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DECLARATION STATEMENT – STATEMENT OF BASIS
FINAL CORRECTIVE MEASURES SELECTION

Former Lockheed Martin- French Road Facility
Utica, Oneida County
USEPA ID No. NYD000521971
DEC Site No. 633036A
OU1 and OU2

March 2015

Statement of Purpose and Basis

This document presents the final corrective measures for the Former Lockheed Martin Facility Site as set forth in the Statement of Basis (SB) for the site. The final corrective measures were selected in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Parts 373.

The Statement of Basis (SB) was made available for public comment between December 29, 2015 and

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining groundwater contamination;
- a provision for further investigation (and remediation if necessary) to refine the nature and extent of contamination in the following areas where access was previously hindered: under the Main Manufacturing Building and under the maintenance building and pole

ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

Lockheed Martin

Lockheed Martin signed a Consent Order for Corrective Action (CO 6-20080321-5) relating to the Facility in June of 2008. The Order obligates the responsible party to perform corrective measures and provide financial assurance for completing corrective action. Five specific areas of concern listed in the Order are on-site soils, groundwater, soil vapor, evaluation of the pre-existing groundwater treatment system and miscellaneous tanks. Soil vapor and miscellaneous tanks were primarily located in OU1; soils primarily in OU2 and groundwater and the pre-existing system groundwater treatment system in both of the OUs. Additional detail is included in the Attachments to the Order.

ENVIRONMENTAL ASSESSMENT

Nature and Extent of Contamination:

Based on investigations of groundwater, soil, soil vapor and indoor air conducted since 1991 for VOCs, semi-volatile organic compounds (SVOCs), metals and PCB/pesticides, the primary contaminants of concern are PCBs, tetrachloroethene (also called perchloroethene (PCE)), trichloroethene (TCE) and the breakdown products including cis-dichloroethene (DCE) and chloroethene (vinyl chloride VC).

Groundwater: In the 1990's, groundwater concentrations up to 11,000 parts per billion (ppb) PCE and 830 ppb TCE were found. Additional groundwater monitoring conducted more recently identified TCE in groundwater up to 5,500 ppb and cis-DCE up to 35,000 ppb. The groundwater standard for both TCE and cis-DCE is 5 ppb. No other contaminants of concern were found in groundwater and no contaminants are leaving the site via the groundwater pathway.

Soil: Contaminant concentrations for soils in the northeast corner of the site in the vicinity of the Former Northern Perimeter Ditch Area have been shown to range up to 210 ppm for PCE and 36 ppm for TCE. These contaminants were found between 7 and 12 feet below the surface. Due to the levels of groundwater contamination for these compounds, the protection of groundwater SCOs of 1.3 ppm for PCE and 0.47 ppm for TCE are applicable in this area. Soil sampling along the property boundary in this area verified that these contaminants were not present at the property boundary, so off-site soil contamination is not a

Soil Vapor and Indoor Air: Soil vapor underlying portions of the on-site building have been impacted by TCE and PCE at levels that warranted vapor mitigation. Initial indoor air and sub-slab soil vapor samples were taken in 2006. Sub-slab TCE ranged to 680 ug/m3, PCE up to 21,000 ug/m3. Indoor air values were up to TCE 73 ug/m3 and PCE 97 ug/m3. However, TCE was in use in the facility at that time. Off-site soil vapor was sampled and there is no concern for off-site migration of soil vapor.

HEALTH ASSESSMENT

The site is partially fenced, which restricts public access to portions of the site. However, persons who enter the site could contact contaminants in the soil by walking on the site, digging or otherwise disturbing the soil. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. A sub-slab depressurization system (systems that ventilate/remove the air beneath the building) has been installed in a portion of the on-site building to prevent the indoor air quality from being affected by the contamination in soil vapor beneath the building. Sampling indicates soil vapor intrusion is not a concern for off-site buildings.

INTERIM CORRECTIVE MEASURES

Groundwater: The contaminated groundwater is currently collected by a groundwater collection system. The system was installed in 1996 and remains operational. The system consists of three legs of perforated pipe that direct groundwater to manholes where it is then pumped through an air stripper to remove the chlorinated VOCs. The clean wastewater is discharged through a NYSDEC regulated wastewater discharge point. A groundwater monitoring program is also in place.

The groundwater collection system was designed and installed to address areas below the main manufacturing building, the east parking lot and the former northern perimeter ditch. Groundwater is collected via collection trenches designed to capture the vertical fluctuation of the groundwater table, and directed to manholes where it is pumped to the treatment system. Collection of the groundwater will continue until groundwater standards are achieved in the groundwater monitoring wells.

In 2011, the SSDS was expanded and now consists of eight (8) sub-slab depressurization sumps connected to a regenerative vacuum blower and the effluent air is treated through granular activated carbon. It has been verified that the SSDS creates sufficient negative pressure differential under the eastern portion of the building to prevent soil vapor intrusion (Figure 6).

In addition, sampling indicates that there has been a significant reduction in the indoor air concentrations of both PCE and TCE. However, in 2013, 4 of 15 locations exhibited TCE indoor air values from 1.8 to 2.5 ug/m3. These detections, which are below the current air guidance value of 5 ug/m3 but above expected background levels, are most likely attributed to a residual presence of TCE in building materials from the past use of TCE at the facility and are not the result of soil vapor intrusion.

SUMMARY OF ALTERNATIVES

Several alternatives to address the remaining site contamination were evaluated. To address contaminated groundwater, options included continued operation of the groundwater collection and treatment system, as well as expansion of the collection system. Use of in-situ groundwater treatment was evaluated. ,. During the pilot test, the radius of influence (meaning the sideways migration of the injected solution) was determined to be five feet, and the amount of substrate injected over six days was limited to only 320 gallons. These parameters reflect tight soils that limit contact between injected compound and the contaminated groundwater, making in-situ groundwater treatment infeasible.

To address VOC soil contamination in the FNPD yard, No Excavation, Partial (Focused) Excavation and Complete Soil Excavation alternatives were considered. All alternatives included continued operation of the groundwater collection and treatment system, continued operation of the sub-slab depressurization system, institutional controls, site management and continued soil vapor and groundwater monitoring as part of the final remedy. Alternatives ranged in cost from $979,000 (no excavation), $1,385,000 (partial excavation) and $1,969,000 (complete excavation). The Corrective Measures Study Report describes alternatives, considerations and expected costs in more detail.

The primary difference in remedial alternatives for this site would be the amount of soil excavation needed in the FNPD yard. The Department has selected a remedy for the site that includes complete excavation of the identified soil contamination to achieve the Groundwater Protection SCOs. See Figure 5. The Department has determined that complete excavation of this source area is necessary based on its accessibility and the concentrations of VOCs that significantly exceed protection of groundwater SCOs for soil. By removing this source area it is expected that the groundwater contamination in this area will decrease rather than remain at elevated levels if no action is taken. As noted above, the existing treatment systems for contaminated groundwater and soil vapor will continue operation, and institutional controls and site management will ensure that these systems are maintained and operated effectively.

SCOPE AND EVALUATION OF CORRECTIVE MEASURE(S)

The Department has selected the following remedy for the site.

The selected remedy will require full excavation of the FNPD yard source area (approximately 2,100 square feet to a depth of 15 feet or 1,170 cubic yards) containing chlorinated VOCs, continued operation of the groundwater collection and treatment system, excavation of isolated surface soils, maintenance of the existing site cover system, continued operation of the sub-slab depressurization system, institutional

controls and site management as the final remedy. This option addresses the source area, located between 7 and 12 feet deep, near the ditch, and continues treatment of groundwater prior to its discharge from the site. The sub-slab depressurization system will continue operation to prevent exposures to soil vapor within the north-eastern portion of the Main Manufacturing Building. Both the groundwater and sub-slab depressurization systems will be operated, maintained and monitored. Institutional controls in the form of an environmental easement and site management plan will ensure these controls continue and remain effective.

Please refer to the attached RAO table which describes how the remedy achieves each RAO.

REMEDIATION OBJECTIVES

The remedial objectives and actions to attain them are found in the following table:

Remedial Objectives	Remedial Action
1. Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards	Will be achieved through an institutional control (environmental easement) and Site Management Plan that will prohibit groundwater use at the Site. Achieved by availability and connection of the site to the municipal public water supply.
2. Prevent contact with, or inhalation of volatiles from, contaminated groundwater	The Site Management Plan will include protocols to safely handle groundwater during potential future excavation activities to protect construction and utility workers The Site Management Plan will require continued monitoring of groundwater to assess contaminant concentrations over time and ensure the plume does not migrate off-site. An interim corrective measure consisting of a sub-slab depressurization system has already been implemented to prevent exposures or the potential for exposures as a result of soil vapor intrusion in the north-eastern portion of the main manufacturing building. The Site Management Plan will require continued operation, maintenance and monitoring of this system. The Site Management Plan will include a provision for evaluation of the potential for soil vapor intrusion for any future buildings developed on the site, along with existing site buildings (maintenance building and pole barn) including provisions for TJ0 -1.3174 TDontfd on

Remedial Objectives	Remedial Action
4. Remove the source of ground or surface water contamination	Source removal (excavation) of a so

- Sampling also identified three other isolated locations where commercial soil standards were exceeded in shallow (0-0.5 feet) soil samples. These areas will also be excavated to a depth of one foot. Side wall and bottom confirmation soil sampling will be required to achieve the commercial SCOs. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and complete the backfilling of the excavation. The top six inches of soil will be of sufficient quality to maintain a vegetation layer

3. Cover System

A site cover consisting of buildings, pavement, and sidewalks currently exists over the vast majority of the eastern portion of the site (approximately 21 acres (40%) of the site). It will be maintained to allow for commercial use of the site. Any site redevelopment will maintain a site cover, which may consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

The western portion of the site (approximately 10 acres) remains undeveloped and has not been used for site operations. This area of the site was evaluated using field inspection, geophysical techniques and some limited sampling that shows the area achieves unrestricted use SCOs for VOCs, SVOCs, metals and PCBs. Based on the results, the intent is to separate this parcel from the site after the Statement of Basis is finalized.

The center of the site (approximately 24 acres) consists of a partially wooded area and paved parking area. Geophysics, test pits and surface sampling have been performed. One isolated area exceeds commercial SCOs and that area will be addressed by excavation. Upon post-excavation confirmation of commercial SCOs, this portion of the site will achieve commercial SCOs and a maintenance of a cover system will not be required.

4. Continued Operation of the Sub-Slab Vapor Mitigation System

The sub-slab depressurization system in the north-eastern portion of the Main Manufacturing building will be required to continue operation to prevent the migration of vapors into the building from groundwater until NYSDEC, in consultation with NYSDOH, determines that it is no longer needed.

5. Continued Operation of the Groundwater Collection & Treatment System

Groundwater collection and treatment has been implemented to treat contaminants in groundwater and to ensure contaminated groundwater does not migrate off-site. Collection of the groundwater will continue until groundwater standards are achieved in the groundwater monitoring wells.

6. Institutional Control

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Former Lockheed Martin Facility Corporation
Utica, Oneida County
Site No.633036A

The Statement of Basis for the Former Lockheed Martin Facility site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was placed in the document repository on December 23, 2014.

This responsiveness summary responds to all questions and comments related to the Statement of Basis that were raised during the public comment period, which ran from December 29, 2014 to February 12, 2015. The following are the written comments received, with the Department's responses:

Stantec Consulting Services Inc. submitted a letter on behalf of Lockheed Martin, dated February 12, 2015, which included the following comments related to the Statement of Basis (the comments are presented verbatim as received):

Comment 1: Page 6, under the heading "Remediation Objectives," in the table summarizing remedial objectives and actions: Item 2, 4th paragraph indicates "for any future buildings developed on the site,..".
Comment: This sentence should read "for any future **occupied** buildings developed on the site,.."

Response 1: The evaluation (of the potential for soil vapor intrusion for any future buildings

conditions and may result in a smaller area(s) of impact that warrant excavation. Accordingly, Lockheed Martin proposes to perform a predesign subsurface investigation, the details of which would be provided to NYSDEC/NYSDOH in advance for review and approval. Results of that investigation would then be used to further define or refine the area for remedial actions.

It may also be feasible to segregate soils into distinct stockpiles during excavation based on field screening with a photoionization detector (PID), and the resulting piles could then be sampled and analyzed (in accordance with guidance provided in NYSDEC's DER-10 guidance document) to determine if the soils actually exceed Protection of Ground Water SCOs. Stantec has employed this approach at other cleanup sites under NYSDEC oversight.

Response 2: The estimated quantities noted in the Statement of Basis were taken from the Corrective Measures Study submitted by Lockheed Martin. The Corrective Measure Implementation Plan will include details of any pre-design studies and design implementation specifics (such as soil segregation and waste disposal protocols).

Comment 3: Page 9, Item #2 – "Excavation," second bullet: "Sampling also identified three other isolated locations where commercial soil standards were exceeded in shallow (0-0.5 feet) soil samples. These areas will also be excavated to a depth of one foot. Side wall and bottom confirmation soil sampling will be required to achieve the commercial SCOs. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and complete the backfilling of the excavation. The top six inches of soil will be of sufficient quality to maintain a vegetation layer."

Comment: Lockheed Martin disagrees with the requirement for removal of soil at the locations where PCBs were detected at levels above Commercial SCOs but below Industrial SCOs, because these soils do not pose an unacceptable risk of harm under the current Industrial site use. It is noted that requirements of the Cover System obligate that site redevelopment install soil cover as necessary to allow for soil that meets commercial use SCOs. As this provision will protect users against the potential for more sensitive use in the future, it is unclear as to what objective is achieved by removing these limited soils under current industrial use.

Response 3: In accordance with 375-1.8(f)(9), soil remedies are intended to address current or reasonably anticipated future use. As indicated in the Statement of Basis, the existing zoning of the site allows light industrial or

commercial uses. In addition, the areas where commercial soil cleanup objectives exceeded are shallow and accessible, meaning that they can be addressed for nominal cost as part of the larger scale soil excavation.

Comment 4: Page 9, item #3 – "Cover System," first paragraph: "It will be maintained to allow for commercial use of the site. Any site redevelopment…"

Comment: This entry should read "It will be maintained to allow for **potential** commercial use of the site. Any **commercial** site redevelopment…"

The above "Cover System" edits are provided to clarify that the site's current use is industrial and soil meets industrial SCOs. A cover system may be useful under changed future conditions to commercial use but is not necessary for current industrial use.

Response 4: As described in the Statement of Basis, existing zoning allows for light industrial or commercial use, so the wording will not be changed.

Comment 5: Page 9, Item #3, second paragraph: "The western portion of the site

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barn should additional investigation show contamination below the building.

Response 12: The Department anticipates that some additional delineation of soil contamination may occur during pre-design studies associated with development of the Remedial Design workplan. Further investigation of the floor drain and the area surrounding the floor drain (beneath the pole barn floor) may be necessary and would also occur during pre-design studies. The necessity of removing the pole barn can be determined once the pre-design studies are completed.

Comment 13: ConMed expressed concern (item I.C) that planning and performing the excavation must be closely coordinated with them, since the ConMed facility generates a significant portion of the company's revenues. In addition, appropriate measures are requested to protect the health and safety of ConMed employees, particularly in the former Guard House.

Response 13: The Department agrees that the remedy will require close coordination with ConMed to ensure that normal business operations remain uninterrupted. Some of the foreseeable logistical issues, such as truck routes, waste segregation, and air monitoring are standard elements of the Remedial Design workplan. All work will be done in accordance with an approved Community Air Monitoring Plan (CAMP) which also applies to the Con Med employees or any persons not directly involved in the remedial efforts. The Community Air Monitoring Plan (CAMP) will be developed during design and the draft CAMP will be shared with ConMed for input before it is approved. Results of the air monitoring will be reviewed by both the Departments of Environmental Conservation and Health. Arrangements will be made to share this data with Con Med's Health and Safety Officer.

Comment 14: II. Former Guard House. ConMed previously requested confirmation that there is no risk to its employees working in the Former Guard House (Customer Complaints Office) and notes that NYSDEC responded by email on January 30, 2015 affirming that there is no concern for soil

Con Med air results alone if soil vapor intrusion is occurring or has the potential to occur. The detections of TCE are low and generally below levels that are commonly detected in indoor air. Based on ConMed's concerns, the potential for soil vapor intrusion to occur into other portions of the ConMed building (western end) could be re-evaluated during Site Management.

Comment 18: Bullet 4, last sub-bullet, ConMed states that there may be unidentified historic sources in the remaining 2/3 of the manufacturing building where investigations and sampling were not completed. ConMed requests wording changes to the Statement of Basis to note "that the Statement of Basis does not preclude the possibility of future findings that other historical sources may have contributed, or may be contributing now or in the future, to air conditions in the remaining 2/3 of the building."

Response 18: The Statement of Basis and the Remedy elements in Section 7 of the Statement of Basis does not distinguish portions of the building, so the entire Main Manufacturing Building is addressed by the Statement of Basis. The Site Management Plan required by Item 7 of the remedy, includes a provision that future investigation of soil under the Main Manufacturing Building may be necessary if the building is removed. Also, see the Response to Comment 17.

Comment 19: IV Excavation of discrete surface soil areas. This comment requests further details regarding the remediation of the surface soil locations and a demarcation layer.

Response 19: The specifics of the surface soil area excavation will be documented in the remedial design workplan, and may include pre-excavation delineation or post-excavation confirmation sampling. The details regarding a demarcation layer will also be included in the remedial design workplan. If an area is not being disturbed, a demarcation layer will not be required to be installed.

Comment 20: V Maintenance of Soil Cover. Bullet 1 - The Statement of Basis proposes that the western-most portion of the site be removed from the site and the program. The comment requests clarification that Lockheed Martin will remain responsible if future contamination is found on that portion of the site.

under Superfund. If the area were found to be contaminated, the Department would pursue the responsible parties for cost recovery.

Comment 21: Bullet 2 - The second and third solid bullets request clarification of Lockheed Martin responsibilities during future intrusive activities below the soil cover, and questions whether soil cover will be maintained after excavation of the discrete areas of surface soil contamination.

Response 21: As described in the Enforcement Section of the Statement of Basis, Lockheed Martin is the Potentially Responsible Part (PRP) under Consent Order with the Department for a full Corrective Measures Program. The details of Lockheed Martin's continuing obligations are addressed in the

APPENDIX B

ADMINISTRATIVE RECORD

Documents

1. NYSDEC 2008. Order on Consent Index Number CO6 20080321-5 October 3, 2008

2. ARCADIS 2009. Corrective Measures Study Report for the Solvent Dock Area. Former Lockheed Martin French Road Facility, Utica, New York. March 2009.

3. ARCADIS 2009. Tank Status Report- Revised. Former Lockheed Martin French Road Facility, Utica, New York. March 2009.

4. ARCADIS 2009. Corrective Measures Study Addendum, Corrective Measures Study Report for the Solvent Dock Area. Former Lockheed Martin French Road Facility, Utica, New York. July 2009.

5. ARCADIS 2010. Supplemental Investigation Report. Solvent Dock Area. Former Lockheed Martin French Road Facility Utica, New York, January 2010.

6. ARCADIS 2010. Report on Final Closure Activities of Wastewater Treatment Plan, Former Lockheed Martin French Road Facility, Utica, New York, August 2010.

7. ARCADIS 2011. Former Northern Perimeter Ditch Supplemental Investigation Report. Former Lockheed Martin French Road Facility, Utica, New York, March 2011.

8. ARCADIS 2011. Former Northern Perimeter Ditch Feasibility Study Report. Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York, June 2011.

9. ARCADIS 2013. Pre-Design Activities Report Former Northern Perimeter Ditch, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York, February 2013.

10. ARCADIS 2013. Feasibility Report Addendum Former Northern Perimeter Ditch, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York, February 2013.

11. ARCADIS 2013. Former Northern Perimeter Ditch Off-Site Vapor Intrusion Pathway Evaluation Report. Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York, April 2013.

12. ARCADIS 2013. Remedial Construction Certification, Groundwater Collection and Treatment System, Former Lockheed Martin facility, Utica, NY. September 2013.

13. ARCADIS 2013. Summary Report of Surface Soils Sampling Activities Former Lockheed Martin French Road Facility, Utica, New York, December 2013.

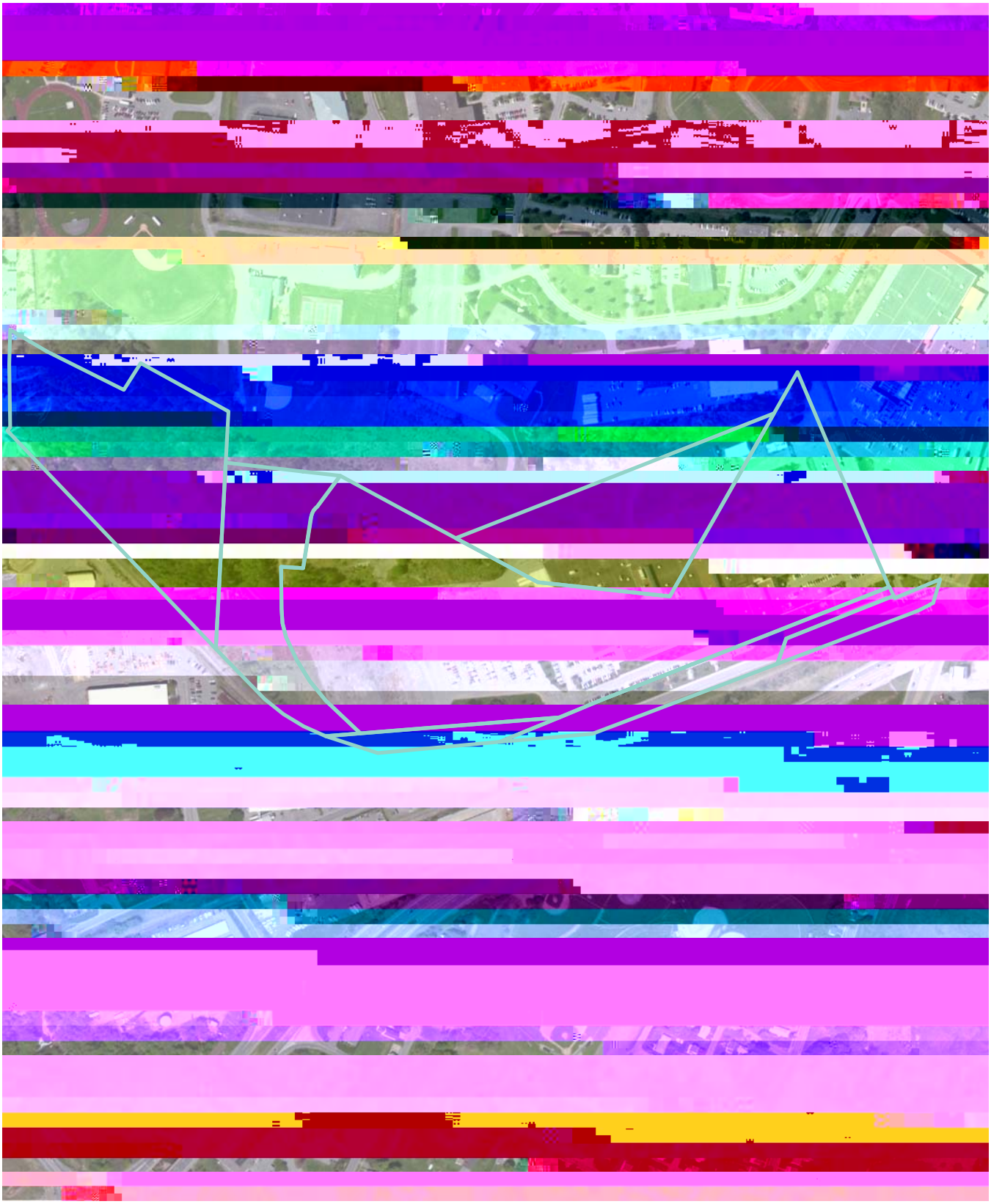
14. ARCADIS 2013. Corrective Measures Study. Former Northern Perimeter Ditch Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York. December 2013.

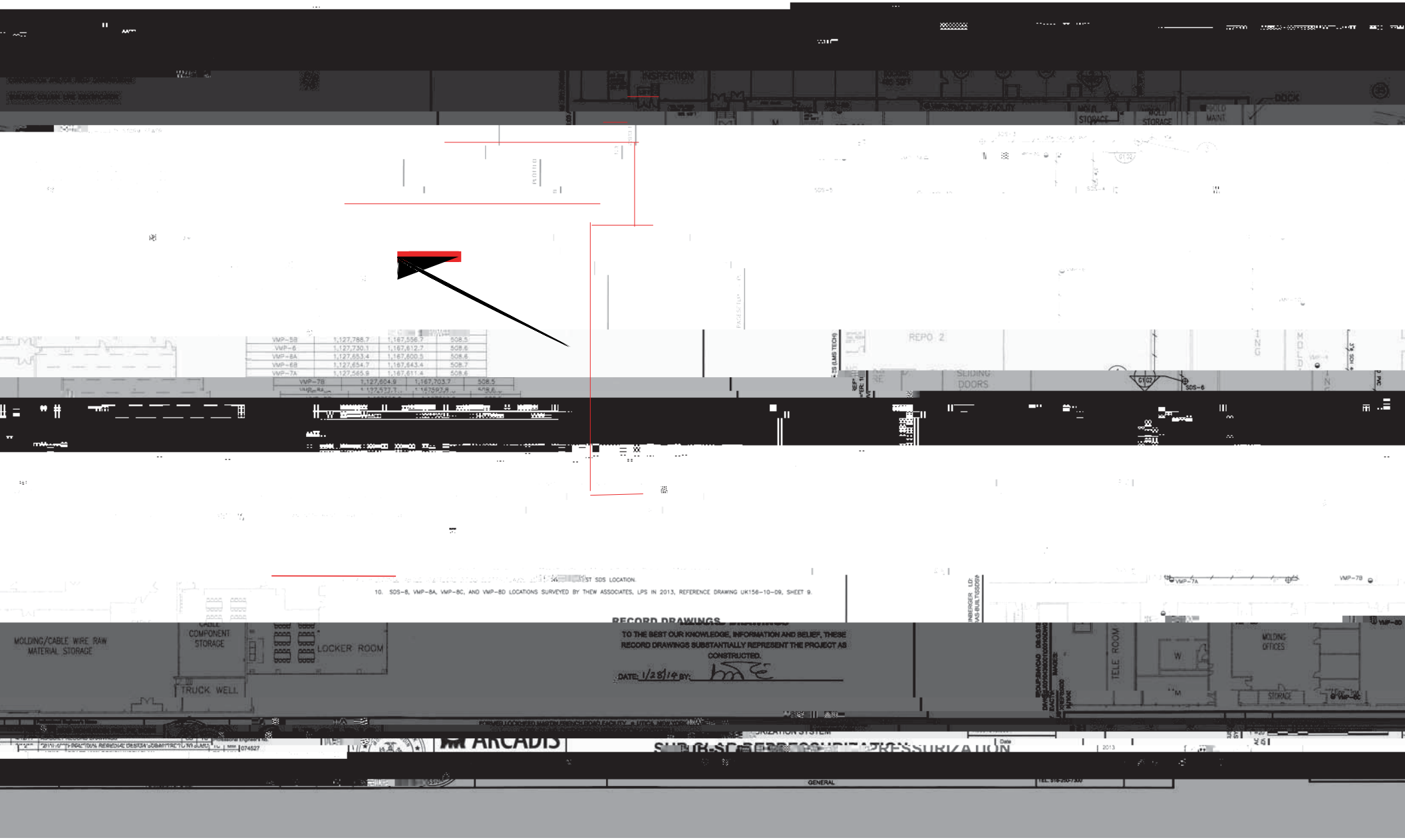
15. ARCADIS 2013. Remedial Construction Certification, Sub-Slab Depressurization System, Former Lockheed Martin Facility, Utica, NY. January 2014.

16. ARCADIS 2014. 2013 Annual Groundwater Monitoring Report, Former Lockheed Martin French Road Facility, Utica, New York. February 2014.

17. STANTEC 2014. Annual Vapor Intrusion Study, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, NY. May 2014.

18. ARCADIS 2009. West Lot Site Supplemental Investigation Report, Lockheed Martin, West Lot Site, Utica, NY. April 2009.




INSPECTION
DOCK
MOLD STORAGE
MOLD MAINT
REPO 2
SLIDING DOORS
SDS-6
VMP-5B 1,127,788.7 1,167,556.7 508.5
VMP-6 1,127,730.1 1,167,612.7 508.6
VMP-8A 1,127,653.4 1,167,600.5 508.6
VMP-6B 1,127,654.7 1,167,643.4 508.7
VMP-7A 1,127,565.9 1,167,611.4 508.6
VMP-7B 1,127,604.9 1,167,703.7 508.5
10. SDS-8, VMP-8A, VMP-8C, AND VMP-8D LOCATIONS SURVEYED BY THEW ASSOCIATES, LPS IN 2013, REFERENCE DRAWING UK156-10-09, SHEET 9.
RECORD DRAWINGS
TO THE BEST OUR KNOWLEDGE, INFORMATION AND BELIEF, THESE RECORD DRAWINGS SUBSTANTIALLY REPRESENT THE PROJECT AS CONSTRUCTED.
DATE: 1/28/14 BY:
MOLDING/CABLE WIRE RAW MATERIAL STORAGE
COMPONENT STORAGE
LOCKER ROOM
TRUCK WELL
TELE ROOM
MOLDING OFFICES
STORAGE
VMP-7A
VMP-7B
VMP-8C
ARCADIS
GENERAL