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TRANSMITTAL LETTER AND DRAFT MINUTES FROM THE 7 MAY 2013 RESTORATION ADVISORY BOARD MEETING NWIRP CALVERTON NY
9/3/2013
RESOLUTION CONSULTANTS

Resolution Consultants
A Joint Venture of AECOM & EnSafe
1500 Wells Fargo Building
440 Monticello Avenue
Norfolk, Virginia 23510

September 3, 2013

Contract N6270-11-D-8013-WE08
Contract Task Order No. WE-07

MEMORANDUM

Re: May 2013 Draft Restoration Advisory Board (RAB) Meeting Minutes
Naval Industrial Weapons Reserve Plant Calverton, NY

To: The Members of the RAB

Attached for your review are the minutes of the RAB meeting held on May 7, 2013. The Navy requests that you review the minutes and provide any comments that you may have to the Remedial Project Manager, Mr. James Tarr. These minutes will be discussed and approved at the next RAB meeting, currently scheduled for November 7, 2013. The location of the November 7 meeting will be announced at a later date. If you have questions or require additional information, please contact Mr. James Tarr at (757) 341-2009, or by email at james.tarr@navy.mil.

Sincerely,

Robert Forstner, PE
Project Manager

RESOLUTION CONSULTANTS

Distribution:

NAVFAC Mid-Atlantic, James Tarr
NAVAIR, William Cords
NYSDEC (Albany), Henry Wilkie
NYSDEC (Stony Brook), Katy Murphy
NYSDEC (Stony Brook), Walter Parrish
NYSDOH, Steve Karpinski
SCDHS, Andrew Rapiejko
SCDEE, Amy Juchatz
USEPA Region II, Ellen Stein
USEPA Region II, Carla Struble
Town of Riverhead, Chris Kempner
Town of Riverhead, Jodi Giglio
H&S, Al Taormina
H&S, Jen Good
NGC, John Cofman
NGC, Kent Smith
Tetra Tech, David Brayack
Community Co-Chair, Bill Gunther
Community RAB Member (WRCA), Sidney Bail
Community RAB Member, Louis Cork
Community RAB Member, Adrienne Esposito
Community RAB Member, Jean Mannhaupt
Community RAB Member, Vincent Racaniello
Community RAB Member (PRSC), John Armentano

Non-RAB Member Mailing List:
SCA Associates, Frank Anastasi
Administrative Record
Public Repository

RESTORATION ADIVSORY BOARD MEETING
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP), CALVERTON
CALVERTON COMMUNITY CENTER, CALVERTON, NEW YORK
TUESDAY, MAY 14, 2013

The thirty-eighth meeting of the Restoration Advisory Board (RAB) was held at the Calverton Community Center. Meeting attendees included representatives from the Navy (James Tarr), New York State Department of Environmental Conservation (NYSDEC) (Henry Wilkie), RAB Community Members (John Armentano (representing the Peconic River Sportsman's Club) Sid Bail (representing the Wading River Civic Association), Lou Cork, Bill Gunther), the Town of Riverhead (Jodi Giglio, Joseph Maiorana), Suffolk County Department of Health Services (Douglas Feldman), Resolution Consultants (Robert Forstner, Gregory Quimby, Michael Zobel), Tetra Tech (David Brayack), H&S Environmental (Jennifer Good, John Hudacek, Al Taormina), SCA Associates (Frank Anastasi), and the North Fork Environmental Council (George Bartunek). The sign-in sheet is included as Attachment 1.

WELCOME AND AGENDA REVIEW

The Navy representative, Mr. James Tarr, welcomed everyone to the RAB meeting and introduced the meeting agenda. The agenda for the meeting is included as Attachment 2. The Navy presentations are included in Attachment 3.

DISTRIBUTION AND APPROVAL OF MINUTES

Mr. Tarr asked whether the RAB members received the December 2012 RAB minutes (initially distributed in April 2013, and followed by a revision distributed in May 2013), and if there were questions or comments on the minutes. Mr. Anastasi noted that it would be more accurate to report in the section discussing Site 2 that a report he had previously provided to the Navy suggested the possibility that there may be other source areas downgradient of those more recently investigated. Mr. Tarr agreed that the minutes should be revised accordingly and that the Navy would review the information previously provided to determine if further investigation was warranted. There were no further questions or comments, and the minutes for the December 2012 RAB meeting were approved with the noted revision.

COMMUNITY UPDATE

Mr. Bill Gunther informed the group of an upcoming gathering to honor Kevin McAllister of the Peconic Baykeeper, and Mr. George Bartunek of the North Fork Environmental Council provided details regarding the meeting location, time, and location. Ms. Jodi Giglio of the Riverhead Town Council was then introduced to deliver a presentation regarding a bicycle trail being constructed within the boundaries of the former NWIRP that now constitute the Enterprise Park at Calverton (EPCAL).

Ms. Giglio introduced herself as a member of the Town Council and founder of the Town's Alternative Transportation Committee, which has recently been focusing on construction of a perimeter bikeway

around EPCAL. The Town is hoping to secure easements in areas where remediation is ongoing to avoid an alternative that would involve the widening of River Road to accommodate the bikeway. Mr. Tarr indicated that he would accept copies of the plans showing the proposed easement, but that the Navy legal and real estate divisions would need to evaluate the proposal. Ms. Giglio elaborated on the proposed design, noting that it would be non-modalized, and fenced and lit to prevent access to the remedial sites. Drawings of sections already constructed by the Town were shown. Mr. Bartunek added that using the perimeter roadway would allow for a substantial pathway for users, and that the preference would be to use the perimeter roadway adjacent to River Road west towards Line Road, and then north along Line Road. Overall, a nine-mile loop could be created under the proposal.

TECHNICAL PROGRESS – GENERAL OVERVIEW OF INSTALLATION RESTORATION SITES AND STATUS OF SITE 7 TREATMENT SYSTEM OPERATION

Mr. Tarr then introduced the technical portion of the meeting, which will consist of presentations on the current activities at Sites 7, 2, 6A/10 and the Southern Area.

Ms. Jen Good, H & S Environmental, provided a brief status update on the Site 7 treatment system, noting that the groundwater treatment system to address Freon and fuel contamination continues to be operated seasonally. The system was shut down for the winter season after the December 2012 RAB meeting. Routine maintenance was performed during the shut-down period and pre-operation groundwater samples were collected before operation of the system resumed in April 2013. Mr. Gunther asked about the monitoring schedule; Ms. Good indicated that the next samples would be collected in December after the system is shut down for the winter period, and that the annual report covering operation of the system in 2012 would be completed shortly.

Mr. David Brayack (Tetra Tech) added that Site 7 is close to being considered clean. There are a limited number of wells that continue to exhibit exceedances of New York State Department of Health (NYSDOH) maximum contaminant levels (MCLs). The Site 7 treatment system was originally planned to operate for four years, but 2013 will be the seventh year of operation, and that the system was expanded beyond the original design over time. For the first time, results are showing that there has not been a rebound of Freon levels in groundwater following the seasonal shutdown. Whether this should be the last year of operation is currently being considered, as the blowers are showing signs of wear. Contaminant concentrations are now in the range of 5 to 10 µg/L, whereas the used to be around 1,000 µg/L.

TECHNICAL PROGRESS – SITE 2 GEOPHYSICAL INVESTIGATION

Mr. Greg Quimby of Resolution Consultants then provided a description of the upcoming additional geophysical investigation at Site 2 to expand the surveyed area to identify any additional areas of unexploded ordnance (UXO) or munitions and explosives of concern (MEC) outside of the areas already surveyed. The presentation is included in Attachment 3. Background on prior UXO/MEC investigations at

the site was provided. The current series of investigations of Site 2 for UXO/MEC began after several fragments of 20 mm ammunition were found during site sampling in 2010. A digital geophysical mapping survey of 7.18 acres was completed in 2010, which identified several saturated areas and approximately 2,400 subsurface anomalies. A UXO remediation operation in 2012 included screening and processing of approximately 12,500 cubic yards of soil at Site 2; 17,006 projectiles were recovered, 8,296 anomalies were destroyed, an estimated 34,000 pounds of metal was recovered and recycled, and four demolition events were conducted to render UXO/MEC safe for disposal.

Site observations suggest additional metallic anomalies may be present outside of the previously-surveyed 7.18-acre area. The upcoming program would use the same equipment used in the 2010 investigation to survey transects at 50-foot intervals and extending up to 200 feet from the boundary of the excavated area, with the intention of identifying saturated areas and any responses indicative of 20 mm projectiles. The survey was scheduled for late May and early June 2013, with a draft Summary Report expected in June.

There was discussion of which areas have been cleared, particularly as it relates to areas identified as having petroleum and PCB contamination in addition to UXO/MEC. Mr. Tarr explained that the UXO remediation contractor gridded the site and cleared it by section, except for areas where petroleum or PCB contamination is suspected. A draft report documenting the removal activities across the majority of the site has been submitted and was in review, and a new scope of work was being issued to address the limited areas with petroleum and PCB-contaminated soil. Mr. Brayack further clarified the status of the site clearance, noting that any UXO that remains at the site would be at depths greater than 18 inches. Many of the remaining anomalies consist of concrete with rebar.

TECHNICAL PROGRESS – SITE 2 ACTIVITIES & SITE 6A / SOUTHERN AREA REMEDIAL DESIGN AND FENCE LINE CONSTRUCTION

Mr. Brayack presented information on planned environmental investigations at Site 2, progress of the installation of the Fence Line System for Site 6A / Southern Area, and other planned supplemental investigations. The presentation regarding Site 2 began with a summary of prior investigations and remedial activities. Currently, the primary concern is the extent of fuel-related contamination at the site, and the potential migration of that contamination via groundwater. Xylene is the only contaminant currently observed at levels triggering concern. During review of a slide presenting current groundwater data and two specific areas of concern, Mr. Anastasi noted that the location of a chemical storage area identified in historic documents would be consistent with one of the current areas of concern. Mr. Brayack further noted that wells in this area formerly exhibited VOC concentrations well in excess of 1,000 µg/L, but that concentrations are now around 50 µg/L; while this is still more than 10 times the typical VOC MCL of 5 µg/L, a substantial reduction has nevertheless been observed. There was a question as to whether there is a plan for remediation in this area; Mr. Brayack indicated that an alternatives analysis is

underway, but any remedial activities would not begin until after the UXO/MEC issues have been addressed; considering the relatively lower levels of contamination currently evident (as compared to historic data), remedial measures would likely be targeted at residuals.

The discussion of Site 2 continued with a description of off-property work. A clay layer has been noted at depths of 50 to 70 feet below the ground surface and dipping to the north, while the ground surface dips to the south. This is surmised to be a localized geologic phenomenon. The influence of Swan Pond as a potential complication in evaluating groundwater transport was specifically noted; groundwater elevation data from the Site 2 off-property investigation has been augmented with data from Sites 6A/10B to evaluate how groundwater travels in this area. With piezometers installed to evaluate groundwater transport, the opportunity to collect groundwater samples at the same time was taken. A surprising result was found at SA-PZ460I, where a trichloroethene (TCE) concentration of 440 µg/L was detected.

Recent investigations at the on-property portion of Site 2 included soil gas samples near the previously-referenced chemical storage area. An upcoming investigation will address delineation of potential contaminants to the north through sampling at four locations. Off-property, an extensive program to delineate potential sources or other upgradient evidence of the elevated TCE concentration observed at SA-PZ460I is ongoing. As already noted, the dammed impoundments complicate groundwater flow in this area. No evidence of potential sources was noted during review of historic aerials, but elevated TCE levels have now been observed in two sampling events at SA-PZ460I, so random error is not a likely explanation for this detection. A semicircle of sampling locations will be installed over the summer in 2013 upgradient of SA-PZ460I, and if anything is found additional locations will be sampled by stepping out at defined intervals. The purpose of the additional investigation is to determine if the Navy property is the source of the elevated TCE concentration.

There was some discussion as to what other sources of TCE might have existed. Mr. Brayack indicated that no others are known definitively. It would be reasonable to think it could have come from Site 2 (to the northwest), but concentrations would have been much lower (on the order of 25 µg/L) in that event. It cannot be ruled out that something was dumped along River Road. Mr. Anastasi noted that Grumman had a discharge permit with a high allowable limit for TCE at their facility on the south side of Grumman Road, and asked if lake sediments had been tested. Mr. Brayack indicated that the lake sediments were tested when Grumman left. There was some discussion about the PRSC's water supply, but Mr. Tarr and Mr. Brayack confirmed that the PRSC is now supplied by the public water supply system and is no longer using wells on their property.

Mr. Brayack continued with a description of progress at Site 6A and construction of the Fence Line Treatment System. The Record of Decision (ROD) was issued in May 2012, and remedial design of the system began the same month. Construction contracts were issued in August 2012 and construction started in October 2012, but Super Storm Sandy caused significant disruption in the availability of

materials and contractors. Construction resumed in late winter 2013. A monitoring program is being developed, and the ROD has contingencies built in to require further investigation and remediation based on performance of the Fence Line Treatment System.

Mr. Brayack also described upcoming sampling planned for the Southern Area. Specifically, several temporary wells are planned for the area south of the eastern runway. The purpose of these wells is to investigate the vertical movement of the Southern Area plume, and to see if the entire plume is flowing upwards into the Peconic River or if some portion of it remains at depth. The investigation will permit a flow net study to further evaluate the vertical nature of the contaminant plume along the river.

GENERAL DISCUSSION

Following completion of the formal presentations, there was further discussion of the Fence Line Treatment System construction. Mr. John Hudacek of H & S Environmental elaborated on the progress of the work, noting that substantial progress had been made and they were approximately 90 percent complete with site civil work. All piping has been installed, and delivery of the building was scheduled for June. Equipment installation would follow soon thereafter. The system would likely be completely installed in August, at which time commissioning would begin. Testing would take approximately four weeks, and the target date for operation is September or October 2013. Mr. Anastasi added that quick progress on the installation of the Fence Line Treatment System was made possible thanks to cooperation from the NYSDEC.

There was further discussion about the installation of off-property wells, whether access has already been granted by the Suffolk County Department of Parks, Recreation and Conservation, and if data would be available for the next RAB meeting. Mr. Brayack confirmed that access has been arranged, and that data would be available at the next RAB.

Additional discussion followed regarding deliverables for completed sampling and the nature of work plans for the upcoming work. It was noted that a Data Summary Report for the 2012 sampling would be forthcoming, but that the data previously presented at the December 2012 RAB was validated, and therefore there would be no changes to the data in terms of the concentrations or qualifiers previously reported. Work Plans for the upcoming investigations were prepared as individual programs rather than as part of the routine monitoring program.

The impacts of the federal budget sequester were discussed. Mr. Tarr indicated that the Navy had already begun the budgeting process for fiscal year 2014, and that it is expected that there would be some impact to operations, but the scope of such impacts would depend on final funding levels for the Department of Defense. Nevertheless, the Navy's intent with respect to NWIRP Calverton is to continue to protect human health and safety and the environment.

CLOSING REMARKS

As a final note, Mr. Tarr suggested November 7, 2013 as a tentative date for the next RAB meeting. The location of the RAB meeting will likely be changed as the town's animal shelter will be taking over use of the Calverton Community Center. The final date and location will be confirmed and communicated prior to the November meeting. The meeting was then adjourned.

ATTACHMENT 1

MAY 14, 2013 RAB MEETING SIGN-IN SHEET

38th RAB Meeting for NWIRP Calverton
May 14, 2013
Sign-in List

Name (Print)	Address and/or email if interested in being on mailing list	Affiliation	How did you hear about the meeting?
Jodi Giglio	200 Howell Ave. giglio@town of riverhead.ny.gov	Town Council	
Mike Zobel	mzobel@ensafe.com	Resolution Consultants	
Robert Forstner	robert.forstner@aecom.com	Resolution Consultants	
Jim TARR	JAMES.TARR@NAV.MIL	NAVFAC	
Lou Cook	louisD99@optonline.net	RGHR	
Jen Good	jgood@hsenv.com	H&S	
Dave Brayock		TENUS.	
Frank Anastasi	RAB Tech. Advisor	SCA Assoc.	
AL TAORMINA	ALTAORMINA@ATT.NET	H&S	
Bill Gunther	RAB	RAB	
HENRY WILKIE	625 Broadway ALBANY, NY 12233	NYSDEC	
Sid Bail	PO Box 128 Wading River Civic	Wading River Civic	
GEORGE BARTUNEK	GMBARTUNEK@HOTMAIL.COM	N. FORK ENVIRON. COUNCIL	
HUDACEK JOHN	HUDACEK@HSENV.COM	H&S	
Greg Quimby	gregory.quimby@aecom.com	Resolution Consultants	
DOUG FELDMAN	douglas.feldman@suffolkcounty.gov	SCDHS	

38th RAB Meeting for NWIRP Calverton
May 14, 2013
Sign-in List

Name (Print)	Address and/or email if interested in being on mailing list	Affiliation	How did you hear about the meeting?
Joe Murray	200 Howell Ave Riverhead, NY	Town	
John Armentano	jcarmentano@farrellfritz.com	PRSC	

ATTACHMENT 2

MAY 14, 2013 RAB MEETING AGENDA

Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Calverton

May 14, 2013
Calverton Community Center, Calverton NY
7:00 p.m.

Welcome and Agenda Review
James Tarr CPG, NAVFAC Mid-Atlantic

Distribution of Minutes
All Members

Community Update
Bill Gunther, RAB Co-chair
Jodi Giglio, Town of Riverhead Councilmember

Technical Progress

General Overview of ER Sites
James Tarr CPG, NAVFAC Mid-Atlantic

Five-Year Review Development
Dave Brayack PE, Tetra Tech

Site 7 Remedial Action Update
Jen Good PG, H&S Environmental

Site 2 Geophysical Investigation Update
Greg Quimby PE, Resolution Consultants

Site 2 Off-Site Groundwater Investigation
Dave Brayack PE, Tetra Tech

OU-3 ROD Fence-Line Treatment System Construction
Dave Brayack PE, Tetra Tech

OU-3 ROD Remedial Design
Dave Brayack PE, Tetra Tech

Closing Remarks
James Tarr CPG, NAVFAC Mid-Atlantic

Presenters will be available after the program for questions.

ATTACHMENT 3

NAVY PRESENTATIONS – MAY 14, 2013 RAB MEETING

Restoration Advisory Board Meeting

General Overview of ER Sites

Naval Weapons Industrial Reserve Plant (NWIRP) Calverton, New York

May 14, 2013

General Overview of ER Sites

- **Site 2**
  - Expanded geophysical survey upcoming
  - Off-site investigation ongoing
- **Site 6A/10B**
  - Fence-line system construction ongoing
  - Additional investigation near source area upcoming
- **Site 7**
  - Seasonal operation of extraction system continues
- **Southern Area & Offsite**
  - Additional investigation along Peconic River planned
  - Monitoring wells installed to monitor auto salvage operation
- **Sitewide**
  - Five-Year Review

Restoration Advisory Board Meeting

Site 7 Remedial Action Update

Naval Weapons Industrial Reserve Plant (NWIRP) Calverton, New York

May 14, 2013

Restoration Advisory Board Meeting

Five-Year Review Development

Naval Weapons Industrial Reserve Plant (NWIRP) Calverton, New York

May 14, 2013

Restoration Advisory Board Meeting

Site 2 Munitions Response
(Fire Training Center)

Naval Weapons Industrial Reserve Plant
(NWIRP) Calverton, New York

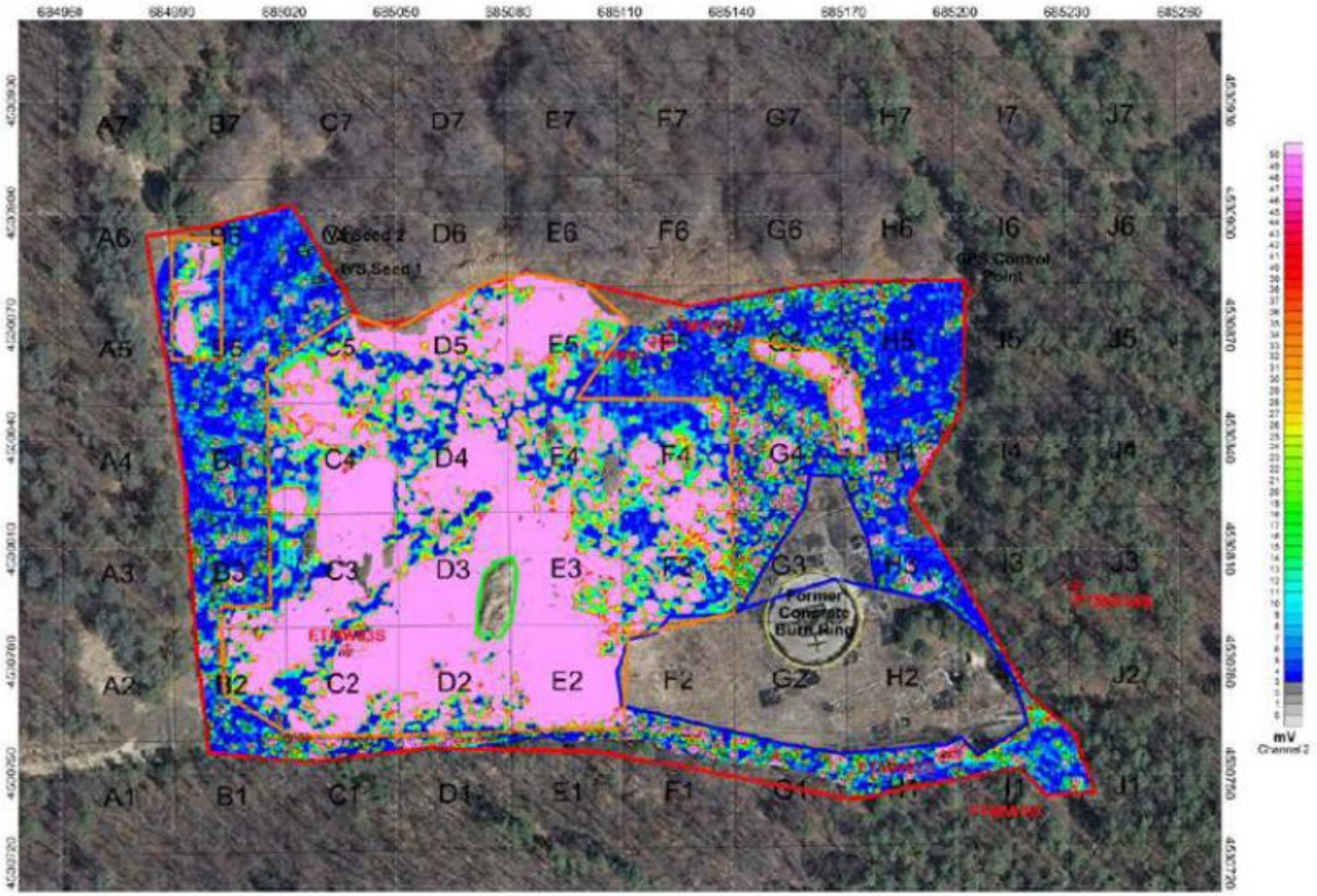
May 14, 2013

Site 2 Location

Site 2: Munitions Response Operations

- **Background**
  - **During sampling operations in April 2010, several (5) 20 mm fragments were found in the auger bucket of the hand auger**
  - **Remedial operations have been on hold since April 2010**
- **Previous Munitions Response Activities (Site 2)**
  - **Digital Geophysical mapping Survey completed in 2010**
    - Surveyed area consisted of 7.18 acres
    - Identified Saturated (Polygon Areas) over ~2,400 subsurface anomalies
  - **Mechanical Low Input Soil Screening**
    - Approximately 3.78 acres contained saturated responses
    - Field Operations included the screening and processing of ~12,500 CYD of soil at Site 2
    - Approximately 9,900 anomalies were located and verified
    - 17,006 projectiles recovered and a total of 8,296 anomalies destroyed
    - An estimated 34,000 pounds of metal was recovered and recycled
    - Completed 4 demolition events with explosives to render MPPEH safe for disposal
      - Only three items were determined to be UXO

Site 2 Previous DGM Results

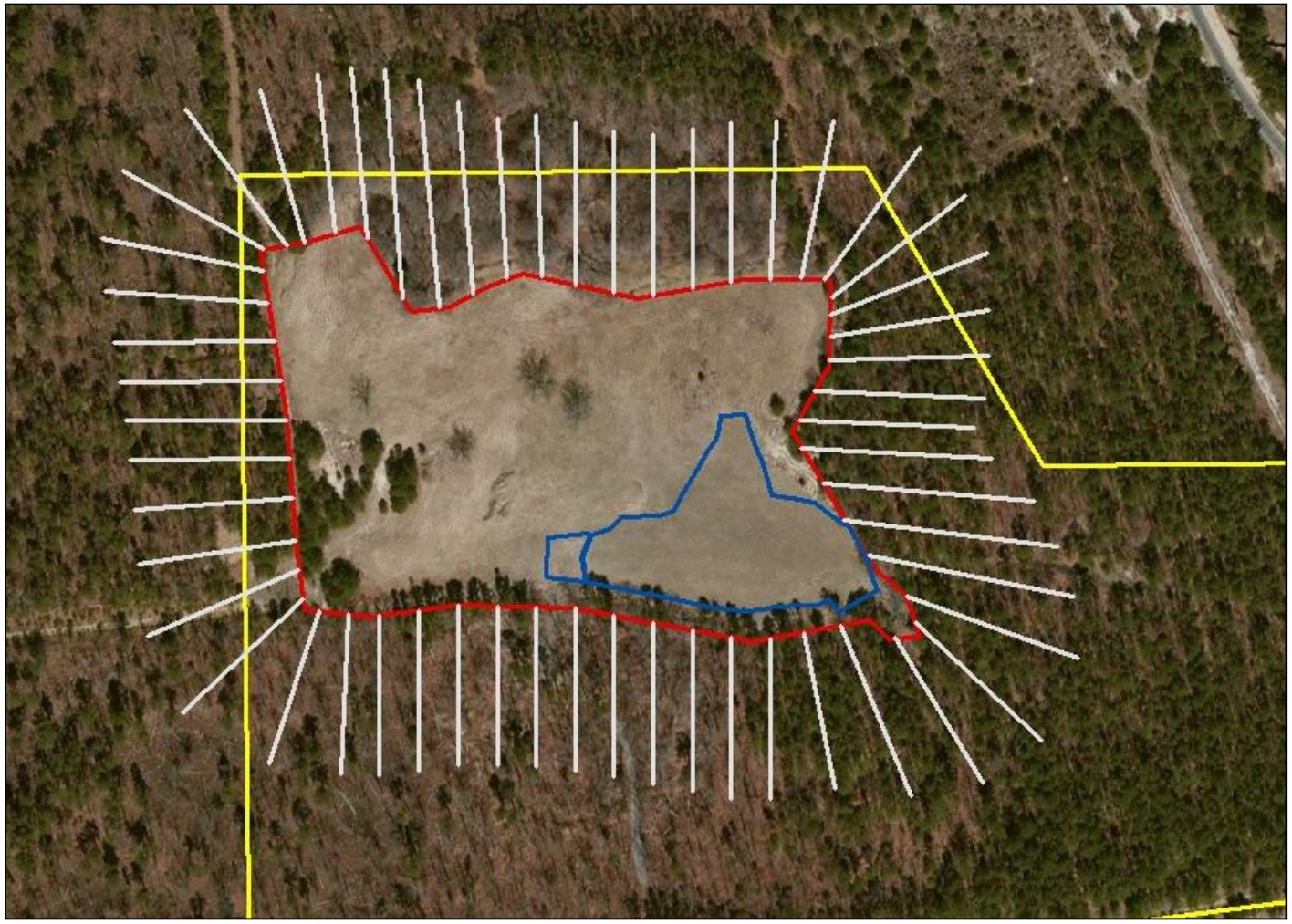


Source: AGVIQ-CH2M Hill

Site 2: Munitions Response Operations

- **Proposed Munitions Response Activities (Site 2)**
  - **Site observations suggest additional munitions may be present outside of 7.18-acre area**
  - **Additional Digital Geophysical Mapping will be conducted to evaluate subsurface anomalies**
    - Will employ same equipment used in 2010 DGM survey
    - Instead of full coverage, data will be collected from transects
    - Transects will extend 200’ from boundary of excavated area
    - Objective is to identify saturated areas and any responses indicative of 20mm projectiles
    - No intrusive investigation will be conducted; assessment will be qualitative in nature
    - Results will help the Navy determine if the site boundary needs to be adjusted and the next steps for future response activities

Site 2 Supplemental DGM Locations



Site 2: Munitions Response Operations

- **Project schedule:**
  - **Mobilization anticipated for last week in May**
  - **Fieldwork will be approximately 2 weeks in duration**
  - **Results will be provided in Summary Report (June 2013)**

QUESTIONS ?

Restoration Advisory Board Meeting

Site 2 Activities and Site 6A - Southern Area Remedial Design and Fence Line Construction

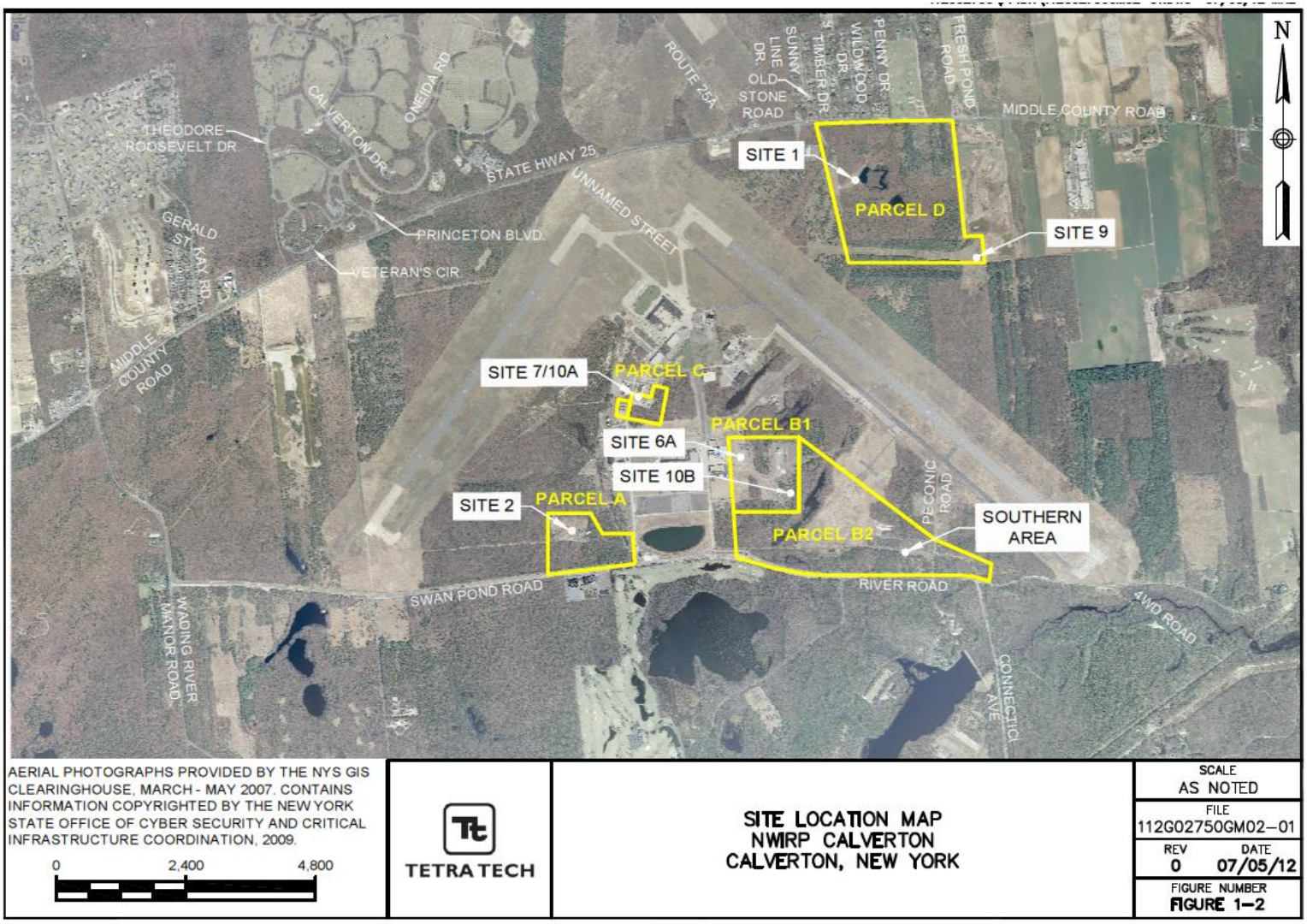
Naval Weapons Industrial Reserve Plant (NWIRP) Calverton, New York

May 14, 2013

Presentation Outline

- Site 2 Activities
  - Corrective Measures Study
- Site 6A – Southern Area Design
  - Fence Line Treatment System Construction
  - Remedial Design Activities
- Supplemental Investigations

Site Layout


N
SITE 1
PARCEL D
SITE 9
SITE 7/10A
PARCEL C
SITE 6A
PARCEL B1
SITE 10B
SITE 2
PARCEL A
PARCEL B2
SOUTHERN AREA
THEODORE ROOSEVELT DR.
CALVERTON DR.
ONEIDA RD.
STATE HWAY 25
ROUTE 25A
UNNAMED STREET
PRINCETON BLVD.
VETERAN'S CIR.
GERALD ST. KAY RD.
MIDDLE COUNTY ROAD
OLD STONE ROAD
SUNNY LINE DR.
TIMBER DR.
WILLOWOOD DR.
PENNY DR.
FRESH POND ROAD
MIDDLE COUNTY ROAD
PECONIC ROAD
SWAN POND ROAD
RIVER ROAD
4WD ROAD
WADING RIVER MANOR ROAD
CONNECTICUT AVE
AERIAL PHOTOGRAPHS PROVIDED BY THE NYS GIS CLEARINGHOUSE, MARCH - MAY 2007. CONTAINS INFORMATION COPYRIGHTED BY THE NEW YORK STATE OFFICE OF CYBER SECURITY AND CRITICAL INFRASTRUCTURE COORDINATION, 2009.
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TETRA TECH
SITE LOCATION MAP
NWIRP CALVERTON
CALVERTON, NEW YORK
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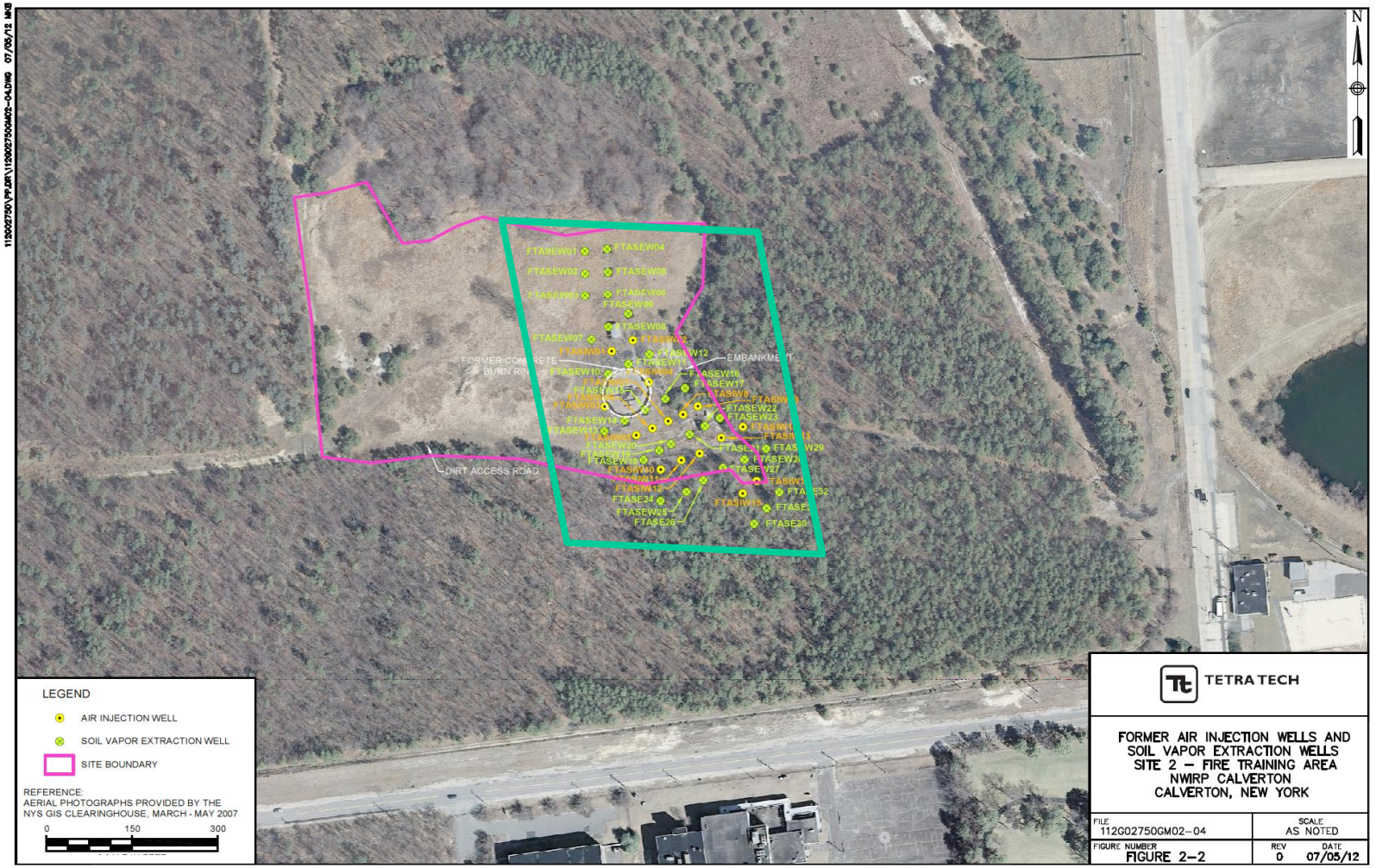
FIGURE NUMBER
FIGURE 1-2

Site 2 Activities

- Site 2 – Fire Training Area, used through the mid-1990s for training
- Previous interim remedial activities consisted of:
  - Free product recovery from 1980's to 1996
  - Air sparging/soil vapor extraction from 1995 to 2000
  - Soil removal in 2008 and 2009
  - MEC Removal 2012
- Soil and groundwater investigations conducted in 2011 and 2012
- The objective was to determine whether any additional source area (soil) activities were required to determine the on- and off-property quality of groundwater
- The groundwater investigation was anticipated to be conducted in phases
- Supplemental RFI Report issued in October 2012 for review

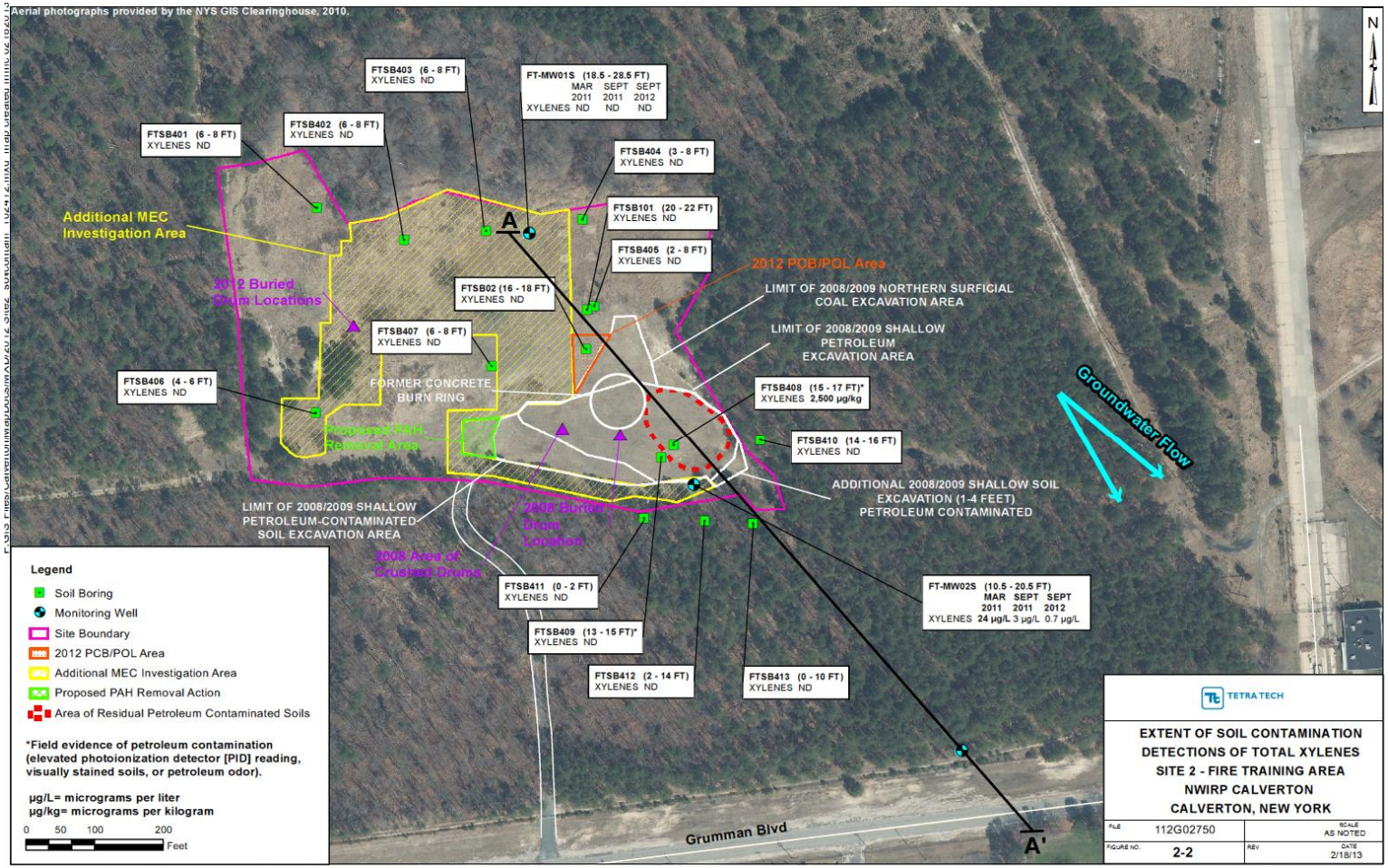
Site 2 Activities

Site 2 Air Sparging/Soil Vapor Extraction System



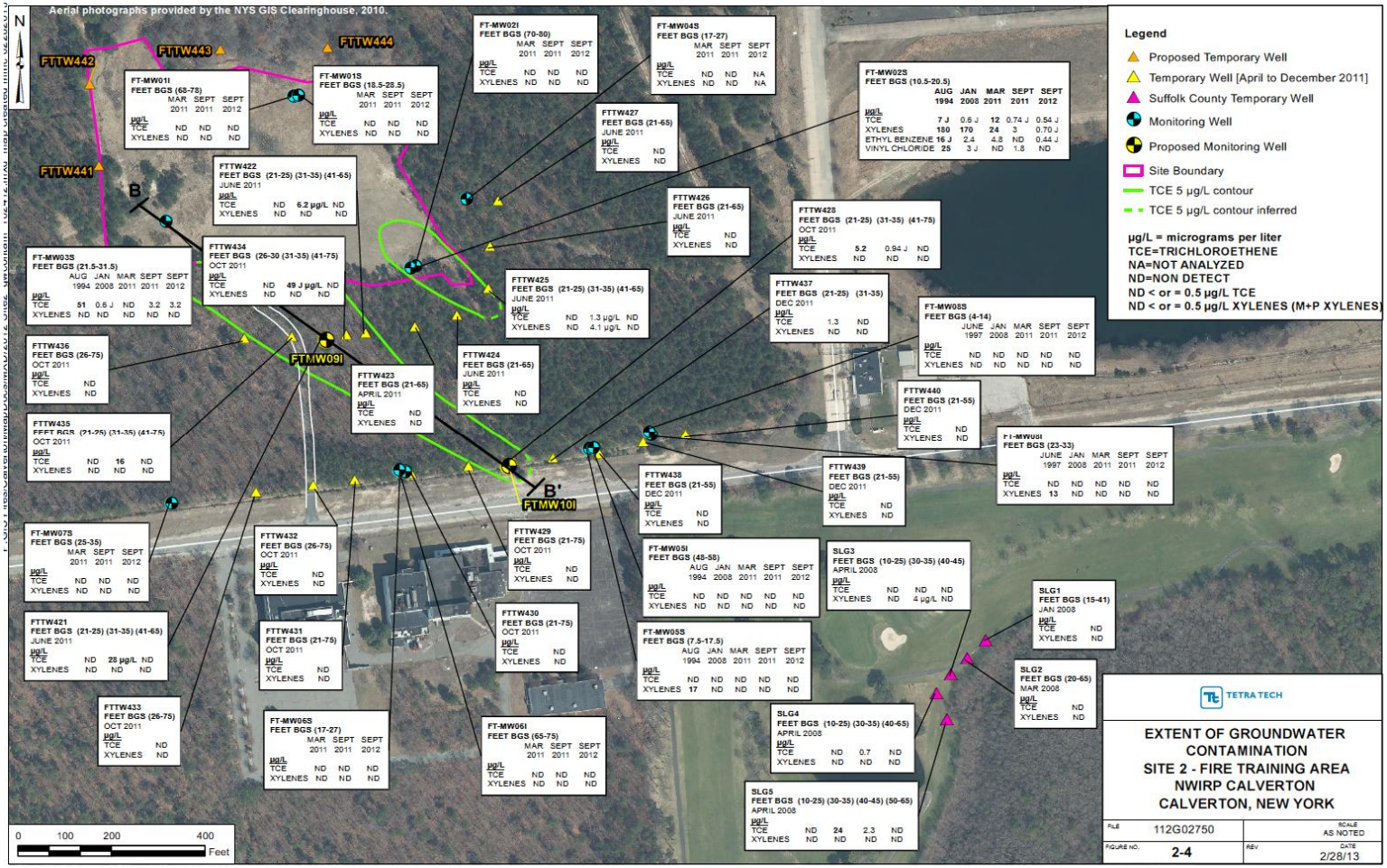
Site 2 Activities

Site 2 – Current Extent of Contaminated Soil (xylene)



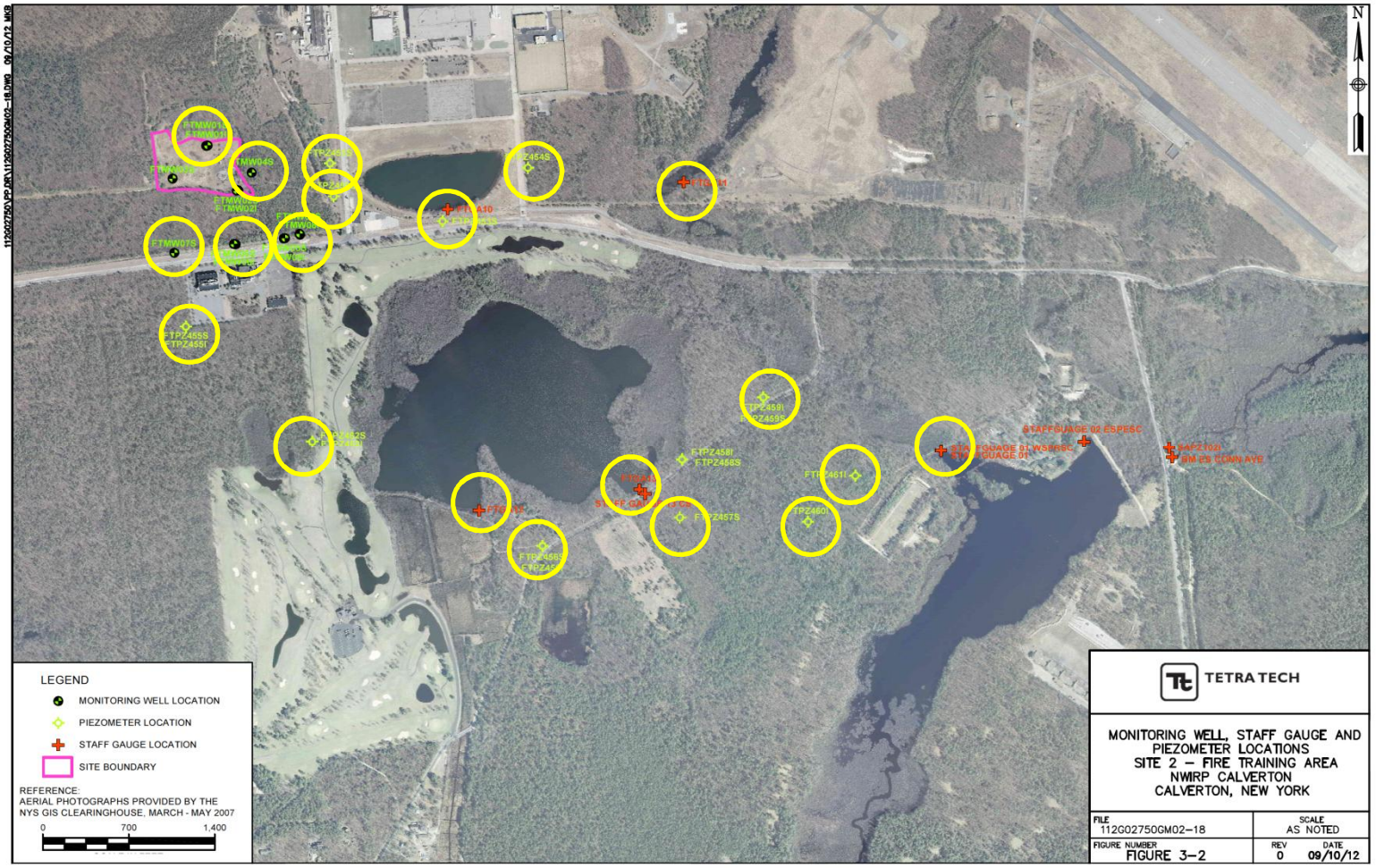
Site 2 Activities

Site 2 –Current Extent of Onsite Contaminated Groundwater



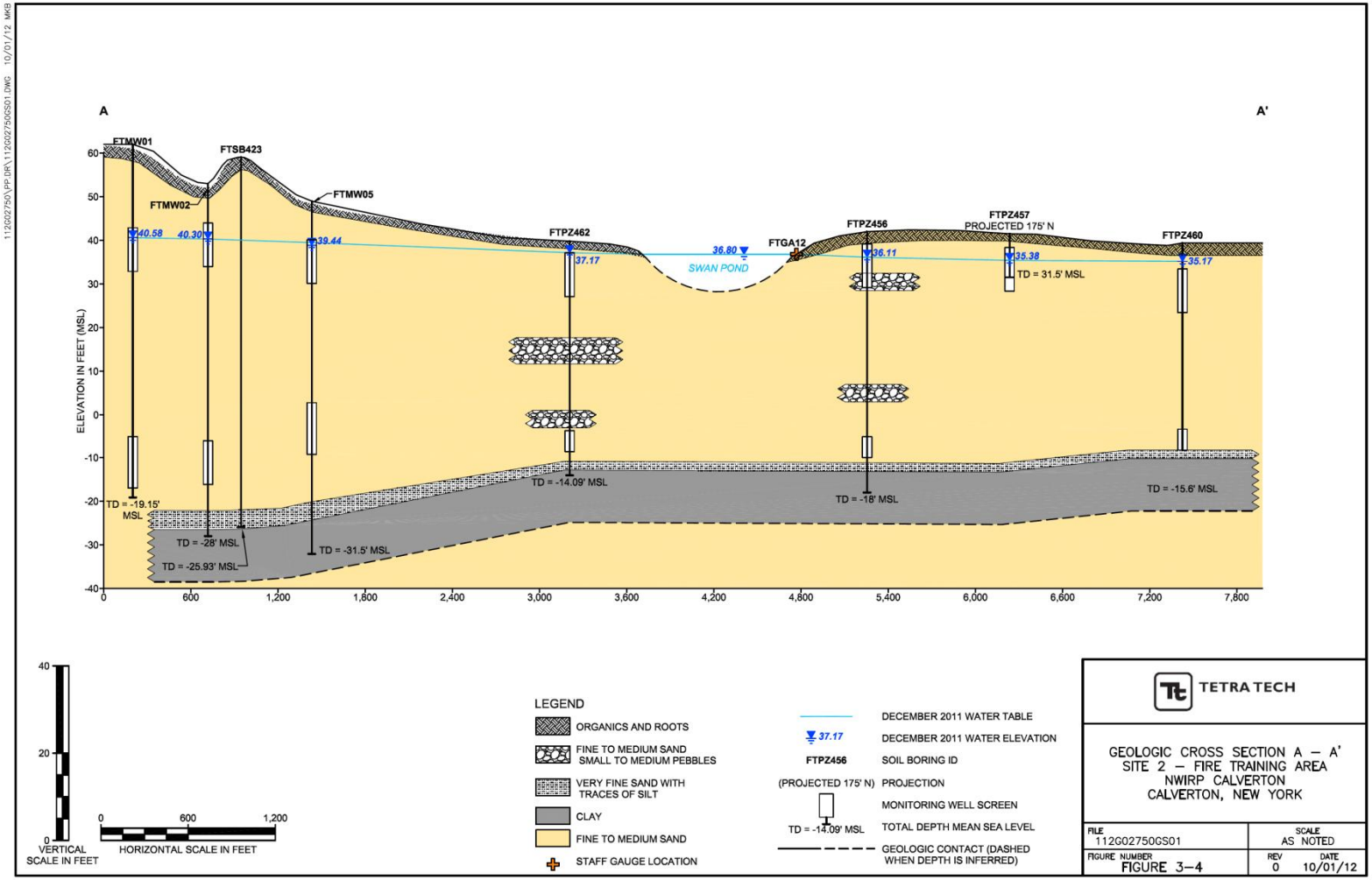
Site 2 Activities

Site 2 Monitoring Well and Piezometers



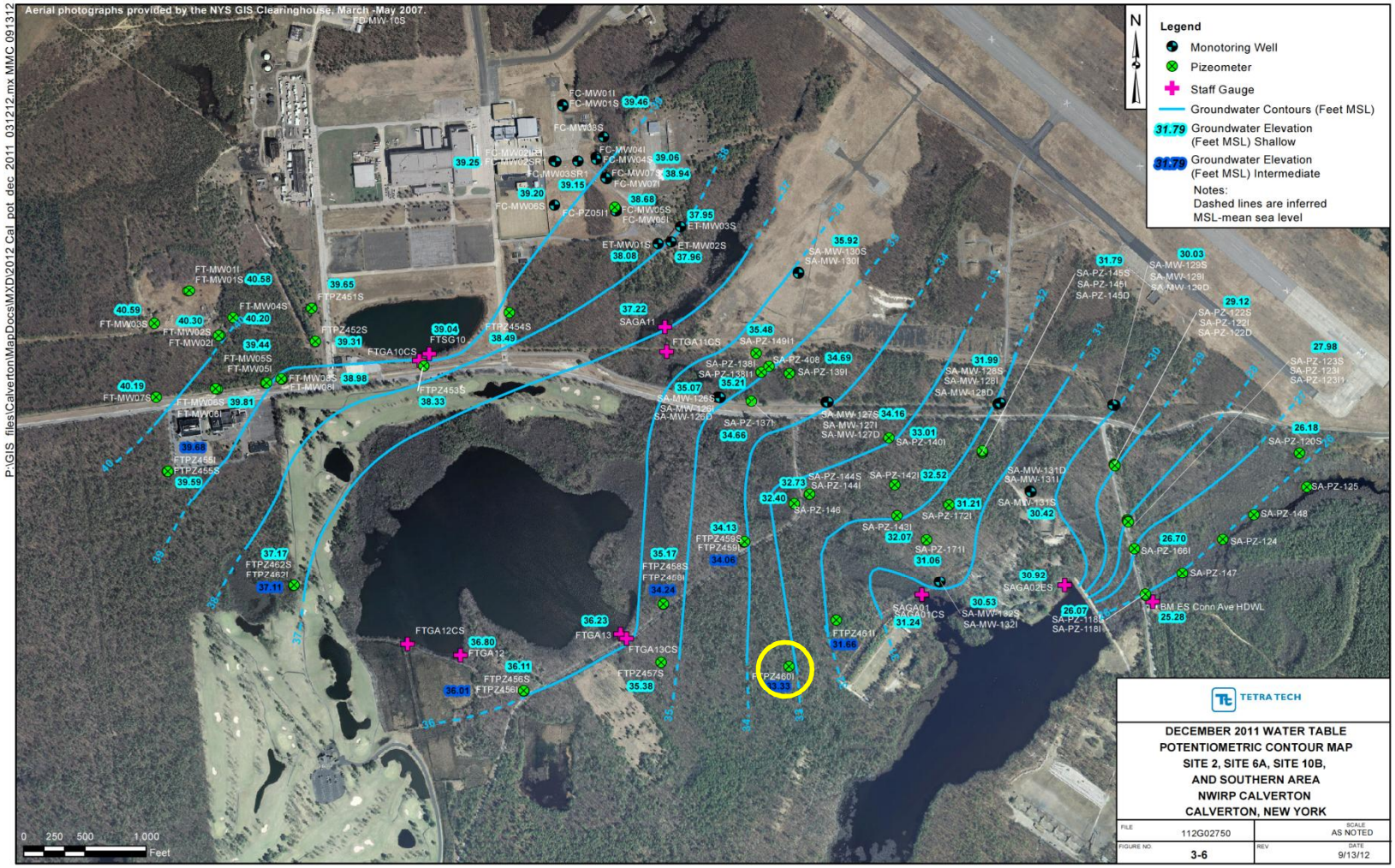
Site 2 Activities

Site 2 Monitoring Well and Piezometers – Cross Section



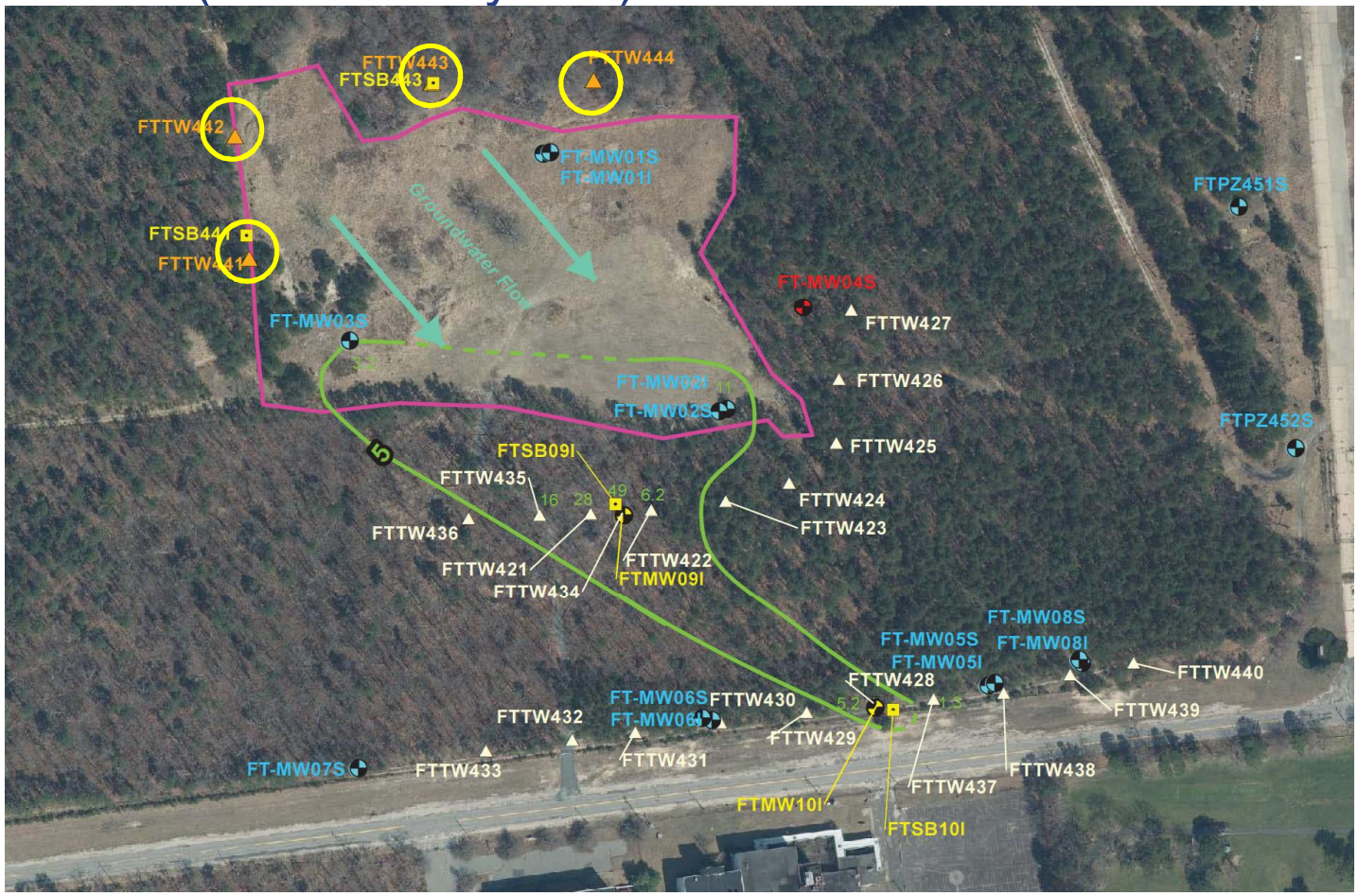
Site 2 Activities

Potentiometric Surface Map (December 2011)



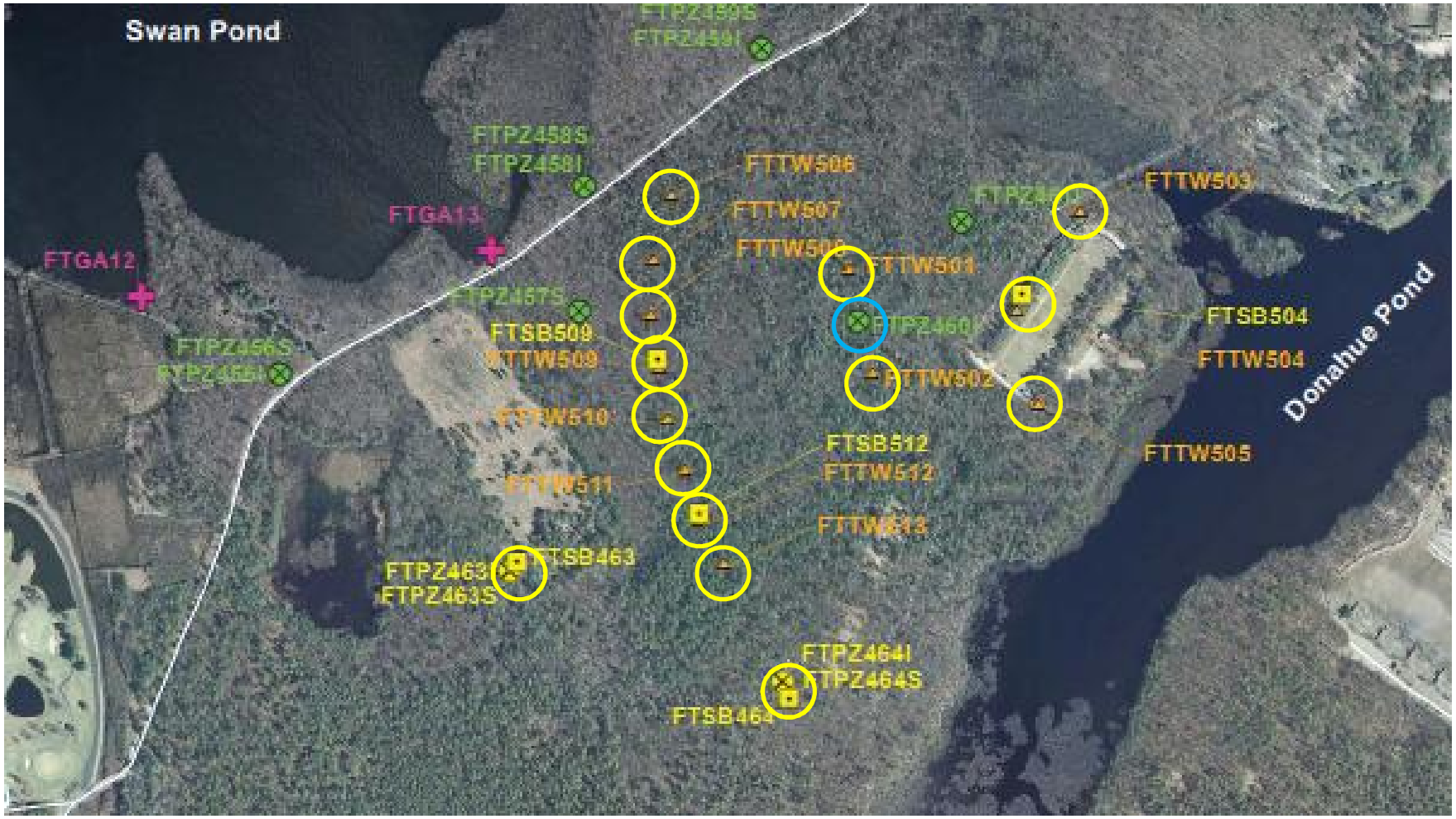
Site 2 Activities

Site 2 – Current Extent of Contaminated Groundwater (TCE and Xylene) and Additional Wells



Site 2 Activities

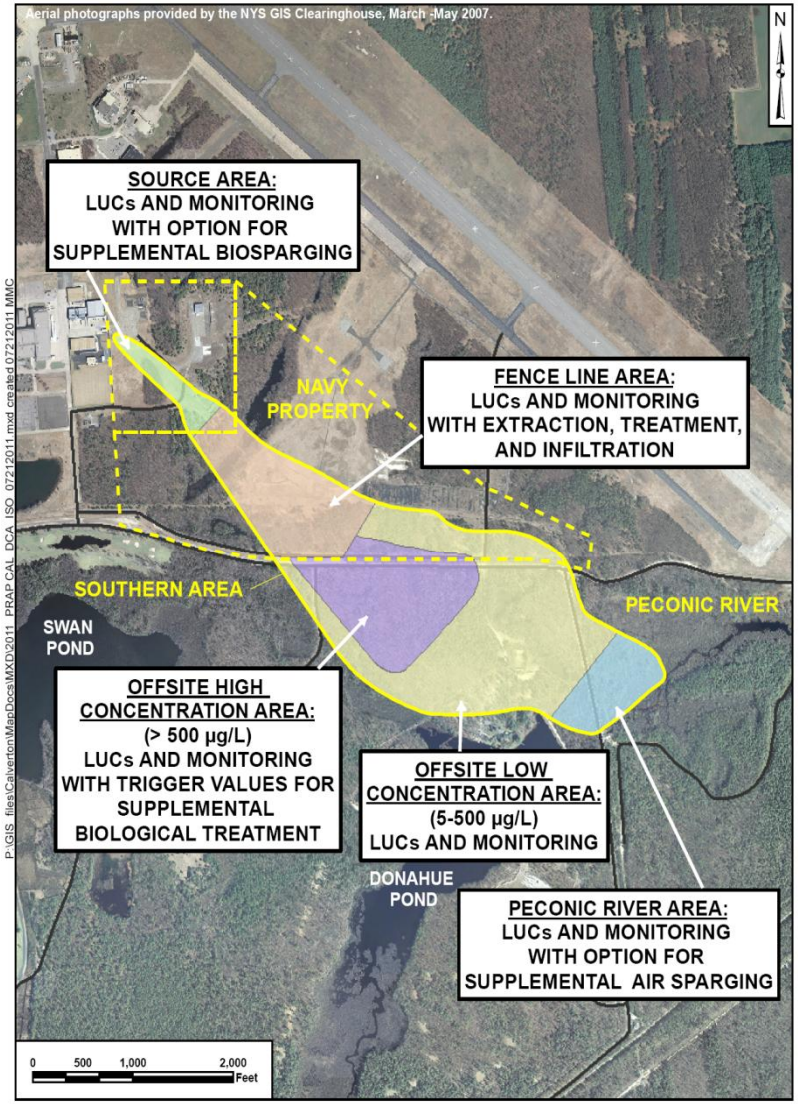
Supplemental Offsite Groundwater Investigations (FTPZ460I)

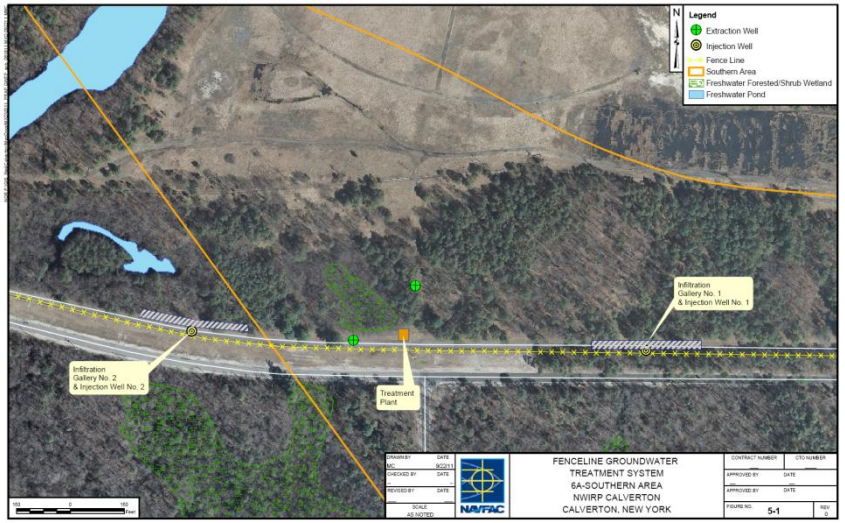


Site 6A – Southern Area Design

- Record of Decision (ROD) in May 2012
- Remedial Design for Fence Line Treatment System in May 2012
- Navy awards construction contract in August 2012
- Contractor (H&S Environmental) prepares Remedial Action Work Plan in September 2012
- Construction starts in October 2012, “Super Storm Sandy” interrupts construction, interferes with supplies and contractors
- Restarted construction in late winter 2013
- Remedial Design for Monitoring Program is in progress

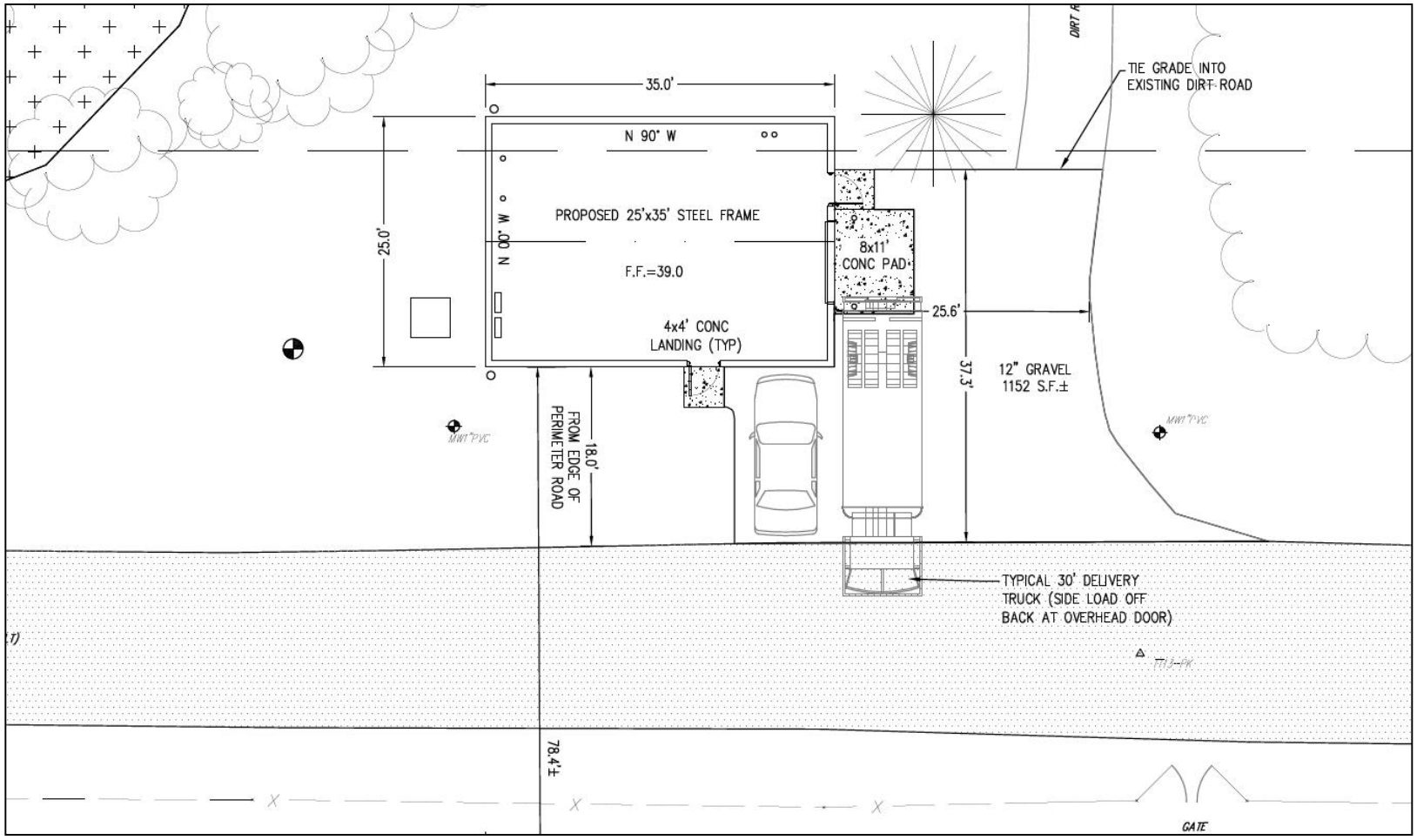
Selected Remedy



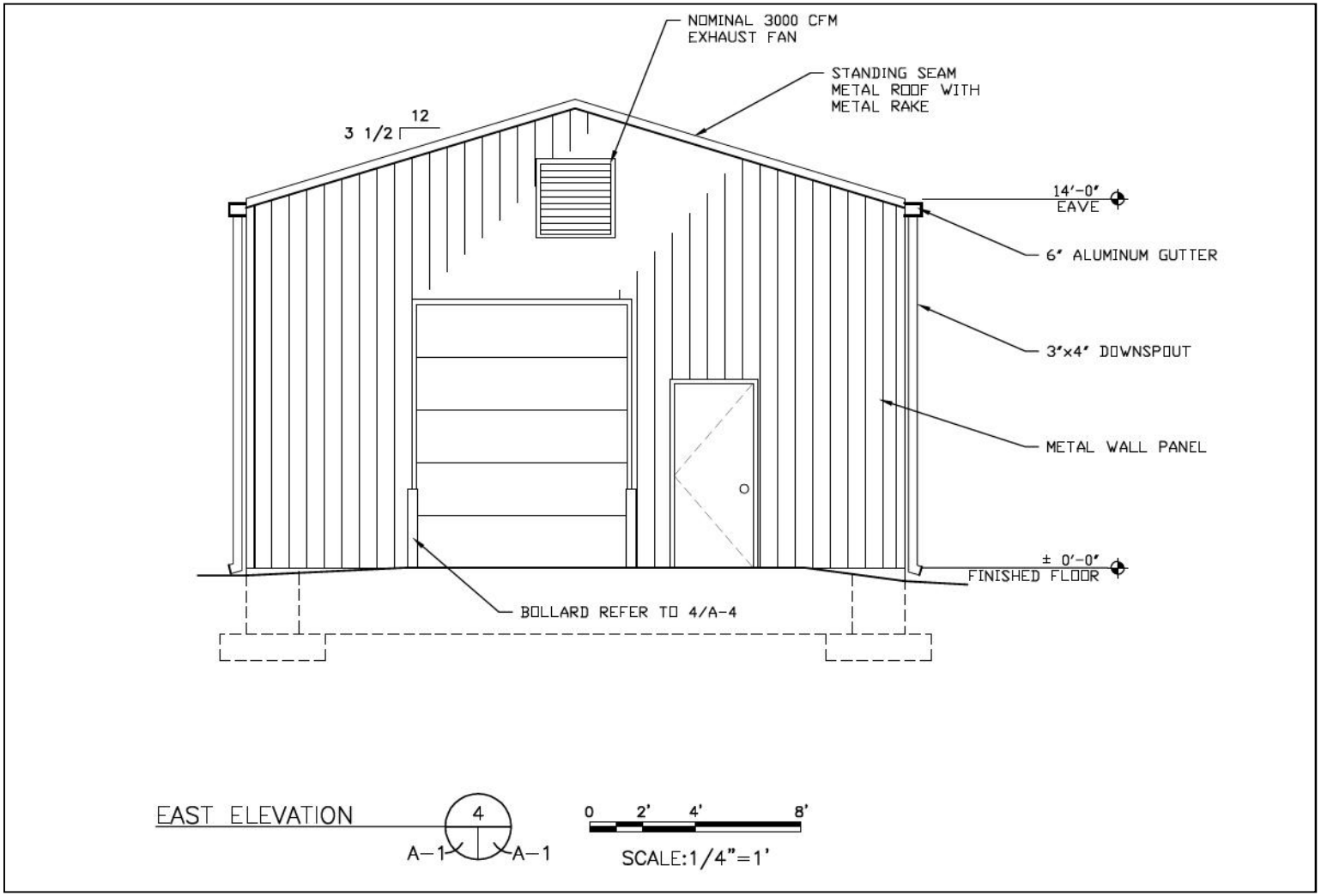


- Two extraction wells, total of 100 gallons per minute
- Air Stripper to remove VOCs
- Re-inject groundwater, meeting MCLs

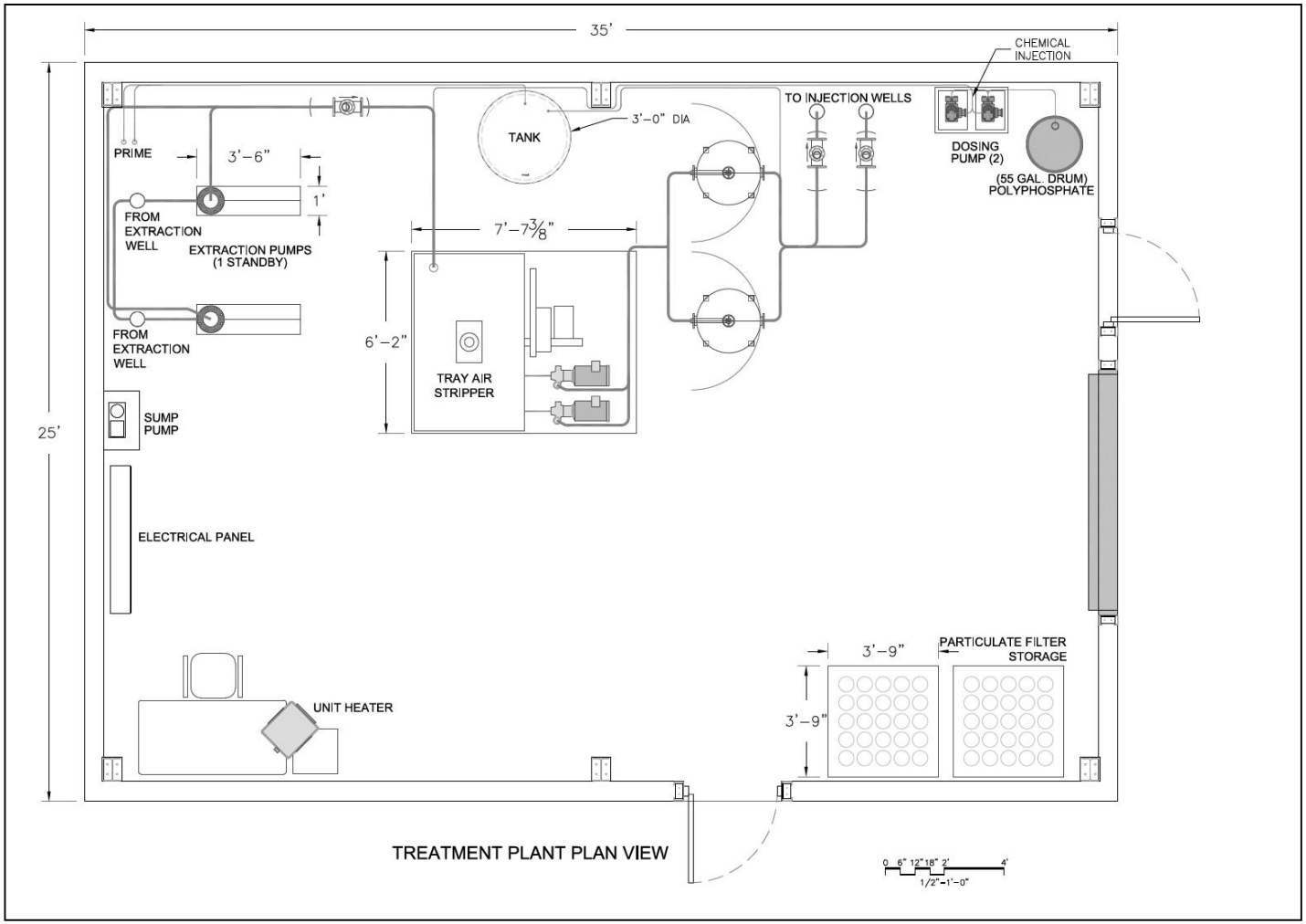
Fence Line Treatment System



Fence Line Treatment System



Fence Line Treatment System



Fence Line Treatment System

Extraction Well

Fence Line Treatment System

Treatment Plant Foundation and Extraction Well

Fence Line Treatment System

Infiltration Gallery

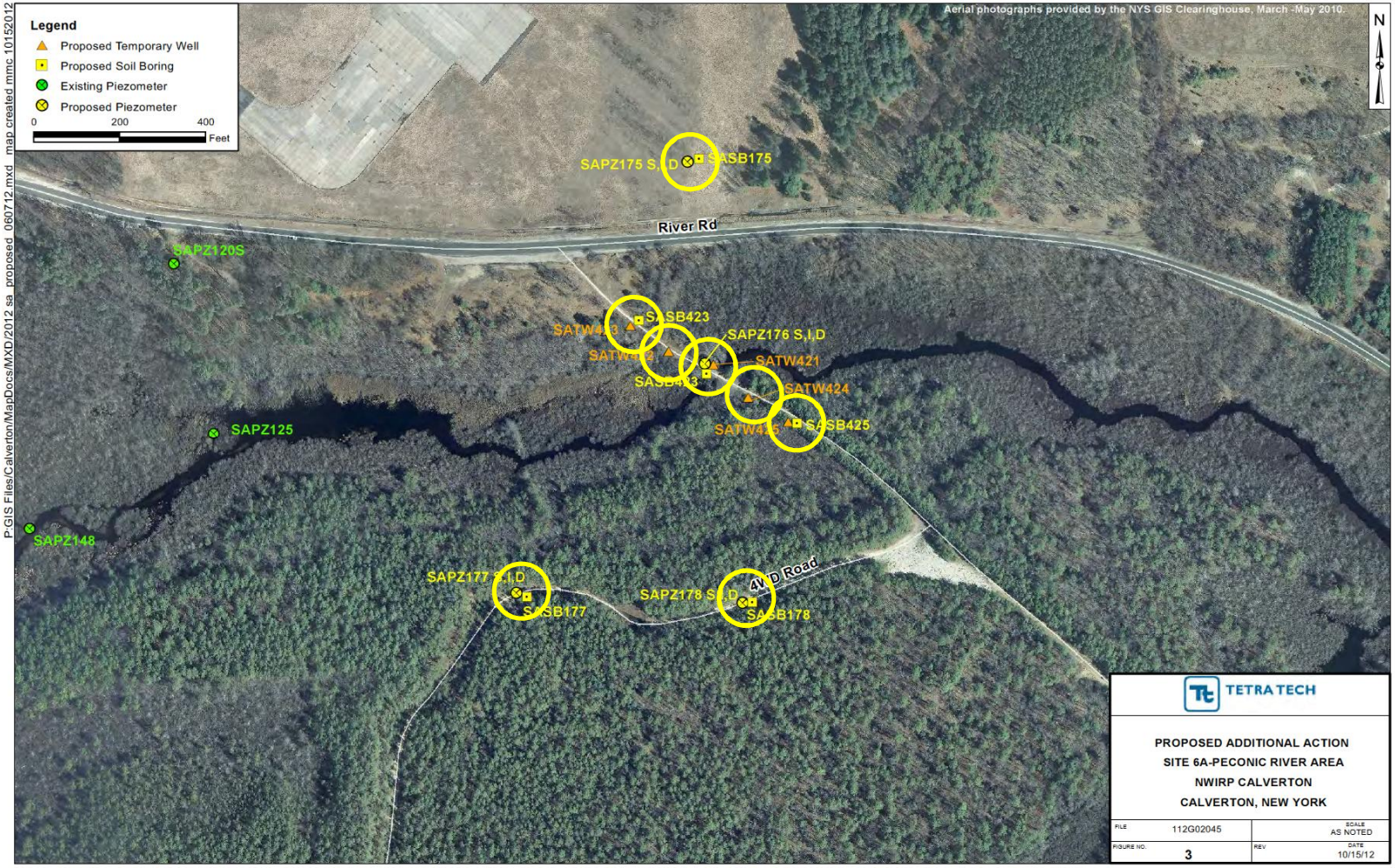
OU3 ROD Remedial Design

Design Basis

- Utilizes groundwater monitoring to establish area-specific groundwater flow, VOC concentrations, and mass flux
- Actions would be area-specific:
  - Sites 6A/10B - Determine need for additional source area action
  - Fence Line Area - Ensure hydraulic capture
  - Peconic River Area - Evaluate potential impact on ecological receptors using benchmarks
  - High (>500 µg/L) and Low (<500 µg/L) Concentration Area - Protect ecological receptors with advance notice

Site 6A Southern Area

Supplemental Offsite Groundwater Investigations (Peconic River Area)



QUESTIONS ?