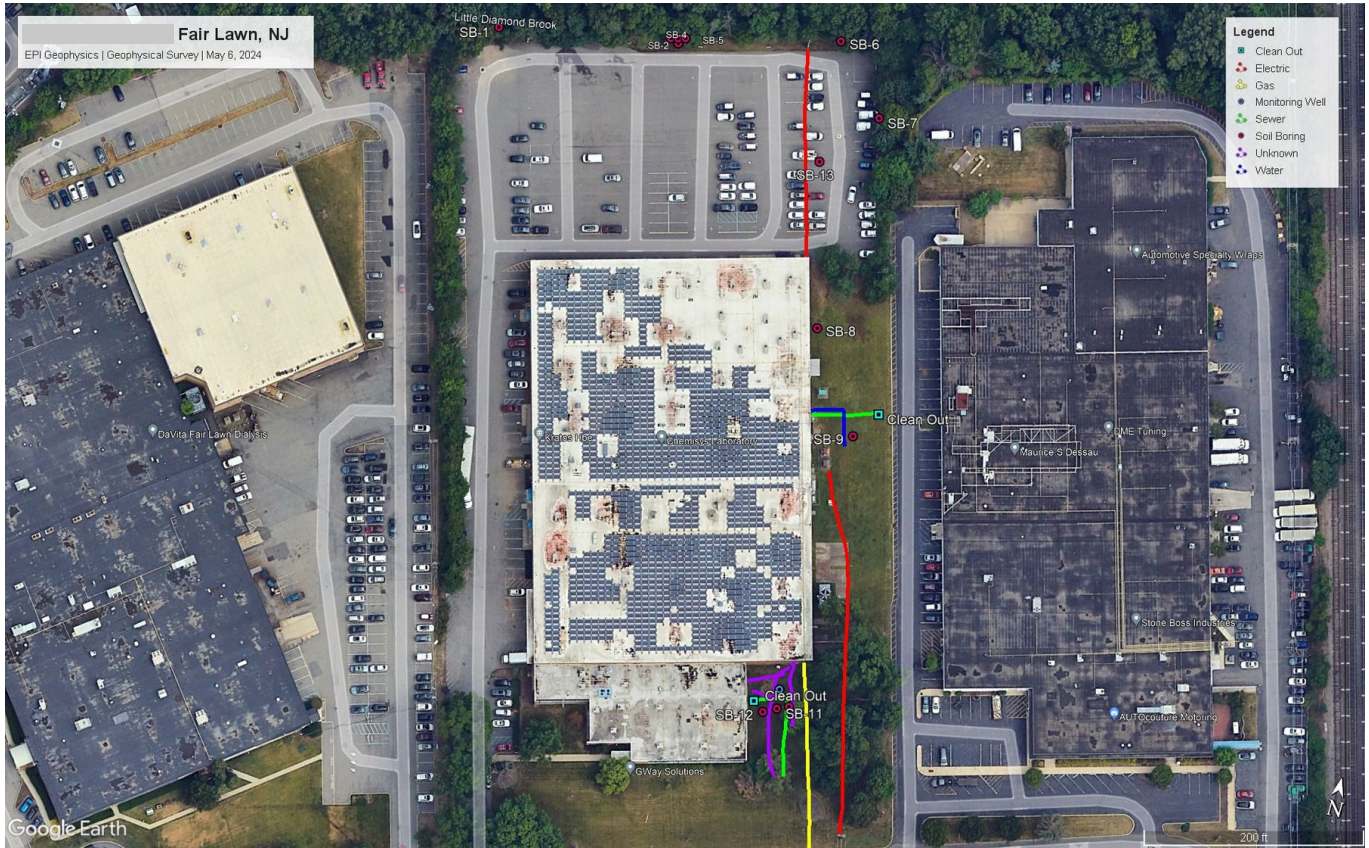


EPI Lead Number	10355
Company	
Report created on:	05 / 10 / 2024
EPI Geophysicist	Dylan Chingery Robert Wiencek
Geophysicist Email	dylan@epi-geophysics.com bob@epi-geophysics.com
Geophysics conducted on:	May 6, 2024
Weather	Cloudy, 70°
Project Name	Fair Lawn, NJ GPR + Soil Sampling
Project Address	Fair Lawn, New Jersey
Client's Purchase Order (if applicable)	PO#: 365558 Project #: 487352
General scope of work	Clear a monitoring well location and soil boring locations.

FIGURE 1 - PROJECT MAP



PROJECT SCOPE: EPI Geophysics was contracted by [redacted] to clear 13 soil boring locations and one monitoring well location at [redacted]

[redacted] to clear 13 soil boring in Fair Lawn, New Jersey.

EQUIPMENT USED

- GPR: GSSI SIR-3000 RADAR SYSTEM - 400 MHz antenna
- GPR: GSSI SIR-4000 RADAR SYSTEM - 350 HS antenna
- RADIO FREQUENCY (RF) LINE TRACING: VIVAX/METROTECH – vLOCPRO2
- TRIMBLE Geo7X GPS

Geophysical Survey Results

The GPR survey made use of a GSSI SIR-4000 together with a 350 HS antenna mounted on a cart. The method involves the transmission of microwave-like signals directly down into the ground and the reception of those same signals as they reflect back up to the receiver. The method works best in dry, sandy, resistive soils with an approximate depth of penetration of around 8'. In damp, clayey, conductive soils the depth of penetration may be as little as 2'-3'. The soils at this particular project site allowed a signal penetration down to a depth of around 4'.

Line Tracing was undertaken with a Vivax-Metrotech system, specifically the Loc-10Tx (10 Watt) transmitter and a VLocPRo2 receiver. The system works on at least two modes including a passive mode where the receiver detects any lines carrying current as well as an induction/conduction mode. In the induction/conduction mode, a specific radio frequency is transmitted into a cable or pipe (either through direct connection or through inductive coupling) and that same frequency is then detected with the receiver to trace the location of the buried pipe or cable.

Limitations

EPI Geophysics completes non-intrusive geophysical surveys using equipment and techniques consistent with the standards of the subsurface utility mapping industry. However, there can be no guarantee that every target will be detected at a particular site. Subsurface conditions may prevent some or all geophysical methods from detecting a particular target. Targets that are non-metallic or deep, as well as areas that are paved or covered with reinforced concrete may be difficult to locate.

Every reasonable effort was made to locate all systems of interest whether indicated on records available to us or not, but EPI Geophysics does not guarantee that all existing utility systems can or will be used as a tool and should not be considered a guarantee regarding the presence or absence of USTs or piping.

FIGURE 2

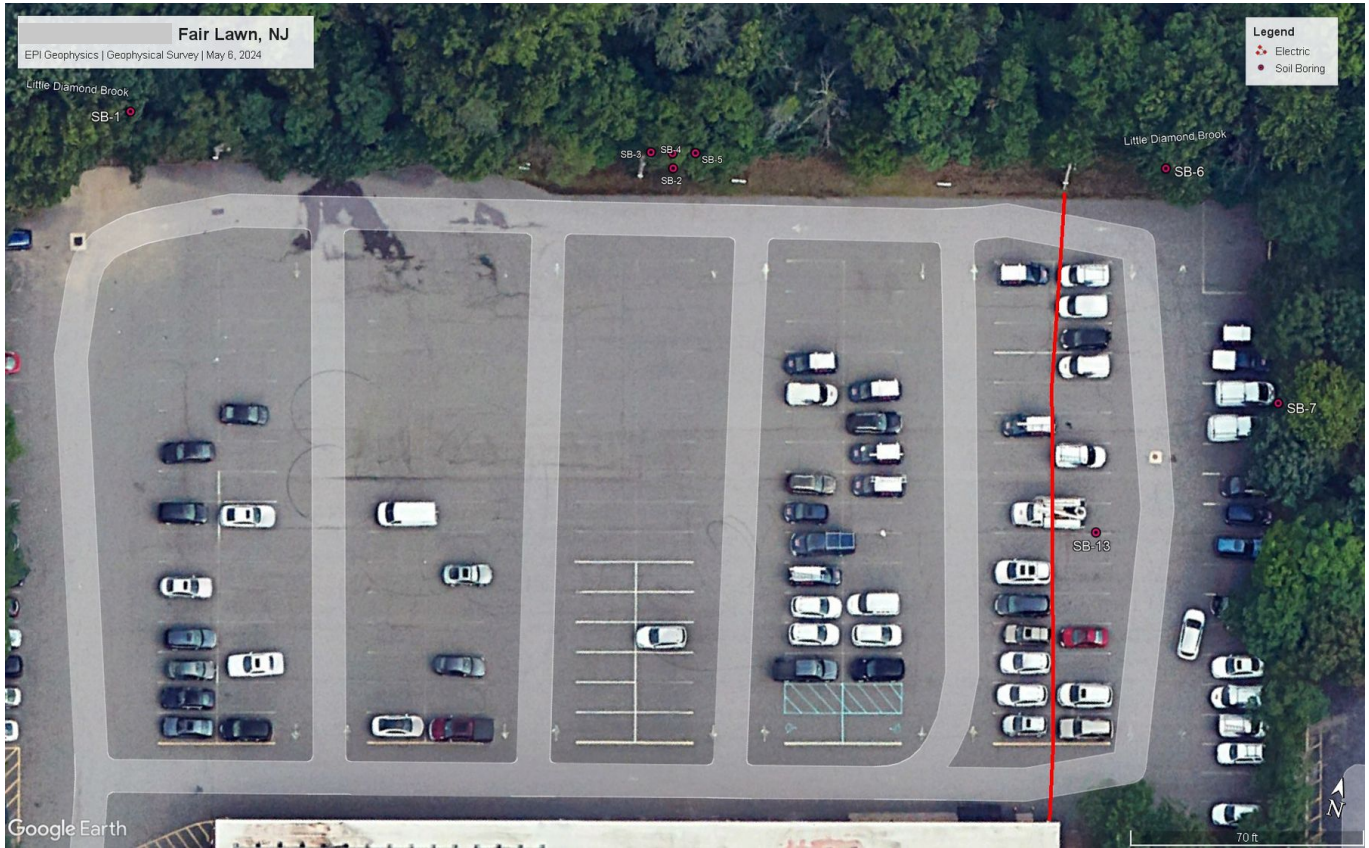


Figure showing a close-up of the parking lot area.

FIGURE 3

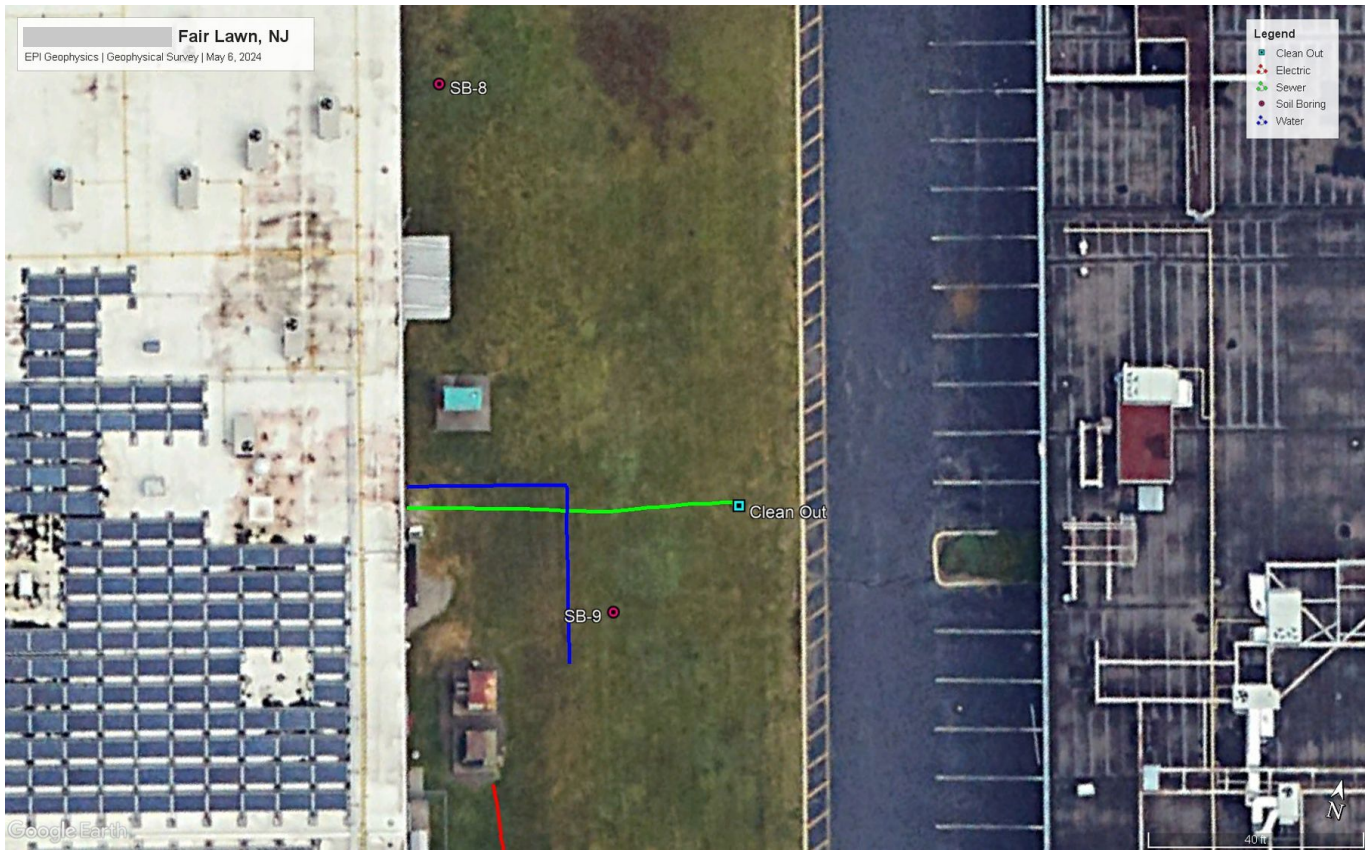


Figure showing a close-up of the east side of the building.

Soil Boring Coordinates

Soil Boring	West Longitude	North Latitude	Easting	Northing
MW-1	-74.125586416	40.945360393	595551.954	769513.647
SB-1	-74.127037387	40.946764040	595148.963	770023.299
SB-2	-74.126494507	40.946842286	595298.801	770052.445
SB-3	-74.126466234	40.946852571	595306.595	770056.225
SB-4	-74.126456097	40.946851711	595309.396	770055.924
SB-5	-74.126430117	40.946842999	595316.586	770052.781
SB-6	-74.125940033	40.946949397	595451.796	770092.121
SB-7	-74.125753858	40.946789790	595503.472	770034.195
SB-8	-74.125772167	40.946248226	595499.259	769836.875
SB-9	-74.125567618	40.946012799	595556.129	769751.348
SB-10	-74.125541750	40.945325320	595564.347	769500.923
SB-11	-74.125578748	40.945312917	595554.146	769496.360
SB-12	-74.125620695	40.945296132	595542.585	769490.196
SB-13	-74.125906144	40.946647610	595461.627	769982.217