

Stantec Consulting Services Inc.

61 Commercial Street, Suite 100, Rochester NY 14614-1009

September 2, 2015 File: 190500800

New York State Department of Environmental Conservation Division of Environmental Remediation Remedial Bureau C 625 Broadway, 11th Floor Albany, NY 12233-7014

Attention: Sarah Saucier, P.E. Project Manager

Reference: Summary of Indium Soil Vapor Monitoring Points Decommissioning

Former Lockheed Martin French Road Facility

Utica, NY

Dear Ms. Saucier:

This letter summarizes the recent decommissioning of four existing soil vapor monitoring points (VMPs) previously installed and sampled on behalf of Lockheed Martin Corporation on the adjacent Indium Corporation (Indium) property. These VMPs had been installed as a screening measure for potential offsite impacts on the adjoining Indium property. Based on the results of that sampling, no further action was recommended. Therefore these VMPs were not retained in the site monitoring program and were subsequently scheduled for decommissioning upon issuance of the Statement of Basis.

The soil VMPs decommissioned were as follows (see locations on Figure 1: Decommissioned Soil Vapor Monitoring Point Locations):

VMP	Installation
<u>Identification</u>	<u>Depth (ft.)</u>
SG-IND-1	2.5
SG-IND-2	5
SG-IND-3	5
SG-IND-4	10

No other VMPs were installed on the Indium property.

Pre Clearance Survey

Prior to decommissioning of the soil VMPs, an access agreement was executed on June 5, 2015 by Lockheed Martin and Indium.



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After access approval was granted a subsurface geophysical screening for potential underground utility interference was performed by Underground Services, Inc. on June 17, 2015 at each of the four VMP locations. The investigation was conducted using a 250 MHz single channel ground penetrating radar (GPR) antenna and a RD7000 radio detection unit. Results from the geophysical screening are summarized in Appendix A. Based on the GPR data and observed manhole locations, a storm sewer line was determined to be located approximately two feet laterally away from sg-ind-3. Stantec confirmed that the sewer line in question belongs to the City of Utica and is buried approximately 8-10 feet below ground surface (bgs).

The screening data and field observations indicated the identified sewer line was not within the limits of expected disturbance for the decommissioning activities for sg-ind-3 (within 5 feet of ground surface, and within a 1-ft by 1-ft square centered on the well). However, due to its proximity a Contingency Plan (Appendix B) was developed in case the sewer was encountered during the decommissioning process.

VMP Decommissioning

On July 31, 2015 the four VMPs were decommissioned by Zebra Environmental Corporation (Zebra) under Stantec observation. The following process was used at each location:

- The metal well box and concrete surface seal were removed with a sledgehammer and crowbar. A majority of the flexible tubing installed for the vapor point was also removed with these materials.
- A Geoprobe® 6620 DT drill rig with a 4 ½ inch diameter auger was used to overdrill each well to a depth commensurate with the installed depth of the VMP.
- A Photo-Ionization Detector (PID) was used during the overdrilling processes and readings remained at 0.0 parts per million (ppm) during the entirety of the processes.
- After the overdrilling was completed the auger was withdrawn from the hole and auger cuttings were returned to the hole. The remainder of the borehole was filled with grout up to about 6 inches bgs.
- Each location was filled to existing grade with topsoil and seeded with grass seed.

A Daily Field Report is included in Appendix C. Photographs of decommissioning activities are included in Appendix D.



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Waste Disposal

The removed concrete, metal curb boxes, and polyethylene tubing were added to Zebra's solid waste stream. These materials were disposed at the Albany County Solid Waste Management Authority's landfill facility in Colonie, New York (NYSDEC Part 360 Permit #4-0126-00033/00001). Contact us at any time if you have questions or need further information.

Regards,

STANTEC CONSULTING SERVICES INC.

Robert J. Mahoney, P.G. Senior Environmental Geologist

585-413-5301

Rymaling

Bob.Mahoney@stantec.com

Peter Nielsen, P.E. Senior Associate 585-413-5280

PHML

Peter.Nielsen@Stantec.com

Attachments

Figure 1 – Decommissioned Soil Vapor Monitoring Point Locations

Appendix A - Geophysical Survey Report

Appendix B - Contingency Plan for Offsite VMP Removal

Appendix C - Daily Field Report

Appendix D - Photographs

cc: Steven Karpinski, NYSDOH

Rick Zigenfus, ConMed

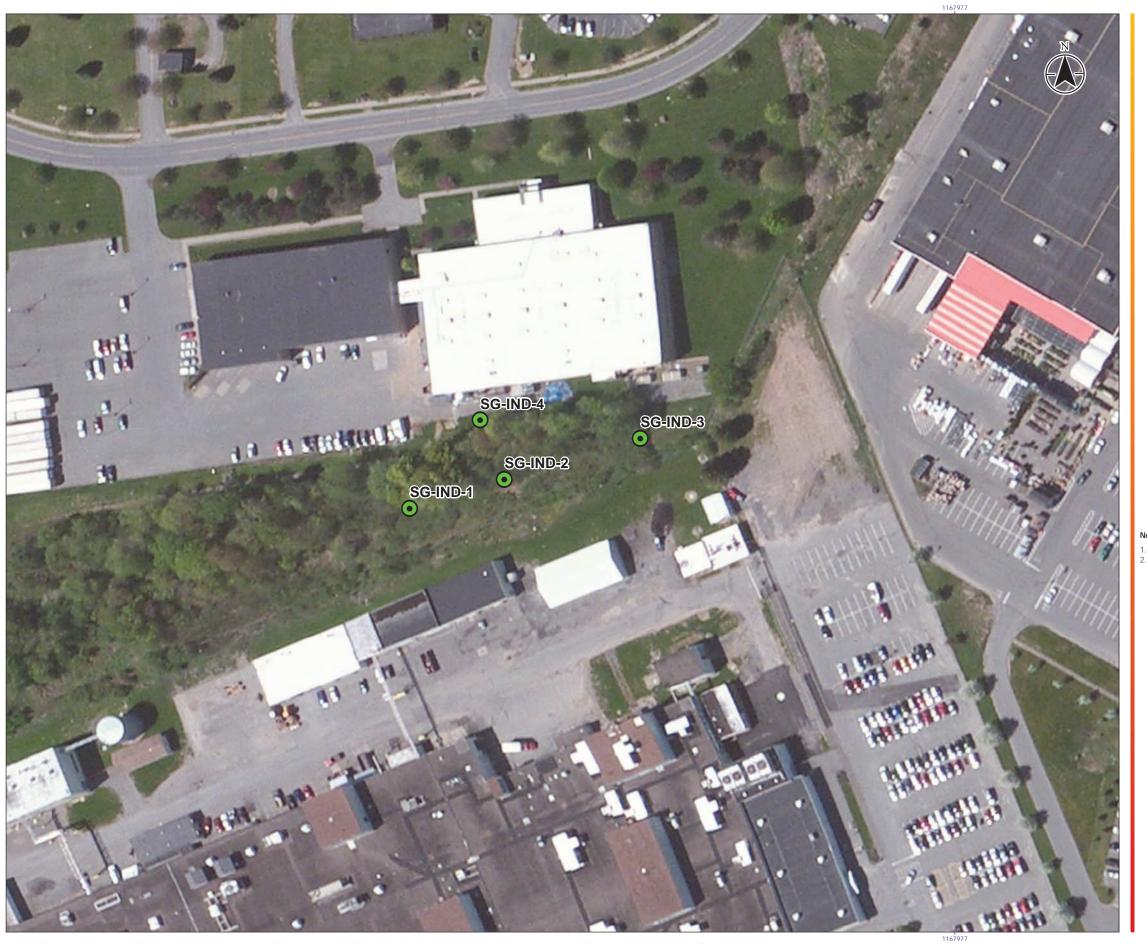
Charles Trione, Lockheed Martin Jann Richardson, Lockheed Martin

James Zigmont, CDM Smith

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FIGURE





Legend

• Indium Soil Vapor Monitoring Points



Coordinate System: NAD 1983 StatePlane New York Central FIPS 3102 Feet Soil VMPs were decommissioned on July 31, 2015.



Project Location: 525 French Road Utica, Oneida County, NY

Prepared by LB on 2015-08-27
1st Technical Review by RJM on 2015-08-27
2nd Technical Review by PN on 2015-08-27

Client/Project Former Lockheed Martin French Road Facility Utica, New York

Decommissioned Soil Vapor Monitoring Point Locations



APPENDIX A

Geophysical Survey Report

GEOPHYSICAL INVESTIGATION VAPOR WELL LOCATIONS JUNE 30TH, 2015

CON MED FACILITY FRENCH ROAD

UTICA, NEW YORK

Prepared for:

Stantec 61 Commercial Street, Suite 100 Rochester, NY 14614

Prepared by:

Underground Services, Inc. 24 Hagerty Blvd., Suite 11 West Chester, PA 19382

CORPORATE HEADQUARTERS:

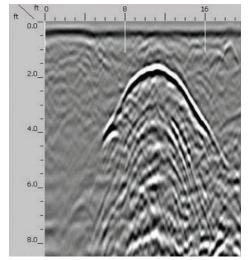
24 HAGERTY BLVD.,STE. 11, WEST CHESTER, PENNSYLVANIA 19382 • 1-877-SOFTDIG (763-8344) • FAX (610)-696-7864 WWW.SOFTDIG.COM

OPERATION CENTERS: SAN ANTONIO, TX, SYRACUSE, NY

This is a summary of findings at the location of 525 French Road, Utica, NY. Underground Services, Inc. employed S.U.E. Analysts on site to locate underground utilities within four soil vapor locations designated by Stantec and Lockheed Martin.

Underground Services Inc. applies well established, industry recognized geophysical practices for underground utility locating. Ground penetrating radar (GPR) and radio detection (RD) cleared the areas immediately surrounding each existing monitoring well (SG-IND-1 thru 4) of anomalies that may conflict with their excavation and removal. USI utilizes a 250 MHz, single channel GPR antenna. This unit has a maximum depth penetration of approximately 8 feet. Saturated and clay soils will reduce depth penetration and antenna resolution.

GPR utilizes electromagnetic waves that are emitted directly into the ground through a transmitter and when encountering a non-soil entity, such as a utility pipe or drain, return a parabolic signal to the GPR receiver unit given the curved nature of a pipe or drain. Figure 1 shows the typical reflection symbol of such situation.



(Figure 1)

The GPR, detected only one potential conflict. A storm line is detected in the areas of SG-IND-1, SG-IND-2, SG-IND-3. The storm line was traced from the manhole with the 250 MHz GPR unit. Location can be seen on Figure 2, found on page 3.

Using a passive Power/Radio sweep, no live electric lines were found with an RD7000 unit. No other anomalies were detected.

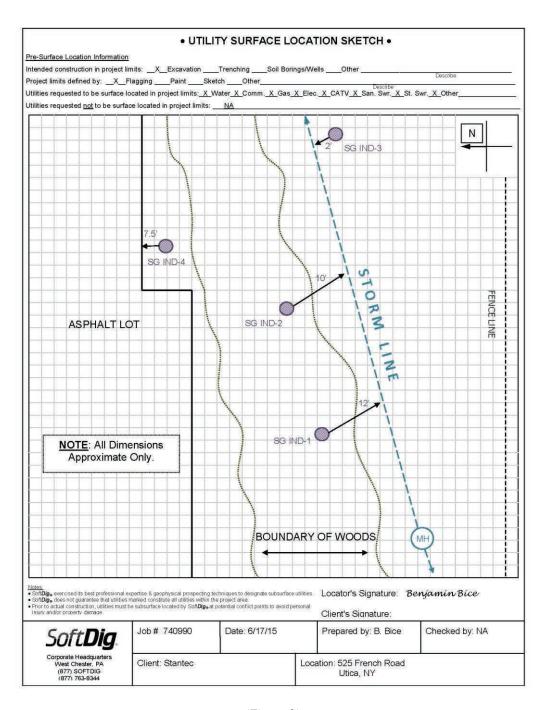
<u>Surface Locates:</u> (Quality Level C & B)

- Designate, record and mark the approximate horizontal location (accurate within 12± in.) of existing utilities by geophysical prospecting techniques.
- SoftDig@ will use its best professional expertise and geophysical prospecting techniques to designate subsurface utilities. SoftDig@ does not guarantee that utilities marked constitute all utilities within the project area.
 - • SoftDig® uses electromagnetic equipment and GPR, however, there exists the possibility that due to circumstances beyond the control of the designating technicians, utilities may be non-detectable or the horizontal location mark is not directly over the centerline of the utility. The following factors may limit or exceed the capabilities, accuracy, and reliability of the geophysical equipment: composition of the utility structure (non-metallic), soil characteristics (mineral content, debris, rocks), salinity of ground water, depth of utility, surface covering, embedded structures (re-bar, wire mesh), confined spaces and external interference (power lines, guard rails, traffic, rail lines).
- Utility depths obtained by instrument readings (only if requested by client) are not guaranteed and are not to be used for design or basis for construction. Clients relying on instrument reading of depths do so at their own risk. True depth is only obtained by exposing the utility.

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(Figure 2)

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Attached: Images of site (Views looking west)







(Figure 3)



(Figure 2)

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APPENDIX B

Contingency Plan for Offsite VMP Removal

Attachment



To: Glenda Smith From: Peter Nielsen/ Bob Mahoney

Lockheed Martin – Utica Stantec Rochester

File: 190500800 Date: July 28, 2015

Reference: Contingency Plan for Offsite VMP Removal

Former Lockheed Martin French Road Facility

Utica, NY

During the month of July, 2015, four offsite vapor monitoring probes (VMPs) are to be removed from the Indium Corporation property located adjacent to the ConMed property to the north. This attachment summarizes the contingency plan in place in the event that VMP removal activities disturb an adjacent storm sewer.

Pre Clearance Survey

Prior to VMP removal activities, on June 17, 2015, a subsurface geophysical investigation of the four probe locations was performed by Underground Services, Inc. to determine if utilities or other subsurface features were present in the repair areas. The investigation determined that a storm sewer line is located adjacent to three of the four probes to be removed (sg-ind-1, sg-ind-2, and sg-ind-3). Each of the three probes extends to approximately 5-feet below ground surface (bgs). Subsequent efforts by Stantec confirmed that the sewer line in question belongs to the City of Utica, is 30-inches in diameter, and is buried 8 to 10-feet bgs.

Contingency Plan

In the event that VMP removal activities disturb or damage the storm sewer, work will cease immediately, and the following sequence of activities will take place:

- Stantec field personnel will contact City of Utica Department of Public Works:
 - o Mike Mahoney (315) 792-0155
- Stantec field personnel will contact Stantec project managers:
 - o Peter Nielsen (585) 413-5280
 - o Bob Mahoney (585) 413-5301
- Stantec project managers will contact Lockheed Martin project manager and safety officer:
 - o Glenda Smith (817)-901-9933
 - o Jimmy Yeager james.l.yeager@lmco.com
- Stantec field personnel will coordinate with City of Utica to isolate damaged sewer segment.
- Stantec field personnel will contact emergency repair contractor:
 - o Paragon Soil and Environmental Consulting, Inc. (780) 434-0400



If you need further information contact us at any time.

STANTEC CONSULTING SERVICES INC.

Peter Nielsen, P.E.

cc: Jim Zigmont, CMD Smith

Mike Mahoney, City of Utica, DPW

Rick Zigenfus, ConMed



APPENDIX C

Daily Field Report



Daily Field Report

Project: Former Lockheed Martin French Road File No. 190500800

Facility

Contractor: Stantec Consulting Services, Inc. **Subcontractor:** Zebra Environmental Corporation

Location: Indium Corporation, adjacent to **Weather:** Sunny, high 70's

former Lockheed Martin site

July 31, 2015

Date:

Summary of Activities and Observations:

L. Lyons onsite at ConMed facility for soil Vapor Monitoring Point (VMP) decommissioning

on adjacent Indium Corporation (Indium) property.

0755 Zebra Environmental Corporation (Zebra) onsite. All individuals sign in as visitors at

ConMed and drive to the Indium property.

0800 Stantec and Zebra safety meeting.

0807 L. Lyons called Indium Facilities Manager (Cal Odin) to inform him that Stantec and

Zebra would be beginning work on the Indium property shortly, and that we would call

once it was complete.

0815 Began work at sg-ind-4 (installation depth of 10 feet).

Concrete surface completion and metal road box removed with sledge hammer. Some

tubing came out simultaneously with the concrete/road box removal.

A Geoprobe® 6620 DT rig with 4 ½-in. auger used to over-drill the soil VMP to depth

corresponding to installation depth. PID readings at 0.0 ppm.

Auger withdrawn and auger cuttings returned to borehole.

Remainder of borehole was filled with grout to within approx. 6 in. of ground surface.

Hole was leveled with topsoil and seeded with grass seed.

0850 Performed similar process at sg-ind-1 (installation depth of 2.5 feet).

PID readings remained at 0.0 ppm during over-drilling process.

0900 Performed similar process at sg-ind-2 (installation depth of 5 feet).

PID readings at 0.0 ppm during entirety of over-drilling process.

0910 Performed similar process at sg-ind-3 (installation depth of 5 feet).

PID readings remained at 0.0 ppm during over-drilling of process.

0930 Waste materials (concrete, metal road boxes, tubing) were taken by Zebra back to their

office. Inspected grass checked for damage from the Geoprobe ® unit - none

observed.

0945 L. Lyons called Cal Odin to let him know that the work was complete (left message).

Stantec and Zebra offsite.

0955 Stantec and Zebra individuals signed out at ConMed facility.

Signature (Consultant's Representative)

8/27/15

Date



APPENDIX D

Photographs







REMOVAL OF VMP WELL BOX, CONCRETE SURFACE SEAL, AND TUBING (LOCATION sg-ind-4)

REMOVED CONCRETE SEAL, WELL BOX, AND TUBING (LOCATION sg-ind-1)







CONCRETE, WELL BOX, AND TUBING FROM sg-ind-2

CONCRETE, WELL BOX, AND TUBING FROM sg-ind-3







DRILLING AT LOCATION sg-ind-4

BOREHOLE PARTIALLY BACKFILLED WITH DRILL CUTTINGS





PARTIALLY FILLING REMAINING BOREHOLE SPACE WITH GROUT

FINAL GRADING WITH TOPSOIL
AND GRASS SEED