SPRING VALLEY FORMERLY USED DEFENSE SITE

Partners Meeting Presentation

June 2020















AGENDA REVIEW



Parsons Update

- 4825 Glenbrook Road
- 4835 Glenbrook Road

Weston Updates

- Site-Wide Remedial Action
- Public Safety Building

USACE Updates

- Groundwater Study
- New TAPP Advisor
- 4835 Glenbrook Road- Review & Path Forward

Future Partners Agenda Development

SPRING VALLEY GLENBROOK ROAD SITES

PARTNER'S UPDATE
June 2020



"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."





4825 Glenbrook Road - Recent Activities

- May was spent:
 - Performing site maintenance
 - ✓ Expanding the backfill storage area at the Federal Property
 - ✓ Setting up the site for -10, -90 activities









4825 Glenbrook Road - Recent Activities (cont.)

- The only area that remained was the completion of the north wall in Grid -10,-90 near the shared property line with 4835 Glenbrook Road
 - ✓ Parsons had to stop operations there when a bottle (later confirmed to be empty) was encountered on July 22, 2019
 - ✓ Parsons had planned on completing the operation in March 2020 after Area 4 but CCDC was forced to demobilize as result of the COVID-19 Pandemic
- CCDC was able mobilize a team to support in late May
- On May 27th began removal of the temporarily placed clean backfill covering Grid -10,-90
- On June 8th began intrusive operations at Grid -10,-90
 - √ Filled one roll-off with soil down to competent saprolite
 - Collected 3 wall and 1 floor Confirmation Samples for Agent, Agent Breakdown Products (APBs), and Arsenic
 - √ No agent or ABPs were detected
 - ✓ The floor sample (RA-4825GR-AREA B-FL-(-10,-90)-01-10) exceeded the exceeded the comparison Arsenic value
- On June 15th attempted advance the excavation another 2 feet in Grid -10,-90
 - ✓ Mechanical refusal was achieved after about 1.5 feet
 - ✓ Collected 1 floor Confirmation sample for Agent, ABPs, and Arsenic
 - ✓ No agent or ABPs were detected
 - ✓ Arsenic results are pending
 - ✓ Further excavation is not possible





4825 Glenbrook Road - Recent Activities (cont.)



Excavation of the remaining portion of the north wall of Grid -10,-90 on June 7th

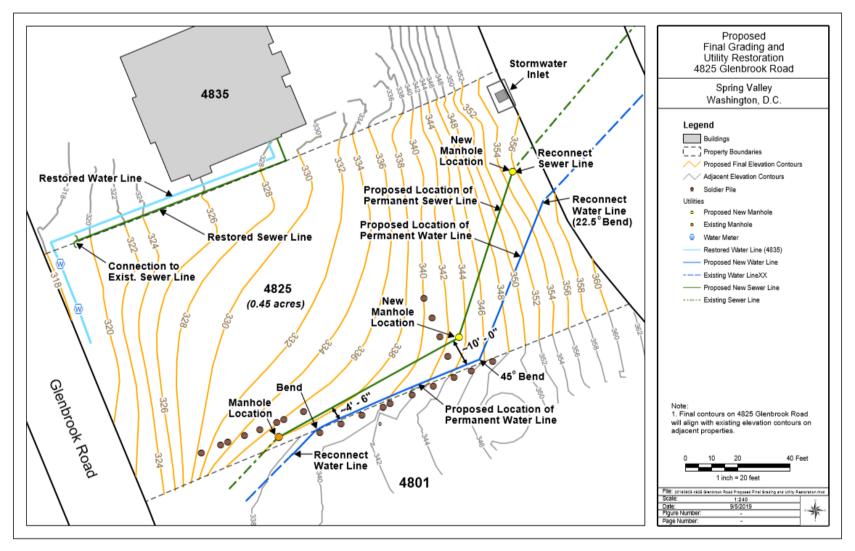


North wall of Grid -10,-90 Excavated Down to Bedrock





4825 Glenbrook Road – Restoration Plan



Final grading and utility restoration plan





Near and Mid-Term Schedule

- Begin final site restoration
 - ✓ Re-install American University (AU) water line
 - ✓ Re-install AU sanitary sewer line
 - ✓ Re-install 4835 waterline lateral
 - ✓ Re-install 4835 sanitary sewer lateral
 - ✓ Move 4835 AC units to original location
 - ✓ Restore fence along 4801 and 4825 Glenbrook Road properties
 - ✓ Restore site to final grade in 6-inch lifts with compaction in accordance with the Work Plan
 - ✓ Remove Siren from AU Property





Tentative Long-Term Schedule

Summer 2020

Final restoration of 4801 and 4825 Glenbrook



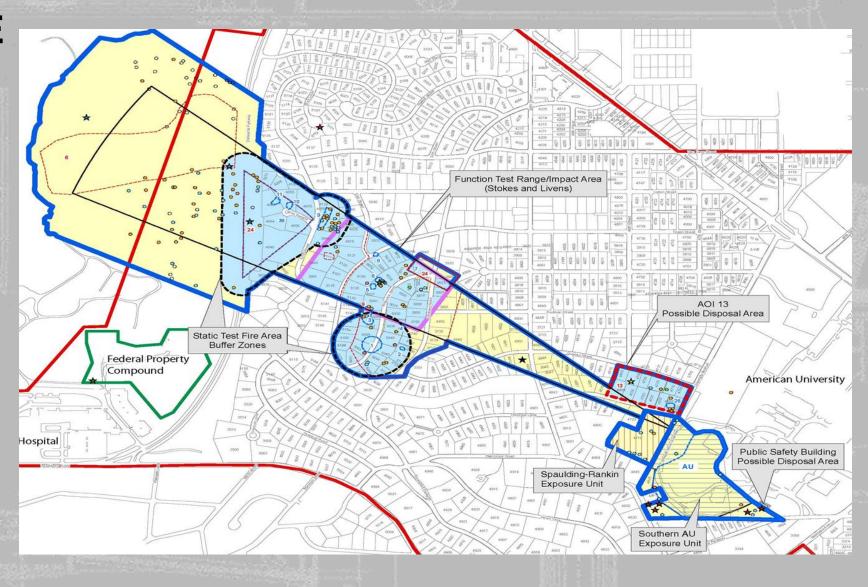


SVFUDS SITE-WIDE REMEDIATION STATUS JUNE 2020

Weston Solutions, Inc.

June 19, 2020







SPRING VALLEY STATUS UPDATE – COVID-19



- Public Safety Building Site Field operations at the PSB Site have been shut down due to the COVID-19 pandemic. U.S. Army Combat Capabilities Development Command Chemical Biological Center (CCDC) could not continue their daily air monitoring services due to Government travel restrictions, so PSB operations were shut down as of March 28th. A re-start date for the PSB (probably in the next few weeks) is being discussed among USACE, Weston, and CCDC.
- Properties Field operations at the 92 Residential Properties have continued and they have not been impacted, so far, by the COVID-19 pandemic. CCDC has been able to provide singleday operations required to support the Advanced Geophysical Classification (AGC) anomaly dig teams.



RESIDENTIAL PROPERTIES – FIELDWORK*



- Property Availability 3 new properties approved their landscape plans and became available for geophysical surveys.
- Vegetation removal/Blind Seeding – Vegetation removal completed at 4 properties and blind seeding completed at 3 properties.



^{*}info provided includes progress since last Partners presentation on April 30, 2020



RESIDENTIAL PROPERTIES – FIELDWORK* (CONTINUED)



- Geophysical surveys Dynamic surveys completed at 2 properties. Cued surveys completed at 1 property.
- Intrusive Investigations Intrusive investigations completed at 11 properties between 05/12/20 and 06/01/20.





RESIDENTIAL PROPERTIES – FIELDWORK* (CONTINUED)



- Intrusive Investigations (continued) Intrusive investigations completed at 11 properties between 05/12/20 and 06/01/20.
- Intrusive investigations were conducted at 1 additional property during the May intrusive phase; however, one target under hard-scape (driveway apron) remains to be investigated. Weston will return to investigate the hardscape target during the next intrusive mobilization.
- Intrusive investigations including 3 Manned Portable Vector (MPV) targets and 26 analog removal areas were completed on the Sedgwick block on 05/12/2020. Intrusive work at the property was halted on 04/06/20 upon identification of an intact livens. The livens is currently stored at the interim holding facility at the Fed Property pending final disposition.

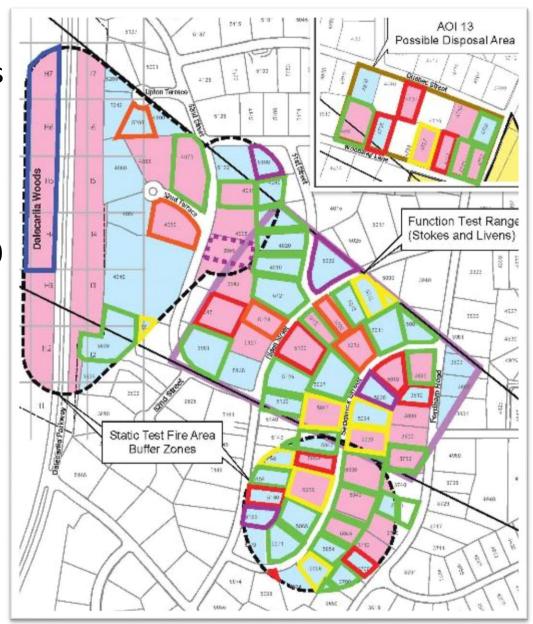




RESIDENTIAL PROPERTIES - INTRUSIVE STATUS



- 60 residential properties and 4 federal/city lots completed to date
- One hard-scape target will be intrusively investigated in July 2020 pending permit approval
- Intrusive investigations to begin at 4 properties in July 2020



Intrusive Investigations:

Completed in 2018

Completed in 2019

Completed Feb/Mar 2020

Completed Mar/Apr 2020

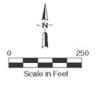
Completed May 2020

Scheduled for July 2020

Began May 2020, to be completed July 2020



as listed in PWS





RESIDENTIAL PROPERTIES – DELIVERABLES*



- Property Specific Data Summary (PSDS) Reports Seven (7) Draft Final PSDS delivered to USACE/EPA/DOEE. Four (4) additional Draft Final PSDS will to be delivered to USACE/EPA/DOEE prior to July 2020 intrusive investigations.
- RA Property Summary (RAPS) Memos One (1) Draft Final RAPS is currently under review by USACE/EPA/DOEE. Seven (7) Final RAPS were delivered to the respective property owners.
- Root Cause Analyses (RCAs)/Field Variance Forms (FVFs) No new FVFs.



RESIDENTIAL PROPERTIES – SCHEDULE



- **Geophysics** Geophysical surveys at available properties are expected be completed on 07/02/20. Weston is currently planning to continue geophysical surveys in Dalecarlia grids 5 through 7, pending approval of additional residential properties.
- Intrusive Investigations July 2020 intrusive investigations will complete 4 properties, one hard-scape target, and Dalecarlia grids 1 through 4. Future dig team mobilizations will be dependent upon property availability and completion of geophysical surveys in grid rows 5 though 7.



PUBLIC SAFETY BUILDING UPDATE



- PSB Site has remained shut down since 28
 March 2020
- Excavation is at 3-4 feet below the slab
- Site is secure and in stable condition
- Weekly inspections of site security and erosion and sedimentation controls are being conducted





PUBLIC SAFETY BUILDING STATUS



- The PSB Site is currently shut down, but remobilization will commence once CCDC is able to provide air monitoring support and Weston is directed by USACE to restart the work. Estimated restart in July 2020.
- Transported roll-off container No. 29, holding soil that exceeded the Regulatory Level for lead, to an off-site facility for disposal as hazardous material, on 1 June 2020.
- Waiting on final approval of revisions to the Draft Final Standard Operating Procedure (SOP) for Determining Final Excavation Boundaries and Post-Excavation Confirmation Sampling at the PSB.



PUBLIC SAFETY BUILDING - PHOTOS







Current PSB Site Conditions (as of 15 June) – At the PSB, earthwork benches and excavation remain stable. Erosion and sedimentation controls are intact and functional.



PUBLIC SAFETY BUILDING – ONGOING TASKS



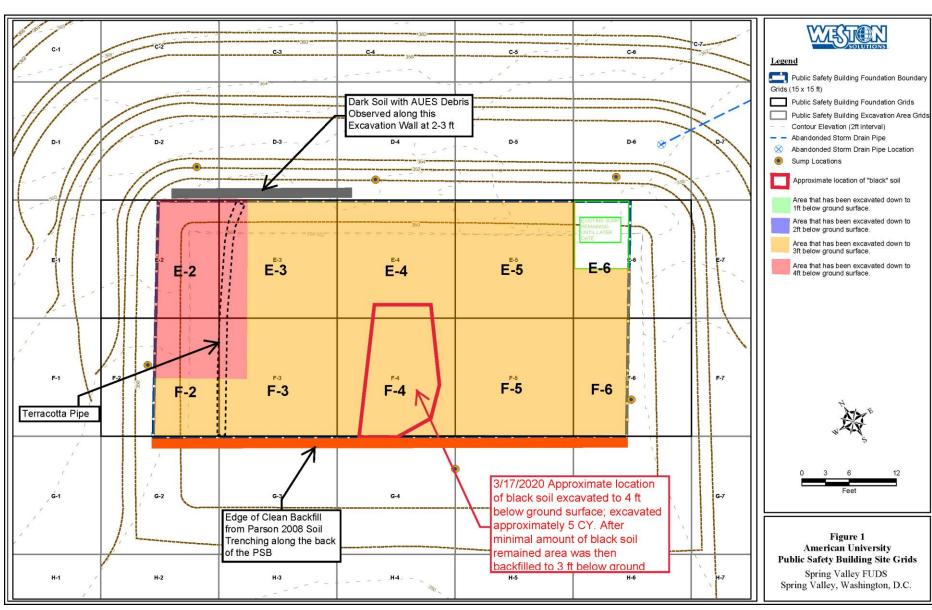
- Weekly security plus erosion & sediment (E&S) control inspections are being conducted at the PSB site. The E&S control inspections are also targeted to occur after major rain events.
- Excess water in the excavation will be pumped off into the Frac tank, as needed to keep the excavation from filling up with water.
- Grass mowing operations are being conducted every other week.
- Management of PSB waste containers stored at the Federal Compound will continue during the PSB Site shut down.
- The site gates are locked but access is available using combination lock.
- The SOP for Determining Final Excavation Boundaries and Post-Excavation Confirmation Sampling are currently in review by USACE.



PUBLIC SAFETY BUILDING - EXCAVATION



- PSB excavation extent as of March 28th shut down
- Excavation depths range from 3-4 feet.
- Excavated dark AUES debris field mostly from 1-3 feet but with one area 1-4 feet.





PUBLIC SAFETY BUILDING - PROGRESS



- Excavation extends down 3-4 feet below the former PSB concrete slab. All the concrete slab, cinder block wall and footers have been removed except around the former sanitary sump in the NE corner.
- The American University Experiment Station (AUES) debris field encountered behind the PSB building in 2008 was found to extend under the building foundation. The bulk (90-95%) of this dark brown soil with abundant AUES glass debris and munition debris has been excavated and removed from the site. No agent or ABPs were detected in the headspace or low-level analyses.
- As expected, a terracotta pipe was uncovered under the PSB slab in the NW part of the excavation at approximately 4-5 feet.
- The excavation has continued to remain dry except after rain events. Groundwater has been encountered between 4 and 5 feet.



AUES DEBRIS ENCOUNTERED









AUES Debris: The AUES Debris layer contained dark brown soil, abundant unsealed lab glassware bottles, pipettes & tubes, plus munitions debris (non-explosive 75-mm projectiles and 4" Stokes mortar rounds). All items have been negative for CWA headspace analysis and soil samples were non-detect for low-level chemical agent and agent breakdown product analyses.



PSB SCHEDULE



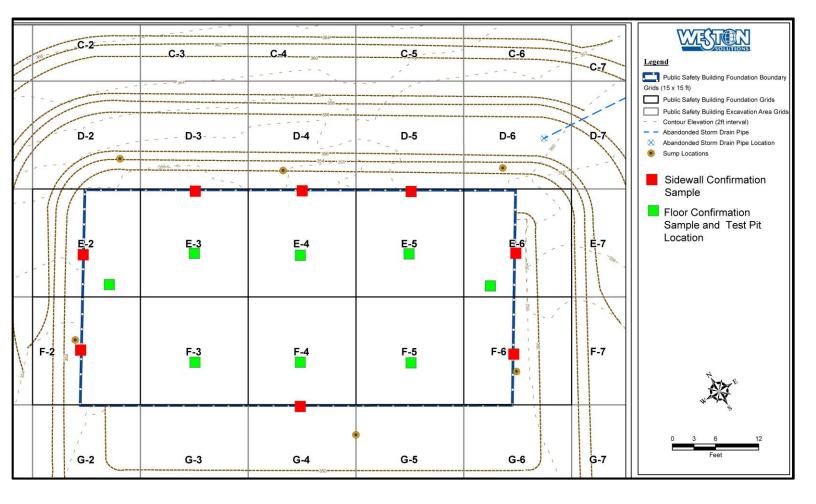
- Continue PSB security and E&S controls inspections and grass mowing.
- Continue USACE, CCDC and Weston discussions about the date to restart PSB operations – estimate July 2020 restart.
- Remobilize team and equipment approximately 2 weeks.
- Restart intrusive operations with CCDC air monitoring support third week.
- Conduct test pit soil screening and sampling at the center of each grid to determine the depth of AUES debris and collect soil confirmation samples.
- Re-route terracotta pipe after excavating & backfilling new pipe location.
- Re-start sub-slab grid soil excavation with Unexploded Ordnance (UXO) Tech support & soil screening in 1-foot lifts. Move west to east, grid by grid from NW corner of foundation.
- Current schedule has PSB demolition and excavation work taking approximately 5 to 6 weeks followed by site restoration activities.



TEST PIT & CONFIRMATION SAMPLE LOCATIONS



Eight test pits are proposed within the grid cells to evaluate the extent of AUES debris and collect confirmation soil samples. The test pits will be excavated at the center of each grid cell in 1-foot depth increments from the existing excavation floor to 8 feet below slab elevation.



Each 1-foot depth increment will be inspected for munitions and explosives of concern (MEC) and AUES items by UXO Technicians and confirmation samples collected for each interval.



GROUNDWATER STUDY



- The groundwater sampling plan prepared by the Army Corps and the U.S. Geological Survey (USGS) has been approved. Sampling took place between June 23 and 26. The team anticipates receiving the confirmation sampling results by the end of July.
- The Army Corps and Partners will discuss the results and determine the path forward for the final groundwater approach.

Next Steps:

- Confirm that the arsenic concentrations are below established drinking water standards.
- Continue to monitor perchlorate concentrations.
 - The EPA has declined to regulate Perchlorate; the
 15 ppb advisory level will be used.

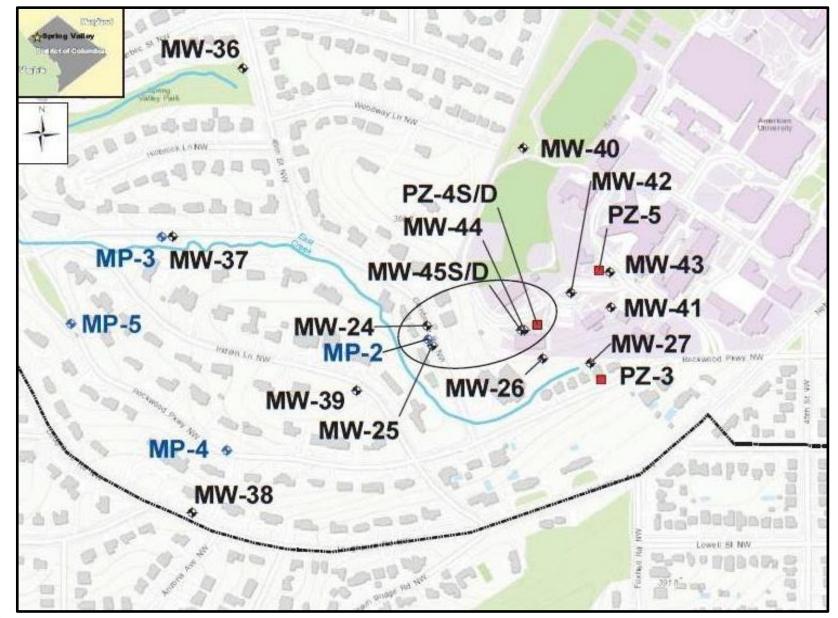


Groundwater sampling well



GROUNDWATER STUDY: EXPOSURE UNIT 2





<u>Key</u>

- Area encompassing the EU2 Monitoring Wells
- Spring Valley FUDS
 Boundary
- Piezometer
- **♦** Monitoring Well
- ◆ Multiport Well

S/D = Monitoring well or piezometer with screened intervals in the same borehole.



TECHNICAL ASSISTANCE FOR PUBLIC PARTICIPATION (TAPP) ADVISOR UPDATE



- Following the January Restoration Advisory Board (RAB) meeting,
 the RAB submitted electronic votes to secure Devamita
 Chattopadhyay, Ph.D. a local Environmental/Chemical
 Engineer, for the Spring Valley RAB TAPP position.
- Following the RAB's decision, the 8A contract to the original contractor expired. USACE worked to redirect the offer to Dr. Chattopadhyay through another firm.
- The two year contract for the TAPP advisor has been approved by USACE Headquarters. A contract will be awarded before the end of the fiscal year.



4835 GLENBROOK ROAD



Non-quantitative passive soil gas monitoring was conducted at borehole locations in the basement. The timeframe below reflects the dates of the sampling and results of those efforts.

July 27, 2018: The site team conducted non-quantitative soil sampling at the 10 boreholes at the property.

August 30, 2018: Results from the soil gas sampling efforts indicated trace amounts of agent breakdown products were detected in soil gas samples from 8 of the 10 borehole sites. This includes 4 boreholes along the foundation wall closest to the shared property line, where contaminated soil remained to be removed, plus 4 additional boreholes further toward the center of the house.



GLENBROOK ROAD – TIMELINE



Continued...

August 30, 2018: The team suspected that these positive results could be due to the close proximity of the contaminated soils to the exterior foundation walls of the house.

October 18, 2019: The U.S. Army Edgewood Chemical Biological Center (ECBC) team completed another round of soil gas sampling in the basement of the house once the contaminated soil was removed.

Dec 10, 2019: Results received from the second round of soil gas sampling at 4835 Glenbrook Road show no agent breakdown product detected.

June 15, 2020: All remedial digging work is completed at the property. Army corps is awaiting the results of the most recent soil confirmation sampling.



GLENBROOK ROAD – PATH FORWARD



- Army suggests that the combination of the removal of all known contaminated soil against the foundation of the house and the clear second round is sufficient to show that this issue has been adequately addressed.
- Input is needed from the Partners in respect to the completion of the sampling effort at 4835 Glenbrook Road.
- Army and Partners to provide an assurance letter to American University describing the results of the sampling efforts and returning the property with unrestricted residential use. Unlike munition efforts, this issue is an Hazardous and Toxic Waste (HTW) issue and Partner assurance seems more appropriate than Army Assurance.
- The previous risk assessment reached this Partner-approved conclusion, however the additional work on the property since seems to indicate that the Partners should ratify again the conclusions of the original risk assessment.



SPRING VALLEY PARTNERS



Reminders:

- Due to continued concerns surrounding the COVID-19 pandemic, the next Partners meeting for **August** will likely be an <u>electronic</u> <u>update</u> in lieu of an in-person meeting once again.
- Our team is continually monitoring the situation closely and is open to discuss plans for future in-person meetings.

Upcoming Agenda Items:

- Suggestions?
- Spring 2020 groundwater sampling results

