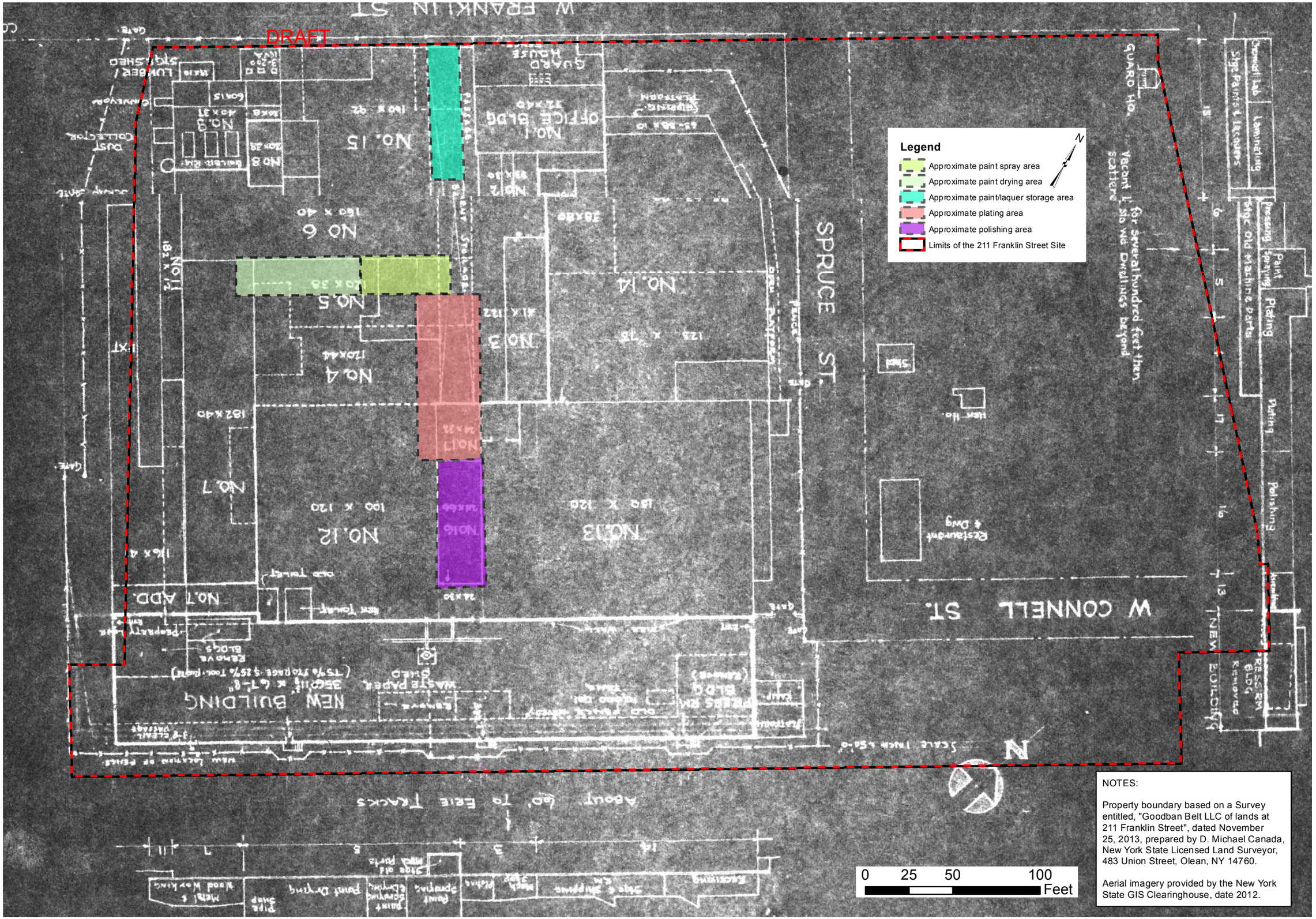


NOTES:

Property boundary based on a Survey entitled, "Goodban Belt LLC of lands at 211 Franklin Street", dated November 25, 2013, prepared by D. Michael Canada, New York State Licensed Land Surveyor, 483 Union Street, Olean, NY 14760.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2012.

DESIGNED BY	RLK
DATE	11-2013
DRAWN BY	CPS
DATE DRAWN	11-2013
SCALE	AS NOTED
DATE ISSUED	12-09-2014

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

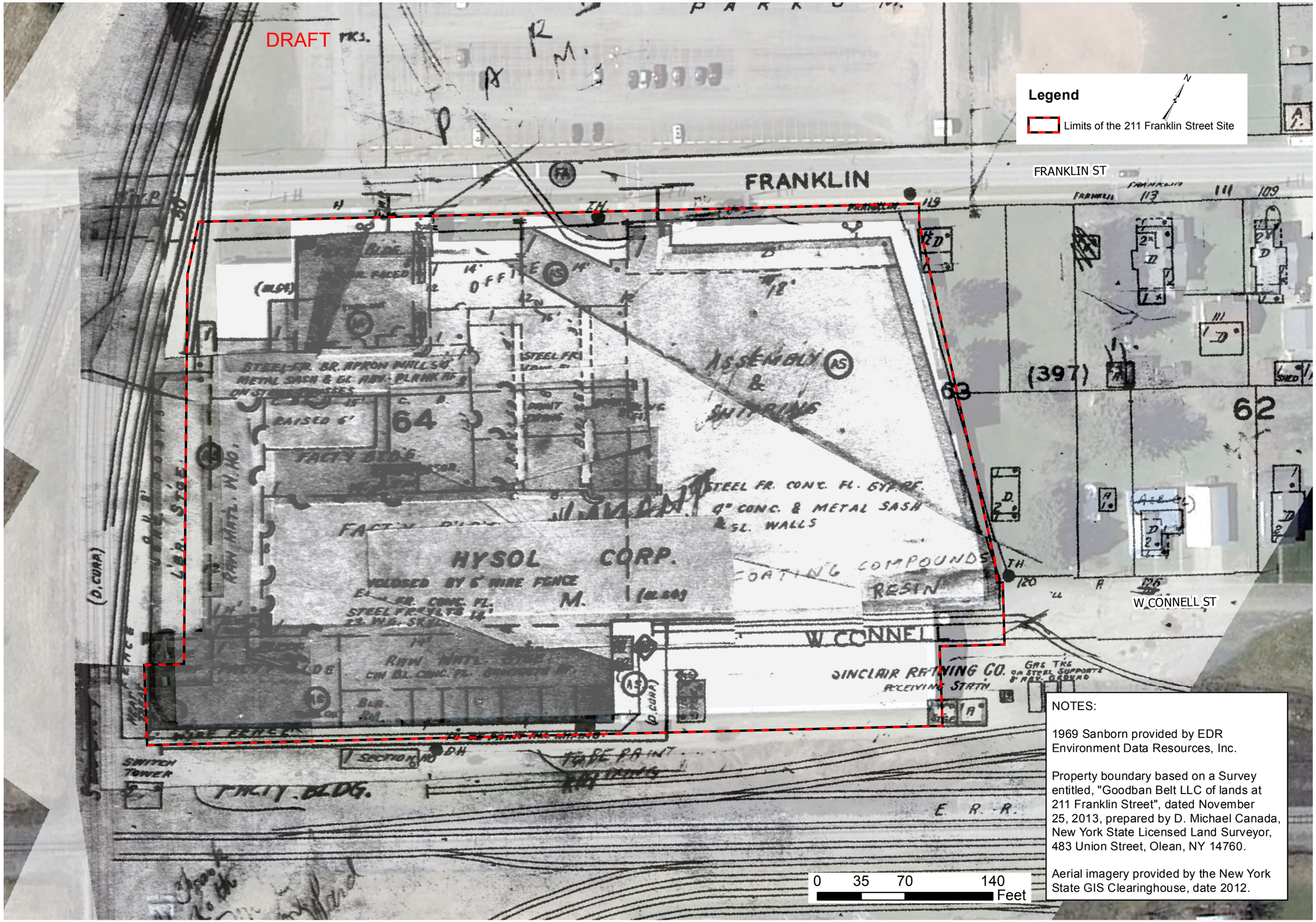
Project Title
211 FRANKLIN STREET
OLEAN, NEW YORK

BCP SITE NO. C905038 REMEDIAL INVESTIGATION

Drawing Title
Site Plan With 1943 Facilty Layout Overlay

Project No.
4884S-13

Last Date Saved: 09 Dec 2014 Document Path: \\Smelt_optiplex\gis\GIS Mapping\4884S-13\Solepo\211Franklin\4884S - 40 - 1943 Daystrom RI_Rpt Appendix.mxd



NOTES:

1969 Sanborn provided by EDR Environment Data Resources, Inc.

Property boundary based on a Survey entitled, "Goodban Belt LLC of lands at 211 Franklin Street", dated November 25, 2013, prepared by D. Michael Canada, New York State Licensed Land Surveyor, 483 Union Street, Olean, NY 14760.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2012.

DATE	11-2013
DESIGNED BY	RLK
DATE DRAWN	11-2013
DRAWN BY	CPS
DATE ISSUED	12-09-2014
SCALE	AS NOTED

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
211 FRANKLIN STREET
OLEAN, NEW YORK

BCP SITE NO. C905038 REMEDIAL INVESTIGATION

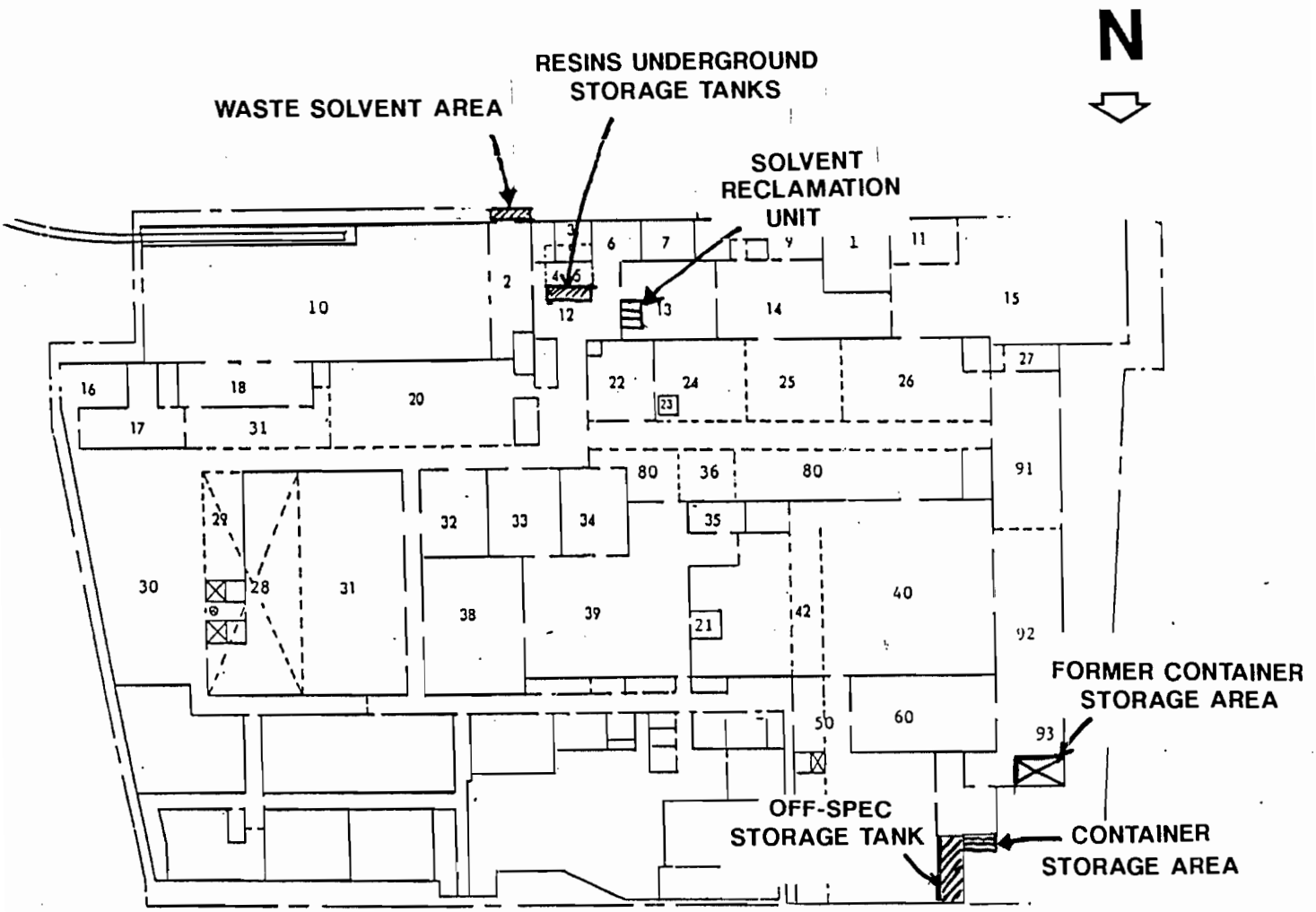
Drawing Title
Site Plan with 1969 Sanborn Map Overlay

Project No.
4884S-13

DRAFT

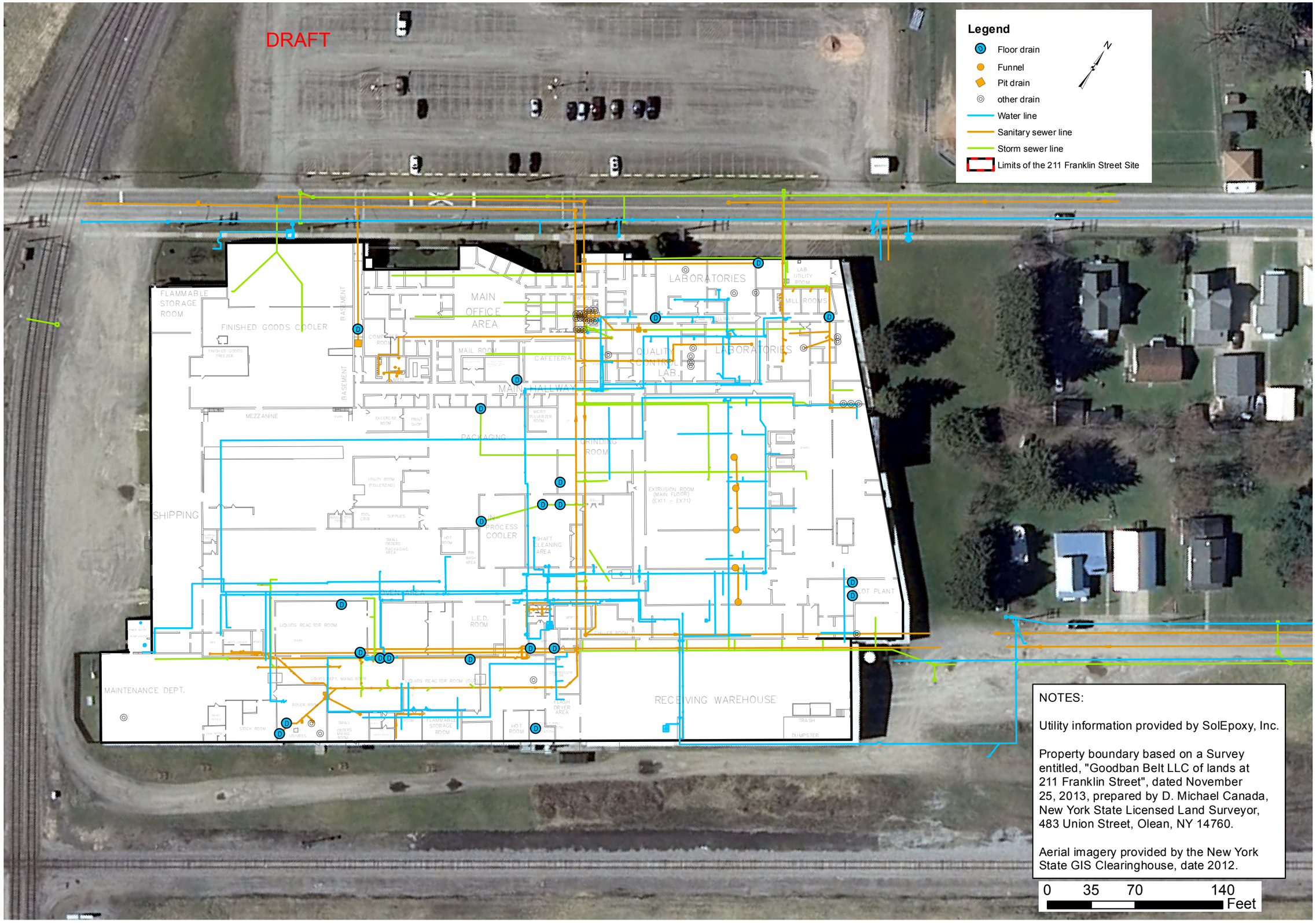
FIGURE 1

FACILITY LAYOUT



1. Boiler Room
2. Raw Material Storage
3. Oven #1
4. Underground Resin Storage
5. Underground Resin Storage
6. Bulk Resin Storage
7. Solvent Storage
8. Liquid Supply Room
9. Liquid Production
10. Raw Material Storage
11. Maintenance Office
12. Raw Material Storage
13. Liquid Production
14. Liquid Production
15. Maintenance Shop
16. Raw Material Storage
17. Powder Pilot Plant
18. Trash Dock
19.
20. Raw Material Storage
21. Powder Supply Room
22. LED Production
23. LED Cooler
24. Cast Products Production
25. Cable Splice Production
26. Liquid Packaging & Specialty Production
27. Materials Equipment
28. Powder Assembly & Preblend Area
29. Pilot Plant Storage
30. Raw Material Storage
31. Powder Production
32. Blending & Preforming Area
33. Powder Production
34. Refrigerated Storage
35. Hot Room
36. Grommet Area
37.
38. Powder Finishing Area
39. Powder Blending & Packaging Area
40. Raw Material Storage
41.
42. Basement Cooler
43.
44.
45. Records Storage
50. Raw Material Storage
60. Refrigerated Storage
70. Refrigerated Storage
80. Finished Goods Storage
91. Receiving Dock
92. Shipping Dock
93. Hazardous Waste Storage

Source: Hysol, 1980.



NOTES:

Utility information provided by SolEpoxy, Inc.

Property boundary based on a Survey entitled, "Goodban Belt LLC of lands at 211 Franklin Street", dated November 25, 2013, prepared by D. Michael Canada, New York State Licensed Land Surveyor, 483 Union Street, Olean, NY 14760.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2012.

DESIGNED BY	DATE	DRAWN BY	DATE DRAWN	SCALE	DATE ISSUED
RLK	11-2013	CPS	11-2013	AS NOTED	12-19-2014

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
211 FRANKLIN STREET
OLEAN, NEW YORK

BCP SITE NO. C905038 REMEDIAL INVESTIGATION

Drawing Title
Site Plan showing the Approximate Current Locations of Drains and Select Underground Utilities

Project No.
4884S-13

Last Date Saved: 13 Dec 2014 Document Path: \\Smelt_optiplex\gis\GISMapping\4884S-13Sdepo\211Franklin\4884S - 49 - 211FranklinUtilities RI_RptAppendix.mxd

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APPENDIX B

AMEC GEOPHYSICAL SURVEY REPORT

DRAFT

90 B John Muir Drive
Amherst, New York 14228
(716) 565-0624 • Fax (716) 565-0625

June 23, 2014

Charles Hampton
Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

Transmitted via email to: Charles Hampton [champton@daymail.net]

Dear Mr. Hampton:

Subject: Geophysical Survey Results,
211 and 202 Franklin St
Olean NY

1.0 INTRODUCTION

This letter report presents the results of the geophysical investigation performed for Day Environmental, Inc. (Day) in support of their environmental investigation of a property located at 211 and 202 Franklin Street in Olean, NY (the Site). The Site is bisected by Franklin Street. The portion south of Franklin Street is a large industrial building and the portion north of Franklin St is comprised of a parking lot and vegetated areas.

A total of five areas were surveyed as shown in Figure 1. Survey Areas 1 through 4 are located around the perimeter of the main site building. Area 5 is comprised of the area to the north of Franklin Street. The geophysical investigation was designed to geophysically characterize the subsurface and focus a follow-up intrusive investigation, if warranted.

The information provided herein is intended to assist Day with their assessment of potential environmental concerns at the Site. AMEC Environment and Infrastructure, Inc. (Amec) performed data acquisition on June 7, 8 and 14, 2014 using time (EM61) and frequency (EM31) domain electromagnetic techniques.

2.0 METHODOLOGY

The following sections present the geophysical methodology utilized for this investigation.

2.1 Reference Grid

Separate and distinct reference grids were installed for the 5 areas surveyed with the EM61. Building corners or other site features where utilized to anchor the EM61 grids. "Grid North" for the EM61 surveys was established such that the survey could be conducted parallel or at right angles to prominent site features. Red and white spray paint was utilized to mark the grids to allow EM61 data to be collected along lines spaced 3 ft apart. Select grid locations were labeled to aid in the reoccupation of anomalous locations if subsequent intrusive work is conducted.

The EM31 survey utilized a differential GPS system for positioning. The equipment was the Trimble AG114 interfaced to an Allegro data logger. Positioning was displayed in real time. EM31 geophysical data were collected along lines spaced approximately 12.5 ft apart.

2.2 Electromagnetic EM61 Survey Methodology

Areas 1 through 4 and portions of Area 5 were geophysically surveyed using the Geonics EM61. The EM61 unit is a high sensitivity, high resolution time domain electromagnetic (TDEM) metal detector that can detect both ferrous and nonferrous metallic objects. It has an approximate investigation depth of 10 feet. The processing console is contained in a backpack worn by the operator which is interfaced to a digital data logger. The transmitter and two receiver coils are located on a two-wheeled cart that is pulled by the operator.

EM61 in use (photo not from this site)

The device's transmitter coil generates a pulsed primary EM field at a rate of 150 pulses per second, inducing eddy currents into the subsurface. The decay rates of these eddy currents are

measured by two, 3.28 foot by 1.64 foot (1 meter by ½ meter) rectangular receiver coils. By taking the measurements at a relatively long time frame after termination of the primary pulse, the response is practically independent of the survey area's terrain conductivity. Specifically, the decay rates of the eddy currents are much longer for metals than for normal soils allowing the discrimination of the two.

Data are collected from the EM61's two receiver coils. One of the receiver coils is located coincident to the transmitter coil. The other receiver coil is located 1.31 feet (0.4 meters) above the transmitter coil. Data from the top receiver coil are stored on Channel 1 of a digital data logger. Data from the bottom receiver coil are stored on Channel 2 of the data logger. Channel 1 and Channel 2 data are simultaneously recorded at each station location. The instrument responses are recorded in units of milliVolts (mV). Data were recorded digitally by a data logger at a rate of approximately 2 measurements per foot along the survey lines which were spaced 3 feet apart.

2.3 Electromagnetic EM31 Survey Methodology

Portions of Area 5 were surveyed with the Geonics EM31 Terrain Conductivity meter. The EM31 was used to measure and record the quadrature component (ground conductivity) and the inphase component of the EM field along the survey lines. The quadrature component of the EM field is a measurement of the apparent ground conductivity. The inphase component of the EM field is sensitive to metallic objects.

EM31 with GPS in use (photo not from this site)

Comparison of the quadrature component of the EM field data (expressed in units of milliSiemens per meter (mS/m)) and the inphase component data (expressed in units of parts per thousand (ppt)) results in increased anomaly definition. The character of the EM response, low or high, is partially dependent on the orientation of the buried target relative to the orientation of the EM31 device during data acquisition, and the survey direction. A buried metal pipe, for example, will exhibit a high valued response when the trend of the pipe is

parallel to the survey direction. Alternatively, when a survey line crosses a buried metal pipe whose trend is perpendicular to the survey direction, it is characterized by a low response. Similarly, other complex buried metal anomalies are indicated by a coupling of a high and low response.

All readings were taken with the instrument oriented parallel to the direction of travel, in the vertical dipole mode and with the instrument at waist height. The depth of penetration with the instrument in this configuration is approximately 12 to 15 feet below ground surface. Data were collected and stored in a solid state memory data logger during the survey. The data logger was interfaced to a portable computer and the data were transferred to a disk for subsequent processing and interpretation. A survey base station was established on-site and was revisited throughout the survey to check for instrument drift and malfunction. No significant drift or malfunction was observed.

The terrain conductivity and inphase data were initially edited and then plotted as profile lines for interpretation. Contour maps of the data were then constructed and utilized for final interpretation. The geophysical data are presented in final form as a series of color contour maps. The color maps allow for an illustration of detected anomalies that are associated with conductive materials such as buried metals, wastes, fill, utilities, and changes in soil texture and/or moisture content.

3.0 Results

Geophysical data collected at the Site are shown in Figures 2 through 8. The color bar on each figure indicates the colors associated with the respective measured values. Surface features encountered, such as monitoring wells and light posts, are shown on the figures. Anomalies interpreted to be potentially significant from an environmental perspective are labeled A through F on the figures and discussed below. It is important to note that the labeled anomalies are not an exhaustive listing of detected anomalies. Any anomalous response, labeled or unlabelled may be of environmental significance. In addition, any labeled anomaly may simply be related to miscellaneous fill material of little or no environmental relevance.

<u>Area 1 (Figure 2)</u>

Area 1 is the survey area northwest and west of the main site building. Loading docks line the west end of the building and a prominent response associated with the associated protective steel bollards is observed. Anomalies A and B are interpreted as buried metal anomalies that may be environmental significance.

Area 2 (Figure 3)

Area 2 is the survey area southwest of the main site building. **Anomalies C and D** are interpreted as buried metal anomalies that may be environmental significance.

Area 3 (Figure 4)

Area 3 is the survey area in the south-central portion of the main site building. A concrete ramp and numerous exterior building features are present in this area. A linear anomaly is interpreted to trend east-west approximately 20 ft south of the building. This anomaly is denoted with a dashed red line on Figure 4. Anomaly E is a large buried metal anomaly located in the southeast portion of this survey area. Surface metallic debris (denoted "SM" on the figure) was observed in this area. **Anomaly E** may be related to additional metallic debris in the subsurface or other buried metals of environmental significance.

Area 4 (Figure 5)

Area 4 is the survey area southeast of the main site building. A rail line is observed to trend east-west terminating at the building. A feature that appeared to be a vent was observed adjacent to the southeast corner of the building. **Anomaly F** is a buried metal anomaly south of the building. This response was observed over the entire 25 ft east-west portion of the survey. A portion of this anomaly is likely associated with the building itself however this anomaly was observed to extend 9 ft from the building. Anomaly F may represent a UST immediately adjacent to the building or other miscellaneous buried metals.

Area 5

Area 5 is the portion of the Site that was surveyed north of Franklin Street. Area 5 is bounded on the west by railroad property and to the east by a baseball diamond. The southern portion of Area 5 is an asphalt paved parking area and the northern portion is vegetated. Portions of the northern area are thickly vegetated or wooded precluding geophysical data acquisition.

- Area 5 EM61 Data (Figure 6)

Numerous buried metal anomalies are observed in the EM61 data set of Figure 6. The large rectilinear nature of many of these suggest remnants of buildings or re-enforced concrete pads. Any of these anomalies, or the edges of these anomalies may be of environmental significance. Though many anomalies are observed, two are called out for special consideration. These are labeled **Anomalies G and H**. Anomaly G is a linear anomaly that trends parallel to the rail line on the western boundary of the site. Linear anomalies are

typically related to buried utilities however their response is usually consistent (when compared across adjacent profile lines). Anomaly G is unique in that the response in not consistently observed at the same magnitude across adjacent profile lines. It should be noted that Anomaly G may lie outside the originally scoped geophysical survey area. (In order to collect the EM61 data the grid needs to be installed in a rectilinear fashion; angled boundaries are addressed by "squaring off" the survey grid). Anomaly H is a buried metal anomaly located in the paved parking area. An interpreted linear anomaly is observed to trend north-south immediately adjacent to Anomaly H.

- Area 5 EM31 Data (Figures 7 and 8)

EM31 conductivity and inphase data for the site is shown in Figures 7 and 8, respectively. Surface features that were observed during the data acquisition are noted on the figures. Positioning was accomplished using an integrated GPS system.

Actual measurement points are shown on the figures as a series of closely spaced tick marks. Data were primarily acquired along parallel lines. Deviations from parallel lines occurred where obstructions were present. This is observed primarily around areas where vegetation precluded data acquisition along parallel lines. Areas with no data (white areas on Figures 7 and 8) are related to heavily vegetated areas where data could not be collected.

Responses from various surface metallic features are evident in the geophysical data. Most notable are debris piles and surface metals. The locations of these surface features are noted on the figures so they are distinguishable from the interpreted subsurface anomalies.

Terrain Conductivity (Figure 7) values at the site were observed to range from below 5 mS/m to over 90 mS/m. The variation in terrain conductivity may be related to any one or combination of the following conditions:

- A change in soil/fill type. For example, an increase in relative clay content may increase the measured conductivity and variations in fill type will cause associated anomalies;

- A change in soil moisture. Moisture content would be expected to increase in areas of low topographic elevation as more saturated sediments lie within the depth of investigation of the EM instrument;

- A change in pore fluid specific conductance. For example, the presence of salt-impacted water within the pore space of the shallow soil will increase the measured conductivity primarily due to the presence of chloride ions; or

- Interference from surface metallic anthropogenic features such as powerlines, fences, pipes, reinforced concrete and other metallic structures.

- Subsurface objects with varying electrical properties

The inphase data set that is shown in Figure 8 exhibits a response that is similar to the conductivity data. The inphase response data is often referred to as the "metal detection" mode however buried metallic objects are expressed as anomalies in both inphase and conductivity data sets.

Eight anomalies or anomalous areas were identified as potentially being related to features of environmental significance and are labeled **Anomaly I through P** on Figures 7 and 8. These anomalies are expressed in both conductivity and inphase data sets. Subsurface material with uniform (or gradually varying) electrical properties would be expected to exhibit a uniform of slowly varying response. Buried objects are interpreted by recognizing an abrupt lateral change in measured response. Buried metallic drums, for example, would typically be expressed as a low (or negative) response (shades of dark blue on Figures 7 and 8). While such a low response is "typical" it is not uniquely the case. The shape and orientation of buried metallic objects sometimes cause a high amplitude positive response (shown in shades of red on Figures 7 and 8). The identified anomalies do not represent an exhaustive list of anomalous responses; rather the largest and most compelling are identified as areas where further intrusive investigation may be warranted.

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4.0 LIMITATIONS

The geophysical methods used during this survey are established, indirect techniques for non-destructive subsurface reconnaissance exploration. As these instruments utilize indirect methods, they are subject to inherent limitations and ambiguities. Metallic surface features (electrical wires, scrap metal, railroad lines, etc.) preclude reliable non-invasive data/results beneath, and in the immediate vicinity of, the surface features. Targets such as buried drums, buried tanks, conduits, etc. are detectable only if they produce recognizable anomalies or patterns against the background geophysical data collected. As with any remote sensing technique, the anomalies identified during a geophysical survey should be further investigated by other techniques such as historical aerial photography, test pit excavation and/or test boring, if warranted.

Please do not hesitate to contact us if you have any questions or require additional information.

Sincerely yours,
AMEC

John Luttinger
Senior Geophysicist