

Precision National Plating Services, Inc.

# Final Report

**198 Ackerly Road  
Clarks Summit, Pennsylvania**

**Docket No. CERC-03-2012-0031DC**

March 2026

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**198 Ackerly Road**  
**Clarks Summit, Pennsylvania 18411**

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Contents

Acronyms and Abbreviations..... iv

1 Introduction..... 1

2 Background..... 1

2.1 Site Setting ..... 1

2.2 Site History..... 2

3 Seep Collection and Treatment..... 8

3.1 Lagoon Treatment System..... 9

3.2 Seep Shed Treatment System ..... 9

4 Supplemental Overburden and Bedrock Groundwater Investigation Activities..... 10

5 In Situ Chemical Reduction of Hexavalent Chromium in Overburden and Bedrock..... 11

6 Semi-Annual Groundwater Monitoring..... 12

7 Surface Water Monitoring ..... 13

8 Potable Well Sampling ..... 13

9 Institutional Controls/Limitations on Use of Groundwater ..... 14

10 Reporting..... 14

11 Completion of Removal Response Action ..... 15

Tables

Table 1 Well Construction Table

Figures

Figure 1 Site Location Map

Figure 2 Site Plan

Figures 3a/3b Hexavalent Chromium Concentrations in Groundwater – Overburden 2008 to 2022

Figures 4a/4b Hexavalent Chromium Concentrations in Groundwater – Shallow Bedrock 2008 to 2022

Figures 5a/5b Hexavalent Chromium Concentrations in Groundwater – Intermediate Bedrock 2008 to 2022

Figure 6 Overburden Hexavalent Chromium Concentrations – October 2024–

Figure 7 Overburden Total Chromium Concentrations – October 2024

Figure 8 Shallow Bedrock Hexavalent Chromium Concentrations – October 2024

- Figure 9**      **Shallow Bedrock Total Chromium Concentrations – October 2024**
- Figure 10**    **Intermediate Bedrock Hexavalent Chromium Concentrations – October 2024**
- Figure 11**    **Intermediate Bedrock Total Chromium Concentrations – October 2024**
- Figure 12**    **Overburden Groundwater Elevations – October 2024**
- Figure 13**    **Shallow Bedrock Groundwater Elevations – October 2024**
- Figure 14**    **Intermediate Bedrock Groundwater Elevations – October 2024**

## Appendices

- Appendix A**    **2012 Administrative Settlement Agreement and Order on Consent for Removal Response Action**
- Appendix B**    **2025 Consent Order and Agreement between the Commonwealth of Pennsylvania, Department of Environmental Protection and Precision National Plating Services, Inc.**
- Appendix C**    **Summary of Reports from 2012 to 2024**

## Acronyms and Abbreviations

|                      |                                                                                                         |
|----------------------|---------------------------------------------------------------------------------------------------------|
| µg/L                 | micrograms per liter                                                                                    |
| 1998 Order           | Precision a Unilateral Administrative Order, Docket No. III-98-069-DC                                   |
| Arcadis              | Arcadis U.S., Inc.                                                                                      |
| CaSx                 | calcium polysulfide                                                                                     |
| CERCLA               | Comprehensive Environmental Response, Compensation, and Liability Act                                   |
| CFR                  | Code of Federal Regulations                                                                             |
| EE/CA                | Engineering Evaluation/Cost Analysis                                                                    |
| H <sub>2</sub> S     | hydrogen sulfide                                                                                        |
| HASP                 | Health and Safety Plan                                                                                  |
| IC                   | institutional control                                                                                   |
| ISCR                 | In-Situ Chemical Reduction                                                                              |
| MCL                  | maximum contaminant level                                                                               |
| mg/kg                | milligrams per kilogram                                                                                 |
| msl                  | mean sea level                                                                                          |
| NCP                  | National Oil and Hazardous Substances Pollution Contingency Plan                                        |
| ORP                  | oxygen-reduction potential                                                                              |
| OSHA                 | PADEP Pennsylvania Department of Environmental Protection                                               |
| ppb                  | parts per billion                                                                                       |
| Precision            | Precision National Plating Services, Inc.                                                               |
| PVC                  | polyvinyl chloride                                                                                      |
| RAP                  | Response Action Plan                                                                                    |
| Settlement Agreement | 2012 Administrative Settlement Agreement and Order on Consent for Removal Response Action               |
| Site                 | former Precision facility located at 198 Ackerly Road in Clarks Summit, Lackawanna County, Pennsylvania |
| UIC                  | Underground Injection Control                                                                           |
| USEPA                | United States Environmental Protection Agency                                                           |

# 1 Introduction

Arcadis U.S., Inc. (Arcadis) is submitting this Final Report on behalf of Precision National Plating Services, Inc. (Precision) as Respondent to Docket No. CERC-03-2012-0031DC for the former Precision facility located at 198 Ackerly Road in Clarks Summit, Lackawanna County, Pennsylvania (the Site). This Final Report describes the response actions performed in accordance with the 2012 Administrative Settlement Agreement and Order on Consent for Removal Response Action (Settlement Agreement) entered by the United States Environmental Protection Agency (USEPA) and Precision (Appendix A). The Settlement Agreement was executed pursuant to the Action Memorandum (2011 Action Memo) issued by the Director of the Hazardous Site Cleanup Division of USEPA Region 3 which selected the response action for addressing chromium contamination at the Site.

As described in the approved 2012 Response Action Plan, the following remedial actions were performed at the Site from 2012 to 2025 to achieve compliance with the Settlement Agreement:

- Seep Collection and Treatment
- Supplemental Overburden and Bedrock Groundwater Investigation Activities
- In Situ Chemical Reduction of Hexavalent Chromium in Overburden and Bedrock
- Semi-annual Groundwater Monitoring
- Surface Water Monitoring
- Potable Well Sampling
- Institutional Controls/Limitations on Use of Groundwater
- Reporting

A summary of the remedial actions completed at the Site is provided in the following sections of this report (Section 3 through 10).

In 2025, oversight of the case was transferred to the Pennsylvania Department of Environmental Protection (PADEP) under a Consent Order and Agreement (COA) between Precision and PADEP (Appendix B). Several of the remedial actions are still ongoing and are now under the oversight of PADEP.

All work performed at the Site under the Settle Agreement was consistent with the National Oil and Hazardous Substances Pollution Contingency Plan, as amended (NCP), 40 Code of Federal Regulations (CFR) Part 300 and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The general objectives of the work conducted pursuant to the Settlement Agreement were to conduct a removal action, as defined in Section 101(23) of CERCLA, 42 United States Code § 9601(23), to abate, mitigate and/or eliminate the release or threat of release of hazardous substances at the Site by preventing the migration of hazardous substances from the Site through the treatment of contaminated groundwater.

## 2 Background

### 2.1 Site Setting

The Precision Site is located at 198 Ackerly Road, Clarks Summit, in Lackawanna County, Pennsylvania, which is approximately 10 miles north of Scranton, Pennsylvania. The majority of the Site is located within Abington Township and a portion of the Site is located within Glenburn Township. The location of the Site is shown on

Figure 1. The Site layout is illustrated on Figure 2. The total property measures 46 acres. Approximately five acres were used for site operations and the balance remained undeveloped and largely wooded. A 45,000 square foot operations building was the principal structure on site. This building was demolished in 2000. Portions of the concrete slab floor of the building remain.

The Site is located near a topographic high in the area with an average elevation of 1,190 feet above mean sea level (msl). Topography slopes down to the north and west of the site toward Ackerly Creek at a gradient of approximately 660 feet per mile. Ackerly Creek, a perennial stream that flows from southeast to northwest before joining a tributary and flowing northwest to Glenburn Pond, is located approximately 800 feet northwest of the former Site operations area. Residential properties are located north, east, and west of the Site. To the south is undeveloped land.

The geology beneath the Site consists of two primary lithologies, the unconsolidated glacial overburden and the consolidated bedrock. The overburden generally consists of silts and silty sands with some interbedded sands. One of these sand lenses occurs in the area of OMW-13 and extends to the area beneath the lagoon treatment shed northward to beneath the former lagoon where the sand lens pinches out.

The consolidated bedrock is a sandstone with interbedded siltstone and shale. At the top of the hill, a siltstone and shale unit is present at approximately 20 to 30 feet bgs in the vicinity of the former building slab. The unit projects out of the slope of the hill. The bedrock has both primary and secondary (joints and fractures) porosity. Since there is a calcareous cement present throughout the formation much of the primary porosity has been sealed. A significant amount of porosity was assigned to the fractures due to the presence of some intensely fractured zones especially in the vicinity of wells SB-2008-4 (SB-4) and SB-2008-7 (SB-7) to SB-2008-11 (SB-11) and SB-2008-12 (SB-12).

There are also sporadic vuggy zones present throughout the formation. These vuggy zones when present represent a preferential pathway for the accumulation and transport of impacted groundwater. The vuggy zones are discontinuous and are generally not connected. However, a vuggy zone is present in the area from SB-2007-H (SB-H) and SB-2007E (SB-E) to SB-2008-9 (SB-9) and SB-2008-8 (SB-8) at an elevation of approximately 1,175 feet above msl. There is a second vuggy zone that occurs from SB-2008-6 (SB-6) to SB-2008-5 (SB-5) and extends under the former lagoon and occurs at an elevation of approximately 1,140 feet above msl.

There are three primary hydrogeologic zones of concern beneath the Site. The uppermost zone is the overburden groundwater which occurs within the unconsolidated glacial deposits. This is generally the first groundwater encountered beneath the Site. The second zone is the shallow bedrock groundwater. The shallow bedrock groundwater occurs below the glacial sediments and bedrock surface, within the shallow bedrock. The shallow bedrock groundwater is perched above the siltstone/shale layer and contains the highest concentrations of hexavalent chromium. The third zone of concern represents the unconfined water table within the intermediate bedrock which occurs at a depth of 60 to 80 feet below the ground surface. The deep bedrock groundwater is not considered to be a zone of concern, although it is monitored along with the other zones.

## 2.2 Site History

The Site began operation as a chromium electroplating facility for locomotive crankshafts in 1956. This operation continued when Precision bought the facility in 1971. Precision operated an industrial component reconditioning facility on site from 1971 until 1999.

The original operations building was approximately 5,500 square feet. From 1975 to 1992, additions were constructed that increased the size of the building to 45,000 square feet.

Site operations ceased in April 1999. Shortly thereafter, the process equipment used for plating operations was decontaminated and either sold or properly disposed offsite. With USEPA oversight and approval from Abington Township, the former plating building was demolished in the fall of 2000.

Based on historical investigations conducted to date, the hazardous substances at the Site are total chromium and hexavalent chromium; however, hexavalent chromium is the primary constituent of concern at the Site. Hexavalent chromium and total chromium in the soil and groundwater at the Site may be related to the following activities:

- Between 1958 and 1970, hexavalent chromium wastes were disposed of in an unlined waste lagoon located just northeast of the operations building. Around 1970, a breach developed in the lagoon wall and a portion of the lagoon contents were released during precipitation events into a drainage pathway leading from the break in the lagoon wall along Ackerly Road. Additional wastewater containing hazardous substances flowed along the drainage pathway leading to Ackerly Creek.
- Until July 1970, plant rinse water containing chromium flowed into floor drains that discharged to the ground surface outside the operations building by way of a footer drain outlet. Until July 1970, some of the wastewater from the onsite treatment plant was discharged to the unlined waste lagoon through a tile field. From approximately 1970 until the cessation of operations, Precision utilized a closed-loop system for the treatment of wastewater in an effort to minimize contamination.
- Overflow spillage from the strip tank was transmitted to a 900 gallon, partially buried septic tank via floor drains.
- From 1978 to 1980, approximately 5,300 cubic yards of chromium-impacted soil from various locations on site were placed in an onsite encapsulation area. The encapsulation area was capped with clay and asphalt, which was maintained by periodically applying a sealer. The encapsulation area design also incorporated an interceptor trench that was designed to capture groundwater on top of the bedrock and divert it around the operations building and the encapsulation area.
- In February 1987, approximately 200 gallons of a cleaning solution containing chromium spilled from a faulty valve.

From 1970 through the present, Site investigation activities have been performed to delineate the extent of hexavalent chromium and total chromium contamination in the soil and groundwater. Various remedial activities have also been conducted to reduce the contamination of hexavalent chromium in the soil and groundwater at the Site. The following is a summary of the remedial history of the Site.

- From 1978 to 1980, approximately 5,300 cubic yards of chromium-impacted soil from various locations on site were placed in an onsite encapsulation area. The encapsulation area was capped with clay and asphalt, which was maintained by periodically applying a sealer. The encapsulation area design also incorporated an interceptor trench that was designed to capture groundwater on top of the bedrock and divert it around the operations building and the encapsulation area.
- In September of 1991, USEPA and Precision entered into an Administrative Order by Consent, Docket No. III-90-057-DC, which required Precision to provide an alternate water supply to one residence located on Arch Avenue. Precision complied with this Order and replaced the well late in 1991. Precision installed another well on Arch Avenue in the fall of 1993 to be used as an alternate source of drinking water for three residents.

- On August 22, 1995, USEPA and Precision entered into an Administrative Order by Consent for Removal Response Action (1995 AOC), Docket No. III-94-32-DC, which required Precision to perform an Engineering Evaluation/Cost Analysis (EE/CA) to characterize the nature and extent of contamination at the Site. The EE/CA, which was approved with reservations by USEPA in 1997, was designed to gather sufficient information to identify and evaluate removal alternatives to ensure that any actions taken would protect public health, welfare, and the environment in accordance with 40 CFR § 300.415(b)(4).
- In 1997, Precision voluntarily removed the encapsulation area. Soil data from the encapsulation area and areas adjacent to the removal showed that total chromium and hexavalent chromium concentrations were below the Pennsylvania Statewide Health Standards for residential soil.
- On April 22, 1998, the Director of the Hazardous Site Cleanup Division of USEPA signed an Action Memorandum (1998 Action Memo), which determined that a threat to public health, welfare, and/or the environment exists due to the actual or threatened release of hazardous substances from the Site and set forth the requirements for the Removal Action at the Site. Supported by this Action Memo, on April 24, 1998, USEPA issued Precision a Unilateral Administrative Order, Docket No. III-98-069-DC (1998 Order) which required Precision to conduct the Removal Action at the Site. In accordance with this administrative order and with input from the USEPA, PADEP, and the local townships, Precision developed a Response Action Plan that detailed the following Site activities:
  - o Residential well monitoring;
  - o Residential soil sampling;
  - o Long-term ground water monitoring;
  - o Ecological risk assessment; and
  - o Collection and treatment of the four seeps, out of the eight identified, that exceeded the Pennsylvania Drinking Water Standard for hexavalent chromium.

The investigation and remediation activities completed from 1998 through May 2012 were conducted pursuant to the requirements of the 1998 Order.

- Precision extended a public water supply line along Ackerly Road and Arch Avenue to provide a municipal water supply for the residences downgradient of the Precision Site. This activity was confirmed by the 1998 Order.
- On January 29, 2001 Precision submitted a Seep Design Report which described how Precision would collect various seeps and treat the seeps to remove hexavalent chromium prior to discharge. USEPA accepted the Seep Design Report on March 1, 2001 and the system was installed and in operation by November 2, 2001.
- Precision submitted surface water sampling results from the June 2002 sampling event in Ackerly Creek which showed hexavalent chromium concentrations were above USEPA's ambient chronic water criteria of 11 micrograms per liter (µg/L) hexavalent chromium for surface water bodies. USEPA sent a notice to Precision on August 6, 2002 that these sampling results indicated that biota in the creek and Glenburn Pond were being exposed to elevated levels of hexavalent chromium. Biological assessment data from November 2001 also showed impacts to aquatic plants and animals in the form of elevated levels of total chromium accumulations in tissue. The August 2002 notice required Precision to submit to USEPA a list of one or more proposals to cease the migration of chromium-contaminated groundwater to Ackerly Creek.
- On September 6, 2002, Precision submitted a summary of alternatives that could be used to reduce the impacts of hexavalent chromium to Ackerly Creek. Based on their evaluation, Precision proposed in-situ

chemical reduction (ISCR) as the preferred option to mitigate impacts of hexavalent chromium to the creek.

- On December 16, 2002, after meeting with PADEP and Precision, USEPA selected Precision's proposal of ISCR using calcium polysulfide (CaSx) as a response alternative and directed Precision to prepare a response action work plan.
- In February 2003, Precision was alerted to the presence of green-tinted water in the former lagoon area on the Precision site. After an initial period of assessment, it was discovered that the water was impacted with hexavalent and trivalent chromium and was slowly being released into a nearby drainage ditch, which led into the neighboring Ackerly Creek. The hexavalent chromium concentrations exceeded the safe drinking water standard of 100 µg/L. The source of the water appeared to be a series of seeps that were located within the former lagoon area. Precision initiated a series of emergency responses to mitigate the release. A berm was constructed along the low end of the northern lagoon where water was draining to the Ackerly Road drainage ditch. A sump was installed in the lagoon, and an on-site Lagoon Treatment System was constructed to collect the water in the lagoon, and remove the hexavalent chromium before discharging the water to the surface.
- In response to an USEPA verbal directive on February 3, 2003 and written directive on February 5, 2003, Precision performed emergency response actions and conducted an assessment of the hexavalent chromium release in the former lagoon area. The results of this assessment showed that there was chromium-impacted soil above bedrock that was impacting perched or shallow groundwater in the vadose zone. In addition, these impacts were directly observable in the former lagoon area downgradient of the area where operations occurred on the Site. Precision reviewed the results of this assessment with USEPA and PADEP and discussed strategies for identifying source areas upgradient of the lagoon. As a follow-up to these discussions, Precision incorporated the assessment information and sampling strategies into the Ackerly Creek Impact Mitigation Remedial Action Work Plan, which was submitted to the USEPA on July 9, 2003 (2003 Work Plan).
- In accordance with the USEPA approved 2003 Work Plan, Precision conducted a phased source area investigation at the Site from August 2003 through April 2004 to first identify and then delineate the source areas accurately. In December 2003, Precision submitted the results of the first phase of the investigation in the report "Source Area Investigation – Preliminary Results & Additional Requirements." This report identified the following four areas with consistently high concentrations of chromium that were potentially acting as source areas for groundwater:
  - o Area adjacent to and south of the former plating building;
  - o Area under the southern part of the former plating building;
  - o Area between the former encapsulation vault and the former lagoon; and
  - o Area between the former lagoon and Ackerly Road adjacent to the drainage trench.Precision reviewed the preliminary results with USEPA and PADEP and agreed to a second phase of sampling to delineate the potential source areas. The second phase of the source area investigation consisted of additional soil borings/sampling and groundwater sampling activities in the above areas. These investigation activities were completed in February, March, and April 2004.
- Based on all of the soil and groundwater data collected as part of the lagoon and source area investigations, Precision submitted a Phase II Report on August 13, 2004 that defined the horizontal and vertical extent of soil source areas with hexavalent chromium in excess of 190 milligrams per kilogram (mg/kg) (Pennsylvania Act 2 Cleanup Standard for soil to groundwater threat) and concluded that the

source areas were relatively small and had been delineated sufficiently to start evaluating remediation alternatives.

- In response to a September 9, 2004 USEPA letter, Precision agreed to calculate a Site-specific sub-surface soil screening level for hexavalent chromium that would result in attainment of the surface water quality standard of 11 µg/L hexavalent chromium in Ackerly Creek, which USEPA had selected as the overall cleanup standard for the Site. Using USEPA guidance and Site-specific data, Precision calculated that remediation of soil in certain source areas to a level of 60 mg/kg hexavalent chromium would achieve this purpose. On March 31, 2005 USEPA approved this proposed level and subsequently required Precision to provide a schedule for future soil remediation activities to mitigate the discharges of hexavalent chromium to Ackerly Creek.
- After evaluation of several alternatives, ISCR of the hexavalent chromium with CaSx was selected as the most effective cleanup method. A Source Area In Situ Chemical Reduction Design Report was prepared and submitted to USEPA in November 2005.
- In June of 2006, a pilot test assessing the injection of CaSx into the soil was conducted on the Precision property. The results of the pilot test confirmed that the high-pressure injection method would successfully deliver the CaSx into the soil and that the frequency of the injections would depend on the soil types at the various locations of the Site. The testing also confirmed that CaSx could be injected into the soils of the former lagoon.
- From July 25 to December 15, 2006, Precision conducted soil injection activities to reduce the concentrations of hexavalent chromium in soil to below a calculated 60 mg/kg criterion for achieving 11 µg/L in Ackerly Creek. Approximately 265,000 gallons of CaSx solution at concentrations ranging from 3% to 6% were injected into approximately 3,677 injection points to reduce hexavalent chromium to trivalent chromium.
- On September 8, 2006, USEPA issued a Response Approval Summary, which compiled, confirmed, updated and documented certain USEPA-approved and selected response actions and measures to be performed pursuant to Section VIII of the 1998 Order.
- In 2007, Precision conducted soil excavation activities to remove hexavalent chromium impacted concrete and soil from the former Rectifier Room located in the basement of the former operations building.
- Between August 2008 and January 2009, approximately 150,000 gallons of a 1% to 2% solution of CaSx were injected into the shallow bedrock and weathered bedrock source areas through 25 injection points and an infiltration gallery installed within the former Rectifier Room to treat shallow bedrock contaminated groundwater.
- Between October and December 2010, Precision injected a total of 34,914 gallons of 1% CaSx solution and 14,852 gallons of 2% CaSx solution into the overburden, shallow bedrock, and weathered bedrock source areas to treat shallow bedrock contaminated groundwater.
- On March 25, 2010, USEPA issued an EE/CA Approval Memorandum, approving the drafting of the EE/CA document.
- Concurrent with the injections in the shallow bedrock, USEPA drafted a second EE/CA (2011 EE/CA) to present the final response alternatives for the Site. A public meeting was conducted on December 7, 2010 to present the response alternatives for the Site to the community and to solicit public comments as required by Section 300.820(a) of the NCP. The USEPA provided the public and opportunity to submit written comments. The preferred alternative presented was continuation of the contaminant source area treatment using an in situ chemical injection system, continuation of the collection and treatment of seeps,

as well as long-term monitoring and institutional controls (ICs) that will prevent exposure of residents to contaminated groundwater and surface water. USEPA finalized the 2011 EE/CA on September 1, 2011.

- Between October and December 2011, Precision injected approximately 63,300 gallons of diluted CaSx solution (1% to 5%) into the overburden, shallow bedrock, and weathered bedrock source areas to treat contaminated groundwater. On September 9, 2011, the Director of the Hazardous Site Cleanup Division approved an Action Memorandum (2011 Action Memo) selecting the response action for addressing chromium contamination at the Site.
- Between September and November 2012, Precision injected a total of 126,137 gallons of 1-2% CaSx solution into the overburden, shallow bedrock, and weathered bedrock source areas to treat shallow bedrock contaminated groundwater.
- Between September and November 2013, Precision injected a total of 115,736 gallons of 1-2% CaSx solution into the overburden, shallow bedrock, and weathered bedrock source areas to treat shallow bedrock contaminated groundwater.
- In September 2014, Precision installed two intermediate bedrock (MW-9IA & MW-9IB) and one deep bedrock (MW-9D) monitoring wells near the south bank of Ackerly Creek to assess lithology and potential connections between the hexavalent chromium concentrations identified on the Site and Ackerly Creek. Downhole geophysics and packer testing were completed in the deep borehole to determine the optimal well construction specifications. Additionally, downhole geophysics were also conducted at AGM-5I, which is located in the Little League complex north of Ackerly Creek, and the newly installed MW-9D. The geophysical testing was conducted to assist in characterizing the nature and hydrogeologic characteristics of the bedrock downgradient from the Site.
- Between May 2015, Precision conducted downhole geophysical testing on MW-C to identify key fractures and water producing zones in the bedrock that might be impacted with hexavalent chromium. During the geophysical survey, it was discovered that the bore hole construction made it impossible to conduct packer testing. A new borehole was installed close to MW-C and using the geophysical survey from MW-C, packer testing was implemented on the new borehole to evaluate fractures and flow zones. Following the completion and data analysis from the packer testing, Precision installed 26 new shallow and intermediate monitoring wells in the vicinity of MW-C and along the southern edge of the former building slab area. All of these wells were installed with the ability to receive injection solution to treat the contaminated groundwater in the area.
- Between September and December 2015, Precision injected a total of 63,469 gallons of 1-5% CaSx solution into the overburden, weathered bedrock, shallow bedrock, and intermediate bedrock source areas to treat the contaminated groundwater.
- Between December 2017 and January 2018, Precision installed six well clusters between the former Trolley Tracks and Ackerly Creek. Each cluster contained four monitoring wells, an overburden, shallow bedrock, intermediate bedrock, and deep bedrock. These wells were installed to evaluate the residual groundwater impacts and assist in determining potential contamination pathways leading towards Ackerly Creek. Following the well installations, borehole geophysics was conducted on the shallow bedrock, intermediate bedrock, and deep bedrock wells in February and March 2018 to identify significant water-bearing fractures in each well as well as to compare the fracture depths/orientations with other known fracture traces previously identified.
- Between July and November 2018, Precision injected a total of 48,935 gallons of 1-3% CaSx solution into the overburden, weathered bedrock, shallow bedrock, and intermediate bedrock source areas to treat the contaminated groundwater.

- Between August 2020 and September 2020, Precision installed six well clusters, each consisting of an overburden and a shallow bedrock well, along the access road between the former Trolley Tracks and Ackerly Creek. These wells were installed to evaluate the residual hexavalent chromium impacts in this area and assist in determining potential contamination pathways leading towards Ackerly Creek. Additionally, downhole geophysics testing was performed on the shallow bedrock wells in October 2020 to identify significant water-bearing fractures in each well as well as to compare the fracture depths/orientations with other known fracture traces previously identified.
- In September 2020, Precision converted the active seep in the former lagoon area into a monitoring well that was cased into the shallow bedrock. The seep was converted to isolate any hexavalent chromium that was being discharged into the lagoon as well as to create an injection point to treat the seep with CaSx solution.
- Between August and October 2020, Precision injected a total of 68,067 gallons of 1-5% CaSx solution into the overburden, weathered bedrock, shallow bedrock, and intermediate bedrock source areas to treat the contaminated groundwater.
- Semi-annual groundwater monitoring of select wells and potable wells was performed from 2012 to the present.
- Quarterly monitoring of Ackerly Creek was performed from 2012 through 2019 and semi-annual monitoring was performed from 2020 to 2025.

### 3 Seep Collection and Treatment

During the historical Site investigations, seeps were identified in the former lagoon area and downgradient of the Site along Ackerly Creek. Eight groundwater seeps were observed offsite in the vicinity of the Site. The seeps were generally only present during times of significant precipitation events when water infiltrating through the unconsolidated glacial sediments reached the top of the bedrock surface, began to flow downhill along the top of the bedrock, and daylighted where there were abrupt changes in the bedrock surface. During the investigation activities, the offsite seeps were sampled for hexavalent chromium. Of the eight seeps, the three seeps in the vicinity of Braces Pond contained hexavalent chromium at low concentrations. One seep, adjacent to Ackerly Creek on the east side of Ackerly Road, had no detectable concentration of hexavalent chromium. The USEPA agreed to exclude these seeps from collection and treatment requirements. The remaining seeps (Bathtub Seep, Cinderblock Seep, Trolley Track Seep, and Arch Avenue dug well) contained higher concentrations of hexavalent chromium. Historically, the hexavalent chromium concentrations observed in these seeps were consistent with groundwater concentrations seen in the vicinity of the seeps. Treatment systems were installed to collect and treat the water from the seeps.

Two water treatment systems are located at the Precision site to address the seeps identified. The first and largest treatment system is the Lagoon Treatment System which collects water from the former lagoon area and seeps that discharge in this area. The second treatment system is the Seep Shed Treatment System that collects water from the Trolley Track Seep, Bathtub Seep and Cinderblock Seep located upgradient of Ackerly Creek.

A third treatment system was previously installed and operated by Precision; however, it was removed in 2008. Precision had previously installed and operated a seep collection and treatment system for the Arch Avenue dug well location. The Arch Avenue dug well was properly filled and closed in 2008 and the water treatment system dismantled. A report summarizing the well closure activities was submitted to the USEPA in February 2009.

### 3.1 Lagoon Treatment System

The Lagoon Treatment System collects and treats water from the former lagoon area and seeps that discharge in this area. The system consists of a collection sump and pump in the former lagoon area that collects water from seeps that surface in the area, surface water runoff that collects during precipitation events, groundwater from a French drain located within the former lagoon, and groundwater from a French drain system located along Ackerly Road. The former lagoon area consists of a shallow, bermed area of approximately 5,000 square feet. The former lagoon area is constructed with a berm on the two downgradient sides. The berm is approximately 3 feet high at its highest point adjacent to the sump. The volume of water that accumulates in the former lagoon area varies widely during the year depending on seasonal precipitation amounts.

The sump pump in the former lagoon area transfers the water to a treatment system located in an on-site building near the former building slab. The treatment system consists of three 300-gallon resin tanks, a sand filter, bag filters, a 300-gallon inlet holding tank, process pumps, inlet and outlet flow meters, a flow totalizer and control valves and piping. The resin tanks are installed in series with the initial two tanks designed for the removal of hexavalent chromium and the final tank designed for the removal of total metals including trivalent chromium. After the water is treated in the Lagoon Treatment System, it is discharged to the ground surface in a pre-existing rip-rap lined infiltration swale located on the western side of the site.

The Lagoon Treatment System was monitored monthly. Samples were collected from the influent, mid-point, and effluent, and analyzed for hexavalent chromium and total chromium to evaluate the effectiveness of the treatment system. In addition, the effluent sample also was analyzed for total metals. The monitoring frequency and parameters were adjusted during on-site in situ chemical reduction activities. The monitoring results were submitted to USEPA in quarterly progress reports.

The Lagoon Treatment System was operated and monitored as required in Section 8.3 of the Settlement Agreement and described in the approved 2012 Response Action Plan. With the transfer of the Site to PADEP oversight, the system will continue to be operated in accordance with the requirements of the 2025 PADEP COA.

### 3.2 Seep Shed Treatment System

The Seep Shed Treatment System collects and treats water from the Trolley Track Seep, Bathtub Seep and Cinderblock Seep located upgradient of Ackerly Creek. The system consists of a collection sump and pump, cartridge filter, four 7-ft<sup>3</sup> resin tanks in series, outlet rotameter flow meter, a flow totalizer, control valves and piping. The treatment system receives water from collection systems installed at the Trolley Track Seep, Bathtub Seep, and Cinderblock Seep. At each seep, a subsurface stone collection system is installed to collect the water. The collected water is then transferred via underground piping to the collection sump of the Seep Shed Treatment System. The water is then pumped through a cartridge filter unit, one resin vessel for the removal of total metals including trivalent chromium, and three resin vessels for the removal of hexavalent chromium. Following treatment, the water is discharged to a subsurface infiltration gallery located adjacent to the shed and upgradient of Ackerly Creek.

The Seep Shed Treatment System was monitored monthly. Samples were collected from the influent, mid-point, and effluent, and analyzed for hexavalent chromium and total chromium to evaluate the effectiveness of the treatment system. The monitoring results were submitted to USEPA in quarterly progress reports.

The Seep Shed System was operated and monitored as required in Section 8.3 of the Settlement Agreement and as described in the approved 2012 Response Action Plan. With the transfer of the Site to PADEP oversight, the system will continue to be operated in accordance with the requirements of the 2025 PADEP COA.

## 4 Supplemental Overburden and Bedrock Groundwater Investigation Activities

From 2012 through 2020, multiple investigation activities were completed at the Site to delineate the horizontal and vertical extent of the chromium contamination in the groundwater and determine the areas for ISCR treatment. Monitoring wells were installed in the overburden, shallow bedrock and intermediate bedrock to supplement the existing well network and delineate the impacts. The locations of the wells were determined based on the ongoing results of the injection activities and groundwater monitoring activities. The overburden monitoring wells were installed using hollow stem auger drilling methods and constructed utilizing either 2-inch or 4-inch PVC well screen. The wells were installed to the depth of the top of bedrock, which varied by location. The length of well screen varied depending on the depth of the well. The shallow, intermediate, and deep monitoring wells were installed using air rotary drilling methods and constructed generally as open borehole wells. Depending on the location of the wells, the wells were installed with 4-inch PVC riser to the top of each aquifer zone where an open borehole was advanced approximately 10 feet into the bedrock of the applicable aquifer, or the wells were installed as traditional 2-inch monitoring wells with 2-inch PVC well screens installed inside the open borehole.

In 2014, one deep and two intermediate bedrock wells were installed in near the south bank of Ackerly Creek. Downhole geophysics and packer testing were completed in the deep borehole to determine the optimal well construction specifications. Additionally, downhole geophysics testing was conducted at AGM-5I, which is located in the Little League complex north of Ackerly Creek, and the newly installed MW-9D. The testing was conducted to assist in characterizing the nature and hydrogeologic characteristics of the bedrock downgradient from the Site. Following the well installations, groundwater sampling was performed, and the results were evaluated to develop an ISCR plan for CaSx injection activities. The investigation activities were summarized in the 2014 Supplemental Investigation Report.

In 2015, Precision conducted downhole geophysical testing on MW-C to identify key fractures and water producing zones in the bedrock that might be impacted with hexavalent chromium. During the geophysical survey, it was discovered that the bore hole construction made it impossible to conduct packer testing. A new borehole will installed close to MW-C and using the geophysical survey from MW-C, packer testing was implemented on the new borehole. Following the packer testing, fifteen (15) shallow and ten (10) intermediate bedrock wells were installed in the MW-C area. Additionally, wells MW-C and MW-22 were modified to each have a nested shallow and intermediate bedrock well. Following the well installations, groundwater sampling was performed, and the results were evaluated to develop an ISCR plan for CaSx injection activities. The investigation activities were summarized in the 2015 Supplemental Investigation Report.

From late 2017 until early 2018, six overburden, six shallow bedrock, six intermediate bedrock, and six deep bedrock wells were installed in six clusters between the former Trolley Tracks and Ackerly Creek. Following the well installations, groundwater sampling was performed, and the results were evaluated to develop an ISCR plan for CaSx injection activities. In February and March 2018, borehole geophysics testing was conducted on the shallow bedrock, intermediate bedrock, and deep bedrock wells to identify significant water-bearing fractures in

each well as well as to compare the fracture depths/orientations with other known fracture traces previously identified. The investigation activities were summarized in the 2017 Supplemental Investigation Report.

In 2020, six overburden and six shallow bedrock wells were installed in six clusters along the access road between the former Trolley Tracks and Ackerly Creek. Additionally, downhole geophysics testing was performed on the shallow bedrock wells in October 2020 to identify significant water-bearing fractures in each well as well as to compare the fracture depths/orientations with other known fracture traces previously identified. Following the well installations, groundwater sampling was performed, and the results were evaluated to develop an ISCR plan for CaSx injection activities. The investigation activities were summarized in the 2020 Supplemental Investigation Report.

The well construction details for the wells installed at the Site are summarized in Table 1. The well locations are illustrated on Figure 2. A summary of the reports prepared to document the investigation activities is provided in Appendix C.

The investigation activities were performed as required in Section 8.3 of the Settlement Agreement and as described in the approved 2012 Response Action Plan. With the transfer of the Site to PADEP oversight, no further investigation activities are required by the 2025 PADEP COA.

## 5 In Situ Chemical Reduction of Hexavalent Chromium in Overburden and Bedrock

From 2012 to 2020, multiple ISCR events using CaSx were performed at the Site to remediate the impacted groundwater. The injection activities were implemented as described in the approved 2012 Response Action Plan and generally followed the procedures previously submitted and approved by USEPA for the previous injection activities conducted in 2008, 2009, 2010 and 2011. The areas of injection and the volumes of CaSx injected in each groundwater zone were determined based on the ongoing investigation activities. During each event, CaSx was received in totes, mixed in batches to the appropriate concentrations ranging from 1% to 5%, stored in tanks and then injected via gravity and pumps into the overburden and bedrock zones through well heads installed on the injection wells.

During each injection event, air monitoring was performed around the Site. Continuous air monitoring stations were set up within the lagoon on Site and at the end of Arch Avenue where the former Trolley Tracks begin. Starting with the 2018 injection event, an additional air monitoring station was installed near the foot bridge across Ackerly Creek by the Seep Shed area. Additionally, air monitoring was conducted routinely around the perimeter of the Site and other areas of interest using a handheld meter as injections were actively occurring.

During the injection events, the Lagoon and Seep Shed Treatment Systems and surface water sample locations along Ackerly Creek were sampled biweekly. Additionally, the two remaining residential wells along Arch Avenue and Ackerly Road were sampled monthly throughout the duration of each injection event. Performance groundwater sampling of key monitoring wells was also implemented one month after the injections were finished to help track injection breakthrough and performance.

Five injection events were performed from 2012 to 2020. In 2012, 126,137 gallons of 1-2% CaSx solution were injected in the overburden, weathered bedrock, and shallow bedrock zones focused around the former building slab, lagoon, and former Trolley Tracks. The injection activities were summarized in the 2012 Supplemental Investigation Report and Shallow Bedrock In Situ Chemical Reduction Remedial Action Report.

In 2013, 115,736 gallons of 1-2% CaSx solution were injected in the overburden, weathered bedrock, and shallow bedrock zones focused around the former building slab, lagoon, and former Trolley Tracks. The injection activities were summarized in the 2013 Supplemental Shallow Bedrock In Situ Chemical Reduction Remedial Action Report.

In 2015, 63,469 gallons of 1-5% CaSx solution were injected in overburden, weathered bedrock, shallow bedrock, and intermediate bedrock zones focused around the MW-C area and former Trolley Tracks. The injection activities were summarized in the 2015 Supplemental Shallow Bedrock In Situ Chemical Reduction Remedial Action Report.

In 2018, 48,935 gallons of 1-3% CaSx solution were injected in overburden, weathered bedrock, shallow bedrock, and intermediate bedrock zones focused around the former Trolley Tracks and the area between the former Trolley Tracks & Ackerly Creek. The injection activities were summarized in the 2018 Supplemental Shallow Bedrock In Situ Chemical Reduction Remedial Action Report.

In 2020, 68,067 gallons of 1% CaSx solution were injected in overburden, weathered bedrock, shallow bedrock, and intermediate bedrock zones focused around the MW-C area, lagoon, former Trolley Tracks and the area between the former Trolley Tracks & Ackerly Creek. The injection activities were summarized in the 2020 Supplemental Shallow Bedrock In Situ Chemical Reduction Remedial Action Report.

A summary of the reports prepared to document the injection activities is provided in Appendix C. The injection activities were performed as required in the Settlement Agreement and as described in the approved 2012 Response Action Plan. With the transfer of the Site to PADEP oversight, no further injection activities are required by the 2025 PADEP COA. The remaining concentrations of hexavalent chromium and total chromium are being addressed with monitored natural attenuation and environmental covenants.

## 6 Semi-Annual Groundwater Monitoring

Semi-annual groundwater monitoring has been performed at the Site from 2012 to the present in accordance with the Settlement Agreement and as described in the approved 2012 Response Action Plan. Monitoring wells installed in the overburden and bedrock on and surrounding the Precision Site have been sampled to evaluate the reduction of hexavalent chromium and total chromium concentrations through the ISRC treatment events and natural attenuation. The sampling has been performed in accordance with the Quality Assurance/Quality Control Monitoring and Sampling Plan, which is based on the Ground Water Sampling Procedure, Low Stress (Low Flow) Purging and Sampling prepared by USEPA Region II dated March 26, 1998.

During each monitoring event, the static water levels in the select wells were measured prior to sampling and the wells were purged using stainless steel submersible pumps with flow controllers following the USEPA slow purge technique. During the purging process, water quality indicators were collected with multi-parameter water quality meters outfitted with a flow-through cell and recorded on purge logs.

The groundwater samples were collected in laboratory-supplied sampling jars with the proper preservatives as necessary and submitted to a USEPA/PADEP certified laboratory under proper chain-of-custody procedures for analysis for hexavalent chromium and total chromium.

The analytical results of the semi-annual groundwater monitoring were summarized in the quarterly progress reports and semi-annual and annual groundwater monitoring reports prepared for the Site. A summary of the monitoring reports prepared to document the sampling activities is provided in Appendix C.

Figures illustrating the decreases in hexavalent chromium concentrations over time from 2008 to 2022 in the overburden, shallow bedrock and intermediate bedrock groundwater zones are provided as Figures 3a/3b, 4a/4b, and 5a/5b, respectively. Hexavalent and total chromium concentration isopleths for the overburden, shallow bedrock, and intermediate bedrock groundwater zones for October 2024 are provided as Figures 6, 7, 8, 9, 10 and 11, respectively. As illustrated by the isopleths, the concentrations in each groundwater zone have decreased significantly as a result of the ISCR injection activities. The groundwater elevation contours for the overburden, shallow bedrock, and intermediate bedrock groundwater zones for October 2024 are illustrated on Figures 12, 13, and 14, respectively.

Based on the groundwater monitoring results following the last injection activities in 2020, it was determined that natural attenuation with the use of environmental covenants was appropriate to address the residual hexavalent and total chromium concentrations in the groundwater. With the transfer of the Site to PADEP oversight, the remaining concentrations of hexavalent chromium and total chromium will be addressed with monitored natural attenuation and environmental covenants in accordance with the 2025 PADEP COA. As part of the COA, semi-annual monitoring of select wells at the Site will continue.

## 7 Surface Water Monitoring

The USEPA selected Ackerly Creek as an endpoint for monitoring the contamination status and progress of the Removal Action at the Precision Site. Pursuant to the Settlement Agreement, Precision monitored six locations in Ackerly Creek on a quarterly basis from 2012 through 2019 and semi-annual basis from 2020 to the present for hexavalent chromium and total chromium.

The samples were collected in laboratory-supplied sampling jars with the proper preservatives as necessary and submitted to a USEPA/PADEP certified laboratory under proper chain-of-custody procedures for analysis for hexavalent chromium and total chromium. The analytical results of the surface water monitoring were summarized in the quarterly progress reports prepared as required by the Settlement Agreement.

The monitoring was performed to evaluate the concentrations of hexavalent chromium relative to the Water Quality Criterion Continuous Concentration of 11 µg/L and the concentrations of total chromium relative to the Maximum Contaminant Level (MCL) of 100 µg/L. During the monitoring period (2012 to the present), the concentrations of total chromium never exceeded the MCL of 100 µg/L. In October 2016, the concentrations of hexavalent chromium decreased to levels less than the 11 µg/L standard. After two years with concentrations of hexavalent chromium below 11 µg/L, the USEPA approved a reduction in sampling frequency to semi-annual on November 4, 2019. From 2020 to 2025, semi-annual monitoring was performed and the concentrations remained below 11 µg/L. Based on these concentrations, no further monitoring is required and the requirements of the Settlement Agreement have been achieved.

## 8 Potable Well Sampling

Two residential potable wells in the vicinity of the Precision Site have been sampled semi-annually for hexavalent chromium and total chromium as required by the Settlement Agreement and described in the approved 2012 Response Action Plan. In addition, during the in situ chemical reduction activities, the residential wells were monitored with increased frequency and for additional parameters, including sulfate and sulfide. The results of the potable well monitoring were summarized in the quarterly progress reports.

With the transfer of the Site to PADEP oversight, the residential wells will continue to be monitored in accordance with the requirements of the 2025 PADEP COA.

## 9 Institutional Controls/Limitations on Use of Groundwater

As required in the Settlement Agreement, groundwater within the contaminated plume shall not be used for drinking water until the maximum contaminant level (MCL) for total chromium (100 µg/L) is achieved. During the investigation and remediation activities, the extent of the groundwater impacts was evaluated and the properties with potentially impacted groundwater were assessed to evaluate the current water supply status and whether that supply was public water or a well. Alternatives for providing water supply to the potentially impacted properties were subsequently evaluated along with institutional controls for limiting use of the impacted groundwater. The evaluation identified the use of environmental covenants through PADEP regulations as an effective method for restricting the use of impacted groundwater. As such, Precision negotiated a transfer of the oversight of the case from USEPA to PADEP with the execution of a COA between Precision and PADEP. The 2025 PADEP COA requires the extension of existing water lines to developable properties identified with impacted groundwater and the establishment of environmental covenants for those properties with impacted groundwater.

## 10 Reporting

In accordance with the Settlement Agreement, Precision prepared and submitted quarterly progress reports to the USEPA during the implementation of the 2012 Response Action Plan. The progress reports summarized the activities completed at the Site and included the following information:

- A description of the response action completed and the actions that have been taken toward achieving compliance with the Settlement Agreement;
- A description of all data anticipated and all activities scheduled for the next 90 calendar days, or, if applicable, the period designated in writing by the USEPA Project Coordinator;
- A description of any problems encountered or anticipated;
- Any actions taken to mitigate such problems;
- A schedule for completion of such actions;
- Copies of all analytical data received during the reporting period; and
- All modifications to the response action, Response Action Plan, and schedule made in accordance with Section XIV of the Settlement Agreement during the reporting period.

In addition to the progress reports, Precision prepared reports documenting the additional investigation and in situ chemical reduction activities described in Sections 4 and 5 of the 2012 Response Action Plan. The reports are summarized in Sections 4 and 5 of this Final Report. A summary of the reports is provided in Appendix C.

This Final Report has been prepared to document the implementation of the activities approved in the 2012 Response Action Plan to address the items in the Settlement Agreement.

## 11 Completion of Removal Response Action

This Final Report summarizes the activities performed at the Site from 2012 to the present to fulfill the requirements of the Settlement Agreement. With the transfer of the case from USEPA to PADEP under the 2025 PADEP COA, the requirements of the Settlement Agreement have been addressed and the removal response action with USEPA is considered complete.

# Tables

**Table 1**  
**Well Construction Table**  
Precision National Plating Services Inc.  
198 Ackerly Road, Clarks Summit, PA

|                             |                   |                                   |                        |                      | Screen/Open Hole |                 |             |
|-----------------------------|-------------------|-----------------------------------|------------------------|----------------------|------------------|-----------------|-------------|
| Well/Boring Name            | Installation Date | Top of Casing Elevation (ft amsl) | Well Diameter (Inches) | Total Depth (ft bgs) | Top (ft bgs)     | Bottom (ft bgs) | Length (ft) |
| SEEPS AND SURFACE WATER     |                   |                                   |                        |                      |                  |                 |             |
| PZ-Seep-1                   | 5/3/2000          | NA                                | 2                      | 7.8                  | 2.8              | 7.8             | 5           |
| PZ-Seep-3                   | 5/3/2000          | NA                                | 2                      | 4.3                  | 2.8              | 4.3             | 1.5         |
| PZ-Seep-4                   | 5/4/2000          | NA                                | 2                      | 6.7                  | 3.2              | 6.7             | 3.5         |
| PZ-Seep-8                   | 5/4/2000          | NA                                | 2                      | 4.7                  | 3.7              | 4.7             | 1           |
| Lagoon Seep                 | NA                | 1161.88                           | 2                      | NA                   | NA               | NA              | NA          |
| Trolley Track Seep          | NA                | 1096.31                           | 6                      | NA                   | NA               | NA              | NA          |
| Bathtub seep                | NA                | 1057.14                           | 6                      | NA                   | NA               | NA              | NA          |
| Cinderblock Seep            | NA                | 1060.95                           | 6                      | NA                   | NA               | NA              | NA          |
| OVERBURDEN MONITORING WELLS |                   |                                   |                        |                      |                  |                 |             |
| OMW-1                       | 9/24/2003         | 1189.97 <sup>1</sup>              | 2                      | 20                   | 13               | 20              | 7           |
| OMW-2                       | 9/25/2003         | 1194.35 <sup>1</sup>              | 2                      | 13                   | 6                | 13              | 7           |
| OMW-3                       | 9/30/2003         | 1162.36 <sup>1</sup>              | 2                      | 6.5                  | 1                | 6.5             | 5.5         |
| OMW-4                       | 9/22/2003         | 1173.82 <sup>1</sup>              | 2                      | 13                   | 6                | 13              | 7           |
| OMW-5                       | 9/22/2003         | 1172.45 <sup>1</sup>              | 2                      | 8                    | 1.5              | 8               | 6.5         |
| OMW-6                       | 9/29/2003         | 1157.95 <sup>1</sup>              | 2                      | 14                   | 7                | 14              | 7           |
| OMW-7                       | 9/23/2003         | 1199.4 <sup>1</sup>               | 2                      | 9                    | 4                | 9               | 5           |
| OMW-8                       | 9/24/2003         | 1201.86 <sup>1</sup>              | 2                      | 10                   | 3                | 10              | 7           |
| OMW-9                       | 9/26/2003         | 1200.93 <sup>1</sup>              | 2                      | 11.5                 | 6.5              | 11.5            | 5           |
| OMW-10                      | 9/25/2003         | 1179.88 <sup>1</sup>              | 2                      | 10                   | 4                | 10              | 6           |
| OMW-11                      | 9/24/2003         | 1199.33 <sup>1</sup>              | 2                      | 21                   | 14               | 21              | 7           |
| OMW-12                      | 9/23/2003         | 1199.62 <sup>1</sup>              | 2                      | 19                   | 12               | 19              | 7           |
| OMW-13                      | 9/26/2003         | 1183.82 <sup>1</sup>              | 2                      | 20                   | 12               | 19              | 7           |
| OMW-14                      | 7/28/2008         | 1088.87                           | 2                      | 10                   | 4                | 10              | 6           |
| OMW-15                      | 5/5/2010          | 1053.62                           | 2                      | 10                   | 3                | 10              | 7           |
| OMW-16                      | 5/6/2010          | 1142.32                           | 2                      | 24                   | 14               | 24              | 10          |
| OMW-17                      | 5/12/2010         | 1149.04                           | 2                      | 27.5                 | 12.5             | 27.5            | 15          |
| OMW-18                      | 5/3/2010          | 1176.58                           | 2                      | 15                   | 5                | 15              | 10          |
| OMW-19                      | 4/30/2010         | 1189.66                           | 2                      | 14.5                 | 4.5              | 14.5            | 10          |
| OMW-20 (TW-4)               | 5/11/2010         | 1190.19                           | 2                      | 13.5                 | 3.5              | 13.5            | 10          |
| OMW-21                      | 9/21/2011         | 1176.08                           | 2                      | 18                   | 8                | 18              | 10          |
| OMW-22                      | 9/22/2011         | 1173.77                           | 2                      | 15                   | 5                | 15              | 10          |
| OMW-23                      | 9/28/2011         | 1145.43                           | 2                      | 18                   | 8                | 18              | 10          |
| OMW-24                      | 9/27/2011         | 1059.59                           | 2                      | 10                   | 2                | 10              | 8           |
| OMW-25                      | 8/22/2012         | 1057.20                           | 2                      | 10                   | 5                | 10              | 5           |
| OMW-26                      | 8/22/2012         | 1090.94                           | 2                      | 11                   | 4                | 11              | 7           |
| OMW-27                      | 8/22/2012         | 1093.85                           | 2                      | 8                    | 3                | 8               | 5           |
| OMW-28                      | 8/20/2012         | 1096.33                           | 2                      | 10.5                 | 3.5              | 10.5            | 7           |
| OMW-29                      | 8/20/2012         | 1101.18                           | 2                      | 12                   | 5                | 12              | 7           |
| OMW-30                      | 8/23/2012         | 1155.15                           | 2                      | 30                   | 15               | 30              | 15          |
| OMW-31                      | 8/24/2012         | 1170.84                           | 2                      | 11                   | 6                | 11              | 5           |
| OMW-32                      | 8/24/2012         | 1162.85                           | 2                      | 7                    | 2                | 7               | 5           |
| OMW-38                      | 12/21/2017        | 1068.88                           | 4                      | 9.49                 | 3                | 9               | 6           |
| OMW-39                      | 12/19/2017        | 1068.34                           | 4                      | 10.42                | 3                | 10              | 7           |
| OMW-40                      | 12/19/2017        | 1071.09                           | 4                      | 10.2                 | 3.2              | 10.2            | 7           |
| OMW-41                      | 12/19/2017        | 1071.19                           | 4                      | 9.36                 | 2.36             | 9.36            | 7           |
| OMW-42                      | 12/19/2017        | 1068.83                           | 4                      | 10.13                | 3                | 10              | 7           |
| OMW-43                      | 12/20/2017        | 1064.71                           | 4                      | 10.13                | 3                | 10              | 7           |
| OMW-44                      | 8/22/2018         | 1070.48                           | 2                      | 12                   | 3                | 12              | 9           |
| OMW-45                      | 8/31/2020         | 1060.35                           | 4                      | 7                    | 2                | 7               | 5           |
| OMW-46                      | 8/31/2020         | 1062.71                           | 4                      | 7.5                  | 2                | 7.5             | 5.5         |
| OMW-47                      | 8/31/2020         | 1064.91                           | 4                      | 7.5                  | 2                | 7.5             | 5.5         |
| OMW-48                      | 9/1/2020          | 1063.33                           | 4                      | 7                    | 2                | 7               | 5           |
| OMW-49                      | 9/2/2020          | 1084.90                           | 4                      | 11.5                 | 3.5              | 11.5            | 8           |
| OMW-50                      | 9/3/2020          | 1083.99                           | 4                      | 13                   | 3                | 13              | 10          |
| SB-2008-10                  | 3/17/2008         | 1167.10                           | 2                      | 15.5                 | 10               | 15              | 5           |
| Rectifier Room Well         | 2/28/2008         | 1202.39                           | 2                      | 12                   | 2                | 12              | 10          |
| SB-2010-21S                 | 4/30/2010         | NA                                | 2                      | 16.5                 | 6.5              | 16.5            | 10          |
| SB-2010-22S                 | 4/30/2010         | NA                                | 2                      | 13.5                 | 3.5              | 13.5            | 10          |
| SB-2010-23S                 | 4/30/2010         | NA                                | 2                      | 13                   | 12               | 22              | 10          |
| SB-2010-24S                 | 4/30/2010         | NA                                | 2                      | 18                   | 8                | 18              | 10          |
| SB-2010-25S                 | 5/3/2010          | NA                                | 2                      | 20                   | 10               | 20              | 10          |
| SB-2010-26S                 | 4/30/2010         | NA                                | 2                      | 22                   | 12               | 22              | 10          |
| TW-1                        | 4/30/2010         | NA                                | 2                      | 15                   | 5                | 15              | 10          |
| TW-2                        | 4/30/2010         | NA                                | 2                      | 14.5                 | 4.5              | 14.5            | 10          |
| TW-3                        | 4/30/2010         | NA                                | 2                      | 8                    | 0                | 8               | 8           |
| TW-4                        | 4/30/2010         | NA                                | 2                      | 13.5                 | 3.5              | 13.5            | 10          |

| Well/Boring Name                 | Installation Date | Top of Casing Elevation (ft amsl) | Well Diameter (Inches) | Total Depth (ft bgs) | Top (ft bgs) | Bottom (ft bgs) | Length (ft) |
|----------------------------------|-------------------|-----------------------------------|------------------------|----------------------|--------------|-----------------|-------------|
| SHALLOW BEDROCK MONITORING WELLS |                   |                                   |                        |                      |              |                 |             |
| IP-1                             | 6/25/2008         | 1201.56                           | 4                      | 25                   | 15           | 25              | 10          |
| IP-2                             | 6/25/2008         | 1202.29                           | 4                      | 21                   | 11           | 21              | 10          |
| IP-3                             | 6/25/2008         | 1201.60                           | 4                      | 28                   | 18           | 28              | 10          |
| IP-4                             | 6/25/2008         | 1200.92                           | 4                      | 29                   | 19           | 29              | 10          |
| IP-5                             | 6/26/2008         | 1193.96                           | 4                      | 31                   | 21           | 31              | 10          |
| IP-6                             | 6/26/2008         | 1194.61                           | 4                      | 31                   | 21           | 31              | 10          |
| IP-7                             | 6/26/2008         | 1202.36                           | 4                      | 30                   | 20           | 30              | 10          |
| IP-8                             | 6/25/2008         | 1202.60                           | 4                      | 30                   | 20           | 30              | 10          |
| IP-9                             | 6/26/2008         | 1188.61                           | 4                      | 27                   | 17           | 27              | 10          |
| IP-10                            | 6/26/2008         | 1191.53                           | 4                      | 27                   | 17           | 27              | 10          |
| IP-11                            | 7/2/2008          | 1202.88                           | 4                      | 33                   | 23           | 33              | 10          |
| IP-12                            | 7/2/2008          | 1201.84                           | 4                      | 33                   | 23           | 33              | 10          |
| IP-13                            | 6/27/2008         | 1190.84                           | 4                      | 31                   | 21           | 31              | 10          |
| IP-14                            | 6/27/2008         | 1190.92                           | 4                      | 30                   | 20           | 30              | 10          |
| IP-15                            | 6/27/2008         | 1188.80                           | 4                      | 29                   | 19           | 29              | 10          |
| IP-16                            | 6/26/2008         | 1192.11                           | 4                      | 27                   | 17           | 27              | 10          |
| IP-17                            | 6/27/2008         | 1190.68                           | 4                      | 35                   | 25           | 35              | 10          |
| SB-2007ER                        | 2/27/2008         | 1201.91                           | 2                      | 28.5                 | 18           | 28.5            | 10.5        |
| SB-2008-1***                     | 2/27/2008         | 1193.24                           | 2                      | 50/32                | 22           | 50/32           | 28/10       |
| SB-2008-2***                     | 2/27/2008         | 1201.02                           | 2                      | 47/25                | 15           | 47/25           | 32/10       |
| SB-2008-3***                     | 2/29/2008         | 1201.18                           | 2                      | 43/21                | 11           | 43/21           | 32/10       |
| SB-2008-4***                     | 3/14/2008         | 1185.65                           | 2                      | 28/29                | 19           | 28/29           | 9/10        |
| SB-2008-5***                     | 3/13/2008         | 1173.50                           | 2                      | 36.5/31              | 21           | 36.5/31         | 15.5/10     |
| SB-2008-6***                     | 3/12/2008         | 1161.91                           | 2                      | 30/34                | 24           | 30/34           | 6/10        |
| SB-2008-7***                     | 3/6/2008          | 1186.96                           | 2                      | 49/35                | 25           | 49/35           | 24/10       |
| SB-2008-8***                     | 3/5/2008          | 1186.20                           | 2                      | 50/32                | 22           | 50/32           | 28/10       |
| SB-2008-9 <sup>3</sup>           | 3/7/2008          | 1190.42                           | 2                      | 47.6/32              | 22           | 47.6/32         | 25.6/10     |
| SB-2008-11                       | 9/22/2008         | 1202.47                           | 4                      | 33                   | 23           | 33              | 10          |
| SB-2008-12                       | 9/22/2008         | 1201.99                           | 4                      | 33                   | 23           | 33              | 10          |
| SB-2008-13                       | 9/22/2008         | 1202.38                           | 4                      | 33                   | 23           | 33              | 10          |
| SB-2008-14                       | 9/22/2008         | 1202.64                           | 4                      | 33                   | 23           | 33              | 10          |
| SB-2008-15                       | 9/22/2008         | 1202.68                           | 4                      | 27.5                 | 17.5         | 27.5            | 10          |
| SB-2008-16                       | 11/13/2008        | 1201.78                           | 4                      | 30                   | 19           | 30              | 11          |
| SB-2008-17                       | 11/14/2008        | 1202.48                           | 4                      | 38                   | 20           | 38              | 18          |
| SB-2008-18                       | 11/24/2008        | 1201.93                           | 4                      | 40.08                | 30           | 40.08           | 10          |
| SB-2008-19                       | 11/24/2008        | 1202.19                           | 4                      | 47.4                 | 35           | 45              | 10          |
| SB-2008-20                       | 11/24/2008        | 1202.17                           | 4                      | 65                   | 55           | 65              | 10          |
| SB-2010-21                       | 5/5/2010          | 1186.99                           | 4                      | 35                   | 20           | 35              | 15          |
| SB-2010-22                       | 5/5/2010          | 1186.30                           | 4                      | 35                   | 25           | 35              | 10          |
| SB-2010-23                       | 5/4/2010          | 1189.67                           | 4                      | 40                   | 20           | 40              | 20          |
| SB-2010-24                       | 5/5/2010          | 1192.69                           | 4                      | 35                   | 27           | 35              | 8           |
| SB-2010-25                       | 5/3/2010          | 1201.31                           | 4                      | 33                   | 23           | 33              | 10          |
| SB-2010-26                       | 5/3/2010          | 1191.14                           | 4                      | 35                   | 25           | 35              | 10          |
| SB-2010-27                       | 6/15/2010         | 1189.44                           | 4                      | 35                   | 20           | 35              | 15          |
| SB-2010-28                       | 6/15/2010         | 1202.07                           | 4                      | 35                   | 20           | 35              | 15          |
| SB-2010-29                       | 6/15/2010         | 1202.68                           | 4                      | 25                   | 10           | 25              | 15          |
| MW-1"                            | NA                | 1201.33                           | 6                      | 33                   | NA           | 32.55           | 32.55       |
| MW-2"                            | NA                | 1198.50                           | 6                      | 37                   | NA           | 34.76           | 34.76       |
| MW-AS                            | 1/30/2009         | 1168.43                           | 2                      | 90                   | 70           | 90              | 20          |
| MW-BS                            | 1/30/2009         | 1159.19                           | 2                      | 90                   | 70           | 90              | 20          |
| MW-3S                            | 1/30/2009         | 1159.19                           | 2                      | 90                   | 70           | 90              | 20          |
| MW-9S                            | 5/5/2010          | 1054.12                           | 2                      | 30                   | 20           | 30              | 10          |
| MW-10S                           | 5/12/2010         | 1142.03                           | 2                      | 43                   | 28           | 43              | 15          |
| MW-11S                           | 9/27/2011         | 1150.31                           | 2                      | 43                   | 25           | 43              | 18          |
| MW-12S                           | 9/29/2011         | 1145.05                           | 4                      | 30                   | 20           | 30              | 10          |
| MW-13S                           | 9/19/2011         | 1176.57                           | 4                      | 40                   | 20           | 40              | 20          |
| MW-14S                           | 9/28/2011         | 1059.08                           | 4                      | 25                   | 14           | 24              | 10          |
| MW-15S                           | 8/22/2012         | 1056.67                           | 4                      | 28                   | 17           | 27              | 10          |
| MW-16S                           | 8/22/2012         | 1092.79                           | 4                      | 43                   | 11           | 43              | 32          |
| MW-17S                           | 8/23/2012         | 1100.89                           | 4                      | 43                   | 15           | 43              | 28          |
| MW-18S                           | 8/23/2012         | 1154.95                           | 4                      | 40                   | 25           | 40              | 15          |
| MW-19S                           | 8/23/2012         | 1170.13                           | 4                      | 31.39                |              | 31.39           |             |
| MW-20S                           | 8/24/2012         | 1162.75                           | 4                      | 15                   | 7            | 15              | 8           |
| MW-21S                           | 8/24/2012         | 1167.31                           | 4                      | 31.49                |              | 31.49           |             |
| AGM-5S                           | 12/21/1998        | 1045.35                           | 6                      | 21.49                | 11.49        | 21.49           | 10          |
| MW-B01S                          | 1/29/2009         | 1200.87                           | 2                      | 90                   | 80           | 90              | 10          |
| MW-22 S                          | 8/10/2015         | 1224.52                           | 2                      | 95.9                 | 75.9         | 95.9            | 20          |
| MW-23                            | 8/10/2015         | 1196.62                           | 4                      | 41.2                 | 23           | 41.2            | 18.2        |
| MW-24                            | 8/10/2015         | 1204.37                           | 4                      | 46.7                 | 20           | 46.7            | 26.7        |
| MW-25                            | 8/10/2015         | 1206.45                           | 4                      | 43                   | 20           | 43              | 23          |
| MW-26S                           | 8/10/2015         | 1220.12                           | 2                      | 105.32               | 85.32        | 105.32          | 20          |
| MW-27S                           | 8/10/2015         | 1228.89                           | 2                      | 102.64               | 82.64        | 102.64          | 20          |
| MW-28S                           | 8/10/2015         | 1218.88                           | 2                      | 102.1                | 82.1         | 102.1           | 20          |
| MW-29                            | 8/10/2015         | 1188.06                           | 4                      | 33                   | 18           | 33              | 15          |
| MW-30                            | 8/10/2015         | 1201.90                           | 4                      | 41.05                | 20           | 41.05           | 21.05       |
| MW-31S                           | 8/10/2015         | 1219.35                           | 2                      | 105.25               | 85.25        | 105.25          | 20          |
| MW-32S                           | 8/10/2015         | 1218.91                           | 2                      | 107                  | 87           | 107             | 20          |
| MW-33S                           | 8/10/2015         | 1229.01                           | 2                      | 72.74                | 42.74        | 72.74           | 30          |
| MW-34S                           | 9/9/2015          | 1231.58                           | 2                      | 70                   | 40           | 70              | 30          |
| MW-35S                           | 9/11/2015         | 1232.28                           | 2                      | 105                  | 85           | 105             | 20          |
| MW-36S                           | 9/15/2015         | 1218.74                           | 2                      | 145                  | 125          | 145             | 20          |
| MW-37S                           | 9/17/2015         | 1187.76                           | 2                      | 78                   | 58           | 78              | 20          |
| MW-38S                           | 12/21/2017        | 1069.67                           | 4                      | 23.9                 | 15           | 23.9            | 9           |
| MW-39S                           | 12/19/2017        | 1069.32                           | 4                      | 24.12                | 15           | 24              | 9           |
| MW-40S                           | 12/21/2017        | 1071.55                           | 4                      | 24.96                | 15           | 24.96           | 9.96        |
| MW-41S                           | 12/19/2017        | 1070.96                           | 4                      | 24.9                 | 15           | 24.9            | 9.9         |
| MW-42S                           | 12/20/2017        | 1068.80                           | 4                      | 24.46                | 15           | 24.46           | 9.46        |
| MW-43S                           | 12/21/2017        | 1064.19                           | 4                      | 24.42                | 15           | 24.42           | 9.42        |
| MW-44S                           | 8/22/2018         | 1069.79                           | 2                      | 25                   | 15           | 25              | 10          |
| MW-45S                           | 9/1/2020          | 1061.58                           | 4                      | 26                   | 15           | 26              | 11          |
| MW-46S                           | 9/2/2020          | 1061.88                           | 4                      | 27                   | 15           | 27              | 12          |
| MW-47S                           | 9/1/2020          | 1063.64                           | 4                      | 30                   | 15           | 30              | 15          |
| MW-48S                           | 9/2/2020          | 1063.91                           | 4                      | 28.5                 | 15           | 28              | 13          |
| MW-49S                           | 9/3/2020          | 1085.63                           | 4                      | 40                   | 20           | 40              | 20          |
| MW-50S                           | 9/3/2020          | 1081.30                           | 4                      | 43                   | 20           | 43              | 23          |
| MW-CS                            | 8/10/2015         | 1225.07                           | 2                      | 72.5                 | 42.5         | 72.5            | 30          |

| Well/Boring Name                             | Installation Date | Top of Casing Elevation (ft amsl) | Well Diameter (Inches) | Total Depth (ft bgs) | Top (ft bgs)    | Bottom (ft bgs) | Length (ft) |
|----------------------------------------------|-------------------|-----------------------------------|------------------------|----------------------|-----------------|-----------------|-------------|
| <b>INTERMEDIATE BEDROCK MONITORING WELLS</b> |                   |                                   |                        |                      |                 |                 |             |
| AGM-1S                                       | 12/1/1998         | 1182.67                           | 6                      | 212.11               | 38              | 212.11          | 174.11      |
| AGM-2S                                       | 12/22/1998        | 1111.32                           | 6                      | 132.66               | 17              | 132.66          | 115.66      |
| AGM-3S                                       | 12/30/1998        | 1095.60                           | 6                      | 111.84               | 18              | 111.84          | 93.84       |
| AGM-4S                                       | 1/6/1999          | 1089.90                           | 6                      | 93.42                | 18              | 93.42           | 75.42       |
| MW-3 <sup>4</sup>                            | NA                | 1184.56                           | 6                      | 127                  | 33              | 126.41          | 126.41      |
| MW-4S                                        | 10/31/2002        | 1197.01                           | 2                      | 195                  | 183             | 195             | 12          |
| MW-8S                                        | 7/28/2008         | 1089.35                           | 4                      | 40                   | 13              | 40              | 27          |
| MW-10I                                       | 5/7/2010          | 1141.13                           | 2                      | 100                  | 85              | 100             | 15          |
| MW-11I                                       | 8/22/2012         | 1150.22                           | 2                      | 100                  | 85              | 100             | 15          |
| MW-12I                                       | 9/30/2011         | 1144.30                           | 2                      | 100                  | 85              | 100             | 15          |
| MW-18I                                       | 8/22/2012         | 1154.69                           | 2                      | 101                  | 86              | 101             | 15          |
| MW-19I                                       | 8/23/2012         | 1170.27                           | 2                      | 105                  | 85              | 105             | 20          |
| MW-20I                                       | 8/24/2012         | 1163.04                           | 2                      | 105                  | 85              | 105             | 20          |
| MW-A <sup>4</sup>                            | 7/2/1991          | 1166.96                           | 6                      | 156                  | 9               | 156.5           | 147.5       |
| MW-B <sup>4</sup>                            | 7/2/1991          | 1159.29                           | 6                      | 130                  | 31              | 130.6           | 99.6        |
| MW-C <sup>6</sup>                            | 6/24/1991         | 1222.97                           | 6                      | 191                  | 25              | 190.35          | 165.35      |
| MW-B01 <sup>4</sup>                          | 2000**            | 1200                              | 6                      | 131                  | 30 <sup>5</sup> | 131             | 101         |
| MW-AD                                        | 1/29/2009         | 1168.42                           | 2                      | 152                  | 127             | 152             | 25          |
| MW-BD                                        | 1/29/2009         | 1159.24                           | 2                      | 128                  | 110             | 128             | 18          |
| MWB01D                                       | 1/30/2009         | 1200.71                           | 2                      | 121                  | 111             | 121             | 10          |
| MW-3D                                        | 1/29/2009         | 1184.45                           | 2                      | 126                  | 110             | 126             | 16          |
| AGM-5I                                       | 12/18/1998        | 1042.57                           | 6                      | 100                  | 27              | 100             | 73          |
| MW-9IA                                       | 9/19/2014         | 1057.91                           | 2                      | 47                   | 37              | 47              | 10          |
| MW-9IB                                       | 9/19/2014         | 1057.41                           | 2                      | 82                   | 67              | 82              | 15          |
| MW-9D                                        | 9/19/2014         | 1057.79                           | 2                      | 107                  | 92              | 107             | 15          |
| MW-25 <sup>6</sup>                           | 5/28/2015         |                                   | 6                      | 195.15               | 25              | 195.15          | 170.15      |
| MW-22I                                       | 8/10/2015         | 1224.57                           | 2                      | 193.85               | 168.85          | 193.85          | 25          |
| MW-26I                                       | 8/10/2015         | 1220.14                           | 2                      | 162.3                | 137.3           | 162.3           | 25          |
| MW-27I                                       | 8/10/2015         | 1228.76                           | 2                      | 195                  | 170             | 195             | 25          |
| MW-28I                                       | 8/10/2015         | 1218.86                           | 2                      | 164.08               | 139.08          | 164.08          | 25          |
| MW-31I                                       | 8/10/2015         | 1219.26                           | 2                      | 163.4                | 138.4           | 163.4           | 25          |
| MW-32I                                       | 8/10/2015         | 1218.92                           | 2                      | 164                  | 139             | 164             | 25          |
| MW-33I                                       | 8/10/2015         | 1229.07                           | 2                      | 164.25               | 139.25          | 164.25          | 25          |
| MW-34I                                       | 9/8/2015          | 1231.63                           | 2                      | 160                  | 135             | 160             | 25          |
| MW-35I                                       | 9/10/2015         | 1232.21                           | 2                      | 190                  | 165             | 190             | 25          |
| MW-36I                                       | 9/14/2015         | 1218.85                           | 2                      | 190                  | 165             | 190             | 25          |
| MW-37I                                       | 9/16/2015         | 1187.76                           | 2                      | 131                  | 111             | 131             | 20          |
| MW-38I                                       | 12/21/2017        | 1068.29                           | 4                      | 39.34                | 30              | 39.34           | 9.34        |
| MW-39I                                       | 12/19/2017        | 1069.46                           | 4                      | 49                   | 30              | 49              | 19          |
| MW-40I                                       | 12/18/2017        | 1072.09                           | 4                      | 39.84                | 30              | 39.84           | 9.84        |
| MW-41I                                       | 12/19/2017        | 1071.23                           | 4                      | 39.35                | 30              | 39.35           | 9.35        |
| MW-42I                                       | 12/20/2017        | 1067.83                           | 4                      | 39.57                | 30              | 39.57           | 9.57        |
| MW-43I                                       | 12/21/2017        | 1064.65                           | 4                      | 49.41                | 30              | 49.41           | 19.41       |
| MW-CI                                        | 8/10/2015         | 1225.01                           | 2                      | 152.55               | 127.55          | 152.55          | 25          |
| <b>DEEP BEDROCK MONITORING WELLS</b>         |                   |                                   |                        |                      |                 |                 |             |
| AGM-1I                                       | 12/7/1998         | 1183.32                           | 6                      | 302.2                | 235             | 302.2           | 67.2        |
| AGM-2I                                       | 12/29/1998        | 1111.12                           | 6                      | 205.31               | 150             | 205.31          | 55.31       |
| AGM-3I                                       | 1/5/1998          | 1096.06                           | 6                      | 204.07               | 130             | 204.07          | 74.07       |
| AGM-4I                                       | 1/8/1998          | 1090.22                           | 6                      | 149.69               | 110             | 149.69          | 39.69       |
| MW-4                                         | NA                | 1195.15                           | 6                      | 420                  | 23              | 420             | 397         |
| MW-4D                                        | 10/31/2002        | 1197.05                           | 2                      | 335                  | 325             | 335             | 10          |
| MW-38D                                       | 12/21/2017        | 1068.90                           | 4                      | 65.62                | 55              | 65.62           | 10.62       |
| MW-39D                                       | 12/18/2017        | 1069.67                           | 4                      | 74.64                | 55              | 74.64           | 19.64       |
| MW-40D                                       | 12/18/2017        | 1072.09                           | 4                      | 64.75                | 55              | 64.75           | 9.75        |
| MW-41D                                       | 12/19/2017        | 1070.49                           | 4                      | 74.87                | 55              | 74.87           | 19.87       |
| MW-42D                                       | 12/19/2017        | 1068.58                           | 4                      | 72.5                 | 55              | 72.5            | 17.5        |
| MW-43D                                       | 12/20/2017        | 1064.81                           | 4                      | 65.46                | 55              | 65.46           | 10.46       |
| PRODUCTION WELL                              | NA                | NA                                | 6                      | 352                  | 60              | 352             | 292         |

#### Notes

\* - Historic Casing Elevation used

" - Well was abandoned 10/30/2002

\*\* - Exact date not known

\*\*\* - Wells were modified between 6/4/2008 and 6/5/2008

<sup>1</sup> - Casing Elevation derived from boring logs

<sup>2</sup> - Wells are in a different system, not used for contouring

<sup>3</sup> - Well was reconstructed as IP-14

<sup>4</sup> - Wells were modified between 1/29/2009 and 1/30/2009

<sup>5</sup> - Information from geophysical investigation

<sup>6</sup> - Wells modified between 8/10/2015 and 8/14/2015

na - Not Available

# Figures

XREFS: PROJECTNAME: ---  
IMAGES: TOPO.jpg



PRECISION NATIONAL PLATING SERVICES, INC. • 198 ACKERLY ROAD, CLARKS SUMMIT, PENNSYLVANIA

## SITE LOCATION MAP

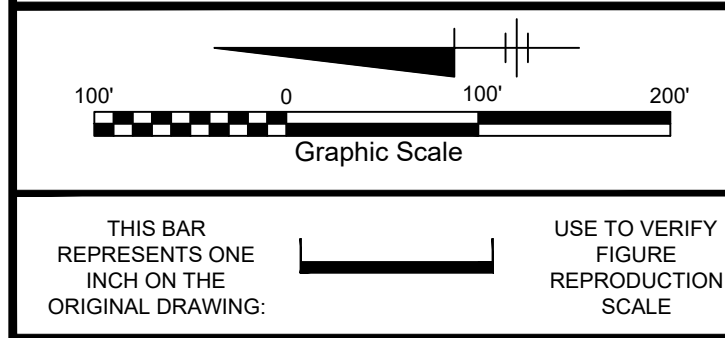
ARCADIS Project No.  
BB014215.0005.00011

Date  
05/25/2012

ARCADIS  
35 COLUMBIA ROAD  
BRANCHBURG, NEW JERSEY  
TEL. 908.526.1000

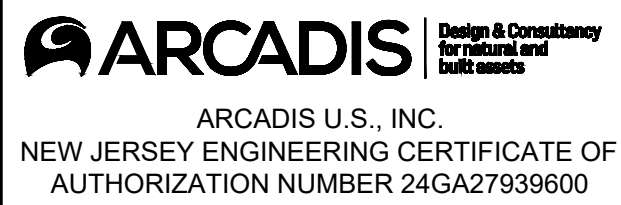
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XREFS: IMAGES: X-BASEMAP-SP-2018  
X-TTL-OCT 2020



| No. | Date | Revisions | By | Ckd |
|-----|------|-----------|----|-----|
|     |      |           |    |     |
|     |      |           |    |     |
|     |      |           |    |     |
|     |      |           |    |     |

|                              |              |                  |
|------------------------------|--------------|------------------|
| Professional Engineer's Name |              |                  |
| Professional Engineer's No.  |              |                  |
| State                        | Date Signed  | Project Mgr. LGB |
| Designed by LGB              | Drawn by TPH | Checked by SWI   |

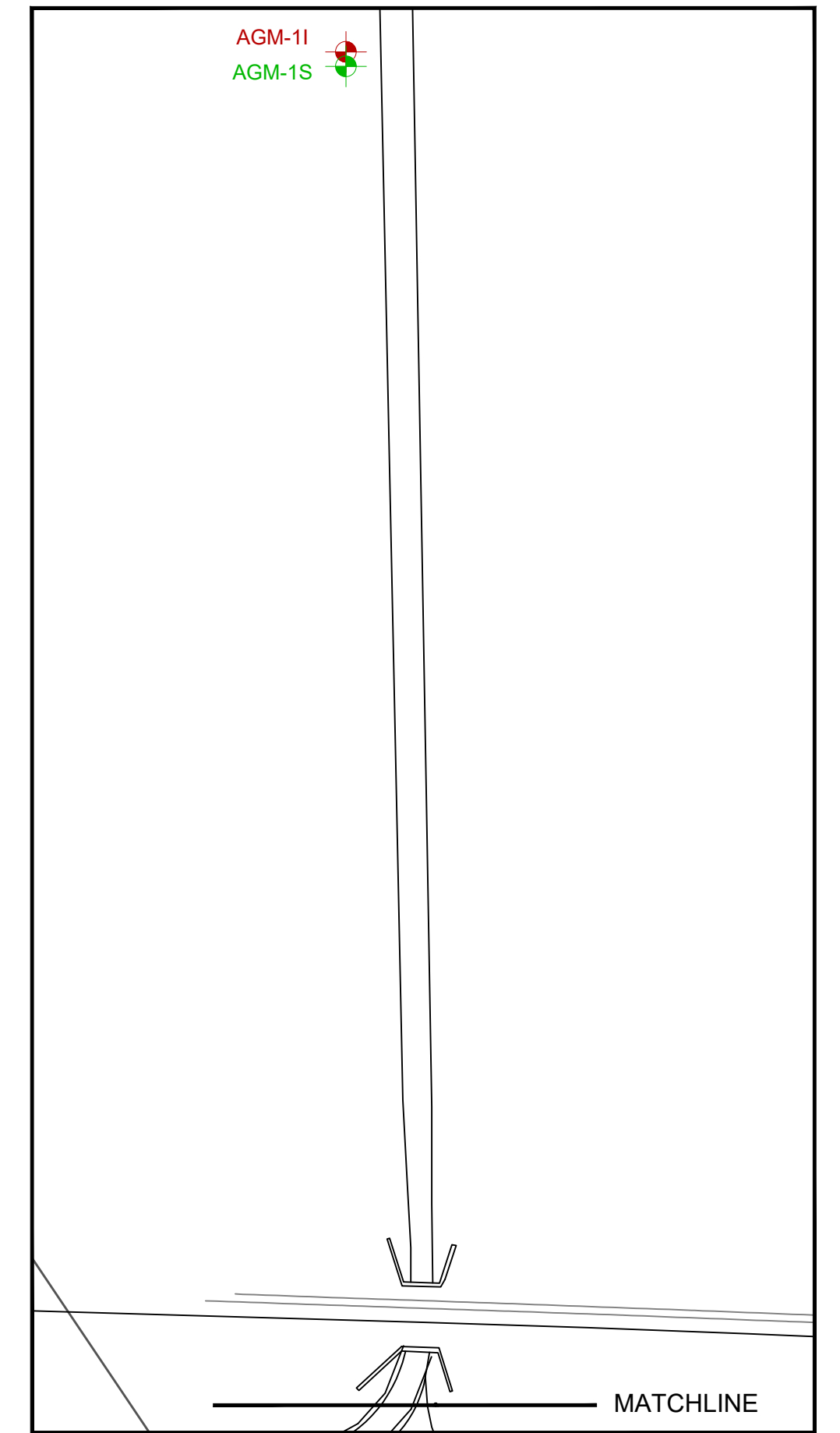


PRECISION NATIONAL PLATING SERVICES, INC. • 198 ACKERLY ROAD, CLARKS SUMMIT, PENNSYLVANIA

## SITE PLAN

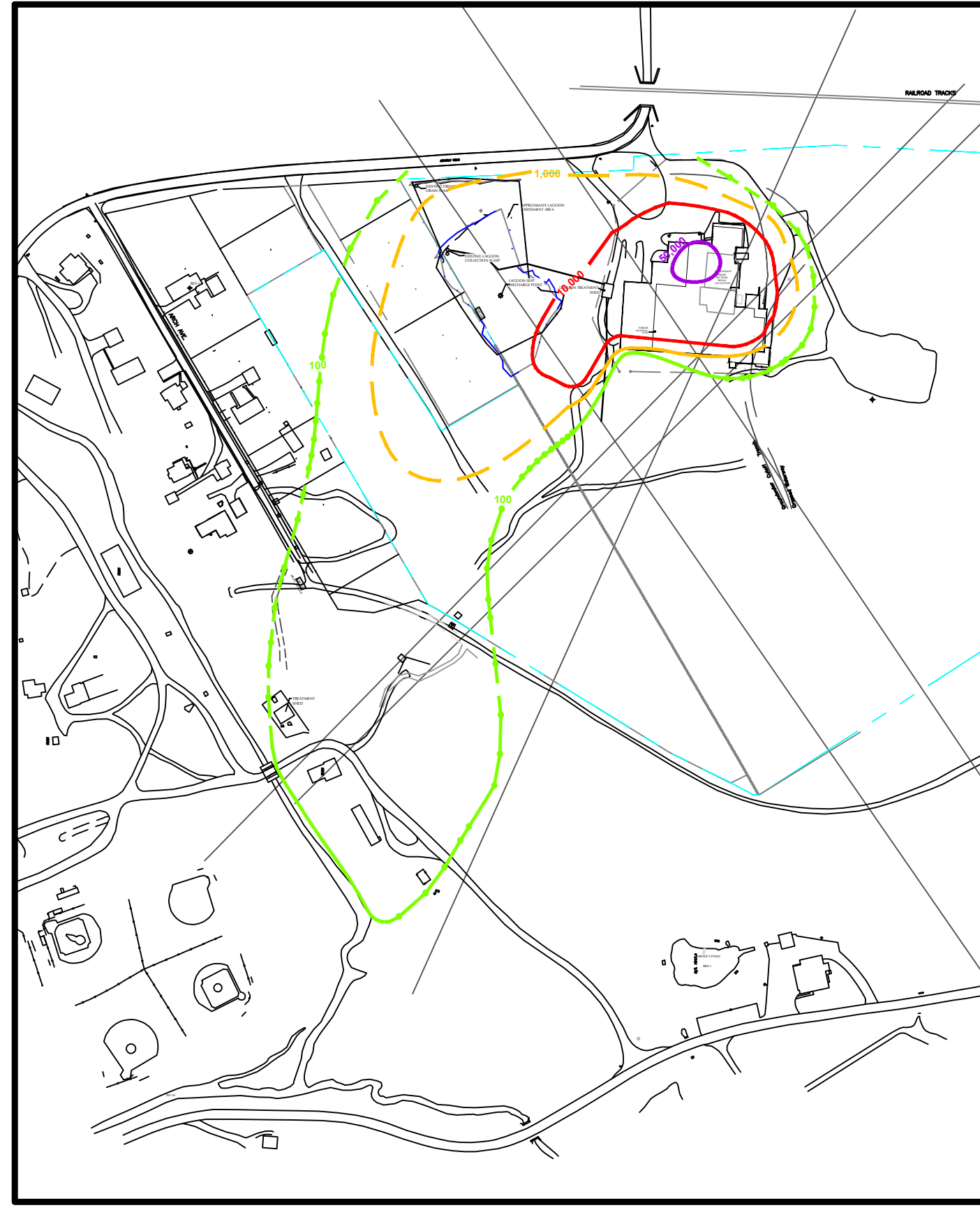
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| ARCADIS Project No. 30003895                                                     |
| Date OCTOBER 2020                                                                |
| ARCADIS<br>1 HARVARD WAY, SUITE 5<br>HILLSBOROUGH, NJ 08844<br>TEL: 908.685.7845 |

- LEGEND:
- APPROXIMATE PROPERTY BOUNDARY
  - PATH/TRAIL
  - FENCE
  - GROUNDWATER INTERCEPTOR TRENCH
  - FRACTURE TRACE (FROM R.E. WRIGHT, 1978)
  - DEEP BEDROCK MONITORING WELL
  - INTERMEDIATE BEDROCK MONITORING WELL
  - SHALLOW BEDROCK MONITORING WELL
  - OVERBURDEN MONITORING WELL
  - SURFACE WATER SAMPLE LOCATION
  - PRODUCTION WELL
  - FORMER/ABANDONED MONITORING WELL
  - SEEP
  - RES-1 ○ RESIDENTIAL POTABLE WELL

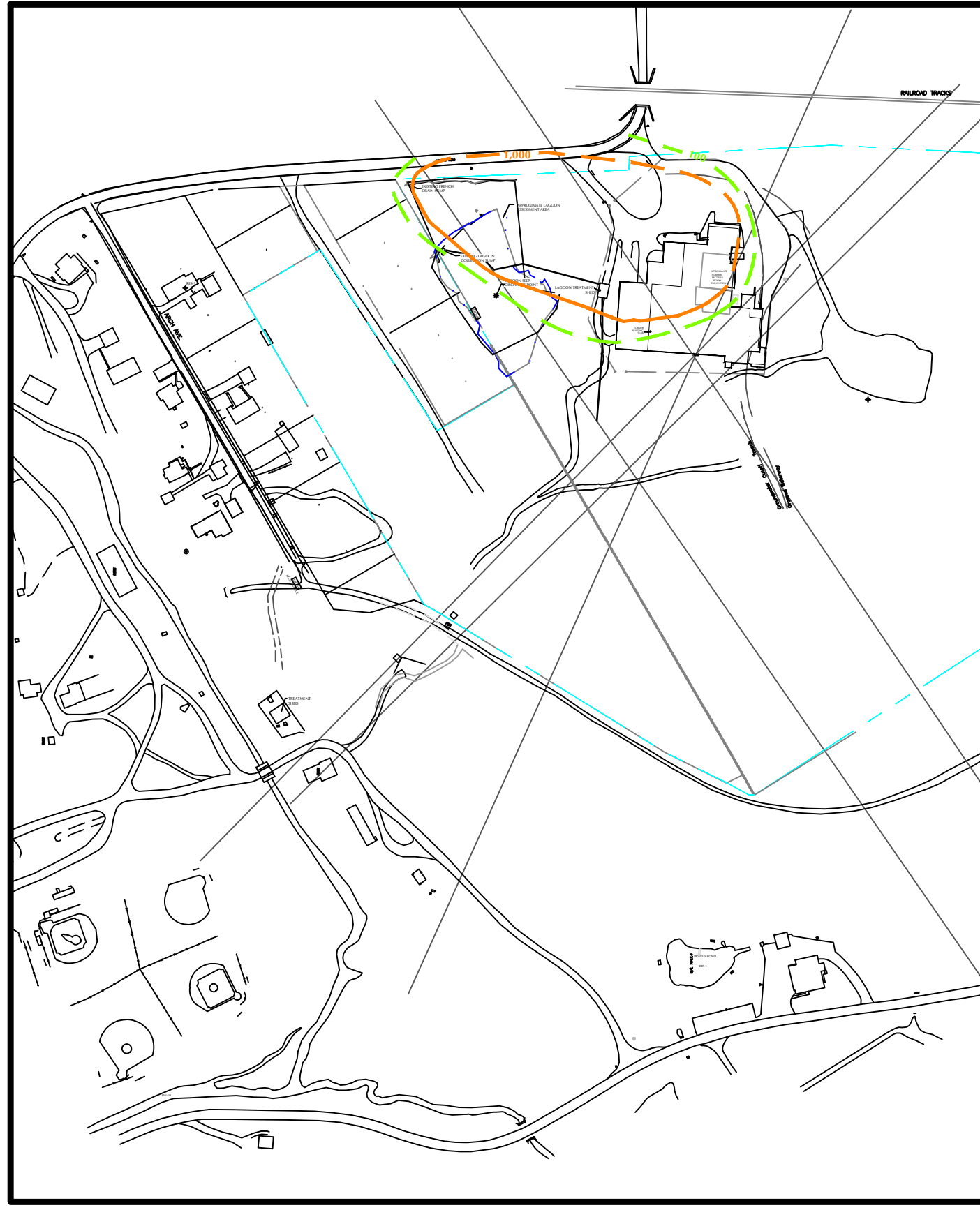


- NOTES:
- MONITORING WELLS MW-AS/AD, MW-BS/BD, MW-3S/3D, MW-9IA/9D, MW-B01S/B01D, MW-26, MW-27, MW-28, MW-31, MW-32 & MW-33 ARE NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)
  - MW-C AND MW-22 ARE CONVERTED WELLS, NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)
  - WELL LOCATIONS FROM DPK SURVEYING.
  - MAP DATUM: PENNSYLVANIA STATE PLANE, NORTH, NAD83, FEET.

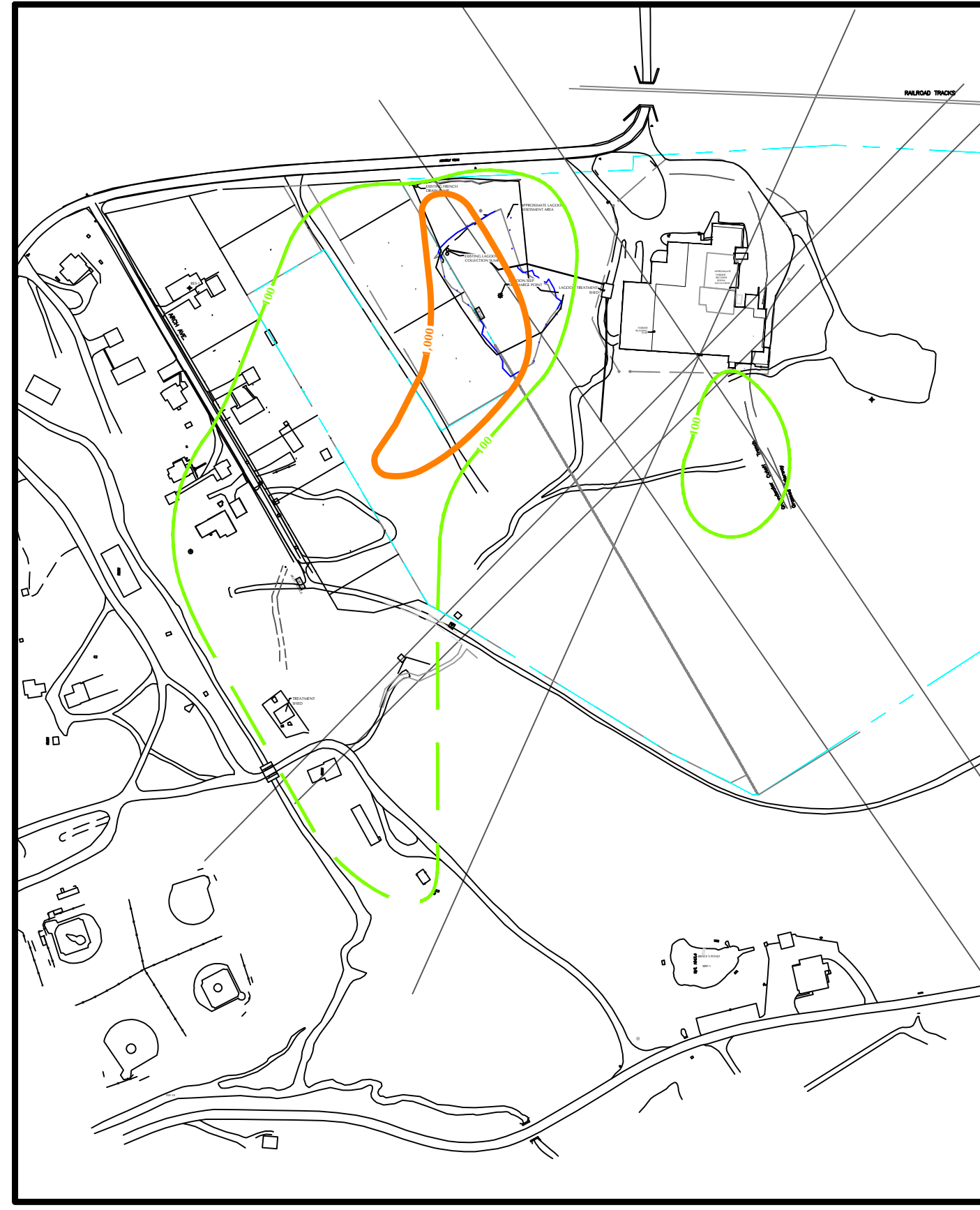
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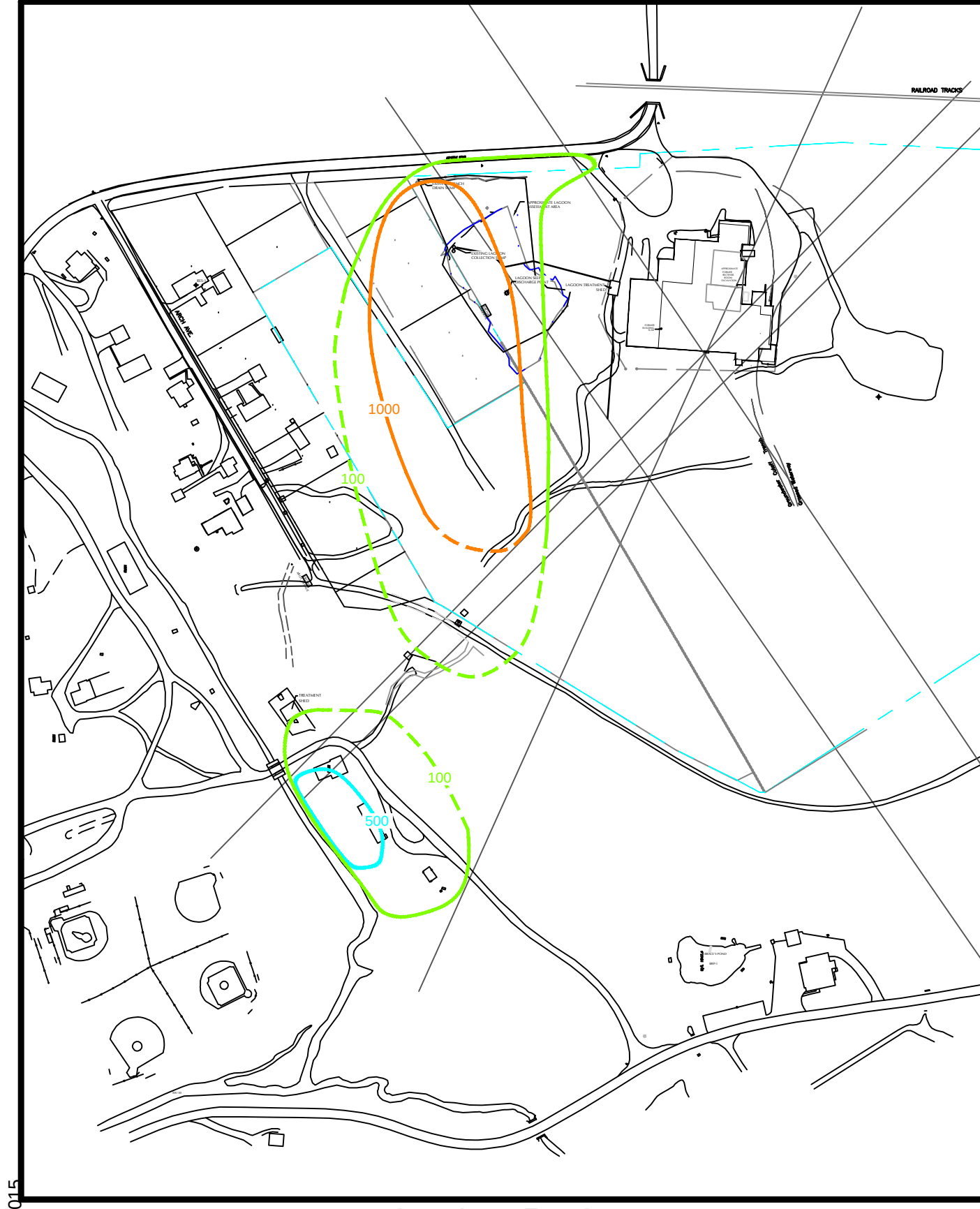
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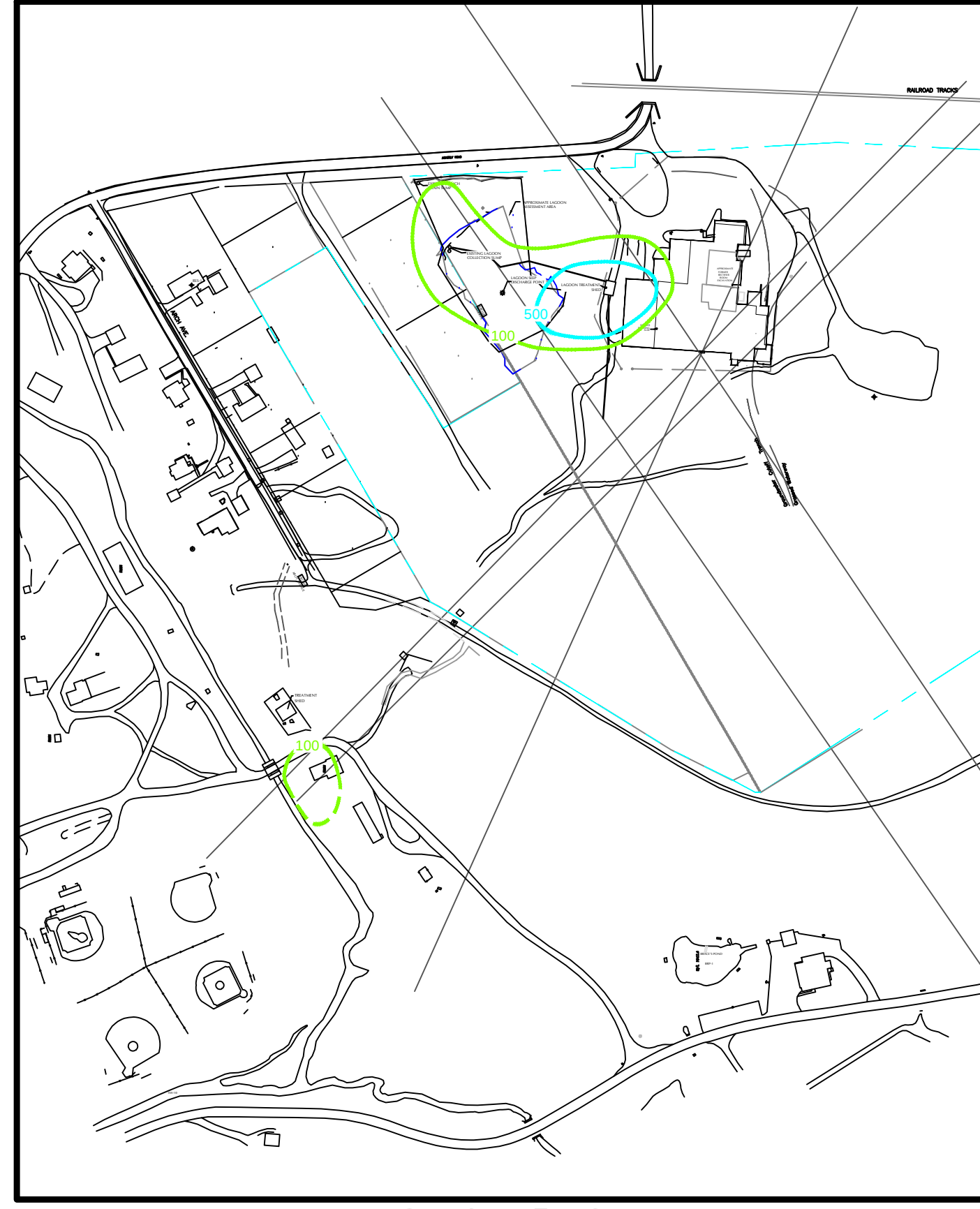
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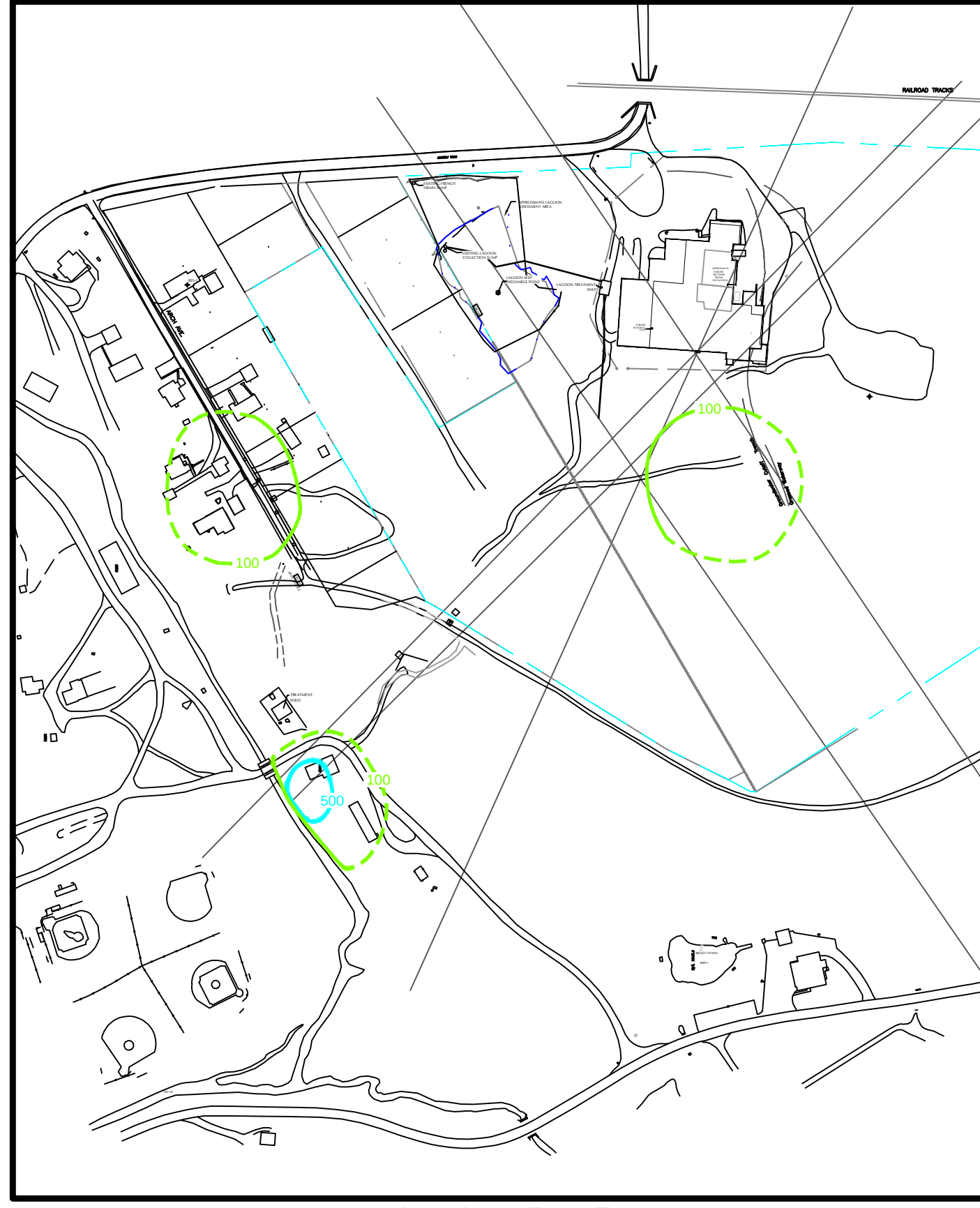
2011



2012



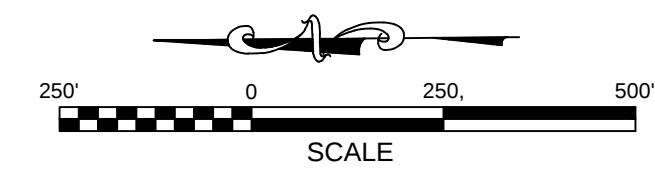
2013



2014

- LEGEND:**
- APPROXIMATE PROPERTY BOUNDARY
  - PATH/TRAIL
  - FENCE
  - GROUNDWATER INTERCEPTOR TRENCH

- HEXAVALENT CHROMIUM ISOCONCENTRATION CONTOURS:**  
(DASHED WHERE INFERRED)
- 50,000
  - 10,000
  - 1,000
  - 500
  - 100



PRECISION NATIONAL PLATING SERVICES, INC.  
198 ACKERLY ROAD  
CLARKS SUMMIT, PENNSYLVANIA

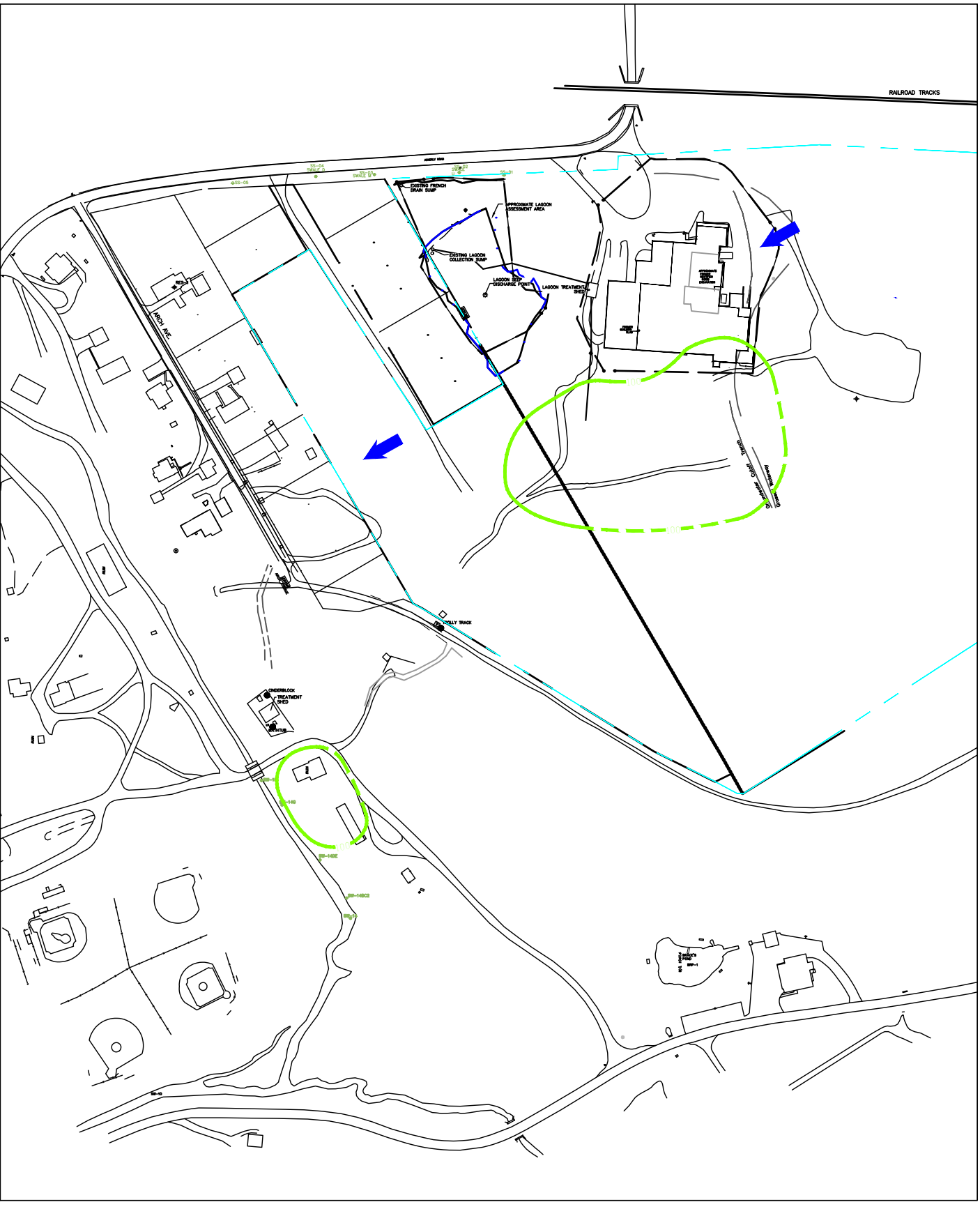
**HEXAVALENT CHROMIUM  
CONCENTRATIONS IN GROUNDWATER-  
OVERBURDEN 2008 TO 2022**



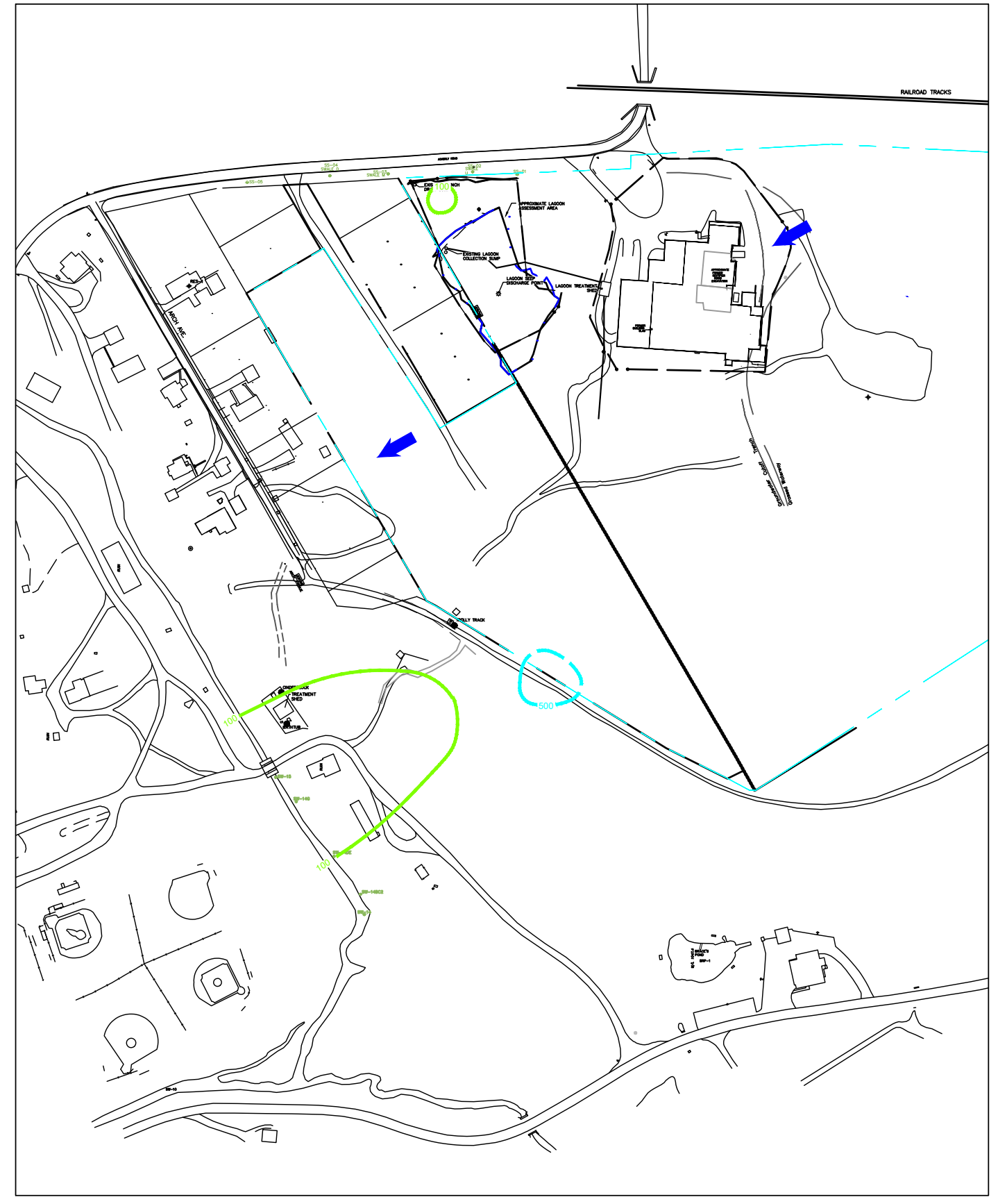
Design & Consultancy  
for natural and  
built assets

FIGURE  
3a

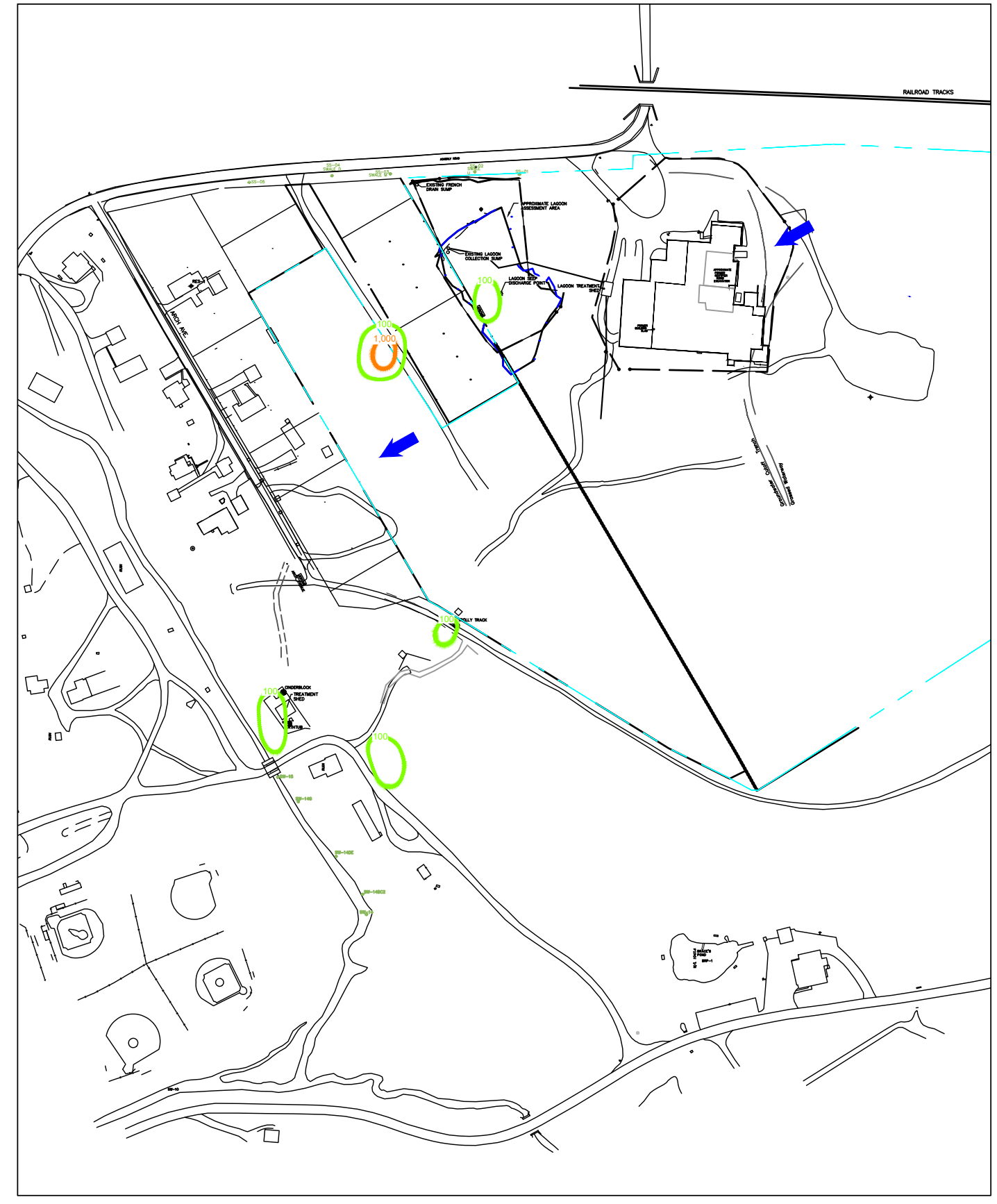
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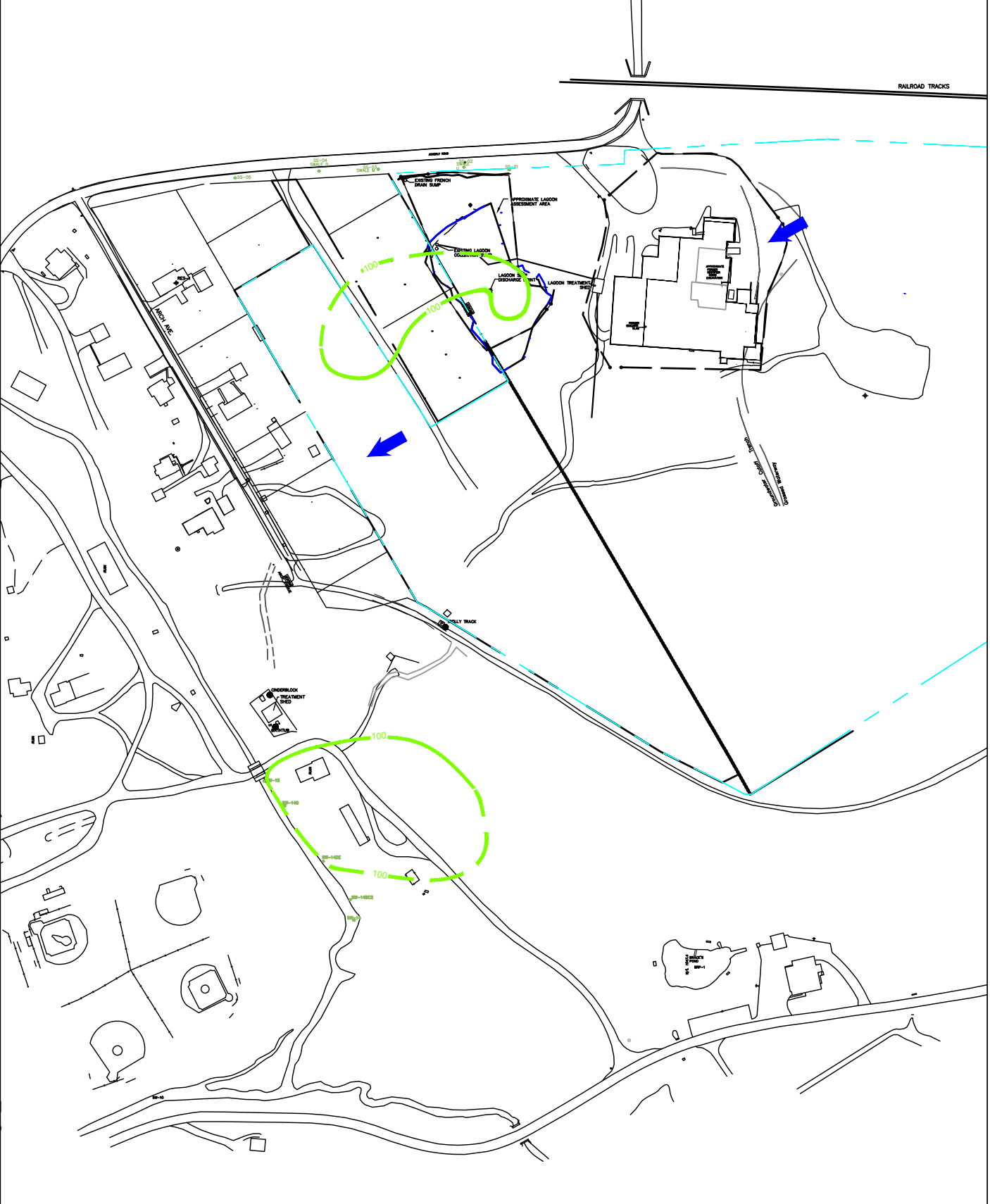
2017



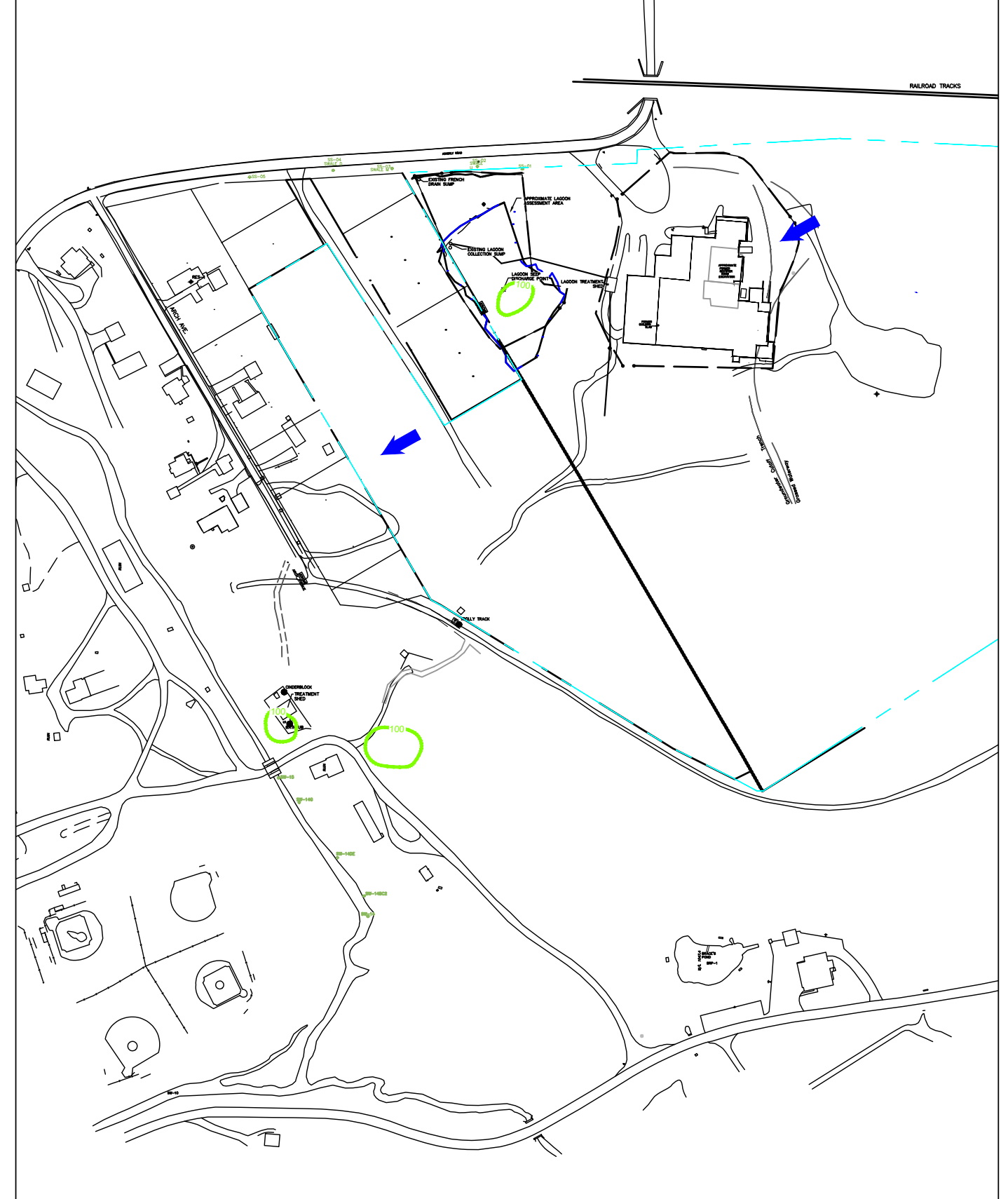
2018



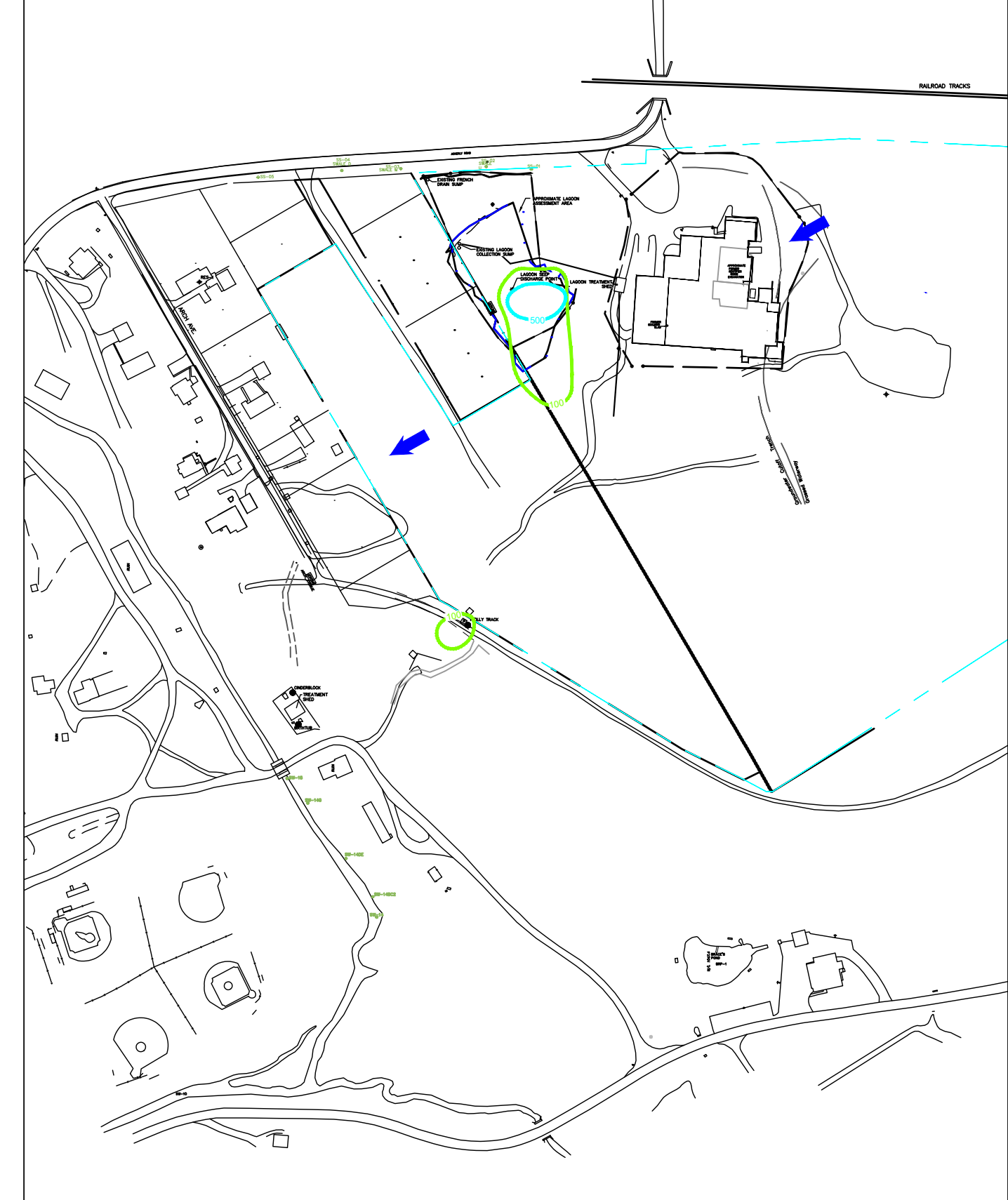
2019



2020



2021



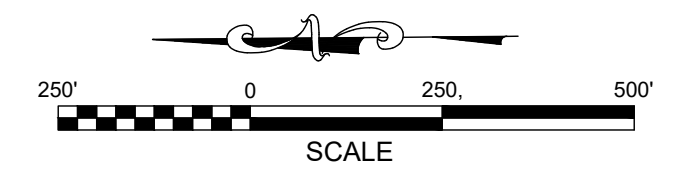
2022

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- PATH/TRAIL
- FENCE
- GROUNDWATER INTERCEPTOR TRENCH
- ➡ GROUNDWATER FLOW DIRECTION

HEXAVALENT CHROMIUM ISOCONCENTRATION CONTOURS:  
(DASHED WHERE INFERRED)

- 50,000
- 10,000
- 1,000
- 500
- 100



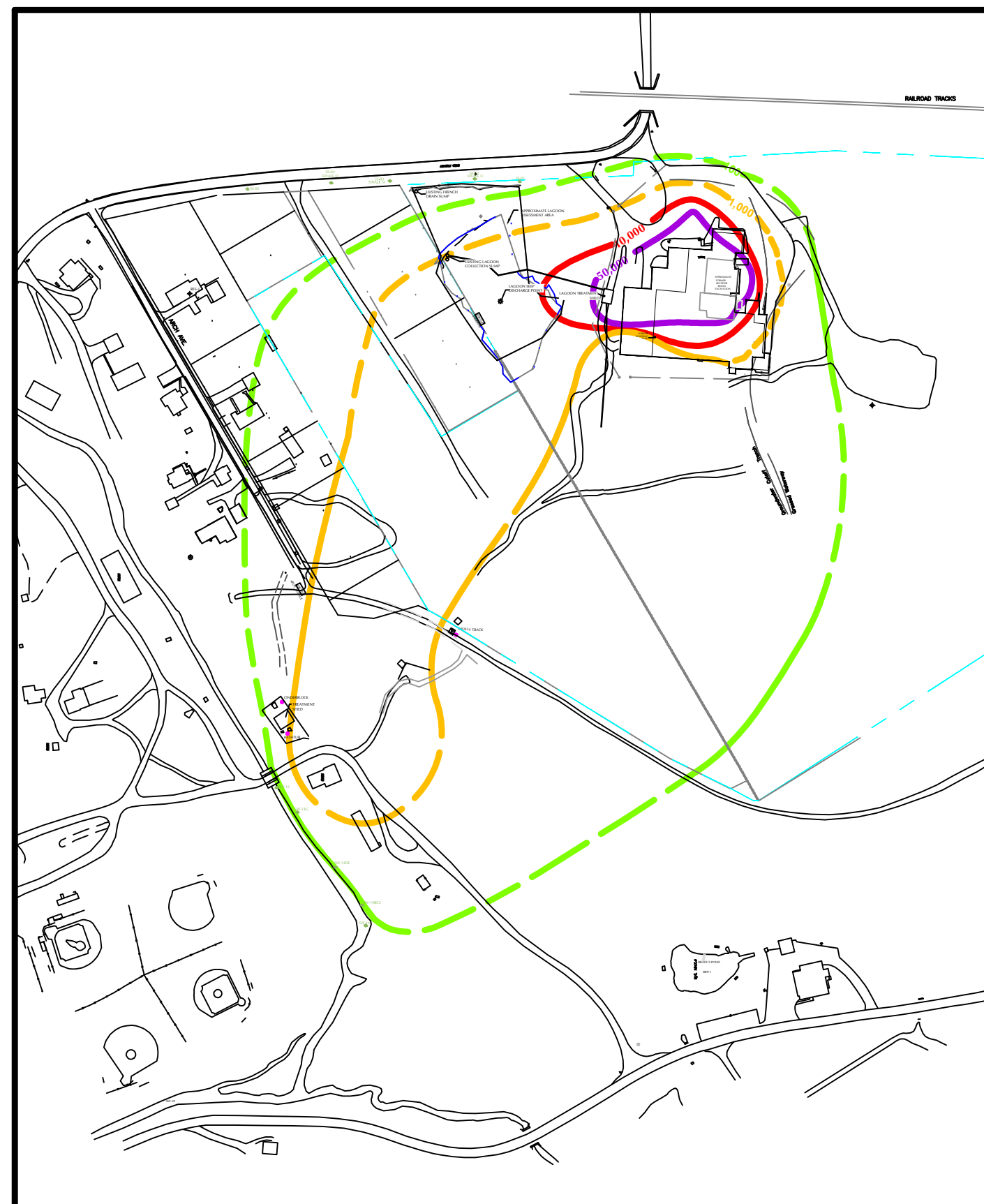
PRECISION NATIONAL PLATING SERVICES, INC.  
198 ACKERLY ROAD  
CLARKS SUMMIT, PENNSYLVANIA

HEXAVALENT CHROMIUM  
CONCENTRATIONS IN GROUNDWATER-  
OVERBURDEN 2008 TO 2022

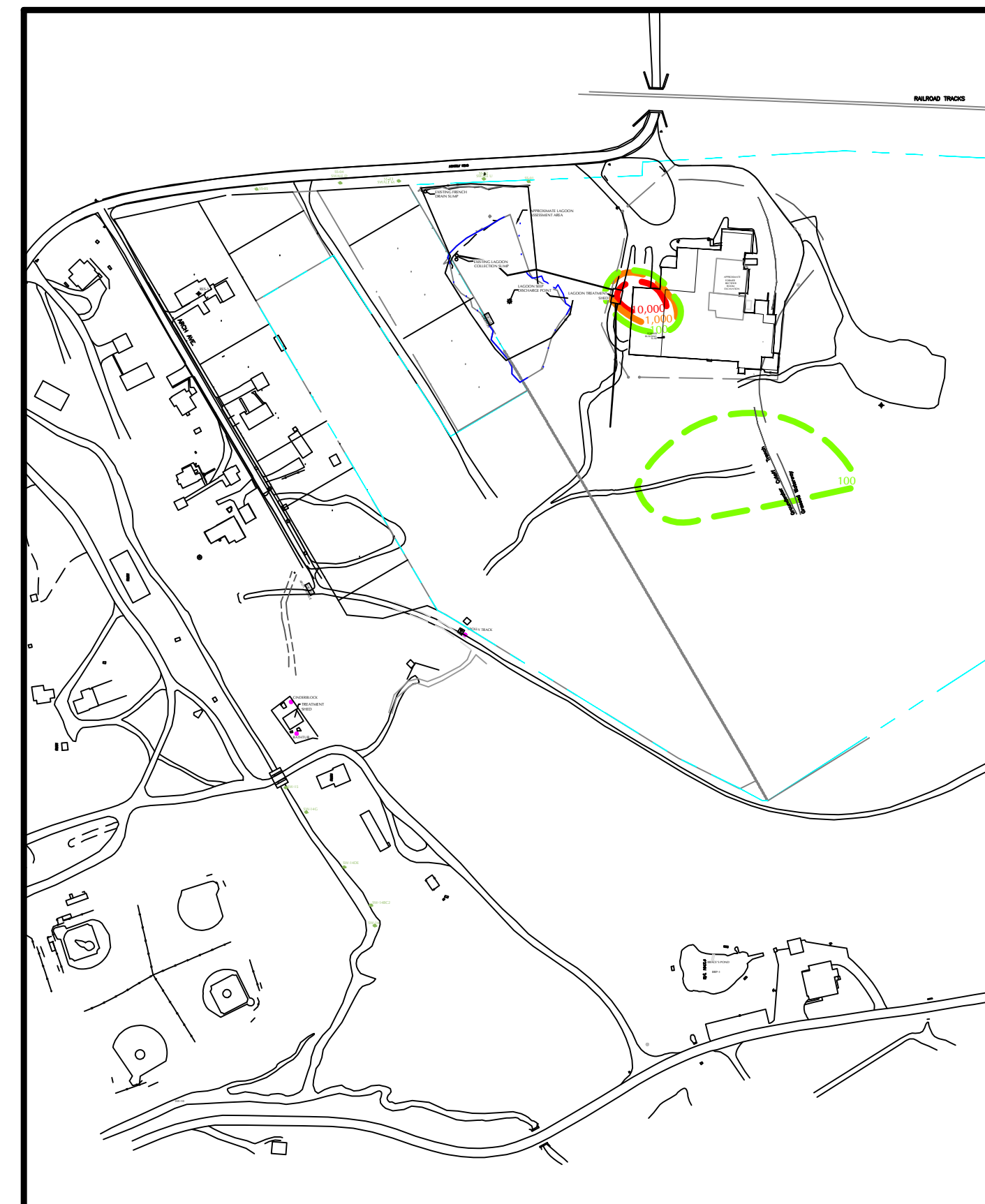
ARCADIS

FIGURE  
3b

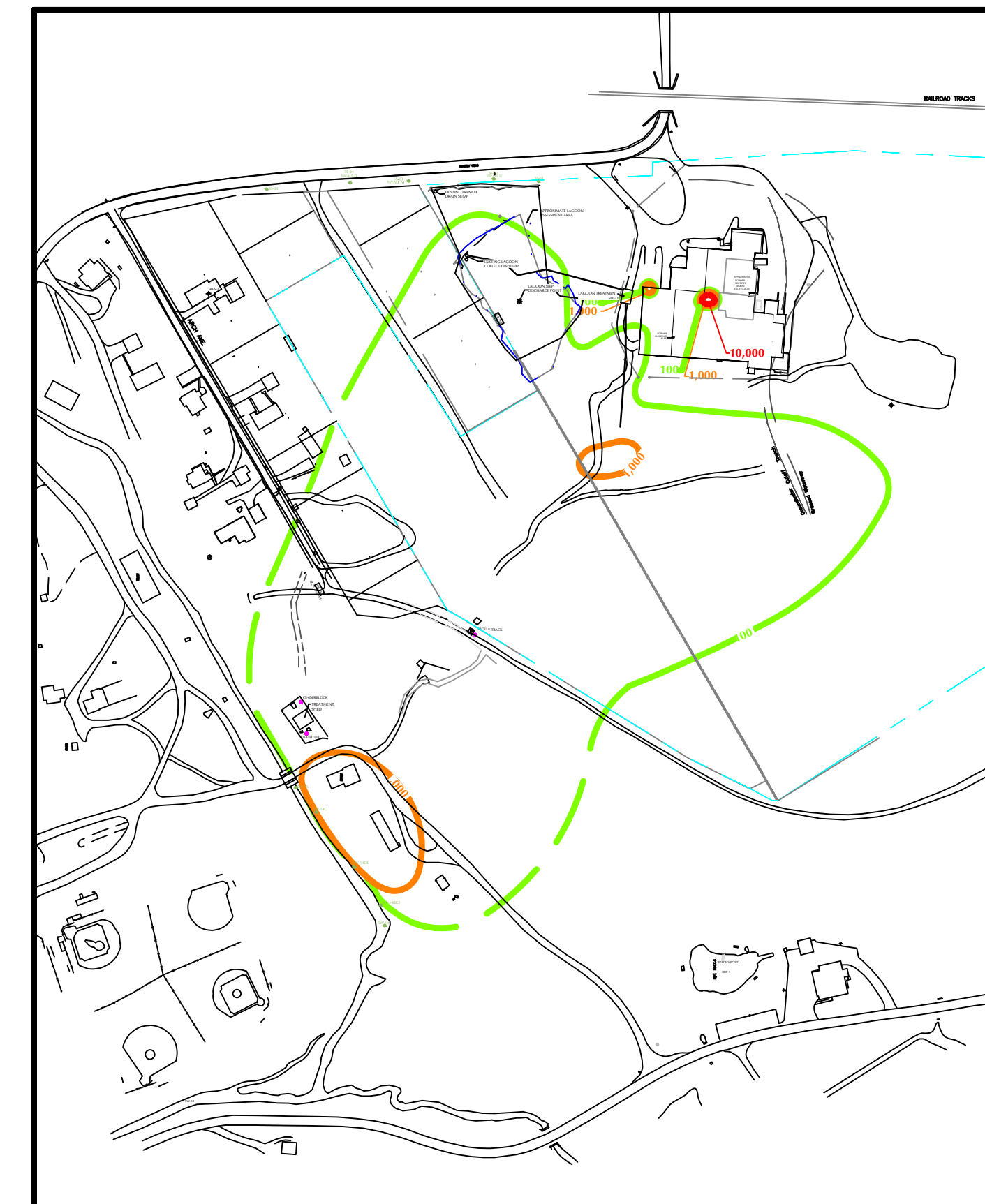
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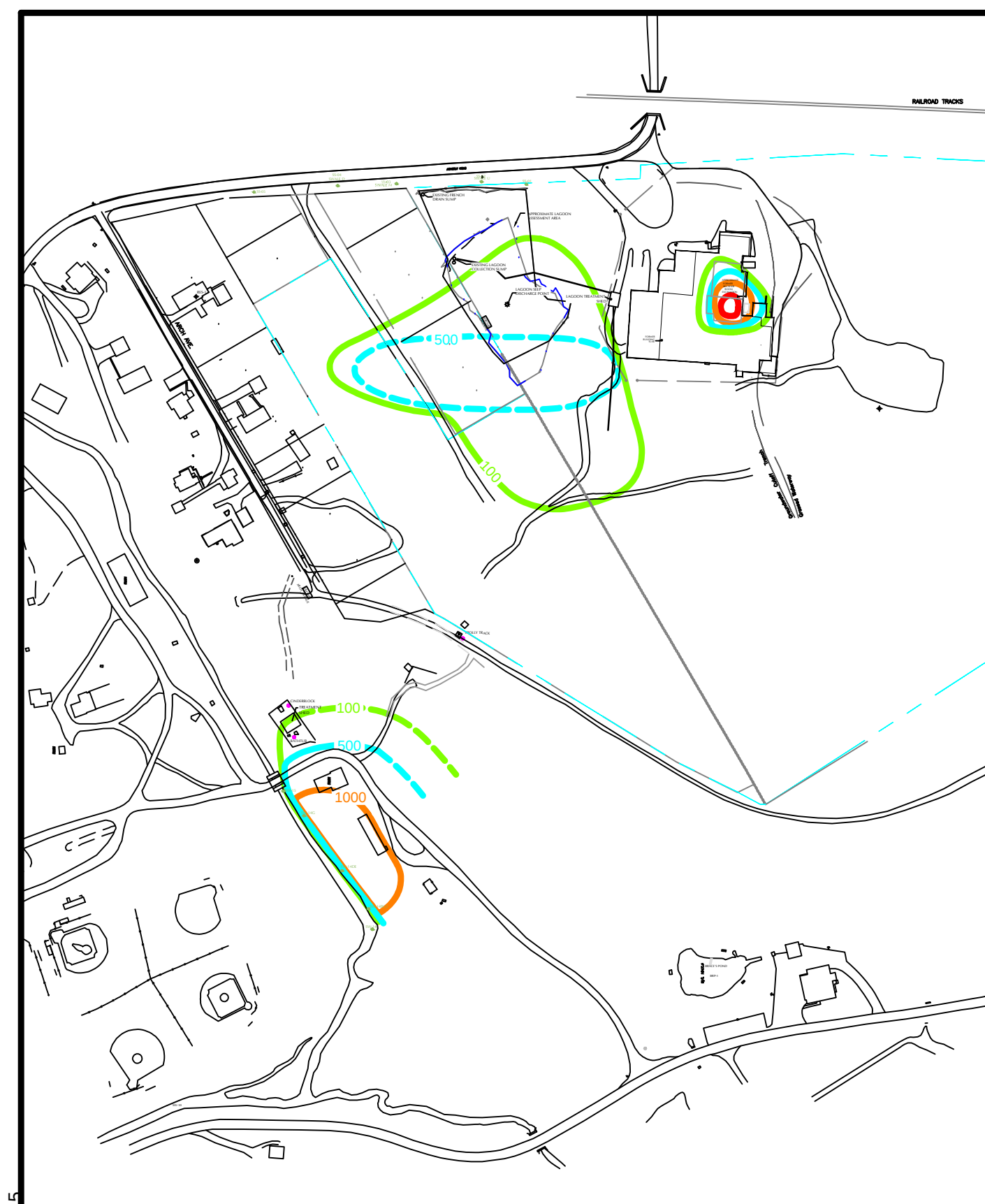
2008



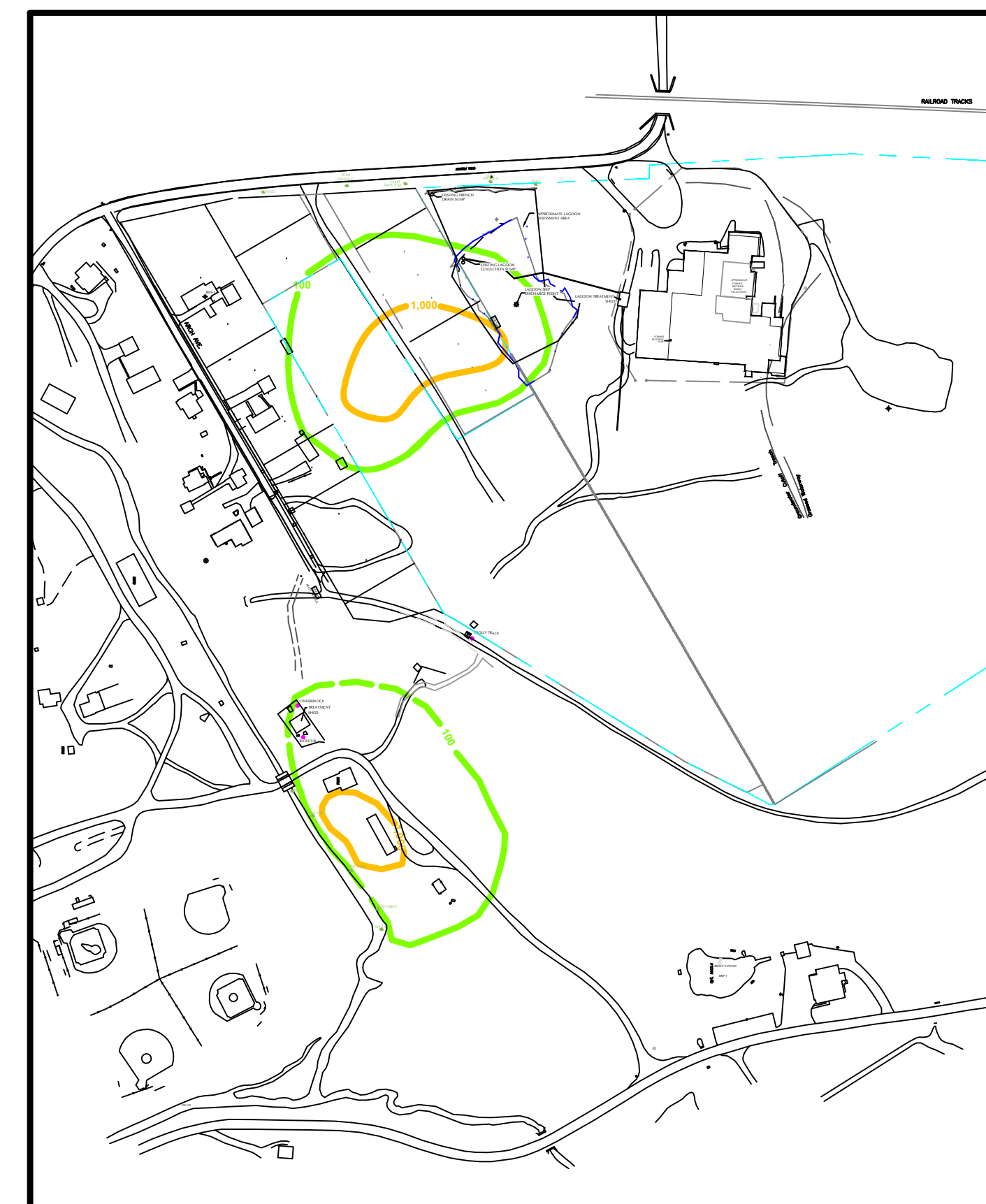
2009



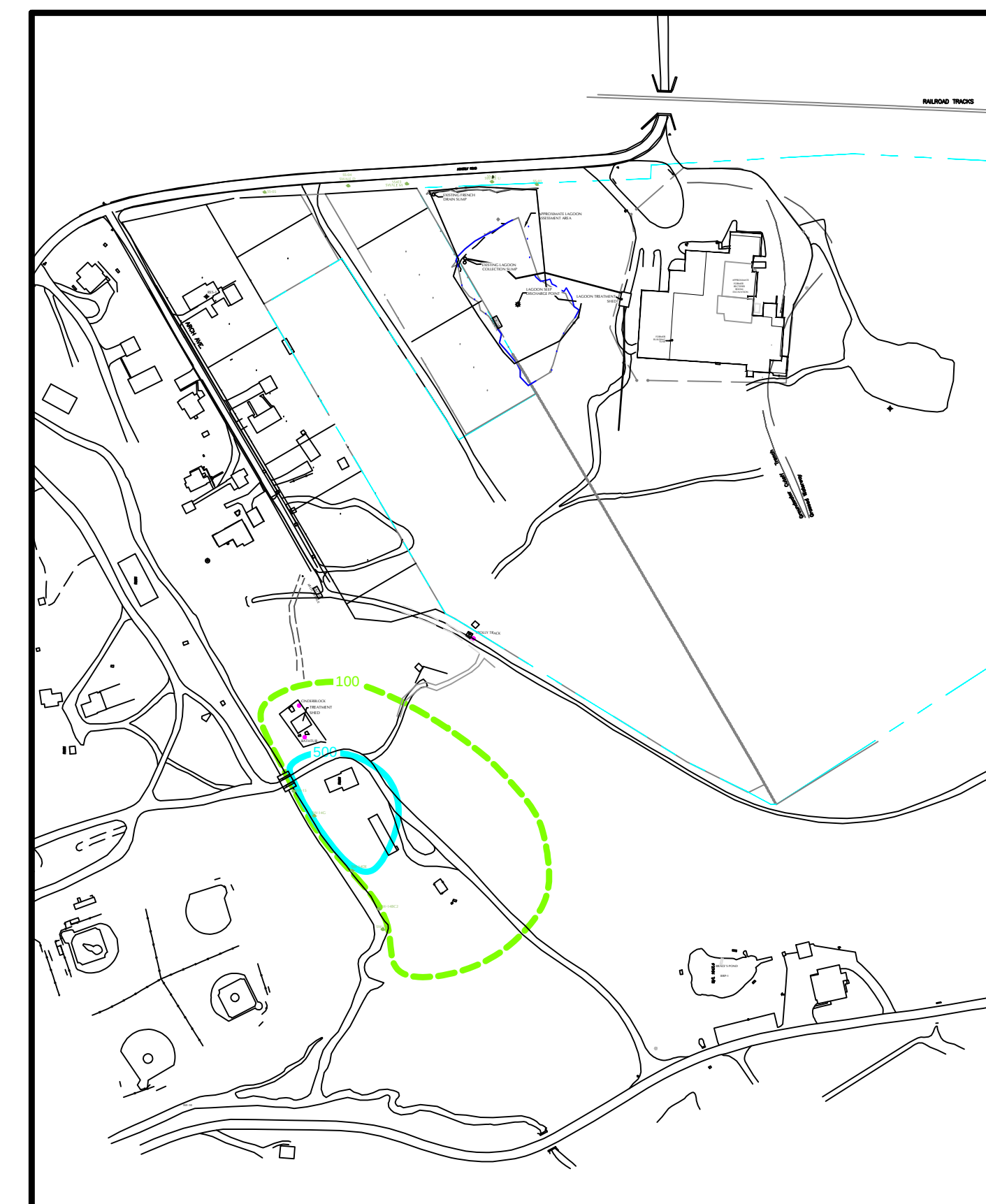
2011



2012



2013



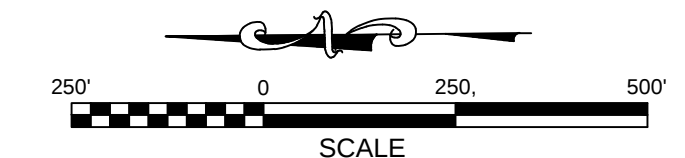
2014

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- PATH/TRAIL
- FENCE
- GROUNDWATER INTERCEPTOR TRENCH

HEXAVALENT CHROMIUM ISOCONCENTRATION CONTOURS:  
(DASHED WHERE INFERRED)

- 50,000
- 10,000
- 1,000
- 500
- 100



PRECISION NATIONAL PLATING SERVICES, INC.  
198 ACKERLY ROAD  
CLARKS SUMMIT, PENNSYLVANIA

HEXAVALENT CHROMIUM  
CONCENTRATIONS IN GROUNDWATER-  
SHALLOW BEDROCK 2008 TO 2022

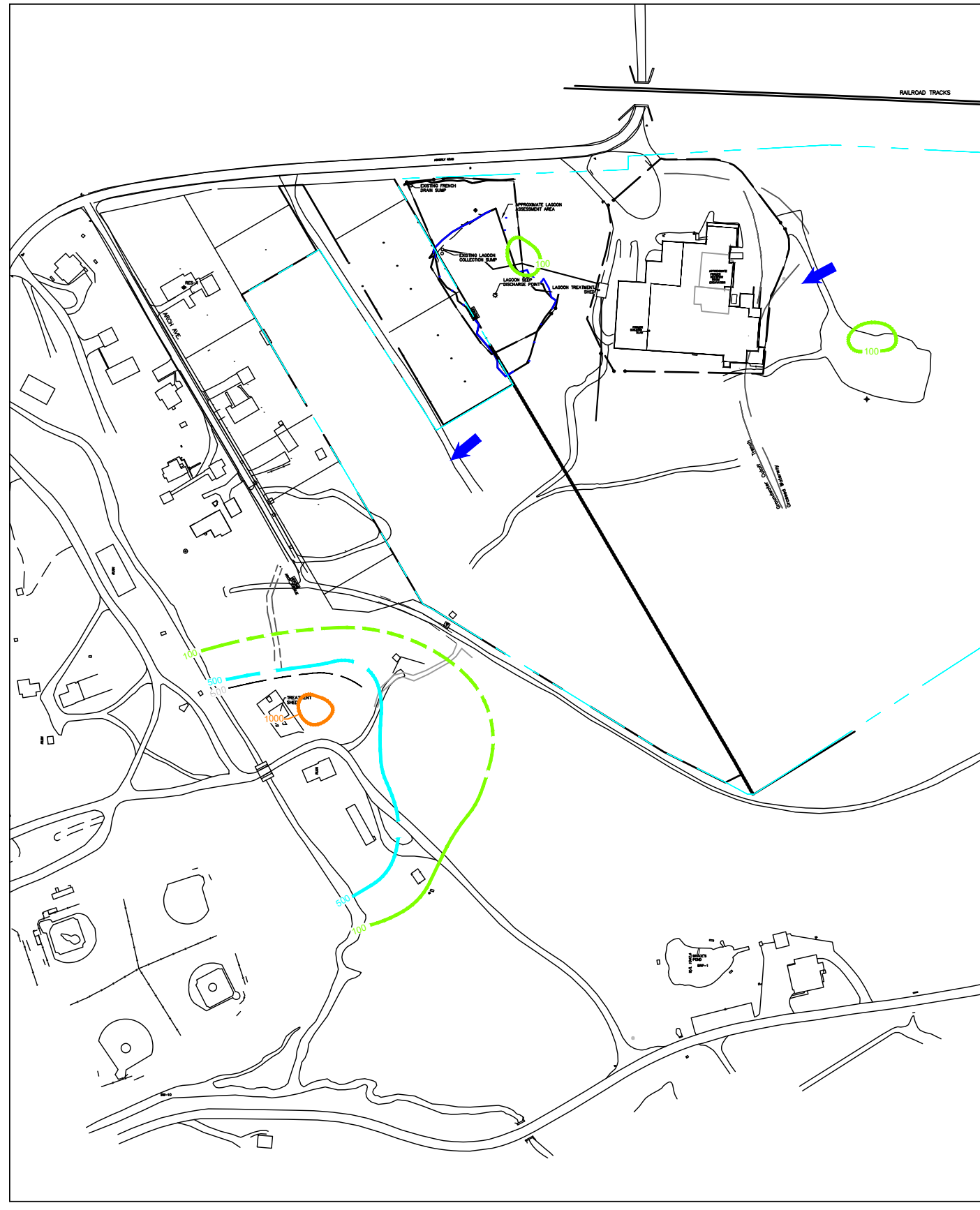
ARCADIS Design & Consultancy  
for natural and  
built assets

FIGURE  
4a

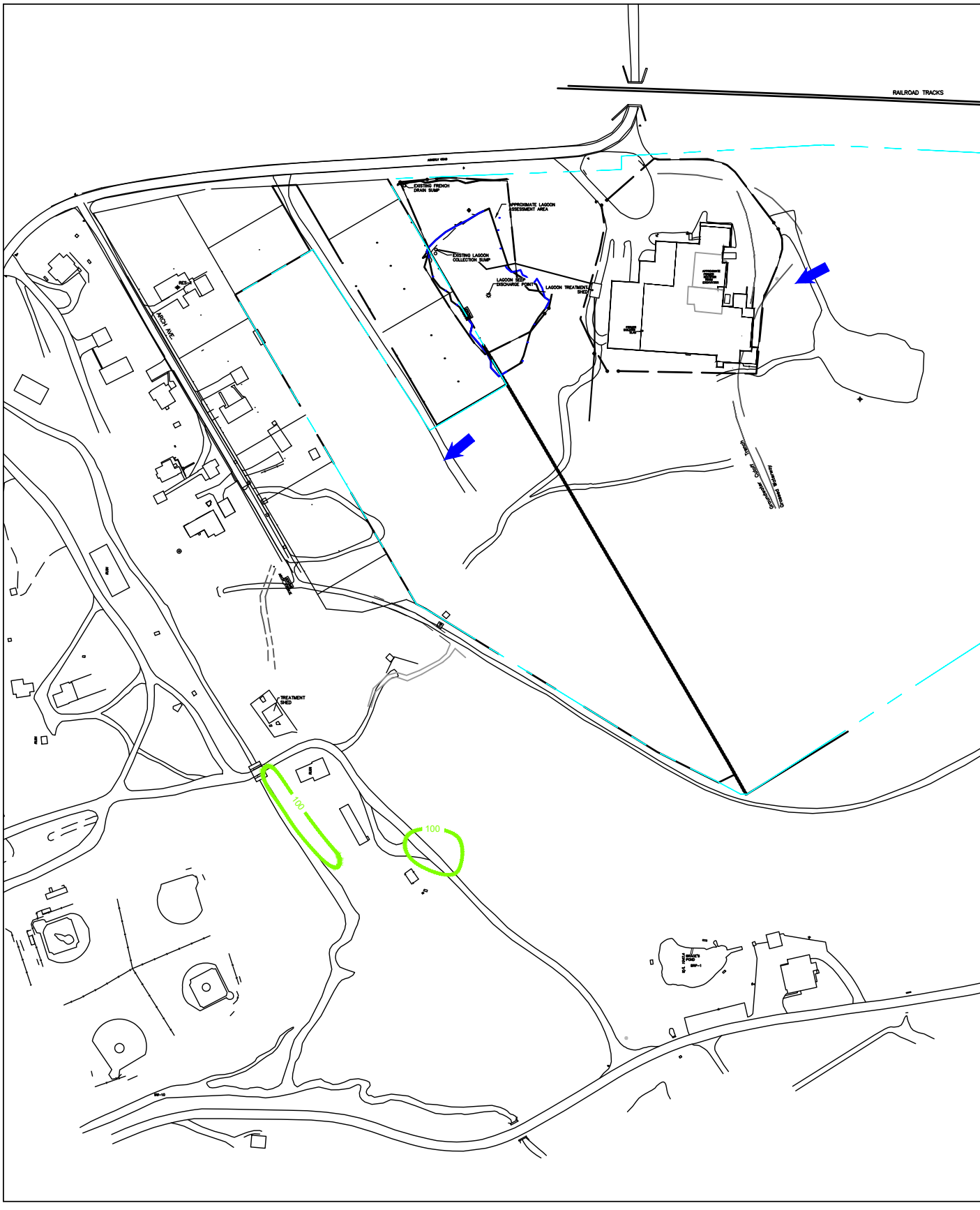
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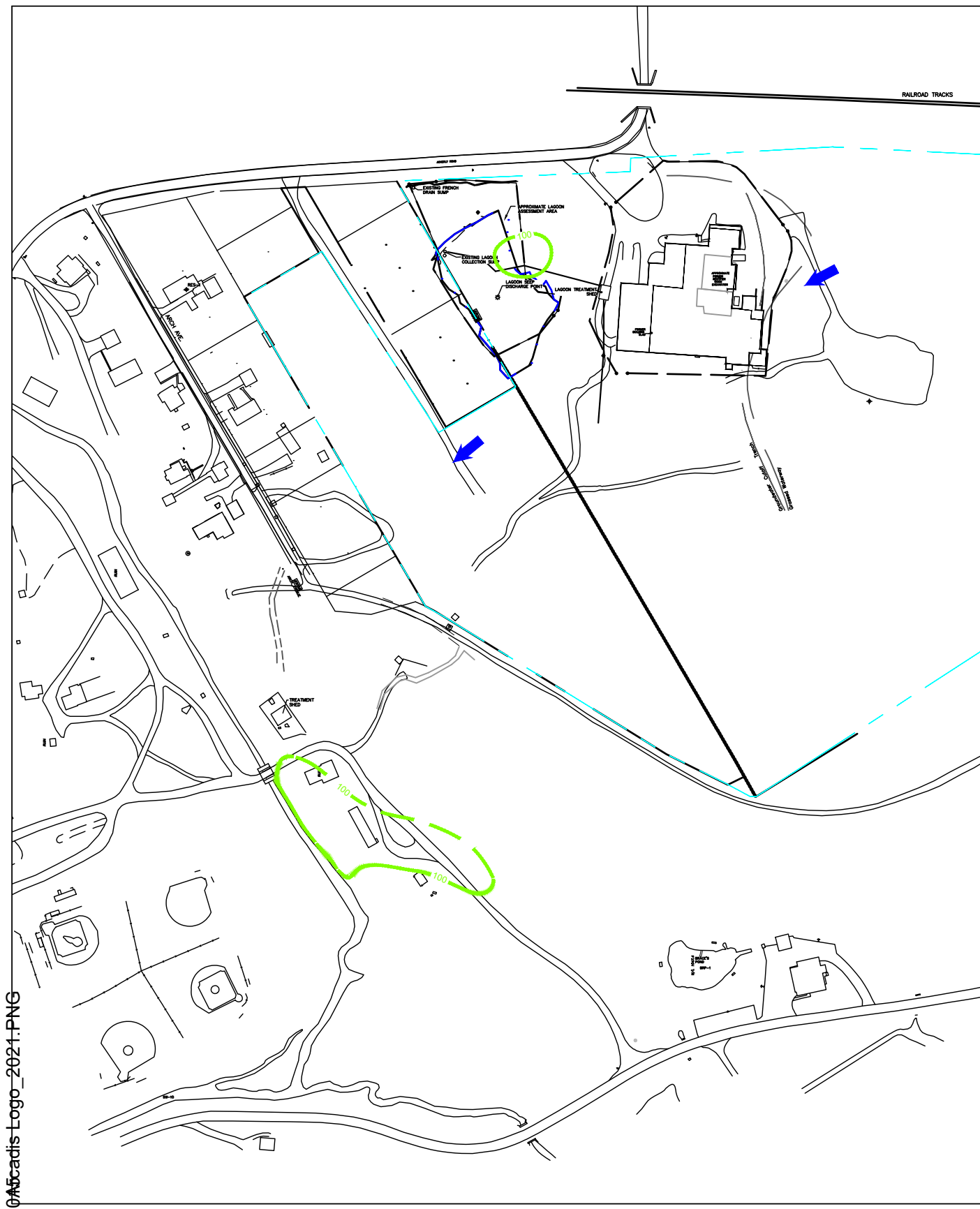
2017



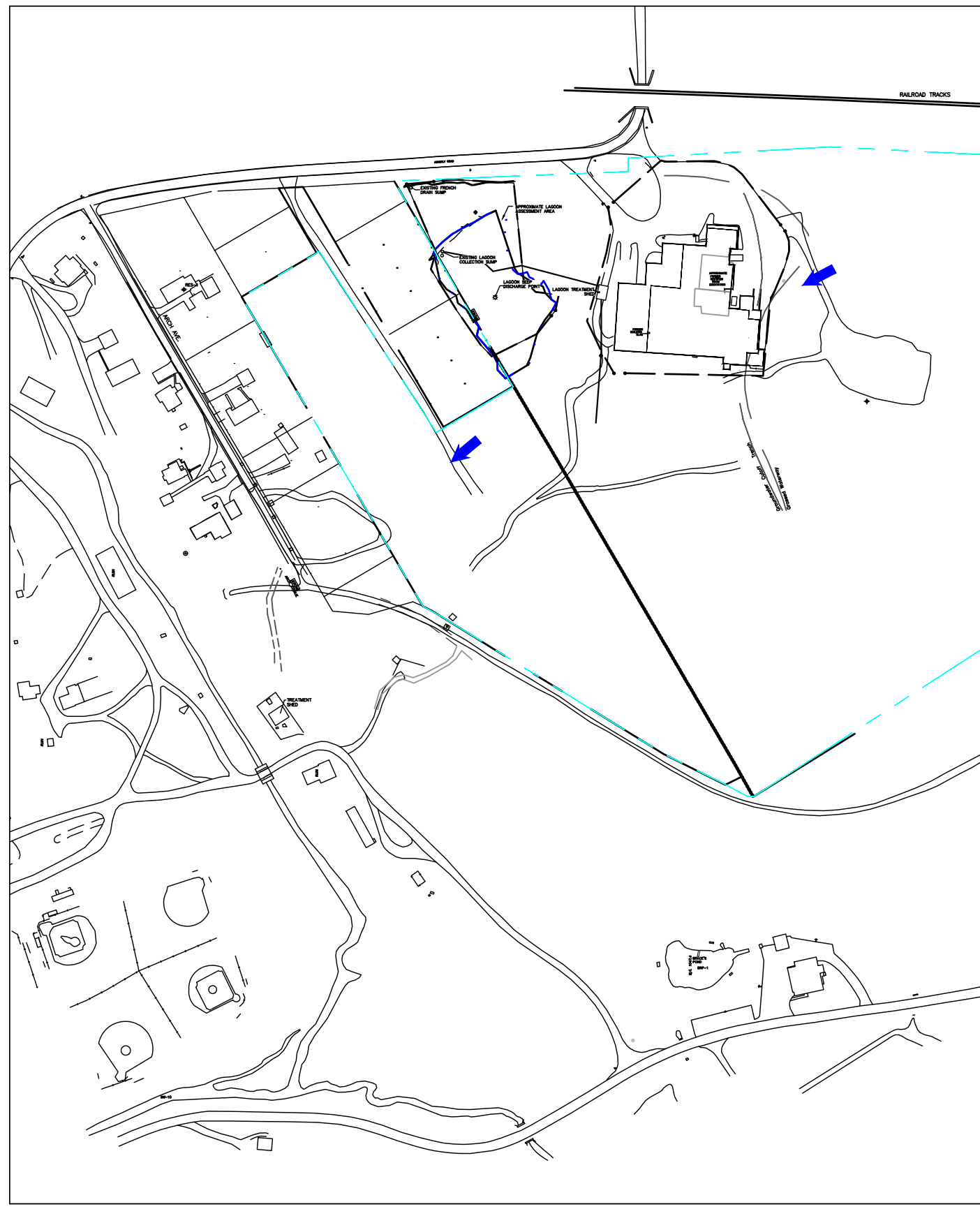
2018



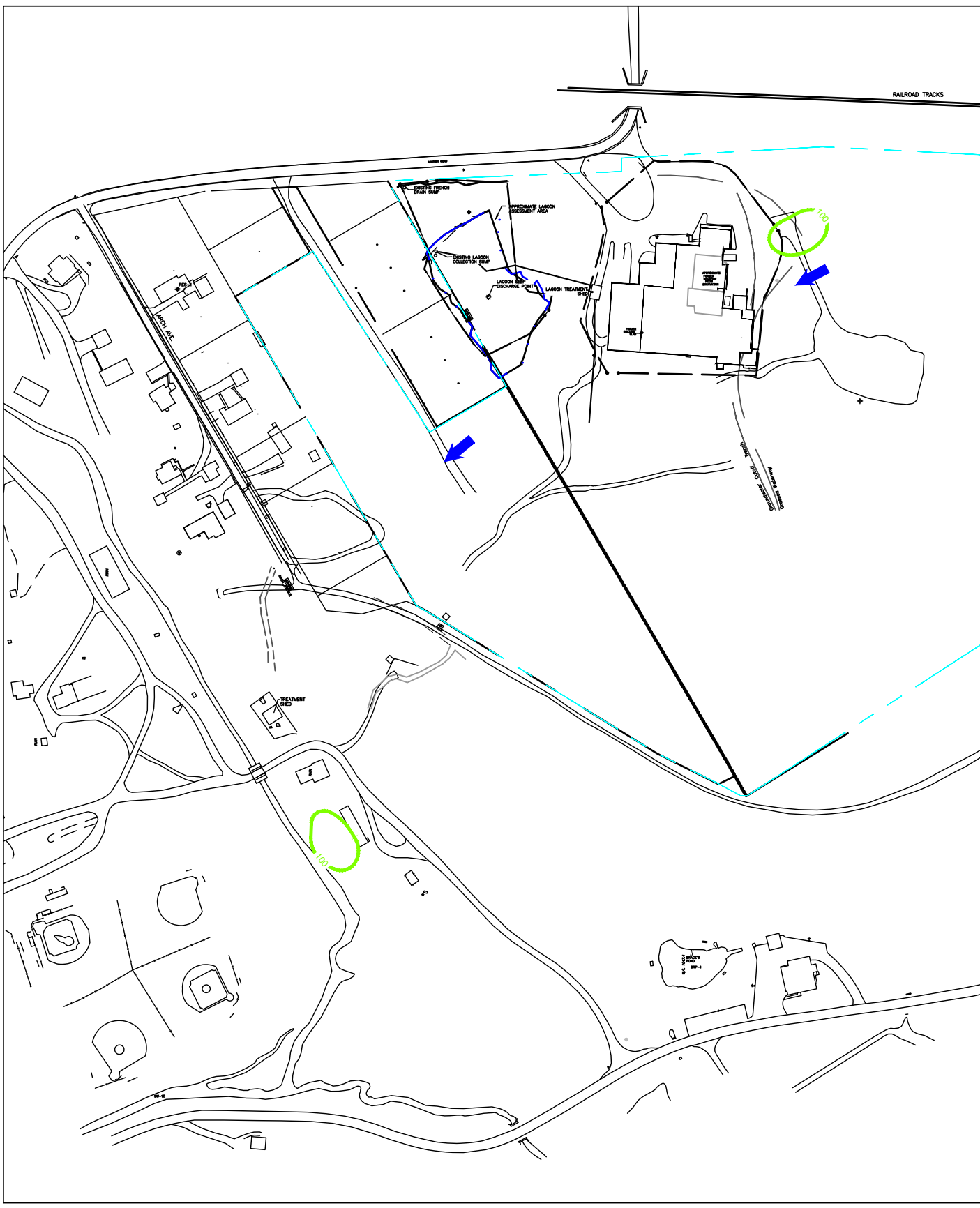
2019



2020



2021



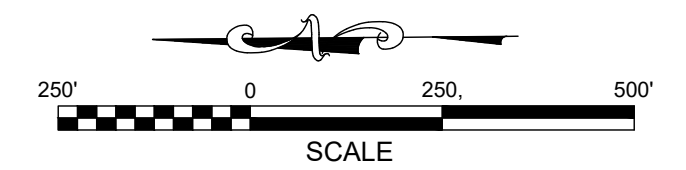
2022

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- PATH/TRAIL
- FENCE
- GROUNDWATER INTERCEPTOR TRENCH
- GROUNDWATER FLOW DIRECTION

HEXAVALENT CHROMIUM ISOCONCENTRATION CONTOURS:  
(DASHED WHERE INFERRED)

- 50,000
- 10,000
- 1,000
- 500
- 100



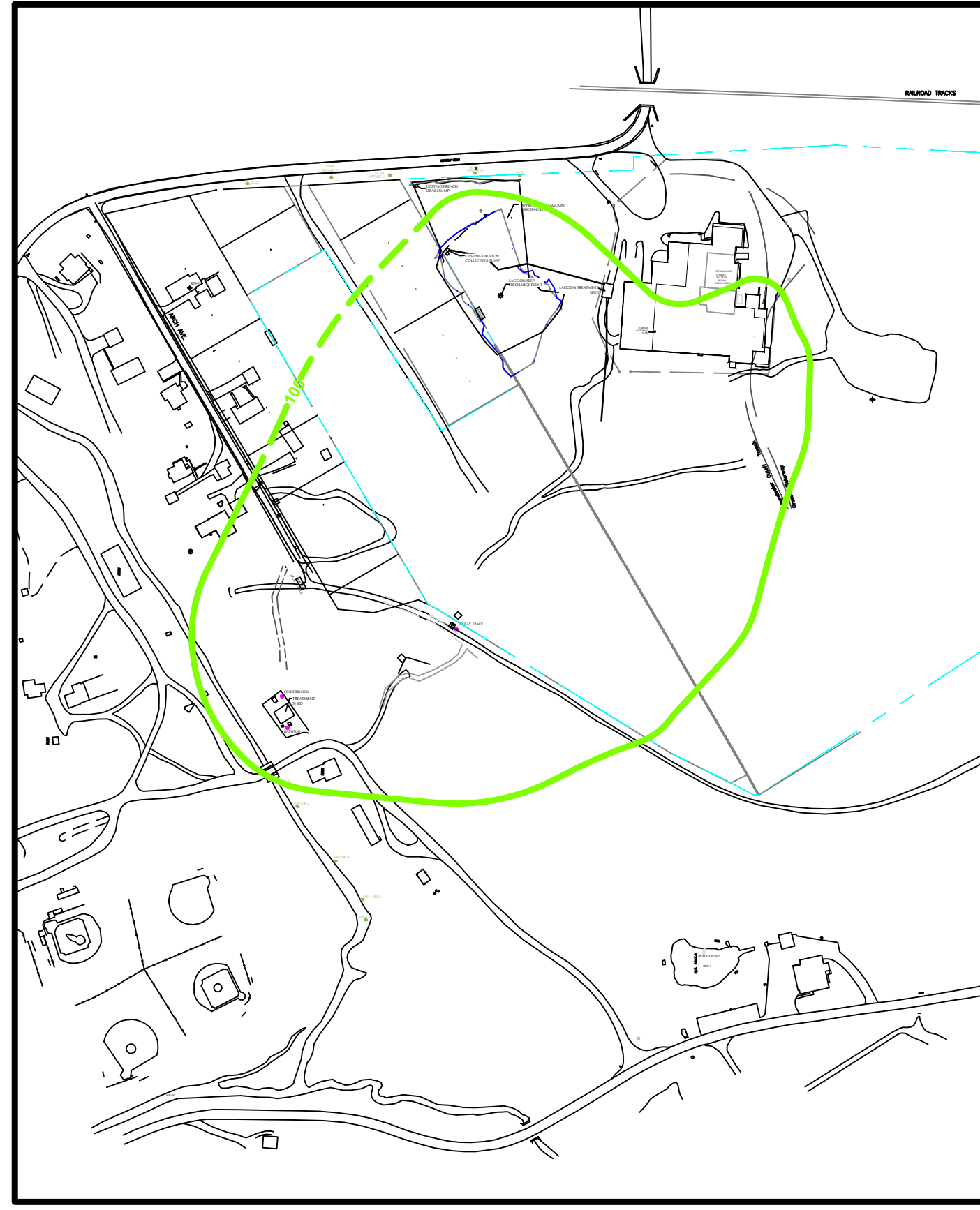
PRECISION NATIONAL PLATING SERVICES, INC.  
198 ACKERLY ROAD  
CLARKS SUMMIT, PENNSYLVANIA

HEXAVALENT CHROMIUM  
CONCENTRATIONS IN GROUNDWATER  
-SHALLOW BEDROCK 2008 TO 2022

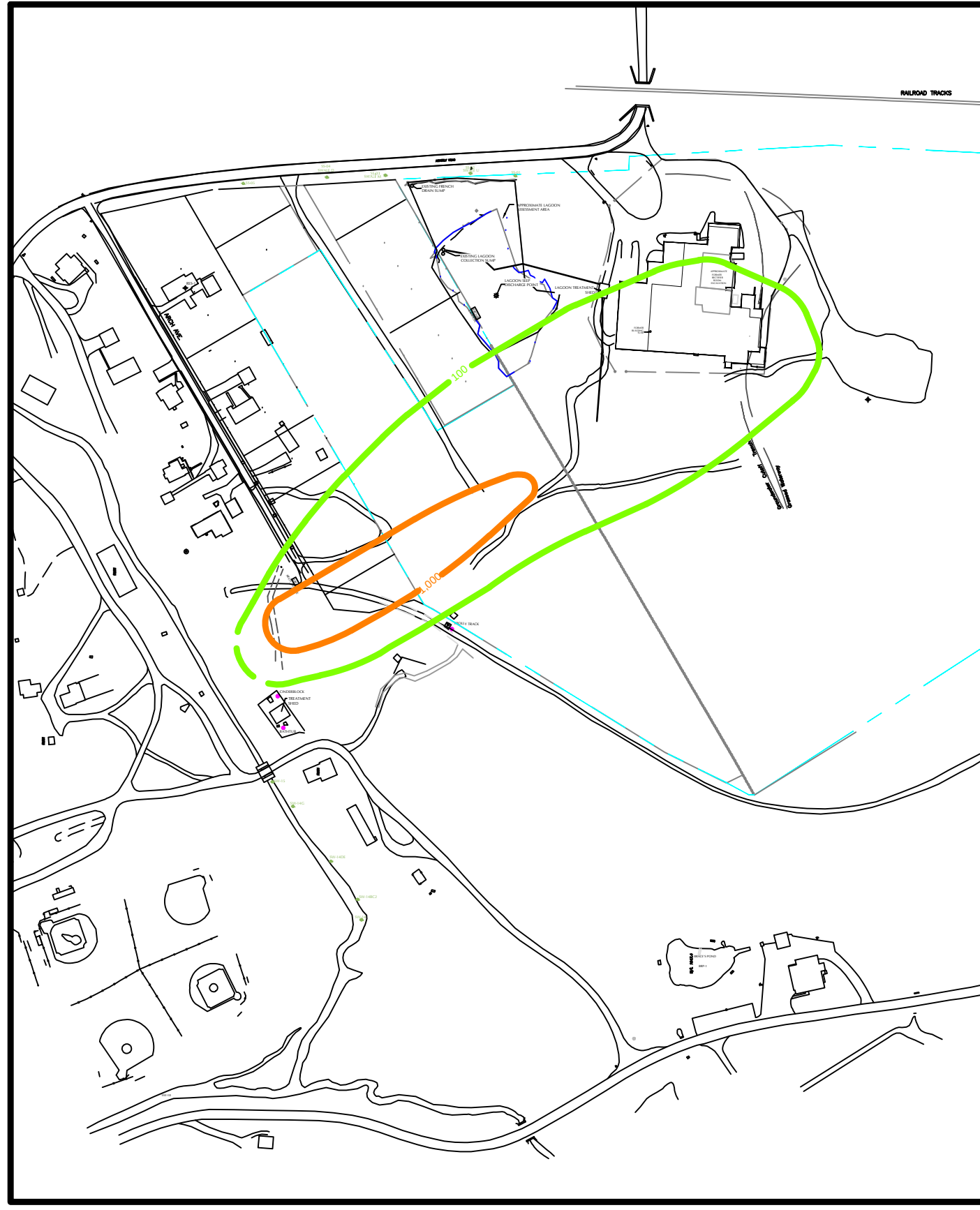


FIGURE  
4b

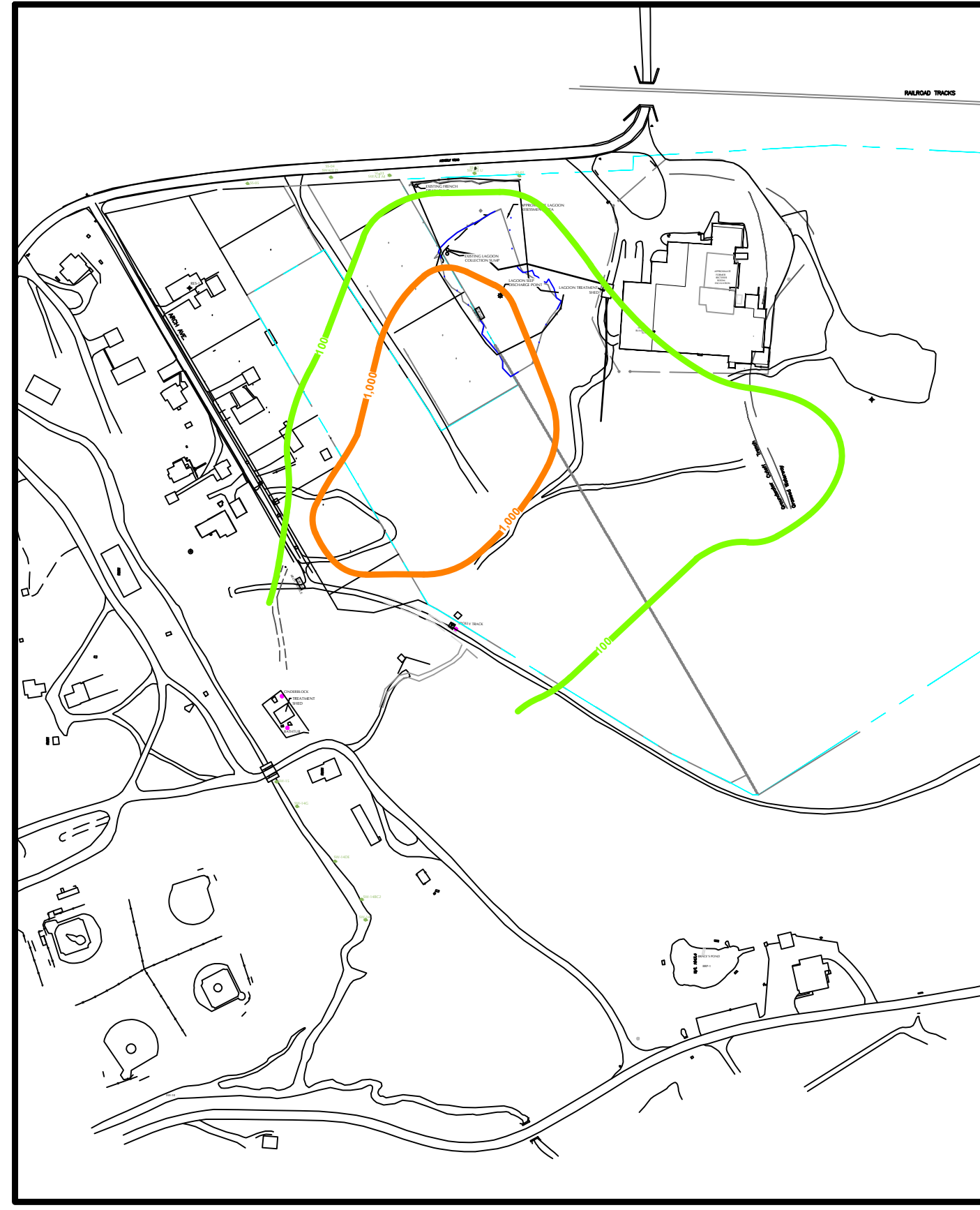
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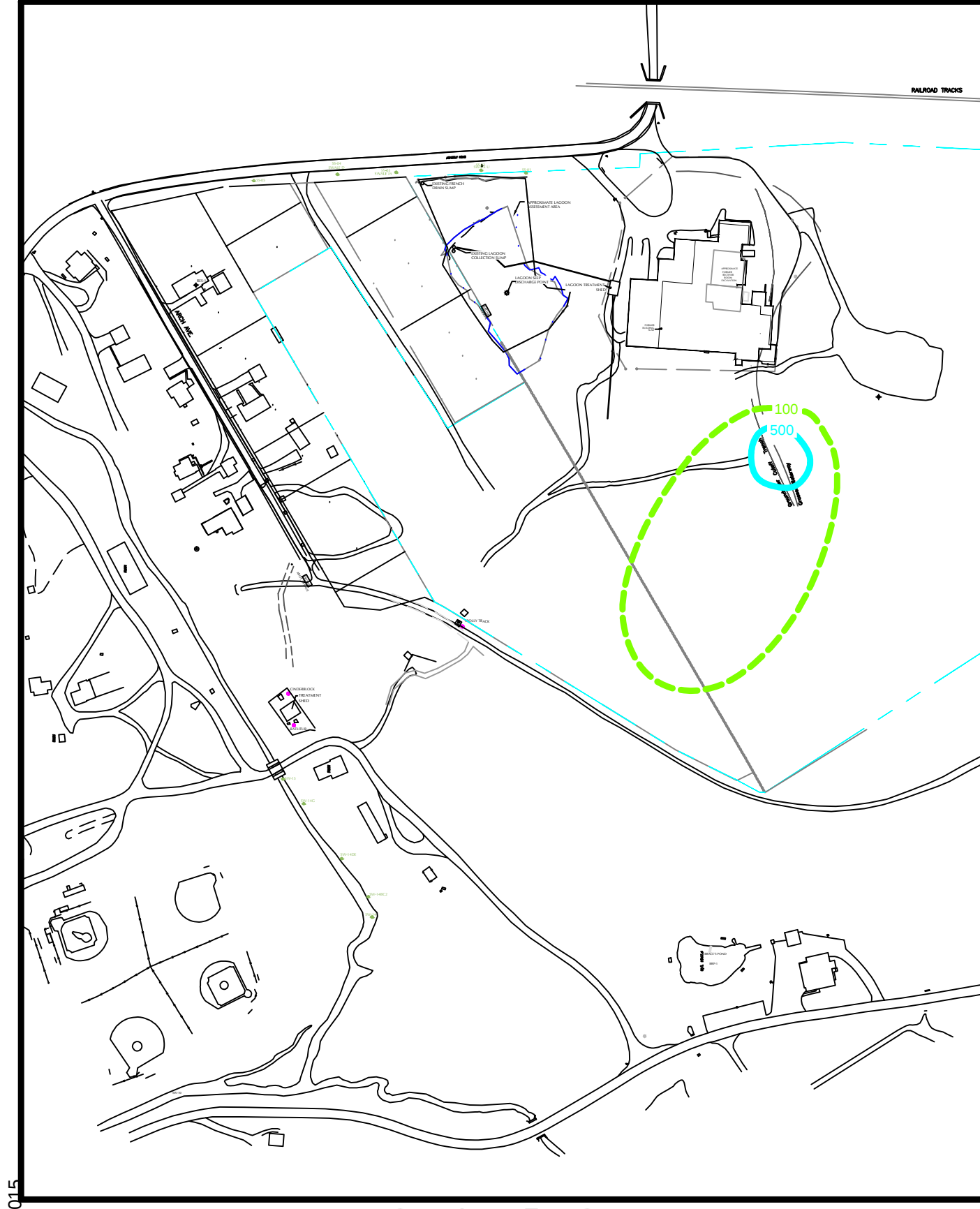
2008



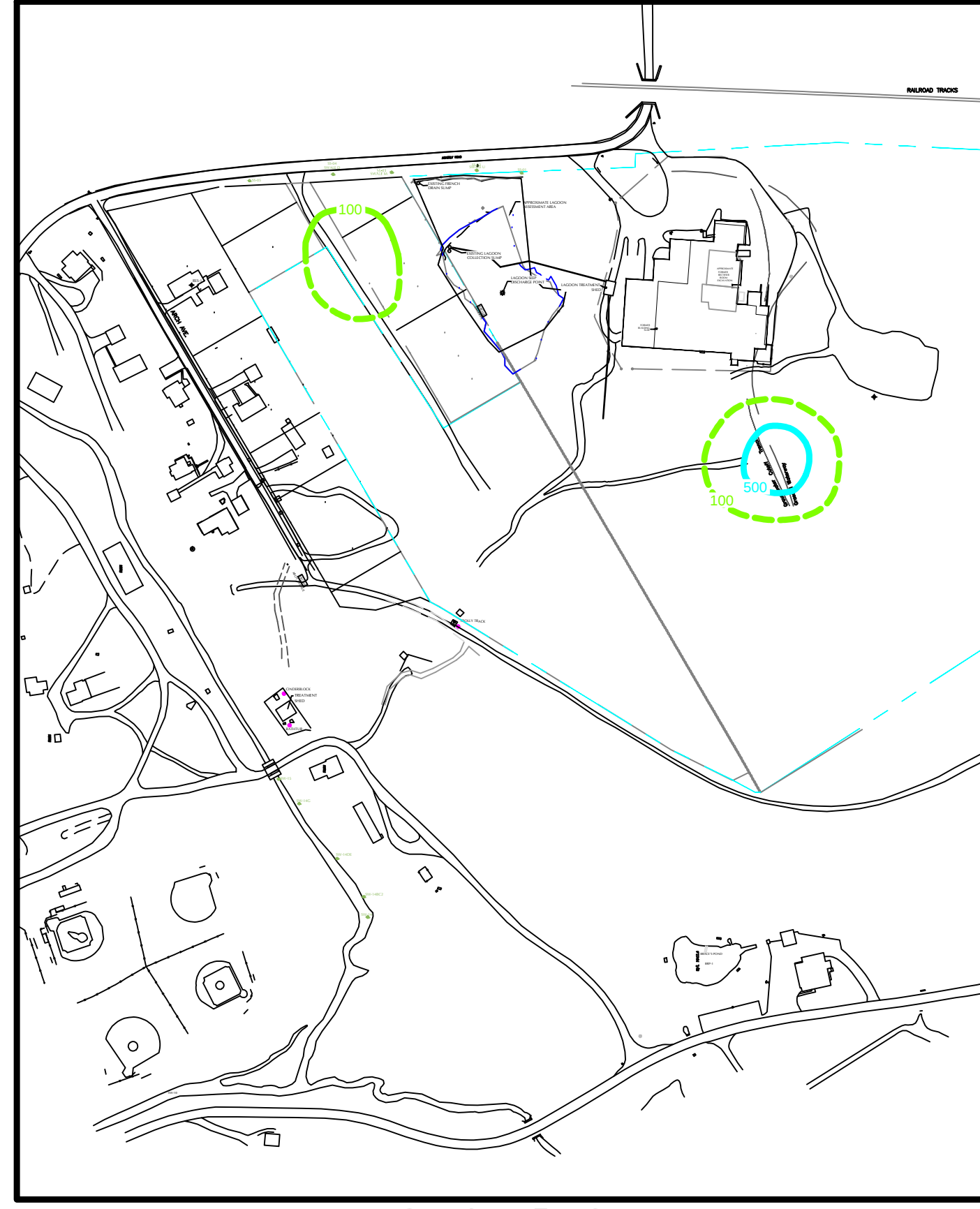
2009



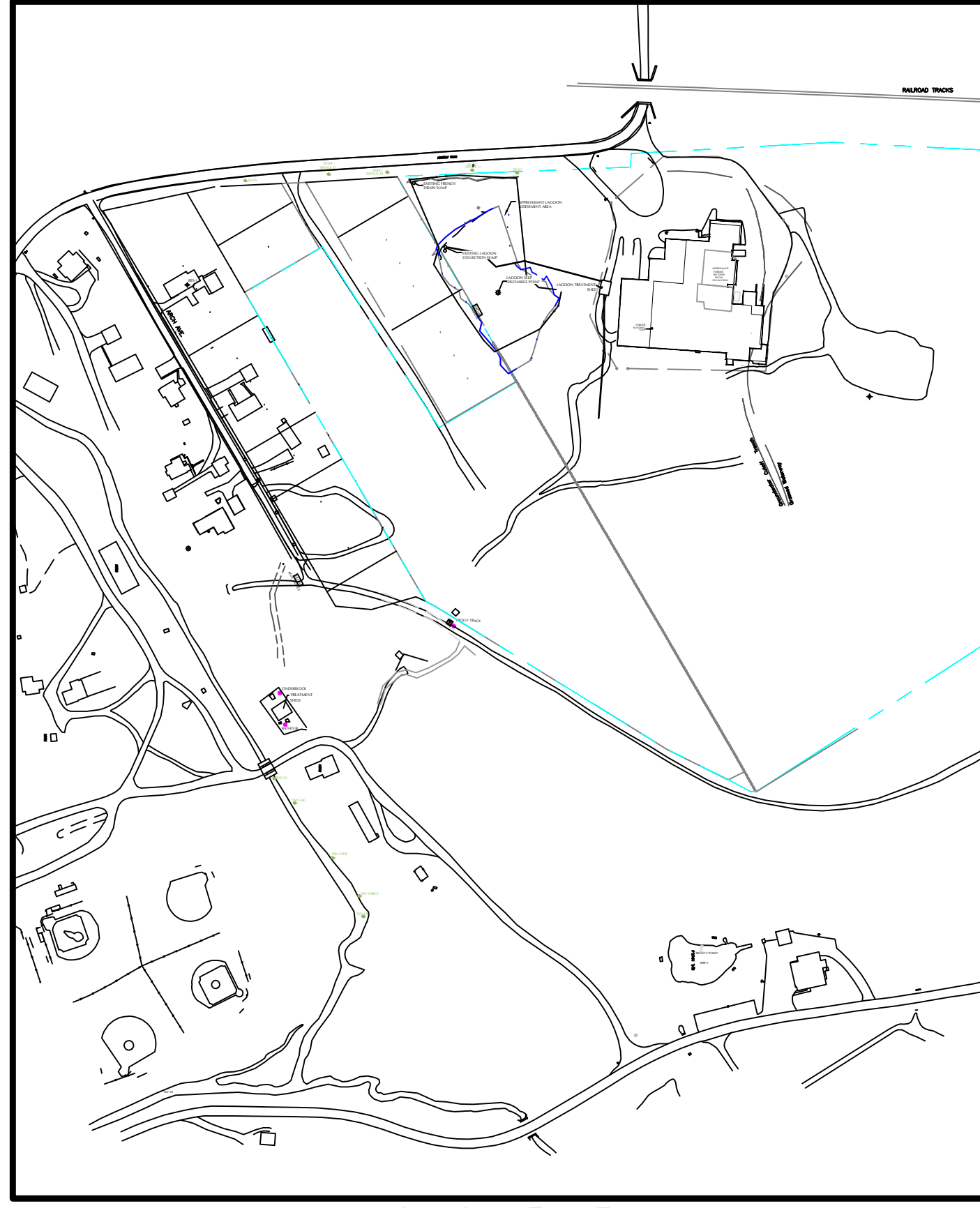
2011



2012



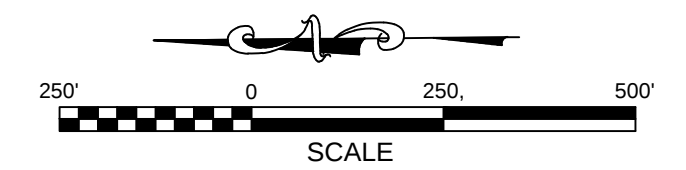
2013



2014

- LEGEND:**
- APPROXIMATE PROPERTY BOUNDARY
  - PATH/TRAIL
  - FENCE
  - GROUNDWATER INTERCEPTOR TRENCH

- HEXAVALENT CHROMIUM ISOCONCENTRATION CONTOURS:**  
(DASHED WHERE INFERRED)
- 50,000
  - 10,000
  - 1,000
  - 500
  - 100



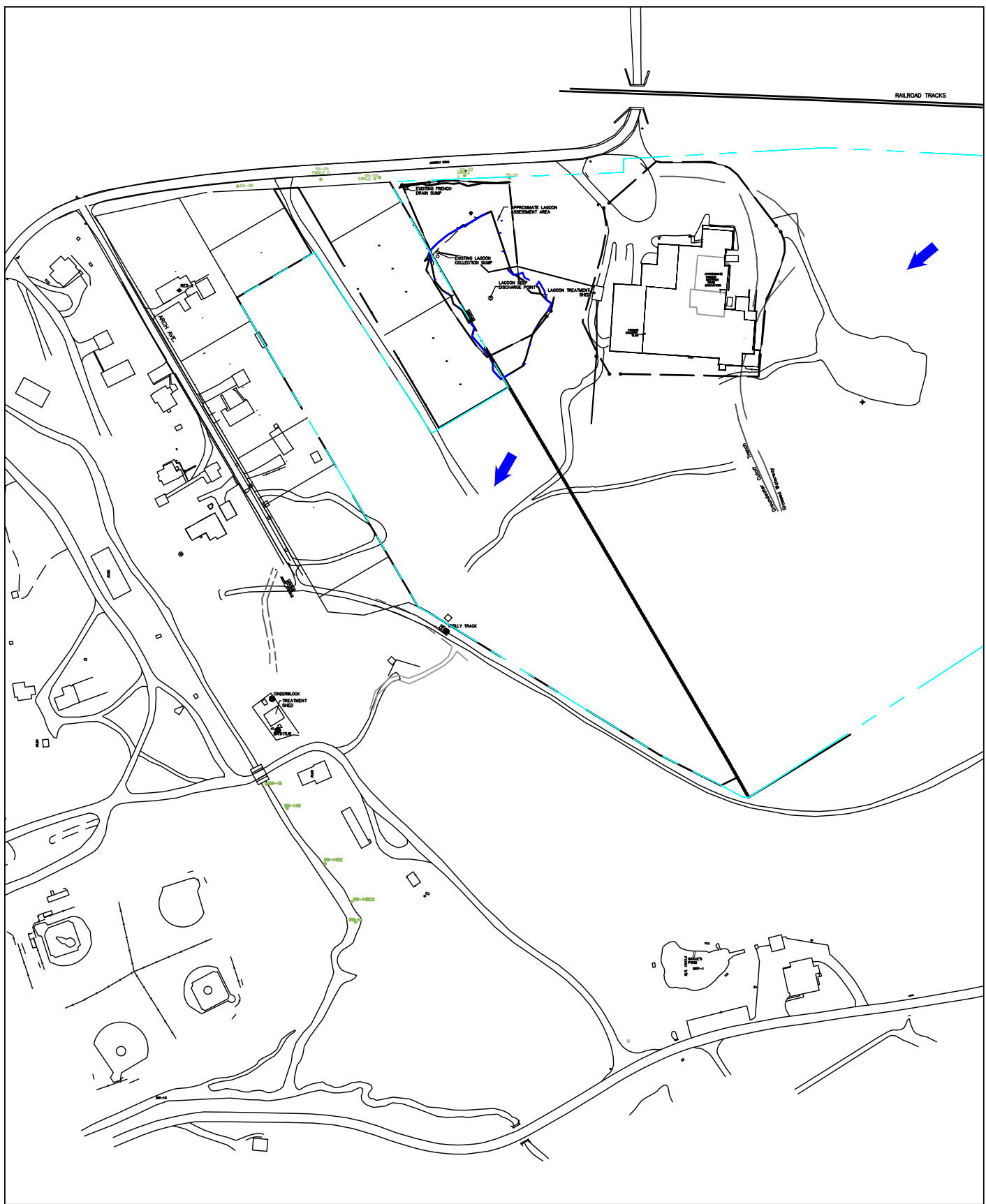
PRECISION NATIONAL PLATING SERVICES, INC.  
198 ACKERLY ROAD  
CLARKS SUMMIT, PENNSYLVANIA

**HEXAVALENT CHROMIUM  
CONCENTRATIONS IN GROUNDWATER-  
INTERMEDIATE BEDROCK 2008 TO 2022**

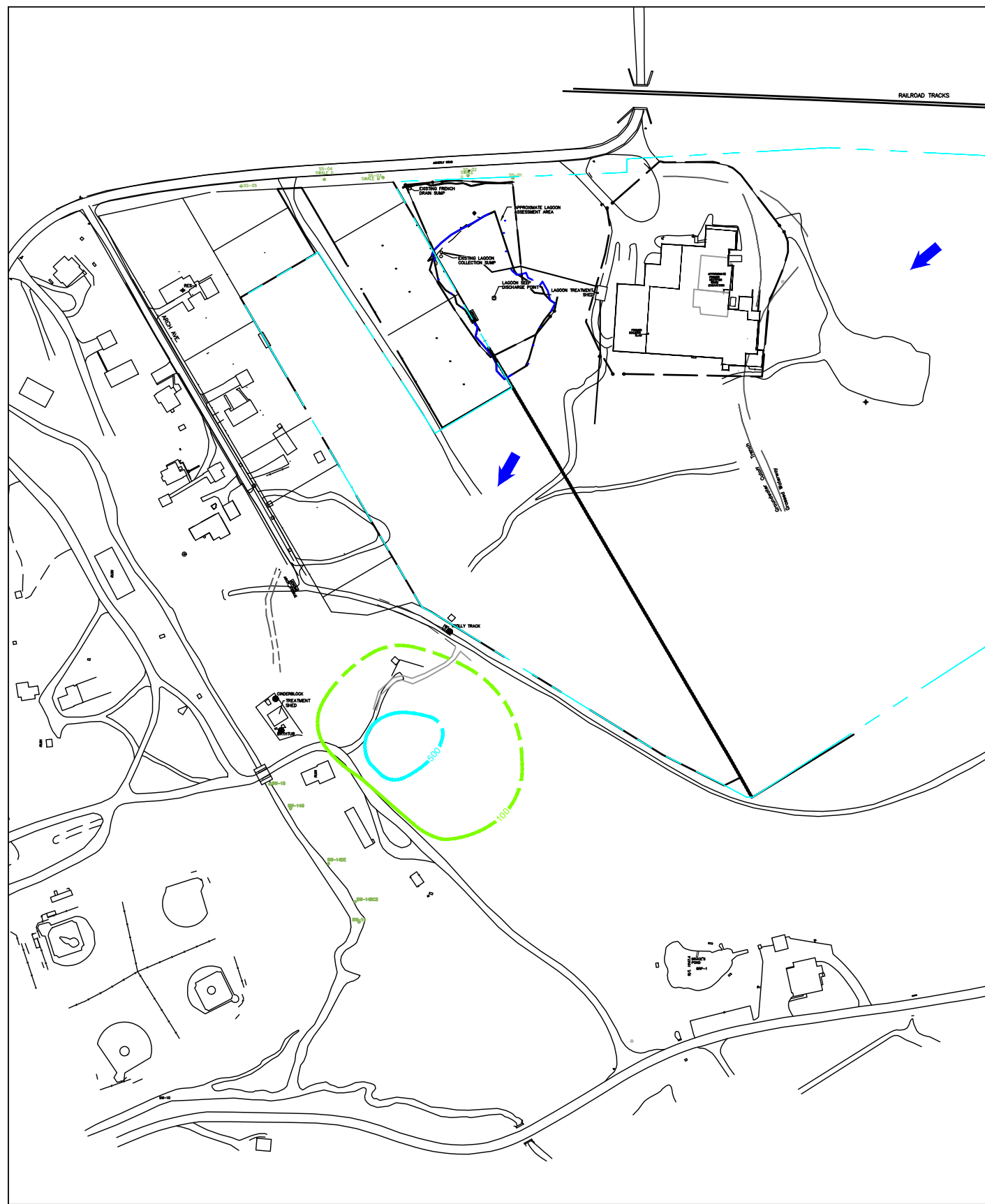
**ARCADIS** Design & Consultancy  
for natural and built assets

FIGURE  
5a

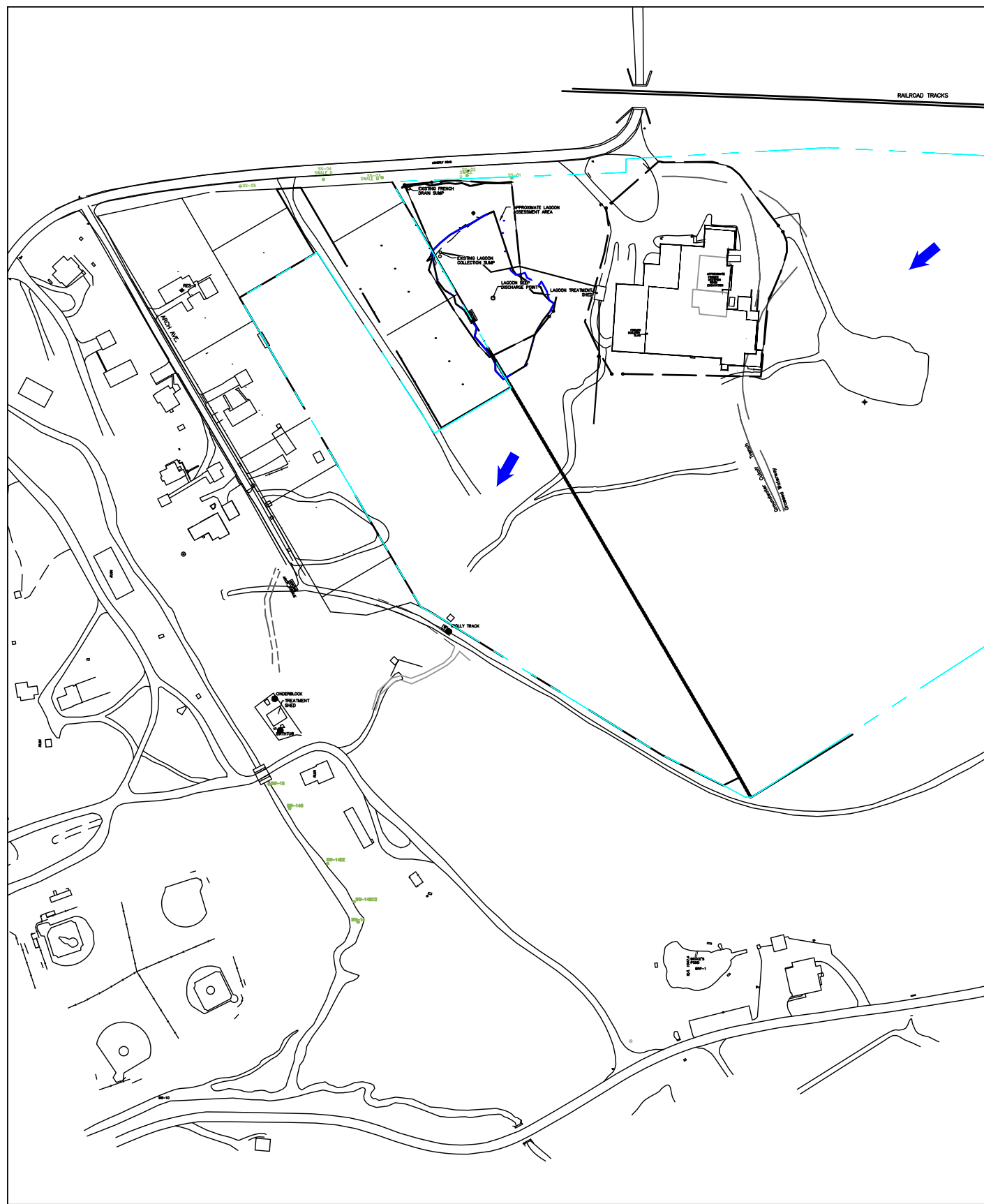
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BASEMAP: 20\ArcadisLogo\_2021.PNG



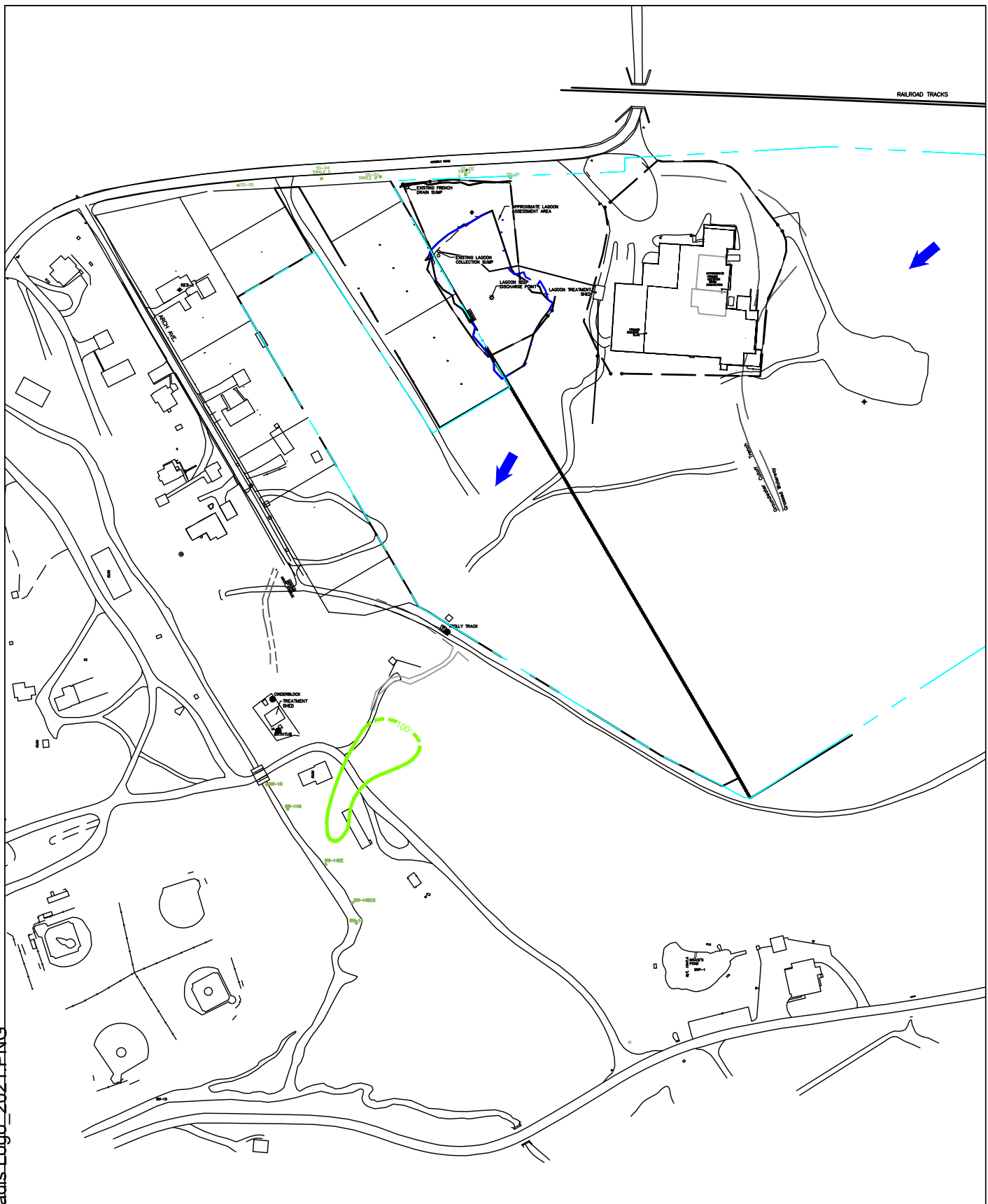
2017



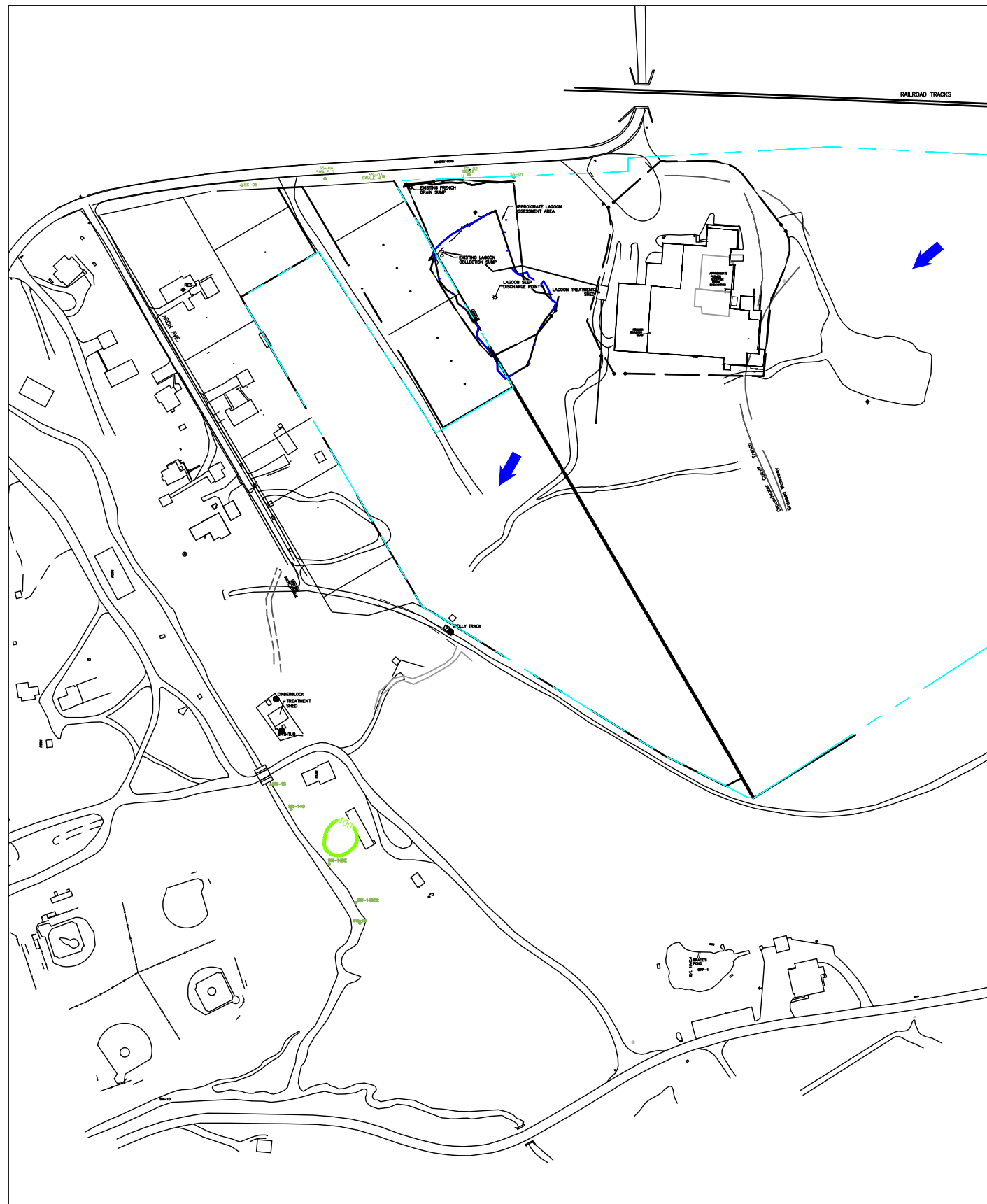
2018



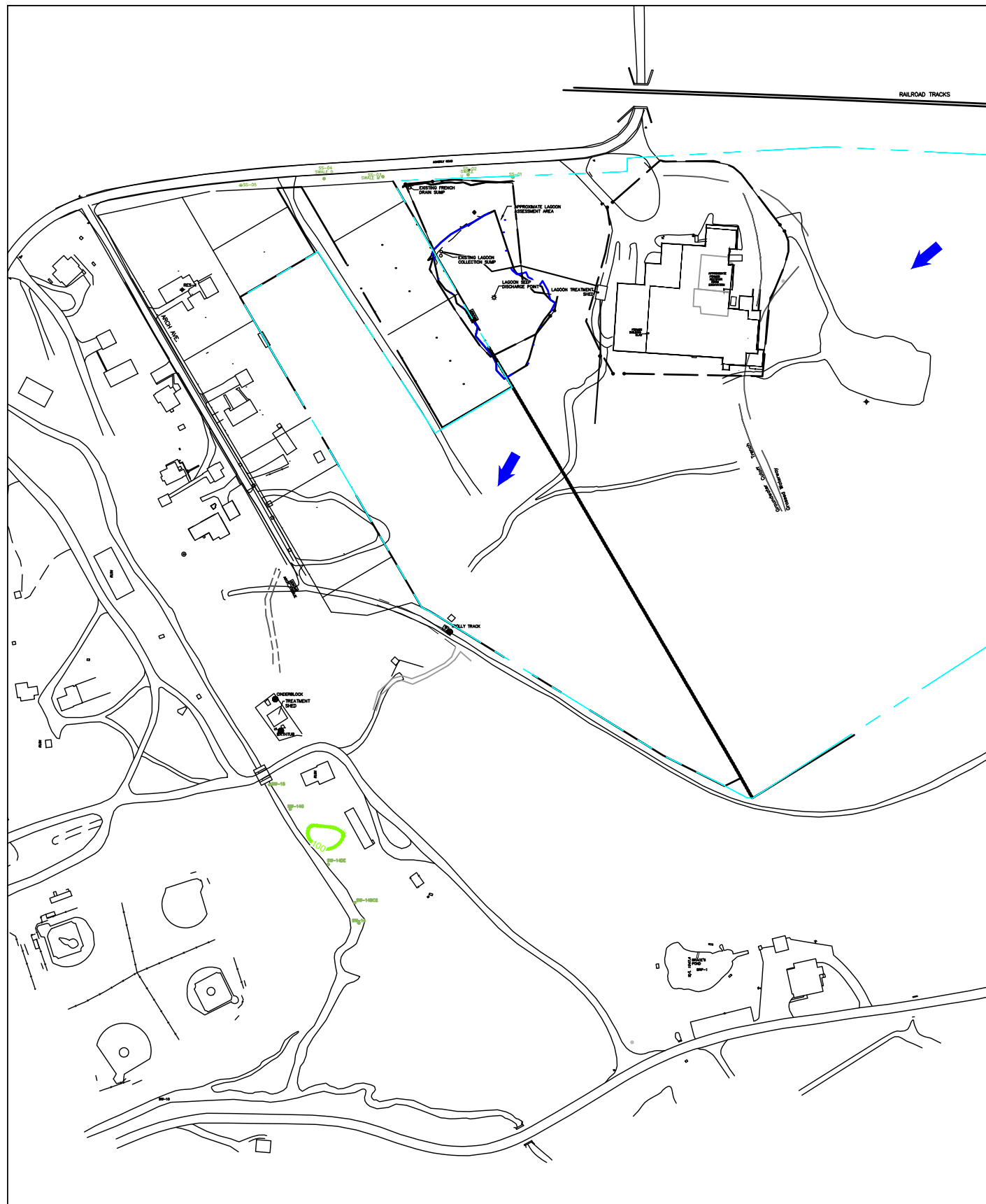
2019



2020



2021



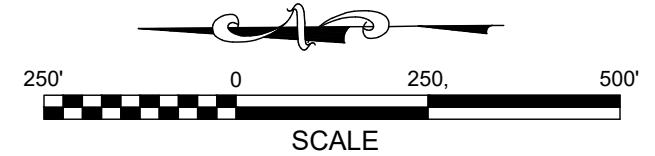
2022

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- PATH/TRAIL
- FENCE
- GROUNDWATER INTERCEPTOR TRENCH
- GROUNDWATER FLOW DIRECTION

HEXAVALENT CHROMIUM ISOCONCENTRATION CONTOURS:  
(DASHED WHERE INFERRED)

- 50,000
- 10,000
- 1,000
- 500
- 100



PRECISION NATIONAL PLATING SERVICES, INC.  
198 ACKERLY ROAD  
CLARKS SUMMIT, PENNSYLVANIA

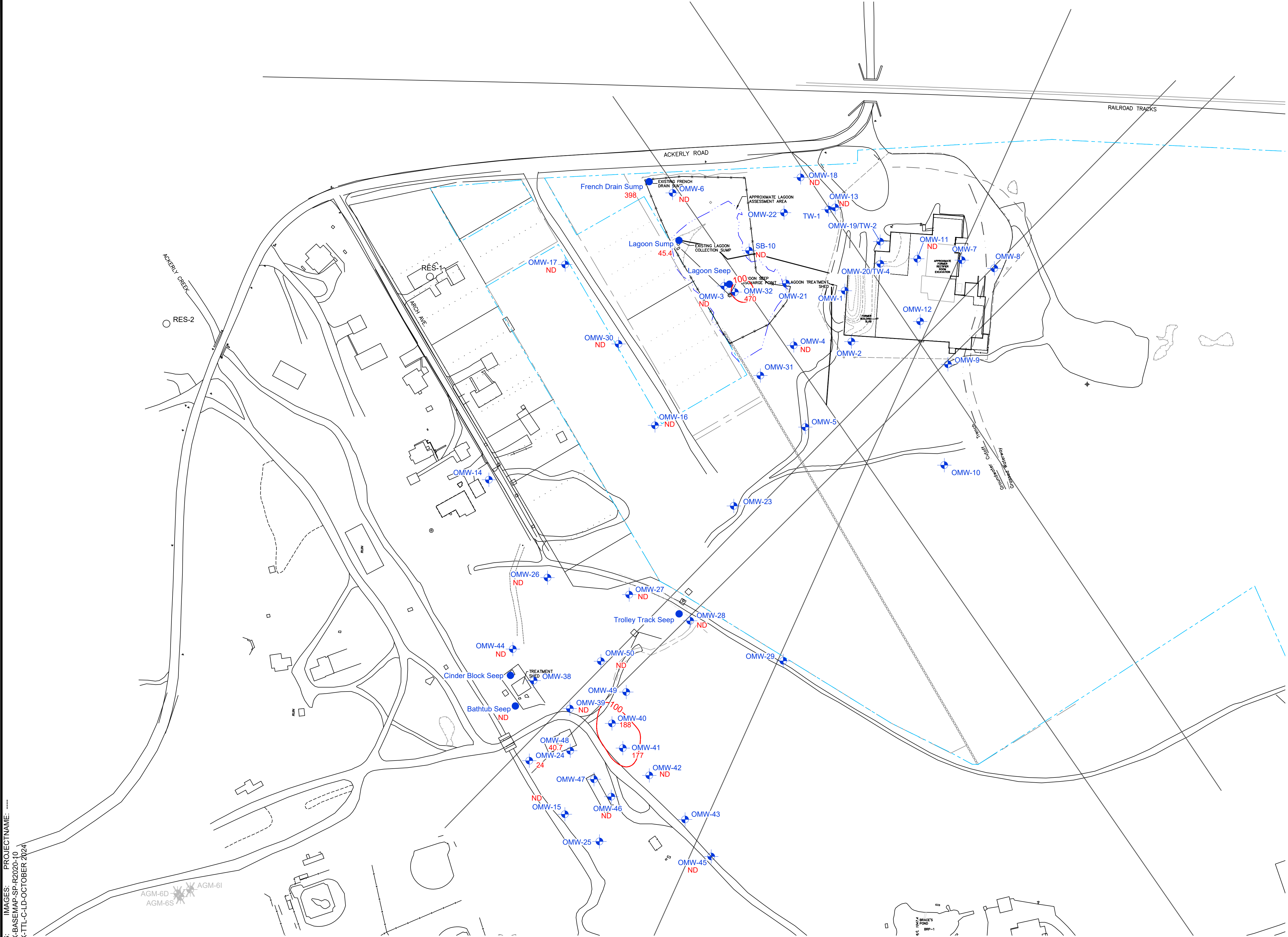
HEXAVALENT CHROMIUM  
CONCENTRATIONS IN GROUNDWATER-  
INTERMEDIATE BEDROCK 2008 TO 2022

ARCADIS

FIGURE  
5b

C:\Users\cmckeough\Documents\Arcadis ACC US\AUS-99999999-PRECISION NATL PLATING CLARKS SUMMIT\_PA\Project Files\10\_WIP\101\_ARC\_ENV\202501-DWG\GW-HC-OVB-OCT 2024.dwg ACADVER: 24.2S (LMS TECH) PAGESETUP: ----  
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PROJECT NAME: ----  
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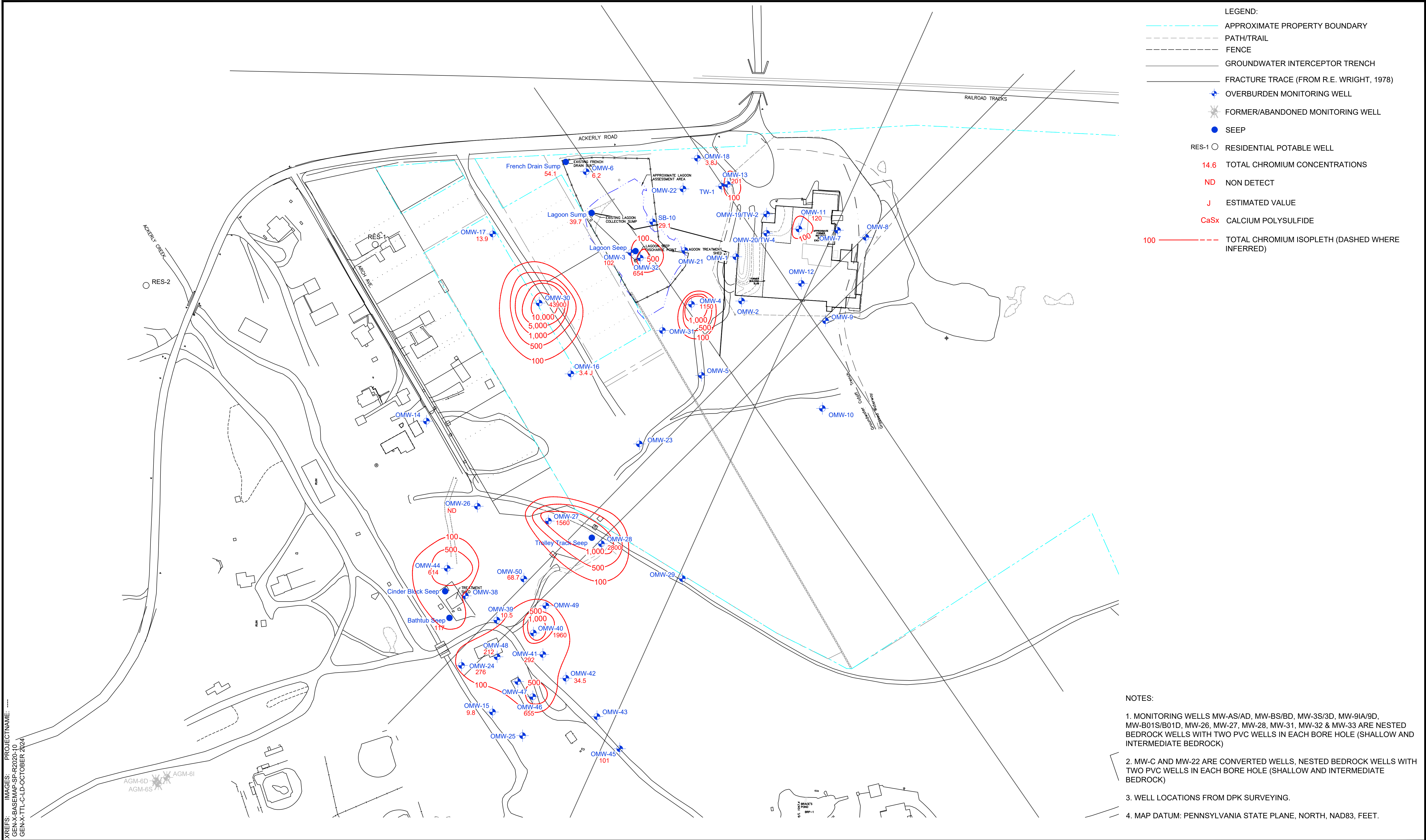


- LEGEND:
- APPROXIMATE PROPERTY BOUNDARY
  - PATH/TRAIL
  - FENCE
  - GROUNDWATER INTERCEPTOR TRENCH
  - FRACTURE TRACE (FROM R.E. WRIGHT, 1978)
  - OVERBURDEN MONITORING WELL
  - FORMER/ABANDONED MONITORING WELL
  - SEEP
  - RES-1 ○ RESIDENTIAL POTABLE WELL
  - 14.9 HEXAVALENT CHROMIUM CONCENTRATIONS
  - ND NON DETECT
  - CaSx CALCIUM POLYSULFIDE
  - 100 --- HEXAVALENT CHROMIUM ISOPLETH (DASHED WHERE INFERRED)

- NOTES:
- MONITORING WELLS MW-AS/AD, MW-BS/BD, MW-3S/3D, MW-9IA/9D, MW-B01S/B01D, MW-26, MW-27, MW-28, MW-31, MW-32 & MW-33 ARE NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)
  - MW-C AND MW-22 ARE CONVERTED WELLS, NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)
  - WELL LOCATIONS FROM DPK SURVEYING.
  - MAP DATUM: PENNSYLVANIA STATE PLANE, NORTH, NAD83, FEET.

|                                                                                                      |                                                                                                                                                                                           |      |           |    |                              |                    |                        |                                                                                           |                                 |                     |   |                                                                                    |
|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|----|------------------------------|--------------------|------------------------|-------------------------------------------------------------------------------------------|---------------------------------|---------------------|---|------------------------------------------------------------------------------------|
| <br>THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING.<br>USE TO VERIFY FIGURE REPRODUCTION SCALE |                                                                                                                                                                                           |      |           |    | Professional Engineer's Name |                    | <br>ARCADIS U.S., INC. | PRECISION NATIONAL PLATING SERVICES, INC. • 198 ACKERLY ROAD, CLARKS SUMMIT, PENNSYLVANIA | ARCADIS Project No.<br>30090360 |                     | 6 |                                                                                    |
|                                                                                                      |                                                                                                                                                                                           |      |           |    | Professional Engineer's No.  |                    |                        |                                                                                           | Date<br>OCTOBER 2024            |                     |   |                                                                                    |
|                                                                                                      | No.                                                                                                                                                                                       | Date | Revisions | By | Ckd                          | State              |                        |                                                                                           | Date Signed                     | Project Mgr.<br>LGB |   | ARCADIS<br>1 HARVARD WAY, SUITE 5<br>HILLSBOROUGH, NJ 08844<br>TEL. (908) 526.1000 |
|                                                                                                      | THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REPRODUCED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME. |      |           |    |                              | Designed by<br>LGB |                        |                                                                                           | Drawn by<br>TPH                 | Checked by<br>SWI   |   |                                                                                    |

C:\Users\kimberly\OneDrive\Arcadis\ACC US\AUS-09090909-PRECISION NAT'L PLATING CLARKS SUMMIT\_PA\Project Files\10\_WIP\101\_ARC\_ENV202501-DWG\GW-TC-OVB-OCT 2024.dwg LAYOUT: X SAVED: 4/10/2025 4:39 PM ACADVER: 24.25 (LMS TECH) PAGES: 1 OF 1 PLOTSTYLETABLE: THERMORETEC STANDARD.CTB PLOTTED: 4/1/2025 3:31 PM BY: JAMICEL, KIMBERLY



|                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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PLOTSTYLETABLE: THERMORETEC STANDARD.CTB PLOTTED: 4/10/2025 3:09 PM BY: MCKEOUGH, CAROL

XREFS: GENX-BASEMAP-SP-R2020-10  
GENX-TTL-CLD-OCTOBER 2024

0100'200'

0100'200'

Graphic Scale

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| Professional Engineer's Name |             |              |
| Professional Engineer's No.  |             |              |
| State                        | Date Signed | Project Mgr. |
| LGB                          | TPH         | SWI          |



PRECISION NATIONAL PLATING SERVICES, INC. • 198 ACKERLY ROAD, CLARKS SUMMIT, PENNSYLVANIA

## SHALLOW BEDROCK HEXAVALENT CHROMIUM ISO CONCENTRATIONS- OCTOBER 2024

ARCADIS Project No. 30090360

Date OCTOBER 2024

ARCADIS  
1 HARVARD WAY, SUITE 5  
HILLSBOROUGH, NJ 08844  
TEL: (908) 526.1000

- LEGEND:
- APPROXIMATE PROPERTY BOUNDARY

PATH/TRAIL

FENCE

GROUNDWATER INTERCEPTOR TRENCH

FRACTURE TRACE (FROM R.E. WRIGHT, 1978)

SHALLOW BEDROCK MONITORING WELL

FORMER/ABANDONED MONITORING WELL

RES-1

RESIDENTIAL POTABLE WELL

12.2

HEXAVALENT CHROMIUM CONCENTRATIONS

CaSx

CALCIUM POLYSULFIDE

ND

NON DETECT

J

ESTIMATED VALUE

100

HEXAVALENT CHROMIUM ISOPLETH (DASHED WHERE INFERRED)

- NOTES:
1. MONITORING WELLS MW-AS/AD, MW-BS/BD, MW-3S/3D, MW-9IA/9D, MW-B01S/B01D, MW-26, MW-27, MW-28, MW-31, MW-32 & MW-33 ARE NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)

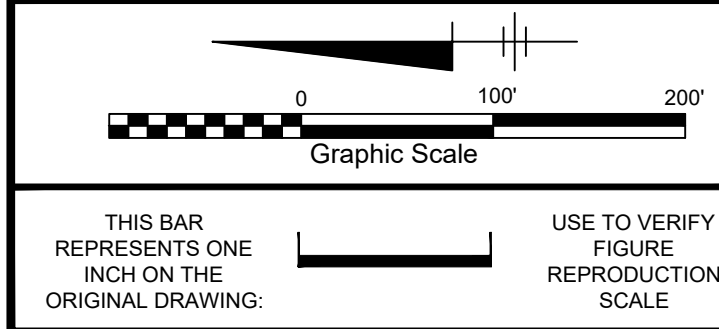
2. MW-C AND MW-22 ARE CONVERTED WELLS, NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)

3. WELL LOCATIONS FROM DPK SURVEYING.

4. MAP DATUM: PENNSYLVANIA STATE PLANE, NORTH, NAD83, FEET.

C:\Users\cmckeough\Documents\Arcadis ACC US\AUS-00000000-PRECISION NAT'L PLATING CLARKS SUMMIT\_PAN\Project Files\10\_WIP\107\_ARC\_ENW\2025\01-DWG\GW-TCSBR-OCT 2024.dwg LAYOUT: X. SAVED: 4/10/2025 3:56 PM ACADVER: 24.2S (LMS TECH) PAGES: 1 OF 1  
PLOT STYLE TABLE: THERMORETEC STANDARD.CTB PLOTTED: 4/10/2025 3:56 PM BY: MCKEOUGH, CAROL

XREFS: IMAGES: PROJECT NAME: GENX-BASEMAP-SP-R2020-10 GENX-TTL-CLD-OCTOBER 2024



| No. | Date | Revisions | By | Ckd |
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|------------------------------|-------------|--------------|
| Professional Engineer's Name |             |              |
| Professional Engineer's No.  |             |              |
| State                        | Date Signed | Project Mgr. |
| LGB                          | TPH         | SWI          |
| Designed by                  | Drawn by    | Checked by   |
| LGB                          | TPH         | SWI          |



ARCADIS U.S., INC.

PRECISION NATIONAL PLATING SERVICES, INC. • 198 ACKERLY ROAD, CLARKS SUMMIT, PENNSYLVANIA

## SHALLOW BEDROCK CHROMIUM ISO CONCENTRATIONS- OCTOBER 2024

|                                                                                  |
|----------------------------------------------------------------------------------|
| ARCADIS Project No.<br>30090360                                                  |
| Date<br>OCTOBER 2024                                                             |
| ARCADIS<br>1 HARVARD WAY, SUITE 5<br>HILLSBOROUGH, NJ 08844<br>TEL. 908.526.1000 |

- LEGEND:
- APPROXIMATE PROPERTY BOUNDARY
  - PATH/TRAIL
  - FENCE
  - GROUNDWATER INTERCEPTOR TRENCH
  - FRACTURE TRACE (FROM R.E. WRIGHT, 1978)
  - SHALLOW BEDROCK MONITORING WELL
  - FORMER/ABANDONED MONITORING WELL
  - RES-1 RESIDENTIAL POTABLE WELL
  - 27 TOTAL CHROMIUM CONCENTRATIONS
  - CaSx CALCIUM POLYSULFIDE
  - ND NON DETECT
  - J ESTIMATED VALUE
  - 100 TOTAL CHROMIUM ISOPLETH (DASHED WHERE INFERRED)

- NOTES:
- MONITORING WELLS MW-AS/AD, MW-BS/BD, MW-3S/3D, MW-9IA/9D, MW-B01S/B01D, MW-26, MW-27, MW-28, MW-31, MW-32 & MW-33 ARE NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)
  - MW-C AND MW-22 ARE CONVERTED WELLS, NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)
  - WELL LOCATIONS FROM DPK SURVEYING.
  - MAP DATUM: PENNSYLVANIA STATE PLANE, NORTH, NAD83, FEET.

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PLOTSTYLETABLE: THERMORETEC STANDARD.CTB PLOTTED: 4/10/2025 3:13 PM BY: MCKEOUGH, CAROL

XREFS: IMAGES: PROJECTNAME: GEN-X-BASEMAP-SP-R2020-10 GEN-X-TTL-CLD-OCTOBER 2024

0100'200'

0100'200'

Graphic Scale

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| Professional Engineer's Name |             |              |
| Professional Engineer's No.  |             |              |
| State                        | Date Signed | Project Mgr. |
| LGB                          | TPH         | SWI          |

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ARCADIS U.S., INC.

PRECISION NATIONAL PLATING SERVICES, INC. • 198 ACKERLY ROAD, CLARKS SUMMIT, PENNSYLVANIA

INTERMEDIATE BEDROCK HEXAVALENT CHROMIUM CONCENTRATIONS- OCTOBER 2024

|                                                                           |
|---------------------------------------------------------------------------|
| ARCADIS Project No. 30090360                                              |
| Date OCTOBER 2024                                                         |
| ARCADIS 1 HARVARD WAY, SUITE 5 HILLSBOROUGH, NJ 08844 TEL: (908) 526.1000 |

LEGEND:

APPROXIMATE PROPERTY BOUNDARY

PATH/TRAIL

FENCE

GROUNDWATER INTERCEPTOR TRENCH

FRACTURE TRACE (FROM R.E. WRIGHT, 1978)

INTERMEDIATE BEDROCK MONITORING WELL

FORMER/ABANDONED MONITORING WELL

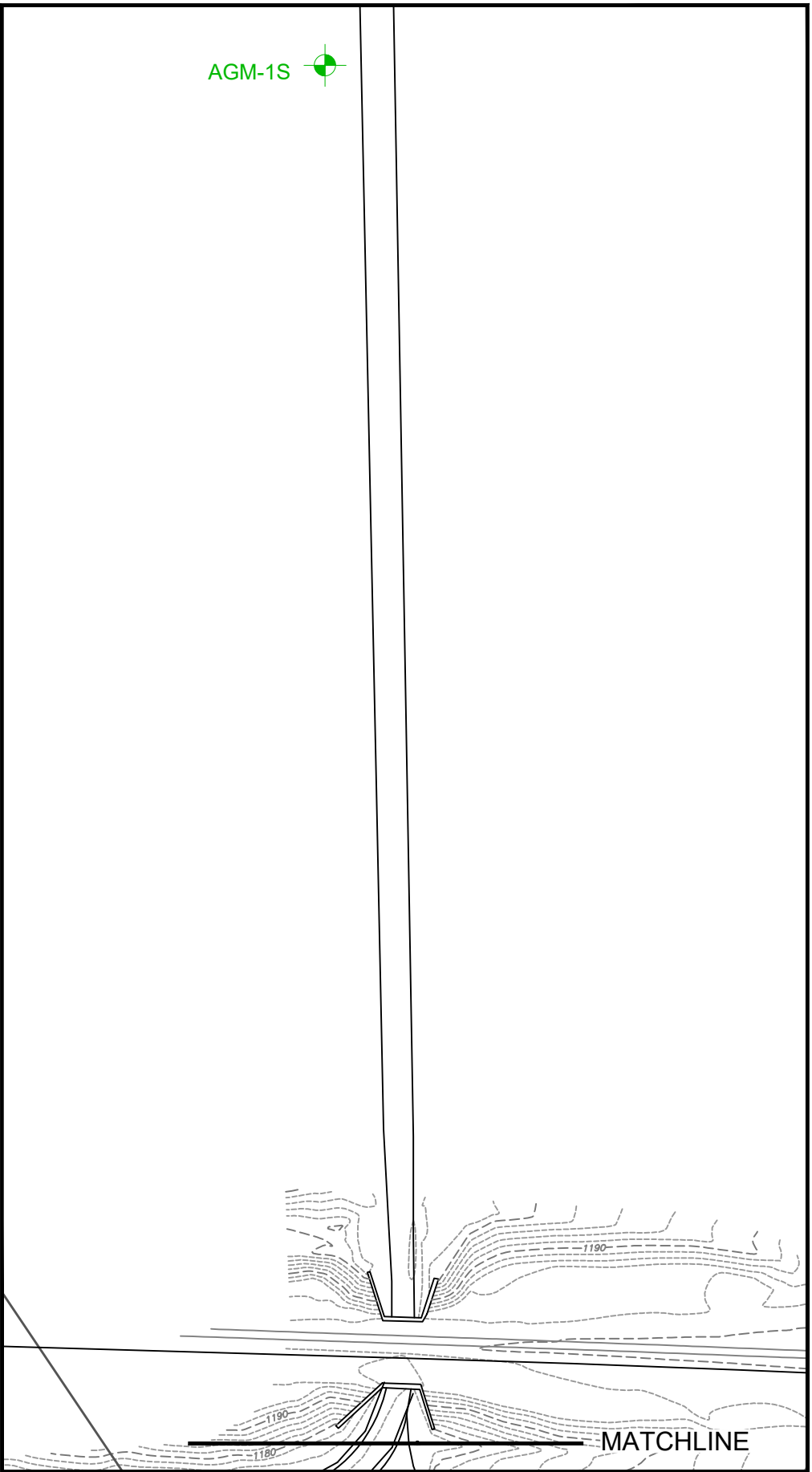
RES-1 RESIDENTIAL POTABLE WELL

30 HEXAVALENT CHROMIUM CONCENTRATIONS

CaSx CALCIUM POLYSULFIDE

ND NON DETECT

100 HEXAVALENT CHROMIUM ISOPLETH (DASHED WHERE INFERRED)



- NOTES:
- MONITORING WELLS MW-AS/AD, MW-BS/BD, MW-3S/3D, MW-9IA/9D, MW-B01S/B01D, MW-26, MW-27, MW-28, MW-31, MW-32 & MW-33 ARE NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)
  - MW-C AND MW-22 ARE CONVERTED WELLS, NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)
  - WELL LOCATIONS FROM DPK SURVEYING.
  - MAP DATUM: PENNSYLVANIA STATE PLANE, NORTH, NAD83, FEET.

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PLOTSTYLETABLE: THERMORETEC STANDARD.CTB PLOTTED: 4/10/2025 4:01 PM BY: MCKEOUGH, CAROL

XREFS: IMAGES: PROJECTNAME: GEN-X-BASEMAP-SP-R2020-10 GEN-X-TTL-CLD-OCTOBER 2024

0100'200'

Graphic Scale

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| Professional Engineer's Name |             |              |
| Professional Engineer's No.  |             |              |
| State                        | Date Signed | Project Mgr. |
| LGB                          | TPH         | SWI          |

|             |          |            |
|-------------|----------|------------|
| Designed by | Drawn by | Checked by |
| LGB         | TPH      | SWI        |

ARCADIS

ARCADIS U.S., INC.

PRECISION NATIONAL PLATING SERVICES, INC. • 198 ACKERLY ROAD, CLARKS SUMMIT, PENNSYLVANIA

INTERMEDIATE BEDROCK CHROMIUM CONCENTRATIONS-OCTOBER 2024

|                                                                                    |
|------------------------------------------------------------------------------------|
| ARCADIS Project No.<br>30090360                                                    |
| Date<br>OCTOBER 2024                                                               |
| ARCADIS<br>1 HARVARD WAY, SUITE 5<br>HILLSBOROUGH, NJ 08844<br>TEL: (908) 526.1000 |

- LEGEND:
- APPROXIMATE PROPERTY BOUNDARY

PATH/TRAIL

FENCE

GROUNDWATER INTERCEPTOR TRENCH

FRACTURE TRACE (FROM R.E. WRIGHT, 1978)

INTERMEDIATE BEDROCK MONITORING WELL

FORMER/ABANDONED MONITORING WELL

RES-1

O

RESIDENTIAL POTABLE WELL

11.4

TOTAL CHROMIUM CONCENTRATIONS

CaSx

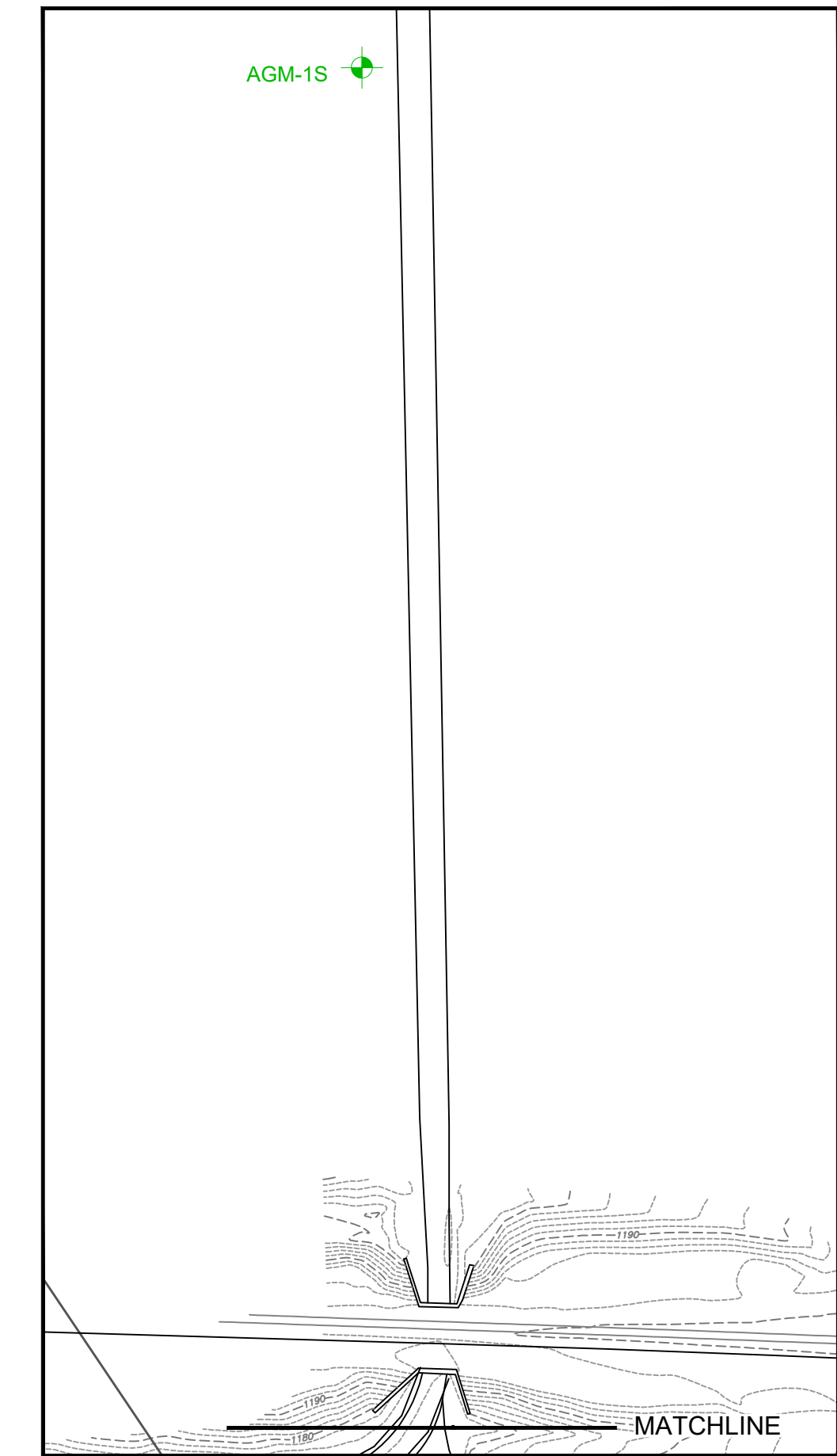
CALCIUM POLYSILFIDE IN WELL, NOT SAMPLED

ND

NON DETECT

100

TOTAL CHROMIUM ISOPLETH (DASHED WHERE INFERRED)



- NOTES:
1. MONITORING WELLS MW-AS/AD, MW-BS/BD, MW-3S/3D, MW-9IA/9D, MW-B01S/B01D, MW-26, MW-27, MW-28, MW-31, MW-32 & MW-33 ARE NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)

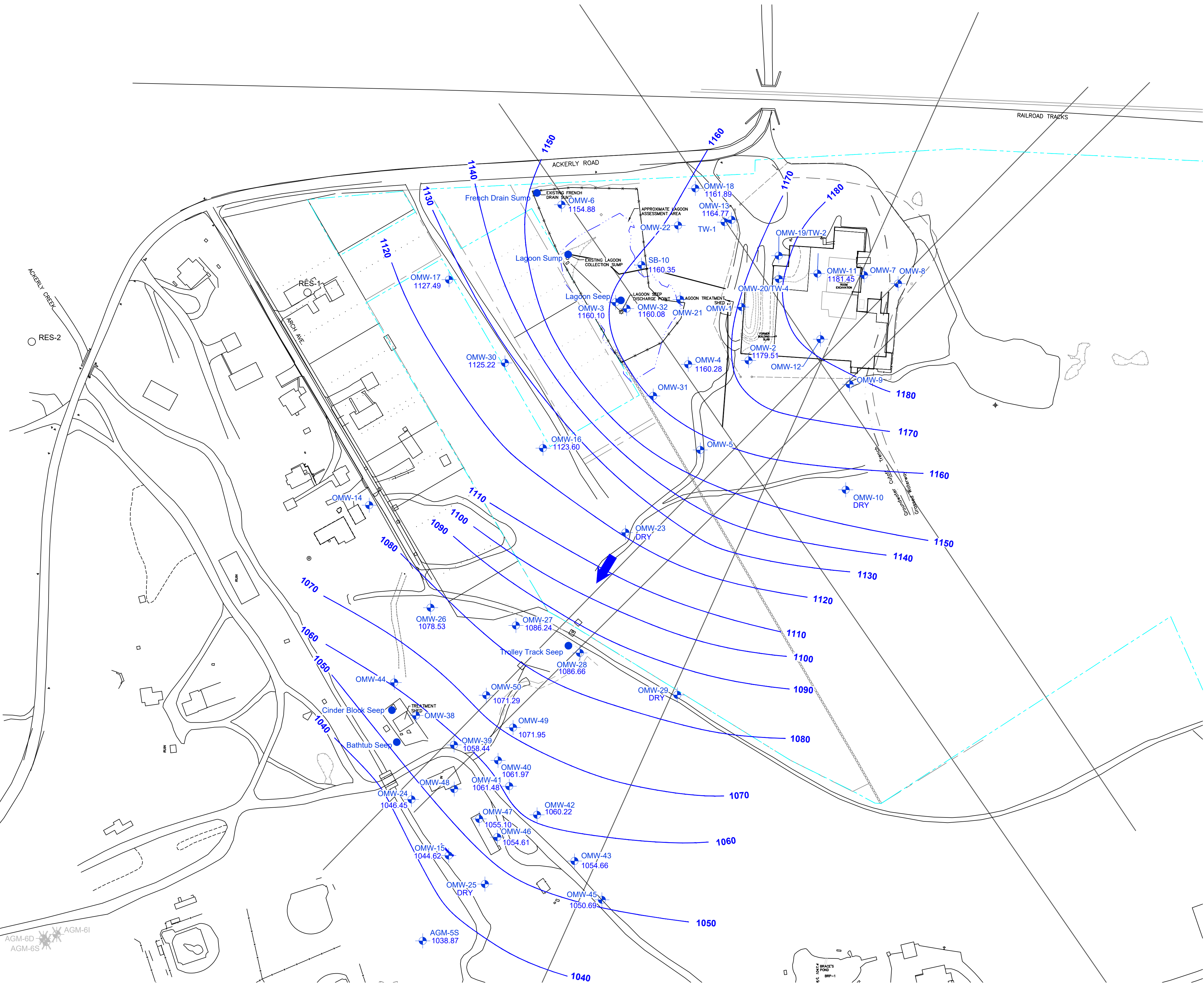
2. MW-C AND MW-22 ARE CONVERTED WELLS, NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)

3. WELL LOCATIONS FROM DPK SURVEYING.

4. MAP DATUM: PENNSYLVANIA STATE PLANE, NORTH, NAD83, FEET.

CITY: MANCHESTER CT, DIV/GROUP: ENV/CAD, DB: T. HALL/WEILL PM, L. BRUNT, TM: L. BRUNT  
C:\Users\cmckee\OneDrive\Arcadis ACC US\AUS-90309030-PRECISION NATL PLATING, CLARKS SUMMIT, PA\Project Files\10\_WIP\101\_ARC\_ENV\202501-DWG\GWE-OVB-OCT 2024.dwg LAYOUT: X, SAVED: 4/9/2025 3:11 PM, ACAD/VER: 24.2S (LMS TECH), PAGES/SETUP: ----, PLOT/STYLE/TABLE: THERMOTEC STANDARD.CTB, PLOTTED: 4/9/2025 3:11 PM, BY: MCKEOUGH, CAROL

PROJECT NAME:   
XREFS: GEN-X-BASEMENT-1890.dwg  
X-TTL-OCT 2024



LEGEND:

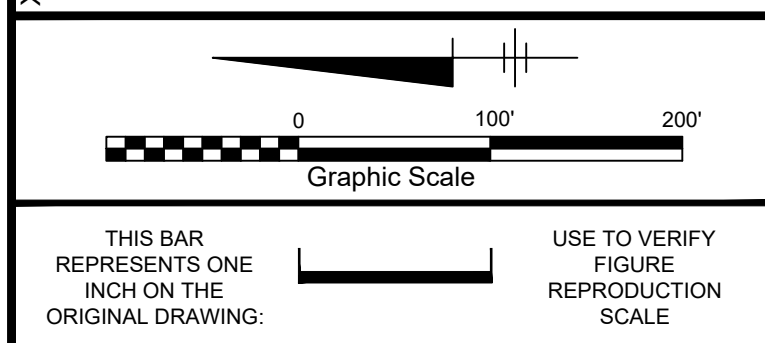
- APPROXIMATE PROPERTY BOUNDARY
- PATH/TRAIL
- FENCE
- GROUNDWATER INTERCEPTOR TRENCH
- FRACTURE TRACE (FROM R.E. WRIGHT, 1978)
- OVERBURDEN MONITORING WELL
- FORMER/ABANDONED MONITORING WELL
- SEEP
- RES-1 ○ RESIDENTIAL POTABLE WELL
- 1181.45 GROUNDWATER ELEVATION
- 1180 GROUNDWATER CONTOUR
- GROUNDWATER FLOW DIRECTION

- NOTES:
- MONITORING WELLS MW-AS/AD, MW-BS/BD, MW-3S/3D, MW-9IA/9D, MW-B01S/B01D, MW-26, MW-27, MW-28, MW-31, MW-32 & MW-33 ARE NESTED BEDROCK WELLS WITH TWO PVC WELLS IN EACH BORE HOLE (SHALLOW AND INTERMEDIATE BEDROCK)
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|                                                                                                                                                                                                                             |             |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|------|-----------|----|-----|--|--|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------|--|--|-----------------------------|--|--|-------|-------------|--------------|--|--|-----|-------------|----------|------------|-----|-----|-----|------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--|-----------------------|----|------------------------------------------------------------------------------------|--|
|  <p>0 100' 200'</p> <p>Graphic Scale</p>                                                                                                 |             | <table><tr><td>No.</td><td>Date</td><td>Revisions</td><td>By</td><td>Ckd</td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> |    | No. | Date | Revisions | By | Ckd |  |  |  |  |  | <table><tr><td colspan="3">Professional Engineer's Name</td></tr><tr><td colspan="3">Professional Engineer's No.</td></tr><tr><td>State</td><td>Date Signed</td><td>Project Mgr.</td></tr><tr><td> </td><td> </td><td>LGB</td></tr><tr><td>Designed by</td><td>Drawn by</td><td>Checked by</td></tr><tr><td>LGB</td><td>TPH</td><td>SWI</td></tr></table> |  | Professional Engineer's Name |  |  | Professional Engineer's No. |  |  | State | Date Signed | Project Mgr. |  |  | LGB | Designed by | Drawn by | Checked by | LGB | TPH | SWI | <div><div><div>ARCADIS U.S., INC.</div></div></div> |  | <div>PRECISION NATIONAL PLATING SERVICES, INC. • 198 ACKERLY ROAD, CLARKS SUMMIT, PENNSYLVANIA</div> <div>OVERBURDON GROUNDWATER ELEVATIONS- OCTOBER 2024</div> |  | <table><tr><td colspan="2">ARCADIS Project No.<br/>30230508.0007</td></tr><tr><td>Date<br/>NOVEMBER 2024</td><td rowspan="2">12</td></tr><tr><td colspan="2">ARCADIS<br/>1 HARVARD WAY, SUITE 5<br/>HILLSBOROUGH, NJ 08844<br/>TEL. (908).685.7845</td></tr></table> | ARCADIS Project No.<br>30230508.0007 |  | Date<br>NOVEMBER 2024 | 12 | ARCADIS<br>1 HARVARD WAY, SUITE 5<br>HILLSBOROUGH, NJ 08844<br>TEL. (908).685.7845 |  |
| No.                                                                                                                                                                                                                         | Date        | Revisions                                                                                                                                             | By | Ckd |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
|                                                                                                                                                                                                                             |             |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| Professional Engineer's Name                                                                                                                                                                                                |             |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| Professional Engineer's No.                                                                                                                                                                                                 |             |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| State                                                                                                                                                                                                                       | Date Signed | Project Mgr.                                                                                                                                          |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
|                                                                                                                                                                                                                             |             | LGB                                                                                                                                                   |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| Designed by                                                                                                                                                                                                                 | Drawn by    | Checked by                                                                                                                                            |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| LGB                                                                                                                                                                                                                         | TPH         | SWI                                                                                                                                                   |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| ARCADIS Project No.<br>30230508.0007                                                                                                                                                                                        |             |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| Date<br>NOVEMBER 2024                                                                                                                                                                                                       | 12          |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| ARCADIS<br>1 HARVARD WAY, SUITE 5<br>HILLSBOROUGH, NJ 08844<br>TEL. (908).685.7845                                                                                                                                          |             |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| <div><div>THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING:</div><div></div><div>USE TO VERIFY FIGURE REPRODUCTION SCALE</div></div> |             | <table><tr><td>No.</td><td>Date</td><td>Revisions</td><td>By</td><td>Ckd</td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> |    | No. | Date | Revisions | By | Ckd |  |  |  |  |  | <table><tr><td colspan="3">Professional Engineer's Name</td></tr><tr><td colspan="3">Professional Engineer's No.</td></tr><tr><td>State</td><td>Date Signed</td><td>Project Mgr.</td></tr><tr><td> </td><td> </td><td>LGB</td></tr><tr><td>Designed by</td><td>Drawn by</td><td>Checked by</td></tr><tr><td>LGB</td><td>TPH</td><td>SWI</td></tr></table> |  | Professional Engineer's Name |  |  | Professional Engineer's No. |  |  | State | Date Signed | Project Mgr. |  |  | LGB | Designed by | Drawn by | Checked by | LGB | TPH | SWI | <div><div><div>ARCADIS U.S., INC.</div></div></div> |  | <div>PRECISION NATIONAL PLATING SERVICES, INC. • 198 ACKERLY ROAD, CLARKS SUMMIT, PENNSYLVANIA</div> <div>OVERBURDON GROUNDWATER ELEVATIONS- OCTOBER 2024</div> |  | <table><tr><td colspan="2">ARCADIS Project No.<br/>30230508.0007</td></tr><tr><td>Date<br/>NOVEMBER 2024</td><td rowspan="2">12</td></tr><tr><td colspan="2">ARCADIS<br/>1 HARVARD WAY, SUITE 5<br/>HILLSBOROUGH, NJ 08844<br/>TEL. (908).685.7845</td></tr></table> | ARCADIS Project No.<br>30230508.0007 |  | Date<br>NOVEMBER 2024 | 12 | ARCADIS<br>1 HARVARD WAY, SUITE 5<br>HILLSBOROUGH, NJ 08844<br>TEL. (908).685.7845 |  |
| No.                                                                                                                                                                                                                         | Date        | Revisions                                                                                                                                             | By | Ckd |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
|                                                                                                                                                                                                                             |             |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| Professional Engineer's Name                                                                                                                                                                                                |             |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| Professional Engineer's No.                                                                                                                                                                                                 |             |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| State                                                                                                                                                                                                                       | Date Signed | Project Mgr.                                                                                                                                          |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
|                                                                                                                                                                                                                             |             | LGB                                                                                                                                                   |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| Designed by                                                                                                                                                                                                                 | Drawn by    | Checked by                                                                                                                                            |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| LGB                                                                                                                                                                                                                         | TPH         | SWI                                                                                                                                                   |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| ARCADIS Project No.<br>30230508.0007                                                                                                                                                                                        |             |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| Date<br>NOVEMBER 2024                                                                                                                                                                                                       | 12          |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |
| ARCADIS<br>1 HARVARD WAY, SUITE 5<br>HILLSBOROUGH, NJ 08844<br>TEL. (908).685.7845                                                                                                                                          |             |                                                                                                                                                       |    |     |      |           |    |     |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                           |  |                              |  |  |                             |  |  |       |             |              |  |  |     |             |          |            |     |     |     |                                                                                                                                          |  |                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                      |                                      |  |                       |    |                                                                                    |  |

CITY: MANCHESTER CT DIV/GROUP: ENV/CAD, DB, T HALL/WEILL PW, L BRUNT, TM: L BRUNT  
C:\Users\lbrunt\OneDrive\Arcadis\ACC\US\AUS\000000000000\PRECISION NATL PLATING CLARKS SUMMIT\_PAI\Project Files\10\_WIP\10T\_ARC\_ENV\2025\01-DWG\GWE-SBR-OCT 2024.dwg LAYOUT: X SAVED: 4/11/2025 2:56 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: THERMORETEC STANDARD.CTB PLOTTED: 4/11/2025 3:32 PM BY: JAMICELL KIMBERLY

PROJECT NAME:   
IMAGES:   
XREFS: GEN-X-BASE



| No.                                                                                                                                                                                       | Date | Revisions | By | Ckd |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|----|-----|
|                                                                                                                                                                                           |      |           |    |     |
| THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REPRODUCED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME. |      |           |    |     |

|                              |             |              |
|------------------------------|-------------|--------------|
| Professional Engineer's Name |             |              |
| Professional Engineer's No.  |             |              |
| State                        | Date Signed | Project Mgr. |
| LGB                          | TPH         | LGB          |
| Designed by                  | Drawn by    | Checked by   |
| LGB                          | TPH         | SWI          |



PRECISION NATIONAL PLATING SERVICES, INC. • 198 ACKERLY ROAD, CLARKS SUMMIT, PENNSYLVANIA

## SHALLOW BEDROCK GROUNDWATER ELEVATIONS- OCTOBER 2024

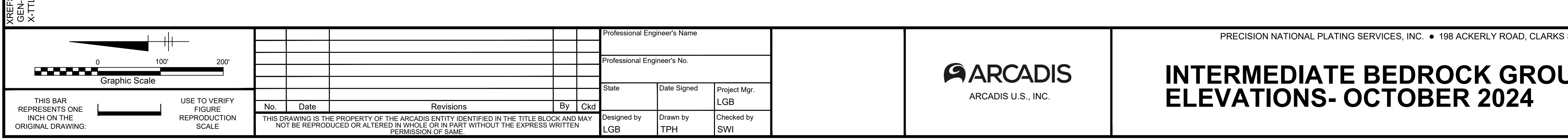
ARCADIS Project No.  
30230508.0007

Date  
NOVEMBER 2024

ARCADIS  
1 HARVARD WAY, SUITE 5  
HILLSBOROUGH, NJ 08844  
TEL. (908) 526.1000

- LEGEND:
- APPROXIMATE PROPERTY BOUNDARY
  - PATH/TRAIL
  - FENCE
  - GROUNDWATER INTERCEPTOR TRENCH
  - FRACTURE TRACE (FROM R.E. WRIGHT, 1978)
  - SHALLOW BEDROCK MONITORING WELL
  - FORMER/ABANDONED MONITORING WELL
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  - 1124.51 GROUNDWATER ELEVATION
  - GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
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- NOTES:
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  - WELL LOCATIONS FROM DPK SURVEYING.
  - MAP DATUM: PENNSYLVANIA STATE PLANE, NORTH, NAD83, FEET.



- 
- AGM-1S
- MATCHLINE
- 1:100

- |                                                  |                                                                                    |             |
|--------------------------------------------------|------------------------------------------------------------------------------------|-------------|
| SUMMIT, PENNSYLVANIA<br><br><h1>GROUNDWATER</h1> | ARCADIS Project No.<br>30230508.0007                                               | <h1>14</h1> |
|                                                  | Date<br>NOVEMBER 2024                                                              |             |
|                                                  | ARCADIS<br>1 HARVARD WAY, SUITE 5<br>HILLSBOROUGH, NJ 08844<br>TEL. (908).526.1000 |             |

# Appendix A

**2012 Administrative Settlement Agreement and Order on  
Consent for Removal Response Action**

**BEFORE THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION III**

**IN THE MATTER OF:**

Precision National Site

:  
:  
:  
:

Precision National Plating Services, Inc.,

: **Docket No. CERC-03-2012-0031DC**

:  
:  
:

**Respondent**

Proceeding Under Sections 106(a) and  
122(a) of the Comprehensive Environmental  
Response, Compensation, and Liability Act  
of 1980, as amended.

:  
:  
:  
:

**ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT  
FOR REMOVAL RESPONSE ACTION**

The parties to this Administrative Settlement Agreement and Order on Consent for Removal Response Action (“Settlement Agreement”), Precision National Plating Services, Inc. (“Respondent” or “Precision”) and the United States Environmental Protection Agency (“EPA”), having agreed to the entry of this Settlement Agreement, it is therefore Ordered, that:

**I. JURISDICTION AND GENERAL PROVISIONS**

- 1.1 This Settlement Agreement is issued pursuant to the authority vested in the President of the United States by Sections 106(a) and 122(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (“CERCLA”), 42 U.S.C. §§ 9606(a) and 9622(a); delegated to the Administrator of EPA by Executive Order No. 12580, 52 Fed. Reg. 2923 (January 29, 1987); and further delegated to the Director of the Hazardous Site Cleanup Division, EPA Region III. This Settlement Agreement pertains to property located at 198 Ackerly Road in Clarks Summit, Lackawanna County, Pennsylvania (“Precision property”). The Precision property will hereinafter be referred to as the Precision National Site or “the Site,” and is further described in paragraphs 3.2 and 3.3 below.
- 1.2 All terms and conditions of this Settlement Agreement, including any modifications hereto, are required by this Settlement Agreement. The Respondent agrees to undertake all actions required by the terms and conditions of this Settlement Agreement and to comply with all such terms and conditions.

- 1.3 The Work shall be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan, as amended ("NCP"), 40 C.F.R. Part 300; and CERCLA.
- 1.4 The Respondent consents to and will not contest EPA's authority or jurisdiction to issue or to enforce this Settlement Agreement.

## **II. STATEMENT OF PURPOSE**

- 2.1 In entering into this Settlement Agreement, the mutual objectives of EPA and Respondent are to conduct a removal action, as defined in Section 101(23) of CERCLA, 42 U.S.C. § 9601(23), to abate, mitigate and/or eliminate the release or threat of release of hazardous substances at the Site (as hereinafter described), by preventing the migration of hazardous substances from the Site through the treatment of contaminated groundwater.

## **III. FINDINGS OF FACT**

- 3.1 Precision National Plating Services, Inc., is a corporation existing and operating under the laws of the State of Delaware.
- 3.2 The Site consists of the Precision property and any areas where Site-related hazardous substances have come to be located. The Precision property is located at located at 198 Ackerly Road in Clarks Summit, Lackawanna County, Pennsylvania, which is approximately 10 miles north of Scranton, Pennsylvania.
- 3.3 The Precision property measures 46 acres, approximately 5 acres of which were used for operations and the remainder of which are undeveloped and largely wooded. A 45,000 square foot operations building was the principal structure on the Precision property. A small residential area is located north of the Precision property on Arch Avenue. Ackerly Creek is located to North of the Site, and drains into Glenburn Pond. The direction of ground water flow is generally north-northwest toward the creek.
- 3.4 The majority of the residents on Arch Avenue were placed on public water in the 1990s due to contaminated well water. One resident chose to have his well drilled deeper and encased into the deep uncontaminated aquifer.
- 3.5 From 1958 until 1971, Ernest V. Berry, Inc., operated a plating business on the Precision property. In or about February 1971, Precision National Corporation purchased the Precision property from Nehall, Inc. (Ernest V. Berry, Inc.'s parent company). Precision National Corporation changed its name to Precision National Plating Services, Inc. in 1987. From 1958 until 1999, the Precision property had been used for chrome-plating operations. Specifically, locomotive crankshafts were chrome-plated at the Precision property and a cylinder-lining plating division began in or about 1971, and both operations continued until the facility ceased operations in 1999.

- 3.6 From 1958 until approximately 1970, chromium wastes were disposed of in a lagoon at the northern end of the Facility. In May of 1970, chromium-contaminated liquids leaked from a break in the lagoon's retaining wall and were absorbed into the soils in a drainage pathway leading from the break in the lagoon wall along Ackerly Road. Additional wastewater containing hazardous substances flowed along the drainage pathway leading to Ackerly Creek.
- 3.7 From approximately 1970 until the cessation of operations, Precision utilized a closed-loop system by which wastewater was treated in what it describes as an effort to minimize contamination.
- 3.8 Due to the hydrogeology at the Site and associated fractures in the bedrock, groundwater to surface water discharges, also known as seeps, occur. There are three seeps (Bathtub, Cinderblock, and Trolley Tracks Seeps) in which groundwater to surface soil/surface water discharges of elevated hexavalent chromium have been detected.
- 3.9 In September of 1991, EPA and Precision entered into an Administrative Order by Consent, Docket No. III-90-057-DC, pursuant to Section 106 and 122 of CERCLA, 42 U.S.C. §§ 9606 and 9622, and Section 1431(a) of the Safe Drinking Water Act ("SDWA"), 42 U.S.C. § 300i(a). This Order required Precision to provide an alternate water supply to one resident located on Arch Avenue. Precision complied with the terms of this Order and replaced this well late in 1991.
- 3.10 In the fall of 1993, Precision installed another well for a residence on Arch Avenue to be used as an alternate source of drinking water. This well serves three residents.
- 3.11 On August 22, 1995, EPA and Precision entered into an Administrative Order by Consent for Removal Response Action ("1995 AOC"), Docket No. III-94-32-DC, that required Precision to perform an Engineering Evaluation/Cost Analysis ("EE/CA") to characterize the nature and extent of contamination at the Site in order to provide sufficient information to identify and evaluate removal alternatives to ensure that any actions taken will protect public health, welfare and the environment in accordance with 40 C.F.R. § 300.415(b)(4).
- 3.12 In 1997, EPA approved, with reservations, the EE/CA ("1997 EE/CA") submitted by Precision to comply with the 1995 AOC.
- 3.13 On April 22, 1998, the Director of the Hazardous Site Cleanup Division signed an Action Memorandum ("1998 Action Memo"), which determined that a threat to public health, welfare and/or the environment exists due to the actual or threatened release of hazardous substances from the Site and set forth the requirements for the Removal Action at the Site.
- 3.14 On April 24, 1998, EPA issued Precision a Unilateral Administrative Order, Docket No. III-98-069-DC ("1998 Order"), supported by the 1998 Action Memo, which required Respondent to conduct the Removal Action at the Site. The 1998 Order required Precision to perform the following actions, among others:

- a. Provide potable water to all residences within a 1-mile radius of the facility not serviced by a public water system whose drinking water contains concentrations of chromium exceeding the maximum contaminant level (MCL) for chromium unless EPA provides Precision with a written confirmation that potable water is not required at that time for a residence based on data acceptable to EPA or conduct monthly monitoring of all private drinking water supplies at all residences within a 1-mile radius of the facility unless they are being provided potable water;
  - b. Conduct quarterly monitoring of all private drinking water supplies at residences within a two-mile radius of the Precision property, or perform a groundwater investigation to fully characterize the extent and nature of contamination attributable to the Site and ensure that drinking water wells are not exposed to Site contamination above the MCL for chromium;
  - c. Install seep collection and treatment systems at all identified seeps (i.e., Trolley Track Seep, Bath Tub Seep, and Cinderblock Seep), including seeps yet to be identified, to remove the threat of direct contact with chromium contamination and to minimize the contamination of soils surrounding the seeps or surface water that may be impacted by the seeps;
  - d. Complete removal of the encapsulation vault and all surrounding contaminated soil to background levels for chromium; and
  - e. Perform an Ecological Risk Assessment ("ERA") to determine the effects of Site contamination on ecological receptors at the Site, with particular regard to Ackerly Creek and Glenburn Pond and its associated wetlands.
- 3.15 In 1998, Precision extended a public water supply line along Ackerly Road and Arch Avenue to provide a municipal water supply for the residences downgradient of the Precision property.
- 3.16 On January 29, 2001, Precision submitted a Seep Design Report ("Report") which described how Precision would collect various seeps and treat the seeps to remove hexavalent chromium prior to discharge. The Report was accepted by EPA on March 1, 2001. The system was installed, and has been in operation since November 2, 2001, and it is currently being operated, inspected, and maintained on a regular basis. Effluent from the system discharges into an infiltration gallery, which reenters the groundwater beneath the Site.
- 3.17 On July 25, 2002, Precision submitted sampling results from a June 4 and 5, 2002, sampling event in Ackerly Creek which indicated levels of hexavalent chromium in the creek that were well over EPA's ambient chronic water criteria of 11 ppb hexavalent chromium for surface water bodies. Levels of 100 ppb hexavalent chromium were found in several locations, the highest level found was 120 ppb. EPA split samples from the event showed similar results.

- 3.18 The hazardous substances present at the Site are total and hexavalent chromium. Chromium is listed as a hazardous substance at 40 C.F.R. § 302.4.
- 3.19 EPA sent a notice to Precision on August 6, 2002, that the June sampling results indicated that biota in the creek and the pond were being exposed to elevated levels of hexavalent chromium. The notice followed biological assessment data from November 2001 that had shown impacts to aquatic plants and animals in the form of elevated levels of total chromium accumulations in tissue. Citing paragraph 8.3(j) of the 1998 Order, which requires the Respondent to mitigate any impacts found to ecological receptors, the notice required Precision to submit to EPA a list of one or more proposals to cease the migration of chromium-contaminated groundwater to Ackerly Creek, one of which would be highlighted as “the preferred option.”
- 3.20 On September 6, 2002, Precision submitted a summary of alternatives that could be used to reduce the impacts of hexavalent chromium to Ackerly Creek. Precision evaluated each alternative using the following criteria: overall protection, long-term effectiveness, reduction of toxicity, implementability, and cost. Based on these criteria, Precision proposed In-Situ Chemical Reduction as the preferred option to mitigate impacts of hexavalent chromium to the creek.
- 3.21 On December 16, 2002, after meeting with the Pennsylvania Department of Environmental Protection (“PADEP”) and Precision, EPA selected Precision’s proposal of In-Situ Chemical Reduction (“ISCR”) using calcium polysulfide as a response alternative and directed Precision to prepare a response action work plan (“Work Plan”).
- 3.22 In June of 2006, a pilot test assessing the injection of calcium polysulfide into the soil was conducted on the Precision property. The results of the pilot test confirmed that the high-pressure injection method would successfully deliver the calcium polysulfide into the soil and that the frequency of the injections would depend on the soil types at the various locations of the Site. The testing also confirmed that calcium polysulfide could be injected into the soils of the lagoon.
- 3.23 From July 25 to December 15, 2006, Precision injected approximately 265,000 gallons of calcium polysulfide solution at concentrations ranging from 3% to 6% into soil source areas. These in situ chemical reduction activities were implemented to reduce the hexavalent chromium concentrations in the soil to a criterion of 60 milligrams per kilogram (mg/kg) for achieving 11 micrograms per liter (µg/L) in Ackerly Creek. The 60 mg/kg criterion was calculated by using the Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites.
- 3.24 On September 8, 2006, EPA issued a Response Approval Summary, which compiled, confirmed, updated and documented certain EPA-approved and -selected response actions and measures to be performed pursuant to Section VIII of the 1998 Order.

- 3.25 During 2007, Precision excavated hexavalent chromium-impacted concrete and soil from the former rectifier room located in the basement of the former operations building. According to Precision, approximately 56 loads of hazardous material was shipped from the Site pursuant to a hazardous waste manifest to a facility permitted to accept it.
- 3.26 On December 4, 2008, the United States District Court for the Eastern District of Pennsylvania entered a Consent Decree for Recovery of Past and Future Response Costs ("Consent Decree"), United States v. Precision National Plating Services, Inc., Docket No. 3:08cv1946, between the United States and Precision for the payment of the United States' Past and Future Response Costs incurred at the Site, as those terms are defined in the Consent Decree.
- 3.27 Between August 2008 and January 2009, Precision injected approximately 150,000 gallons of a 1% to 2% solution of calcium polysulfide into the shallow bedrock and weathered bedrock source areas to treat shallow bedrock contaminated groundwater.
- 3.28 Between October and December 2010, Precision injected a total of 34,914 gallons of 1% calcium polysulfide solution and 14,852 gallons of 2% calcium polysulfide solution into the shallow bedrock and weathered bedrock source areas to treat shallow bedrock contaminated groundwater.
- 3.29 On March 25, 2010, EPA issued an EE/CA Approval Memorandum, approving the drafting of the EE/CA document.
- 3.30 Concurrent with the injections in the shallow bedrock, EPA drafted a second EE/CA ("2011 EE/CA") to present the final response alternatives for the Site. A public meeting was conducted on December 7, 2010 to present the response alternatives for the Site to the community and to solicit public comments as required by Section 300.820(a) of the NCP. The preferred alternative presented was continuation of the contaminant source area treatment using an in situ chemical injection system, continuation of the collection and treatment of seeps, as well as long-term monitoring and institutional controls ("ICs") that will prevent exposure of residents to contaminated groundwater and surface water.
- 3.31 EPA finalized the 2011 EE/CA on September 1, 2011.
- 3.32 On September 9, 2011, the Director of the Hazardous Site Cleanup Division approved an Action Memorandum ("2011 Action Memo") selecting the response action for addressing chromium contamination at the Site.

#### **IV. CONCLUSIONS OF LAW**

- 4.1 The Precision National Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

- 4.2 The Respondent is a “person” as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- 4.3 Chromium is a “hazardous substance” within the meaning of Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), because it is listed at 40 C.F.R. § 302.4 (or other applicable citation).
- 4.4 “Hazardous substances,” as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), have been disposed of at the Precision National Site and are currently present there.
- 4.5 The presence of hazardous substances at the Site and the past, present, and/or potential migration of hazardous substances from the Site constitutes an actual and/or threatened “release” as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- 4.6 Respondent is an “owner or operator of a vessel or a facility” (the Site) within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).
- 4.7 EPA has determined that the Respondent is liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

## **V. DETERMINATIONS**

Based on the Findings of Fact and Conclusions of Law set forth above, and upon EPA’s review of information for the Administrative Record, EPA has determined that:

- 5.1 The actual and/or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health or welfare or the environment.
- 5.2 The Work is necessary to protect the public health and welfare and the environment.
- 5.3 Because there is a threat to public health or welfare or the environment, a removal action is appropriate to abate, minimize, stabilize, mitigate or eliminate the release or threat of release of hazardous substances at or from the Site.

## **VI. PARTIES BOUND**

- 6.1 This Settlement Agreement shall apply to and be binding upon EPA and its agents, and upon Respondent and its agents, successors, and assigns. Neither a change in ownership or corporate or partnership status of the Respondent, nor a change in ownership or control of the Site, shall in any way alter Respondent’s responsibilities under this Settlement Agreement.
- 6.2 In the event of any change in ownership or control of the Site, Respondent shall notify EPA in writing at least thirty (30) calendar days in advance of such change and shall provide a

copy of this Settlement Agreement to the transferee in interest of the Site prior to any agreement for transfer.

- 6.3 In the event that Respondent files for or is placed into bankruptcy, Respondent shall notify EPA within three days of such event.
- 6.4 The Respondent shall provide a copy of this Settlement Agreement to all contractors, subcontractors, supervisory personnel, laboratories and consultants retained by Respondent to conduct any portion of the Work to be performed by Respondent pursuant to this Settlement Agreement. Respondent shall require in any and all contracts related to this Site that the Work that is the subject of such contract be performed within the time and in the manner set forth in this Settlement Agreement.
- 6.5 The undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms of this Settlement Agreement and to execute and legally bind Respondent to this Settlement Agreement.

## **VII. NOTICE TO THE STATE**

- 7.1 Notice of issuance of this Settlement Agreement has been given to the Commonwealth of Pennsylvania pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

## **VIII. RESPONSE ACTION PLAN DEVELOPMENT AND IMPLEMENTATION**

- 8.1 Respondent shall commence and complete performance of the following response action within the time periods specified herein.
- 8.2 Within five (5) business days of the effective date of this Settlement Agreement, Respondent shall notify EPA in writing of the identity and qualifications of the contractor, subcontractor, supervisory personnel, and other persons who will be primarily responsible for developing the Response Action Plan ("RAP") required by this Section. Respondent shall further notify EPA in writing of the identity and qualifications of all contractors, subcontractors, supervisory personnel and other persons selected by Respondent who will conduct all or any portion of the response action no less than three (3) days prior to commencement of the response action to be performed by such persons. Respondent shall ensure that all contractors, subcontractors, supervisory personnel and/or other persons retained to perform the response action shall meet the applicable Occupational Safety and Health Administration ("OSHA") requirements as defined in 29 C.F.R. § 1910.120. Respondent's selection of all contractors, subcontractors, supervisory personnel and other persons who will perform the response action; the Respondent's Project Coordinator designated pursuant to Section IX; and any replacements to any such persons are subject to disapproval by EPA at any time. In the event of any such disapproval by EPA,

Respondent shall notify EPA within five (5) calendar days of receipt of such EPA disapproval of the person(s) who will replace the one(s) disapproved by EPA. If a person's selection is disapproved by EPA, they shall not perform such specified response action.

8.3 Respondent shall accomplish the following items:

- a. Collect contaminated water from the seeps (i.e., Trolley Track, Bathtub and Cinderblock Seeps) until concentrations of total chromium in the seeps remain below the MCL of 100 ppb for total chromium to prevent human exposure to contaminated groundwater.
- b. Treat the water from the currently collected seeps (i.e., Trolley Track, Bathtub and Cinderblock Seeps) in order that concentrations of chromium in the seeps remain below the MCL of 100 µg/L for total chromium to prevent human exposure to contaminated groundwater.
- c. Treat the water from the currently collected seeps in order that concentrations of hexavalent chromium in the treated effluent remain below the EPA's Water Quality Criterion Continuous Concentration (CCC) of 11 µg/L.
- d. Treat hexavalent chromium-contaminated overburden and bedrock (as generally defined in the EE/CA in Figure 6, and attached hereto as Attachment A) with in-situ chemical reduction to prevent high levels of hexavalent chromium from leaching into groundwater, ensuring that hexavalent chromium concentrations in Ackerly Creek and the swale adjacent to Ackerly Road are below the maximum allowed by the CCC standard of 11 µg/L.
- e. Sample semi-annually on- and off-Site groundwater wells to track the plume and nearby residential wells at an accelerated schedule during in-situ chemical treatment to ensure no breakthrough of sulfides from treatment into receptors.
- f. Sample Ackerly Creek quarterly and analyze for hexavalent chromium to measure effectiveness of treatment and to monitor for levels of total chromium.
- g. Perform air monitoring during treatment to ensure residents are not exposed to unsafe levels of hydrogen sulfide, defined by ATSDR in its June 2006 Health Consultation as prolonged exposure to 30 parts per billion ("ppb") hydrogen sulfide or higher.
- h. Groundwater within the contaminated plume (see Attachment B) shall not be used for drinking water until the MCL for total chromium is reached. This shall be implemented by controls, including but not limited to, easements, deed notices, zoning restrictions or other appropriate means.

- 8.4 Within twenty (20) business days of the effective date of this Settlement Agreement, Respondent shall submit to EPA for approval a RAP detailing the response action to be implemented for the items specified in paragraph 8.3 above. To the extent that information concerning the details of a particular item does not yet exist so that it can be described in the RAP, the RAP shall set forth an expeditious schedule and plan for submittal of RAP supplement(s) to EPA for approval, which supplement(s) shall fully detail such items. All references to the review, approval and enforcement of the RAP shall also be applicable to any RAP supplement(s). The RAP shall include, among other things, a schedule for expeditious performance of the response actions required by this Settlement Agreement. The RAP shall be consistent with the NCP and shall be subject to approval by EPA according to the provisions of paragraphs 8.5 and 8.9 below.
- 8.5 EPA will review the RAP and notify the Respondent of EPA's approval or disapproval of the RAP. In the event of disapproval, EPA will specify the deficiencies in writing. The Respondent shall respond to and correct the deficiencies identified by EPA and resubmit the RAP to EPA within ten (10) business days of receipt of EPA disapproval or such longer time as may be specified by EPA in its discretion. Exercise of EPA's discretion with respect to such period shall not be subject to the dispute resolution procedures set forth in Section XII of this Settlement Agreement. Approval, disapproval and/or modification by EPA of the subsequent RAP submission shall be according to the provisions of Paragraph 8.9 below.
- 8.6 Within ten (10) business days of receipt from EPA of written approval to proceed with implementation of the EPA-approved RAP ("written approval to proceed"), the Respondent shall commence implementation of such RAP and complete it in accordance with the RAP and the schedule therein. In the event EPA determines that any portion of the response action performed is deficient, and EPA requires Respondent to correct or re-perform such portion of the response action pursuant to this Settlement Agreement, Respondent shall correct or re-perform such response action or portion of the response action in accordance with a schedule provided by EPA.
- 8.7 Beginning seven (7) calendar days subsequent to the date of receipt of EPA approval of the RAP and every ninety (90) calendar days thereafter, or such longer interval as may be determined in writing by the EPA Project Coordinator designated pursuant to Section IX, and until EPA advises Respondent that the Work is complete, the Respondent shall provide EPA with a progress report for each preceding 90-day period or if applicable, the period specified in writing by the EPA Project Coordinator. The progress reports shall include, at a minimum: 1) a description of the response action completed and the actions that have been taken toward achieving compliance with this Settlement Agreement; 2) a description of all data anticipated and activities scheduled for the next 90 calendar days or, if applicable, the period specified in writing by the EPA Project Coordinator; 3) a description of any problems encountered or anticipated; 4) any actions taken to prevent or mitigate such problems; 5) a schedule for completion of such actions; 6) copies of all analytical data received during the reporting period; and 7) all modifications to the response action, RAP

and schedule made in accordance with Section XIV of this Settlement Agreement during the reporting period.

- 8.8 Documents, including plans, reports, sampling results and other correspondence to be submitted pursuant to this Settlement Agreement, shall be sent by e-mail and/or overnight mail to the EPA Project Coordinator designated pursuant to Section IX.
- 8.9 All reports, plans, approval letters, specifications, schedules and attachments required by this Settlement Agreement are subject to EPA approval and shall be deemed incorporated into this Settlement Agreement upon approval by EPA. In the event that EPA approves a portion of the RAP, report or other item required to be submitted under this Settlement Agreement, the approved portion shall be enforceable under this Settlement Agreement. In the event of conflict between this Settlement Agreement and any document attached hereto, incorporated in or enforceable hereunder, the provisions of this Settlement Agreement shall control. In the event that EPA disapproves any required submission, EPA will (1) specify the deficiencies in writing, and/or (2) submit its own modifications to the Respondent to accomplish the Work outlined in paragraph 8.3 above. Respondent shall amend and submit to EPA a revised submission that responds to and corrects the specified deficiencies within five (5) business days of receipt of EPA disapproval or such longer time as may be specified by EPA in its discretion. Exercise of EPA's discretion with respect to such period shall not be subject to the dispute resolution procedures set forth in Section XII of this Settlement Agreement. In the event that EPA submits its own modifications to the Respondent, the Respondent is hereby required to incorporate such modifications. Any non-compliance with EPA-approved reports, plans, specifications, schedules, attachments, or submission of deficient revisions following EPA disapproval, or non-compliance with an EPA-required modification shall be considered a failure to comply with a requirement of this Settlement Agreement. Determination(s) of non-compliance will be made by EPA.
- 8.10 In addition to the information and documents otherwise required by this Settlement Agreement, Respondent shall provide to EPA, upon written request, any and all information and documents in its possession, custody or control related to the Site including, but not limited to, Site analytical data (including raw data); Site safety data; Site monitoring data; operational logs; copies of all hazardous waste manifests (including copies of all hazardous waste manifests signed upon receipt of the hazardous wastes by a licensed treatment, storage or disposal facility); the identity of treatment, storage and/or disposal facilities used; the identity of transporters used; the identity of any contractors, subcontractors and supervisory personnel used; information and documents concerning Respondent's compliance with Quality Assurance and Quality Control requirements of this Settlement Agreement; information and documents relating to Respondent's efforts to secure access; and information and documents relating to any project delays. Nothing herein shall be interpreted as limiting the inspection and information-gathering authority of EPA under Federal law.

- 8.11 Within twenty (20) calendar days of the date Respondent concludes it has completed implementation of the RAP and the items identified in paragraph 8.3 above, Respondent shall submit a written Final Report to EPA, subject to EPA approval described in paragraph 8.9 above. The written report shall detail the work undertaken to implement the RAP and the items identified in paragraph 8.3 above, and shall be certified by Respondent in accordance with the terms of Section XXII of this Settlement Agreement. EPA will review the adequacy of Respondent's implementation of the RAP and accomplishment of items specified in paragraph 8.3 above. EPA will notify Respondent, in writing, of any discrepancies in the Final Report or deficiencies in the execution of the RAP and the items identified in paragraph 8.3 and the actions required to correct such discrepancies or deficiencies. Within fifteen (15) business days of receipt of notification by EPA, or as otherwise specified by EPA, Respondent shall, as directed by EPA, amend the Final Report, develop an additional plan or amend the existing RAP to address such discrepancies or deficiencies. Any additional plan or amendment to the RAP will be subject to the approval procedures outlined in paragraphs 8.5 and 8.9 above. Respondent shall perform all actions approved by EPA in a manner consistent with the NCP and all applicable Federal laws and regulations, as required by the NCP.
- 8.12 Respondent shall not handle or remove any hazardous substances from the Site except in conformance with the terms of this Settlement Agreement including, without limitation, Section XXIII of this Settlement Agreement) and all applicable Federal, State and local laws and regulations, as required by the NCP. Any transfer of hazardous substances, pollutants and contaminants from the Site to an off-site facility required by this Settlement Agreement shall be performed in accordance with section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3). In addition, any transfer of hazardous substances, pollutants and contaminants from the Site to an off-site facility for treatment, storage, or disposal required by this Settlement Agreement shall be performed in accordance with 40 C.F.R. § 300.440.
- 8.13 Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement. Respondent shall not commence implementation of the RAP developed hereunder until receiving written EPA approval to proceed pursuant to paragraph 8.6 above.
- 8.14 Respondent shall immediately notify EPA's Project Coordinator and the National Response Center [(800) 424-8802] and any other party required by law in the event of any action or occurrence during the pendency of this Settlement Agreement which causes or threatens to cause an additional release of hazardous substances, pollutants or contaminants on, at or from the Site, or which may create a danger to public health, welfare or the environment.
- 8.15 In the event that EPA believes that response action or other activities at the Site by the Respondent are causing or may cause a release or potential release of hazardous substances, or are a threat to public health or welfare or to the environment, EPA may, in its discretion, immediately halt or modify such response actions or other activities to eliminate or mitigate such actual or potential releases or threats.

## **IX. DESIGNATED PROJECT COORDINATORS**

- 9.1 Respondent shall designate a Project Coordinator and shall notify EPA of such designation no later than five (5) calendar days after the effective date of this Settlement Agreement. Designation of a Project Coordinator shall not relieve Respondent of its obligation to comply with the requirements of the Settlement Agreement. The Respondent's Project Coordinator shall be a technical and/or managerial representative of the Respondent and may be a contractor and/or consultant; provided, however, the Respondent's Project Coordinator shall not be its legal representative in this matter. The Project Coordinator for EPA designated pursuant to this Section and the Project Coordinator for the Respondent shall be responsible for overseeing the Work. To the maximum extent possible, communications between the Respondent and EPA and all documents concerning the activities performed pursuant to the terms and conditions of this Settlement Agreement, including plans, reports, approvals and other correspondence, shall be directed to the Project Coordinators.
- 9.2 The Project Coordinator for EPA is:
- Ann DiDonato  
U.S. Environmental Protection Agency  
Eastern Response Branch (3HS31)  
1650 Arch Street  
Philadelphia, PA 19103  
(215) 814-3311
- 9.3 Respondent shall have the right to change its Project Coordinator. Such a change shall be accomplished by notifying the EPA Project Coordinator in writing at least five (5) calendar days prior to the change.
- 9.4 EPA shall have the right to change its Project Coordinator at any time without prior notice to Respondent. EPA's intent is to notify the Respondent as soon as practicable following any such change of its Project Coordinator.
- 9.5 The absence of the EPA Project Coordinator from the Site shall not be cause for the stoppage or delay of Work except when such stoppage or delay is specifically required by EPA.
- 9.6 The EPA Project Coordinator shall have the authority to halt or modify Work or other activities performed by Respondent at the Site in order to eliminate a release or threat of release of hazardous substances. Such direction by the EPA Project Coordinator may be given verbally or in writing. If such direction is given verbally, the EPA Project Coordinator will later memorialize such direction in writing.

## **X. QUALITY ASSURANCE**

- 10.1 The Respondent shall use quality assurance, quality control, and chain of custody procedures in accordance with the following documents while conducting all sample collection and analysis activities required by this Settlement Agreement:
- a. “EPA NEIC Policies and Procedures Manual” (EPA Document 330/9-78-001-R (revised November 1984));
  - b. “Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans,” (QAMS-005/80 (December 1980)); and
  - c. “QA/QC Guidance for Removal Activities,” (EPA/540/G-90/004 (April 1990)).
- 10.2 The Respondent shall consult with EPA in planning for, and prior to, all sampling and analysis required by the approved RAP. The Respondent shall use a laboratory(s) which has a documented Quality Assurance Program that complies with EPA guidance document QAMS-005/80.

## **XI. ACCESS**

- 11.1 As of the effective date of this Settlement Agreement, Respondent shall provide to EPA and its employees, agents, consultants, contractors and other authorized and/or designated representatives, for the purposes of conducting and/or overseeing the Work, access to all property owned or controlled by Respondent wherein Work must be undertaken. Such access shall permit EPA and its employees, agents, consultants, contractors and other authorized and designated representatives to conduct all activities described in paragraph 11.3 of this Settlement Agreement.
- 11.2 To the extent that property wherein Work must be undertaken is presently owned or controlled by parties other than the Respondent, the Respondent shall use its best efforts to obtain Site access agreements from the present owners. Such access agreements shall be finalized as soon as practicable but no later than thirty (30) calendar days after receiving EPA’s written approval to proceed. Such agreements shall provide reasonable access for the Respondent and its employees, agents, consultants, contractors and other authorized and designated representatives to conduct the work, and for EPA and its designated representatives to conduct the activities outlined in paragraph 11.3 below. In the event that any property owner refuses to provide such access or access agreements are not obtained within the time designated above, whichever occurs sooner, the Respondent shall notify EPA at that time, in writing, of all efforts to obtain access and the circumstances of the failure to obtain such access. EPA may then take steps to provide such access. Respondent shall reimburse the United States for all costs incurred in obtaining access which are not inconsistent with the NCP.

- 11.3 In accordance with law and regulation, as appropriate, EPA and its employees, agents, contractors, consultants and other authorized and designated representatives shall have the authority to enter and freely move about the location where the response actions and/or Work is being performed at all reasonable times for the purposes of, inter alia: inspecting Work, records, operating logs and contracts related to the Site; reviewing the progress of the Respondent in carrying out the terms of this Settlement Agreement; conducting such tests as EPA deems necessary; using a camera, sound recording or other documentary type equipment; and verifying the data submitted to EPA by the Respondent. The Respondent shall permit such persons to inspect and copy all records, files, photographs, documents and other writings, including all sampling and monitoring data, in any way pertaining to the Work.
- 11.4 Respondent may make a claim of business confidentiality for information submitted pursuant to this Settlement Agreement in the manner described in 40 C.F.R. § 2.203(b). Such an assertion shall be adequately substantiated in accordance with 40 C.F.R. § 2.204(e)(4) at the time the assertion is made. Information subject to a confidentiality claim shall be made available to the public by EPA only in accordance with the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim of business confidentiality accompanies the information when it is submitted or made available to EPA, the submitted information may be made available to the public by EPA without further notice to Respondent.
- 11.5 The Respondent may withhold those records and documents covered by any privilege or protection recognized under federal law and applied by federal courts in actions commenced by the United States. In the event that the Respondent withholds a document as privileged, the Respondent shall provide EPA with the title of the document, the date of the document, the name(s) of the author(s) and addressee(s)/recipient(s), a description of the nature of the document and identification of the privilege asserted at the time such document is required to be provided to EPA.
- 11.6 No claim of confidentiality or privilege shall be made regarding any data required to be submitted pursuant to this Settlement Agreement including, but not limited to, sampling, analytical, monitoring, hydrogeologic, scientific, chemical or engineering data, or documents or information evidencing conditions at or around the Site. Nor shall such claims be made for analytical data; Site safety data; Site monitoring data; operational logs; hazardous waste manifests; identities of treatment, storage and/or storage facilities used; identities of transporters used; identities of any contractors or subcontractors used in performing work required by this Settlement Agreement.
- 11.7 Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access and information-gathering authorities and rights under CERCLA and any other applicable statute and regulation.

## **XII. DISPUTE RESOLUTION**

- 12.1 Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section XII shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. EPA and Respondent shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.
- 12.2 If Respondent objects to any EPA action taken pursuant to this Settlement Agreement, it shall notify EPA in writing of its objection(s) within fourteen (14) days after such action, unless the objection(s) has/have been resolved informally. EPA and Respondent shall have fourteen (14) days from EPA's receipt of Respondent's written objection(s) to resolve the dispute through formal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA.
- 12.3 Any agreement reached by EPA and Respondent pursuant to this Section XII shall be in writing and shall, upon signature by both parties, be incorporated into and become an enforceable part of this Settlement Agreement. If EPA and Respondent are unable to reach an agreement within the Negotiation Period, an EPA management official at the level of Associate Director, Office of Preparedness and Response, Hazardous Site Cleanup Division or higher will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondent's obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section.
- 12.4 Following resolution of the dispute, as provided by this Section XII, Respondent shall perform the Work that was the subject of the dispute in accordance with the agreement reached or EPA's decision. To the extent that Respondent does not prevail upon resolution of any dispute involving any contested costs other than oversight costs, Respondent shall submit to EPA, within fourteen (14) calendar days of receipt of such resolution, all such costs determined to be owed to EPA, including any accrued interest, as specified in paragraph 13.1 below.
- 12.5 Notwithstanding any other provision of this Settlement Agreement, no action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h). Nothing in this Section shall limit the rights of the Respondent under CERCLA or any other federal law to participate in the preparation of or to challenge the content of EPA's Administrative Record supporting any response action decisions for the Site.

### **XIII. DELAY IN PERFORMANCE AND STIPULATED PENALTIES**

- 13.1 For each day, or portion thereof, that Respondent fails to comply with any requirement of this Settlement Agreement at the time and in the manner set forth herein, the Respondent shall be liable upon demand to EPA for the sums set forth below as stipulated penalties. Checks shall be made payable to the "Hazardous Substance Superfund" and shall be transmitted to the following address, or to such other address(es) as EPA may provide in writing to the Respondent in the future:

U.S. Environmental Protection Agency, Region III  
Attention: Superfund Accounting  
P.O. Box 360515  
Pittsburgh, PA 15251-6515

Payment shall be made by cashier's or certified check within thirty (30) calendar days of receipt of demand. Interest at the rate of the current annualized treasury bill rate shall begin to accrue on the unpaid balance at the end of the thirty day period pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). A copy of the transmittal letter shall be sent simultaneously to the EPA Project Coordinator at the address identified in Section IX of this Settlement Agreement and to: EPA Region III Hearing Clerk (3RC00), 1650 Arch Street, Philadelphia, PA 19103.

- 13.2 Stipulated penalties shall accrue in the amount of \$2,500 per calendar day per violation for the first week and \$5,000 per day per violation for each day thereafter. Neither the accrual of nor demand for stipulated penalties set forth in this Section XIII shall preclude EPA from pursuing other penalties or sanctions available to EPA for Respondent's failure to comply with the requirements of this Settlement Agreement.

### **XIV. FORCE MAJEURE AND NOTIFICATION OF DELAY**

- 14.1 The Respondent, through its Project Coordinator, shall notify EPA of any delay or anticipated delay in achieving compliance with any requirement of this Settlement Agreement. Such notification shall be made verbally as soon as possible but not later than two (2) calendar days after Respondent becomes aware or should have become aware of any such delay or anticipated delay, and in writing no later than seven (7) calendar days after Respondent becomes aware, or should have become aware, of such delay or anticipated delay. Such written notification shall be certified by the Project Coordinator in accordance with Section XXII of this Settlement Agreement and shall fully describe the nature of the delay, including how it may affect the Work, RAP and schedule; the actions that will be or have been taken to mitigate, prevent and/or minimize further delay; and the timetable according to which the future actions to mitigate, prevent and/or minimize the delay will be taken. The Respondent shall ensure that its Project Coordinator provides Respondent with immediate notification of any project delays. The Respondent shall adopt all reasonable measures to avoid and minimize such delay.

- 14.2 To the extent Respondent intends to claim that any delay or anticipated delay described by Respondent in accordance with paragraph 14.1 was or will be caused by circumstances beyond its control, Respondent shall, within fourteen (14) calendar days after Respondent becomes aware, or should have become aware, of such delay or anticipated delay, submit to EPA a "Notice of Force Majeure" in which Respondent fully demonstrates that the delay was caused by circumstances beyond its control which could not have been overcome by due diligence, the necessity of the proposed length of the delay, and that the Respondent took and is taking all reasonable measures to avoid and minimize delay. The Respondent shall have the burden of proving these facts to EPA. Any "Notice of Force Majeure" shall be certified by a responsible official of Respondent pursuant to paragraph 22.1(b) of this Settlement Agreement.
- 14.3 Any such delay that EPA determines (1) has resulted or will result from circumstances beyond the control of the Respondent and (2) that could not and cannot be overcome by due diligence on the Respondent's part, shall not be deemed to be a violation of Respondent's obligation(s) under this Settlement Agreement, and shall not subject Respondent to stipulated penalties under this Settlement Agreement for that particular delay. In such event, the schedule affected by the delay shall be extended for a period EPA deems necessary to complete the Work on an expedited basis, but no greater than a period equal to the delay directly resulting from such circumstances. Increased costs of performance of the requirements of this Settlement Agreement or changed economic circumstances shall not be considered circumstances beyond the control of the Respondent. Delay in one item or component of Work or the RAP does not justify delay in timely achievement of other items or components. Each delay must be separately addressed and substantiated according to the provisions of paragraphs 14.1 and 14.2 above.
- 14.4 Failure of the Respondent to comply with the notice requirements of paragraphs 14.1 and 14.2 above shall constitute a waiver of the Respondent's right to invoke the benefits of this Section with respect to that event.
- 14.5 In the event that EPA and the Respondent cannot agree that any delay in compliance with the requirements of this Settlement Agreement has been or will be caused by circumstances beyond the control of the Respondent that cannot be overcome by due diligence, the dispute shall be resolved in accordance with the provisions of Section XII (Dispute Resolution) of this Settlement Agreement.

## **XV. RESERVATION OF RIGHTS**

- 15.1 The covenant not to sue set forth in Section XXVIII below does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:

- a. claims based on a failure by Respondents to meet a requirement of this Settlement Agreement;
  - b. liability for costs other than oversight costs recoverable under Section XXI of this Settlement Agreement;
  - c. liability for performance of response action other than the Work;
  - d. criminal liability;
  - e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
  - f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
  - g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.
- 15.2 Except as expressly provided in this Settlement Agreement, (1) each party reserves all rights, claims, interests and defenses it may otherwise have, and (2) nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, including the right to seek injunctive relief and/or the imposition of statutory penalties.
- 15.3 As provided by this Settlement Agreement, EPA expressly reserves its right to disapprove of Work performed by Respondent; to halt Work being performed by Respondent if Respondent has not complied with an approved RAP or this Settlement Agreement, or at any time EPA deems necessary to protect public health, welfare or the environment and to perform such Work; to request and require hereunder that Respondent correct and/or re-perform any and all Work disapproved by EPA; and/or to request or require that Respondent perform response actions in addition to those required by this Settlement Agreement. Further, EPA reserves the right to undertake response action at any time EPA deems appropriate. In the event EPA requires Respondent, and Respondent declines, to correct and/or re-perform work that has been disapproved by EPA and/or to perform response actions in addition to those required by this Settlement Agreement, EPA reserves the right to undertake such actions and seek reimbursement of the costs incurred and/or to seek any other appropriate relief. In addition, EPA reserves the right to undertake removal and/or remedial actions at any time that such actions are appropriate under the NCP and to seek reimbursement for any costs incurred and/or take any other action authorized by law.

- 15.4 EPA reserves the right to bring an action against the Respondent for recovery of all recoverable costs incurred by the United States related to this Settlement Agreement which are not reimbursed by the Respondent, as well as any other costs incurred by the United States in connection with response actions conducted at the Site.
- 15.5 This Settlement Agreement concerns certain response actions (Work described in Section VIII, above) concerning the Site. Such response actions might not fully address all contamination at the Site. Subsequent response actions which may be deemed necessary by EPA are not addressed by this Settlement Agreement. EPA reserves all rights including, without limitation, the right to institute legal action against Respondent and/or any other parties in connection with the performance of any response actions not addressed by this Settlement Agreement.
- 15.6 Nothing in this Settlement Agreement shall limit the authority of the EPA On-Scene Coordinator as outlined in the NCP and CERCLA.

#### **XVI. OTHER CLAIMS**

- 16.1 Nothing in this Settlement Agreement shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation not bound by this Settlement Agreement for any liability it may have relating in any way to the generation, storage, treatment, handling, transportation, release or disposal of any hazardous substances, hazardous wastes, pollutants or contaminants found at, taken to, or taken from the Site.

#### **XVII. OTHER LAWS**

- 17.1 All Work shall be undertaken in accordance with the requirements of all applicable and/or relevant and appropriate local, State and Federal laws and regulations, as required by the NCP.

#### **XVIII. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION**

- 18.1 The effective date of this Settlement Agreement shall be the date on which it is signed by EPA.
- 18.2 This Settlement Agreement may be amended by mutual agreement of EPA and the Respondent. Such amendments shall be in writing and shall have as their effective date the date on which such amendments are signed by EPA. Modifications to the EPA-approved RAP and its implementation may be made by mutual agreement of the Project Coordinators. Such modifications shall be memorialized in writing by the Project Coordinators.

- 18.3 Any reports, plans, specifications, schedules, or other submissions required by this Settlement Agreement are, upon approval by EPA, incorporated into this Settlement Agreement. Any non-compliance with such EPA-approved reports, plans, specifications, schedules, or other submissions shall be considered non-compliance with the requirements of this Settlement Agreement and will subject the Respondent to the requirements of Section XIII (Delay in Performance and Stipulated Penalties), above. Determinations of non-compliance will be made by EPA.
- 18.4 No informal advice, guidance, suggestions or comments by EPA regarding reports, plans, specifications, schedules or other submissions by the Respondent or the requirements of this Settlement Agreement will be construed as relieving the Respondent of its obligation to obtain formal approval when required by this Settlement Agreement, and to comply with the requirements of this Settlement Agreement unless formally modified.

#### **XIX. LIABILITY OF THE UNITED STATES GOVERNMENT**

- 19.1 Neither the United States Government nor any agency thereof shall be liable for any injuries or damages to persons or property resulting from acts or omissions of Respondent, or of its employees, agents, servants, receivers, successors or assigns, or of any persons including, but not limited to, firms, corporations, subsidiaries, contractors or consultants in carrying out the Work, nor shall the United States Government or any agency thereof be held out as a party to any contract entered into by Respondent in carrying out the Work.

#### **XX. INDEMNIFICATION AND HOLD HARMLESS**

- 20.1 Respondent agrees to indemnify and hold harmless the United States, its agencies, departments, agents, officers, employees and representatives from any and all causes of action caused by any acts or omissions of Respondent or its contractors in carrying out the work required by this Settlement Agreement.

#### **XXI. OBLIGATIONS UNDER CONSENT DECREE, UNILATERAL ADMINISTRATIVE ORDER AND REIMBURSEMENT OF OVERSIGHT COSTS**

- 21.1 EPA and Precision entered into the Consent Decree on December 4, 2008, for payment of the United States' Past and Future Response Costs incurred at the Site, as those terms are defined in the Consent Decree.
- 21.2 Precision has been complying with the terms of the Consent Decree. Nothing in this Settlement Agreement shall abrogate or excuse Precision's obligations under the Consent Decree, to pay EPA's Future Response Costs, which include the payment of EPA's

oversight costs, including those for the actions required by this Settlement Agreement or affect Precision's rights pursuant to the Consent Decree.

- 21.3 In the event of a conflict between the Consent Decree and this Settlement Agreement regarding the payment of Future Response Costs, the Consent Decree shall control.
- 21.4 Precision has been complying with the terms of the 1998 Order since April 1998. Upon the Effective Date of this Settlement Agreement, the 1998 Order is superseded by this Settlement Agreement and is therefore terminated.

## **XXII. CERTIFICATION OF COMPLIANCE**

- 22.1 a. Unless otherwise required by the terms of this Settlement Agreement, any notice, report, certification, data presentation or other document submitted by Respondent under or pursuant to this Settlement Agreement which discusses, describes, demonstrates or supports any finding or makes any representation concerning Respondent's compliance or non-compliance with any requirement(s) of this Settlement Agreement shall be certified by the Respondent, a responsible official of the Respondent or by the Project Coordinator for the Respondent. The term "responsible official" means: (i) a president, secretary, treasurer or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$35 million (in 1987 dollars when the consumer price index was 345.3), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. The responsible official of a partnership or sole proprietorship means the general partner or the proprietor, respectively.
- b. The written Final Report required by paragraph 8.11 of this Settlement Agreement, any written notification described in paragraph 12.1 of this Settlement Agreement and any "Notice of Force Majeure" described in paragraph 14.2 of this Settlement Agreement shall be certified by the Respondent or a responsible official of Respondent.
- 22.2 The certification required by paragraph 22.1 of this Settlement Agreement shall be in the following form:

I certify that the information contained in or accompanying this (specify type of submission) is true, accurate and complete.

I am aware that there are significant penalties for submitting false information including the possibility of fines and imprisonment for knowing violations.

Signature: \_\_\_\_\_  
Name (print): \_\_\_\_\_  
Title: \_\_\_\_\_

- 22.3 Submission of documents pursuant to this Settlement Agreement which are found by EPA to contain false information shall constitute a failure to comply with this Settlement Agreement and shall subject Respondent to, among other things, stipulated penalties whether or not a responsible official of Respondent has certified the document.

### **XXIII. SHIPMENT OF HAZARDOUS SUBSTANCES**

- 23.1 Respondent shall, prior to any off-site shipment of hazardous substances from the Site to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving state and to EPA's Project Coordinator of such shipment of hazardous substances. However, the notification to EPA of shipments shall not apply to any such off-site shipments when the total volume of all such shipments will not exceed ten (10) cubic yards. Notifications to States in those circumstances shall be governed by applicable state law.
- 23.2 The notification required by paragraph 23.1 shall be in writing and shall include the following information, where available: (1) the name and location of the facility to which the hazardous substances are to be shipped; (2) the type and quantity of the hazardous substances to be shipped; (3) the expected schedule for the shipment of the hazardous substances; and (4) the method of transportation of the hazardous substances. Respondent shall notify the receiving state of major changes in the shipment plan, such as a decision to ship the hazardous substances to another facility within the same state or to a facility in another state.
- 23.3 The identity of the receiving facility and state will be determined by Respondent. Respondent shall provide all relevant information, including information required by paragraph 23.1, above, relating to the off-site shipments as soon as practicable but no later than one (1) business day before the hazardous substances are actually shipped.

### **XXIV. RECORD RETENTION**

- 24.1 Until 10 years after Respondent's receipt of EPA's notification pursuant to Paragraph 26.1 (Notice of Completion), Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until 10 years after Respondent's receipt of EPA's notification pursuant to Paragraph 26.1 (Notice of

Completion), Respondent shall also instruct its contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.

- 24.2 At the conclusion of this document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA, Respondent shall deliver any such records or documents to EPA. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, Respondent shall provide EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

## **XXV. DEFINITIONS**

- 25.1 “1998 Order” shall mean the Unilateral Administrative Order EPA issued Precision on April 24, 1998, Docket No. III-98-069-DC.
- 25.2 “Business days” as used in this Settlement Agreement shall mean every day of the week except Saturdays, Sundays and federal holidays.
- 25.3 “Calendar days” as used in this Settlement Agreement shall mean every day of the week, including Saturdays, Sundays and federal holidays.
- 25.4 “Days” as used herein shall mean “calendar days” unless specified otherwise.
- 25.5 “Work” as used herein shall mean all requirements of this Settlement Agreement, including any modifications hereto.
- 25.6 “Consent Decree” shall mean the Consent Decree for Payment of Past and Future Response Costs and all appendices thereto, entered into and between the United States and Precision on December 4, 2008, USA v. Precision National Plating Services, Inc., No. 3:08cv1946.
- 25.7 All terms not defined herein shall have the meanings set forth in CERCLA and the NCP.

## **XXVI. NOTICE OF COMPLETION**

- 26.1 When EPA determines, after EPA's review and approval of the Final Report required pursuant to paragraph 8.11 of this Settlement Agreement, that all response actions specified in Section VIII of this Settlement Agreement have been fully performed, and upon receipt of costs and penalties assessed by EPA, with the exception of any continuing obligations required by this Settlement Agreement, including those requirements specified in Sections XV ("Reservation of Rights"), XVI ("Other Claims"), XIX ("Liability of the United States"), XX ("Indemnification and Hold Harmless"), XXIV ("Record Retention") and XXV ("Post Removal Site Control"), EPA will provide a notice of completion to the Respondent.

## **XXVII. NO ADMISSION**

- 27.1 By entering into this Settlement Agreement, or by taking any action in accordance with it, the Respondent does not admit any of the findings of fact, conclusions of law, determinations or any of the allegations contained in this Settlement Agreement, nor does Respondent admit liability for any purpose or admit any issues of law or fact or any responsibility for any alleged release or threat of release of any hazardous substances into the environment relating to the Site. The participation of Respondent in this Settlement Agreement shall not be admissible against Respondent in any judicial or administrative proceeding, except in an action by the EPA to enforce the terms of this Settlement Agreement. However, Respondent shall not challenge the findings of fact, conclusions of law, determinations or EPA's jurisdiction to issue this Settlement Agreement, in any action to interpret or enforce this Settlement Agreement.

## **XXVIII. COVENANT NOT TO SUE BY EPA**

- 28.1 From the effective date of this Settlement Agreement and for as long as EPA determines that the terms of this Settlement Agreement, including any modifications made hereto, are being fully complied with, and except for any proceeding to enforce its terms or collect any applicable costs or penalties, EPA agrees not to sue or take any administrative action against the Respondent for the Work required by this Settlement Agreement, including for reimbursement of costs incurred in connection with this Settlement Agreement.
- 28.2 Nothing in this Settlement Agreement shall be construed to limit the rights EPA has reserved under Section XV of this Settlement Agreement.
- 28.3 Nothing in this Settlement Agreement shall be construed to grant any rights to persons not a party to this Settlement Agreement. Further, nothing in this Settlement Agreement precludes the United States or the Respondent from asserting any claims, causes of action, or demands against any person not parties to this Settlement Agreement for indemnification, contribution, or cost recovery. Nothing herein diminishes the right of the

United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that provide contribution protection to such persons.

#### **XXIV. COVENANT NOT TO SUE BY RESPONDENT**

- 29.1 Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, oversight costs paid under this Settlement Agreement, or this Settlement Agreement including, but not limited to:
- a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
  - b. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Commonwealth of Pennsylvania Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or
  - c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Site.

Except as provided in Paragraph 29.3 (Waiver of Claims), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 15.1 (b), (c), and (e) - (g), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

- 29.2 Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).
- 29.3 Respondent agrees not to assert any claims and to waive all claims or causes of action that it may have for all matters relating to the Site, including for contribution, against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if the materials contributed by such person to the Site containing hazardous substances did not exceed the greater of i) 0.002% of the total volume of waste at the Site, or ii) 110 gallons of liquid materials or 200 pounds of solid materials.

- a. the materials contributed by such person to the Site containing hazardous substances did not exceed the greater of i) 0.002% of the total volume of waste at the Site, or ii) 110 gallons of liquid materials or 200 pounds of solid materials.
- b. This waiver shall not apply to any claim or cause of action against any person meeting the above criteria if EPA has determined that the materials contributed to the Site by such person contributed or could contribute significantly to the costs of response at the Site. This waiver also shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person if such person asserts a claim or cause of action relating to the Site against Respondent.

### **XXX. CONTRIBUTION**

- 30.1 The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. §§ 9613(f)(2), and that the Respondent is entitled, as of the effective date of this Settlement Agreement, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may be otherwise provided by law, for “matters addressed” in this Settlement Agreement. The “matters addressed” in this Settlement Agreement is the Work and payment of costs under Section XXI of this Settlement Agreement.
- 30.2 The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which the Respondent has, as of the effective date of this Settlement Agreement, resolved its liability to the United States for the Work and payment of costs under Section XXI of this Settlement Agreement.
- 30.3 Nothing in this Settlement Agreement precludes the United States or Respondent from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any persons not parties to this Settlement Agreement. Nothing herein diminishes the right of the United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2).

**FOR RESPONDENT:**

  
[Signature]

Please Type the Following:

Name: DREW J. ANDERSON

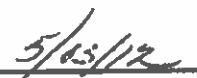
Title: PRESIDENT

Address: PO BOX 8588  
TARRYTOWN, NY 10591-8588

**FOR EPA:**

  
\_\_\_\_\_  
**Ronald J. Borsellino**

**Director, Hazardous Site Cleanup Division  
U.S. Environmental Protection Agency  
Region III**

  
\_\_\_\_\_

**Date**

# Appendix B

**2025 Consent Order and Agreement between the  
Commonwealth of Pennsylvania, Department of Environmental  
Protection and Precision National Plating Services, Inc.**

**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

In the matter of:

Precision National Plating Services, Inc.  
c/o Kevin C. Quinn, Esq,  
600 Third Avenue  
Kingston, PA 18704

:  
:  
: The Clean Streams Law, Solid  
: Waste Management Act Hazardous Sites  
: Cleanup Act, and the Comprehensive  
: Environmental Response, Compensation, and  
: Liability Act  
:  
:  
:

**CONSENT ORDER AND AGREEMENT**

This Consent Order and Agreement ("CO&A") is entered into this 2nd day of April, 2025, by and between the Commonwealth of Pennsylvania, Department of Environmental Protection ("Department") and Precision National Plating Services, Inc. ("Precision").

**FINDINGS**

The Department has found and determined the following:

A. The Department is the agency of the Commonwealth with the duty and authority to administer and enforce the provisions of the Hazardous Sites Cleanup Act, Act of October 18, 1988, P.L. 756, No. 108, 35 P.S. §6020.101 – 6020.1305 ("HSCA"); The Clean Streams Law, the Act of June 22, 1937, P.L. 1987, *as amended*, 35 P.S. § 691.1 – 691.1001., ("the Clean Streams Law"); the Solid Waste Management Act, Act of July 7, 1980, P.L. 380, *as amended*, 35 P.S. §§ 6018.101 – 6018.1003("Solid Waste Management Act") and Section 1917-A of the Administrative Code, the Act of April 9, 1929, P.L. 177, *as amended*, 71 P.S. § 510-17 ("Administrative Code") and the rules and regulations promulgated under each. The Department is also the agency of the Commonwealth vested with the duty and authority to implement and

administer the State support program under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 *et seq.* (“CERCLA”).

B. Precision is a corporation organized under the laws of the State of Delaware and is authorized to conduct business in the Commonwealth of Pennsylvania. Precision has a registered business address of 81 Main Street, Suite 504, White Plains, NY, 10601.

C. Precision is the owner of a property located at 198 Ackerly Road in Clarks Summit, Lackawanna County, Pennsylvania, 18411 (“Property”).

D. On May 3, 2012, Precision entered into an Administrative Settlement Agreement and Order on Consent (“AOC”) with the United States Environmental Protection Agency (“EPA”). The findings, terms and conditions contained therein are incorporated herein by reference. A true and correct copy of the AOC is attached hereto as Exhibit A.

E. According to the EPA, the following corrective actions required by the AOC have not been completed:

- 1) For as long as releases continues. collect contaminated water from the seeps (i.e., Trolley Track, Bathtub and Cinderblock Seeps) until concentrations of total chromium in the seeps remain below the Maximum Contaminant Level (“MCL”) of 100 ppb for total chromium to prevent human exposure to contaminated groundwater. (AOC Section 8.3a)
- 2) Treat the water from the currently collected seeps (i.e., Trolley Track, Bathtub and Cinderblock Seeps) in order that concentrations of chromium in the seeps remain below the MCL of 100 µ/L for total chromium to prevent human exposure to contaminated groundwater. (AOC Section 8.3b). Such treatment may occur in the infiltration gallery that is part of the existing treatment system, rather than in a

separate treatment unit.

- 3) Sample semi-annually on- and off-Site groundwater wells to track the plume and nearby residential wells at an accelerated schedule during in-situ chemical treatment to ensure no breakthrough of sulfides from treatment into receptors.  
(AOC Section 8.3e)
- 4) Perform air monitoring during any treatment conducted to ensure residents are not exposed to unsafe levels of hydrogen sulfide, defined by ATSDR in its June 2006 Health Consultation as prolonged exposure to 30 ppb hydrogen sulfide or higher.  
(AOC Section 8.3g)
- 5) Groundwater within the contaminate plume shall not be used for drinking water until the MCL for total chromium is reached. This shall be implemented by controls, including but not limited to, easements, deed notices, zoning restrictions or other appropriate means. (AOC Section 8.3h)

F. The Property is impacted from the release of total chromium, which includes trivalent and hexavalent chromium, above the MCL in ground and surface water. Hexavalent chromium is defined as a “hazardous substance” in accordance with Section 103 of HSCA, 35 P.S. § 6020.103, and Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

G. All areas impacted by the release of hazardous substances and/or contaminants from activities at Precision’s facility constitute a “Site” as defined in Section 103 of HSCA, 35 P.S. § 6020.103.

H. The Site is a “facility” within the meaning of Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

I. The past and present conditions at the Site constitute a release and/or threatened

release of hazardous substances and/or contaminants, as those terms are defined in Section 103 of HSCA, 35 P.S. §6020.103 and Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

J. Pursuant to Section 501(a) of HSCA, 35 P.S. § 6020.501(a), the Department and Precision have agreed that further response is necessary to abate the release or threat of release of hazardous substances and/or contaminants identified in Paragraphs G through I, above.

K. Precision is a “responsible person” in accordance with Section 701 of HSCA, 35 P.S. §6020.701, with respect to the release or threat of release referred to in Paragraph J, above.

L. The release and threat of release of hazardous substances at the Site, as referenced in the above paragraphs, constitutes a statutory public nuisance under Section 1101 of HSCA, 35 P.S. § 6020.1101.

M. The Department and Precision have agreed that, in addition to completion of those items in the AOC as described in paragraph E, above, the installation of a public water line to the property lines of properties shown in Figure 1 impacted or threatened to be impacted by the release of hazardous substances from the site is an acceptable final, permanent, remedy.

N. The EPA and the Department will consider installation/extension of the public water line as described in paragraph M, and completion of all corrective actions as noted in Exhibit A as constituting completion of the remedy under the EPA’s AOC.

O. Section 1 of the Clean Streams Law, 35 P.S. § 691.1 states:

“Industrial waste” shall be construed to mean any liquid, gaseous, radioactive, solid, or other substance, not sewage, resulting from any manufacturing or industry, or from any establishment, as herein defined, and mine drainage, refuse, silt, coal mine solids, rock, debris, dirt and clay from coal mines, coal collieries, breakers, or other coal mine processing operations. “Industrial waste” shall include all such substances whether or not generally characterized as a waste.”

P. Total chromium is an “industrial waste” as defined within Section 1 of the Clean Streams Law, 35 P.S. § 691.1.

Q. Section 301 of the Clean Streams Law, 35 P.S. § 691.301 states:

“No person or municipality shall place or permit to be placed, or discharge or permit to flow, or continue to discharge or permit to flow, into any of the waters of the Commonwealth any industrial wastes, except as hereinafter provided in this act.”

R. Section 307(c) of the Clean Streams Law, 35 P.S. § 691.307(c) states:

“A discharge of industrial wastes without a permit or contrary to the terms and conditions of a permit or contrary to the rules and regulations of the Department is hereby declared to be a nuisance.”

S. Precision discharged “industrial waste” into the waters of the Commonwealth without a permit in violation of Sections 301 and 307(c) of the Clean Streams Law, 35 P.S. §§ 691.301 and 691.307(c). Precision has been and is prohibited from discharging or permitting the discharge of industrial waste into waters of the Commonwealth. Such discharge of industrial waste constitutes a nuisance pursuant to Section 307(c) of the Clean Streams Law, 35 P.S. § 691.307(c) and unlawful conduct as defined by Section 611 of the Clean Streams Law, 35 P.S. § 691.611.

T. Section 1 of the Clean Streams Law, 35 P.S. § 691.1 defines “pollution” as:

“Pollution” shall be construed to mean contamination of any waters of the Commonwealth such as will create or is likely to create a nuisance or to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, municipal, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life, including but not limited to such contamination by alteration of the physical, chemical or biological properties of such waters, or change in temperature, taste, color or odor thereof, or the discharge of any liquid, gaseous, radioactive, solid or other substances into such waters.

U. Section 401 of the Clean Streams Law, 35 P.S. § 691.401 states:

“It shall be unlawful for any person or municipality to put or place into any of the waters of the Commonwealth, or allow or permit to be discharged from property owned or occupied by such person or municipality into any of the waters of the Commonwealth, any substance of any kind or character resulting in pollution as herein defined. Any such discharge is hereby declared to be a nuisance.”

V. Section 402 of The Clean Streams Law, 35 P.S. § 691.402 states in relevant part:

“a) Whenever the Department finds that any activity, not otherwise requiring a permit under this act, including but not limited to the impounding, handling, storage, transportation, processing or disposing of materials or substances, creates a danger of pollution of the waters of the Commonwealth or that regulation of the activity is necessary to avoid such pollution, the Department may, by rule or regulation, require that such activity be conducted only pursuant to a permit issued by the Department or may otherwise establish the conditions under which such activity shall be conducted, or the Department may issue an order to a person or municipality regulating a particular activity. Rules and regulations adopted by the Department pursuant to this section shall give the persons or municipalities affected a reasonable period of time to apply for and obtain any permits required by such rules and regulations.

(b) Whenever a permit is required by rules and regulations issued pursuant to this section, it shall be unlawful for a person or municipality to conduct the activity regulated except pursuant to a permit issued by the Department. Conducting such activity without a permit, or contrary to the terms or conditions of a permit or conducting an activity contrary to the rules and regulations of the Department or conducting an activity contrary to an order issued by the Department, is hereby declared to be a nuisance.”

W. Precision discharged and/or threatened to discharge a substance into the waters of the Commonwealth resulting in pollution or potential pollution in violation of Sections 401 and 402 of the Clean Streams Law, 35 P.S. §§ 691.401 and 691.402, respectively. Such discharges or threatened discharges of pollution constitute a nuisance pursuant to Section 401 and 402 of the Clean Streams Law, 35 P.S. §§ 691.401 and 691.402, respectively, and unlawful conduct as defined by Section 611 of the Clean Streams Law, 35 P.S. § 691.611.

X. The conditions and violations described in Paragraphs S and W above constitute a nuisance under Sections 307(c), 401, and 402 of the Clean Streams Law, 35 P.S. § 691.307(c), 691.401, and 691.402; and Sections 1917-A of the Administrative Code, 71 P.S. § 510-117.

Y. The total chromium-contaminated soil disposed of at the Site is a “solid waste” as that term is defined in Section 103 of the Solid Waste Management Act, 35 P.S. § 6018.103.

Z. Precision permitted the disposal of “solid waste” as defined by Section 103 of the Solid Waste Management Act, 35 P.S. § 6018.103.

AA. Section 401(a) of the Solid Waste Management Act, 35 P.S. § 6018.401(a), states in relevant part:

“No person shall ... treat or dispose of hazardous waste within the Commonwealth unless such ... treatment, or disposal is authorized by the rules and regulations of the Department; no person ... shall own or operate a hazardous waste ... treatment or disposal facility unless such person ... has first obtained a permit for the treatment and disposal of hazardous waste from the Department; ...”

BB. Section 401(b) of the Solid Waste Management Act, 35 P.S. § 6018.401(b), states:

“The storage, transportation, treatment and disposal of hazardous waste are hereby declared to be activities, which subject the person carrying on those activities to liability for harm although he has exercised utmost care to prevent harm, regardless whether such activities were conducted prior to the enactment hereof.”

CC. Precision disposed of hazardous waste in violation of Section 401 of the Solid Waste Management Act, 35 P.S. § 6018.401.

DD. Section 501(a) of the Solid Waste Management Act, 35 P.S. § 6018.501(a), states in relevant part:

“It shall be unlawful for any person or municipality to use, or continue to use, their land or the land of any other person or municipality as a solid waste . . . treatment or disposal area without first obtaining a permit from the Department as required by this act; ...”

EE. Precision used their land as a solid waste treatment or disposal area in violation of Section 501(a) of the Solid Waste Management Act, 35 P.S. § 6018.501(a).

FF. The conditions and violations described in Paragraphs CC and EE, above constitute unlawful conduct under Sections 401, 501(a) and 610(1), (2), (4) and (9) of the Solid Waste Management Act, 35 P.S. 6018.401, 6018.501(a) and 6018.610(1), (2), (4) and (9) and a statutory nuisance under Section 601 of the Solid Waste Management Act, 35 P.S. § 6018.601.

### **ORDER**

After full and complete negotiation of all matters set forth in this Consent Order & Agreement and upon mutual exchange of covenants contained herein, the parties desiring to avoid litigation and intending to be legally bound, it is hereby ORDERED by the Department and AGREED to by Precision as follows:

1. **Authority.** This CO&A is an Order of the Department authorized and issued pursuant to Section 505(d) and 1102 of HSCA, 35 P.S. §§ 6020.505(d) and 6020.1102; Section 5 of the Clean Streams Law, 35 P.S. § 691.5; Sections 401, 501, 601, 602 and 610 of the Solid Waste Management Act, 35 P.S. §§ 6018.401, 6018.501, 6018.601, 6018.602 and 6018.610, and Section 1917-A of the Administrative Code, 71 P.S. § 510-17.

2. **Findings.**

a. In any matter or proceeding between Precision and the Department, Precision shall not challenge or deny the Department’s assertion of the truth, accuracy, or validity of Paragraphs A through FF, above.

b. The parties do not authorize any other persons to use the findings in this CO&A in any matter or proceeding.

3. ***Remedial Action.***

**Compliance with Prior Agreements**

a. Precision shall complete all corrective actions noted in Exhibit A that have not yet been completed, as identified in Paragraph E, above.

**Water Line Construction**

b. Precision shall work with Pennsylvania American Water Company (“PAWC”) for the installation of the water line extension at and around the Site (“Water Line Extension.”). The Water Line Extension shall provide the opportunity for owners of vacant properties within the area of the Site impacted by total chromium above the MCLs to have public water available at such time as the vacant property is in need of water. The properties currently subject to this requirement are shown in Figure 1. The Water Line Extension shall be constructed in accordance with design criteria as well as in accordance with any federal, state, and local requirements.

c. Precision shall, as part of the installation of the Water Line Extension, provide and maintain appropriate erosion and sediment controls during soil disturbance activities and until vegetation cover or pavement is established.

d. Precision shall ensure proper precautions are taken to protect workers from exposure to any contamination during installation of the Water Line Extension.

e. Precision shall restore excavated areas associated with the installation of the Water Line Extension to as close to its pre-excavation condition as possible by performing

site restoration and revegetation. Paving restoration will be performed in accordance with Pennsylvania Department of Transportation and local specifications.

f. Precision shall complete water line construction by the end of the 2026 construction season, or no later than December 15, 2026, provided Precision obtains required permits and water company review in a timely fashion. In the event that obtaining such permits or completing such reviews prevents Precision from completing water line construction in accordance with this anticipated schedule, Precision shall advise the Department, in writing, and work with the Department to make necessary and reasonable adjustments to the schedule and complete construction of the water line expeditiously.

g. Precision shall submit quarterly reports to the Department describing the progress made related to paragraphs 3(b) through 3(f) beginning ninety (90) days from the effective date of this CO&A.

#### **Environmental Covenants**

h. With regard to properties impacted or threatened to be impacted by chromium contamination from the Site and therefore requiring the recordation of an Environmental Covenant, Precision shall, within ninety (90) days of the Effective Date of this CO&A, provide to the Department documentation describing its reasonable efforts to procure said Environmental Covenants on such properties. In the event that, despite Precision's reasonable efforts, one or more such property owners refused to enter an Environmental Covenant, Precision will be relieved of this obligation. Any Environmental Covenant to be recorded shall be drafted in accordance with the provisions of the Pennsylvania Uniform Environmental Covenants Act, Act No. 68 of 2007, 27 Pa. C.S. §§ 6501 – 6517 and shall be submitted to the Department for review, comment, and ultimate signature.

### **Reporting Requirements**

i. Precision shall submit to the Department quarterly progress reports that:

(1) describe the actions which have been undertaken toward achieving compliance with this CO&A, (2) include a summary of all results of sampling and tests and all other data received or generated by Precision or their contractors or agents including the seep shed monitoring results, (3) identify all submittals required by this CO&A which were completed, and (4) provide the semi-annual monitoring well and residential well sampling results in the next quarterly report after the samples are taken. Precision shall submit the quarterly progress reports to the Department by the tenth day of every quarter following the effective date of this CO&A, until the Department has determined, pursuant to Paragraph 3, that the remedial action is complete.

j. Precision shall notify the Department of any change in the schedule described in the latest quarterly progress report for the performance of any activity, as soon as possible, but no later than seven (7) days prior to the scheduled date of performance of the activity.

### **Certificate of Completion**

k. Notwithstanding the requirements of any other prior agreement, when Precision concludes that the remedial action, as described in Paragraph 3, has been fully performed and that the performance standards have been attained, Precision can schedule an inspection with the Department. If, after the inspection is conducted, Precision still believes that the remedial action has been fully performed and that the performance standards have been attained, Precision shall, within thirty (30) days of such inspection, submit a written report to the Department which requests a certification of completion of the remedial action. The report shall be signed by Precision's Project Coordinator and a registered professional engineer and shall

demonstrate that the remedial action has been completed in full satisfaction of this CO&A. The written report shall specifically contain all requirements of Paragraph 3, as well as a sign off by PAWC and as-built drawings.

l. If, after review of the written report submitted by Precision pursuant to the preceding paragraph, the Department determines that the remedial action has not been completed in accordance with this CO&A, or that the performance standards have not been attained, the Department will notify Precision in writing of the activities that must be undertaken to complete the remedial action and achieve the performance standards, and will include in that notice a schedule for performance of those activities, or require Precision to submit a schedule to the Department for review and approval. Precision shall perform all of the activities described in the Department's notice.

m. If, after review of the written report submitted by Precision pursuant to the Paragraph 3 the Department determines that the remedial action has been fully performed in accordance with this CO&A, and that the performance standards have been attained, the Department will provide to Precision a written certification of remedial action completion, for the purposes of this CO&A. This certification shall not affect Precision's obligations under this CO&A except as stated by the Department in the certification.

4. ***Department's Covenant Not to Sue.*** Subject to the reservations of rights provided in Paragraphs 5 and 6, and Precision's full compliance with this CO&A, the Department covenants not to sue or to take administrative action against Precision pursuant to HSCA, 35 P.S. §§ 6020.101 et seq., CERCLA, 42 U.S.C.A. §§ 9601-9675, or any other environmental state or federal statutory or common law, for response costs, [or] response actions, and for injunctive relief arising from remediation of the release or threatened release of

hazardous substances [and contaminants] at the Site, as identified in the Department's files. Except with respect to future liability, these covenants not to sue shall become effective upon execution of this CO&A by all parties, notification from the Department in accordance with Paragraph 3 above. With respect to future liability, these covenants not to sue shall become effective upon the Department's determination, in writing, that the Site presents no currently foreseeable future significant risk and its certification that the remedial action has been completed in accordance with section 706 of HSCA and this CO&A and has achieved the performance standards.

5. ***Reopeners/Reservations of Rights.*** Notwithstanding any other provision of this CO&A, the covenants not to sue in Paragraph 4 above shall be voidable by the Department and the Department reserves the right to sue Precision for additional response costs relating to the Site, or to issue an administrative order requiring Precision to perform additional work relating to the Site, if:

a. Precision, its officers, directors, employees, contractors, or agents, falsify information, reports, or data, or make false representations or statements in a record, report or document submitted under this CO&A and such actions resulted in avoiding the need for further clean-up at the Site; or

b. New information confirms the existence of an area of previously unknown contamination at the Site which contains regulated [hazardous] substances that have been shown to exceed the standards in Chapter 3 of the Land Recycling and Environmental Remediation Standards Act, Act of May 19, 1995, P.L. 4, No 1995-2, 35 P.S. §§ 6026.101 et seq. ("Land Recycling Act") applied to previous remediation at the Site; or

c. Based on new information, the remediation method for the Site fails to meet one or a combination of the three clean-up standards in Chapter 3 of the Land Recycling Act, as required under the Statement of Decision; or

d. The level of risk is increased beyond the acceptable risk range at the Site, due to substantial changes in exposure conditions, such as a change in land use as provided in the Land Recycling Act, or new information is obtained about a regulated substance at the Site which revises exposure assumptions beyond the acceptable risk range established under Chapter 3 of the Land Recycling Act.

The information received by and presently known to the Department includes only that information set forth in the Department's files related to the Site.

6. ***Non-Applicability/Reservation of Rights.*** The Department's covenants not to sue set forth in Paragraph 4, above also shall not apply to the following claims by the Department against Precision for:

- a. failure to comply with [or meet the requirements of] this CO&A;
- b. past, present or future releases or threatened releases of hazardous substances outside the boundaries of the Site;
- c. past, present or future violations of state or federal criminal law; and
- d. damages for injury to, destruction of, or loss of "natural resources" as that term is defined in Section 103 of HSCA, 35 P.S. § 6020.103.

7. ***Contribution Protection.*** Subject to the Department's Reservation of Rights in Paragraph 5, above Precision is a person that has resolved its liability to the Department for the Site and it is eligible for protection from claims for contribution regarding matters addressed in this settlement, as provided by Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and Section

705(c)(2) of HSCA, 35 P.S. § 6020.705(c)(2). This contribution protection is intended to be as broad as permissible under CERCLA and HSCA, and the "matters addressed" in this settlement encompass all of the response actions and response costs at the Site. This contribution protection shall take effect upon execution of this CO&A by the Parties, extends only to Precision, and shall terminate upon Precision's failure to meet any of the requirements of this CO&A.

8. ***Waiver of Other Claims by Settlor.***

a. Precision shall not assert any claims or defenses that it may have against the Commonwealth government regarding the application of Sections 708, 709 and 1301 of HSCA, 35 P.S. § 6020.708, 6020.709 and 6020.1301, for matters arising from the release and threatened release of hazardous substances at the Site, arising out of the Response actions at the Site, or arising out of this CO&A.

b. Precision shall not assert any claims for reimbursement, contribution, and/or indemnity from the Pennsylvania Hazardous Sites Cleanup Fund for matters arising from the release and threatened release of hazardous substances at the Site, arising out of the Response actions at the Site, or arising out of this CO&A.

9. ***Acknowledgment of No Obligation.*** Precision acknowledges that the Department has no obligation to defend it in any suit, demand, or claim for contribution for any matters arising from the release and threatened release of hazardous substances at the Site, arising out of the Response actions at the Site, or arising out of this CO&A.

10. ***Liability of Operator.*** Precision shall inform all persons necessary for the implementation of this CO&A of the terms and conditions of this CO&A. Precision shall be jointly and severally liable for any violation of this CO&A, including those caused by, contributed to, or allowed by the directors, officers, agents, managers, servants, and privies of

Precision and any persons, contractors, and consultants acting under or for Precision. Except as provided in Paragraph 14, Precision remains liable for any violation of this CO&A caused by, contributed to, or allowed by their successors and assigns.

11. ***Existing Obligations Unaffected.*** Except as specifically provided for in this CO&A, nothing set forth in this CO&A is intended, nor shall be construed, to relieve or limit Precision's obligation to comply with any existing or subsequent statute, regulation, permit, or order. In addition, nothing set forth in this CO&A is intended, nor shall be construed, to authorize any violation of any statute, regulation, order, or permit issued or administered by the DEP.

12. ***Retention of Records.*** For six (6) years after termination of this CO&A, Precision shall retain all records and documents, including all cost documentation, in their possession or in the possession of their divisions, employees, agents, contractors, accountants, and attorneys, which in any way relate to the work performed at the Site pursuant to this CO&A, despite any document retention policy to the contrary. At the end of this six-year period, Precision or the agent(s) of Precision having custody of such documents, shall notify the Department at least sixty (60) days prior to the destruction of any such documents. Upon request by the Department, Precision shall make available to the Department such records or copies of such records.

13. ***Additional Remedies.***

a. In the event Precision fails to comply with any provision of this CO&A, the Department may, in addition to the remedies prescribed herein, pursue any remedy available for a violation of an order of the Department, including an action to enforce this CO&A.

b. The remedies provided by this paragraph and Paragraph 5 are cumulative and the exercise of one does not preclude the exercise of any other. The failure of the Department to pursue any remedy shall not be deemed to be a waiver of that remedy.

c. The Department will not pursue any remedy for a violation of Paragraph 3 if the violation is corrected within fifteen (15) days of notice from the Department.

14. ***Transfer of Facilities.***

a. The duties and obligations under this CO&A shall not be modified, diminished, terminated or otherwise altered by the transfer of any legal or equitable interest in the Precision Facilities or any part thereof.

b. If Precision intends to transfer any legal or equitable interest in the Precision Facilities which is affected by this CO&A, Precision shall serve a copy of this CO&A upon the prospective transferee of the legal and equitable interest at least thirty (30) days prior to the contemplated transfer and shall simultaneously inform the Northeast Regional Office of the Department of such intent.

c. The Department in its sole discretion may agree to modify or terminate Precision duties and obligations under this CO&A upon transfer of the Precision Facilities. Precision waives any right that it may have to challenge the Department's decision in this regard.

15. ***Correspondence with the DEP.***

All correspondence with the Department concerning this CO&A shall be addressed to:

Environmental Cleanup Program Manager  
PA Department of Environmental Protection  
2 Public Square  
Wilkes-Barre, PA 18701-1915  
Phone: 570-826-2511  
Fax: 570-820-4907

16. ***Correspondence with Precision.***

All correspondence with Precision concerning this CO&A shall be addressed by certified mail to:

Precision National Plating Services, Inc.  
c/o Kevin C. Quinn, Esq.  
600 Third Avenue  
Kingston, PA 18704.

Precision shall notify the Department whenever there is a change in the contact person's name, title, or address. Service of any notice or any legal process for any purpose under this CO&A, including its enforcement, may be made by mailing a copy by first class mail to the above address.

17. ***Severability.*** The paragraphs of this CO&A shall be severable, and should any part hereof be declared invalid or unenforceable, the remainder shall continue in full force and effect between the parties.

18. ***Opportunity for Public Comment.***

a. Pursuant to Section 1113 of HSCA, 35 P.S. § 6020.1113, the Department shall publish a notice containing a summary of the terms of this CO&A in the *Pennsylvania Bulletin* and in a newspaper of general circulation in the area of the Site, and the Department shall receive and consider comments relating to this CO&A for a period of sixty (60) days from publication of this notice. This notice shall also be sent to the persons named in Paragraph 18, above. The Department reserves the right to withdraw its consent to this CO&A, if the comments disclose facts or considerations which indicate that this CO&A is inappropriate, improper, or not in the public interest. Said publication and public comment period shall not affect the effective date of this CO&A.

b. This CO&A shall be final upon the date the Department files a response to any significant comments received during the public comment period, if described in Paragraph

18(a), above or notifies Precision that no comments were received. If the Department notifies Precision that it is withdrawing its consent to this CO&A in response to public comment received pursuant to Paragraph 18(a), above, the terms of the CO&A shall be void and of no effect and shall not be used as evidence in any litigation or other proceeding.

19. ***Effective Date.*** This CO&A shall become effective upon the date first entered above.

20. ***Entire Agreement.*** This CO&A shall constitute the entire integrated agreement of the parties. No prior or contemporaneous communications or prior drafts shall be relevant or admissible for purposes of determining the meaning or extent of any provisions herein in any litigation or any other proceeding.

21. ***Attorney's Fees.*** The parties shall bear their respective attorney fees, expenses and other costs in the prosecution or defense of this matter or any related matters, arising prior to execution of this CO&A.

22. ***Modifications.*** No changes, additions, modifications, or amendments of this CO&A shall be effective unless they are set out in writing and signed by the parties hereto.

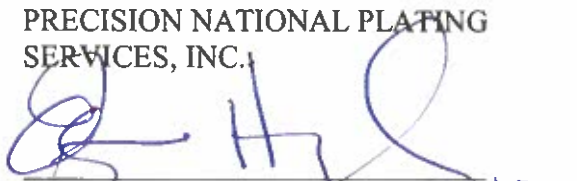
23. ***Titles.*** A title used at the beginning of any paragraph of this CO&A may be used to aid in the construction of that paragraph, but shall not be treated as controlling.

24. ***Hazardous Sites Cleanup Act.*** Precision agrees that failure to comply with the provisions of Paragraph 3 of this CO&A constitutes a failure to comply with an "enforcement action" as provided in Section 1301 of the Hazardous Sites Cleanup Act, the Act of October 18, 1988, P.L. 756, 35 P.S. § 6020.1301.

26. **Termination.** The obligations of this CO&A shall terminate upon written request by Precision and determination by the Department that the activity is no longer necessary, which determination will not be unreasonably withheld.

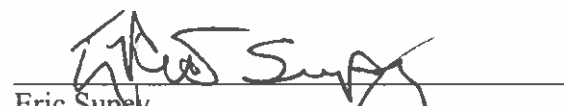
IN WITNESS WHEREOF, the Parties hereto have caused this CO&A to be executed by their duly authorized representatives. The undersigned representatives of Precision certify under penalty of law, as provided by 18 Pa. C.S. § 4904, that they are authorized to execute this CO&A on behalf of Precision; that Precision consents to the entry of this CO&A and the foregoing Findings as a final ORDER of the Department; and that Precision hereby knowingly waives its right to appeal this CO&A and to challenge its content or validity, which rights may be available under Section 4 of the Environmental Hearing Board Act, Act of July 13, 1988, P.L. 530, No. 1988-94, 35 P.S. § 7514; the Administrative Agency Law, 2 Pa. C.S. § 103(a) and Chapters 5A and 7A; sections 508 and 1102 of HSCA, 35 P.S. §§ 6020.508 and 1102; or any other provisions of law. Signature by Settlor's attorney certifies only that the agreement has been signed after consulting with counsel.

PRECISION NATIONAL PLATING  
SERVICES, INC.

  
Name: EUGENE HEYWARD  
Title: PRESIDENT

  
Name: Kermit Wadler, Esquire  
Attorney for Precision

FOR THE COMMONWEALTH OF  
PENNSYLVANIA, DEPARTMENT OF  
ENVIRONMENTAL PROTECTION:

  
Eric Supley  
Environmental Cleanup Program Manager  
Northeast Regional Office

  
Michael T. Ferrence  
Assistant Counsel

**EXHIBIT**

**“A”**

**IN THE MATTER OF:**

[illegible]

**: Docket No. CERC-03-2012-0031DC**

## **I. JURISDICTION AND GENERAL PROVISIONS**

- 1.1 This Settlement Agreement is issued pursuant to the authority vested in the President of the United States by Sections 106(a) and 122(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §§ 9606(a) and 9622(a); delegated to the Administrator of EPA by Executive Order No. 12580, 52 Fed. Reg. 2923 (January 29, 1987); and further delegated to the Director of the Hazardous Site Cleanup Division, EPA Region III. This Settlement Agreement pertains to property located at 198 Ackerly Road in Clarks Summit, Lackawanna County, Pennsylvania ("Precision property"). The Precision property will hereinafter be referred to as the Precision National Site or "the Site," and is further described in paragraphs 3.2 and 3.3 below.
- 1.2 All terms and conditions of this Settlement Agreement, including any modifications hereto, are required by this Settlement Agreement. The Respondent agrees to undertake all actions required by the terms and conditions of this Settlement Agreement and to comply with all such terms and conditions.
- 1.3 The Work shall be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan, as amended ("NCP"), 40 C.F.R. Part 300; and CERCLA.

- 1.4 The Respondent consents to and will not contest EPA's authority or jurisdiction to issue or to enforce this Settlement Agreement.

## **II. STATEMENT OF PURPOSE**

- 2.1 In entering into this Settlement Agreement, the mutual objectives of EPA and Respondent are to conduct a removal action, as defined in Section 101(23) of CERCLA, 42 U.S.C. § 9601(23), to abate, mitigate and/or eliminate the release or threat of release of hazardous substances at the Site (as hereinafter described), by preventing the migration of hazardous substances from the Site through the treatment of contaminated groundwater.

## **III. FINDINGS OF FACT**

- 3.1 Precision National Plating Services, Inc., is a corporation existing and operating under the laws of the State of Delaware.
- 3.2 The Site consists of the Precision property and any areas where Site-related hazardous substances have come to be located. The Precision property is located at located at 198 Ackerly Road in Clarks Summit, Lackawanna County, Pennsylvania, which is approximately 10 miles north of Scranton, Pennsylvania.
- 3.3 The Precision property measures 46 acres, approximately 5 acres of which were used for operations and the remainder of which are undeveloped and largely wooded. A 45,000 square foot operations building was the principal structure on the Precision property. A small residential area is located north of the Precision property on Arch Avenue. Ackerly Creek is located to North of the Site, and drains into Glenburn Pond. The direction of ground water flow is generally north-northwest toward the creek.
- 3.4 The majority of the residents on Arch Avenue were placed on public water in the 1990s due to contaminated well water. One resident chose to have his well drilled deeper and encased into the deep uncontaminated aquifer.
- 3.5 From 1958 until 1971, Ernest V. Berry, Inc., operated a plating business on the Precision property. In or about February 1971, Precision National Corporation purchased the Precision property from Nehall, Inc. (Ernest V. Berry, Inc.'s parent company). Precision National Corporation changed its name to Precision National Plating Services, Inc. in 1987. From 1958 until 1999, the Precision property had been used for chrome-plating operations. Specifically, locomotive crankshafts were chrome-plated at the Precision property and a cylinder-lining plating division began in or about 1971, and both operations continued until the facility ceased operations in 1999.
- 3.6 From 1958 until approximately 1970, chromium wastes were disposed of in a lagoon at

the northern end of the Facility. In May of 1970, chromium-contaminated liquids leaked from a break in the lagoon's retaining wall and were absorbed into the soils in a drainage pathway leading from the break in the lagoon wall along Ackerly Road. Additional wastewater containing hazardous substances flowed along the drainage pathway leading to Ackerly Creek.

- 3.7 From approximately 1970 until the cessation of operations, Precision utilized a closed-loop system by which wastewater was treated in what it describes as an effort to minimize contamination.
- 3.8 Due to the hydrogeology at the Site and associated fractures in the bedrock, groundwater to surface water discharges, also known as seeps, occur. There are three seeps (Bathtub, Cinderblock, and Trolley Tracks Seeps) in which groundwater to surface soil/surface water discharges of elevated hexavalent chromium have been detected.
- 3.9 In September of 1991, EPA and Precision entered into an Administrative Order by Consent, Docket No. III-90-057-DC, pursuant to Section 106 and 122 of CERCLA, 42 U.S.C. §§ 9606 and 9622, and Section 1431(a) of the Safe Drinking Water Act ("SDWA"), 42 U.S.C. § 300i(a). This Order required Precision to provide an alternate water supply to one resident located on Arch Avenue. Precision complied with the terms of this Order and replaced this well late in 1991.
- 3.10 In the fall of 1993, Precision installed another well for a residence on Arch Avenue to be used as an alternate source of drinking water. This well serves three residents.
- 3.11 On August 22, 1995, EPA and Precision entered into an Administrative Order by Consent for Removal Response Action ("1995 AOC"), Docket No. III-94-32-DC, that required Precision to perform an Engineering Evaluation/Cost Analysis ("EE/CA") to characterize the nature and extent of contamination at the Site in order to provide sufficient information to identify and evaluate removal alternatives to ensure that any actions taken will protect public health, welfare and the environment in accordance with 40 C.F.R. § 300.415(b)(4).
- 3.12 In 1997, EPA approved, with reservations, the EE/CA ("1997 EE/CA") submitted by Precision to comply with the 1995 AOC.
- 3.13 On April 22, 1998, the Director of the Hazardous Site Cleanup Division signed an Action Memorandum ("1998 Action Memo"), which determined that a threat to public health, welfare and/or the environment exists due to the actual or threatened release of hazardous substances from the Site and set forth the requirements for the Removal Action at the Site.
- 3.14 On April 24, 1998, EPA issued Precision a Unilateral Administrative Order, Docket No. III-98-069-DC ("1998 Order"), supported by the 1998 Action Memo, which required Respondent to conduct the Removal Action at the Site. The 1998 Order required Precision to perform the following actions, among others:

- a. Provide potable water to all residences within a 1-mile radius of the facility not serviced by a public water system whose drinking water contains concentrations of chromium exceeding the maximum contaminant level (MCL) for chromium unless EPA provides Precision with a written confirmation that potable water is not required at that time for a residence based on data acceptable to EPA or conduct monthly monitoring of all private drinking water supplies at all residences within a 1-mile radius of the facility unless they are being provided potable water;
  - b. Conduct quarterly monitoring of all private drinking water supplies at residences within a two-mile radius of the Precision property, or perform a groundwater investigation to fully characterize the extent and nature of contamination attributable to the Site and ensure that drinking water wells are not exposed to Site contamination above the MCL for chromium;
  - c. Install seep collection and treatment systems at all identified seeps (i.e., Trolley Track Seep, Bath Tub Seep, and Cinderblock Seep), including seeps yet to be identified, to remove the threat of direct contact with chromium contamination and to minimize the contamination of soils surrounding the seeps or surface water that may be impacted by the seeps;
  - d. Complete removal of the encapsulation vault and all surrounding contaminated soil to background levels for chromium; and
  - e. Perform an Ecological Risk Assessment ("ERA") to determine the effects of Site contamination on ecological receptors at the Site, with particular regard to Ackerly Creek and Glenburn Pond and its associated wetlands.
- 3.15 In 1998, Precision extended a public water supply line along Ackerly Road and Arch Avenue to provide a municipal water supply for the residences downgradient of the Precision property.
- 3.16 On January 29, 2001, Precision submitted a Seep Design Report ("Report") which described how Precision would collect various seeps and treat the seeps to remove hexavalent chromium prior to discharge. The Report was accepted by EPA on March 1, 2001. The system was installed, and has been in operation since November 2, 2001, and it is currently being operated, inspected, and maintained on a regular basis. Effluent from the system discharges into an infiltration gallery, which reenters the groundwater beneath the Site.
- 3.17 On July 25, 2002, Precision submitted sampling results from a June 4 and 5, 2002, sampling event in Ackerly Creek which indicated levels of hexavalent chromium in the creek that were well over EPA's ambient chronic water criteria of 11 ppb hexavalent chromium for surface water bodies. Levels of 100 ppb hexavalent chromium were found in several locations, the highest level found was 120 ppb. EPA split samples from the event showed similar results.

- 3.18 The hazardous substances present at the Site are total and hexavalent chromium. Chromium is listed as a hazardous substance at 40 C.F.R. § 302.4.
- 3.19 EPA sent a notice to Precision on August 6, 2002, that the June sampling results indicated that biota in the creek and the pond were being exposed to elevated levels of hexavalent chromium. The notice followed biological assessment data from November 2001 that had shown impacts to aquatic plants and animals in the form of elevated levels of total chromium accumulations in tissue. Citing paragraph 8.3(j) of the 1998 Order, which requires the Respondent to mitigate any impacts found to ecological receptors, the notice required Precision to submit to EPA a list of one or more proposals to cease the migration of chromium-contaminated groundwater to Ackerly Creek, one of which would be highlighted as "the preferred option."
- 3.20 On September 6, 2002, Precision submitted a summary of alternatives that could be used to reduce the impacts of hexavalent chromium to Ackerly Creek. Precision evaluated each alternative using the following criteria: overall protection, long-term effectiveness, reduction of toxicity, implementability, and cost. Based on these criteria, Precision proposed In-Situ Chemical Reduction as the preferred option to mitigate impacts of hexavalent chromium to the creek.
- 3.21 On December 16, 2002, after meeting with the Pennsylvania Department of Environmental Protection ("PADEP") and Precision, EPA selected Precision's proposal of In-Situ Chemical Reduction ("ISCR") using calcium polysulfide as a response alternative and directed Precision to prepare a response action work plan ("Work Plan").
- 3.22 In June of 2006, a pilot test assessing the injection of calcium polysulfide into the soil was conducted on the Precision property. The results of the pilot test confirmed that the high-pressure injection method would successfully deliver the calcium polysulfide into the soil and that the frequency of the injections would depend on the soil types at the various locations of the Site. The testing also confirmed that calcium polysulfide could be injected into the soils of the lagoon.
- 3.23 From July 25 to December 15, 2006, Precision injected approximately 265,000 gallons of calcium polysulfide solution at concentrations ranging from 3% to 6% into soil source areas. These in situ chemical reduction activities were implemented to reduce the hexavalent chromium concentrations in the soil to a criterion of 60 milligrams per kilogram (mg/kg) for achieving 11 micrograms per liter (µg/L) in Ackerly Creek. The 60 mg/kg criterion was calculated by using the Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites.
- 3.24 On September 8, 2006, EPA issued a Response Approval Summary, which compiled, confirmed, updated and documented certain EPA-approved and -selected response actions and measures to be performed pursuant to Section VIII of the 1998 Order.
- 3.25 During 2007, Precision excavated hexavalent chromium-impacted concrete and soil from

the former rectifier room located in the basement of the former operations building. According to Precision, approximately 56 loads of hazardous material was shipped from the Site pursuant to a hazardous waste manifest to a facility permitted to accept it.

- 3.26 On December 4, 2008, the United States District Court for the Eastern District of Pennsylvania entered a Consent Decree for Recovery of Past and Future Response Costs ("Consent Decree"), United States v. Precision National Plating Services, Inc., Docket No. 3:08cv1946, between the United States and Precision for the payment of the United States' Past and Future Response Costs incurred at the Site, as those terms are defined in the Consent Decree.
- 3.27 Between August 2008 and January 2009, Precision injected approximately 150,000 gallons of a 1% to 2% solution of calcium polysulfide into the shallow bedrock and weathered bedrock source areas to treat shallow bedrock contaminated groundwater.
- 3.28 Between October and December 2010, Precision injected a total of 34,914 gallons of 1% calcium polysulfide solution and 14,852 gallons of 2% calcium polysulfide solution into the shallow bedrock and weathered bedrock source areas to treat shallow bedrock contaminated groundwater.
- 3.29 On March 25, 2010, EPA issued an EE/CA Approval Memorandum, approving the drafting of the EE/CA document.
- 3.30 Concurrent with the injections in the shallow bedrock, EPA drafted a second EE/CA ("2011 EE/CA") to present the final response alternatives for the Site. A public meeting was conducted on December 7, 2010 to present the response alternatives for the Site to the community and to solicit public comments as required by Section 300.820(a) of the NCP. The preferred alternative presented was continuation of the contaminant source area treatment using an in situ chemical injection system, continuation of the collection and treatment of seeps, as well as long-term monitoring and institutional controls ("ICs") that will prevent exposure of residents to contaminated groundwater and surface water.
- 3.31 EPA finalized the 2011 EE/CA on September 1, 2011.
- 3.32 On September 9, 2011, the Director of the Hazardous Site Cleanup Division approved an Action Memorandum ("2011 Action Memo") selecting the response action for addressing chromium contamination at the Site.

#### **IV. CONCLUSIONS OF LAW**

- 4.1 The Precision National Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- 4.2 The Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- 4.3 Chromium is a "hazardous substance" within the meaning of Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), because it is listed at 40 C.F.R. § 302.4 (or other applicable citation).
- 4.4 "Hazardous substances," as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), have been disposed of at the Precision National Site and are currently present

there.

- 4.5 The presence of hazardous substances at the Site and the past, present, and/or potential migration of hazardous substances from the Site constitutes an actual and/or threatened "release" as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- 4.6 Respondent is an "owner or operator of a vessel or a facility" (the Site) within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).
- 4.7 EPA has determined that the Respondent is liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

#### **V. DETERMINATIONS**

Based on the Findings of Fact and Conclusions of Law set forth above, and upon EPA's review of information for the Administrative Record, EPA has determined that:

- 5.1 The actual and/or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health or welfare or the environment.
- 5.2 The Work is necessary to protect the public health and welfare and the environment.
- 5.3 Because there is a threat to public health or welfare or the environment, a removal action is appropriate to abate, minimize, stabilize, mitigate or eliminate the release or threat of release of hazardous substances at or from the Site.

#### **VI. PARTIES BOUND**

- 6.1 This Settlement Agreement shall apply to and be binding upon EPA and its agents, and upon Respondent and its agents, successors, and assigns. Neither a change in ownership or corporate or partnership status of the Respondent, nor a change in ownership or control of the Site, shall in any way alter Respondent's responsibilities under this Settlement Agreement.
- 6.2 In the event of any change in ownership or control of the Site, Respondent shall notify EPA in writing at least thirty (30) calendar days in advance of such change and shall provide a copy of this Settlement Agreement to the transferee in interest of the Site prior to any agreement for transfer.
- 6.3 In the event that Respondent files for or is placed into bankruptcy, Respondent shall notify EPA within three days of such event.

- 6.4 The Respondent shall provide a copy of this Settlement Agreement to all contractors, subcontractors, supervisory personnel, laboratories and consultants retained by Respondent to conduct any portion of the Work to be performed by Respondent pursuant to this Settlement Agreement. Respondent shall require in any and all contracts related to this Site that the Work that is the subject of such contract be performed within the time and in the manner set forth in this Settlement Agreement.
- 6.5 The undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms of this Settlement Agreement and to execute and legally bind Respondent to this Settlement Agreement.

#### **VII. NOTICE TO THE STATE**

- 7.1 Notice of issuance of this Settlement Agreement has been given to the Commonwealth of Pennsylvania pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

#### **VIII. RESPONSE ACTION PLAN DEVELOPMENT AND IMPLEMENTATION**

- 8.1 Respondent shall commence and complete performance of the following response action within the time periods specified herein.
- 8.2 Within five (5) business days of the effective date of this Settlement Agreement, Respondent shall notify EPA in writing of the identity and qualifications of the contractor, subcontractor, supervisory personnel, and other persons who will be primarily responsible for developing the Response Action Plan ("RAP") required by this Section. Respondent shall further notify EPA in writing of the identity and qualifications of all contractors, subcontractors, supervisory personnel and other persons selected by Respondent who will conduct all or any portion of the response action no less than three (3) days prior to commencement of the response action to be performed by such persons. Respondent shall ensure that all contractors, subcontractors, supervisory personnel and/or other persons retained to perform the response action shall meet the applicable Occupational Safety and Health Administration ("OSHA") requirements as defined in 29 C.F.R. § 1910.120. Respondent's selection of all contractors, subcontractors, supervisory personnel and other persons who will perform the response action; the Respondent's Project Coordinator designated pursuant to Section IX; and any replacements to any such persons are subject to disapproval by EPA at any time. In the event of any such disapproval by EPA, Respondent shall notify EPA within five (5) calendar days of receipt of such EPA disapproval of the person(s) who will replace the one(s) disapproved by EPA. If a person's selection is disapproved by EPA, they shall not perform such specified response action.
- 8.3 Respondent shall accomplish the following items:

- a. Collect contaminated water from the seeps (i.e., Trolley Track, Bathtub and Cinderblock Seeps) until concentrations of total chromium in the seeps remain below the MCL of 100 ppb for total chromium to prevent human exposure to contaminated groundwater.
- b. Treat the water from the currently collected seeps (i.e., Trolley Track, Bathtub and Cinderblock Seeps) in order that concentrations of chromium in the seeps remain below the MCL of 100 µg/L for total chromium to prevent human exposure to contaminated groundwater.
- c. Treat the water from the currently collected seeps in order that concentrations of hexavalent chromium in the treated effluent remain below the EPA's Water Quality Criterion Continuous Concentration (CCC) of 11 µg/L.
- d. Treat hexavalent chromium-contaminated overburden and bedrock (as generally defined in the BE/CA in Figure 6, and attached hereto as Attachment A) with in-situ chemical reduction to prevent high levels of hexavalent chromium from leaching into groundwater, ensuring that hexavalent chromium concentrations in Ackerly Creek and the swale adjacent to Ackerly Road are below the maximum allowed by the CCC standard of 11 µg/L.
- e. Sample semi-annually on- and off-Site groundwater wells to track the plume and nearby residential wells at an accelerated schedule during in-situ chemical treatment to ensure no breakthrough of sulfides from treatment into receptors.
- f. Sample Ackerly Creek quarterly and analyze for hexavalent chromium to measure effectiveness of treatment and to monitor for levels of total chromium.
- g. Perform air monitoring during treatment to ensure residents are not exposed to unsafe levels of hydrogen sulfide, defined by ATSDR in its June 2006 Health Consultation as prolonged exposure to 30 parts per billion ("ppb") hydrogen sulfide or higher.
- h. Groundwater within the contaminated plume (see Attachment B) shall not be used for drinking water until the MCL for total chromium is reached. This shall be implemented by controls, including but not limited to, easements, deed notices, zoning restrictions or other appropriate means.

8.4 Within twenty (20) business days of the effective date of this Settlement Agreement, Respondent shall submit to EPA for approval a RAP detailing the response action to be implemented for the items specified in paragraph 8.3 above. To the extent that information concerning the details of a particular item does not yet exist so that it can be described in the RAP, the RAP shall set forth an expeditious schedule and plan for submittal of RAP supplement(s) to EPA for approval, which supplement(s) shall fully detail such items. All references to the review, approval and enforcement of the RAP shall also be applicable to any RAP supplement(s). The RAP shall include, among other

things, a schedule for expeditious performance of the response actions required by this Settlement Agreement. The RAP shall be consistent with the NCP and shall be subject to approval by EPA according to the provisions of paragraphs 8.5 and 8.9 below.

- 8.5 EPA will review the RAP and notify the Respondent of EPA's approval or disapproval of the RAP. In the event of disapproval, EPA will specify the deficiencies in writing. The Respondent shall respond to and correct the deficiencies identified by EPA and resubmit the RAP to EPA within ten (10) business days of receipt of EPA disapproval or such longer time as may be specified by EPA in its discretion. Exercise of EPA's discretion with respect to such period shall not be subject to the dispute resolution procedures set forth in Section XII of this Settlement Agreement. Approval, disapproval and/or modification by EPA of the subsequent RAP submission shall be according to the provisions of Paragraph 8.9 below.
- 8.6 Within ten (10) business days of receipt from EPA of written approval to proceed with implementation of the EPA-approved RAP ("written approval to proceed"), the Respondent shall commence implementation of such RAP and complete it in accordance with the RAP and the schedule therein. In the event EPA determines that any portion of the response action performed is deficient, and EPA requires Respondent to correct or re-perform such portion of the response action pursuant to this Settlement Agreement, Respondent shall correct or re-perform such response action or portion of the response action in accordance with a schedule provided by EPA.
- 8.7 Beginning seven (7) calendar days subsequent to the date of receipt of EPA approval of the RAP and every ninety (90) calendar days thereafter, or such longer interval as may be determined in writing by the EPA Project Coordinator designated pursuant to Section IX, and until EPA advises Respondent that the Work is complete, the Respondent shall provide EPA with a progress report for each preceding 90-day period or if applicable, the period specified in writing by the EPA Project Coordinator. The progress reports shall include, at a minimum: 1) a description of the response action completed and the actions that have been taken toward achieving compliance with this Settlement Agreement; 2) a description of all data anticipated and activities scheduled for the next 90 calendar days or, if applicable, the period specified in writing by the EPA Project Coordinator; 3) a description of any problems encountered or anticipated; 4) any actions taken to prevent or mitigate such problems; 5) a schedule for completion of such actions; 6) copies of all analytical data received during the reporting period; and 7) all modifications to the response action, RAP and schedule made in accordance with Section XIV of this Settlement Agreement during the reporting period.
- 8.8 Documents, including plans, reports, sampling results and other correspondence to be submitted pursuant to this Settlement Agreement, shall be sent by e-mail and/or overnight mail to the EPA Project Coordinator designated pursuant to Section IX.
- 8.9 All reports, plans, approval letters, specifications, schedules and attachments required by this Settlement Agreement are subject to EPA approval and shall be deemed incorporated

into this Settlement Agreement upon approval by EPA. In the event that EPA approves a portion of the RAP, report or other item required to be submitted under this Settlement Agreement, the approved portion shall be enforceable under this Settlement Agreement. In the event of conflict between this Settlement Agreement and any document attached hereto, incorporated in or enforceable hereunder, the provisions of this Settlement Agreement shall control. In the event that EPA disapproves any required submission, EPA will (1) specify the deficiencies in writing, and/or (2) submit its own modifications to the Respondent to accomplish the Work outlined in paragraph 8.3 above. Respondent shall amend and submit to EPA a revised submission that responds to and corrects the specified deficiencies within five (5) business days of receipt of EPA disapproval or such longer time as may be specified by EPA in its discretion. Exercise of EPA's discretion with respect to such period shall not be subject to the dispute resolution procedures set forth in Section XII of this Settlement Agreement. In the event that EPA submits its own modifications to the Respondent, the Respondent is hereby required to incorporate such modifications. Any non-compliance with EPA-approved reports, plans, specifications, schedules, attachments, or submission of deficient revisions following EPA disapproval, or non-compliance with an EPA-required modification shall be considered a failure to comply with a requirement of this Settlement Agreement. Determination(s) of non-compliance will be made by EPA.

- 8.10 In addition to the information and documents otherwise required by this Settlement Agreement, Respondent shall provide to EPA, upon written request, any and all information and documents in its possession, custody or control related to the Site including, but not limited to, Site analytical data (including raw data); Site safety data; Site monitoring data; operational logs; copies of all hazardous waste manifests (including copies of all hazardous waste manifests signed upon receipt of the hazardous wastes by a licensed treatment, storage or disposal facility); the identity of treatment, storage and/or disposal facilities used; the identity of transporters used; the identity of any contractors, subcontractors and supervisory personnel used; information and documents concerning Respondent's compliance with Quality Assurance and Quality Control requirements of this Settlement Agreement; information and documents relating to Respondent's efforts to secure access; and information and documents relating to any project delays. Nothing herein shall be interpreted as limiting the inspection and information-gathering authority of EPA under Federal law.
- 8.11 Within twenty (20) calendar days of the date Respondent concludes it has completed implementation of the RAP and the items identified in paragraph 8.3 above, Respondent shall submit a written Final Report to EPA, subject to EPA approval described in paragraph 8.9 above. The written report shall detail the work undertaken to implement the RAP and the items identified in paragraph 8.3 above, and shall be certified by Respondent in accordance with the terms of Section XXII of this Settlement Agreement. EPA will review the adequacy of Respondent's implementation of the RAP and accomplishment of items specified in paragraph 8.3 above. EPA will notify Respondent, in writing, of any discrepancies in the Final Report or deficiencies in the execution of the RAP and the items identified in paragraph 8.3 and the actions required to correct such

discrepancies or deficiencies. Within fifteen (15) business days of receipt of notification by EPA, or as otherwise specified by EPA, Respondent shall, as directed by EPA, amend the Final Report, develop an additional plan or amend the existing RAP to address such discrepancies or deficiencies. Any additional plan or amendment to the RAP will be subject to the approval procedures outlined in paragraphs 8.5 and 8.9 above. Respondent shall perform all actions approved by EPA in a manner consistent with the NCP and all applicable Federal laws and regulations, as required by the NCP.

- 8.12 Respondent shall not handle or remove any hazardous substances from the Site except in conformance with the terms of this Settlement Agreement including, without limitation, Section XXIII of this Settlement Agreement) and all applicable Federal, State and local laws and regulations, as required by the NCP. Any transfer of hazardous substances, pollutants and contaminants from the Site to an off-site facility required by this Settlement Agreement shall be performed in accordance with section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3). In addition, any transfer of hazardous substances, pollutants and contaminants from the Site to an off-site facility for treatment, storage, or disposal required by this Settlement Agreement shall be performed in accordance with 40 C.F.R. § 300.440.
- 8.13 Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement. Respondent shall not commence implementation of the RAP developed hereunder until receiving written EPA approval to proceed pursuant to paragraph 8.6 above.
- 8.14 Respondent shall immediately notify EPA's Project Coordinator and the National Response Center [(800) 424-8802] and any other party required by law in the event of any action or occurrence during the pendency of this Settlement Agreement which causes or threatens to cause an additional release of hazardous substances, pollutants or contaminants on, at or from the Site, or which may create a danger to public health, welfare or the environment.
- 8.15 In the event that EPA believes that response action or other activities at the Site by the Respondent are causing or may cause a release or potential release of hazardous substances, or are a threat to public health or welfare or to the environment, EPA may, in its discretion, immediately halt or modify such response actions or other activities to eliminate or mitigate such actual or potential releases or threats.

#### **IX. DESIGNATED PROJECT COORDINATORS**

- 9.1 Respondent shall designate a Project Coordinator and shall notify EPA of such designation no later than five (5) calendar days after the effective date of this Settlement Agreement. Designation of a Project Coordinator shall not relieve Respondent of its obligation to comply with the requirements of the Settlement Agreement. The Respondent's Project Coordinator shall be a technical and/or managerial representative of the Respondent and may be a contractor and/or consultant; provided, however, the

Respondent's Project Coordinator shall not be its legal representative in this matter. The Project Coordinator for EPA designated pursuant to this Section and the Project Coordinator for the Respondent shall be responsible for overseeing the Work. To the maximum extent possible, communications between the Respondent and EPA and all documents concerning the activities performed pursuant to the terms and conditions of this Settlement Agreement, including plans, reports, approvals and other correspondence, shall be directed to the Project Coordinators.

**9.2 The Project Coordinator for EPA is:**

Ann DiDonato  
U.S. Environmental Protection Agency  
Eastern Response Branch (3HS31)  
1650 Arch Street  
Philadelphia, PA 19103  
(215) 814-3311

- 9.3** Respondent shall have the right to change its Project Coordinator. Such a change shall be accomplished by notifying the EPA Project Coordinator in writing at least five (5) calendar days prior to the change.
- 9.4** EPA shall have the right to change its Project Coordinator at any time without prior notice to Respondent. EPA's intent is to notify the Respondent as soon as practicable following any such change of its Project Coordinator.
- 9.5** The absence of the EPA Project Coordinator from the Site shall not be cause for the stoppage or delay of Work except when such stoppage or delay is specifically required by EPA.
- 9.6** The EPA Project Coordinator shall have the authority to halt or modify Work or other activities performed by Respondent at the Site in order to eliminate a release or threat of release of hazardous substances. Such direction by the EPA Project Coordinator may be given verbally or in writing. If such direction is given verbally, the EPA Project Coordinator will later memorialize such direction in writing.

**X. QUALITY ASSURANCE**

- 10.1** The Respondent shall use quality assurance, quality control, and chain of custody procedures in accordance with the following documents while conducting all sample collection and analysis activities required by this Settlement Agreement:
- a. "EPA NEIC Policies and Procedures Manual" (EPA Document 330/9-78-001-R (revised November 1984));

- b. "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans," (QAMS-005/80 (December 1980)); and
  - c. "QA/QC Guidance for Removal Activities," (EPA/540/G-90/004 (April 1990)).
- 10.2 The Respondent shall consult with EPA in planning for, and prior to, all sampling and analysis required by the approved RAP. The Respondent shall use a laboratory(s) which has a documented Quality Assurance Program that complies with EPA guidance document QAMS-005/80.

## **XI. ACCESS**

- 11.1 As of the effective date of this Settlement Agreement, Respondent shall provide to EPA and its employees, agents, consultants, contractors and other authorized and/or designated representatives, for the purposes of conducting and/or overseeing the Work, access to all property owned or controlled by Respondent wherein Work must be undertaken. Such access shall permit EPA and its employees, agents, consultants, contractors and other authorized and designated representatives to conduct all activities described in paragraph 11.3 of this Settlement Agreement.
- 11.2 To the extent that property wherein Work must be undertaken is presently owned or controlled by parties other than the Respondent, the Respondent shall use its best efforts to obtain Site access agreements from the present owners. Such access agreements shall be finalized as soon as practicable but no later than thirty (30) calendar days after receiving EPA's written approval to proceed. Such agreements shall provide reasonable access for the Respondent and its employees, agents, consultants, contractors and other authorized and designated representatives to conduct the work, and for EPA and its designated representatives to conduct the activities outlined in paragraph 11.3 below. In the event that any property owner refuses to provide such access or access agreements are not obtained within the time designated above, whichever occurs sooner, the Respondent shall notify EPA at that time, in writing, of all efforts to obtain access and the circumstances of the failure to obtain such access. EPA may then take steps to provide such access. Respondent shall reimburse the United States for all costs incurred in obtaining access which are not inconsistent with the NCP.
- 11.3 In accordance with law and regulation, as appropriate, EPA and its employees, agents, contractors, consultants and other authorized and designated representatives shall have the authority to enter and freely move about the location where the response actions and/or Work is being performed at all reasonable times for the purposes of, inter alia: inspecting Work, records, operating logs and contracts related to the Site; reviewing the progress of the Respondent in carrying out the terms of this Settlement Agreement; conducting such tests as EPA deems necessary; using a camera, sound recording or other documentary type equipment; and verifying the data submitted to EPA by the

**Respondent.** The Respondent shall permit such persons to inspect and copy all records, files, photographs, documents and other writings, including all sampling and monitoring data, in any way pertaining to the Work.

- 11.4 Respondent may make a claim of business confidentiality for information submitted pursuant to this Settlement Agreement in the manner described in 40 C.F.R. § 2.203(b). Such an assertion shall be adequately substantiated in accordance with 40 C.F.R. § 2.204(e)(4) at the time the assertion is made. Information subject to a confidentiality claim shall be made available to the public by EPA only in accordance with the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim of business confidentiality accompanies the information when it is submitted or made available to EPA, the submitted information may be made available to the public by EPA without further notice to Respondent.
- 11.5 The Respondent may withhold those records and documents covered by any privilege or protection recognized under federal law and applied by federal courts in actions commenced by the United States. In the event that the Respondent withholds a document as privileged, the Respondent shall provide EPA with the title of the document, the date of the document, the name(s) of the author(s) and addressee(s)/recipient(s), a description of the nature of the document and identification of the privilege asserted at the time such document is required to be provided to EPA.
- 11.6 No claim of confidentiality or privilege shall be made regarding any data required to be submitted pursuant to this Settlement Agreement including, but not limited to, sampling, analytical, monitoring, hydrogeologic, scientific, chemical or engineering data, or documents or information evidencing conditions at or around the Site. Nor shall such claims be made for analytical data; Site safety data; Site monitoring data; operational logs; hazardous waste manifests; identities of treatment, storage and/or storage facilities used; identities of transporters used; identities of any contractors or subcontractors used in performing work required by this Settlement Agreement.
- 11.7 Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access and information-gathering authorities and rights under CERCLA and any other applicable statute and regulation.

## **XII. DISPUTE RESOLUTION**

- 12.1 Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section XII shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. EPA and Respondent shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

- 12.2 If Respondent objects to any EPA action taken pursuant to this Settlement Agreement, it shall notify EPA in writing of its objection(s) within fourteen (14) days after such action, unless the objection(s) has/have been resolved informally. EPA and Respondent shall have fourteen (14) days from EPA's receipt of Respondent's written objection(s) to resolve the dispute through formal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA.
- 12.3 Any agreement reached by EPA and Respondent pursuant to this Section XII shall be in writing and shall, upon signature by both parties, be incorporated into and become an enforceable part of this Settlement Agreement. If EPA and Respondent are unable to reach an agreement within the Negotiation Period, an EPA management official at the level of Associate Director, Office of Preparedness and Response, Hazardous Site Cleanup Division or higher will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondent's obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section.
- 12.4 Following resolution of the dispute, as provided by this Section XII, Respondent shall perform the Work that was the subject of the dispute in accordance with the agreement reached or EPA's decision. To the extent that Respondent does not prevail upon resolution of any dispute involving any contested costs other than oversight costs, Respondent shall submit to EPA, within fourteen (14) calendar days of receipt of such resolution, all such costs determined to be owed to EPA, including any accrued interest, as specified in paragraph 13.1 below.
- 12.5 Notwithstanding any other provision of this Settlement Agreement, no action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h). Nothing in this Section shall limit the rights of the Respondent under CERCLA or any other federal law to participate in the preparation of or to challenge the content of EPA's Administrative Record supporting any response action decisions for the Site.

### **XIII. DELAY IN PERFORMANCE AND STIPULATED PENALTIES**

- 13.1 For each day, or portion thereof, that Respondent fails to comply with any requirement of this Settlement Agreement at the time and in the manner set forth herein, the Respondent shall be liable upon demand to EPA for the sums set forth below as stipulated penalties. Checks shall be made payable to the "Hazardous Substance Superfund" and shall be transmitted to the following address, or to such other address(es) as EPA may provide in writing to the Respondent in the future:

U.S. Environmental Protection Agency, Region III  
Attention: Superfund Accounting  
P.O. Box 360515  
Pittsburgh, PA 15251-6515

Payment shall be made by cashier's or certified check within thirty (30) calendar days of receipt of demand. Interest at the rate of the current annualized treasury bill rate shall begin to accrue on the unpaid balance at the end of the thirty day period pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). A copy of the transmittal letter shall be sent simultaneously to the EPA Project Coordinator at the address identified in Section IX of this Settlement Agreement and to: EPA Region III Hearing Clerk (3RC00), 1650 Arch Street, Philadelphia, PA 19103.

- 13.2 Stipulated penalties shall accrue in the amount of \$2,500 per calendar day per violation for the first week and \$5,000 per day per violation for each day thereafter. Neither the accrual of nor demand for stipulated penalties set forth in this Section XIII shall preclude EPA from pursuing other penalties or sanctions available to EPA for Respondent's failure to comply with the requirements of this Settlement Agreement.

#### **XIV. FORCE MAJEURE AND NOTIFICATION OF DELAY**

- 14.1 The Respondent, through its Project Coordinator, shall notify EPA of any delay or anticipated delay in achieving compliance with any requirement of this Settlement Agreement. Such notification shall be made verbally as soon as possible but not later than two (2) calendar days after Respondent becomes aware or should have become aware of any such delay or anticipated delay, and in writing no later than seven (7) calendar days after Respondent becomes aware, or should have become aware, of such delay or anticipated delay. Such written notification shall be certified by the Project Coordinator in accordance with Section XXII of this Settlement Agreement and shall fully describe the nature of the delay, including how it may affect the Work, RAP and schedule; the actions that will be or have been taken to mitigate, prevent and/or minimize further delay; and the timetable according to which the future actions to mitigate, prevent and/or minimize the delay will be taken. The Respondent shall ensure that its Project Coordinator provides Respondent with immediate notification of any project delays. The Respondent shall adopt all reasonable measures to avoid and minimize such delay.
- 14.2 To the extent Respondent intends to claim that any delay or anticipated delay described by Respondent in accordance with paragraph 14.1 was or will be caused by circumstances beyond its control, Respondent shall, within fourteen (14) calendar days after Respondent becomes aware, or should have become aware, of such delay or anticipated delay, submit to EPA a "Notice of Force Majeure" in which Respondent fully demonstrates that the delay was caused by circumstances beyond its control which could not have been overcome by due diligence, the necessity of the proposed length of the

delay, and that the Respondent took and is taking all reasonable measures to avoid and minimize delay. The Respondent shall have the burden of proving these facts to EPA. Any "Notice of Force Majeure" shall be certified by a responsible official of Respondent pursuant to paragraph 22.1(b) of this Settlement Agreement.

- 14.3 Any such delay that EPA determines (1) has resulted or will result from circumstances beyond the control of the Respondent and (2) that could not and cannot be overcome by due diligence on the Respondent's part, shall not be deemed to be a violation of Respondent's obligation(s) under this Settlement Agreement, and shall not subject Respondent to stipulated penalties under this Settlement Agreement for that particular delay. In such event, the schedule affected by the delay shall be extended for a period EPA deems necessary to complete the Work on an expedited basis, but no greater than a period equal to the delay directly resulting from such circumstances. Increased costs of performance of the requirements of this Settlement Agreement or changed economic circumstances shall not be considered circumstances beyond the control of the Respondent. Delay in one item or component of Work or the RAP does not justify delay in timely achievement of other items or components. Each delay must be separately addressed and substantiated according to the provisions of paragraphs 14.1 and 14.2 above.
- 14.4 Failure of the Respondent to comply with the notice requirements of paragraphs 14.1 and 14.2 above shall constitute a waiver of the Respondent's right to invoke the benefits of this Section with respect to that event.
- 14.5 In the event that EPA and the Respondent cannot agree that any delay in compliance with the requirements of this Settlement Agreement has been or will be caused by circumstances beyond the control of the Respondent that cannot be overcome by due diligence, the dispute shall be resolved in accordance with the provisions of Section XII (Dispute Resolution) of this Settlement Agreement.

#### **XV. RESERVATION OF RIGHTS**

- 15.1 The covenant not to sue set forth in Section XXVIII below does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:
- a. claims based on a failure by Respondents to meet a requirement of this Settlement Agreement;
  - b. liability for costs other than oversight costs recoverable under Section XXI of this Settlement Agreement;
  - c. liability for performance of response action other than the Work;

- d. criminal liability;
  - e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
  - f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
  - g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.
- 15.2 Except as expressly provided in this Settlement Agreement, (1) each party reserves all rights, claims, interests and defenses it may otherwise have, and (2) nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, including the right to seek injunctive relief and/or the imposition of statutory penalties.
- 15.3 As provided by this Settlement Agreement, EPA expressly reserves its right to disapprove of Work performed by Respondent; to halt Work being performed by Respondent if Respondent has not complied with an approved RAP or this Settlement Agreement, or at any time EPA deems necessary to protect public health, welfare or the environment and to perform such Work; to request and require hereunder that Respondent correct and/or re-perform any and all Work disapproved by EPA; and/or to request or require that Respondent perform response actions in addition to those required by this Settlement Agreement. Further, EPA reserves the right to undertake response action at any time EPA deems appropriate. In the event EPA requires Respondent, and Respondent declines, to correct and/or re-perform work that has been disapproved by EPA and/or to perform response actions in addition to those required by this Settlement Agreement, EPA reserves the right to undertake such actions and seek reimbursement of the costs incurred and/or to seek any other appropriate relief. In addition, EPA reserves the right to undertake removal and/or remedial actions at any time that such actions are appropriate under the NCP and to seek reimbursement for any costs incurred and/or take any other action authorized by law.
- 15.4 EPA reserves the right to bring an action against the Respondent for recovery of all recoverable costs incurred by the United States related to this Settlement Agreement which are not reimbursed by the Respondent, as well as any other costs incurred by the United States in connection with response actions conducted at the Site.
- 15.5 This Settlement Agreement concerns certain response actions (Work described in Section VIII, above) concerning the Site. Such response actions might not fully address all contamination at the Site. Subsequent response actions which may be deemed necessary

by EPA are not addressed by this Settlement Agreement. EPA reserves all rights including, without limitation, the right to institute legal action against Respondent and/or any other parties in connection with the performance of any response actions not addressed by this Settlement Agreement.

- 15.6 Nothing in this Settlement Agreement shall limit the authority of the EPA On-Scene Coordinator as outlined in the NCP and CERCLA.

#### **XVI. OTHER CLAIMS**

- 16.1 Nothing in this Settlement Agreement shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation not bound by this Settlement Agreement for any liability it may have relating in any way to the generation, storage, treatment, handling, transportation, release or disposal of any hazardous substances, hazardous wastes, pollutants or contaminants found at, taken to, or taken from the Site.

#### **XVII. OTHER LAWS**

- 17.1 All Work shall be undertaken in accordance with the requirements of all applicable and/or relevant and appropriate local, State and Federal laws and regulations, as required by the NCP.

#### **XVIII. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION**

- 18.1 The effective date of this Settlement Agreement shall be the date on which it is signed by EPA.
- 18.2 This Settlement Agreement may be amended by mutual agreement of EPA and the Respondent. Such amendments shall be in writing and shall have as their effective date the date on which such amendments are signed by EPA. Modifications to the EPA-approved RAP and its implementation may be made by mutual agreement of the Project Coordinators. Such modifications shall be memorialized in writing by the Project Coordinators.
- 18.3 Any reports, plans, specifications, schedules, or other submissions required by this Settlement Agreement are, upon approval by EPA, incorporated into this Settlement Agreement. Any non-compliance with such EPA-approved reports, plans, specifications, schedules, or other submissions shall be considered non-compliance with the requirements of this Settlement Agreement and will subject the Respondent to the requirements of Section XIII (Delay in Performance and Stipulated Penalties), above. Determinations of non-compliance will be made by EPA.

- 18.4 No informal advice, guidance, suggestions or comments by EPA regarding reports, plans, specifications, schedules or other submissions by the Respondent or the requirements of this Settlement Agreement will be construed as relieving the Respondent of its obligation to obtain formal approval when required by this Settlement Agreement, and to comply with the requirements of this Settlement Agreement unless formally modified.

#### **XIX. LIABILITY OF THE UNITED STATES GOVERNMENT**

- 19.1 Neither the United States Government nor any agency thereof shall be liable for any injuries or damages to persons or property resulting from acts or omissions of Respondent, or of its employees, agents, servants, receivers, successors or assigns, or of any persons including, but not limited to, firms, corporations, subsidiaries, contractors or consultants in carrying out the Work, nor shall the United States Government or any agency thereof be held out as a party to any contract entered into by Respondent in carrying out the Work.

#### **XX. INDEMNIFICATION AND HOLD HARMLESS**

- 20.1 Respondent agrees to indemnify and hold harmless the United States, its agencies, departments, agents, officers, employees and representatives from any and all causes of action caused by any acts or omissions of Respondent or its contractors in carrying out the work required by this Settlement Agreement.

#### **XXI. OBLIGATIONS UNDER CONSENT DECREE, UNILATERAL ADMINISTRATIVE ORDER AND REIMBURSEMENT OF OVERSIGHT COSTS**

- 21.1 EPA and Precision entered into the Consent Decree on December 4, 2008, for payment of the United States' Past and Future Response Costs incurred at the Site, as those terms are defined in the Consent Decree.
- 21.2 Precision has been complying with the terms of the Consent Decree. Nothing in this Settlement Agreement shall abrogate or excuse Precision's obligations under the Consent Decree, to pay EPA's Future Response Costs, which include the payment of EPA's oversight costs, including those for the actions required by this Settlement Agreement or affect Precision's rights pursuant to the Consent Decree.
- 21.3 In the event of a conflict between the Consent Decree and this Settlement Agreement regarding the payment of Future Response Costs, the Consent Decree shall control.
- 21.4 Precision has been complying with the terms of the 1998 Order since April 1998. Upon the Effective Date of this Settlement Agreement, the 1998 Order is superseded by this

Settlement Agreement and is therefore terminated.

## **XXII. CERTIFICATION OF COMPLIANCE**

- 22.1 a. Unless otherwise required by the terms of this Settlement Agreement, any notice, report, certification, data presentation or other document submitted by Respondent under or pursuant to this Settlement Agreement which discusses, describes, demonstrates or supports any finding or makes any representation concerning Respondent's compliance or non-compliance with any requirement(s) of this Settlement Agreement shall be certified by the Respondent, a responsible official of the Respondent or by the Project Coordinator for the Respondent. The term "responsible official" means: (i) a president, secretary, treasurer or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$35 million (in 1987 dollars when the consumer price index was 345.3), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. The responsible official of a partnership or sole proprietorship means the general partner or the proprietor, respectively.
- b. The written Final Report required by paragraph 8.11 of this Settlement Agreement, any written notification described in paragraph 12.1 of this Settlement Agreement and any "Notice of Force Majeure" described in paragraph 14.2 of this Settlement Agreement shall be certified by the Respondent or a responsible official of Respondent.
- 22.2 The certification required by paragraph 22.1 of this Settlement Agreement shall be in the following form:
- I certify that the information contained in or accompanying this (specify type of submission) is true, accurate and complete.
- I am aware that there are significant penalties for submitting false information including the possibility of fines and imprisonment for knowing violations.
- Signature: \_\_\_\_\_
- Name (print): \_\_\_\_\_
- Title: \_\_\_\_\_
- 22.3 Submission of documents pursuant to this Settlement Agreement which are found by EPA to contain false information shall constitute a failure to comply with this Settlement

Agreement and shall subject Respondent to, among other things, stipulated penalties whether or not a responsible official of Respondent has certified the document.

### **XXIII. SHIPMENT OF HAZARDOUS SUBSTANCES**

- 23.1 Respondent shall, prior to any off-site shipment of hazardous substances from the Site to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving state and to EPA's Project Coordinator of such shipment of hazardous substances. However, the notification to EPA of shipments shall not apply to any such off-site shipments when the total volume of all such shipments will not exceed ten (10) cubic yards. Notifications to States in those circumstances shall be governed by applicable state law.
- 23.2 The notification required by paragraph 23.1 shall be in writing and shall include the following information, where available: (1) the name and location of the facility to which the hazardous substances are to be shipped; (2) the type and quantity of the hazardous substances to be shipped; (3) the expected schedule for the shipment of the hazardous substances; and (4) the method of transportation of the hazardous substances. Respondent shall notify the receiving state of major changes in the shipment plan, such as a decision to ship the hazardous substances to another facility within the same state or to a facility in another state.
- 23.3 The identity of the receiving facility and state will be determined by Respondent. Respondent shall provide all relevant information, including information required by paragraph 23.1, above, relating to the off-site shipments as soon as practicable but no later than one (1) business day before the hazardous substances are actually shipped.

### **XXIV. RECORD RETENTION**

- 24.1 Until 10 years after Respondent's receipt of EPA's notification pursuant to Paragraph 26.1 (Notice of Completion), Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until 10 years after Respondent's receipt of EPA's notification pursuant to Paragraph 26.1 (Notice of Completion), Respondent shall also instruct its contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.
- 24.2 At the conclusion of this document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA, Respondent shall deliver any such records or documents to EPA. Respondent may

assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, Respondent shall provide EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

#### **XXV. DEFINITIONS**

- 25.1 "1998 Order" shall mean the Unilateral Administrative Order EPA issued Precision on April 24, 1998, Docket No. III-98-069-DC.
- 25.2 "Business days" as used in this Settlement Agreement shall mean every day of the week except Saturdays, Sundays and federal holidays.
- 25.3 "Calendar days" as used in this Settlement Agreement shall mean every day of the week, including Saturdays, Sundays and federal holidays.
- 25.4 "Days" as used herein shall mean "calendar days" unless specified otherwise.
- 25.5 "Work" as used herein shall mean all requirements of this Settlement Agreement, including any modifications hereto.
- 25.6 "Consent Decree" shall mean the Consent Decree for Payment of Past and Future Response Costs and all appendices thereto, entered into and between the United States and Precision on December 4, 2008, USA v. Precision National Plating Services, Inc., No. 3:08cv1946.
- 25.7 All terms not defined herein shall have the meanings set forth in CERCLA and the NCP.

#### **XXVI. NOTICE OF COMPLETION**

- 26.1 When EPA determines, after EPA's review and approval of the Final Report required pursuant to paragraph 8.11 of this Settlement Agreement, that all response actions specified in Section VIII of this Settlement Agreement have been fully performed, and upon receipt of costs and penalties assessed by EPA, with the exception of any

continuing obligations required by this Settlement Agreement, including those requirements specified in Sections XV ("Reservation of Rights"), XVI ("Other Claims"), XIX ("Liability of the United States"), XX ("Indemnification and Hold Harmless"), XXIV ("Record Retention") and XXV ("Post Removal Site Control"), EPA will provide a notice of completion to the Respondent.

#### **XXVII. NO ADMISSION**

- 27.1 By entering into this Settlement Agreement, or by taking any action in accordance with it, the Respondent does not admit any of the findings of fact, conclusions of law, determinations or any of the allegations contained in this Settlement Agreement, nor does Respondent admit liability for any purpose or admit any issues of law or fact or any responsibility for any alleged release or threat of release of any hazardous substances into the environment relating to the Site. The participation of Respondent in this Settlement Agreement shall not be admissible against Respondent in any judicial or administrative proceeding, except in an action by the EPA to enforce the terms of this Settlement Agreement. However, Respondent shall not challenge the findings of fact, conclusions of law, determinations or EPA's jurisdiction to issue this Settlement Agreement, in any action to interpret or enforce this Settlement Agreement.

#### **XXVIII. COVENANT NOT TO SUE BY EPA**

- 28.1 From the effective date of this Settlement Agreement and for as long as EPA determines that the terms of this Settlement Agreement, including any modifications made hereto, are being fully complied with, and except for any proceeding to enforce its terms or collect any applicable costs or penalties, EPA agrees not to sue or take any administrative action against the Respondent for the Work required by this Settlement Agreement, including for reimbursement of costs incurred in connection with this Settlement Agreement.
- 28.2 Nothing in this Settlement Agreement shall be construed to limit the rights EPA has reserved under Section XV of this Settlement Agreement.
- 28.3 Nothing in this Settlement Agreement shall be construed to grant any rights to persons not a party to this Settlement Agreement. Further, nothing in this Settlement Agreement precludes the United States or the Respondent from asserting any claims, causes of action, or demands against any person not parties to this Settlement Agreement for indemnification, contribution, or cost recovery. Nothing herein diminishes the right of the United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that provide contribution protection to such persons.

#### **XXIV. COVENANT NOT TO SUE BY RESPONDENT**

- 29.1 Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, oversight costs paid under this Settlement Agreement, or this Settlement Agreement including, but not limited to:
- a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
  - b. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Commonwealth of Pennsylvania Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or
  - c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Site.
- Except as provided in Paragraph 29.3 (Waiver of Claims), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 15.1 (b), (c), and (e) - (g), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.
- 29.2 Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).
- 29.3 Respondent agrees not to assert any claims and to waive all claims or causes of action that it may have for all matters relating to the Site, including for contribution, against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if the materials contributed by such person to the Site containing hazardous substances did not exceed the greater of i) 0.002% of the total volume of waste at the Site, or ii) 110 gallons of liquid materials or 200 pounds of solid materials.
- a. the materials contributed by such person to the Site containing hazardous substances did not exceed the greater of i) 0.002% of the total volume of waste at the Site, or ii) 110 gallons of liquid materials or 200 pounds of solid materials.

- b. This waiver shall not apply to any claim or cause of action against any person meeting the above criteria if EPA has determined that the materials contributed to the Site by such person contributed or could contribute significantly to the costs of response at the Site. This waiver also shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person if such person asserts a claim or cause of action relating to the Site against Respondent.

### **XXX. CONTRIBUTION**

- 30.1 The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. §§ 9613(f)(2), and that the Respondent is entitled, as of the effective date of this Settlement Agreement, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may be otherwise provided by law, for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement is the Work and payment of costs under Section XXI of this Settlement Agreement.
- 30.2 The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which the Respondent has, as of the effective date of this Settlement Agreement, resolved its liability to the United States for the Work and payment of costs under Section XXI of this Settlement Agreement.
- 30.3 Nothing in this Settlement Agreement precludes the United States or Respondent from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any persons not parties to this Settlement Agreement. Nothing herein diminishes the right of the United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2).

**FOR RESPONDENT:**

  
[Signature]

**Please Type the Following:**

Name: DREW J. ANDERSON

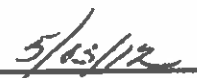
Title: PRESIDENT

Address: PO BOX 8588  
TARRYTOWN, NY 10591-8588

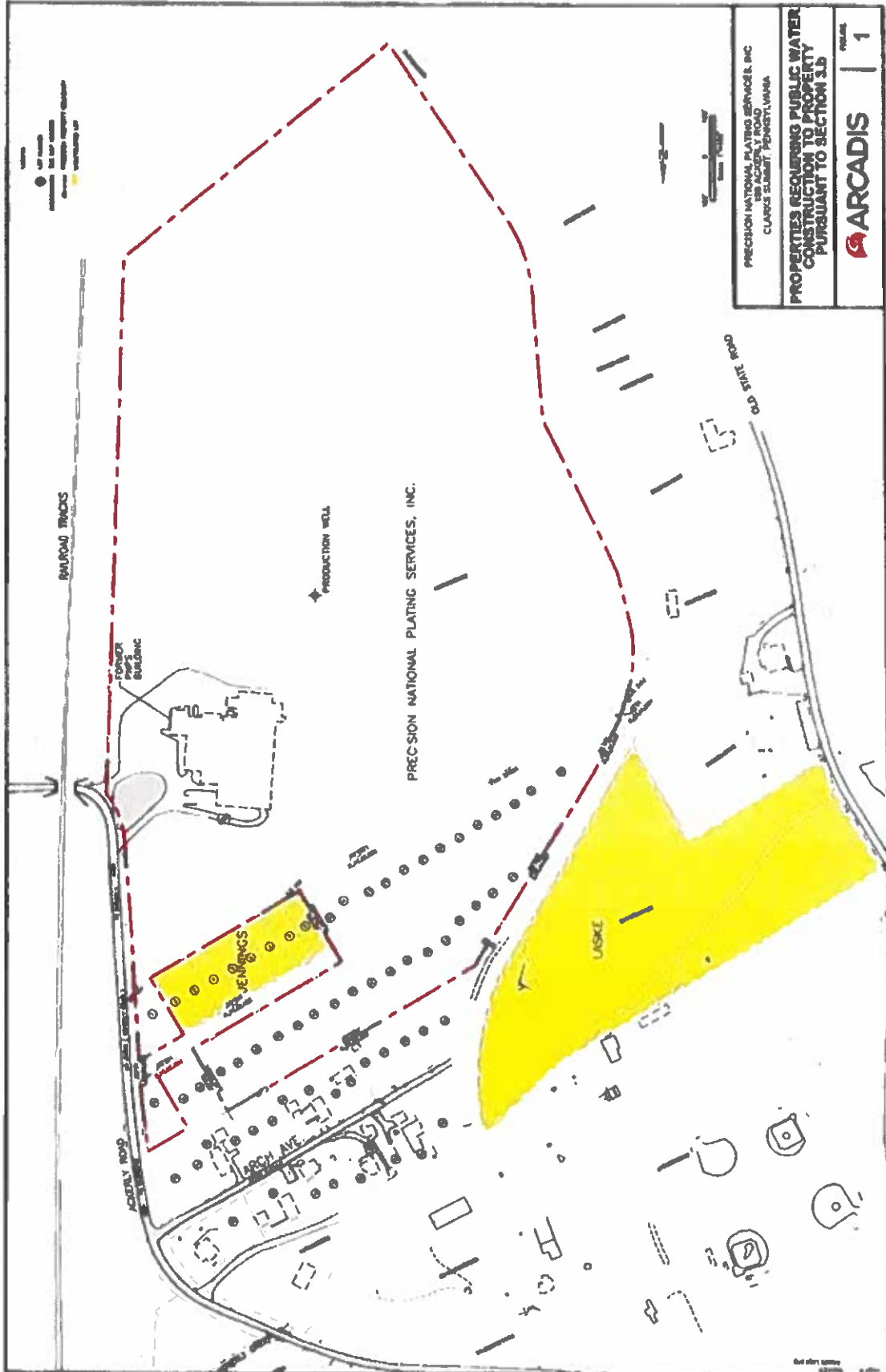
**FOR EPA:**

  
\_\_\_\_\_  
**Ronald J. Borsellino**

**Director, Hazardous Site Cleanup Division  
U.S. Environmental Protection Agency  
Region III**

  
\_\_\_\_\_

**Date**



PRECISION NATIONAL PLATING SERVICES, INC.  
 88 AGENCY ROAD  
 CLARKS SUMMIT, PENNSYLVANIA

**PROPERTIES REQUIRING PUBLIC WATER  
 CONSTRUCTION TO PROPERTY  
 PURSUANT TO SECTION 3.5**

**ARCADIS** | **PAGE 1**

# Appendix C

**Summary of Reports from 2012 to 2024**

## **Summary of Reports 2012 – 2024**

- 2012 Response Action Plan
- Quarterly Progress Reports
  - o Quarterly Progress Report: January through March 2012
  - o Quarterly Progress Report: April through June 2012
  - o Quarterly Progress Report: July through September 2012
  - o Quarterly Progress Report: October through December 2012
  - o Quarterly Progress Report: January through March 2013
  - o Quarterly Progress Report: April through June 2013
  - o Quarterly Progress Report: July through September 2013
  - o Quarterly Progress Report: October through December 2013
  - o Quarterly Progress Report: January through March 2014
  - o Quarterly Progress Report: April through June 2014
  - o Quarterly Progress Report: July through September 2014
  - o Quarterly Progress Report: October through December 2014
  - o Quarterly Progress Report: January through March 2015
  - o Quarterly Progress Report: April through June 2015
  - o Quarterly Progress Report: July through September 2015
  - o Quarterly Progress Report: October through December 2015
  - o Quarterly Progress Report: January through March 2016
  - o Quarterly Progress Report: April through June 2016
  - o Quarterly Progress Report: July through September 2016
  - o Quarterly Progress Report: October through December 2016
  - o Quarterly Progress Report: January through March 2017
  - o Quarterly Progress Report: April through June 2017
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  - o Quarterly Progress Report: July through September 2019
  - o Quarterly Progress Report: October through December 2019
  - o Quarterly Progress Report: January through March 2020

- o Quarterly Progress Report: April through June 2020
- o Quarterly Progress Report: July through September 2020
- o Quarterly Progress Report: October through December 2020
- o Quarterly Progress Report: January through March 2021
- o Quarterly Progress Report: April through June 2021
- o Quarterly Progress Report: July through September 2021
- o Quarterly Progress Report: October through December 2021
- o Quarterly Progress Report: January through March 2022
- o Quarterly Progress Report: April through June 2022
- o Quarterly Progress Report: July through September 2022
- o Quarterly Progress Report: October through December 2022
- o Quarterly Progress Report: January through March 2023
- o Quarterly Progress Report: April through June 2023
- o Quarterly Progress Report: July through September 2023
- o Quarterly Progress Report: October through December 2023
- o Quarterly Progress Report: January through March 2024
- o Quarterly Progress Report: April through June 2024
- o Quarterly Progress Report: July through September 2024
- o Quarterly Progress Report: October through December 2024
- Semi-Annual Groundwater Monitoring Reports
  - o Semi Annual Monitoring Report January - June 2012
  - o Semi Annual Monitoring Report July - December 2012
  - o Semi Annual Monitoring Report January - June 2013
  - o Semi Annual Monitoring Report July - December 2013
- Annual Groundwater Monitoring Reports
  - o Groundwater Monitoring Report January - December 2014
  - o Groundwater Monitoring Report January - December 2015
  - o Groundwater Monitoring Report January - December 2016
  - o Groundwater Monitoring Report January - December 2017
  - o Groundwater Monitoring Report January - December 2018
  - o Groundwater Monitoring Report January - December 2019
  - o Groundwater Monitoring Report January - December 2020
  - o Groundwater Monitoring Report January - December 2021
  - o Groundwater Monitoring Report January - December 2022
  - o Groundwater Monitoring Report January - December 2023
  - o Groundwater Monitoring Report January - December 2024

- Investigation Reports
  - o 2014 Supplemental Investigation Report
  - o 2015 Supplemental Investigation Report
  - o 2017 Supplemental Investigation Report
  - o 2020 Supplemental Investigation Report
- Injection Reports
  - o 2012 Supplemental Shallow Bedrock In Situ Chemical Reduction Remedial Action Report
  - o 2013 Supplemental Shallow Bedrock In Situ Chemical Reduction Remedial Action Report
  - o 2015 Supplemental Shallow Bedrock In Situ Chemical Reduction Remedial Action Report
  - o 2018 Supplemental Shallow Bedrock In Situ Chemical Reduction Remedial Action Report
  - o 2020 Supplemental Shallow Bedrock In Situ Chemical Reduction Remedial Action Report

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