



**NAVAL AIR STATION JOINT RESERVE BASE
(NAS JRB) WILLOW GROVE
Restoration Advisory Board (RAB) Meeting Minutes
RAB Meeting No. 55**

Meeting Date: March 5, 2014

Meeting Time: 2:00 p.m.

Meeting Place: Horsham Township Public Library

	<u>Name</u>	<u>Organization</u>
Attendance:	Mary Gemmill (R)	RAB Co-Chair
	Jim Vetrini (R)	RAB member
	Lawrence Caldwell	Community Member
	Tom Ames	Horsham Township Authority (HLRA)
	Mike McGee	HLRA
	Tina O'Rourke	Horsham Water and Sewer Authority
	Bill Walker	Horsham Township
	Willie Lin (R)	Navy, BRAC PMO (Co-Chair)
	Brian Helland (R)	Navy, NAVFAC
	Marty Schy	NAS JRB Navy Caretaker's Office
	Lisa Cunningham (R)	EPA (via telephone)
	Larry Brown	EPA
	Margaret Pollich (R)	PADEP
	Andrew Frebowitz	Tetra Tech
	Mark Marotta	Montgomery Media
	Scott Roman	Public Spirit
	Rachel DeMarzio	Montgomery County Health Department

(R) Designates RAB Member

Willie Lin opened the meeting by greeting the attendees. Mr. Lin asked all attendees to introduce themselves. After introductions, Mr. Lin asked if the attendees had an opportunity to review the minutes from the December 4, 2013 RAB meeting. There were no comments on the minutes; therefore, they were considered accepted. Mr. Lin reminded the attendees that meeting minutes are posted on the Navy's BRAC website and placed in the Horsham Library information repository as well as mailed to RAB participants. Mr. Lin informed the attendees that the Air Force, which normally is part of the RAB meetings, was not present, but he would take any questions for the Air Force and forward those for response.

Mr. Lin notified the RAB that the draft environmental impact statement is in preparation. Public meetings were held in January 2014 and comments were due on February 10, 2014. There were no other announcements; therefore, Mr. Lin continued with the agenda items.

Mr. Lin provided an update on the radiological assessment. A Historical Radiological Assessment (HRA), which is a file review for potential radiological impacts, was completed In

July 2013. Eighteen potential sites were identified. The draft-final Basewide Radiological Management Plan (BRMP) was provided to the regulators in early February 2014. The Navy will prepare site-specific work plans known as Task-Specific Plans (TSPs) for each site. The TSPs now in preparation are for the scoping surveys at Sites 3 and 12. Scoping surveys are the initial evaluation to identify if radionuclide contaminants exist. The work will include a surface scan, soil sampling, and a dose rate assessment. Minimal clearing of vegetation is expected. The draft TSPs are planned to be submitted to the regulators in March 2014 and the scoping surveys for Sites 3 and 12 are expected to start in July 2014.

Fifteen potentially impacted buildings were identified in the HRA. These include hangar facilities and aviation support buildings. The Navy will also conduct an evaluation on these. Some of these have actually been demolished, but there will be surface scans and sampling. A wheeled detector will be used to survey building floors. These surveys are scheduled to start in early 2015.

Mr. Lin asked if there were any questions on the radiological update. Mike McGee asked about the schedule and the timeframe to complete the survey. Mr. Lin replied that surveys will start in July 2014, and work could be completed in two to three months. However, the final schedule cannot be determined until field work is implemented. There could be additional sampling after the data are evaluated. Mr. McGee asked about the contract status to perform the work, and Mr. Lin replied the contract was already in place. Mr. McGee asked if the two to three month schedule applied to the buildings. Mr. Lin replied that the time to conduct the work could be different. Some of the buildings are large and it could take longer to survey the floor and buildings in order to clear the building. The timetables have not been worked out yet. The plans have to be coordinated through the Navy's Radiological Affairs Support Office and then approved by the regulators.

Tom Ames asked if the ability to complete a transfer of the buildings is dependent upon completion of the radiological surveys and a finding that there is no impact. Mr. Lin replied that was correct, which is why surveys are planned for 2015, but hopefully the schedules could be exceeded. The Navy will keep providing updates on the survey schedule.

Mr. Lin introduced Andy Frebowitz to provide an update on the CERCLA sites; Sites 3, 5, and 12. Mr. Frebowitz continued the presentation with the status of Site 3 – the Ninth Street Landfill. Mr. Frebowitz gave a brief summary of the site which used several disposal trenches for waste burial. There has been no change in status since the last RAB meeting. The Feasibility Study (FS) for chemical contamination has been prepared. Various remedial alternatives were evaluated in the FS including capping and removal options, but the FS cannot be completed until the radiological results are received and included in the remedial alternatives evaluation. There were no questions from the attendees regarding Site 3.

Mr. Frebowitz continued with Site 5 – the Fire Training Area. This is the site where the bioremediation project is being performed on the groundwater plume contaminated with volatile organic compounds. The record of decision (ROD) was signed in September 2012 and that documented the selected alternative which is in-situ treatment of groundwater by anaerobic bioremediation and monitored natural attenuation (MNA) for the downgradient portion of the

plume outside of the source area. The remedy also includes implementation of land use controls (LUCs) to prevent the use of untreated groundwater and implementation of vapor mitigation in any new buildings and a vapor intrusion assessment or mitigation before existing buildings are reused.

Remedial designs were prepared and finalized in May 2013. These designs were for implementation of LUCs and to upgrade the treatment system that has been in place since the pilot test. The upgrades included installation of seven new injection wells which will also be used for monitoring the plume. The new wells were installed in July 2013 and sampled in August 2013. A remedial action completion report (RACR), which provides details of the system upgrades, was submitted to the regulators in November 2013. Regulatory comments have been provided and comment resolution is currently ongoing.

Sample results indicated that a biostimulation was needed. These activities include the injection of Lactoil, which is the food for the bacteria performing the anaerobic degradation, and buffering solution which is sodium bicarbonate. This event was started in early January and was completed in mid-February. Groundwater monitoring to determine the effectiveness of the injection started today (March 5, 2014). Monitoring is for oxidation-reduction potential (ORP), pH, and dissolved oxygen (DO) which provides data on the suitability of the groundwater environment to perform anaerobic degradation. After the results are reviewed, a determination will be made to either conduct additional injections, or, if the environment is suitable, continue only with monitoring.

An operations and maintenance (O&M) plan is also being prepared. The O&M Plan will serve as a guide for maintaining the system over the years and will also include a plan for long-term monitoring.

Mary Gemmill asked if there was a timeline for conducting the monitoring. Mr. Frebowitz replied that, for now, we are going to monitor monthly for ORP, pH, and DO to evaluate the environmental conditions. Monitoring for other parameters including VOCs will be addressed in the long-term monitoring plan which will specify the timeframe, such as annually or semi-annually; however, that plan is still being prepared. Ms. Gemmill asked what will be done if the monthly results aren't acceptable. Mr. Frebowitz replied that another round of injections will be performed and perhaps change the approach such as length of injection and amount of amendments and what wells will receive the amendments. Mr. Ames asked for a clarification on the RACR and that this doesn't mean that the remedial action is complete. Mr. Frebowitz replied that the RACR indicates construction is complete, but it is not a document that indicates cleanup is complete. The RACR provides the construction details such as well logs and sample results.

Mr. Frebowitz continued the presentation with an update on Site 12 – the South Landfill. Similar to Site 3, the landfill contains trench and disposal areas which were identified by a geophysical study. The final RI was submitted on February 20, 2014. The report is now online and in the information repository. The next step would be to prepare the FS, but that will wait until the radiological survey is performed.

There were no comments from attendees on Site 12. Mr. Lin opened the floor for any other comments or questions. There were no questions or comments.

Mr. Lin reminded everyone that the information repository can be accessed through the Horsham Township Library and Navy BRAC PMO websites; the links are provided on the agendas. Mr. Lin indicated the next three RAB meetings are on the agenda and scheduled for Wednesday, June 4, 2014, Wednesday September 3, 2014, and Wednesday, December 3, 2014 with all meetings starting at 2:00 pm. If RAB members would like to have an evening meeting, they should inform Mr. Lin. Documents may be found on the shelves in the Horsham Library and on the library information repository website which is on the bottom of the agenda. Information may also be found on the BRAC website. The website address has been changed and is www.bracpmo.navy.mil/reserve_base_willow_grove.html.

Mr. Lin asked if there were any comments or questions for the Air Force that he could pass along. There were no comments.

Meeting adjourned.



**NAS JRB
WILLOW GROVE
RESTORATION
ADVISORY BOARD
(RAB)**

**March 5, 2014
Meeting Number 55**



Agenda



- Welcome Community RAB Members
- Radiological Update
- Site 3 – Ninth Street Landfill Status
- Site 5 – Fire Training Area Groundwater Remediation Status
- Site 12 – South Landfill Phase II Investigation Status
- Closing Remarks



Radiological Update



- Historical Radiological Assessment (HRA)
 - HRA is a file review for potential radiological impacts, 18 sites identified
 - Final HRA completed 18 July 2013
- Basewide Radiological Management Plan (BRMP)
 - Provides overall plan for investigating HRA impacted sites.
 - Navy submitted draft final BRMP to EPA/PADEP on 4 Feb 2014.
 - Individual Task Specific Plans (TSP) are developed for each site.



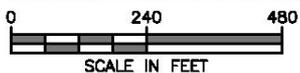
Radiological Update



- Scoping Survey for Sites 3 and 12
 - Initial evaluation to identify if radionuclide contaminants exist
 - Includes surface scan, soil sampling, dose rate assessments
 - Minimal clearing of plant growth expected
 - Draft TSP to be provided to regulators in early March 2014
 - Scoping survey expected to be initiated by July 2014.
- Scoping Surveys for buildings and structures
 - Initial evaluation to identify if radionuclide contaminants exist
 - Includes surface scan, soil sampling, dose rate assessments
 - 15 buildings (hangars/repair facilities) identified in HRA
 - Scoping surveys expected to be initiated by early 2015



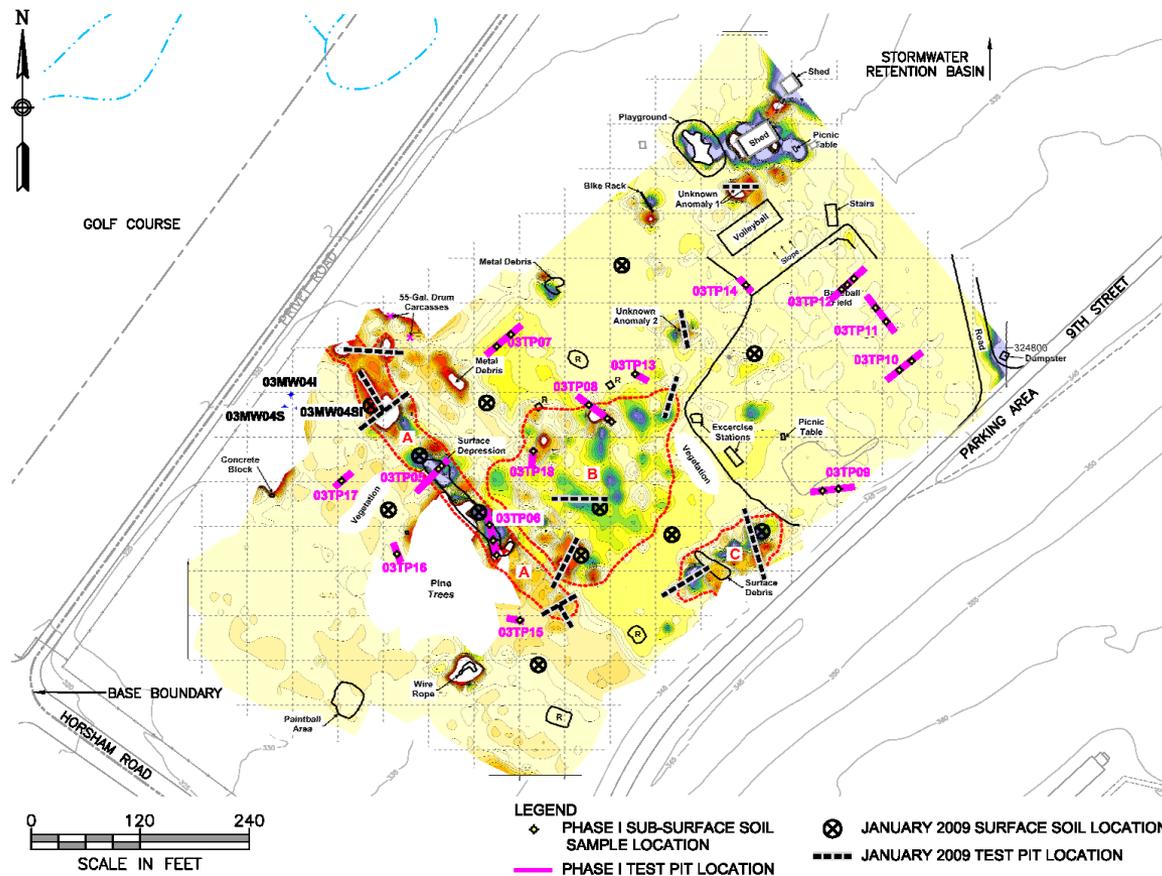
Site 3 – Ninth Street Landfill



SOURCE:
DELAWARE VALLAY REGIONAL PLANNING COMMISSION
2005 DIGITAL ORTHOIMAGERY



Site 3 – Ninth Street Landfill





Site 3 – Ninth Street Landfill



- Feasibility Study (FS) in preparation
 - Remediation goals developed for chemical constituents
 - Evaluates removal and capping alternatives
 - Completion of FS After Radiological Field Survey
 - Results from survey will be incorporated into FS



Site 5 – Fire Training Area Groundwater





Site 5 Groundwater Selected Remedy



- Record of Decision signed September 2012
 - In-situ treatment of groundwater by anaerobic bioremediation in and around the former drum storage source area
 - Monitored Natural Attenuation
 - LUCs will be initiated to preclude use of untreated groundwater and require that future buildings are constructed to mitigate the potential for vapor intrusion of VOCs from the subsurface into the buildings



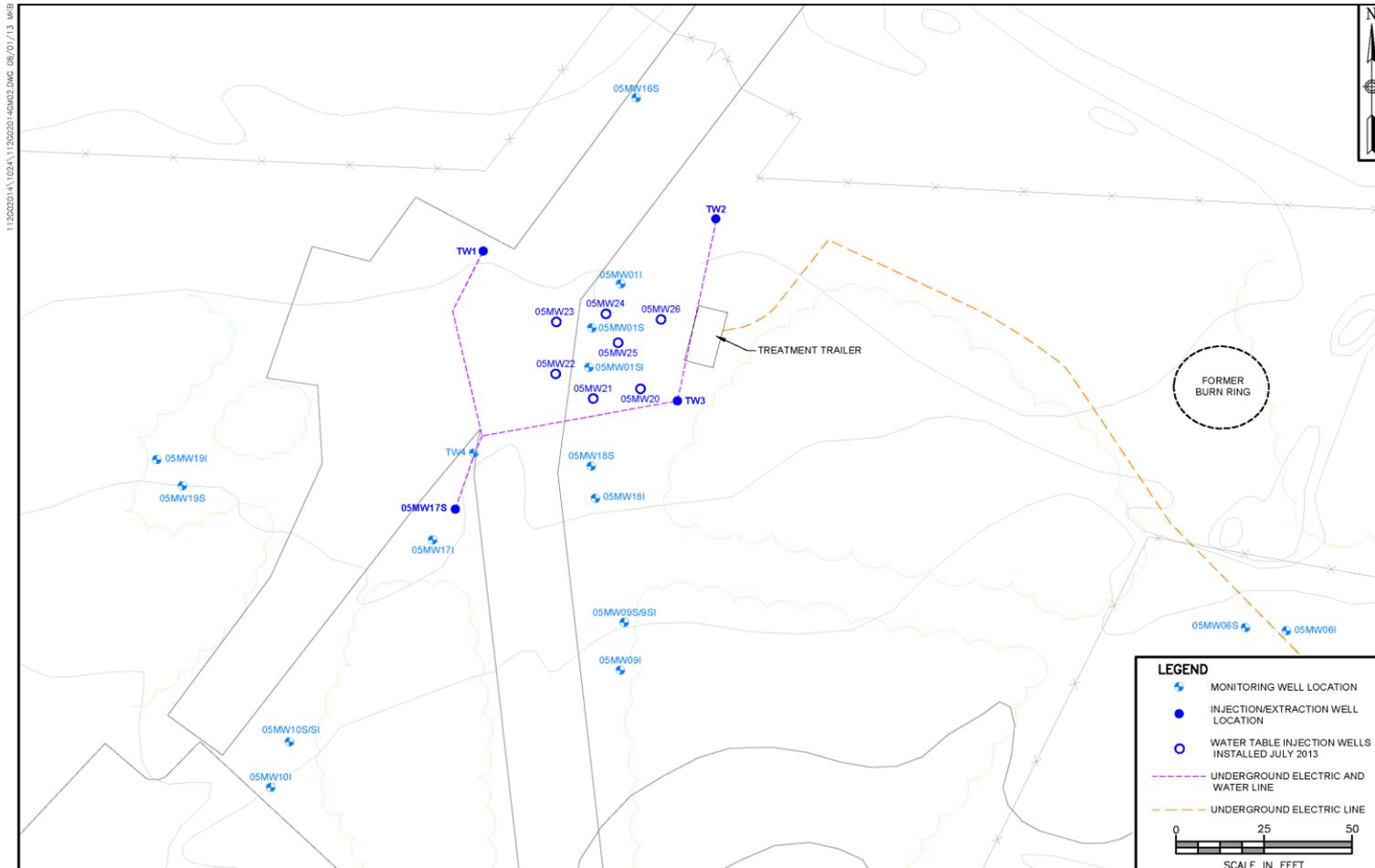
Site 5 Groundwater Remedial Design/Remedial Action



- Remedial Designs Finalized May 2013
 - Remedial Design for Land Use Controls
 - Remedial Design for Additional Injection Wells
- Remedial Action
 - Well Installation Completed July 2013
 - 7 new injection/monitoring wells (figure on next slide)
 - Sampling Completed late July 2013
 - Results from new wells in source area show elevated levels of parent compounds (TCE and PCE) in several wells and dichloroethanes in all seven wells
 - Results indicated injection of amendments was needed
 - Draft Remedial Action Completion Report (RACR) provided for EPA/PADEP review on 20 November 2013
 - Comment resolution in progress



Site 5 – Fire Training Area Groundwater





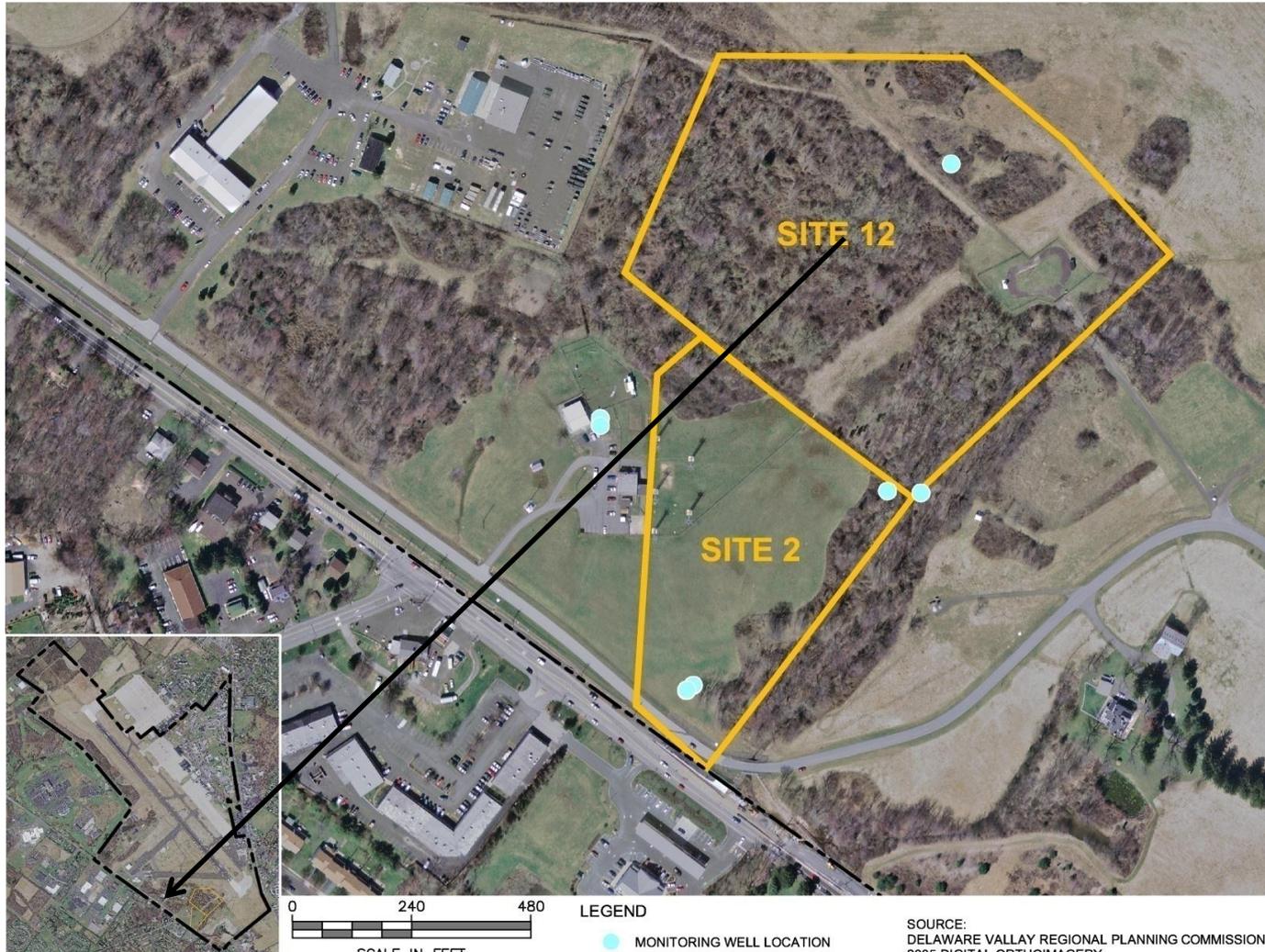
Site 5 Groundwater Current Conditions



- Biostimulation event conducted early January to mid-February 2014
 - Injection of Lactoil and sodium bicarbonate
- Groundwater monitoring in progress
 - pH, ORP, DO
- Additional injections will be conducted based on monitoring results until optimal environment for anaerobic reduction is obtained
- Development of O&M Plan and Long-Term Monitoring Plan

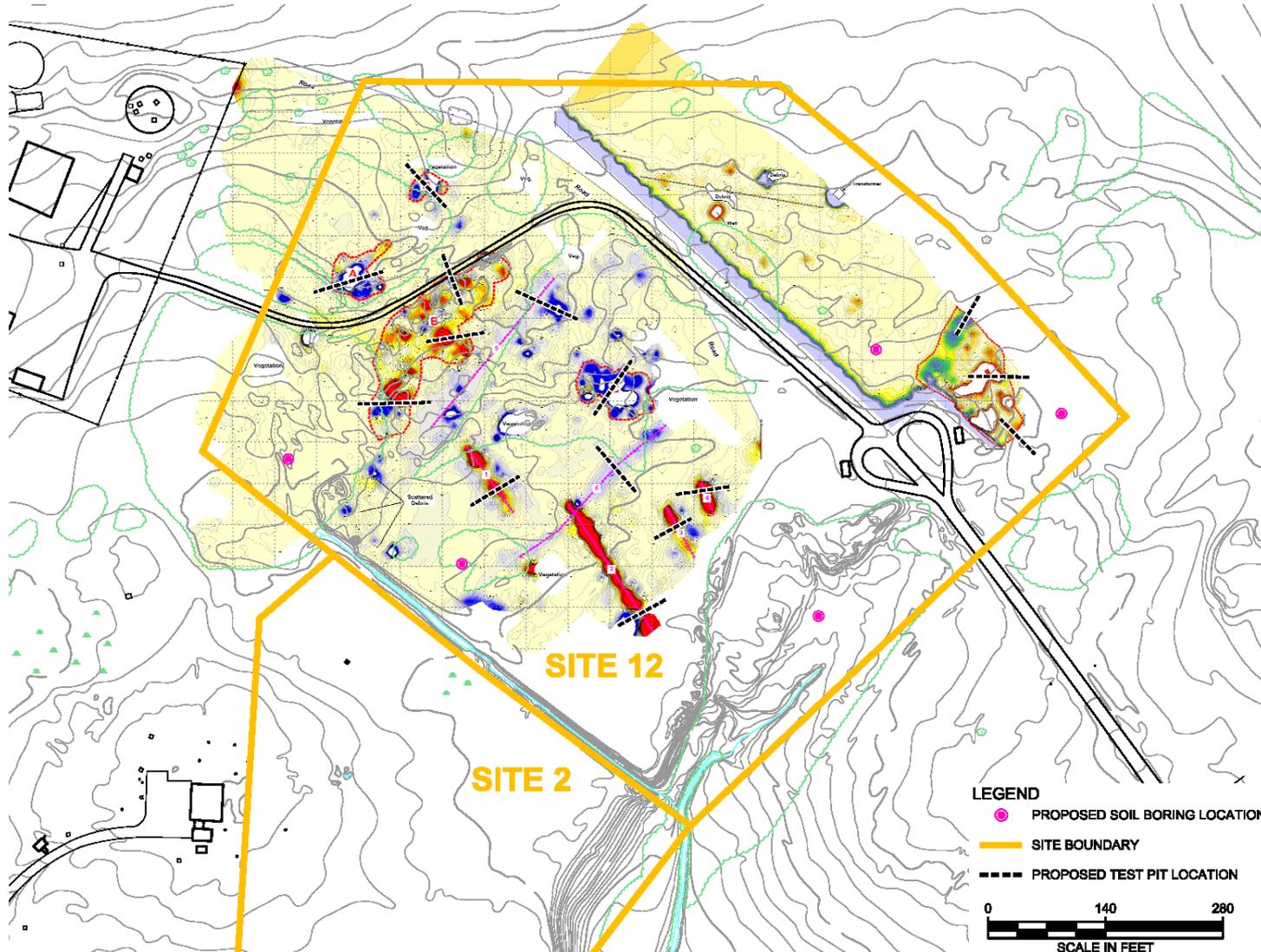


Site 12 – South Landfill Phase II Remedial Investigation





Site 12 – South Landfill





Site 12 Phase II Status



- Remedial Investigation Report
 - Final RI Report submitted on 20 February 2014
 - Available in information repository and online administrative record
- Feasibility Study to be prepared after radiological survey



NAS JRB Willow Grove RAB Meeting 55



- Closing Remarks
- Questions or Comments From The Community?
- Next Meetings
 - June 4, 2014 @ 2:00 pm
 - September 3, 2014 @ 2:00 pm
 - December 3, 2014 @ 2:00 pm
- Meeting Adjourned