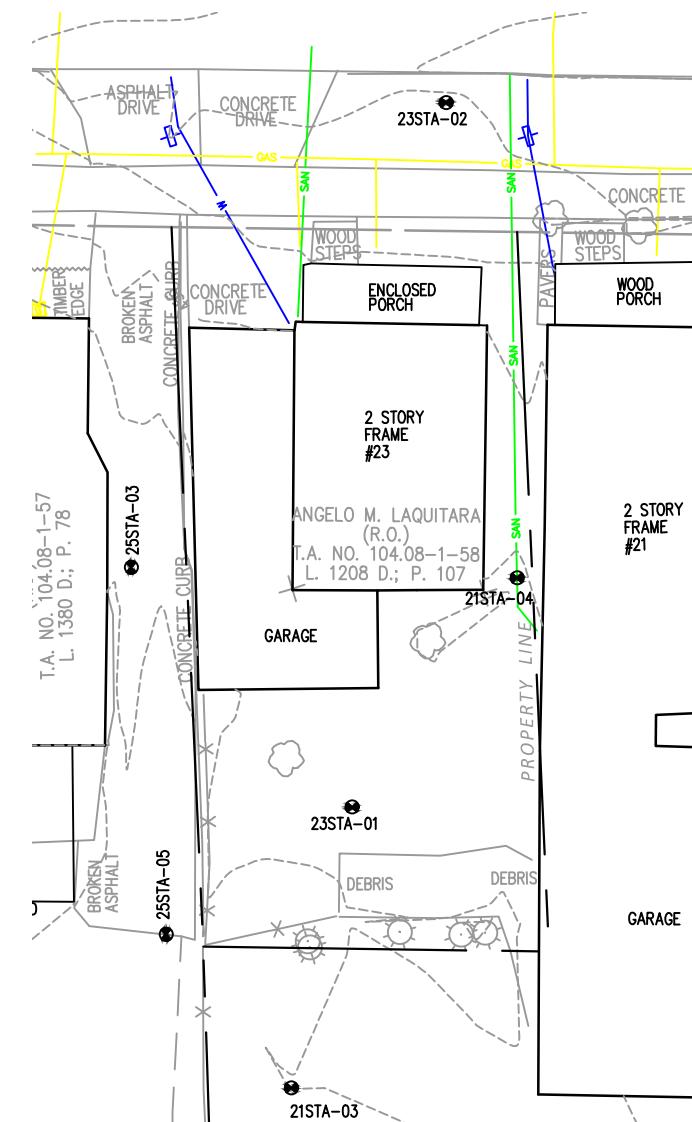
Analytical Results for 22 State Street

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)											
		22STA-01		22STA-02		22STA-03		22STA-04		22STA-05		22STA-06	
		Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	80.6	1730	N/A	N/A	6.5	73.2	34.4	379	57.4	779	20.5	220
6	12	16.7	324	3.3 J	25.8	32.6	108	11.9	71.2	25.8	202	11.4	106
12	18	7.5	42.9	4.5 J	13.4	8.6	89.2	6.7	172	5.4	55.6	1.0 J	18.1
18	24	5.4	11.8	4.9 J	26.4	6.9	111	6.4	132	3.1 J	17.4	1.2	11.3

Analytical Results for 22 State Street

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)			
		22STA-GAR			
		Arsenic		Lead	
0	2	66.3		728	
2	6	57.0		552	
6	12	18.9		230	

N



LEGEND

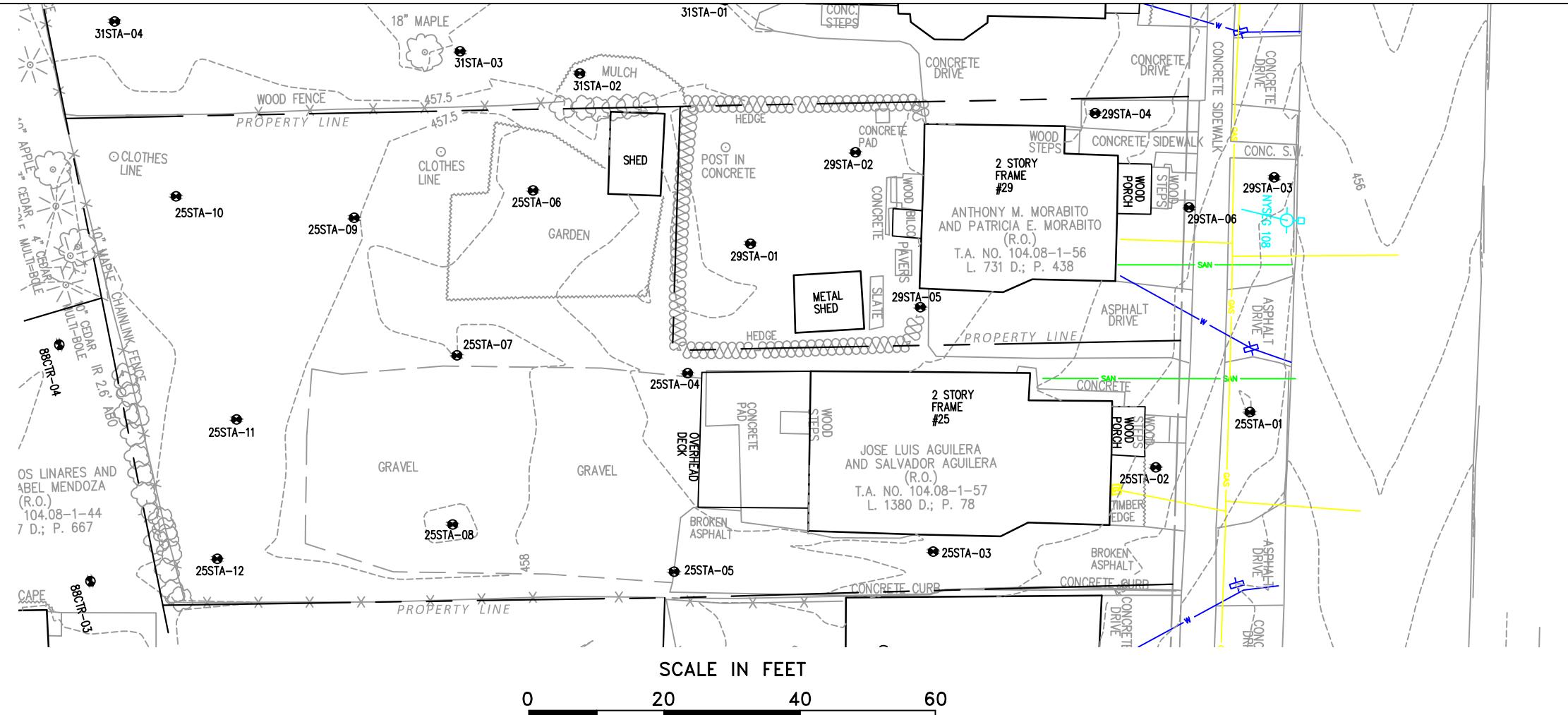
23STA-02	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
—RED—	OVERHEAD ELECTRIC LINE
—YELLOW—	GAS LINE
—BLUE—	WATER LINE
—GREEN—	SANITARY SEWER LINE
E	ELECTRIC METER
Y	GAS VALVE
G	GAS METER
W	WATER VALVE
UPL	UTILITY POLE WITH LIGHT
T	TELEPHONE MANHOLE
ULP	UTILITY LIGHT POLE
RESULT EXCEEDS REMEDIAL GOAL	

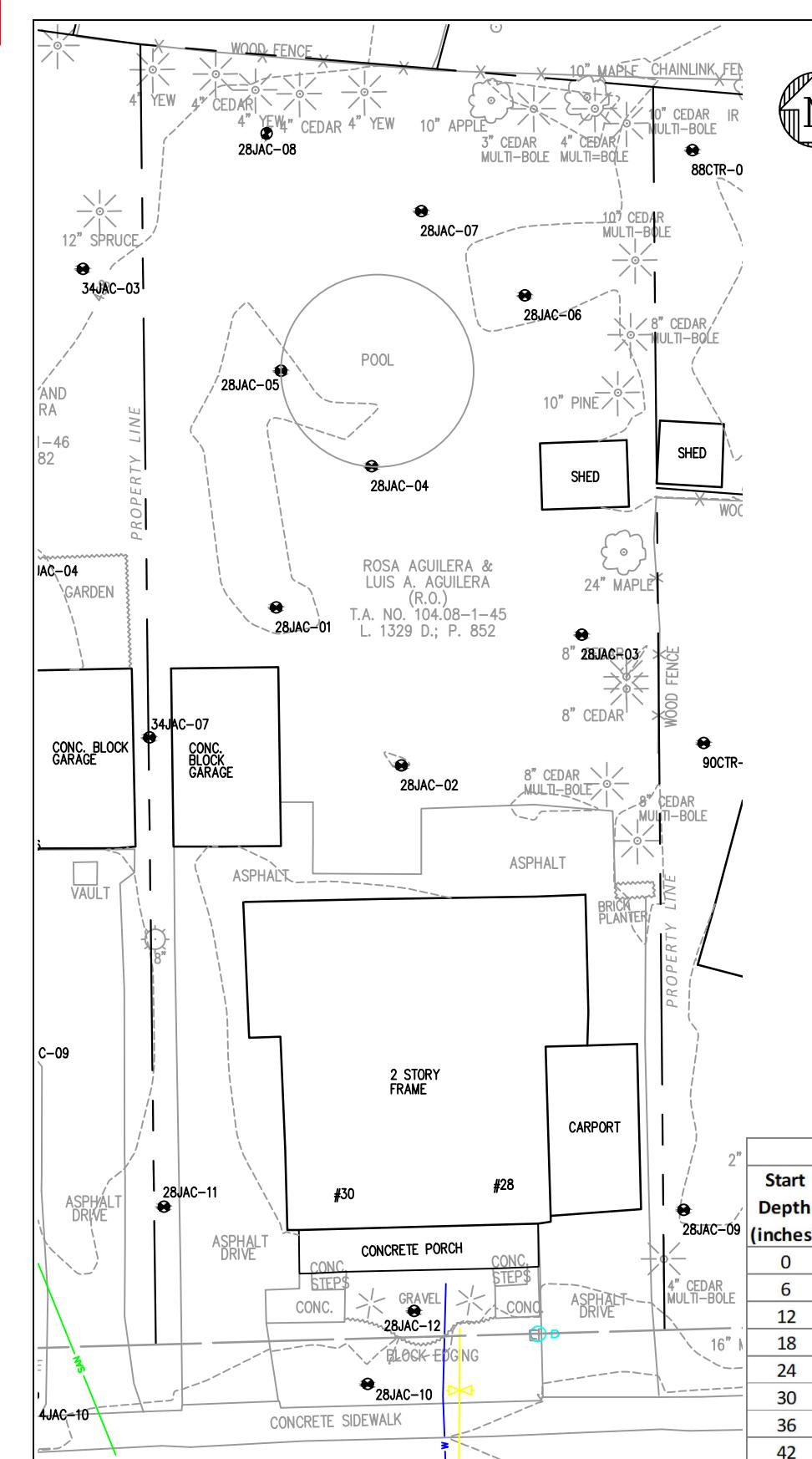
NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTE FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

Analytical Results for 23 State Street				
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)		
		23STA-01		23STA-02
Arsenic	Lead	Arsenic	Lead	
0	6	51.7	608	25.5
6	12	41.6	382	30.8
12	18	19.8	192	11.6
18	24	13.1	176	6.5
				54.9

1. ARSENIC AND LEAD RESULTS FOR 23STA-01 DEPTH 0-6" ARE FROM THE FIELD DUPLICATE SAMPLES.



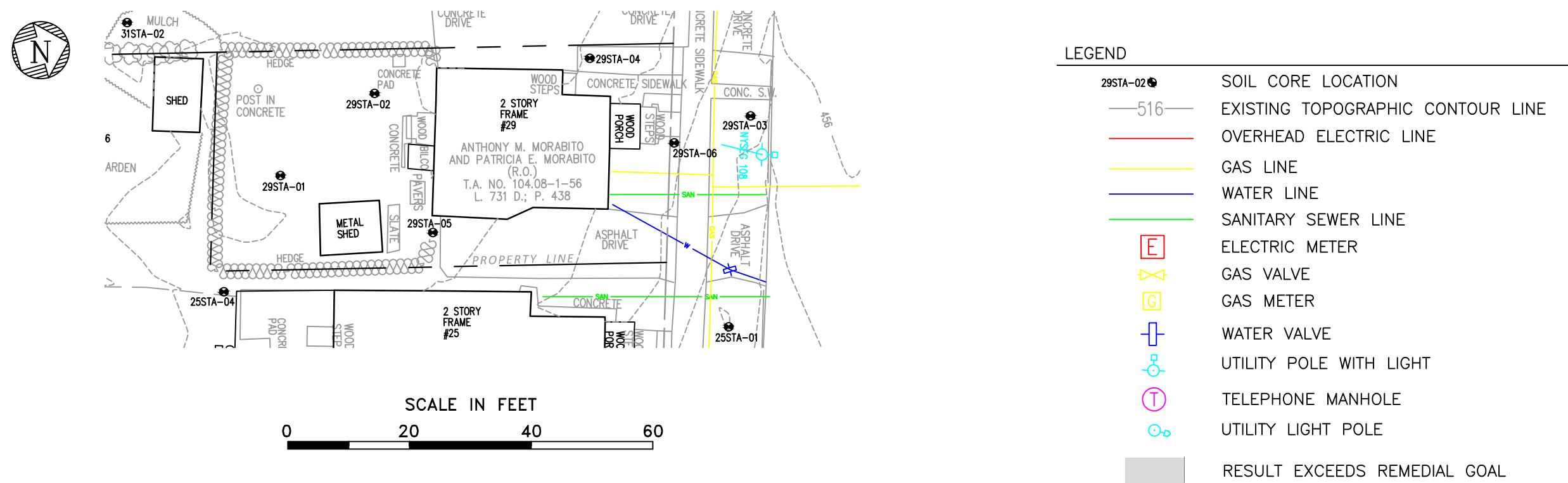


Analytical Results for 28 Jackson Street																	
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)															
		28JAC-01		28JAC-02		28JAC-03		28JAC-04		28JAC-05		28JAC-06		28JAC-07		28JAC-08	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	18.2	754	19.2	2890	11.2	325	10.7	372	12.2	323	8.5	276	8.9	205	12.1	646
6	12	15.9	592	15.1	2010	11.1	308	9.8	278	10.0	180	9.6	306	7.8	133	14.1	729
12	18	10.2	234	13.7	866	12.0	313	9.9	252	11.0	190	11.5 J	182	7.8	148	12.0	396
18	24	9.0	184	13.0	358	14.8	376	10.2	237	7.2	48.0	6.4	27.8	6.1	51.4	7.8	55.4
24	30	5.1	102	8.9	221	7.1	63.3	6.7	57.1								
30	36	3.3	10.4	8.7	178	6.5	40.7	5.6	25.4								
36	42	6.8	11.9	5.2	20.8 J	5.0	12.4	4.8	9.4								
42	48	4.6	6.8	6.0	21.4	4.6	10.0	6.0	13.2								

- Arsenic result for 28JAC-02 depth 42–48" is from the field duplicate sample.
- Arsenic and lead results for 28JAC-12 depth 12–18" are from the field duplicate sample.

SCALE IN FEET

0 20 40 60

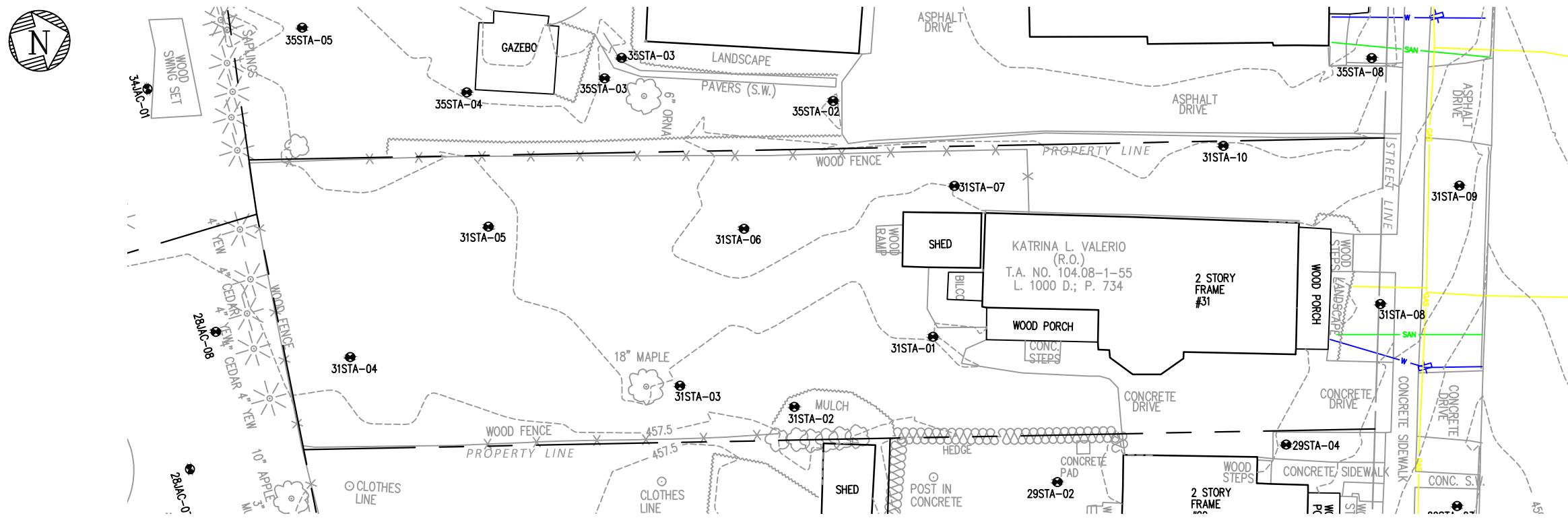


NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTICS FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

Analytical Results for 29 State Street													
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)											
		29STA-01		29STA-02		29STA-03		29STA-04		29STA-05		29STA-06	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	28.6	477	35.9	817	32.2	231	48.1	642	66.7	963	31.1	406
6	12	32.9	526	40.8	593	26.4	156	22.0J	269	35.5	380	8.7	69.9
12	18	40.7	133	7.2	36.0	16.5	88.3	18.0	117J	7.6	98.7	4.9	39.4
18	24	7.3	26.9	5.7	23.3	11.1	109	5.3	36.6	7.2	97.6	4.8	11.4

1. ARSENIC AND LEAD RESULTS FOR 29STA-04 DEPTH 12-18" ARE FROM THE FIELD DUPLICATE SAMPLES.



Analytical Results for 31 State Streets

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																			
		31STA-01		31STA-02		31STA-03		31STA-04		31STA-05		31STA-06		31STA-07		31STA-08		31STA-09		31STA-10	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead		
0	6	26.8	994	17.0	1360	10.9	556	13.7	504	12.9	599	21.1	394	29.0	399	9.3	327	42.5	296	108	643
6	12	11.1	311	19.0	783	9.3	282	15.6	645	11.3	280	14.6	280	18.7	219	9.1	246	49.6	211	75.4	308
12	18	8.2	118	20.3	1670	5.4	46.0	6.5	61.7	9.0	106	11.1	186	8.5	267	4.7	215	7.1	31.3	8.7	79.0
18	24	7.6	131	4.7	24.9	5.5	21.5	5.6	11.1	6.1	19.6	6.2	20.8	6.1	144	4.2	63.8	6.2	363	8.7	37.3

LEGEND

- | | |
|----------|-----------------------------------|
| 31STA-08 | SOIL CORE LOCATION |
| —516— | EXISTING TOPOGRAPHIC CONTOUR LINE |
| _____ | OVERHEAD ELECTRIC LINE |
| _____ | GAS LINE |
| _____ | WATER LINE |
| _____ | SANITARY SEWER LINE |
| E | ELECTRIC METER |
| ◇ | GAS VALVE |
| G | GAS METER |
| + | WATER VALVE |
| ⌚ | UTILITY POLE WITH LIGHT |
| T | TELEPHONE MANHOLE |
| ○ | UTILITY LIGHT POLE |
| | RESULT EXCEEDS REMEDIAL GOAL |

1. ARSENIC AND LEAD RESULTS FOR 31STA-03 DEPTH 18-24" ARE FROM THE FIELD DUPLICATE SAMPLES.

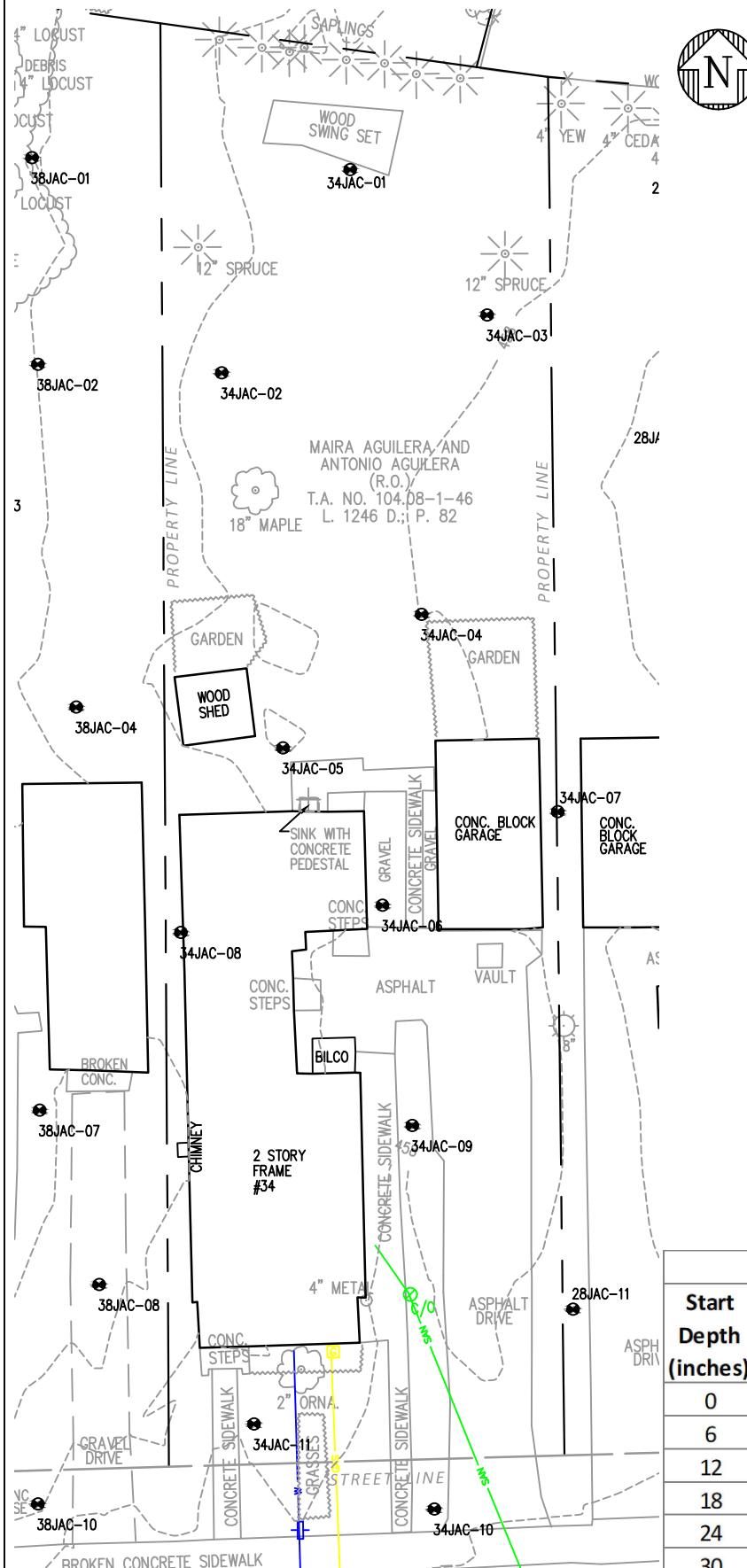
NOTE

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
 2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
 3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
 4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTES FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE



SCALE IN FEET

**ANALYTICAL RESULTS
31 STATE STREET
FORMER GENEVA FOUNDRY,
AIR DEPOSITION AREA OU3
GENEVA, ONTARIO COUNTY, NEW YORK**



NOTES

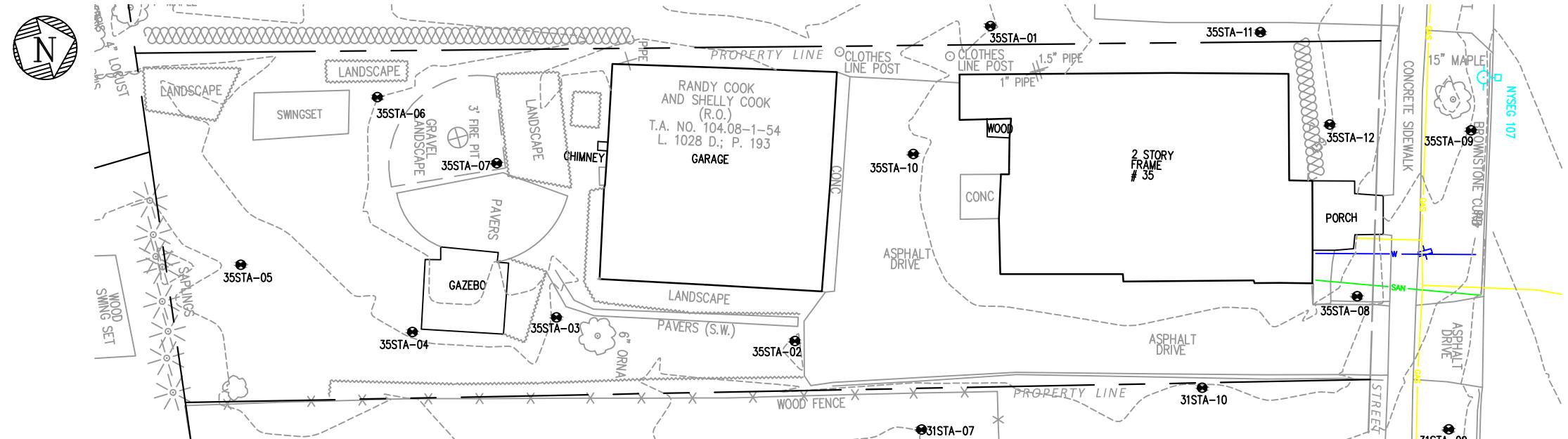
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2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
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ANALYTICS FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

Analytical Results for 34 Jackson Street																							
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																					
		34JAC-01		34JAC-02		34JAC-03		34JAC-04		34JAC-05		34JAC-06		34JAC-07		34JAC-08		34JAC-09		34JAC-10		34JAC-11	
0	6	11.4	257	7.4	236	9.9	231	12.2	557	25.8	541	18.4	1470	10.8	448	31.4	2140	14.3	537	14.3	333	15.7	493
6	12	12.2	245	6.9	86.4	8.2	157J	13.1	349	18.8	373	18.7	666	12.2	289	13.0	477	9.4	314	9.6	143	9.9	133
12	18	10.7	92.6	8.9	92.0	7.7	95.6	9.4	161	12.4	209	19.0	839	13.5	310	10.2	164	5.3	42.0	5.1	63.7J	5.6	56.2
18	24	9.3	118	4.5	9.4	8.1	68.0	5.8	83.4	7.0	26.2	16.8	557	15.7	257	7.2	60.1	5.5	23.3	6.9	26.1J	7.4	15.5
24	30																						
30	36																						

SCALE IN FEET

0 20 40 60

1. 34JAC-06 SAMPLE DEPTH WAS 2-6"
2. 34JAC-07 SAMPLE DEPTH WAS 18-20"
3. ARSENIC AND LEAD RESULTS FOR 34JAC-03 DEPTH 18-24" ARE FROM THE FIELD DUPLICATE SAMPLES.
4. ARSENIC AND LEAD RESULTS FOR 34JAC-10 DEPTH 18-24" ARE FROM THE FIELD DUPLICATE SAMPLES.



LEGEND

- 35STA-05 ● SOIL CORE LOCATION
- 516— EXISTING TOPOGRAPHIC CONTOUR LINE
- RED — OVERHEAD ELECTRIC LINE
- YEL — GAS LINE
- BLU — WATER LINE
- GRN — SANITARY SEWER LINE
- E ELECTRIC METER
- Y GAS VALVE
- G GAS METER
- W WATER VALVE
- U UTILITY POLE WITH LIGHT
- T TELEPHONE MANHOLE
- O UTILITY LIGHT POLE

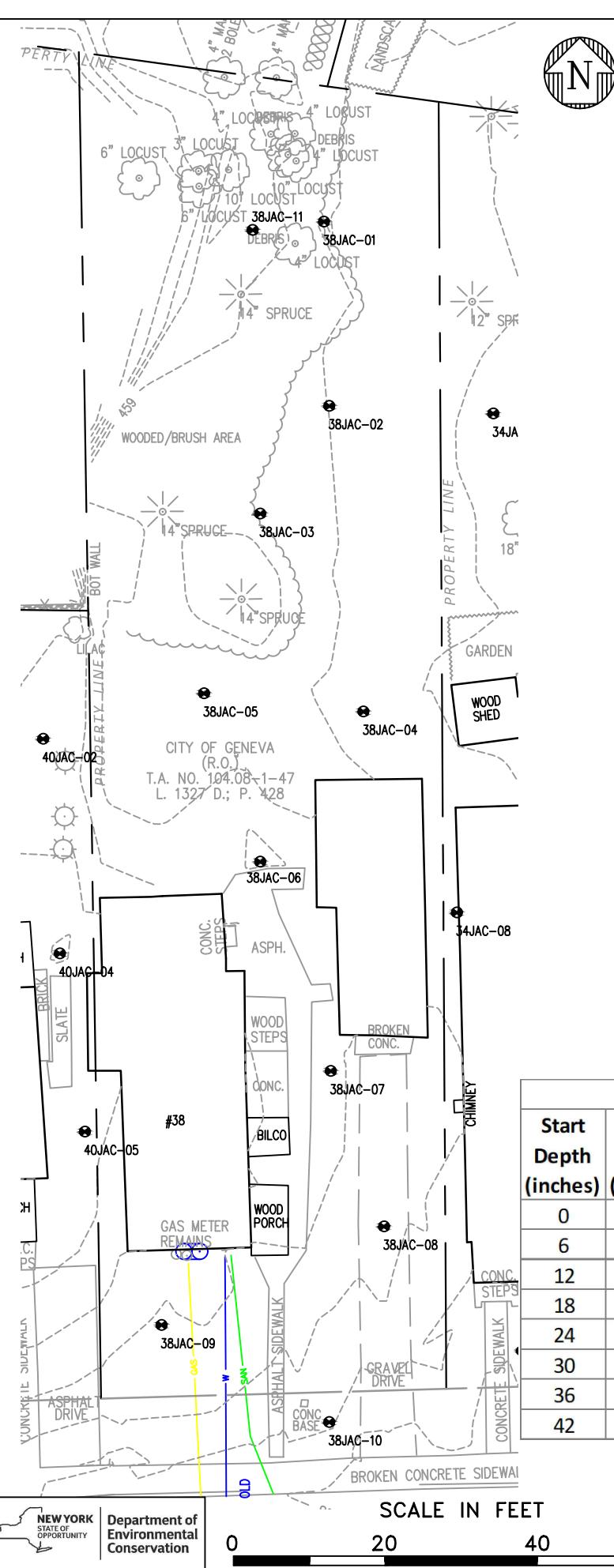
RESULT EXCEEDS REMEDIAL GOAL

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTICS FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

Analytical Results for 35 State Street																									
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																							
		35STA-01		35STA-02		35STA-03		35STA-04		35STA-05		35STA-06		35STA-07		35STA-08		35STA-09		35STA-10		35STA-11		35STA-12	
0	6	9.6	258	11.4	411	25.2	411	6.0 J	168	7.2	299	7.3	218	13.3	164	48.9	388	29.3	241	12.7	110	29.7	339	37.1	491
6	12	9.2	229	15.3	276	27.2	508	7.9	227	8.3	567	5.9	142 J	5.9	75.8	31.6	242	14.2 J	97.0 J	15.9	767	11.6	186	33.1	335
12	18	5.6 J	177	57.0	1020	7.5	189	9.5	180	12.8	184	7.5	118	3.7 J	20.0	5.7	131	6.4	23.7	11.8	315	4.4	21.1	6.5	101
18	24	3.8 J	46.7	6.8	84.8	1.9 J	10.3	3.1 J	14.8	6.6	88.4	3.8 J	46.6	3.7 J	9.2	5.8	32.6	7.2	109	6.5	60.8	6.3	53.8	6.3	14.4

1. 35STA-07 sample depth was 18–22"
2. Arsenic and lead results for 35STA-03 depth 6–12" are from the field duplicate samples.



LEGEND

- 38JAC-02 ● SOIL CORE LOCATION
- 516 — EXISTING TOPOGRAPHIC CONTOUR LINE
- RED — OVERHEAD ELECTRIC LINE
- YELLOW — GAS LINE
- BLUE — WATER LINE
- GREEN — SANITARY SEWER LINE
- E ELECTRIC METER
- ◆ GAS VALVE
- G GAS METER
- WATER VALVE
- U UTILITY POLE WITH LIGHT
- T TELEPHONE MANHOLE
- U UTILITY LIGHT POLE
- RESULT EXCEEDS REMEDIAL GOAL

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C. ANALYTICS FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE IN THE SAMPLE.

Analytical Results for 38 Jackson Street

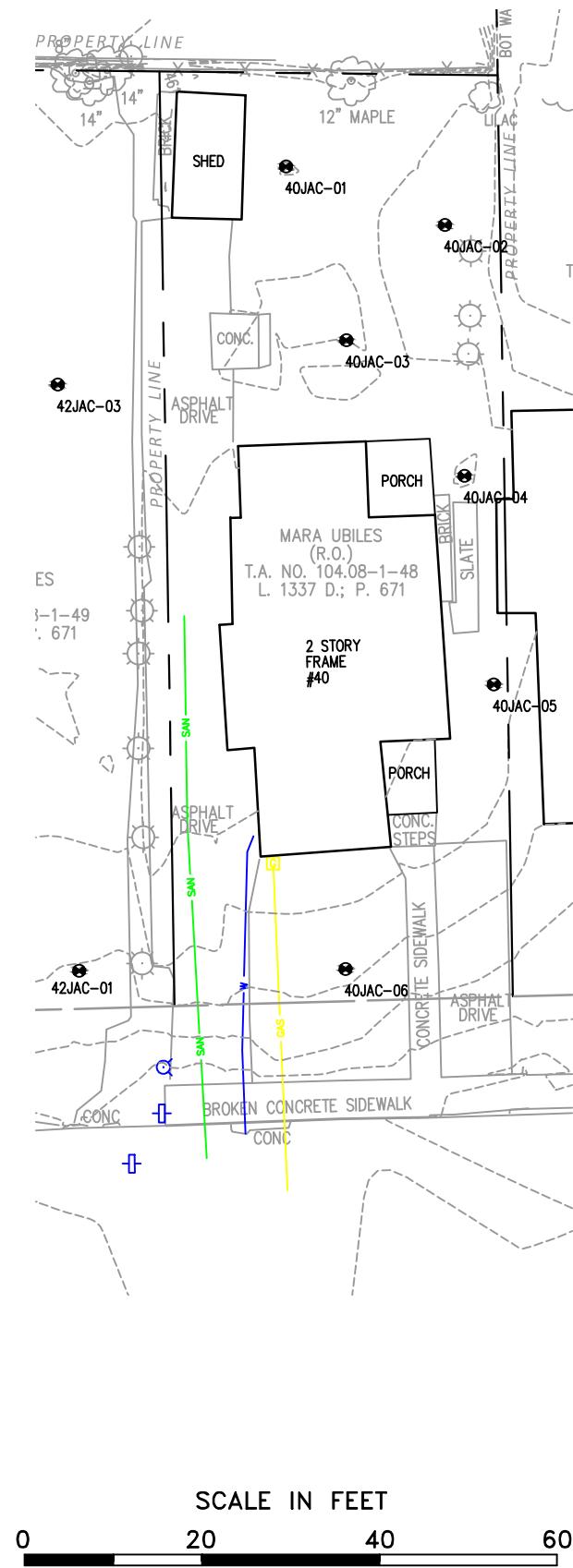
Results in milligrams per kilogram (mg/kg)

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																					
		38JAC-01		38JAC-02		38JAC-03		38JAC-04		38JAC-05		38JAC-06		38JAC-07		38JAC-08		38JAC-09		38JAC-10		38JAC-11	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	10.6	236	10.1	263	9.4	414	13.2	583	17.2	744	22.1	1520	12.1	742 J	13.4	457	13.1	728	16.1	762	9.7	449
6	12	11.4	148	11.2	203	12.4	101	11.0	179	16.7	364	13.7	383	7.1	292	7.0	155 J	7.6	187	14.7	315	11.7	427
12	18	9.7	78.5	9.5	52.0	10.3	60.9	9.5	145	6.9	211 J	16.0	325	2.6	26.0	3.8	95.0	4.0	69.7	4.5	74.3	5.7 J	248
18	24	9.0	41.2	6.0	24.5	5.3	15.8	5.3	19.3	5.7	41.8	12.4	174	3.0	27.1	3.9	97.0	5.5	33.6	6.3	30.2	N/A	N/A
24	30																						
30	36																						
36	42																						
42	48																						

1. N/A = A SAMPLE COULD NOT BE COLLECTED AT THIS LOCATION/DEPTH.

2. ARSENIC RESULT FOR 38JAC-05 DEPTH 12-18" IS FROM THE FIELD DUPLICATE SAMPLE.

3. ARSENIC RESULT FOR 38JAC-06 DEPTH 30-36" IS FROM THE FIELD DUPLICATE SAMPLE.



LEGEND

40JAC-02	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
—	OVERHEAD ELECTRIC LINE
—	GAS LINE
—	WATER LINE
—	SANITARY SEWER LINE
E	ELECTRIC METER
—	GAS VALVE
G	GAS METER
+	WATER VALVE
—	UTILITY POLE WITH LIGHT
T	TELEPHONE MANHOLE
O	UTILITY LIGHT POLE
■	RESULT EXCEEDS REMEDIAL GOAL

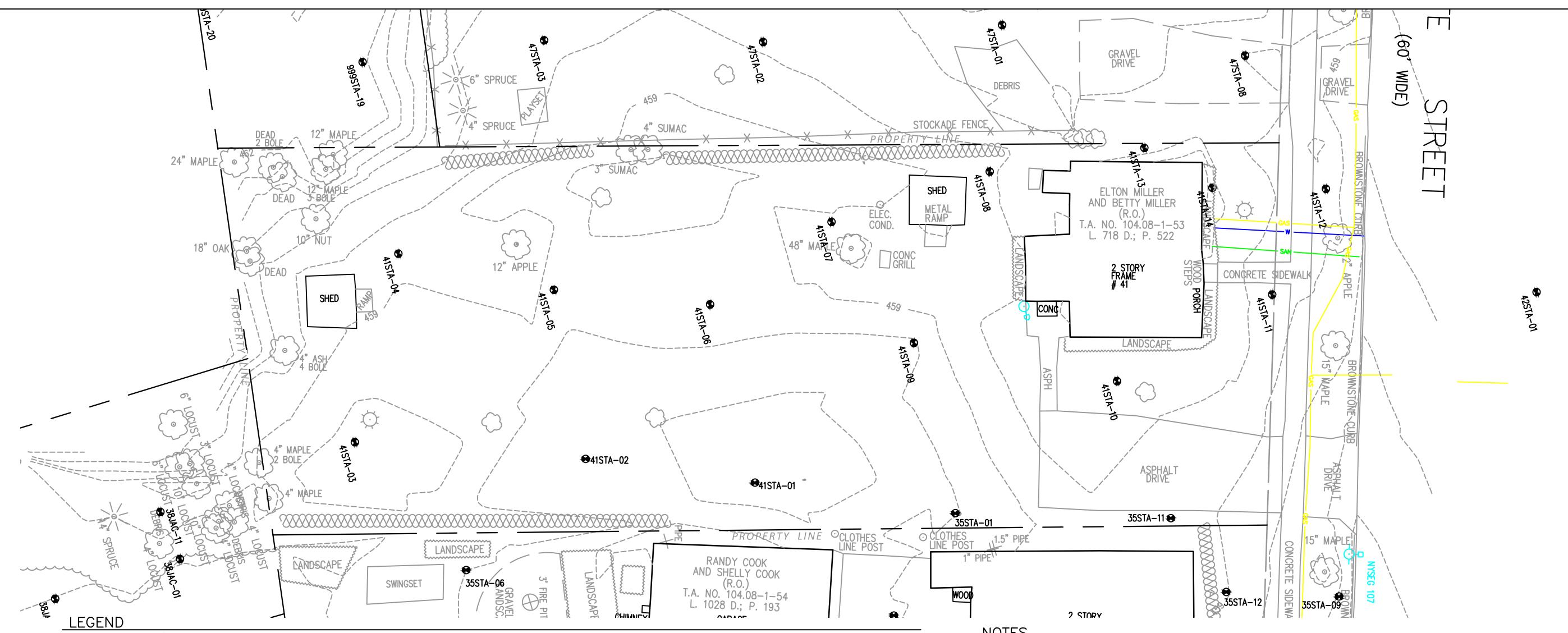
NOTES

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2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTICS FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

Analytical Results for 40 Jackson Street

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)									
		40JAC-01		40JAC-02		40JAC-03		40JAC-04		40JAC-05	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	16.0	828	15.6	690	13.4	505	25.3	1960	17.3	959
6	12	19.8	38000	16.6	540	15.0	455	8.5	163	8.5	338
12	18	8.7	134	11.6	232	10.7	274	8.8	97.4	4.2	71.1
18	24	8.3	105	7.8	119	9.6	291	23.5 J	361	4.8	108
24	30					5.4	31.7				
30	36					5.1	14.6				
36	42					6.3	9.4				
42	48					5.5	45.1				

1. 40JAC-04 SAMPLE DEPTH WAS 18-22"
2. ARSENIC AND LEAD RESULTS FOR 40JAC-03 DEPTH 6-12" ARE FROM THE FIELD DUPLICATE SAMPLES.
3. LEAD RESULT FOR 40JAC-04 DEPTH 12-18" IS FROM THE FIELD DUPLICATE SAMPLE.



LEGEND

41STA-03 SOIL CORE LOCATIO

—516— EXISTING TOPOGRAPHIC CONTOUR LINE

OVERHEAD ELECTRIC LINE

GAS LIN

WATER L

SANITARY SEWER LIN

E ELECTRIC METER

GAS VAL

GAS METER

WATER VAL

□

UTILITY POLE WITH LIGHT

TELEPHONE MANHOLE

UTILITY LIGHT POLE

RESULT EXCEEDS 400 mg/kg (LEAD)

RESULT EXCEEDS 15 mg/kg (ARSENIC)

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
 2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
 3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
 4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTES FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

SCALE IN FEET

0 20 40 60

Analytical Results for 41 State Street

Results in milligrams per kilogram (mg/kg)

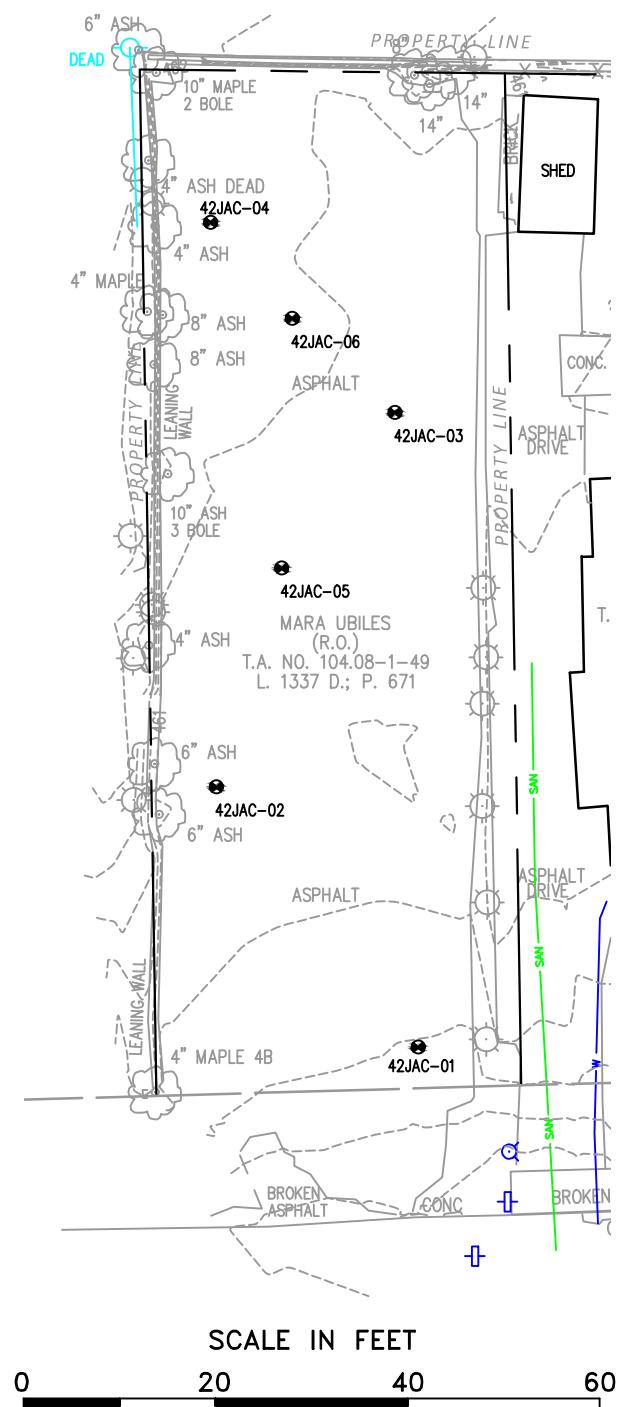
		Analytical Results for 41 State Street																											
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																											
		41STA-01		41STA-02		41STA-03		41STA-04		41STA-05		41STA-06		41STA-07		41STA-08		41STA-09		41STA-10		41STA-11		41STA-12		41STA-13		41STA-14	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead				
0	6	33.6	355	15.6	297	6.6 J	186 J	16.2	324	13.5	252	15.9	279	16.3	424	26.1	492	18.0	467	49.5	546	64.8	574	45.4	407	35.5	1460	25.3	721
6	12	19.8	281	18.5	283	7.9	95.1	11.0	149	12.0	165	22.5	242	21.3 J	385 J	20.1	372	24.0	670	30.9	551	23.2	544	19.6	161	9.7	264	17.4	751
12	18	3.7 J	43.7	3.4 J	10.7	3.8 J	44.1	4.4 J	10.2	4.2 J	25.7	5.3 J	65.5	13.5	432	6.8	56.4	43.7	795	7.6	146	5.1	66.3	6.9	18.6	8.2 J	152	3.9	98.7
18	24	4.1 J	21.2	2.7 J	10.8	5.4 J	23.3	4.8 J	11.4	2.9 J	10.6	3.1 J	17.6	3.9 J	33.3 J	5.4 J	17.6	4.6 J	50.3	6.9	36.3	6.7	11.1	6.5	11.8	2.9	8.2	3.1	12.9



Department of
Environmental
Conservation

1. ARSENIC AND LEAD RESULTS FOR 41STA-03 DEPTH 18-24" ARE FROM THE FIELD DUPLICATE SAMPLES
2. VALUE FOR 41STA-13 SAMPLE DEPTH 00-06"" WAS TAKEN FROM FD FOR LEAD.

**ANALYTICAL RESULTS
41 STATE STREET
FORMER GENEVA FOUNDRY,
AIR DEPOSITION AREA OU3
GENEVA, ONTARIO COUNTY, NEW YORK**



LEGEND

42JAC-04	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
— — —	OVERHEAD ELECTRIC LINE
— — —	GAS LINE
— — —	WATER LINE
— — —	SANITARY SEWER LINE
E	ELECTRIC METER
X	GAS VALVE
G	GAS METER
+	WATER VALVE
□	UTILITY POLE WITH LIGHT
T	TELEPHONE MANHOLE
O	UTILITY LIGHT POLE
[Grey Box]	RESULT EXCEEDS REMEDIAL GOAL

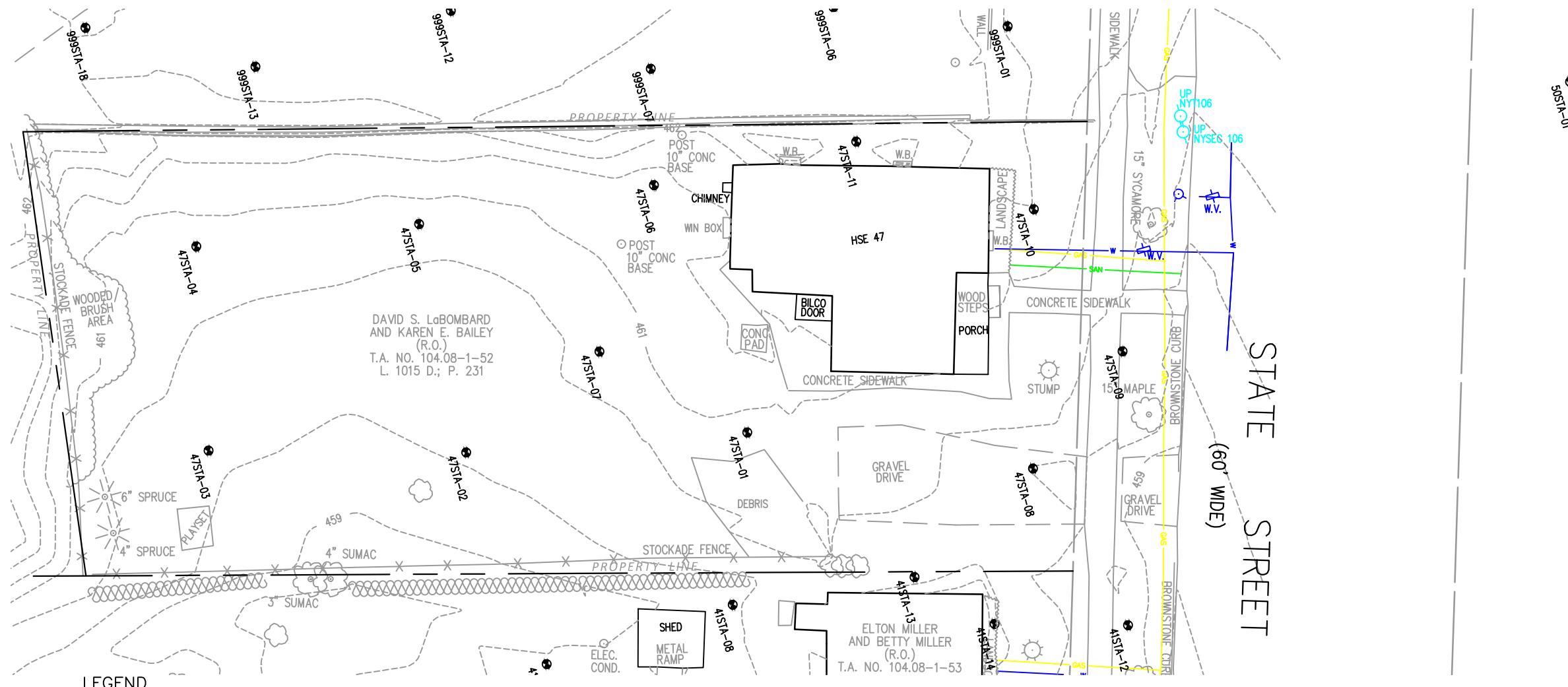
NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C. ANALYTICS FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE IN THE SAMPLE.

Analytical Results for 42 Jackson Street

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)											
		42JAC-01		42JAC-02		42JAC-03		42JAC-04		42JAC-05		42JAC-06	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	20.2	237	3.3	47.9	4.1	64.1	2.9	59.7	2.8	15.0	1.9 J	12.1
6	12	4.9	16.2	4.6	18.4	5.9	118	10.9	198	4.2	91.3	5.4	44.2
12	18	5.9	14.5	5.7	10.9	16.6	252	4.4	18.7	4.8	14.7	9.9	172
18	24	5.9	13.3	5.2	11.8	5.9	50.6	5.7	21.6	6.5	14.6	6.5	86.5

1. ARSENIC RESULT FOR 42JAC-01 DEPTH 6-12" IS FROM THE FIELD DUPLICATE SAMPLE.



LEGEND

47STA-03	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
—	OVERHEAD ELECTRIC LINE
—	GAS LINE
—	WATER LINE
—	SANITARY SEWER LINE
[E]	ELECTRIC METER
[G]	GAS VALVE
[C]	GAS METER
[W]	WATER VALVE
	UTILITY POLE WITH LIGHT
	TELEPHONE MANHOLE
	UTILITY LIGHT POLE
	RESULT EXCEEDS REMEDIAL GOAL

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C. ANALYTICS FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE IN THE SAMPLE.

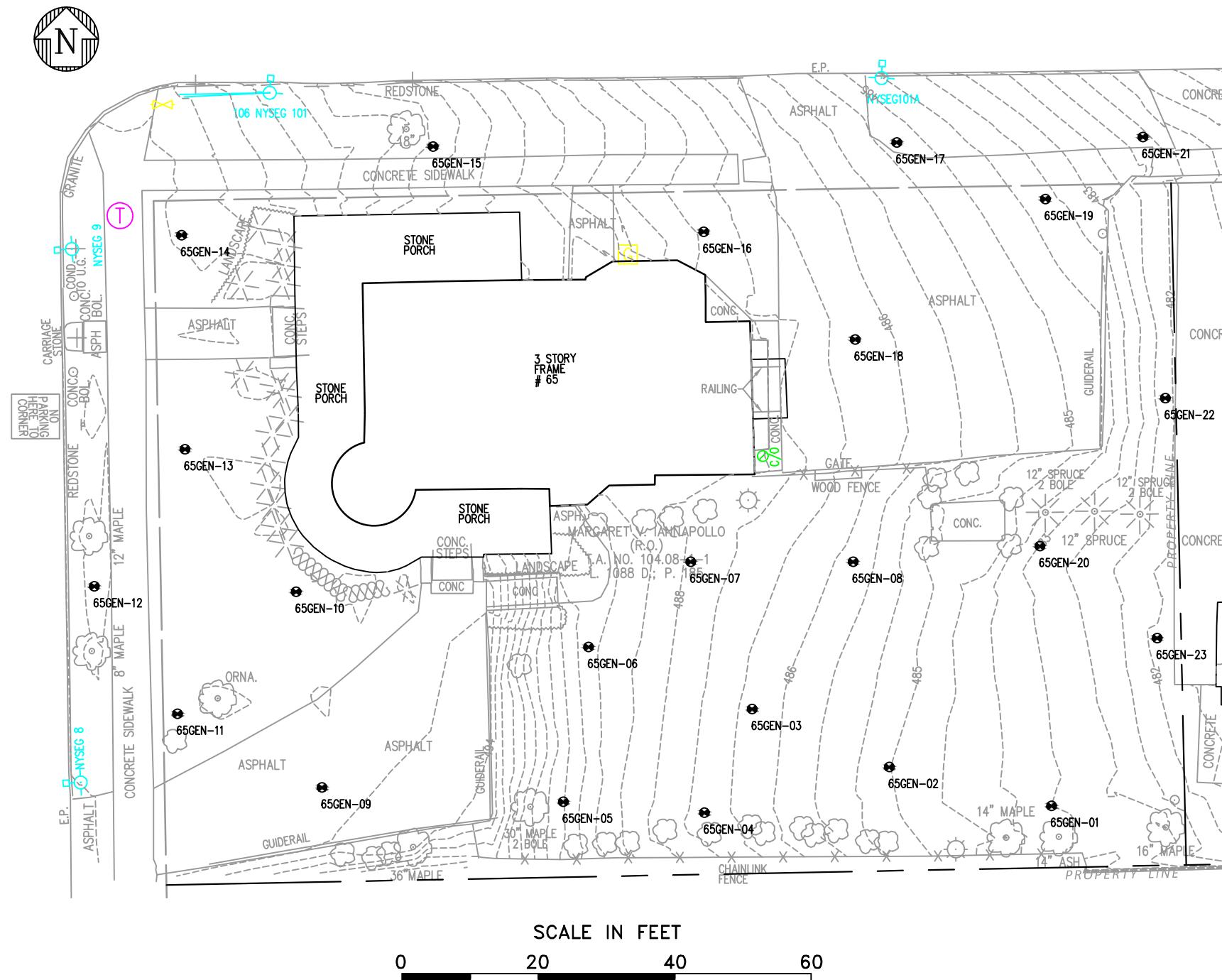
SCALE IN FEET

0 20 40 60

Analytical Results for 47 State Street

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)														47STA-08		47STA-09		47STA-10		47STA-11	
		47STA-01		47STA-02		47STA-03		47STA-04		47STA-05		47STA-06		47STA-07		47STA-08		47STA-09		47STA-10		47STA-11	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	9.8	244	13.4	232	10.3	242	11.8	253	19.4	537	17.1	895	12.1	427	4.4	24.1	8.7	228	12.5	358	11.9	623
6	12	10.7	213	8.6	249	10.5	169	12.5	181	21.4	415	20.5	1030	16.2	438	7.0	91.0	11.4	222	7.2	122	8.3	368
12	18	6.9	98.2	8.8	209	6.4	14.6	5.3	17.8	10.1	69.8	5.6	59.6	8.5	128	3.5	20.6	5.5	104	5.5	64.3	5.9	160
18	24	6.4	13.6	6.8	73.1	5.8	11.1	5.5	12.1	6.9	26.0	4.7	46.7	6.7	24.2	5.4	18.0	6.5	33.6	6.1	47.0	4.3	67.6

1. ARSENIC RESULT FOR 47STA-03 DEPTH 6-12" IS FROM THE FIELD DUPLICATE SAMPLE.
2. Arsenic and lead results for 47STA-07 depth 12-18" are from the field duplicate samples.



LEGEN

- | | |
|----------|-----------------------------------|
| 65GEN-19 | SOIL CORE LOCATION |
| —516— | EXISTING TOPOGRAPHIC CONTOUR LINE |
| _____ | OVERHEAD ELECTRIC LINE |
| _____ | GAS LINE |
| _____ | WATER LINE |
| _____ | SANITARY SEWER LINE |
| E | ELECTRIC METER |
| Y | GAS VALVE |
| G | GAS METER |
| W | WATER VALVE |
| L | UTILITY POLE WITH LIGHT |
| T | TELEPHONE MANHOLE |

NOTES

- 1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
 2. BASE MAP SURVEY BY POPLI DESIGN GROUP.



Analytical Results for 65 Genesee Street																		
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																
		65GEN-01		65GEN-02		65GEN-03		65GEN-04		65GEN-05		65GEN-06		65GEN-07		65GEN-08		
0	6	21.1	692	15.8	388	55.6	419	17.2	226	14.9	226	16.9	308	29.6	469	35.6	429	
6	12	27.8	920	17.9	483	54.5	267	21.4	225	21.9	256	13.5	190	30.3	446	16	193	
12	18	9.0	75.9	9.0	348	7.1 J	32.1	11.2	69.9	6.2	168	7.4	35.9	7.2	106	8.0	63.2	
18	24	7.9	30.8	8.5	26.6	5.7	23.4	4.2	11.8	5.4	41.1	7.6	24.2	9.4	39.4	6.2 J	13.9	

Analytical Results for 65 Genesee Street																		
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																
		65GEN-09		65GEN-10		65GEN-11		65GEN-12		65GEN-13		65GEN-14		65GEN-15		65GEN-16		
0	6	N/A	N/A	21.4	230	52.4	506	40.1	364	62.1	449	55.1	684	11.1	240	7.7	443	
6	12	N/A	N/A	7.4	72.4	19.0	153	41.0	364	51.2	146	30.1	388	42.0	514	9.7	377	
12	18	4.5	26.3	4.3	27.1	2.7	22.4	6.1	200	4.0	17.2	6.5	150	35.2	215	8.8	502	
18	24	4.1	27.5	5.2	18.0	4.5	20.5	3.2	25.9	5.5	13.7	4.0	79.4	7.7	33.2	7.3	491	
24	30															6.3	388	

Analytical Results for 65 Genesee Street																		
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																
		65GEN-17		65GEN-18		65GEN-19		65GEN-20		65GEN-21		65GEN-22		65GEN-23		Arsenic	Lead	
0	6	5.1	193	N/A	N/A	N/A	N/A	15.0	234	22.1	394	11.4	333	18.4	335			
6	12	5.9	133	6.9	579	17.6	184	15.7 J	118	22.3	423	16.6	346	8.1	105			
12	18	9.7	133	5.1	165	11.8	246	7.7	22.2	6.6	146	3.9	25.1	8.1	38.1			
18	24	11.4	169	5.0	237	5.5	42.0	6.8	25.8	6.4	72.1	5.1	60.8	4.6	13.4			

1. N/A = A SAMPLE COULD NOT BE COLLECTED AT THIS LOCATION/DEPTH.
2. ARSENIC RESULT FOR 65GEN-08 DEPTH 6–12" IS FROM THE FIELD DUPLICATE SAMPLE.
3. ARSENIC RESULT FOR 65GEN-10 DEPTH 12–18" IS FROM THE FIELD DUPLICATE SAMPLE.
4. ARSENIC RESULT FOR 65GEN-20 DEPTH 0–6" IS FROM THE FIELD DUPLICATE SAMPLE.

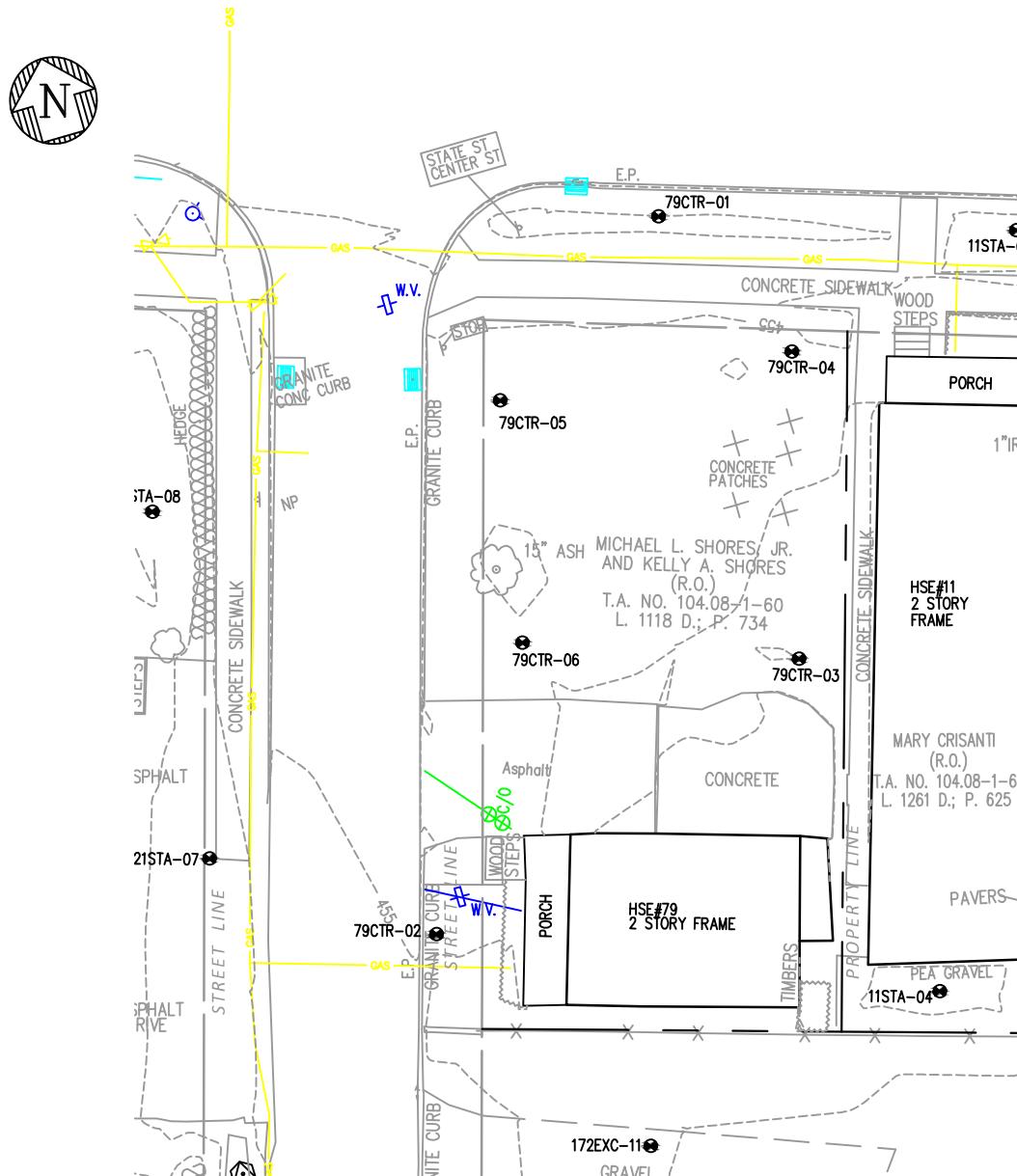
LEGEND

RESULT EXCEEDS REMEDIAL GOAL

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
3. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTES FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.





SCALE IN FEET
0 20 40 60

LEGEND

79CTR-05 ●	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
—RED—	OVERHEAD ELECTRIC LINE
—YEL—	GAS LINE
—BLU—	WATER LINE
—GRN—	SANITARY SEWER LINE
[E]	ELECTRIC METER
[G]	GAS VALVE
[C]	GAS METER
[W]	WATER VALVE
[U]	UTILITY POLE WITH LIGHT
[T]	TELEPHONE MANHOLE
[L]	UTILITY LIGHT POLE
[REMEDIAL GOAL]	RESULT EXCEEDS REMEDIAL GOAL

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTE FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

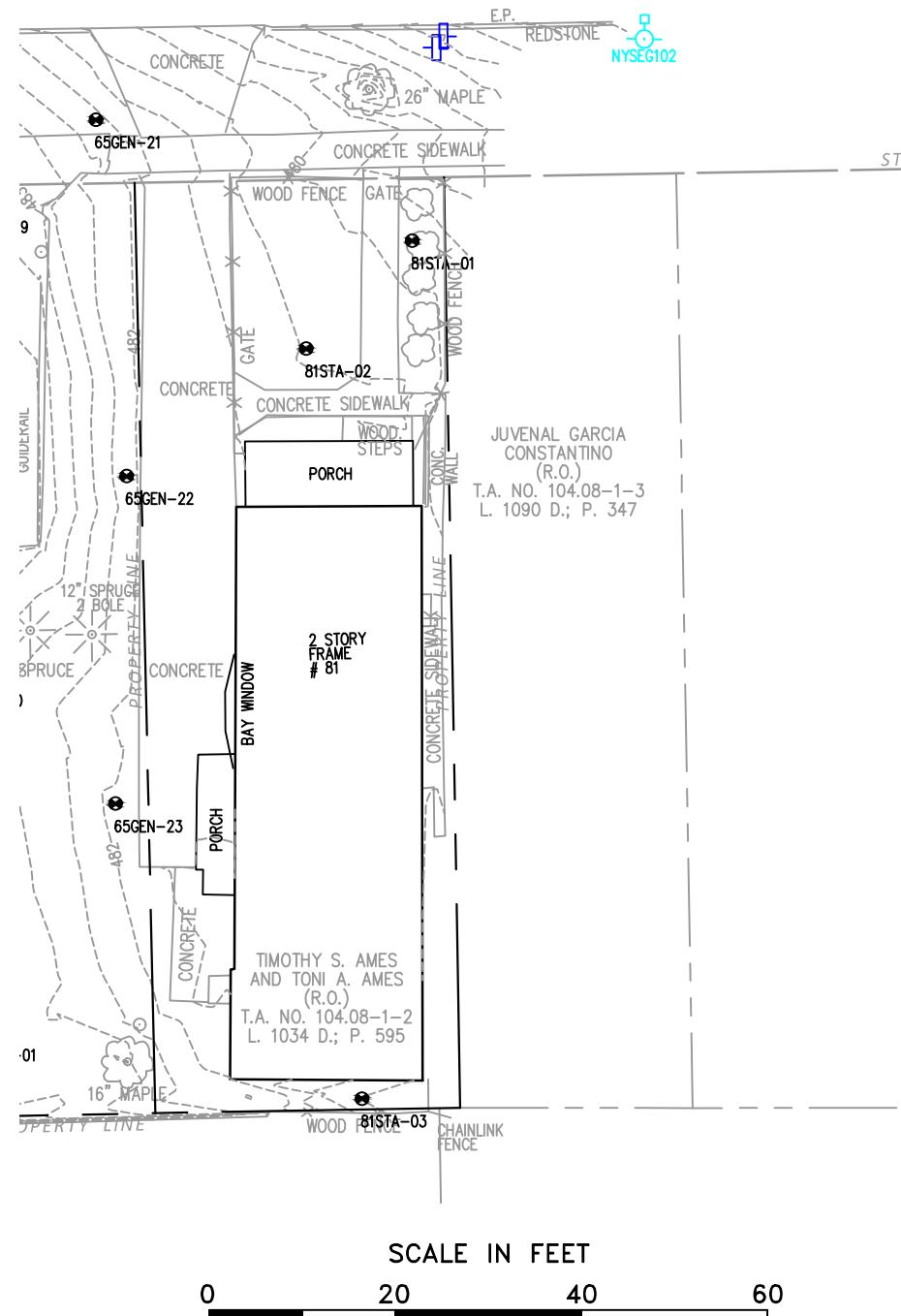
Analytical Results for 79 Center Street													
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)											
		79CTR-01		79CTR-02		79CTR-03		79CTR-04		79CTR-05		79CTR-06	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	37.9	400	13.6	214	45.8	572	28.3	418	48.8	662	118	6720
6	12	38.9	264	13.3	107	25.6	697	4.8	39.2	10.1	94.1	71.0	876
12	18	7.0	97.1	7.9	52.3	5.4	40.0	5.1	59.5	8.7	300	10.7	106
18	24	6.3	47.8	8.1	24.3	5.7	32.0	7.8	63.4	5.3	15.6	7.0	14.6

1. ARSENIC RESULT FOR 79CTR-05 DEPTH 0-6" IS FROM THE FIELD DUPLICATE SAMPLE.



STATE STREET

(60' WIDE)



LEGEND

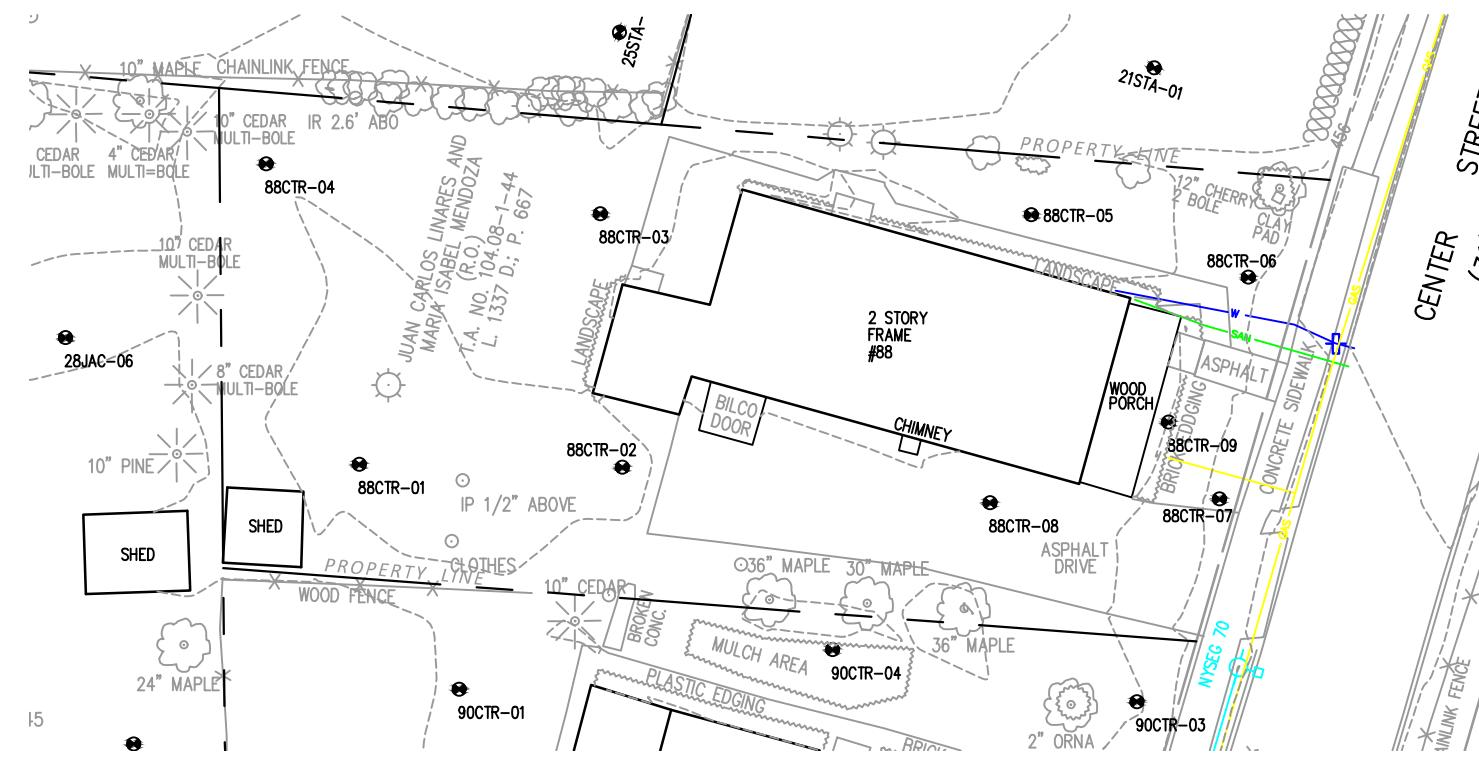
81STA-02	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
—	OVERHEAD ELECTRIC LINE
—	GAS LINE
—	WATER LINE
—	SANITARY SEWER LINE
E	ELECTRIC METER
—>—	GAS VALVE
G	GAS METER
—+—	WATER VALVE
—○—	UTILITY POLE WITH LIGHT
T	TELEPHONE MANHOLE
[Grey Box]	RESULT EXCEEDS REMEDIAL GOAL

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C. ANALYTICS FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE IN THE SAMPLE.

Analytical Results for 81 State Street

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)					
		81STA-01		81STA-02		81STA-03	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	40.1	312	19.6	356	25.1	1780
6	12	24.4	168	5.9	289	40.3	608
12	18	8.7	110	5.7	278	7.0	263
18	24	5.8	153	7.1	30.8	6.7	71.1



LEGEND

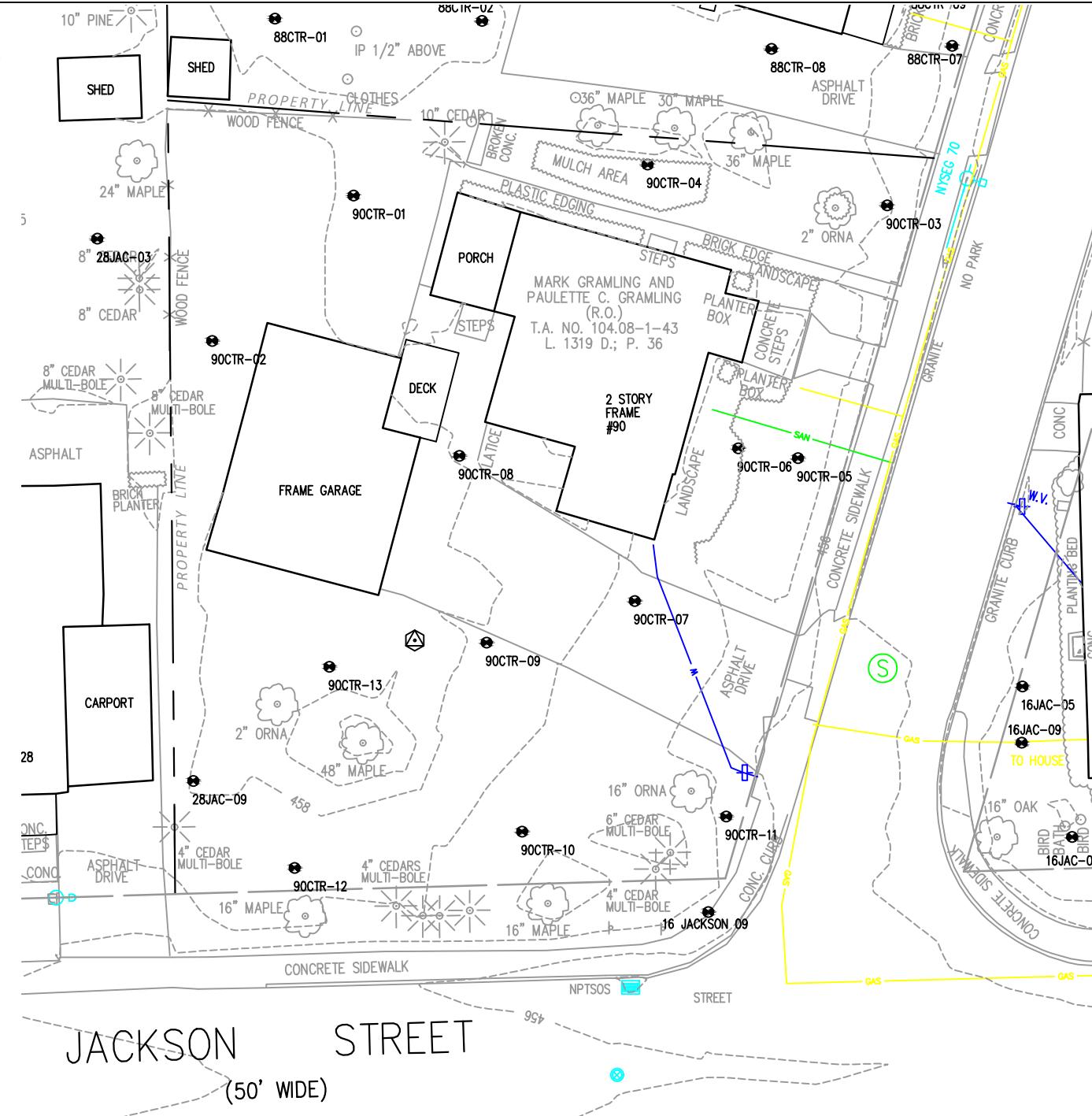
88CTR-05	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
—	OVERHEAD ELECTRIC LINE
—	GAS LINE
—	WATER LINE
—	SANITARY SEWER LINE
E	ELECTRIC METER
G	GAS VALVE
G	GAS METER
+	WATER VALVE
+	UTILITY POLE WITH LIGHT
T	TELEPHONE MANHOLE
O	UTILITY LIGHT POLE
[Grey Box]	RESULT EXCEEDS REMEDIAL GOAL

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C. ANALYTICS FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE IN THE SAMPLE.

Analytical Results for 88 Center Street

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																	
		88CTR-01		88CTR-02		88CTR-03		88CTR-04		88CTR-05		88CTR-06		88CTR-07		88CTR-08		88CTR-09	
		Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead		
0	6	11.8	612	76.2	616	32.8	594	13.9	394	119	769	50.5	456	44.9	457	7.6	415	11.4	807
6	12	11.1	493	67.2	1030	10.4	561	12.4	357	15.3	167J	10.2	53.0	54.9	226	13.5	393	18.9	675
12	18	5.9	80.2	22.4	260	12.3	570	11.0	268	6.8	55.6	6.1	76.4	12.7	80.8	5.2	31.0	12.2	355
18	24	5.7	23.8	4.9	59.8	6.7	274	9.0	280	6.2	24.2	6.0	56.2	12.5	104	5.9	45.9	6.5	169



LEGEND

90CTR-03	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
—RED—	OVERHEAD ELECTRIC LINE
—YELLOW—	GAS LINE
—BLUE—	WATER LINE
—GREEN—	SANITARY SEWER LINE
E	ELECTRIC METER
G	GAS VALVE
W.V.	GAS METER
UPL	WATER VALVE
TP	UTILITY POLE WITH LIGHT
TMH	TELEPHONE MANHOLE
ULP	UTILITY LIGHT POLE
[Grey Box]	RESULT EXCEEDS REMEDIAL GOAL

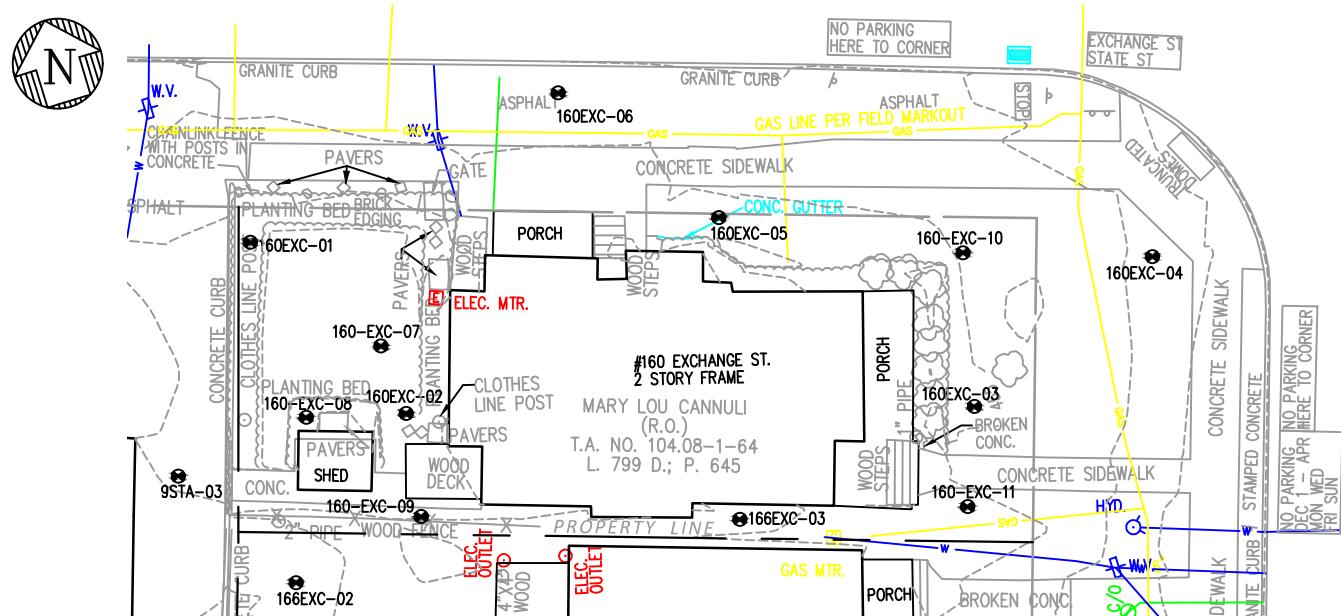
NOTES

- FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
- BASE MAP SURVEY BY POPLI DESIGN GROUP.
- ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
- DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTICS FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

SCALE IN FEET
0 20 40 60

Analytical Results for 90 Center Street

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																									
		90CTR-01		90CTR-02		90CTR-03		90CTR-04		90CTR-05		90CTR-06		90CTR-07		90CTR-08		90CTR-09		90CTR-10		90CTR-11		90CTR-12		90CTR-13	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead				
0	6	29.1	408	26.0	512	48.1	585	42.5	491	43.3	347	51.7	911	3.8	13.4	10.0	250	16.0	462	23.2	899	29.9	609	16.8	717	7.3	242
6	12	26.4	412	18.8	452	35.3	525	19.2	2130	19.0	147	32.8	1280	4.6	87.6	21.9	492	19.4	562	7.0	96.1	12.8	233	10.5	200	8.3	308
12	18	17.7	410	19.0 J	538	16.9	436	21.5	206	12.1	440	5.0	28.8	5.1	130	5.6	15.8	8.1	515	7.7	257	8.4	366	5.3	99.9	6.8	230
18	24	10	164	29.1	1660	10.4	155	8.7	79.7	8.7	212	4.1	15.0	7.4	84.2	4.8	14.6	18.4	1240	5.2	48.6 J	4.2	12.1	4.7	28.8	12.5	466
24	30			13.1	318															5.1	34.8					6.7	234
30	36			6.5	56.6															4.4	10.9					6.7	200
36	42																			5.0	13.0					3.8	19.9
42	48																									3.9	19.6



LEGEND

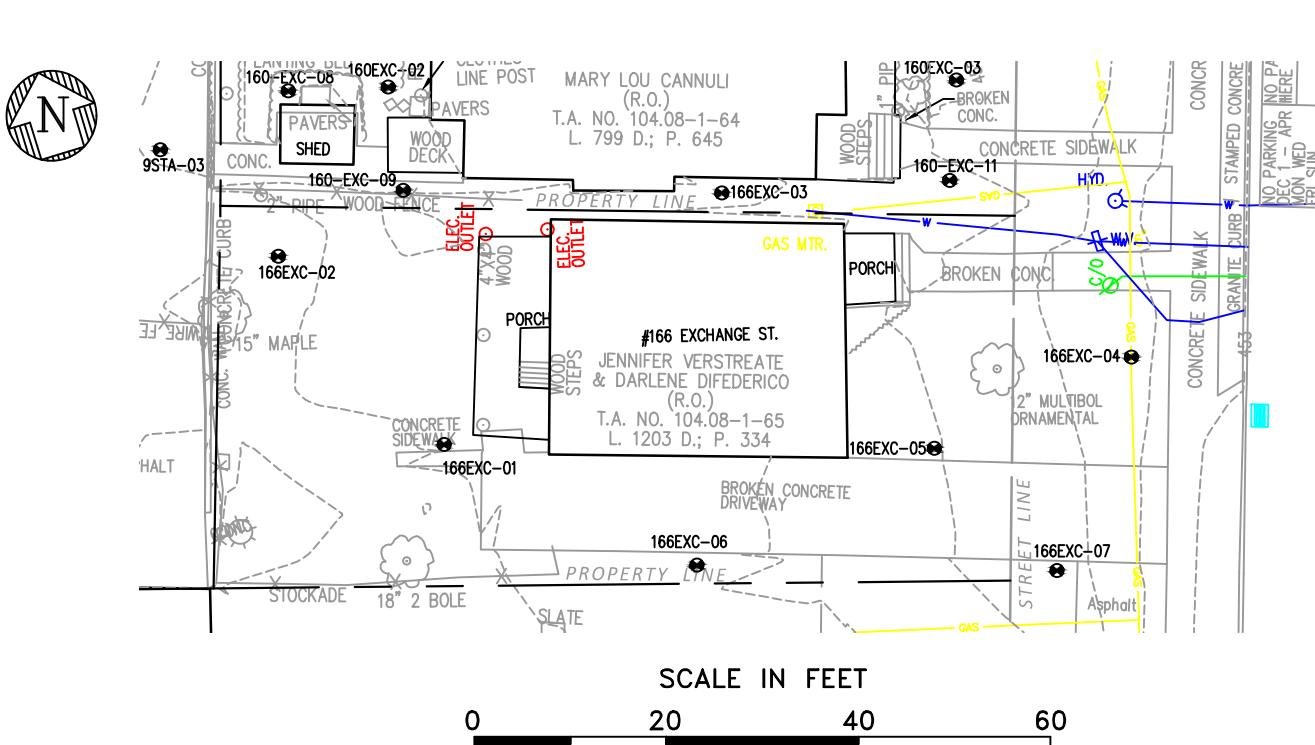
160EXC-04 ●	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
—RED—	OVERHEAD ELECTRIC LINE
—YELLOW—	GAS LINE
—BLUE—	WATER LINE
—GREEN—	SANITARY SEWER LINE
E	ELECTRIC METER
G	GAS VALVE
M	GAS METER
W	WATER VALVE
UPL	UTILITY POLE WITH LIGHT
T	TELEPHONE MANHOLE
ULP	UTILITY LIGHT POLE
[Grey Box]	RESULT EXCEEDS REMEDIAL GOAL

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTE FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

Start Depth (inches)	End Depth (inches)	Analytical Results for 160 Exchange Street																					
		Results in milligrams per kilogram (mg/kg)																					
		160EXC-01		160EXC-02		160EXC-03		160EXC-04		160EXC-05		160EXC-06		160EXC-07		160EXC-08		160EXC-09		160EXC-10		160EXC-11	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead		
0	6	12.4	192	15.6	244	52.8	878	7.7	109	13.0	275	N/A	N/A	15.5	155	8.5	178	15.2	727	22.0	279	21.8	627
6	12	9.0	76.5	22.8	528	24.4	379	11.6	203	17.8	300	10.7	91.5	18.5	185	9.9	191	17.1	92.1	8.1	122	11.0	293
12	18	6.4	17.8	6.7	223	7.2	142	5.7	85.0 J	5.4 J	84.4	4.8	68.5	16.3	254	6.0	75.1	7.1	85.7	6.8	110	6.3	167
18	24	3.5 J	144	5.9 J	160	7.6	254	5.9	23.9	5.1 J	110	4.6	78.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1. N/A = A SAMPLE COULD NOT BE COLLECTED AT THIS LOCATION/DEPTH.



LEGEND

166EXC-03	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
_____	OVERHEAD ELECTRIC LINE
_____	GAS LINE
_____	WATER LINE
_____	SANITARY SEWER LINE
	ELECTRIC METER
	GAS VALVE
	GAS METER
	WATER VALVE
	UTILITY POLE WITH LIGHT
	TELEPHONE MANHOLE
	UTILITY LIGHT POLE

RESULT EXCEEDS REMEDIAL GOAL

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
 2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
 3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
 4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTES FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

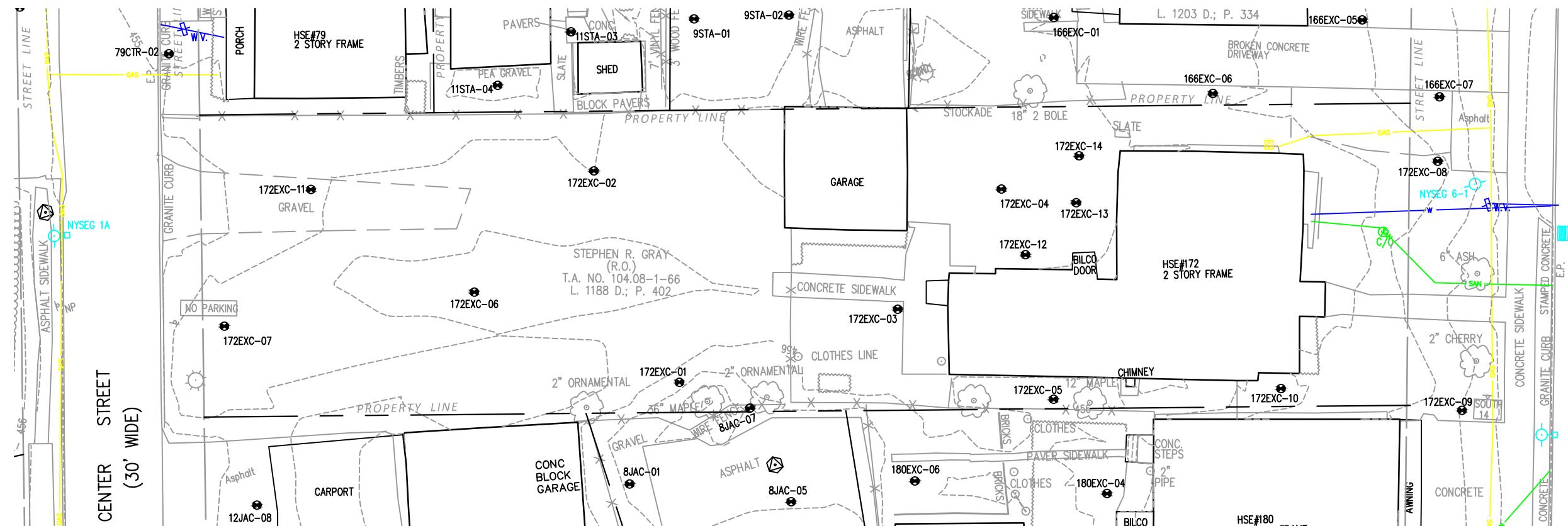
Analytical Results for 166 Exchange Street

Analytical Results for 166 Exchange Street													
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)											
		166EXC-01		166EXC-02		166EXC-03		166EXC-04		166EXC-05		166EXC-06	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	14.2	477	22.2	379	7.3	626	5.4 J	74.4	3.3 J	188	11.5	159
6	12	16.6	572	39.7	456	5.7	98.0	5.8 J	82.1	4.4 J	303 J	7.3	275
12	18	9.8	221	12.2	136	31.5	263	7.7	43.8	3.0 J	36.5	11.1	131
18	24	7.9	72.2	9.8	120	4.7	94.6	5.7 J	58.2	3.7 J	28.4	3.8 J	14.2
												4.9	10.0

1. N/A = A SAMPLE COULD NOT BE COLLECTED AT THIS LOCATION/DEPTH.



N



LEGEND

172EXC-03 ●	SOIL CORE LOCATION		WATER VALVE
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE		UTILITY POLE WITH LIGHT
—	OVERHEAD ELECTRIC LINE		TELEPHONE MANHOLE
—	GAS LINE		UTILITY LIGHT POLE
—	WATER LINE		
—	SANITARY SEWER LINE		
[E]	ELECTRIC METER		
	GAS VALVE		
	GAS METER		
		RESULT EXCEEDS REMEDIAL GOAL	

SCALE IN FEET



NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C. ANALYTES FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE IN THE SAMPLE.

Analytical Results for 172 Exchange Street

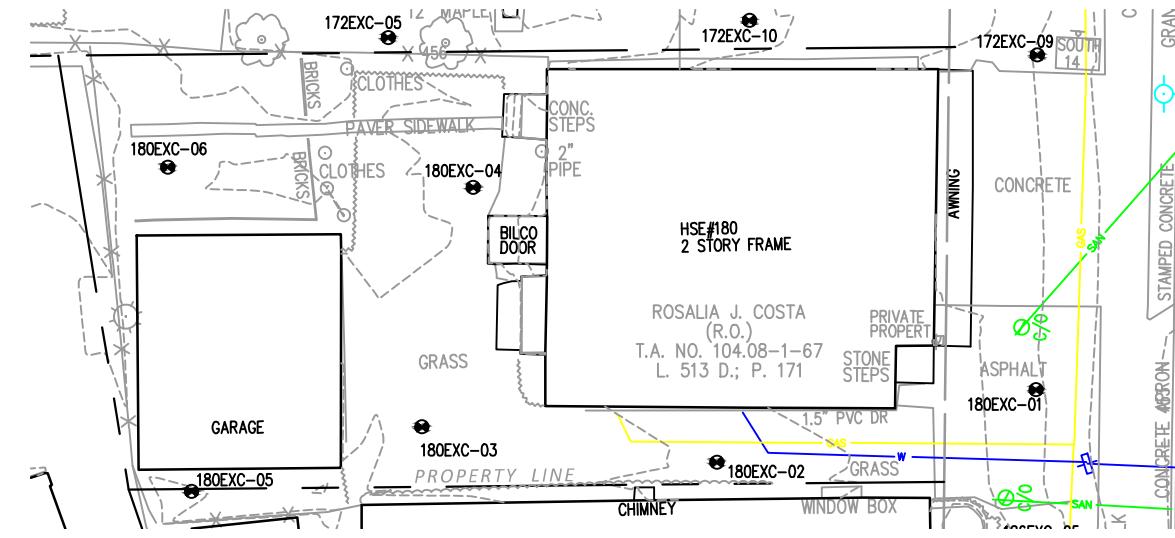
Results in milligrams per kilogram (mg/kg)

Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																172EXC-09		172EXC-10		172EXC-11		172EXC-12		172EXC-13		172EXC-14	
		Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	10.4	430	5.0	78.6	20.8	481	13.2	178	31.0	442	19.7	346	19.9	1550	7.7	51.9	26.0	554	14.8	801	13.1	44.8	17.6	666	14.6	318	15.8	216
6	12	19.4	556	21.9	394	25.2	433	55.8	534	27.1	352	26.2	581	19.2	175	16.6	82.8	27.0	474	8.2	126	19.1	243	13.6	590	7.1	323	23.5 J	166 J
12	18	19.1	390	23.8	267	12.2	247	23.0	305	8.3	109	9.1	34.9	6.2	18.4	5.9	13.5	12.5	215	6.6	61.4	15.1	128	5.4	85.2	5.0	69.2	15.1	139
18	24	15.6	195	6.3	19.3	8.9	92.8	4.5	53.8	3.6	70.0	5.2	28.5 J	5.6	16.8	3.3 J	10	9.1	112	7.5	21.7	7.9	24.1	4.6	13.5	3.8	12.7	3.6	21.3



1. LEAD RESULT FOR 172EXC-08 DEPTH 6–12" IS FROM THE FIELD DUPLICATE SAMPLE.

ANALYTICAL RESULTS
172 EXCHANGE STREET
FORMER GENEVA FOUNDRY,
AIR DEPOSITION AREA OU3
GENEVA, ONTARIO COUNTY, NEW YORK



NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTICS FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

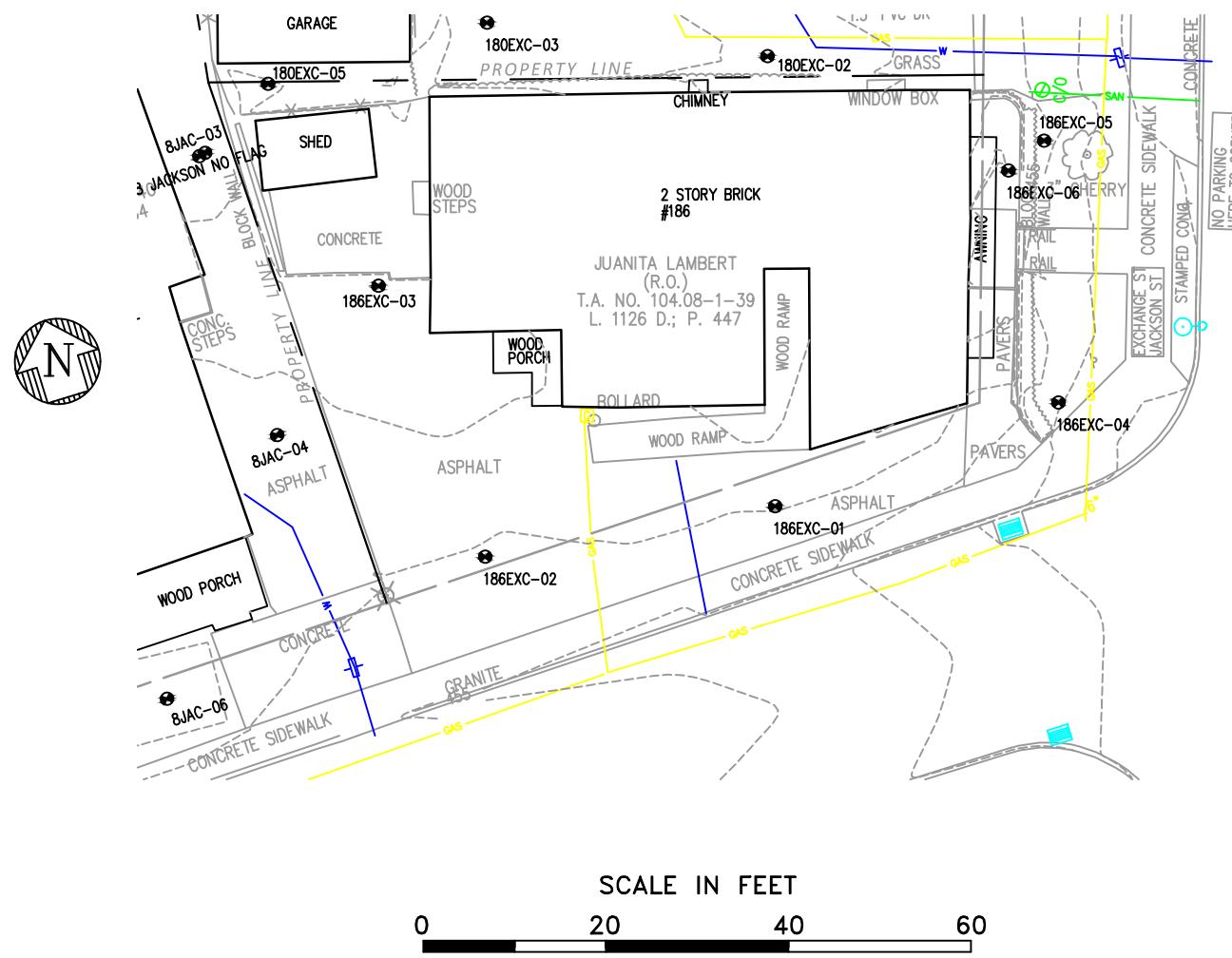
LEGEND

180EXC-03 ●	SOIL CORE LOCATION
— 516 —	EXISTING TOPOGRAPHIC CONTOUR LINE
— RED —	OVERHEAD ELECTRIC LINE
— Y —	GAS LINE
— BLUE —	WATER LINE
— GREEN —	SANITARY SEWER LINE
E	ELECTRIC METER
Y	GAS VALVE
C	GAS METER
W	WATER VALVE
U	UTILITY POLE WITH LIGHT
T	TELEPHONE MANHOLE
O	UTILITY LIGHT POLE

RESULT EXCEEDS REMEDIAL GOAL

Analytical Results for 180 Exchange Street													
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)											
		180EXC-01		180EXC-02		180EXC-03		180EXC-04		180EXC-05		180EXC-06	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	N/A	N/A	15.1	168	19.8	217	17.4	792	23.6	1230	21.4	582
6	12	2.5 U	16.6	6.8	172	15.4	359	15.6	378	21.0	1580	16.9	336
12	18	5.1J	10.5	4.8J	43.8	8.6	572	7.0	149J	7.6	195	10.8	208
18	24	4.0J	7.4	3.1J	9.0	5.7	181	8.2	197	3.6J	111	1.6	45.9

1. N/A = A SAMPLE COULD NOT BE COLLECTED AT THIS LOCATION/DEPTH.
2. U = ESTIMATED NON-DETECTED VALUE (METHOD DETECTION LIMIT SHOWN).
3. ARSENIC RESULT FOR 180EXC-04 DEPTH 6-12" IS FROM THE FIELD DUPLICATE SAMPLE.



LEGEND

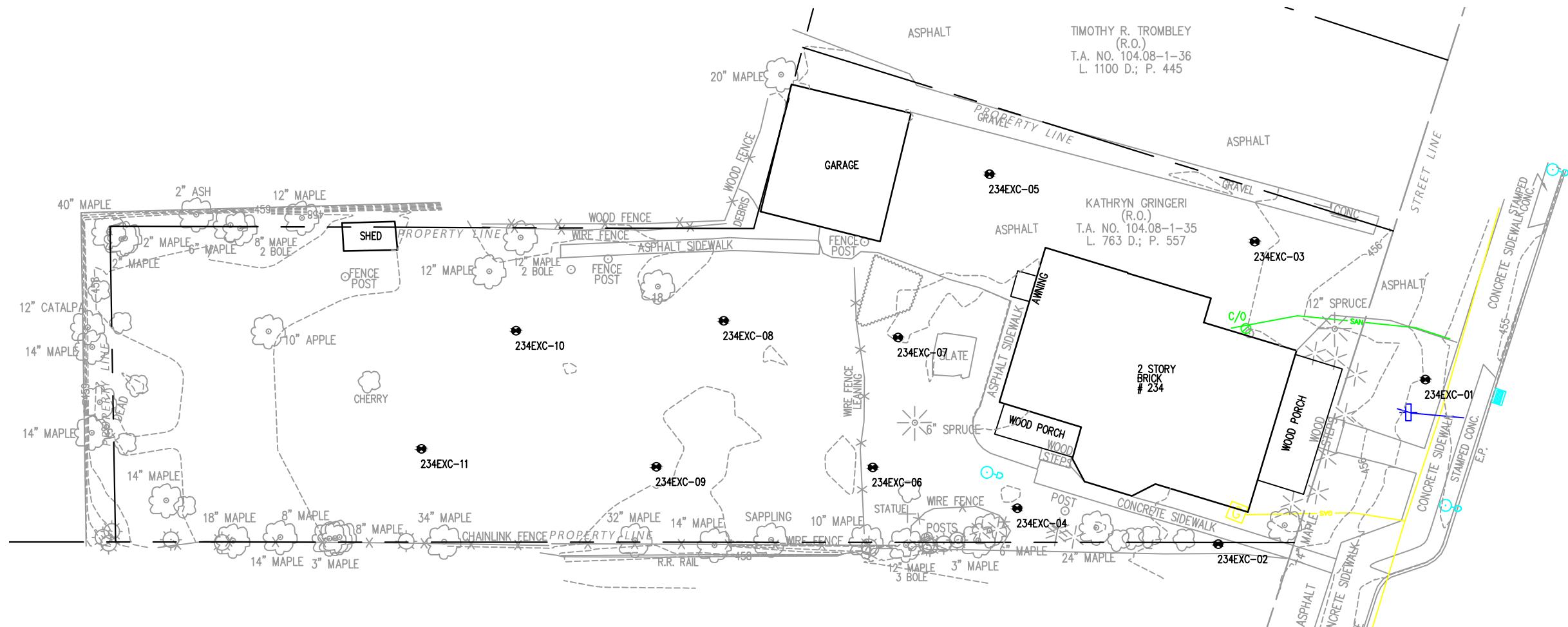
186EXC-03	SOIL CORE LOCATION
—516—	EXISTING TOPOGRAPHIC CONTOUR LINE
—OVERHEAD ELECTRIC LINE	
—GAS LINE	
—WATER LINE	
—SANITARY SEWER LINE	
E	ELECTRIC METER
G	GAS VALVE
+	GAS METER
U	WATER VALVE
U	UTILITY POLE WITH LIGHT
T	TELEPHONE MANHOLE
O	UTILITY LIGHT POLE
[Grey Box]	RESULT EXCEEDS REMEDIAL GOAL

NOTES

1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C. ANALYTICS FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE IN THE SAMPLE.

Analytical Results for 186 Exchange Street													
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)											
		186EXC-01		186EXC-02		186EXC-03		186EXC-04		186EXC-05		186EXC-06	
Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead
0	6	8.1	86.8	10.1	371	18.2	1020	4.7	24.9	3.1	22.8	3.4	10.7
6	12	5.8	1150	13.8	381	6.9	699	5.4	16.5	11.8	110	2.9	14.3
12	18	5.8	193	5.4	316	5.2	75.1J	3.3	12.1	5.1	26.9	2.4	7.3
18	24	2.2J	13.5	5.0	147	4.1	80.2J	2.9	9.1	4.8	31.8	7.0	96.1

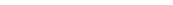
1. Arsenic and lead results for 186EXC-03 depth 12–18" are from the field duplicate samples.



LEGEND

- | | | | |
|-----------|-----------------------------------|--|------------------------------|
| 234EXC-03 | SOIL CORE LOCATION | | WATER VALVE |
| —516— | EXISTING TOPOGRAPHIC CONTOUR LINE | | UTILITY POLE WITH LIGHT |
| — | OVERHEAD ELECTRIC LINE | | TELEPHONE MANHOLE |
| — | GAS LINE | | UTILITY LIGHT POLE |
| — | WATER LINE | | |
| — | SANITARY SEWER LINE | | RESULT EXCEEDS REMEDIAL GOAL |
| | ELECTRIC METER | | |
| | GAS VALVE | | |
| | GAS METER | | |

SCALE IN FEET



A horizontal scale bar with tick marks at 0, 20, 40, and 60. The segment between 0 and 20 is shaded black.

NOTE

- 1. FIGURE PREPARED BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
 2. BASE MAP SURVEY BY POPLI DESIGN GROUP.
 3. ANALYTICAL RESULTS PROVIDED BY TESTAMERICA LABORATORIES, INC.
 4. DATA VALIDATION BY ECOLOGY AND ENVIRONMENT ENGINEERING AND GEOLOGY, P.C.
ANALYTES FLAGGED "J" WERE POSITIVELY IDENTIFIED AND THE ASSOCIATED
VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE
IN THE SAMPLE.

Analytical Results for 234 Exchange Street

		Analytical Results for 234 Exchange Street																					
Start Depth (inches)	End Depth (inches)	Results in milligrams per kilogram (mg/kg)																					
		234EXC-01		234EXC-02		234EXC-03		234EXC-04		234EXC-05		234EXC-06		234EXC-07		234EXC-08		234EXC-09		234EXC-10		234EXC-11	
		Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead	Arsenic	Lead		
0	6	13.2	215	21.9	984	N/A	N/A	27.8	426	N/A	N/A	18.3	498	22.2	605	17.3	686	18.4	567	15.3	587	16.6	820
6	12	13.1	193	26.0 J	317	6.1	25.3	22.0	191	6.8	72.5	13.9	269	21.0	459	19.5	684	17.8	437	15.4	432	17.8	580
12	18	8.0	98.5	8.6	177	8.0	121 J	8.7	76.2	6.4	55.1	10.9	144	14.7	250	12.6	159	17.6	126	13.6	211	15.0	185
18	24	8.0	89.1	6.7	149	9.7	127	5.1	72.1	5.5	159	5.8	60.5	6.8	63.8	8.7	138 J	12.1	99.3	8.0	89.1	7.0	48.9

1. N/A = A SAMPLE COULD NOT BE COLLECTED AT THIS LOCATION/DEPTH.
 2. ARSENIC RESULT FOR 234EXC-08 DEPTH 12-18" IS FROM THE FIELD DUPLICATE SAMPLE

