



LMS/CIS/S31187

**2020 Annual Inspection
Colonie, New York, Site
July 13–17, 2020**

December 2020

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Abbreviations

AEC	U.S. Atomic Energy Commission
CFR	<i>Code of Federal Regulations</i>
DOE	U.S. Department of Energy
FUSRAP	Formerly Utilized Sites Remedial Action Program
LM	Office of Legacy Management
LMS	Legacy Management Support
NYSDEC	New York Department of Environmental Conservation
OpEx	operating experience
OU	operable unit
SMP	Site Management Plan
USACE	U.S. Army Corps of Engineers
VOC	volatile organic compound
VP	vicinity property

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1.0 Introduction

This report documents site conditions as observed during the annual site inspection of the Colonie, New York, Site conducted during the week of July 13, 2020. Annual inspections are conducted in accordance with the *Long-Term Surveillance and Maintenance Plan for the Colonie, New York, FUSRAP Site* (DOE 2019b); the *Site Management Plan, Main Site Soils Operable Unit, Colonie FUSRAP Site* (DOE and USACE 2020), hereafter referred to as the Site Management Plan (SMP); and procedures established by the U.S. Department of Energy (DOE) Office of Legacy Management (LM) for site inspections. The primary objectives of this annual inspection were to ensure the integrity of the institutional controls, assess site security, perform general housekeeping, and identify any changes to the surrounding area that might impact the site.

In addition to the annual inspection, the week of July 13, 2020, was used to perform repairs to monitoring well MW-44S and redevelop and sample the seven active groundwater monitoring wells. A separate long-term monitoring report will be completed and will include results of the groundwater sampling and the well redevelopment and provide additional information related to the repair of MW-44S.

1.1 Inspection and Reporting Requirements

The SMP (DOE and USACE 2020) provides inspection and reporting requirements. According to Section 4.2 of the SMP, an annual inspection will be performed at the site to assess the following:

- Compliance with all institutional controls, including site usage
- General site conditions at the time of the inspection
- Confirm that Site records are up to date

The inspector will document findings on the site inspection form found in Appendix E of the SMP (DOE and USACE 2020).

In accordance with the requirements listed in Section 6.1 of the SMP, interim monitoring reports will include the following:

- Date of event or reporting period
- Name, company, and position of person(s) conducting monitoring or inspection activities
- Description of the activities performed
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist or form or on an attached sheet)
- Any observations, conclusions, or recommendations
- A determination as to whether contaminant conditions have changed since the last reporting event

The annual inspection report will be provided to the New York Department of Environmental Conservation (NYSDEC) for review.

1.2 Site History

The Colonie site is at 1130 Central Avenue in Colonie, New York (Figure 1). The site's southern property line is on the border between the town of Colonie and city of Albany. Industrial operations at the site began in 1923, when a factory was built for manufacturing wood products. In 1927, the factory was converted to a brass foundry to manufacture railroad components. In 1937, National Lead Company (later renamed NL Industries Inc. [NL]), purchased the foundry and began conducting electroplating operations. NL purchased an adjacent lot that contained Patroon Lake and used it to dispose of casting sand and other wastes. In 1958, NL began producing items manufactured from uranium and thorium under licenses issued by the U.S. Atomic Energy Commission (AEC) and the State of New York. The AEC contract was terminated in 1968. Work at the plant thereafter included fabricating shielding components, aircraft counterweights, and artillery projectiles from depleted uranium.

Industrial operations resulted in contaminated soil, groundwater, and structures at the site and its vicinity properties (VPs). Depleted uranium released from the plant exhaust stacks spread to site buildings, portions of the site grounds, and 56 commercial and residential VPs. The New York State Supreme Court ordered the plant to shut down in 1984 due to airborne releases of uranium dust. Congress assigned DOE the authority to clean up the contamination in 1984, and DOE acquired the site to conduct the cleanup.

DOE managed the site cleanup under the Formerly Utilized Sites Remedial Action Program (FUSRAP) from 1984 until 1997. During this period, DOE investigated the VPs, onsite structures, groundwater, and soil; developed a plan to remove radiologically impacted soil; remediated 53 of the 56 VPs; removed the onsite buildings; and stored the waste materials onsite.

In 1997, Congress transferred responsibility for FUSRAP cleanups to the U.S. Army Corps of Engineers (USACE). In 2007, USACE completed a large-scale soil removal action at the site and the three remaining VPs by excavating 135,000 cubic yards of soil contaminated with radionuclides, metals, and volatile organic compounds (VOCs). The waste was disposed in an offsite landfill, and the excavation was backfilled with clean soil. In 2010, USACE initiated a long-term monitoring program to assess the effectiveness of using monitored natural attenuation for VOC contamination in groundwater. Between 2011 and 2014, USACE investigated depleted uranium dust contamination within structures of VPs (USACE 2018).

Cleanup at the site and the VPs was completed in accordance with Records of Decision for the three site operable units (OUs): the Groundwater OU in April 2010, the Main Site Soils OU in March 2015, and the VP OU in September 2017. The Site Closeout Report documenting completion of the remedial actions was completed in February 2018 (USACE 2018).

The response action for groundwater is complete. The selected remedy of monitored natural attenuation with institutional controls has been in place since 2010. In accordance with the *Long-Term Surveillance and Maintenance Plan for the Colonie, New York, FUSRAP Site* (DOE 2019b), long-term groundwater monitoring will continue until target cleanup goals are achieved for tetrachloroethene (the single remaining VOC in exceedance), which persists in two wells.

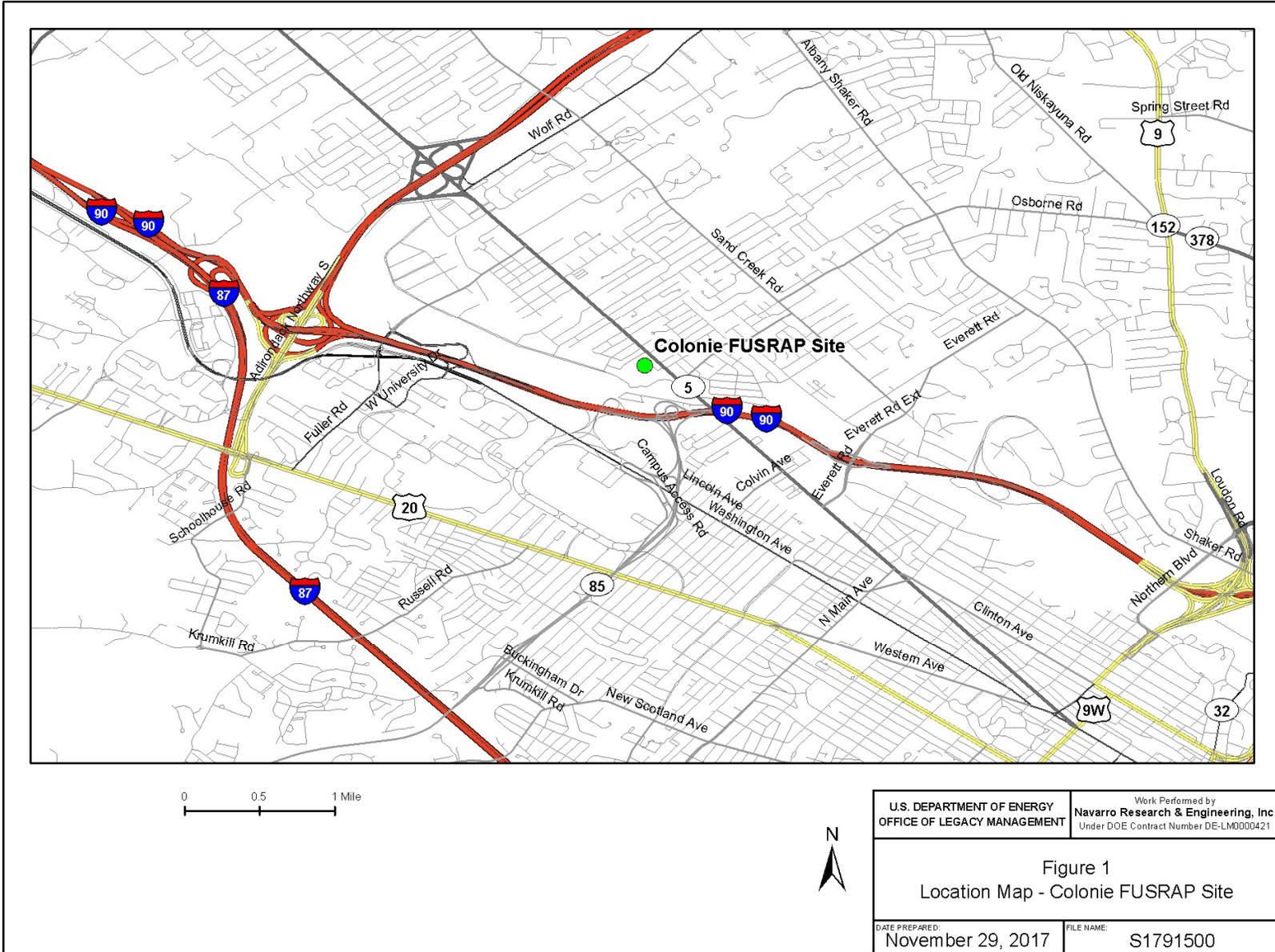


Figure 1. Colonie FUSRAP Site Location Map

All radioactive materials that were above the risk-based cleanup goals have been removed from federal property, the VPs, and groundwater. No further action is needed to address soil contamination. However, metals contamination remains in subsurface soils in three specific inaccessible areas near utility infrastructure. The easement areas are indicated in Figure 2. These areas are managed by an environmental easement and SMP (DOE and USACE 2020).

The cleanup has made the site suitable for commercial and residential use. The three small environmental easement areas allow restricted residential use. Excavation in these areas would require excavation plans and prior notification to the regulator. The easement prohibits the use of groundwater and requires a study for soil vapor intrusion before constructing a habitable building. Annual site inspections are a requirement of the environmental easement (DOE and USACE 2020; NY ECL 71-36).

The Legacy Management Support (LMS) contractor performed a condition assessment survey in 2017 (DOE 2018). The Colonie site was transferred from USACE to DOE on September 30, 2019 (Fatherly 2019). The site entered the LM FUSRAP program (LMS/S16063) as a Category 2 site, meaning that there is a long-term monitoring program in place (*Site Management Guide* [LM-Guide 3-20.0-1.0]). The LMS contractor performed a site inspection shortly after transfer in October 2019 (DOE 2019a).

1.3 Participants

Carl Young, a professional geologist from Navarro Research and Engineering, Inc. (Navarro), and the Colonie site lead, performed the annual inspection of the site from July 13, 2020, to July 16, 2020. The inspection checklists are included in Appendix B, and photographs documenting the inspection are included in Appendix C.

Table 1 lists additional personnel that were onsite during the week of July 13, 2020, to perform well repair and redevelopment and groundwater sampling.

Table 1. Additional Onsite Personnel

Supporting Subcontractors	
Well repair	Will Hackett (Parratt-Wolff Drilling, Albany, New York)
Well redevelopment and sampling	Rachel Farnum, Thomas Roscona (Envirospec, Albany, New York)
Oversight	
NYSDEC	John Abunaw, project manager
Amtrak	Chad Harmon, (Amtrak, Albany, New York)

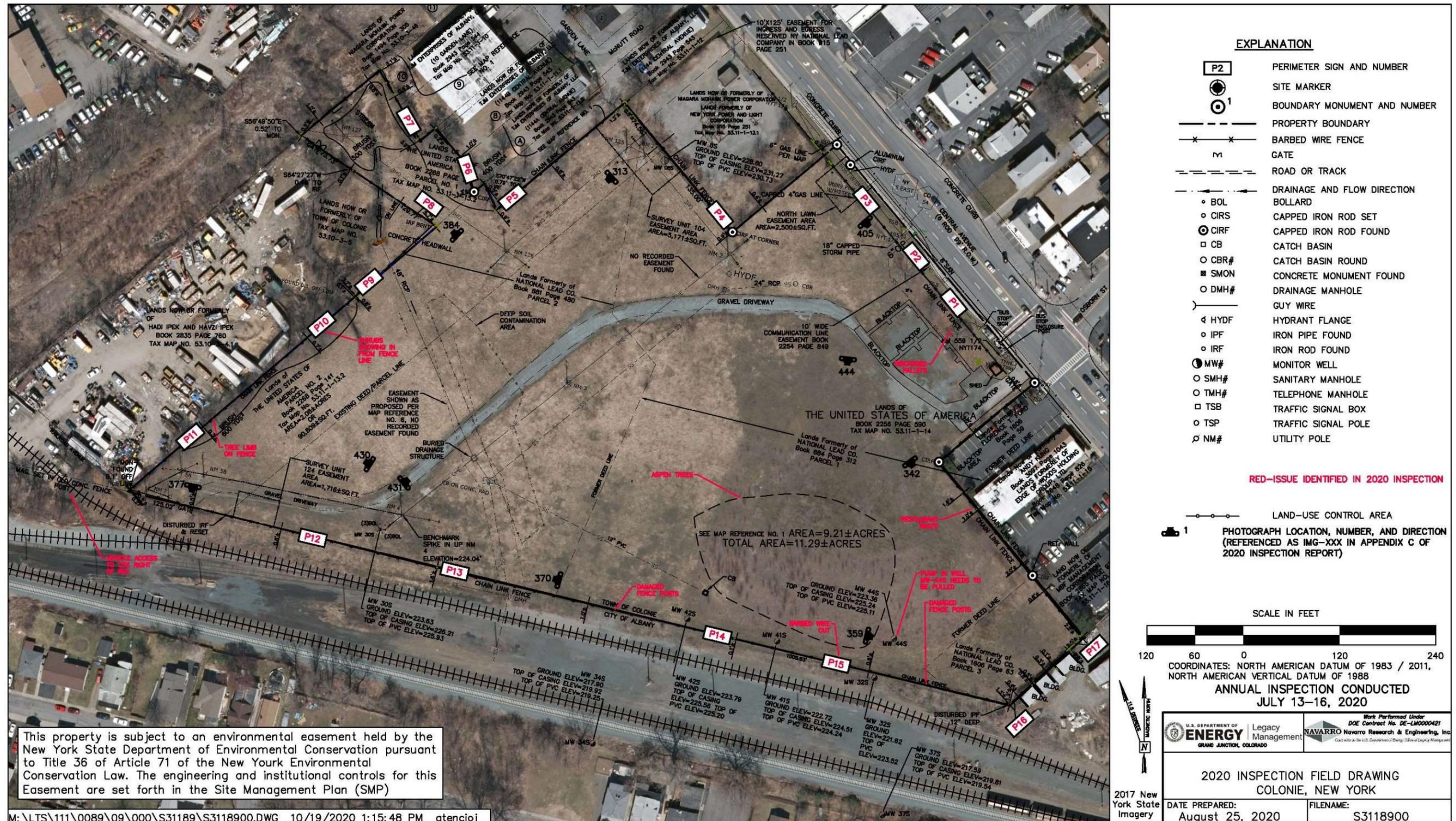


Figure 2. 2020 Inspection Field Drawing

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Table 2 lists offsite personnel that provided critical support for these events.

Table 2. Supporting Personnel

LM Management	
Site manager	Darina Castillo (LM, Westminster, Colorado)
LMS Management	
Program manager	Sam Marutzky (Navarro, Grand Junction, Colorado)
Task manager	Rebecca Roberts (Navarro, Weldon Spring, Missouri)
LMS Team	
Contracts	Teri Kisner (Navarro, Morgantown, West Virginia)
Environmental Monitoring Operations	Sam Campbell (Navarro, Grand Junction, Colorado)
Environmental Compliance	Ann Houska (Navarro, Grand Junction, Colorado)
Quality and Performance Assurance	Jaime Hayes (Navarro, Grand Junction, Colorado)
Safety and Health	Nikole Cale (Navarro, Morgantown, West Virginia)
Learning and Development	Kate Joyce (Navarro, Grand Junction, Colorado)

1.4 Planning

Project planning was governed by the LMS *Integrated Work Control Process Manual* (LMS/POL/S11763). The planning and control documents that control this work are shown in Appendix A and include:

- Readiness Review Checklist
- *Plan of the Day/Plan of the Week* (LMS 2130)
- *Job Safety Analysis* specific to the tasks (CLN-0520-01)
- *COVID-19 Field Job Safety Analysis* (LMS-0620-09)
- *Site-Specific Emergency Response Plan* (LMS 2107)
- *Landholder Notification Form* (LMS 1013)
- *Pre-job Brief/Safety Meeting Attendance Record* (LMS 1554)

The redevelopment and sampling of monitoring wells is addressed in the *Groundwater Long-Term Monitoring Report, Colonie, New York, Site* (DOE forthcoming).

1.5 Rights-of-Entry and Notification Requirements

To perform the annual inspection, right-of-entry agreements were needed from three separate entities. Each right-of-entry was reviewed in detail in advance of the annual inspection. Complete copies of the rights-of-entry and contact information for each are stored in the project and Asset Management Support files. Key details related to each right-of-entry are summarized in Table 3.

Table 3. Rights of Entry

Grantor / Grantee	Purpose	Entry and Notification Requirements	Notification Date	Notes
Amtrak (National Railroad Passenger Corporation) and Navarro Research and Engineering, Inc., expiring January 30, 2021	Access by the LMS contractor to sample offsite monitoring wells MW-34S and MW-37S, which are on Amtrak property	<ul style="list-style-type: none"> Annual fee and insurance coverage Prior safety training on the Amtrak website and issuance of worker ID cards High-visibility vest, hearing protection, safety glasses with side shields, hard hats, and steel-toed safety shoes Coordination with Amtrak district engineer at least 2 weeks before fieldwork Onsite entry meeting with Amtrak district engineer or track foreman Oversight by Amtrak engineer or foreman After sampling, Amtrak will receive analysis results 	<ul style="list-style-type: none"> June 16, 2020 July 7, 2020 Notifications are documented on the <i>Landowner/Stakeholder Notification Form</i> included in Appendix A. 	<ul style="list-style-type: none"> Amtrak request reminder 1 week before fieldwork began Required that a track foreman be present for the sampling work
Amtrak (National Railroad Passenger Corporation) and the United States of America, expiring June 4, 2021	Access by U.S. government employees for MW-34S and MW-37S, which are on Amtrak property	<ul style="list-style-type: none"> Annual fee and insurance coverage Prior safety training on the Amtrak website and issuance of worker ID cards High-visibility vest, hearing protection, safety glasses with side shields, hard hats, and steel-toed safety shoes Coordination with Amtrak district engineer at least 2 weeks before fieldwork Onsite entry meeting with Amtrak district engineer or track foreman Oversight by Amtrak engineer or foreman After sampling, Amtrak will receive analysis results 	<ul style="list-style-type: none"> June 16, 2020 July 7, 2020 Notifications are documented on the <i>Landowner/Stakeholder Notification Form</i> included in Appendix A. 	<ul style="list-style-type: none"> Amtrak request reminder 1 week before fieldwork began Required that a track foreman be present for the sampling work
CSX Transportation and the United States of America, renewed annually from February 1, 2020	Access well MW-32S for inspection	<ul style="list-style-type: none"> Annual fee and insurance coverage Flag protection fees for certain work but not required for this event 10 calendar days prior notification Safety glasses with side shields, hard hats, hearing protection, and steel-toed safety shoes 	<ul style="list-style-type: none"> July 24, 2020 Notifications are documented on the <i>Landowner/Stakeholder Notification Form</i> included in Appendix A. 	<ul style="list-style-type: none"> No oversight was required by CSX
Owner of 82 Yardboro Avenue, Albany, New York and the United States of America, expiring July 31, 2024	Cross private property to gain access to offsite wells MW-34S and MW-37S	<ul style="list-style-type: none"> 5-year term Prior notice of no less than 24 hours is required before entering the premises 	<ul style="list-style-type: none"> July 1, 2020 July 7, 2020 Notifications are documented on the <i>Landowner/Stakeholder Notification Form</i> included in Appendix A. 	<ul style="list-style-type: none"> Prior notifications of property owners are documented on a landowner notification form by the Environmental Monitoring Operations team

Abbreviation: ID = identification

Access by NYSDEC representatives is not addressed in the rights-of-entry granted to Navarro or to the United States of America. NYSDEC and Amtrak have a cooperative agreement that allows NYSDEC representatives to make unannounced inspections on Amtrak property.

The SMP requires that NYSDEC receive notification at least 7 days before any remedial program-related field activity, which includes both the annual site inspection and periodic groundwater sampling. The LM site manager and LMS site lead coordinated site access requirements with NYSDEC 7 days in advance and provided plans about activities every day. The NYSDEC project manager made periodic unannounced visits to the site to observe the work.

2.0 Site Inspection

The site lead conducted the annual inspection from July 13 through July 16, 2020. The method of inspection was to visually inspect both the institutional controls and the real property assets in accordance with the criteria listed in the SMP Inspection Checklist (Appendix E of the SMP) and a Colonie Specific Checklist. The completed checklists are included as Appendix B of this report. Notes and photo locations were recorded directly onto the inspection field drawing (Figure 2). Table 4 summarizes the photo locations indicated in Figure 2 that were taken to document the condition of the assets for comparison of changes over time. The photo number corresponds with the image numbers in the photo log that is included as Appendix C.

2.1 Institutional Controls

Inspection Criteria: Check to ensure that all institutional controls are being complied with; if any of the easement areas are disturbed; if there have been any changes in site conditions; if there is any gardening or farming taking place; if the property is being used for industrial or commercial purposes; if the property is vacant; or if the land use shows evidence of new construction, digging or soil excavation, dumping, staining, or vegetative stress.

Inspection Results: The inspector performed a walkdown of the site and the easement areas to verify the integrity of the institutional controls. It was determined that the institutional controls at the site were properly implemented and fully enforced. There was no evidence that the soil in the easement areas had been disturbed and no signs of gardening or farming. There were no signs of new construction, digging, soil excavation, dumping, staining, or vegetative stress within the easement areas beyond yellowing of the grass due to lack of precipitation.

The property remains a vacant industrial use property; however, it was noted that land use has changed along Central Avenue west of the site. Several previously vacant properties have been developed into commercial along the strip extending eastward from the shopping centers near Wolf Road.

- At the North Lawn Easement Area, a grass-free patch is evident where the former fire hydrant has been cut away at ground surface (Figure 3).
- The Survey Unit 104 Easement Area (Appendix C, Photos 0011–0014) showed no signs of excavation or erosion.
- The Survey Unit 124 Easement Area showed no signs of erosion or excavation.

Table 4. Photos of Site Conditions

Photo No.	Viewing Location and Direction	Purpose	Observations
313	From near well MW-08S looking southwest	Note condition of grass and vegetation along the fence	The grass has been cut. Shrubs are invading into the site from the fence line.
342	From the corner behind the restaurant looking southeast along the fence line	Note the condition of the grass and vegetation along the fence	Waste from the restaurant has been discarded onto the site.
359	From well MW-44S looking east along the fence line	Condition of MW-44S and eastern corner of site	There is a damaged fence post on the southern fence line.
370	From the middle of the south fence line looking west along the fence line	Condition of MW-30S and western corner of site	Shrubs have grown in around well MW-30S. Shrubs have begun to invade the site from along the southern fence line.
377	Viewing the south gate	Condition of the gate and vegetation at the gate	Shrubs have grown in along the rear gate, which prevents the gate from fully opening.
384	From the entrance of the keyhole area looking northwest along the fence line	Extent of vegetation; note any blockage of the stream	Mowers have been unable to cross the stream which has allowed shrubs to colonize the area. The fence over the stream has not collected debris as it has in the past.
405	From the north lawn easement area looking southeast along the fence line	Condition of north lawn and fence line	The north lawn is mown and well kept. The fence line has been trimmed.
430	From the road near MW-30S looking at the western fence	Condition of western fence	There is a large amount of shrubbery growing into the site from the fence.
431	From the road near well MW-30S looking northeast along the road	Condition of road and grass in center of site	The gravel driveway remains passable. The grass has been recently cut.
444	From the road at the end of the blacktop looking south toward the aspen trees	Condition of the aspen trees	Extent of the aspen stand, which currently occupies roughly 1 acre. Shrubs have been cut to the edge of the trees.



Figure 3. North Lawn Easement Area Looking North

2.2 Fencing

Inspection Criteria: Check for missing or damaged components, excessive corrosion, trees and vegetation contacting or damaging the fence, erosion or soil loss that would allow human access, and indications of vandalism.

Inspection Result: There were several instances of damage and vandalism that could lead to threats to site security found when performing a walkdown of the fencing. These are listed below:

- Evidence of trespass include ladders leaning against the exterior and interior sides of the fence (Figure 4). The site lead spoke with a worker from the restaurant and informed him that all the waste needed to be removed and that they cannot trespass in the future. The worker stated that the restaurant will comply. The landscaping contractor stated that he had also spoken with restaurant staff because the contractor could not mow close enough to the fence line due to the obstructions.

The site lead opened operating experience (OpEx) database issue I 1509 on July 22, 2020, and contacted the restaurant manager July 30, 2020, by telephone to discuss the business's trespass and onsite dumping. The manager apologized and stated that the trash and debris would be removed, and no further trespass would occur. He said there was a trash can onsite because his workers had already been told to start cleaning up. The site lead contacted the

landscaping contractor and asked him to take photographs of the area during a future visit to ensure that the waste has been removed and that this issue has been resolved.

- All three strands of barbed wire at the top of the chain link fence have been cut in one part of the south fence near monitoring well MW-41S (Figure 5). The incident was entered into the OpEx database as issue number I-1517. The damage was not present during the October transfer inspection. A report has been filed with the Colonie Police Department as report number 20045608. In accordance with DOE Order 221.1B, *Reporting Fraud, Waste and Abuse to the Office of Inspector*, the DOE Office of Inspector General was notified of the incident (Keeler 2020). The site lead contacted three fencing contractors to determine a price estimate for repairing the damage.
- The south gate is blocked and overgrown with trees (Figure 6). See Section 3.0 for further discussion.
- A tree is resting on the top rail of the fence and pushing the barbed wire down along the southwest fence line (Figure 7). There does not appear to be permanent damage to the top rail or barbed wire. The tree has fallen from the Z. Ipek & Sons General Contracting lot at 7 Railroad Avenue.
- There are four bent or broken fence posts along the south fence line (Figure 8 and Figure 9).

Recommendations:

- Vandalism to the rear fence should be repaired. The unburdened subcontract price for this work has been estimated to be \$500 (Stewart 2020).
- Clear vegetation from the rear gate that is partially blocked from opening by overgrown shrubs.
- The tree limb on the fence should be cut away during grubbing of the vegetation on the western side of the site. Note that the adjacent property owner has no liability for the fallen tree unless the owner knew that tree was compromised in advance or was given constructive notification in advance of the tree's deficiency (Wei 2020).

2.3 Signs

Inspection Criteria: Check for missing or damaged signs, excessive corrosion, and vandalism.

Inspection Result: All signs were in place and undamaged.

2.4 Locks

Inspection Criteria: Check for missing or damaged locks at site entrances, the storage shed, and monitoring wells.

Inspection Result: The LMS-controlled lock and the contractor lock were in place and undamaged at the site entrance. LMS locks were in place at all other locations.



Figure 4. Restaurant Waste Includes a Waste Bin and Ladders



Figure 5. Cut Barbed Wire Near Monitoring Well MW-41S



Figure 6. Looking North at South Gate



Figure 7. Tree Resting on Top Rail of Fence in Southwest Corner of Site



Figure 8. Broken Fence Post near Monitoring Well MW-42S



Figure 9. Damaged Fence Post in Southeast Corner of Site

2.5 Vegetation

Inspection Criteria: Check to see if the grass onsite and along Central Avenue has been mowed and trimmed and is the approximate height of the grass and for trash, stressed vegetation, dead trees or branches, and areas of erosion.

Inspection Result: The grass on the site and along Central Avenue had been mowed and trimmed to approximately 4 inches. The grass was dry due to lack of precipitation in the area. There were areas where trees and shrubs were overgrown. Debris and trash remain from previous work on the site, and trash and branches have been dumped onto the site from the neighboring restaurant. There was no evidence of erosion.

- Trees and shrubs have grown in along the fence line of the site in several locations but primarily along the west fence. There is a 20-foot-wide swath of trees in the southwest corner of the site, and trees and shrubs block an area of approximately 1500 square yards (0.3 acre) on the western side of the site (Figure 7).
- A succession in tree types appears to be occurring in the center of the site where black locusts are displacing quaking aspens (Figure 10). Quaking aspens are efficient consumers of aqueous-phase solvent contamination in water table aquifers, but black locusts are not as well studied. Black locusts are considered an invasive species in New York (Waugh 2020).
- Trash and branches have been dumped onto the site from the neighboring restaurant (Figure 11 and Figure 4). See Section 2.2 for further discussion.
- The lawn shows scarring in the center of the site caused by a skid steer during mowing. The grass is very thin, and mowing during the drought apparently does not allow enough time for the vegetation to recover. There is no evidence of erosion at this location (Figure 12).
- Debris remains from previous site work; it includes old pallets, used bollards, and tree branches from grubbing work (Figure 13).

Recommendations:

- Approximately 0.3 acre of shrubs and trees has grown in from the fence line on the western side of the site. This dense vegetation makes it difficult to inspect the fence and places the fence at risk of damage from falling trees and ingrowth. This vegetation should be grubbed back to the fence line and chipped onsite.
- Black locusts (and honey locusts) have an extensive root system that allows them to reproduce clonally. Cutting or mowing are ineffective for management and would require systematic herbicides to control (NYSDEC 2020) but which would also inhibit growth of the quaking aspens. There are studies that support the use of black locusts for phytoremediation (Longley 2007).
- Although the site is generally free of trash, personnel should bring a trash bag during site visits to pick up stray discarded or windblown trash for proactive housekeeping.



Figure 10. Looking South at Black Locust Tree and Monitoring Well MW-42S



Figure 11. Debris from Restaurant Prevents Mowing to the Fence Line



Figure 12. Ruts in Grass at Center of Site



Figure 13. Discarded Pallets Behind Shed

2.6 Road and Parking Area

Inspection Criteria: Check for driving hazards and conditions that make the road unsafe or unusable.

Inspection Result: During the time of the annual inspection, there were no driving hazards or conditions found that would make the road or parking areas unsafe or unusable.

- The road was inspected to identify structural defects. No damage to the road was identified, which allowed personnel to drive the road along its entire distance. The ground was dry, and the area experienced a drought during the summer (Figure 14).
- The parking area was cleared and usable. A few discarded food or drink containers were present as has been observed during previous visits.

Recommendations: Driving off the road on the site is not recommended unless a 4-wheel drive vehicle is used, especially during wet conditions. The grass cover is thin, and the soil type is silty sand.



Figure 14. Looking North Along Road from Center of Site

2.7 Storm Drain System

Inspection Criteria: Check for damage to the catch basins and obstructions and erosion in the unnamed tributary.

Inspection Result: During the time of the annual inspection, no damage to the catch basins or obstructions or erosion to the unnamed tributary was identified.

- The eastern catch basin was inspected and added to the site base map (Figure 2) as a 2-foot by 2-foot square structure. The basin was dry (Figure 15).
- The northern catch basin was free of obstructions and dry.
- At the center catch basin, the sound of water flow from the captured unnamed tributary was distinct, as in previous visits.
- The unnamed tributary was captured on video. The flow rate was much slower than a previous springtime observation. The water was cloudy but without foam. No obstructions to flow were observable (Figure 16).

Recommendations: The site base map should be updated prior to the next annual inspection as the eastern drainage basin was not indicated on the map.



Figure 15. Eastern Catch Basin



Figure 16. Unnamed Tributary Exiting Keyhole Area

2.8 Monitoring Wells

Inspection Criteria: The eight monitoring wells belonging to the site were inspected during the visit following the LMS *Guidance for the Inspection and Maintenance of Groundwater Monitoring and Extraction Wells* (LMS/PRO/S18459).

Inspection Results: Seven of the wells are part of the active monitoring well network, and one well is no longer monitored. The entire well system is cataloged as a single real property asset. Monitoring well MW-44S was previously damaged and was repaired on July 13, 2020. Section 2.8.1 describes the well repairs. Well conditions are summarized in Table 5.

Table 5. Well Condition Summary

Well No.	Location and Use	Notes on Condition
MW-08S	Upgradient well	Some surface rust; needs two bollards
MW-30S	Lateral control well on western side of site	Some surface rust; ID obscured; cracked pad; four bollards (one damaged)
MW-32S	Inactive: On CSX property	Surface rust; ID obscured; no bollards needed
MW-34S	Offsite, western downgradient well	In wooded area; ID obscured; no bollards needed
MW-37S	Offsite, eastern downgradient well	In nondriving area; ID obscured; no bollards needed
MW-41S	Impacted well in plume	Some surface rust; ID obscured; needs four bollards
MW-42S	No longer exceeding goals, on western edge of plume	Some surface rust; ID obscured; needs four bollards
MW-44S	Impacted well on eastern side of plume	Repaired July 13, 2020; protective casing is new construction; needs four bollards

Abbreviation: ID = identifier

All the wells have similar surface construction. They are completed in protective cases with a nominal 2 feet of stickup above the ground surface because the protective cases are 4 feet long and by design are sunk 2 feet below ground surface. Monitoring well MW-08S is set in a 6-inch protective steel casing, and the other wells are set in 4-inch protective steel casings. Only monitoring well MW-30S has protective bollards, one of which is out of vertical alignment.

Recommendations: To protect the monitoring wells from future damage, protective bollards should be installed around all monitoring wells. Currently, only one onsite well (MW-30S) has protective bollards. Monitoring well MW-08S is set close to the fence line and therefore could be protected by two bollards. The other three onsite wells need four bollards each, meaning that 18 bollards would need to be installed to protect the monitoring wells. In addition, one of the installed bollards at monitoring well MW-30S should be brought back to vertical. Well MW-32S (on CSX property) serves no purpose to the program and is a liability. It should be decommissioned.

2.8.1 Repair of Monitoring Well MW-44S

Damage to monitoring well MW-44S was found during the October 2019 site transfer inspection (DOE 2019a). The well pad was broken, and the protective casing was off from vertical by approximately 30 degrees (Figure 17). The well needed to be either repaired or replaced in keeping with New York State regulations (NYSDEC 2009; NYSDEC 2010).

A local, licensed well drilling company was contracted to make the repairs. The driller mobilized to the site on July 13, 2020, cleared away the soil surrounding the broken pad and observed that the PVC casing was snapped off entirely at the approximate depth of the protective steel casing (Figure 18). Coincidentally, this location had a threaded casing joint, which is a weak point. The pneumatic pump was still in the well and could not be pulled out, probably because of sand locking caused by dirt ingress into the PVC casing. While the pump's pneumatic tubing was being cut, the tubing slipped through the site lead's grasp, and the pump dropped to the bottom of the well. The driller was directed to repair the surface completion (Figure 19). The construction report is included as Appendix D.

Redevelopment with a surge block or sampling with a bladder pump are not possible since the pneumatic tubing is in the well. After discussion with LMS subject matter experts, it was decided that the well could be sampled using a tubing pump (Figure 19).

The onsite wells that were not protected by bollards. Monitoring wells MW-08S, MW-41S, MW-42S, and MW-44S were painted orange to make them more visible (Figure 20).

The well coordinates and elevation were resurveyed on July 14, 2020, by the incumbent licensed surveyor. The new coordinates were compared to the previous coordinates and are less than 4 inches apart, while the elevation is 0.01 foot apart. The new coordinates have been entered into the LM geographical information system database and updated on the site base map.



Figure 17. Monitoring Well MW-44S Before Repair



Figure 18. PVC Casing Snapped Off Below Steel Protective Casing at Well MW-44S



Figure 19. Monitoring Well MW-44S Is Sampled with a Tubing Pump After Repairs



Figure 20. Orange Painted Monitoring Wells MW-42S and MW-41S

2.8.2 Well Redevelopment and Sampling

The seven active wells of the monitoring network were sampled from July 13 to July 15, 2020. Well sampling fieldwork and results will be discussed in a subsequent long-term monitoring report. This report discusses issues of concern for future planning and coordination.

Due to COVID-19 precautions, the groundwater sampling was performed at the site using a local contractor with the site lead driving from Baltimore to provide oversight.

Work at the wells on Amtrak property was began on July 14, 2020. Amtrak provided its own safety briefing at 100 Yardboro Avenue. Continuous oversight was provided by the Amtrak foreman during work on Amtrak property. The foreman suggested that the wells could be better accessed on July 15, 2020, from north of the tracks by driving through the end of Railroad Avenue. Amtrak coordinated this access with the owner of Z. Ipek & Sons storage lot, where the lot owner has gated the road at the end of Railroad Avenue abutting CSX property.

Recommendations:

- The LMS site lead gained access to the offsite wells by driving to the end of Railroad Avenue and crossing the active rail spur at a graded crossing. Access through the rear gate to sample offsite monitoring wells MW-34S and MW-37S is not advisable. An abandoned rail spur blocks the path and cannot be crossed using a standard rental vehicle. A path that once ran along the outer fence line east of the gate is overgrown with shrubs that would need to be grubbed.
- The pump at the bottom of monitoring well MW-44S should be removed if possible. The driller was unsure of the chances for success of this. The pneumatic tubing needs to be removed as well. This will allow another bladder pump to be installed at the correct elevation.

2.9 Storage Shed

Inspection Criteria: Check to ensure that the shed is locked and secure, for signs of vandalism, and for signs of water damage to the inside of the shed.

Inspection Result: The shed was locked and secure when inspected. There were no signs of vandalism or water damage.

2.10 Mailbox

Inspection Criteria: Check to ensure that the mailbox is present and intact and for signs of vandalism or damage.

Inspection Result: The mailbox has been damaged from a strike but is functional (Figure 21). No mail was in the box.



Figure 21. The Mailbox Is Damaged But Serviceable

2.11 Personal Property

Inspection Criteria: Verify against personal property inventory to ensure all personal property is accounted for and check for signs of vandalism or damage.

Inspection Result: As part of this annual inspection additional personal property assets were identified.

- Additional personal property assets were identified that had not been recognized as government property during the site transfer inspection in October 2019 (DOE 2019a). They are a lawn mower, a gasoline-powered air compressor, two gasoline-powered line trimmers, and a garden cart (Figure 22 and Figure 23).
- The air compressor bears a U.S. government property tag number 019806. USACE was contacted about whether this personal property was intended to transfer with the site. USACE confirmed that the personal property does convey (Moore 2020). Since the equipment is below the cost threshold of \$10,000, it will not be tagged or tracked by DOE according to Title 41 *Code of Federal Regulations* Section 109 (41 CFR 109) and the *Personal Property Manual* (LMS/POL/S24628). The personal property is now tracked on the site's personal property inventory. A copy of the personal property inventory list is included in Appendix E of this report.



Figure 22. Lawn Mower and Air Compressor in the Shed

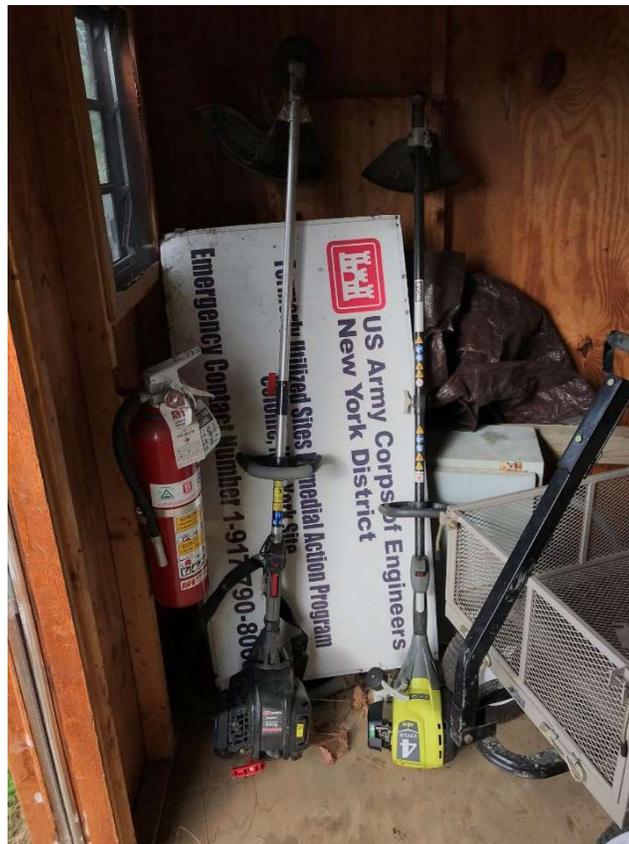


Figure 23. Two Line Trimmers and Garden Cart in the Shed

Recommendations:

- LMS Asset Management personnel recommend that all personal property onsite except for the spare pumps will convey with disposal of the site (McDilda 2020).
- Some of the personal property onsite may be useful for future inspections and sampling events; however, the site lead will need to bring additional equipment in order to use these items. For example, the site's garden cart proved useful during the sampling event. Because the cart has pneumatic tires, future samplers should bring a tire pump (or a Schrader valve fitting if they bring an air compressor) to fill the tires. The gasoline-powered mower and line trimmers may need to be serviced before use. The gasoline-powered air compressor was probably used for well sampling at one time but currently has no pump controller. It would not be dependable as a primary air supply but may be serviceable as a backup if needed.

3.0 Recommendations

The following items have been recommended based on the results of the annual inspection:

- Repair the damaged site fencing (see Section 2.2)
- Remove vegetation along the fence line (see Section 2.5)
- Update site planning materials to include access to offsite wells from the north (see Section 2.6 and Section 2.11)
- Update the site base map to include all key features (see Section 2.7)
- Install bollards around all onsite monitoring wells (see Section 2.8)
- Remove the bladder pump and tubing from MW-44S and reinstall pump at correct elevation (see Section 2.8.2)
- All personal property onsite (except for the spare pumps) should convey with disposal of the site (see Section 2.11)

4.0 Life-Cycle Baseline Assumptions

Cost savings will be realized by filtering developed groundwater onsite instead of transporting it offsite for disposal. The contingency for fence maintenance seems adequate. Landscaping cost estimates were based on previous costs but may need to increase to keep vegetation cleared away from the entire fence line. The cost to install bollards, remove the pump from MW-44S, and to decommission the well on CSX property should be added to the baseline for the second half of fiscal year 2021.

5.0 References

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DOE (U.S. Department of Energy), 2018. *Summary of the Condition Assessment Survey Report for the 2017 Inspection of the Colonie, New York, Site*, LMS/CIS/S18743, Office of Legacy Management, April.

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DOE (U.S. Department of Energy) and USACE (U.S. Army Corps of Engineers), 2020. *Site Management Plan, Main Site Soils Operable Unit, Colonie FUSRAP Site*, March.

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Fatherly, N., 2019. Nicki Fatherly, FUSRAP National Program Manager, U.S. Army Corps of Engineers, email communication (regarding FUSRAP – Colonie Site – Notice of Complete and Final Transfer of Site) to Gwen Hooten, LM CERCLA/RCRA/FUSRAP Team lead, October 1.

Keeler, R., 2020. Raymond Keeler, LMS Quality Assurance manager, email communication (regarding DOE Office of Legacy Management incident at Colonie, NY, Site) to DOE Office of Inspector General Hotline, July 30.

LMS Contract DE-LM0000421 implementing documents, continually updated, prepared by Navarro Research and Engineering, Inc., for the U.S. Department of Energy Office of Legacy Management:

Guidance for the Inspection and Maintenance of Groundwater Monitoring and Extraction Wells, LMS/PRO/S18459

Integrated Work Control Process Manual, LMS/POL/S11763

Legacy Management Program Management Plan for Formerly Utilized Sites Remedial Action Program, LMS/S16063

Legacy Management Site Management Guide, LM-Guide 3-20.0-1.0

Personal Property Manual, LMS/POL/S24628

Longley, K., 2007. *The Feasibility of Poplars for Phytoremediation of TCE Contaminated Groundwater*, masters thesis, The Evergreen State College, June.

McDilda, W., 2020. William McDilda, LMS Beneficial Reuse and Property Management, email communication (regarding personal property) to Carl Young, LMS site lead, July 30.

Moore, J., 2020. James Moore, U.S. Army Corps of Engineer project manager, email communication (regarding personal property) to Darina Castillo, LM project manager, July 23.

NYECL (New York Environmental Conservation Law), 71-3605. “Environmental Easements.”

NYSDEC (New York State Department of Environmental Conservation), 2009. *Groundwater Monitoring Well Decommissioning Policy*, CP-43, November.

NYSDEC (New York State Department of Environmental Conservation), 2010. *Technical Guidance for Site Investigation and Remediation*, DER-10, May.

NYSDEC (New York State Department of Environmental Conservation), 2020. Western New York Partnership for Regional Invasive Species Management, 2020. Invasive Species; Black Locust, https://www.wnyprism.org/invasive_species/black-locust/.

Stewart, R., 2020. Robert Stewart, A Plus Fence, Albany, New York, Personal communication (regarding a verbal cost estimate for fence repair), August 6.

USACE (U.S. Army Corps of Engineers), 2018. *Final Site Closeout Report for the Colonie FUSRAP Site, New York District*, June.

Waugh, J., 2020. Jody Waugh, LMS ecologist, email communication (regarding Colonie site vegetation) to Carl Young, LMS site lead, August 6.

Wei, A., 2020. Ann Wei, LMS Asset Management manager, email communication (regarding fallen trees) to Carl Young, LMS site lead, August 17.

Appendix A

Planning and Control Documents

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Readiness Review Checklist

Project Title: FUSRAP Colonie Well Redevelop Sampling, July 13-17, 2020 **Task Assignment:** 102

Project Lead: Carl Young **Site:** Colonie NY **Date:** 07/01/20

(The template contains typical checklist subject areas. Add or delete rows in the following table as needed.)

Item No.	Description	Hold Point, Status Update, or Date Due	Assigned To	Date Complete
Project and Personnel Management				
PM1	Ensure field team are available.	Field Personnel identified: Rachel Farnum [sampling lead] Thomas Rascona [technician] Carl Young [site lead, logistics support]	[Sam Campbell] Carl Young	06/09 Revised 06/24 ↔
PM2	Obtain needed equipment and materials	06/09 - Equipment list prepared	Gretchen Baer/Carl Young	06/09
PM3	Notify Amtrak	06/15 – emailed Glenn Kazanjian, he asked for simple plan 06/16 – sent summary plan to Amtrak. They ask for 1-week reminder.	Carl Young	06/09
PM4	Notify CSX	Approved by email	Carl Young	06/24
PM5	Notify property owner	Carl to call Ms. Harris	Carl Young	07/01
PM6	Notify NYSDEC	Notified by email. Carl to contact. NYSDEC do not want splits. Call to confirm visit with Mr. Abunaw	Darina Castillo	06/22
PM7	Complete notification form and submit to Ops Admin	07/01 – Completed form for all 3 notifications	Carl Young	07/01
PM8	Review equipment list with EnviroSpec	07/02 – review scheduled for Thursday 07/02	Carl Young	
Project Plans and Procedures				
PP1	Project Line Management and Support Identification	01/24 – teleconference meeting held	Carl Young	03/20 Revised 06/29
PP2	Procedure-based activities, using: S04351- Sampling and Analysis Plan, and S18459 – Well Inspection and Maintenance	03/11 – Carl Young is qualified to support on these procedures	Sam Campbell	03/11
PP3	Plan of the Week	completed	Carl Young	06/16
PP4	Revise Program Directive	completed	Carl Young	05/19
Logistics				
LO1	Are there any special access instructions that we need to know about such as contacting land owners or tenants, roads to avoid, gate issues, or railroads?	03/04 - MW-34S & MW-37S are in Amtrak ROE and must be accessed from the south. The same is true for Development work	Carl Young	03/18
LO2	Will there be any visitors, observers, or auditors at the site? If so, who and what is the purpose?	Regulator – John Abunaw, NYSDEC Amtrak Engineer – Glenn Kazanjian	Carl Young	06/29



Project Title: FUSRAP Colonie Well Redevelop Sampling, July 13-17, 2020 **Task Assignment:** 102

Project Lead: Carl Young **Site:** Colonie NY **Date:** 07/01/20

(The template contains typical checklist subject areas. Add or delete rows in the following table as needed.)

Item No.	Description	Hold Point, Status Update, or Date Due	Assigned To	Date Complete
LO3	Are there places on the site that we should not drive? Do we need to use UTVs?	03/04 – vehicles should stay on road & parking pad if the ground is wet.	Carl Young	03/18
LO4	Field duplicate location specified	03/04 – dup should come from the exceeding well MW-44S	Carl Young	03/18
LO5	Have analyses and containers been ordered?	06/25 – Steve Donivan has sent order form to Carl for review.	Carl Young	06/29
LO6	Has filtration equipment been ordered?	06/15 – Teri Wisner will place credit card order for delivery on 06/29 06/22 – order received	Carl Young	06/22
LO7	Order GPS data collector for annual inspection	06/26 – Matt Spinelli reviewed data needs and is placing an internal requisition for a Trimble Geo 7X	Matt Spinelli	06/29
Training				
TR1	Is routine training required for this job complete and current?	06/29 – subcontractors will need the following LMS training: hearing conservation, heat stress, hazard communication. Site lead needs to take HAZCOM & heat stress training.	Carl Young	
TR2	Are there any special training requirements for this job?	03/13 – no.	Sam Campbell	03/13
Submittals Required at Mobilization				
SR1	In-house work. No submittals required	NA	NA	NA
Environmental Compliance and Waste Management				
EC1	Needed EC permits identified	No EC permits required	Ann Houska	06/09
EC2	Treatment for purge water	Plan Complete – see Program Directive Purge water will be filtered onsite using GAC	Carl Young	06/09
Safety and Health				
SH1	Are there any special safety considerations?	High-speed rail line. Do not cross the tracks. Amtrak support will be present	Carl Young	06/09
SH2	Are there any special health considerations?	Ticks are active on the site. Addressed in SAP	Nikki Cale	06/09
SH3	JSA Approved	S&H have approved JSA CLN-0520-01	Nikki Cale	07/01
SH4	Needed Safety permits identified	No safety permits required	Nikki Cale	06/09
SH5	Are field personnel Fit for Duty (FFD)?	06/24 – FFD not required if employees have worked on a DOE site less than 20 days within the past 12 months	Nikki Cale	06/26
SH6	Unoccupied Sites Emergency Procedures reviewed & approved	02/25 – Approved by Safety & Health	Carl Young	02/25



Project Title: FUSRAP Colonie Well Redevelop Sampling, July 13-17, 2020 **Task Assignment:** 102

Project Lead: Carl Young **Site:** Colonie NY **Date:** 07/01/20

(The template contains typical checklist subject areas. Add or delete rows in the following table as needed.)

Item No.	Description	Hold Point, Status Update, or Date Due	Assigned To	Date Complete
SH7	COVID-19 Recovery Step 2 Field JSA compliance	06/05 - Reviewed by site lead 06/24 - Reviewed subs	Carl Young	06/05, 06/24
SH8	COVID-19 Recovery Step 3 Field JSA compliance	TBD - not yet issued		
Quality Assurance				
QA1	POW approved	Jaime Hayes reviewed	Carl Young	06/30

- All items have been reviewed, accepted, or verified complete and the activity review is closed.
- All items have been reviewed and an Open Items List has been prepared. Verification and closure will be documented on the Open Items List.
- Integrated Work Control Process Required Core Team Member approval signatures have been obtained. Not Applicable

Project Lead: Carl Young **Date:** 07/01/20

Open Items List							
Item No.	Pre-Start	Post-Start	Hold Point	Description or Status Update	Responsibility Assigned To	Date Due	Date Complete
PM3	x			Remind Amtrak of schedule on 07/07/20	Carl Young	07/07	07/06
PM8	x			Complete review of equipment list with Envirospec	Carl Young	07/02	07/06
LO2	x			Call John Abunaw [NYSDEC] to touch base	Carl Young	07/13	07/13
TR1	x			Required training completed	Carl Young	07/10	07/10
SH8	x	x		Review COVID-19 Recovery Step 3 JSA when issued	Carl Young	TBD	07/06

- All Open Items have been reviewed, accepted, or verified complete and the activity review is closed.

Project Lead: Carl Young **Date:** 07/13/20



Project or Activity Core Team Members

When the Readiness Review is conducted for Type-4 work, this section is to be completed by the project lead with assistance from the functional support organization managers and task order manager to identify representatives from the contractor's matrixed organizations.

Optional Core Team Members	Name	Date
Asset Management (<i>Real or Personal Property</i>)	Not applicable	
Construction Site Supervisor	Not applicable	
Ecology	Not applicable	
Information Technology	Not applicable	
Public Affairs	Not applicable	
Records Management	Not applicable	
Technical Subject Matter Expert	Not applicable	
Training	Not applicable	
Other	Not applicable	

Required Core Team Members	Name and Approval Signature	Date
Approval signature means that review of applicable hazards and requirements have been addressed, the readiness review is complete, and the work can proceed. If a resource was not identified as part of the core team and an approval signature is not required, insert N/A.		
Contracts Services	Not applicable	
Engineering	Not applicable	
Environmental Compliance	Ann Houska ANN HOUSKA (Affiliate) <small>Digitally signed by ANN HOUSKA (Affiliate) Date: 2020.07.01 14:44:17 -06'00'</small>	
Geosciences (<i>required for drilling</i>)	Not applicable	
Quality and Performance Assurance	Jaime Hayes Jaime-David I. Hayes <small>Digitally signed by Jaime-David I. Hayes Date: 2020.07.06 09:52:03 -06'00'</small>	
Safety and Health	Nikole Cale NIKOLE CALE (Affiliate) <small>Digitally signed by NIKOLE CALE (Affiliate) Date: 2020.07.07 08:19:39 -04'00'</small>	
Site Operations Lead	Not applicable	
Occupational Medicine (<i>if fitness for duty evaluation is required</i>)	Not applicable	
Radiological Control Manager (<i>if radiological hazards are identified</i>)	Not applicable	

Final Approval	Name and Approval Signature	Date
Project Lead	Not applicable	
Task Manager, Subtask Manager, or Site Lead	Carl Young <i>Carl Young</i>	2020.07.07 08:23:39 -04'00'



Contractor to the U.S. Department of Energy Office of Legacy Management

Landowner/Stakeholder Notification Form

Site: Colonie, NY – Carl Young
Date: Week of 07-13-2020
Task: First Sampling Event – Sampling every 2 years, the next cycle will begin April, 2021

Date	Time	Landowner/Stakeholder Information	Location Number	Special Instructions	Phone Number
06/24/20	12:24pm	CSX Transport – Ruben Alonso	MW-32S	NTP granted. Do not cross track	267-751-5070
06/16/20	12:44pm	Amtrak – Glenn Kazanjian	MW-34S, MW-37S	Call 07/07 to re-confirm	518-857-7095
07/01/20	10:30am	Ms. Marion Harris	MW-34S, MW-37S	Call 07/13 to confirm	518-813-9235
		Per email from Sam Campbell – Carl Young will contact landowners			



Contractor to the U.S. Department of Energy Office of Legacy Management

Plan of the Day/Plan of the Week

Plan of the Day/ Plan of the Week

Site name: Colonie NY

Date(s) Work Authorized: MON 13 JULY - FRI 17 JULY

Work authorized by: Carl Young

Carl Young
Site lead (signature)

Site lead (print name)

Site lead (signature)

1. Authorized Activities					
Item No.	Work Type	Activity Description ¹	Work Control Reference ²	PIC ³	
				Printed Name	Initials ⁴
1	<input type="checkbox"/> SBA <input type="checkbox"/> PBA <input checked="" type="checkbox"/> MWT <input type="checkbox"/> PAE	Conduct Site Inspection	LTS&M Plan	Carl Young	
2	<input type="checkbox"/> SBA <input checked="" type="checkbox"/> PBA <input type="checkbox"/> MWT <input type="checkbox"/> PAE	Redevelop 7 active wells	Readiness Review PP3, S04351 - Sampling and Analysis Plan	Rachel Farnum [Envirospec]	
3	<input type="checkbox"/> SBA <input checked="" type="checkbox"/> PBA <input type="checkbox"/> MWT <input type="checkbox"/> PAE	Sample 7 active wells	Readiness Review PP3, S04351 - Sampling and Analysis Plan	Rachel Farnum [Envirospec]	
4	<input checked="" type="checkbox"/> SBA <input type="checkbox"/> PBA <input type="checkbox"/> MWT <input type="checkbox"/> PAE	Repair Well MW-44S Surface Completion	Contract Scope of Work	MATT CARNIE [Parratt-Wolff]	
5	<input checked="" type="checkbox"/> SBA <input type="checkbox"/> PBA <input type="checkbox"/> MWT <input type="checkbox"/> PAE	Civil Survey of MW-44S	Contract Scope of Work	[CT Male Assoc.]	

¹ A description of the authorized work scope that is sufficient to define the operational envelope.

² This may be a brief verbal description, an MWT reference number, a procedure title or number (and step reference, if needed to define the work scope), a PAE title (and step reference, if needed to define the work scope), or a Job Safety Analysis (JSA) title or number.

³ The LMS Person in Charge of the activity and directing the work/workers at the activity level. Example PICs include: Construction Site Supervisor, Project lead, Operations lead or designee.

⁴ Application of initials indicates PIC understanding of authorized work and their responsibility for work performance.

SBA = Skill-Based Activity, MWT = Minor Work Task, PBA = Procedure Based Activity, PAE = Project or Activity Evaluation, PIC = Person in Charge



Plan of the Day/Plan of the Week

2. Safety, Radiological, and Environmental Precautions

- a) *This section is used to document the dissemination of information to site personnel. This section may contain safety share topics; discussion of prior day/week lessons learned; formal lessons-learned review; timely orders, new or revised site-wide procedures, or JSAs (specify by listing or as a full brief of the document); review of field changes made to procedures or JSAs; required-reading list updates; or other general briefings the site lead deem appropriate. Note relevant changes in site conditions (e.g., weather extremes, visitors, abnormal conditions, new employees, new or non-routine activities).*
- b) *All workers have, and are expected to use, **pause and stop work authority**.*
- c) *All workers should notify their supervisor or Safety and Health representative of abnormal events, such as changed site conditions, vandalism, or discovery of cultural resources in the work area, etc.*
- d) *All workers must notify their supervisor and/or PIC immediately of any injury or potential injury, regardless of how minor it may appear at the time.*
- e) *Safety and Health must be contacted prior to entry into **any** permit required confined space.*

- 1) task-specific JSA to be used.
- 2) COVID-19 Phase 2 JSA and/or Phase 3 JSA [when that is issued]
- 3) Ticks will be present. Use DEET spray and check for ticks frequently.

3. Site and Project Contact Information—Names and Phone Numbers

This section should contain pertinent contact information and job assignments deemed necessary by the site lead. Examples of contact information include: site leads, project leads, operations leads, construction inspector, technical monitor, and site safety supervisor. If multiple projects or activities are being conducted, the site lead may determine that each project or activity include the respective positions. In this case, the site lead may elect to specify contact information for each project.

Carl Young - site lead; m: 410-816-4029

Rachel Farnum - operations lead [Envirospec]; m: 518-491-6798

Thomas Rascona - technician [Envirospec]; m:

MATT CARNIE - DRILLER [PARRATT-WOLFE] m: 315-530-2630



Contractor to the U.S. Department of Energy Office of Legacy Management

Job Safety Analysis (JSA)

Descriptive title: Monitoring Well Redevelopment and Sampling

JSA number: CLN-0520-01

General LMS or **Specific site:** Colonie, NY Site

Issuance date: 07/13/20

Expiration date: 07/12/21

Work Scope

The scope statement must address the following five questions:

1. What is the work being performed?
Redevelopment of 2-inch diameter, 20-foot deep wells set in field boxes. Purging and low-flow sampling of these same wells
2. Where is the work being performed? Which site(s)? Inside or outside?
Colonie NY site: 5 onsite wells and 2 offsite wells on Amtrak property
3. When is the work being performed (i.e., exact date[s], month[s], season[s])?
Applicable to any season of the year
4. What tools or equipment will be used? Hand tools do not need to be itemized; however, power tools and heavy equipment should be itemized.
Compressors, compressed gas cylinders, hand tools, batteries, bladder pumps, surge blocks, bailers, buckets, activated carbon vessels
5. Who is performing the work (LMS contractor, subcontractor, or both)?
Contractor or subcontractor personnel

Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
Working outdoors	Illness due to heat stress	<ul style="list-style-type: none"> Assess the potential for heat related illnesses and follow the Heat Stress Procedure (LMS/POL/S15935), requirements when the possibility of working in heat stress conditions exist. Forecasted weather should be discussed during the Plan of the Day (POD) or the Plan of the Week (POW) so all personnel understand anticipated changing weather conditions. If weather conditions are expected to meet or exceed 80°F, ensure all personnel complete course HS418, "Heat Stress" as well as the appropriate job performance metric (JPM) for heat stress monitoring equipment.



Contractor to the U.S. Department of Energy Office of Legacy Management

Job Safety Analysis (JSA)

Descriptive title: Monitoring Well Redevelopment and Sampling

JSA number: CLN-0520-01

Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
		<ul style="list-style-type: none"> • Monitor onsite personnel for heat stress when ambient temperatures exceed 80°F and they are working outside a climate-controlled area for more than 15 minutes at a time. • Watch for signs of heat stress in self and others. These include unusual redness or profuse sweating, or uncontrollable shivering. • Take breaks as necessary to cool down. •
Working Outdoors	Illness due to cold stress	<ul style="list-style-type: none"> • Assess the potential for cold related illnesses and follow the <i>Cold Stress Procedure</i> (LMS/PRO/ S16014), requirements when the possibility of working in cold stress conditions exist. • Forecasted weather should be discussed during the Plan of the Day (POD) or the Plan of the Week (POW) so all personnel understand anticipated changing weather conditions. • Ensure workers who could be exposed to cold stress have completed course HS419, "Cold Stress." • If ambient temperatures are expected to be ≤ 40 °F: <ul style="list-style-type: none"> ○ Workers shall wear appropriate insulating clothing. ○ Workers shall have a change of dry clothing when work clothing becomes wet. ○ If the potential to become wet exists, workers should wear water-repellent outerwear. ○ If wind, draft, or ventilating equipment increases air velocity, implement shielding, when feasible, to reduce the wind. ○ Workers shall take special precautions to avoid soaking clothing or gloves with evaporative liquids (e.g., gasoline, alcohol, cleaning fluids). • If ambient temperatures are expected to be < 10 °F: <ul style="list-style-type: none"> ○ Use the buddy system. ○ Pace work rate to avoid heavy sweating that will result in wet clothing. ○ If heavy work must be done, ensure rest periods are taken in heated areas and the opportunity to change into dry clothes is provided. ○ Arrange work to minimize sitting or standing still for long periods.



Contractor to the U.S. Department of Energy Office of Legacy Management

Job Safety Analysis (JSA)

Descriptive title: Monitoring Well Redevelopment and Sampling

JSA number: CLN-0520-01

Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
Working Outdoors	Medical Emergency	<ul style="list-style-type: none"> Review the <i>Site-Specific Emergency Response Plan</i> during the pre-work safety meeting. At least one person in the group shall have current first aid and CPR training. Have onsite a first-aid kit that complies with the ANSI/ISEA standard, Z308.1-2015. Workers should have cell phones. Service is available area-wide. Use the buddy system by working at wells within view of each other where possible. Where line-of-sight is not possible then agree on periodic check-ins.
Working Outdoors	Slips, trips, and falls over uneven terrain and equipment	<ul style="list-style-type: none"> Avoid steep slopes where possible. The Amtrak railway road bed should be avoided. Be aware that gopher and ground hog burrows are present. Avoid stepping on ice, puddles, or plastic sheeting. Use a distinct equipment laydown area rather than laying equipment in random places. Wear boots that provide ankle support.
Working Outdoors	Inclement weather (wind, lightning, tornados)	<ul style="list-style-type: none"> As per <i>LMS Health and Safety Plan (LMS/POL/S20043)</i>, evaluate the need to seek shelter if thunder is audible. Use the 30/30 rule at a minimum (30 seconds between flash of lighting and bang of thunder). Cease field activities when lightning is within 6 miles (i.e., when there is less than 30 seconds between flash and bang). Field activities can resume 30 minutes after the last audible thunder. Suspend outdoor work when a severe thunderstorm or tornado warning has been issued. Use a weather warning cell phone app. Cease field activities if wind can move equipment [i.e. gusts greater than 25 mph] In the event of tornado warnings, consider sheltering in the vehicle under the Amtrak railroad bridge, under the I-90 overpass, or in the Home Depot.
Working outdoors	Poison ivy	<ul style="list-style-type: none"> Poison ivy is present near offsite wells MW-34S and MW-37S. Wear long sleeves and cover exposed skin as much as possible. Apply ivy block.
Working outdoors	Ticks	<ul style="list-style-type: none"> Ticks are plentiful and will be present in above-freezing weather, especially near offsite wells MW-34S and MW-37S. Use repellent containing DEET. Wear light-colored clothes. Check for ticks frequently.



Contractor to the U.S. Department of Energy Office of Legacy Management

Job Safety Analysis (JSA)

Descriptive title: Monitoring Well Redevelopment and Sampling

JSA number: CLN-0520-01

Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
Working near a public roadway	Vehicle striking people or equipment	<ul style="list-style-type: none"> • Yardboro Avenue is narrow and residential. Do not leave equipment in the street or behind a vehicle.
Driving on-site	Getting stuck	<ul style="list-style-type: none"> • Vehicles are to remain in the parking area or roadway. • <p>NOTE: Tow-truck companies in the area were contacted and stated they wouldn't respond to help a vehicle stuck off-road.</p>
Opening wells	Pinch points, cuts	<ul style="list-style-type: none"> • Wear leather gloves to open well covers
Opening wells	Insect stings	<ul style="list-style-type: none"> • Wasps or spiders may inhabit protective casings. Wear leather gloves when opening well covers and consider spraying with insecticide.
Working on Amtrak property	Industrial-area hazards	<ul style="list-style-type: none"> • Amtrak safety orientation training is required prior to work at Wells MW-34S or MW-37S. • Amtrak flagmen must be present. • Amtrak requires hard hat, safety glasses, ear plugs, hi-vis vest, and steel toes.
Sample collection and preservation	Chemical exposure and spills	<ul style="list-style-type: none"> • Prior to handling acidized containers or other reagents, review safety data sheets (SDSs) for PPE requirements. • Acidized sample bottles may be used, using strong acid – review safety data sheets. • Have two 32-ounce eyewash bottles available.
Operating bladder pumps using compressed air	Unexpected pressure releases from gas cylinders, compressors, and pneumatic equipment	<ul style="list-style-type: none"> • HS322, "Compressed Gas Cylinder" training is required for use of compressed gas cylinders. • Compressed air cylinders shall be secured (either vertical or horizontal) with the regulator removed and protective cap in place during transport on public roads. Regulators can remain attached to air cylinder on a controlled site (from well to well). • Use a properly rated regulator for the control of air flow. • Maintain all fittings and connections; keep free from dirt, grease, and oil. • Check for leaks after regulator and fittings are in place.



Contractor to the U.S. Department of Energy Office of Legacy Management

Job Safety Analysis (JSA)

Descriptive title: Monitoring Well Redevelopment and Sampling

JSA number: CLN-0520-01

JSA Review/Approval

Carl Young

Line Supervisor (Print Name)

Signature

2020.07.07 11:17:09 -04'00'

Date

Nikole Cale

Safety and Health Representative (Print Name)

NIKOLE CALE (Affiliate)

Signature

Digitally signed by NIKOLE CALE

(Affiliate)

Date: 2020.07.01 13:01:25 -04'00'

Date

Rachel Farnum

Worker or Subcontractor Representative (Print Name)

Signature

7/13/2020

Date



Contractor to the U.S. Department of Energy Office of Legacy Management

Job Safety Analysis (JSA)

Descriptive title: Monitoring Well Redevelopment and Sampling

JSA number: CLN-0520-01

Field Change Authorization and Review

Field Management Changes (Use a separate sheet if more space is necessary.)

Define New or Changed Scope of Work by Tasks (ISMS Core Function #1)	Analyze the New or Changed Hazards (ISMS Core Function #2)	Develop and Implement New Controls (ISMS Core Function #3)	Date

Safety and Health Representative (Print Name)

Signature

Date

Line Supervisor (Print Name)

Signature

Date

Worker or Subcontractor Representative (Print Name)

Signature

Date



Contractor to the U.S. Department of Energy Office of Legacy Management

Job Safety Analysis (JSA)

Descriptive title: Monitoring Well Redevelopment and Sampling

JSA number: CLN-0520-01

I acknowledge I have had the opportunity to provide input on the field change and am aware of the scope change, new or changed hazards, and associated work controls.

Print Name	Signature	Company	Date

Provide Feedback and Improvement Suggestions (ISMS Core Function #5)



COVID-19 HEALTH SCREENING FOR SITE OR FACILITY ACCESS

As of May 4, 2020

SITE/FACILITY ACCESS REQUIREMENT—PLEASE READ BELOW

The U.S. Department of Energy is enforcing the federal mandate of social distancing to protect their employees and contractors from the COVID-19 virus to ensure vital mission essential work continues for the United States government. **All personnel and contractors are required to read scenarios A–F. If any of the below scenarios apply to you, then you are not authorized to perform work at this location until an evaluation of your answers has been conducted by your supervisor and a Safety and Health representative.** Management will then contact you for follow-up. Re-entry to this location will be reconsidered when any of the following have occurred: a vaccination is developed and administered; a negative COVID-19 screening is presented; or any of the below scenarios no longer apply.

If none of the scenarios below apply, please present a valid ID authorized by the REAL ID Act of 2005 and you will be signed in to conduct your work. Please maintain appropriate social distancing.

- A. You have tested positive for COVID-19.
- B. You have had a fever (≥ 100.4 °F), a new or worsening cough, new-onset muscle pain, new-onset headache, chills, repeated shaking with chills, sore throat, new-onset loss of taste or smell, or shortness of breath within the last 24 hours. (NOTE: “New onset” means the first appearance of the symptom. For example, you developed a headache on the way to work and you generally do not get headaches.)
- C. You have a household member who has a fever (≥ 100.4 °F), a new or worsening cough, new-onset muscle pain, new-onset headache, chills, repeated shaking with chills, sore throat, new-onset loss of taste or smell, or shortness of breath, or tested positive for COVID-19 within the past 14 days.
- D. You have had close contact with an individual that had a fever (≥ 100.4 °F), cough, new-onset muscle pain, new-onset headache, chills, repeated shaking with chills, sore throat, new-onset loss of taste or smell, or shortness of breath, or tested positive for COVID-19 within the past 14 days. (Close contact is considered closer than 6 feet for more than 10-15 minutes and/or being coughed or sneezed on.)
- E. You have returned from international travel, (e.g., China, Iran, Europe, South Korea), or domestic travel, (e.g., New York, Los Angeles, Seattle) or traveled on a cruise ship in the previous 14 days.
- F. You have had close contact with an individual, including a household member, that has returned from international travel or a domestic area with a high rate of infection or a cruise ship within the past 4 weeks. (Close contact is considered closer than 6 feet for more than 10-15 minutes and/or being coughed or sneezed on.)

COVID-19 HEALTH SCREENING FOR SITE OR FACILITY ACCESS: INSTRUCTIONS

The purpose of this form is to reduce the risk of having our site or facility accessed by someone who is symptomatic or has had possible exposure to COVID-19.

- 1. Managers are to ask these questions of anyone who is requesting to access a site or facility.
- 2. If any answers are in the affirmative, then they will not be allowed access until the condition is resolved.
- 3. If anyone does not pass the questions, please let your manager know.
- 4. If these questions are asked by a guard or facility access control persons, then any affirmative responses will disallow access. The information would then be provided back to the sponsor of the individual trying to gain access.
- 5. Guards or facility access control persons will have vendors and subcontractors read the statement and any answers in the affirmative will disallow access.



Contractor to the U.S. Department of Energy Office of Legacy Management

Job Safety Analysis (JSA)

Descriptive title: COVID-19 Field JSA

JSA number: LMS-0620-09

General LMS or Specific site: _____

Issuance date: 07/13/2020

Expiration date: 07/12/2021

Work Scope

The scope statement must address the following five questions:

1. What is the work being performed?
Field operations during Limited OPS Steps 1, 2 and 3
2. Where is the work being performed? Which site(s)? Inside or outside?
All sites
3. When is the work being performed (i.e., exact date[s], month[s], season[s])?
Limited OPS Step 3; changes from Limited OPS Step 2 are highlighted in blue
4. What tools or equipment will be used? Hand tools do not need to be itemized; however, power tools and heavy equipment should be itemized.
As needed under field operation JSA
5. Who is performing the work (LMS contractor, subcontractor, or both)?
All LM/LMSP employees, subcontractors (and any other site participants)

NOTE: To elevate awareness and increase the integrity of integrated field safety operations, this JSA and the LM/LMSP COVID-19 health survey questionnaire shall be transmitted to all non-LM/LMSP site participants (e.g., NRC, state, tribal, county, municipal, and others) prior to the scheduled rendezvous in the field.

NOTE: Field changes are not allowed on this JSA. If work cannot be completed in compliance with the requirements identified in this JSA, work must be paused or stopped and reevaluated with the JSA signatories before work can proceed.

Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
General Requirements	Exposure to COVID-19 from other workers who may be infected	<ul style="list-style-type: none"> • Reduce exposure by continuing to telework unless you have been authorized by your manager to perform work at the office or field location.



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Job Safety Analysis (JSA)

Descriptive title: COVID-19 Field JSA

JSA number: LMS-0620-09

Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
		<ul style="list-style-type: none"> • Managers or site security personnel will screen workers using the COVID-19 Health Screening for Site or Facility Access and the COVID-19 Temperature Screening Process prior to authorizing workers to perform work at an office or field location. • If you experience fever $\geq 100.4^{\circ}\text{F}$, difficulty breathing, dry coughing, chills, repeated shaking with chills, sore throat, new-onset loss of taste or smell, new-onset muscle pain, or new-onset headache, notify your manager of your condition as soon as possible and do not report to work. Follow your manager's direction regarding attendance at an office location. You will be sent home immediately if these conditions are observed while in the office or at a job site. <p>NOTE: In medicine, onset means the first appearance of the signs and symptoms of an illness as, for example, the onset of symptoms. For example, someone who has a headache on a regular basis does not meet the criteria of "new-onset" because it is something that is not unusual for them.</p> <ul style="list-style-type: none"> • Workers experiencing these symptoms should call a doctor and stay home until they know they cannot make others sick. • Follow additional Centers for Disease Control and Prevention (CDC) guidelines at www.cdc.gov. • If you previously have had symptoms you may not return to work until you meet the following conditions: <ul style="list-style-type: none"> ○ have been fever free for 72 hours without the use of fever-reducing medications, AND ○ have improvement in symptoms identified in the COVID-19 Health Screening for Site and Facility Access, AND ○ At least 10 days have passed since symptoms first appeared. • If you believe you have been exposed to someone who has or may have COVID-19, notify your supervisor as soon as possible and do not come in to



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Job Safety Analysis (JSA)

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Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
		<p>the office or job site for 14 days.</p> <p>NOTE: Exposure means being in close contact to someone who is either confirmed infected or may be infected. Exposure can include caring for a relative, shaking hands with someone, receiving services from someone, or being in a group of people standing close to one another.</p> <ul style="list-style-type: none"> • Whenever possible, maintain social distancing by keeping a distance between you and other people of at least six feet, or about two arms' length. • Face covering use in outdoor areas where 6-foot distancing is difficult to maintain is required. This is especially important where individuals may congregate or stop to converse. Face covering use in indoor areas is required at all times when you are outside your own work station area. • Individuals should supply their own cloth face covering, however if you don't have one, one will be supplied. • Face covering use is a public health recommendation to stop virus transmission as source control; it is not a form of personal protective equipment (PPE). In other words, the covering protects others from getting the virus from you (as a potential source of the virus); it offers little protection for you from contracting the virus from someone else. <p>NOTE: If you are not able to wear a face covering due to a medical condition, then contact your supervisor.</p> <ul style="list-style-type: none"> • Do not congregate near entrances of buildings or rooms. If a line has formed maintain distancing while waiting. • Do not share items such as PPE, pens, tools, or phones unless the items have been completely wiped down with disinfectant. • As often as possible, wash your hands for at least 20 seconds using soap. Hand sanitizer that contains at least 60% alcohol should be used when hand washing isn't an option.



Job Safety Analysis (JSA)

Descriptive title: COVID-19 Field JSA

JSA number: LMS-0620-09

Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
Entering/exiting office complex	Exposure to COVID-19 from other workers who may be infected	<ul style="list-style-type: none"> • Always maintain social distancing while on site. • Park every other space OR exit vehicle while no one is near to maintain social distancing upon arrival at office or field location. • Use “no-touch” tool to enter/exit site if doors are not in an open position. • Wipe equipment surfaces prior to and after handling. • If using a cart to load field supplies, wipe cart handles down prior to and after use. • Follow all requirements per the COVID-19 Office JSA.
Cleaning GSA/rental vehicles, ATV/UTV, mower, skid steer, tractor	Surface COVID-19 exposure on touch points inside vehicle or from other passengers who may be infected	<ul style="list-style-type: none"> • Wash or sanitize hands before entering and after exiting vehicle. • Disinfect frequently touched vehicle surfaces upon entering and when done using the vehicle using disinfecting products provided in vehicle’s trip box. Frequently touched areas include: <ul style="list-style-type: none"> ○ Trip box containing disinfectant, sanitizer, anti-fog, and other supplies. ○ GSA book (or similar), car keys, fobs, and vehicle gas cards ○ Door handles, door latches, and lock buttons ○ Steering wheel ○ Shift lever ○ Any buttons or touch screens (radios, mirror adjusters, climate controls, etc.) ○ Wiper and turn signal stalks ○ Center console and cup holders ○ Driver and passenger armrests and seat belts, grab handles, and seat adjusters ○ Headrests and seat pockets <p>NOTE: If you are the only person using a vehicle, either throughout a day or for a longer period, you must wipe down the vehicle between users. It is recommended that you wipe the vehicle down every day but not required.</p> <ul style="list-style-type: none"> • Follow the cleaning agent manufacturer’s product label guidance for the recommended disinfecting procedure, as guidance varies by cleaning product. Read all instructions and precautions of the materials being



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Job Safety Analysis (JSA)

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Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
		<p>utilized and follow all safety recommendations when utilizing cleaning products to ensure personal safety.</p> <ul style="list-style-type: none"> • When using wipes, remove excess liquid before wiping surfaces, especially electrical components and touch screens. • Never combine cleaning chemicals as doing so may lead to generation of toxic gases. • Use “no-touch” tool to touch common use contact areas.
<p>Operation of GSA/rental vehicles with two personnel</p>	<p>Exposure to COVID-19 from other workers who may be infected</p>	<ul style="list-style-type: none"> • Face coverings are required when two people occupy the vehicle. Face coverings are not required if only one person occupies the vehicle. <p>NOTE: Workers may decline to ride with another worker and shall discuss their concerns and alternatives with their supervisor prior to the start of any work involving GSA or rental vehicle use.</p> <p>NOTE: Apply anti-fog to glasses as needed if fogging occurs due to face covering use. Anti-fog is included in the trip box.</p> <ul style="list-style-type: none"> • If individuals have a personal health issue and are unable to wear a face covering, then contact your immediate supervisor to make alternative plans prior to occupying vehicle. • Vehicles must be operated with the HVAC system configured as follows: <ul style="list-style-type: none"> ○ Medium setting (or higher) ○ Vents pointed straight out for maximum air flow and to ensure air does not blow across one person toward another ○ Recirculation turned OFF • When possible, open windows at least ½ inch to allow additional airflow into vehicle



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Job Safety Analysis (JSA)

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Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
		<ul style="list-style-type: none"> • One person will be the designated driver. If individuals traveling together need to switch due to fatigue or other reasons, the cab shall be sanitized prior to the change. • Each person will clean and sanitize their designated area before and after use. • Work crews driving in caravans should provide travel plans in the form of a briefing prior to leaving site, including but not limited to: <ul style="list-style-type: none"> ○ Lead and drag vehicles ○ Stops/rendezvous/refueling ○ Travel speed ○ Lane change indicators ○ Safety requirements for cell phones/radios for communication (two-way radios are preferred) ○ Radio/communication checks prior to departure <p>NOTE: While operating a motor vehicle you are not allowed to use communication devices in the handheld or the hands-free mode. If there is an issue that needs to be communicated immediately, then using the communication device for that purpose is allowed. Examples of situations are as follows:</p> <ul style="list-style-type: none"> ○ You notice a low tire on the trailer being towed in front of you ○ Debris in the road blocking part of the lane of travel ○ Unexpected detour ○ Unexpected deviation from travel plans needed
Operation of UTVs	Airborne COVID-19 exposure, Impaired visibility	<ul style="list-style-type: none"> • More than one person can ride in a UTV under certain circumstances. • If the UTV has an open cab or a half windshield, its full seating capacity can be used.



Contractor to the U.S. Department of Energy Office of Legacy Management

Job Safety Analysis (JSA)

Descriptive title: COVID-19 Field JSA

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Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
		<ul style="list-style-type: none"> • If UTV enclosed cab, the doors must be removed for more than a single person to ride within. • If the UTV has a fan and air vents, the fan should be set to full new air (no recirculation) and on medium or higher speed. • All persons shall wear face coverings when within 6-foot distance from one another. If the driver cannot do so without compromising their vision, they should surrender the driving task to another worker. • If no worker can perform the driving function without restricted vision, only one person may be in the vehicle. • Avoid sitting in a stationary UTV with more than one person for more than a few minutes. • Off Road vehicles such as Jeeps are not considered to be used in the manner as UTVs
Fueling GSA/rental vehicles	Surface COVID-19 exposure on touch points	<ul style="list-style-type: none"> • Wash or sanitize hands prior to and after fueling vehicle. • Use contactless payment methods when possible to avoid touching keypads or pens, or “no-touch” tool to avoid touching keypads with hands.
Air travel and associated public transportation (e.g., terminal trams, transport to rental car or hotel facilities)	Airborne/surface COVID-19 exposure from other people who may be infected	<ul style="list-style-type: none"> • When possible, consider traveling during non-peak hours when there are likely to be fewer people. • Check and adhere to face covering requirements at your origin and destination airport and city prior to travel. Face covering use is recommended (even if not required by the airport or locality) in public areas. • Consider skipping a row of seats between yourself and other riders and choosing the window seat when possible. • Maintain a 6-foot distance from others (except household members) and limit the time spent next to someone to less than 15 minutes when possible. • Avoid gathering in groups, and stay out of crowded spaces when possible, especially at transit stations and stops. • Enter and exit buses through rear entry doors when possible. • Look for social distancing instructions or physical guides offered by transit authorities (for example, floor decals or signs indicating where to stand or sit



Contractor to the U.S. Department of Energy Office of Legacy Management

Job Safety Analysis (JSA)

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Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
		<p>to remain at least 6 feet apart from others).</p> <ul style="list-style-type: none"> • Carry a small bottle of hand sanitizer with you. It must be 12 fluid ounces or less to pass through security. • Limit touching frequently touched surfaces such as kiosks, digital interfaces such as touchscreens and fingerprint scanners, ticket machines, turnstiles, handrails, restroom surfaces, elevator buttons, and benches as much as possible. • Use touchless payment and no-touch trash cans and doors when available. Exchange cash or credit cards by placing them in a receipt tray or on the counter rather than by hand, if possible. • Wash or sanitize hands frequently, including after going through security, after you leave the transit station or stop, when you arrive at your destination, etc.
<p>Entering public areas (gas stations, grocery stores, hotels, etc.)</p>	<p>Airborne/surface COVID-19 exposure from other people who may be infected or on touch points</p>	<ul style="list-style-type: none"> • Maintain a 6-foot distance from others as much as possible. • Limit the time spent next to someone to less than 15 minutes. • Face covering use is recommended and may be required in certain locations. Check and be prepared to comply with local requirements for face coverings. • Individuals should supply their own cloth face covering; however, there is one in the trip box if you do not have your own. Dispose of trip box face covering after use and contact Fleet to resupply. • If you must stay in a hotel, motel, or rental property: <ul style="list-style-type: none"> ○ Request permission for overnight travel from your manager. ○ Prior to travel, contact the property (call or visit website) to determine if CDC guidelines for cleaning are being followed. ○ Bring trip box inside (if traveling by vehicle) so you have supplies to disinfect all frequently touched areas, which include: tables, doorknobs, light switches, countertops, handles, desks, phones, remote controls, toilets, and sink faucets. ○ Wash any plates, cups, or silverware (other than pre-wrapped plastic) before using. ○ Wash hands frequently. ○ Avoid congregating in public areas for longer than a few minutes.



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Job Safety Analysis (JSA)

Descriptive title: COVID-19 Field JSA

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Define the Scope of Work by Individual Tasks (ISMS Core Function #1)	Analyze the Safety and Environmental Hazards (ISMS Core Function #2)	Develop and Implement Controls (ISMS Core Function #3)
Working outdoors and using hand-held equipment (hand & power tools, monitoring equipment, etc.)	Airborne/surface COVID-19 exposure from other people who may be infected or on touch points	<ul style="list-style-type: none"> • Maintain a 6-foot distance with others. • A face covering is required when you cannot maintain a 6-foot distance from an individual you are working with (e.g., working together to repair a fence, rad tech monitoring equipment prior to working on it). • Wash / sanitize hands before and after handling tools and equipment. • Do not share items such as tools, keys, backpacks, pens, clipboards, sampling supplies, etc. whenever possible. • Disinfect equipment after use.
Performing pre-job briefings	Airborne/surface COVID-19 exposure from other people who may be infected or on touch points	<ul style="list-style-type: none"> • Maintain 6-foot distance from others • Do not share pens for signing documents • Wash or sanitize hands prior to and after touching clipboards and/or documents. • Place documents in a location to allow workers to sign while maintaining social distancing.
Restroom use in public areas	Surface COVID-19 exposure from touch points	<ul style="list-style-type: none"> • Maintain a 6-foot distance from others and/or limit the time spent next to someone to less than 15 minutes. It is recommended that you wear a face covering when out in the public. • Before and after using the restroom, wash your hands for at least 20 seconds using soap. Hand sanitizer that contains at least 60% alcohol should be used when hand washing isn't an option.
Hand sanitizer use	Potential skin burns	<ul style="list-style-type: none"> • Allow sanitizer to fully dry (i.e., allow all alcohol to evaporate) before touching any surface, particularly one that may hold a static charge. • Do not store or apply near ignition sources.



Contractor to the U.S. Department of Energy Office of Legacy Management

Job Safety Analysis (JSA)

Descriptive title: COVID-19 Field JSA

JSA number: LMS-0620-09

JSA Review/Approval

Sam Marutzky

Line Supervisor (Print Name)

JOHN ELMER
(Affiliate)

Digitally signed by JOHN ELMER
(Affiliate)
Date: 2020.07.02 09:38:08 -06'00'

Signature

Date

Scott Ficklin

Safety and Health Representative (Print Name)

SCOTT FICKLIN (Affiliate)

Digitally signed by SCOTT FICKLIN
(Affiliate)
Date: 2020.07.02 10:18:12 -06'00'

Signature

Date

CARL YOUNG

Worker or Subcontractor Representative (Print Name)

Carl Young
Signature

07/07/20
Date



Contractor to the U.S. Department of Energy Office of Legacy Management

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Descriptive title: COVID-19 Field JSA

JSA number: LMS-0620-09

I acknowledge I have had the opportunity to provide input on the field change and am aware of the scope change, new or changed hazards, and associated work controls.

Print Name	Signature	Company	Date

Pre-job Brief/Safety Meeting Attendance Record

Project: GROUND WATER MONITORING WELL REPAIR Job Safety Analysis: _____

Location: COLONIE NEW YORK Procedure Title: _____

Initial pre-job brief Pre-job brief or safety meeting

Briefing performed by: CARL YOUNG - SITE LEAD Date: _____

Description of the work scope (*authorized work, roles and responsibilities, changed conditions, training requirements, hold points, quality requirements, and environmental requirements, as applicable):

REDEVELOP WELLS, SAMPLE GROUNDWATER, REPAIR MW-44S

Check the specific items below covered during the briefing (*Items are mandatory for initial pre-job brief.)

General Hazards	<input type="checkbox"/> NA	Yes	Equipment	<input type="checkbox"/> NA	Yes
1. Fall potential, floor opening, and elevated work	<input type="checkbox"/>	<input type="checkbox"/>	1. Aerial lift	<input type="checkbox"/>	<input type="checkbox"/>
2. Wildlife or biting or stinging insects	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Ladder	<input type="checkbox"/>	<input type="checkbox"/>
3. Heat or cold stress (assessments or monitoring)	<input type="checkbox"/>	<input type="checkbox"/>	3. Forklift or telehandler	<input type="checkbox"/>	<input type="checkbox"/>
4. Sharp objects	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Crane	<input type="checkbox"/>	<input type="checkbox"/>
5. Area access or egress	<input type="checkbox"/>	<input type="checkbox"/>	5. Chain fall or come-along	<input type="checkbox"/>	<input type="checkbox"/>
6. Weather conditions (wind > 25 mph, lightning, rain, snow, fire danger, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	6. Scaffold	<input type="checkbox"/>	<input type="checkbox"/>
7. Pinch points	<input type="checkbox"/>	<input type="checkbox"/>	7. Earth-moving equipment	<input type="checkbox"/>	<input type="checkbox"/>
8. Manual lifting	<input type="checkbox"/>	<input type="checkbox"/>	8. Rotating equipment (drilling or other)	<input type="checkbox"/>	<input type="checkbox"/>
9. Elevated noise > 85 dBA	<input type="checkbox"/>	<input type="checkbox"/>	9. Hand tools	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Overhead hazards	<input type="checkbox"/>	<input type="checkbox"/>	10. Power tools	<input type="checkbox"/>	<input type="checkbox"/>
11. Traffic (control worker or protection flagger)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. Dump truck	<input type="checkbox"/>	<input type="checkbox"/>
12. Maintain good housekeeping	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. Compacting equipment	<input type="checkbox"/>	<input type="checkbox"/>
13. Nearby storm drains, streams, ponds, or wetlands; runoff control	<input type="checkbox"/>	<input type="checkbox"/>	13. Bucket truck	<input type="checkbox"/>	<input type="checkbox"/>
14. Spills and releases	<input type="checkbox"/>	<input type="checkbox"/>	14. Mowing or lawn equipment	<input type="checkbox"/>	<input type="checkbox"/>
15. Waste generation	<input type="checkbox"/>	<input type="checkbox"/>	15. Snow removal equipment	<input type="checkbox"/>	<input type="checkbox"/>
16. Other:	<input type="checkbox"/>	<input type="checkbox"/>	16. Geoprobe operations	<input type="checkbox"/>	<input type="checkbox"/>

EQUIPMENT BEST MANAGEMENT PRACTICES - During any activity involving the use of heavy equipment, positive controls meeting industry best practices will be put into place. Examples include but are not limited to, safety observers, exclusion zones, high-visibility clothing, two-way radios and cameras, and other devices that enhance operator situational awareness.

Pre-job Brief/Safety Meeting Attendance Record

Utilities/Electric <input checked="" type="checkbox"/> NA		Yes	Permits <input type="checkbox"/> NA		Yes
1. Electric shock potential	<input type="checkbox"/>	<input type="checkbox"/>	1. Confined space entry permit	<input type="checkbox"/>	<input type="checkbox"/>
2. Electric arc flash potential	<input type="checkbox"/>	<input type="checkbox"/>	2. LO/TO Specific Equipment Plan (SEP)	<input type="checkbox"/>	<input type="checkbox"/>
3. Overhead or buried utilities	<input type="checkbox"/>	<input type="checkbox"/>	3. Penetration permit	<input type="checkbox"/>	<input type="checkbox"/>
4. Other hazardous energy or utilities	<input type="checkbox"/>	<input type="checkbox"/>	4. Safe work permit (i.e., hotwork)	<input type="checkbox"/>	<input type="checkbox"/>
5. Lockout/tagout (LO/TO)	<input type="checkbox"/>	<input type="checkbox"/>	5. Lift plan or rigging plan	<input type="checkbox"/>	<input type="checkbox"/>
6. Ground fault circuit interrupter (GFCI) protected and proper ground	<input type="checkbox"/>	<input type="checkbox"/>	6. Radiological Work Permit (RWP) No.	<input type="checkbox"/>	<input type="checkbox"/>
7. Disconnected, air gapped, and zero energy	<input type="checkbox"/>	<input type="checkbox"/>	AMTRAK Work Permit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Chemical and Radiological Hazards <input type="checkbox"/> NA		Yes	Excavation or Backfill <input checked="" type="checkbox"/> NA		Yes
1. Hazardous chemicals	<input type="checkbox"/>	<input type="checkbox"/>	1. Excavation access and egress	<input type="checkbox"/>	<input type="checkbox"/>
2. Compressed gas cylinders	<input type="checkbox"/>	<input type="checkbox"/>	2. Excavating and backfill equipment	<input type="checkbox"/>	<input type="checkbox"/>
3. Flammables and combustibles	<input type="checkbox"/>	<input type="checkbox"/>	3. Underground and overhead utilities	<input type="checkbox"/>	<input type="checkbox"/>
4. Radiation dose and/or radiological contamination	<input type="checkbox"/>	<input type="checkbox"/>	4. Shored, sloped, benched, or trench box used	<input type="checkbox"/>	<input type="checkbox"/>
5. Safety data sheets available and reviewed *	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	5. Daily inspection by competent person	<input type="checkbox"/>	<input type="checkbox"/>
Ergonomics <input type="checkbox"/> NA		Yes	Emergency Preparedness <input type="checkbox"/> NA		Yes
1. Hand-arm or whole-body vibration	<input type="checkbox"/>	<input type="checkbox"/>	1. Fire extinguisher needed and checked *	<input type="checkbox"/>	<input type="checkbox"/>
2. Repetitive task	<input type="checkbox"/>	<input type="checkbox"/>	2. Communication (radio, phone, etc.) *	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. Lifting more than 50 pounds	<input type="checkbox"/>	<input type="checkbox"/>	3. First aid kit location: *	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. Body positioning	<input type="checkbox"/>	<input type="checkbox"/>	4. Portable eye wash or shower	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5. Proper lifting technique	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	5. Map to nearest emergency facility *	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
			6. Discussion on pause or stop work authority *	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
			7. Escape routes and assembly areas *	<input type="checkbox"/>	<input type="checkbox"/>

Personal Protective Equipment

<input checked="" type="checkbox"/> Hard hat	<input checked="" type="checkbox"/> Eye or face protection	<input checked="" type="checkbox"/> Gloves	<input checked="" type="checkbox"/> Safety shoes	<input checked="" type="checkbox"/> High-visibility clothing
<input type="checkbox"/> Fall protection	<input checked="" type="checkbox"/> Hearing protection	<input type="checkbox"/> Other:		

Specific Hazard Control Measures/Operating Experiences/Comments/Questions/Concerns/Suggestions:



Site-Specific Emergency Response Information

Site name: Colonie FUSRAP Site Date: 10/02/2019

Site address: 1130 Central Avenue, Albany, NY 12205 Site Phone number: none

Hazard profile (summary of *Site Hazard Survey* [LMS 1567] information)

- Decommissioned reactor
- No Cellular Service
- Water treatment plant
- Disposal cell
- Public access
- Wildlife
- Monitoring wells
- Rough Terrain
- Other ticks

Please indicate the type of phone number provided (W = work, C = cell, H = home, O = other)

LMS site lead

Name	Primary phone number	Secondary phone number
<u>Carl Young</u>	<u>C: 410-816-4029</u>	<u>O: 410-575-3604</u>

LM site manager

Name	Primary phone number	Secondary phone number
<u>Darina Castillo</u>	<u>W: 720-377-3824</u>	<u>C: 720-450-2936</u>

Medical emergency support facility or hospital: Albany Med EmUrgentCare, 98 Wolf Rd Ste 16, Albany, NY

Fire: **911** or 518-459-6311 (West Albany Fire Dept)

Ambulance: **911** or 518-434-4151 (Mohawk Ambulance Service)

Air rescue: **911** or Not applicable

Police or sheriff: **911** or 518-458-9148 (Albany Police Dept)

Nearest available telephone: *Personnel must bring a cellular phone to the site.* Several businesses are at the site entrance or _____

Nearest emergency room: Albany Memorial Hospital, 600 Northern Blvd, Albany, NY 12204 (518) 471-3221

AllOne Health (800) 350-4511
Call if worker is taken to healthcare facility.

Site-Specific Emergency Response Information

Emergency assembly area:

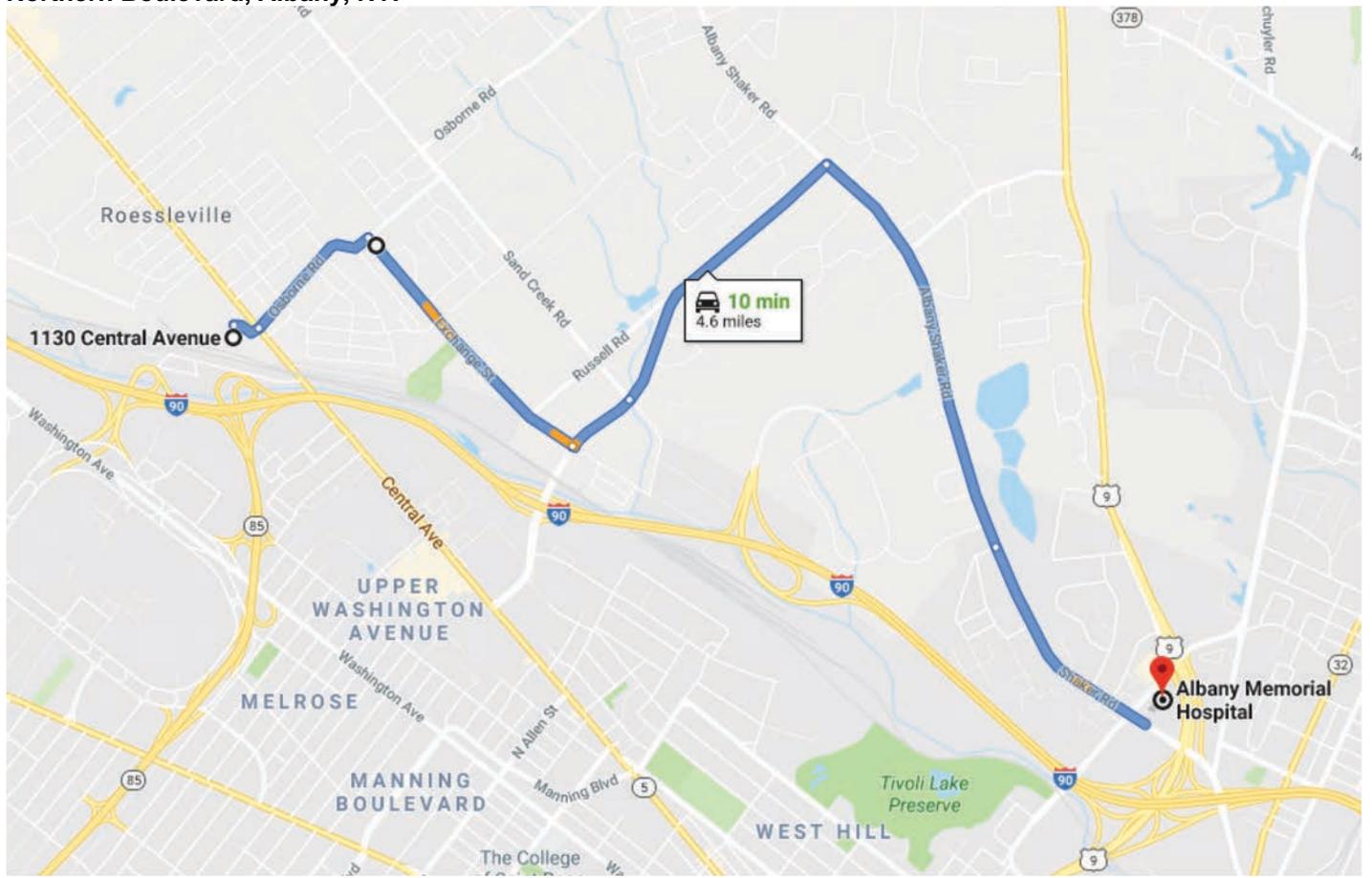
Main entrance

Evacuation warning

system: 3 car horn blasts

Directions from site to emergency facility (Please paste or attach a map of the site location *and* a map from the site to the emergency facility):

Exit site and proceed straight on Osbourne Rd., turn right onto Exchange St., turn left onto Everett Rd., turn right onto Albany Shaker Rd., turn left onto Northern Blvd to: Albany Memorial Hospital Emergency Room, 600 Northern Boulevard, Albany, NY.



Site GPS coordinates: 42.690129, -73.801660



Site-Specific Emergency Response Information

Personnel accountability process and responsible individuals

Per the *General Emergency Plan for Unoccupied Sites and Activities*, in the event of an emergency, "site workers notify the LM site/program manager and LMS site lead/task manager of the emergency and provide information about personnel accountability."

Define how the accountability process will work at your site, who is responsible for performing the task, how it is documented, etc.:

The Colonie site is unoccupied. Each person that is on the Site must notify the site lead about visiting in advance. During site visits for inspections, groundwater monitoring, or maintenance, the Person in Charge is responsible for contacting emergency response entities. Accountability, reporting, and documentation requirements are specified in the Comprehensive Emergency Management System.

Appendix B
Inspection Forms

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Date of this Inspection: July 16, 2020 Date of the last inspection: INITIAL INSPECTION

Names of Inspector(s): CARL YOUNG, LMS SITE LEAD

Other persons present and roles: _____

1) Pre-Trip		
1.1 Was a readiness review conducted?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
1.2 Was this form reviewed by the LM site manager?	<input type="checkbox"/> yes	<input type="checkbox"/> no <input checked="" type="checkbox"/> n/a
1.3 Were deficiencies or issues identified on the previous inspection form?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input checked="" type="checkbox"/> n/a
1.4 Will this inspection include an annual site-wide inspection for the soil easement areas?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
1.5 Has this form be revised since the previous inspection?	<input type="checkbox"/> yes	<input type="checkbox"/> no <input checked="" type="checkbox"/> n/a
1.6 Is right-of entry in effect for offsite locations? If not, do not access off-site locations	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
Notes: <u>INITIAL INSPECTION INITIAL USE OF FORM</u>		

07/09/20
CW

2) General Observations		
2.1 Was a Plan of the Day (Week) prepared?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
2.2 Was a Job Safety Analysis reviewed?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
Notes, including weather conditions: <u>SUNNY, 83°F, SLIGHT WIND</u>		

3) Fencing - Inspector will walk along the entire interior fence line. Photograph all deficiencies		
3.1 Missing or damaged fence components, including gates and locks?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
3.2 Excessive corrosion of fence components?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
3.3 Trees or vegetation either contacting or damaging any fence component?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
3.4 Erosion or other soil loss that would allow human access?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
3.5 Indications of vandalism or unauthorized entry?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
Notes (include photo numbers): <u>3.1 FENCE DAMAGE - POSTS STRUCK (3), BARBED WIRE CUT (1), TREE DAMAGE</u> <u>3.2 TREE LIMB ON BARBED WIRE ON WEST SIDE</u> <u>3.5 TRESPASS FROM MEXICAN RESTAURANT - ALSO ON SOUTH SIDE WHERE BARBED WIRE WAS CUT.</u>		

4) Signs - Reference the locations in the Signage plan shown in Figure 1. Photograph all deficiencies		
4.1 Missing or damaged signs?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
4.2 Excessive corrosion of signs?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
4.3 Indications of vandalism?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
Notes (include photo numbers):		

5) Locks - Reference the locations of defects or issues. Well locks are reviewed with wells in Section X. Photograph all deficiencies.		
5.1 Missing or damaged lock at front entrance?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
5.2 Missing or damaged lock at rear entrance?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
5.3 Missing or damaged lock at west pedestrian entrance?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
Notes (include photo numbers):		
5.1 KEYS LOCK + CONTRACTOR COMBO LOCK IN PLACE		

6) Vegetation		
6.1 Has the grass along Central Avenue been recently mown? Grass height: (4) inches	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
6.2 Is the grass along Central Avenue fence line trimmed? Grass height: (4) inches	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
6.3 Is there trash on the lawn on Central Avenue?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
6.4 Has the grass in the site interior been recently mown? Grass height: (4) inches	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
6.5 Is there trash on the site?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
6.6 Are there signs of stressed vegetation?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
6.7 Are there dead trees or downed branches?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
6.8 Are there any areas of erosion on the grounds?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
Notes (include photo numbers):		
6.5 SOME BOTTLES & LITTER FROM REAR RESTAURANT		
6.6 DROUGHT CONDITIONS - GRASS IS YELLOWED		
6.7 BRANCHES FROM RESTAURANT HAVE BEEN THROWN ONTO SITE.		
6.8 MINOR WHEEL RUTS IN GRASS FROM MOWING W/ SKID STEER.		

7) Roads and Parking Area		
7.1 Are there any driving hazards in the road or parking area?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
7.2 Do any conditions make the road unsafe or unusable?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
Notes (include photo numbers):		

8) Storm Drain System		
8.1 Is the northern catch basin intact and undamaged?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
8.2 Is the eastern catch basin intact and undamaged?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
8.3 Is the central catch basin intact and undamaged?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no <input type="checkbox"/> n/a
8.4 Are there any obstructions in the unnamed tributary?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
8.5 Are there any signs of erosion in the unnamed tributary?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
Notes (include photo numbers):		
EAST BASIN ISN'T ID'd ON MAP.		

9) Easement Areas	
9.1 Is this an annual inspection where the Site Management Plan Checklist will be used? If 'yes' then do not complete the remainder of this section.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a
9.2 Are there signs that digging has occurred in any of the easement areas?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a
9.3 Are there any signs of dumping, staining, or vegetative stress?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
Notes (include photo numbers): IN NORTH LUNN THERE REMAINS A SAND PATCH WHERE THE HYDRANT WAS CUT AWAY.	

10) Monitoring Wells - Photograph all wells if possible and list photo numbers	
10.1 Are separate well inspection forms being used? If yes, do not complete this section.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a
10.2 Are there signs of damage to the wells or bollards?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
10.3 Are the locks installed and undamaged?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a
Notes (include photo numbers): WELL MW-449 WAS REPAIRED ON MONDAY. ALSO SEE SEPARATE WELL INSPECTION FORMS.	

11) Storage Shed	
11.1 Is the shed locked and secure?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a
11.2 Are there signs of vandalism or damage?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
11.2 Are there signs of water damage inside the shed?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
Notes (include photo numbers): THE EQUIPMENT IN THE SHED MUST BE GOVERNMENT-OWNED. THERE IS A C-TAG ON AN AIR COMPRESSOR. NONE OF THE EQUIPMENT SHOWS SIGNS OF RECENT USE.	

12) Mail box	
12.1 Is the mail box present and intact?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a
12.2 Are there signs of vandalism or damage?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a
Notes (include photo numbers): 12.2 THERE ARE DENTS IN THE MAIL BOX.	

12) Personal Property	
12.1 Refer to the Personal Property inventory. Is all equipment accounted for?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a
12.2 Are there signs of vandalism or damage?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a
Notes (include photo numbers): EQUIPMENT THOUGHT TO BE LANDSCAPERS MUST BE USG PROPERTY. AIR COMPRESSOR, LAWN MOWER, 2 LINE TRIMMERS, GARDEN SAAT.	

3) Additional Notes - Summarize Notable Issues
Notes (include photo numbers):
S.1 FENCE BARBED WIRE MUST HAVE BEEN CUT.
F.5 SPOKE WITH LANDSCAPE CONTRACTORS ABOUT DUMPING ON SITE BY RESTAURANT WORKERS.

I. COLONIE SITE INFORMATION	
Date of Inspection: <u>JULY 16, 2020</u>	Type of Inspection (site walk, windshield): <u>SITE WALK</u>
General Site Conditions: <u>LANDSCAPING IS KEPT SOME WASTE FROM RESTAURANT NO SIGN OF EXCAVATION OR DISTURBANCE OF BASEMENT AREAS.</u>	Inspection Team Names/Affiliation (print): <u>CARL YOUNG / NAVARRO</u>
Weather/Temperature: <u>SONNY, 83°F</u>	
Deed Holder: <u>DOE</u>	
If the property is owned by the DOE, is it currently leased? Yes <input checked="" type="radio"/> No	
Site Records, Inspections, and Reports up to date? <input checked="" type="radio"/> Yes No	
<p>Institutional Controls:</p> <ol style="list-style-type: none"> 1. Excavation is restricted in the Soil Easement Areas. 2. Data and information pertinent to Site management must be reported at the frequency and in a manner as defined in this SMP. 3. All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP. 4. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP. 5. Maintenance, monitoring, inspection, and reporting of any physical component of the remedy shall be performed as defined in this SMP. 6. Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the Property Owner to assure compliance with the restrictions identified by the Environmental Easement. 7. Gardening and farming are prohibited in the Soil Easement Areas. 	
Agency or company conducting the inspection: <u>NAVARRO RESEARCH & ENGINEERING</u>	
Primary Inspector <u>CARL YOUNG</u>	<u>SITE LEAD</u> <u>410-816-4029</u>
Name	Title Phone No.
 Signature	<u>07/16/20</u> Date
Use the following to document current changed Site Conditions, include as Attachments: Photographs Maps Other (sketches, etc.)	

II. INSTITUTIONAL CONTROLS (ICs)

**If deficiencies are noted, the locations should be documented on a site map and photographed.*

1. Property Use:

Are all ICs being complied with?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Soil Easement Areas disturbed in any manner?	<input type="radio"/> Yes	<input checked="" type="radio"/> No
Changes in Site Conditions?	<input type="radio"/> Yes	<input checked="" type="radio"/> No
Is there any Gardening or Farming?	<input type="radio"/> Yes	<input checked="" type="radio"/> No
Is the property used for industrial purposes?	<input type="radio"/> Yes	<input checked="" type="radio"/> No
Is the property used for commercial purposes?	<input type="radio"/> Yes	<input checked="" type="radio"/> No
Is the property currently vacant?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Any evidence of new construction?	<input type="radio"/> Yes	<input checked="" type="radio"/> No

Remarks: _____

2. Soil Conditions:

Is there any evidence of digging or soil excavation?	<input type="radio"/> Yes	<input checked="" type="radio"/> No
Authorization/Permit #: _____		
Any signs of dumping, staining, or vegetative stress?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Remarks: GRASS ACROSS SITE HAS YELLOWED DUE TO DROUGHT

3. Real Property Assets:

Do any property assets need maintenance?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
--	--------------------------------------	--------------------------

Remarks: THERE IS DAMAGED BARBED WIRE, DAMAGED FENCE POSTS. THE DAMAGED WELL MW-4ES WAS REPAIRED.

III. EVALUATION OF INSTITUTIONAL CONTROLS (ICs)

1. Implementation and Enforcement:

Site conditions imply ICs have been properly implemented.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Site conditions imply ICs are fully enforced.	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Remarks: _____

2. Observations, Conclusions, Recommendations (including changes needed and overall performance and effectiveness of the remedy):

Remarks: MINOR FENCE REPAIRS SHOULD BE DONE.
ONSITE WELLS SHOULD BE PROTECTED BY BOLLARDS.

Appendix C

Photo Log

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Name	Title
IMG_0008.jpg	07/16/20 shed
IMG_0009.jpg	07/16/20 mailbox
IMG_0010.jpg	07/16/20 looking S from center of site
IMG_0011.jpg	07/16/20 tree overhanging fence NG fenceline
IMG_0012.jpg	07/16/20 MW-08S
IMG_0013.jpg	07/16/20 NWC at National Grid fenceline
IMG_0014.jpg	07/16/20 power pole near MW-08S
IMG_0015.jpg	07/16/20 looking from keyhole to SE across site
IMG_0016.jpg	07/16/20 looking into the keyhole
IMG_0017.jpg	07/16/20 view along fenceline in SWC
IMG_0018.jpg	07/16/20 stream exiting site
IMG_0019.jpg	07/16/20 looking N along edge of stream
IMG_0020.jpg	07/16/20 looking N keyhole at fenceline tree overhang
IMG_0021.jpg	07/16/20 dense veg in SWC
IMG_0022.jpg	07/16/20 S gate seen from interior
IMG_0023.jpg	07/16/20 looking E along S fenceline
IMG_0024.jpg	07/16/20 south gate
IMG_0025.jpg	07/16/20 disused spur on CSX property
IMG_0026.jpg	07/16/20 CSX rail spur looking W
IMG_0027.jpg	07/16/20 CSX rail spur switch looking W
IMG_0028.jpg	07/16/20 looking at fence from CSX property
IMG_0029.jpg	07/16/20 looking at fence from CSX property
IMG_0030.jpg	07/16/20 west edge of sheetwall
IMG_0031.jpg	07/16/20 garbage on CSX property
IMG_0032.jpg	07/16/20 MW-32S
IMG_0033.jpg	07/16/20 MW-08S under locking cap
IMG_0034.jpg	07/16/20 MW-32S seen from SE
IMG_0035.jpg	07/16/20 from MW-32S looking S
IMG_0036.jpg	07/16/20 from MW-32S looking W
IMG_0037.jpg	07/16/20 rail spur manual switch actuator [in weeds]
IMG_0038.jpg	07/16/20 looking N from S gate
IMG_0039.jpg	07/16/20 MW-30S from W side
IMG_0040.jpg	07/16/20 MW-30S
IMG_0041.jpg	07/16/20 looking N from MW-30S
IMG_0042.jpg	07/16/20 broken fence post neat MW-30S
IMG_0043.jpg	07/16/20 main catch basin
IMG_0044.jpg	07/16/20 E catch basin in aspens
IMG_0045.jpg	07/16/20 MW-42S seen from N in trees
IMG_0046.jpg	07/16/20 broken fence post near MW-42S
IMG_0047.jpg	07/16/20 looking N from MW-42S
IMG_0048.jpg	07/16/20 MW-42S
IMG_0049.jpg	07/16/20 bent fence post near MW-42S
IMG_0050.jpg	07/16/20 MW-42S
IMG_0051.jpg	07/16/20 bent fence post near MW-41S
IMG_0052.jpg	07/16/20 cut barbed wire S fenceline near MW-41S
IMG_0053.jpg	07/16/20 bent fence post near MW-41S

IMG_0054-MW44S.jpg	07/16/20 MW-44S repaired
IMG_0055.jpg	07/16/20 bent fence post near MW-41S
IMG_0056.jpg	07/16/20 S fenceline at SEC with damaged fence post
IMG_0057.jpg	07/16/20 damaged fence post near SEC
IMG_0058.jpg	07/16/20 fence at SEC
IMG_0059.jpg	07/16/20 E fence line looking N
IMG_0060.jpg	07/16/20 debris near restaurant
IMG_0061.jpg	07/16/20 view S from fence at restaurant
IMG_0062.jpg	07/16/20 drain from rest parking lot onto site
IMG_0063.jpg	07/16/20 tree cuttings near rest parking lot
IMG_0064.jpg	07/16/20 view to NE toward rest parking lot
IMG_0129i.jpeg	10/08/19 MW-44S damaged
IMG_0130i.jpeg	10/08/19 MW-44S closeup damaged
IMG_0309.JPEG	07/13/20 NG lot from S
IMG_0310.JPEG	07/13/20 MW-08S under cap
IMG_0311.JPEG	07/13/20 MW-08S open - side view
IMG_0312.JPEG	07/13/20 view from S
IMG_0313.JPEG	07/13/20 from MW-08S looking S
IMG_0314.JPEG	07/13/20 from MW-08S looking SE
IMG_0315.JPEG	07/13/20 from MW-08S looking E
IMG_0316.JPEG	07/13/20 MW-44S before fixing
IMG_0317.JPEG	07/13/20 MW-08S waterra pump and GAC
IMG_0318.JPEG	07/13/20 MW-08S waterra pump and GAC
IMG_0319.JPEG	07/13/20 MW-30S
IMG_0320.JPEG	07/13/20 MW-30S
IMG_0321.JPEG	07/13/20 MW-44S snapped in hole
IMG_0322.JPEG	07/13/20 MW-44S riser removed
IMG_0323.JPEG	07/13/20 MW-44S new riser installed
IMG_0324.JPEG	07/13/20 MW-44S new riser w/ old protective casing
IMG_0325.JPEG	07/13/20 MW-44S old protective casing removed
IMG_0326.JPEG	07/13/20 MW-44S driller smoothing pad
IMG_0327.JPEG	07/13/20 MW-44S with level on top
IMG_0328.JPEG	07/13/20 turbidity sample at MW-42S
IMG_0329.JPEG	07/13/20 50 gal turbid water at MW-42S
IMG_0330.JPEG	07/13/20 MW-44S repaired w/ ID in concrete
IMG_0331.JPEG	07/13/20 MW-42S silt in buckets
IMG_0332.JPEG	07/13/20 MW-42S filter sock in bucket
IMG_0333.JPEG	07/14/20 MW-34S redevelopment
IMG_0334.JPEG	07/14/20 MW-34S redevelopment
IMG_0335.JPEG	07/14/20 W end of sheet wall
IMG_0336.JPEG	07/14/20 MW-32S locked
IMG_0337.JPEG	07/14/20 MW-37S redevelopment
IMG_0338.JPEG	07/14/20 MW-37S redevelopment
IMG_0339.JPEG	07/14/20 MW-37S redevelopment
IMG_0340.JPEG	07/14/20 MW-37S redevelopment
IMG_0341.JPEG	07/14/20 site center track ruts in grass
IMG_0342.JPEG	07/14/20 looking E along fence behind restaurant

IMG_0343.JPEG	07/14/20 behind restaurant ladders, trash can, sticks
IMG_0344.JPEG	07/14/20 behind restaurant ladders, trash can, sticks
IMG_0345.JPEG	07/14/20 ladders over fence at restaurant
IMG_0346.JPEG	07/14/20 trash can onsite behind restaurant
IMG_0347.JPEG	07/14/20 corner near restaurant with dumped branches
IMG_0348.JPEG	07/15/20 MW-34S sampling
IMG_0349.JPEG	07/15/20 MW-34S sampling
IMG_0350.JPEG	07/15/20 MW-34S staghorn sumac
IMG_0351.JPEG	07/15/20 MW-37S hidden in brush
IMG_0352.JPEG	07/15/20 MW-37S hidden in brush
IMG_0353.JPEG	07/15/20 MW-37S hidden in brush, conditions after sampling
IMG_0354.JPEG	07/15/20 MW-34S hidden in brush, conditions after sampling
IMG_0355.JPEG	07/15/20 in shed - compressor & mower
IMG_0356.JPEG	07/15/20 in shed 2 line trimmers
IMG_0357.JPEG	07/15/20 Klozur oxidant in shed
IMG_0358.JPEG	07/15/20 MW-44S sampling
IMG_0359.JPEG	07/15/20 looking E from MW-44S w/ sampling equipment
IMG_0360.JPEG	07/15/20 looking SW from MW-44S
IMG_0361.JPEG	07/15/20 looking SW from MW-44S
IMG_0362.JPEG	07/15/20 MW-41S
IMG_0363.JPEG	07/15/20 bent fence post E of MW-41S
IMG_0364.JPEG	07/15/20 bent fence post E of MW-41S
IMG_0365.JPEG	07/15/20 broken fence post W of MW-42S
IMG_0366.JPEG	07/15/20 broken fence post W of MW-42S
IMG_0367.JPEG	07/15/20 broken fencepost S fence near former deed line
IMG_0368.JPEG	07/15/20 broken fencepost S fence near former deed line
IMG_0369.JPEG	07/15/20 looking W along S fence near old deed line
IMG_0370.JPEG	07/15/20 looking W along S fence near old deed line
IMG_0374.JPEG	07/15/20 MW-30S looking W
IMG_0375.JPEG	07/15/20 MW-30S looking E
IMG_0376.JPEG	07/15/20 S fenceline looking W near MW-30S
IMG_0377.JPEG	07/15/20 S gate from inside looking S
IMG_0378.JPEG	07/15/20 S gate from inside looking S
IMG_0379.JPEG	07/15/20 SWC near gate with power poles
IMG_0380.JPEG	07/15/20 SW fence line tree limb on barbed wire and top rail
IMG_0381.JPEG	07/15/20 tree branches on fence top rail W fenceline
IMG_0382.JPEG	07/15/20 tree branches on fence top rail W fenceline
IMG_0383.JPEG	07/15/20 logs in lawn near W fence line
IMG_0384.JPEG	07/15/20 looking into keyhole from entrance
IMG_0385.JPEG	07/15/20 stream exiting site
IMG_0386.MP4	07/15/20 video of stream flowing
IMG_0387.JPEG	07/15/20 phragmites in keyhole
IMG_0388.JPEG	07/15/20 phragmites in keyhole
IMG_0389.JPEG	07/15/20 looking W across stream with power pole & phragmites
IMG_0390.JPEG	07/15/20 phragmites & wet soil in keyhole
IMG_0391.JPEG	07/15/20 keyhole N fenceline broken top rail
IMG_0392.JPEG	07/15/20 keyhole N fenceline broken top rail

IMG_0393.JPEG	07/15/20 fence behind Murphy Overhead Door & keyhole entrance
IMG_0394.JPEG	07/15/20 looking E from keyhole entrance
IMG_0395.JPEG	07/15/20 W fenceline at keyhole entrance
IMG_0396.JPEG	07/15/20 NG site remaining steel
IMG_0397.JPEG	07/15/20 MW-08S looking E
IMG_0398.JPEG	07/15/20 MW-08S looking E
IMG_0399.JPEG	07/15/20 NG lot grubbed
IMG_0400.JPEG	07/15/20 looking N at N/S NG fence with tree fall
IMG_0401.JPEG	07/15/20 looking S from NWC at north fence
IMG_0404.JPEG	07/15/20 spot where north lawn hydrant was
IMG_0405.JPEG	07/15/20 looking E along N fence line
IMG_0406.JPEG	07/15/20 pile of old pallets
IMG_0407.JPEG	07/15/20 pile of old pallets
IMG_0408.JPEG	07/15/20 looking E at back of shed
IMG_0409.JPEG	07/15/20 looking E at back of shed
IMG_0410.JPEG	07/15/20 shed
IMG_0411.JPEG	07/15/20 shed
IMG_0412.JPEG	07/15/20 entrance looking NE
IMG_0413.JPEG	07/15/20 entrance looking NE
IMG_0414.JPEG	07/15/20 looking E at mailbox and sign
IMG_0415.JPEG	07/15/20 looking E at mailbox and sign
IMG_0416.JPEG	07/15/20 sampling MW-44S, looking into aspens
IMG_0417.JPEG	07/15/20 COC from sampling event
IMG_0418.JPEG	07/15/20 COC from sampling event
IMG_0419.JPEG	07/15/20 FedEx manifest from sampling event
IMG_0420.JPEG	07/16/20 looking E into keyhole area
IMG_0421.JPEG	07/16/20 looking N under power lines from MW-30S
IMG_0422.JPEG	07/16/20 looking N under power lines from MW-30S
IMG_0423.JPEG	07/16/20 looking into E catch basin
IMG_0424.JPEG	07/16/20 looking into E catch basin
IMG_0425.JPEG	07/16/20 fence corner at restaurant
IMG_0426.JPEG	07/16/20 fence corner at restaurant
IMG_0427.JPEG	07/16/20 looking E along fence behind restaurant at ladders
IMG_0428.JPEG	07/16/20 looking E behind restaurant at ladders
IMG_0429.JPEG	07/16/20 looking W behind Ziebart
IMG_0430.JPEG	07/16/20 looking W from site center
IMG_0431.JPEG	07/16/20 looking N along road at site center
IMG_0432.JPEG	07/16/20 looking N along road at site center
IMG_0433.JPEG	07/16/20 capped water line at former hydrant location
IMG_0434.JPEG	07/16/20 N catch basin
IMG_0435.JPEG	07/16/20 looking S from parking lot
IMG_0436.JPEG	07/16/20 looking SE at aspens from parking area
IMG_0437.JPEG	07/16/20 USG tag on air compressor
IMG_0438.JPEG	07/16/20 2 line trimmers in shed
IMG_0439.JPEG	07/16/20 lawn mower & air compressor in shed
IMG_0440.JPEG	07/16/20 MW-41S & MW-42S painted orange
IMG_0441.JPEG	07/16/20 MW-44S & MW-41S painted orange

IMG_0442.JPEG	07/16/20 MW-08S painted orange
IMG_0443.JPEG	07/16/20 MW-08S painted orange looking NW
IMG_0444.JPEG	07/16/20 looking SE at aspens from road



IMG_0008



IMG_0009



IMG_0010



IMG_0011



IMG_0012



IMG_0013



IMG_0014



IMG_0015



IMG_0016



IMG_0017



IMG_0018



IMG_0019



IMG_0020



IMG_0021



IMG_0022



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IMG_0024



IMG_0025



IMG_0026



IMG_0027



IMG_0028



IMG_0029



IMG_0030



IMG_0031



IMG_0032



IMG_0033



IMG_0034



IMG_0035



IMG_0036



IMG_0037



IMG_0038



IMG_0039



IMG_0040



IMG_0041



IMG_0042



IMG_0043



IMG_0044



IMG_0045



IMG_0046



IMG_0047



IMG_0048



IMG_0049



IMG_0050



IMG_0051



IMG_0052



IMG_0053



IMG_0054-MW44S



IMG_0055



IMG_0056



IMG_0057



IMG_0058



IMG_0059



IMG_0060



IMG_0061



IMG_0062



IMG_0063



IMG_0064



IMG_0129i



IMG_0130i



IMG_0309



IMG_0310



IMG_0311



IMG_0312



IMG_0313



IMG_0314



IMG_0315



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IMG_0375



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IMG_0381



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Appendix D

Construction Report for Repair of Monitoring Well MW-44S

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Construction Field Inspection Log

Site: Colonie NY Project: Repair Monitoring Well MW-44S

Legacy Management Support Services Contract

Date: Monday, July 13, 2020

<p align="center">Project Identification</p> <p>Subcontractor(s): <u>Parratt-Wolff, Inc.</u></p> <p>Subcontract or Purchase Order No.: <u>LMCP7182</u></p> <p>Subcontractor Supervisor and OSHA Competent Person: <u>Will Hackett</u></p> <hr/> <p>Lower Tier OSHA Competent Person: <u>Not applicable</u></p> <p>LMS Representative Contract Construction Site Supervisor: <u>Carl Young (Person in Charge)</u></p> <p>LMS Contract Health and Safety Technician: <u>Nikki Cale (Safety & Health SME, offsite)</u></p> <p>Subcontractor Time on Project: <u>10:00</u> to <u>12:29</u> hrs</p>	<p align="center">Personnel</p> <p>Subcontractor on Site: <u>Will Hackett</u></p> <p>Lower Tier Subcontractor on Site: <u>Not applicable</u></p> <p>Additional LMS Subcontractor Support (affiliation only) <u>none</u></p> <p>Visitors (affiliation only) <u>none</u></p> <p>Note: If required, track personnel by name and the number of hours worked on a separate tracking form.</p>
<p align="center">Weather</p> <p>Temperature: a.m. <u>75°</u> F + (-) p.m. <u>81°</u> F + (-)</p> <p>Weather: <u>Sunny, calm</u></p> <p>Forecast: <u>Sunny, calm</u></p>	<p align="center">Health and Safety</p> <p>Type of Training/Briefing: <u>Plan of the Week (POW), Project-specific JSA, COVID-19 Field JSA, Unoccupied Sites Emergency Response Plan</u></p>

Work in Progress/Comments (To Include documentation of today's conditions, activities, events, changes, incidents, near miss, etc.; quantity and type of material and supplies delivered; additional information on Health and Safety, weather, personnel; planning for upcoming events—days, weeks, changes, etc.; equipment mobilized/demobilized; contacts today by phone or in person that affected the project; photographs taken to correlate with the Digital Photograph and Video Log form; etc.)

Documentation

Scope: repair damage to Monitoring Well MW-44S, which has a cracked pad and is bent ~30 degrees off of true. **[see Figure 1 & Figure 2]**

- 07:00** – Carl Young and other subcontractors arrived to perform other tasks.
- 10:00** – Will Hackett, Parratt-Wolff driller, arrived. Carl took Will's temperature and inquired exposure status as per COVID JSA. Carl reviewed the POW, JSAs, and emergency response plan with Will. PPE included hard hat, leather gloves and steel toed-boots.
- 10:30** – Will broke away the concrete pad and dug away the soil from around the protective casing. **[Figure 3]** Will asked Carl to hold the protective casing in place while he dug in order to minimize the amount of soil that would fall into the hole or the well casing.
- 10:40** – Will determined that the PVC casing was snapped at the threads, which are 2 feet below ground



Construction Field Inspection Log

surface and just below the protective casing. He suspects that concrete/bentonite grout was emplaced from the depth of the filter pack to the depth of the threads, and neat concrete was poured above the threads as part of the well completion design. He suspects that, although this is a standard practice, it makes a weaker design where the two different cement types meet AND there is a thread. Will attempted to pull the pneumatic pump from the well but it could not be pulled up. He suspected that soil had already entered the PVC casing during the damaging event and had sand-locked the pump into place.

11:00 - It was decided to complete the contracted task of fixing the well in order to secure it from surface influx. Carl cut the sampling cap off, but neither party had a proper grasp on the tubing and the tubing retracted into the well. The driller removed additional grout from around the outside of the PVC casing to expose 2 inches of the casing. A rubber coupling was attached to the PVC casing with a band clamp and a four-foot length of schedule-40 PVC pipe was clamped into place to bring the well back to original elevation.

[Figure 4] A new 4-inch-diameter, 4-foot-long steel protective casing was placed over the PVC casing and cemented into place using two 80-pound sacks of concrete. Gravel was poured into the annular space between the PVC casing and the protective casing to a height of approximately 3.5 feet above ground surface. The pad was then created using a 4-foot-square, 4-inch thick wooden form. The protective casing has finished with an aluminum locking cap. The well ID number was printed into the wet concrete. **[Figures 5 & 6]**

12:30 – The driller removed all of the construction debris and left the site.

14:30 – Carl conferred with LMS Environmental Monitoring Operations personnel about the stuck pump. They suggested that the depth to the pump should be confirmed and that it might be possible to collect a groundwater sample from above the pump if there is enough screen available. Both the S&H SME Nikki Cale and QA SME Jaime Hayes contacted me to inquire about the status of the work task. Additional conversation was held with LM and LMS FUSRAP task manager to discuss the status of the well.

Vendor/Quantity and Type of Material/Supplies Delivered

Well construction supplies used by Parratt-Wolff:

- 4 feet of 2-inch-diameter Schedule-40 PVC pipe
- 2-inch rubber coupling [with 2 steel band clamps]
- 4-foot-long, 4-inch diameter steel protective casing
- 4-inch diameter aluminum locking cap
- 40-pound bag of gravel
- [10] 80-pound sacks of concrete
- Wooden form
- Potable water



Construction Field Inspection Log

Planning – Include Days, Weeks, Changes

LMS SOW S28458 for well repairs and Parratt-Wolff proposal P20013 were used without deviations or exceptions.

The Plan of the Week and [2] JSAs were used without deviations or exceptions.

Equipment Utilization Mobilized/Demobilized (Note: Only equipment mobilized and demobilized will be documented. If required, track equipment by the hour, day, week, or month on a separate tracking form.)

Mobilized: Not applicable

Demobilized: Not applicable

Significant Contacts Today

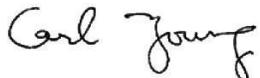
Contact: Nikki Cale [S&H SME]	Issue: JSA	Potential for deviation from	Result: No changes
Contact: Jaime Hayes [QA SME]	Issue: POW	Potential for deviation from	Result: No changes

End of Day

Subcontractor employees' departure from site: 12:30

LMS Contract employees' departure from site: 19:00

End of Construction Field Inspection Log date: 07/13/2020

Signature:  2020.07.22 10:49:46 -04'00'

Print and sign/date

Distribution: Darina Castillo [LM PM], Rebecca Roberts [Task 102 manager], Melvin Madril [LMS engineering SME], project file

Construction Field Inspection Log

1. MW-44S as found in October 2019



2. MW-44S as found on July 13, 2020



Construction Field Inspection Log

3. The driller hand-shoveled down to the break



4. A rubber coupling was used to connect a new PVC riser to the existing PVC casing. It is also cemented in place.



Construction Field Inspection Log

5. Setting the new pad



6. Completed repair



Appendix E

Personal Property Inventory

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EQUIPMENT INVENTORY LIST

Colonie NY Site

PHYSICAL CONDITION							FINANCIAL STATUS		
Item description (make and model)	Serial number	Location	Condition	Vendor	Service Life [yrs]	Years of service left	Initial value	Date purchased	
mail box	n/a	main gate	Fair	local	10	-3	\$15.00	1/1/2008	
pump, pneumatic		MW-08S	poor	local	10	-10	\$1,000.00	8/2/2000	
pump, pneumatic		shed	Good	local	10	-9	\$1,000.00	12/11/2001	
pump, pneumatic		MW-30S	poor	local	10	-10	\$1,000.00	8/2/2000	
pump, pneumatic		MW-34S	Good	local	10	-9	\$1,000.00	12/20/2001	
pump, pneumatic		MW-37S	Good	local	10	-9	\$1,000.00	1/27/2002	
pump, pneumatic		MW-41S	Good	local	10	-4	\$1,000.00	12/11/2006	
pump, pneumatic		MW-42S	Good	local	10	-4	\$1,000.00	12/12/2006	
pump, pneumatic		MW-44S	Good	local	10	5	\$1,000.00	7/27/2015	
Shed	n/a	Entrance	Fair	unk	20	-1	\$5,000.00	1/1/2000	
air compressor	19806	shed	unk	unk	10	-11	\$200.00	1/1/2000	
line trimmer		shed	ink	Ryobi					
line trimmer		shed	unk	Ryobi					

PHYSICAL CONDITION							FINANCIAL STATUS		
Item description (make and model)	Serial number	Location	Condition	Vendor	Service Life [yrs]	Years of service left	Initial value	Date purchased	
wagon		shed	good						
lawn mower		shed	unk						