

July 1, 2026

Maryland Department of the Environment
Oil Control Program
Attn: Christopher King
1800 Washington Blvd. Suite 620
Baltimore, MD 21230-1719
Email: christopherj.king@maryland.gov

Subject: **Permanent Closure Site Assessment Work Plan Rev1
Piney Point Terminal
17877 Piney Point Road, Piney Point, Maryland 20674
MDE Oil Operations Permit No. 2019-OPT-3484**

Dear Mr. King,

EnviroAnalytics Group, LLC (EAG) is pleased to submit this work plan to complete a Permanent Closure Site Assessment (**SA**) for the Piney Point Terminal (**Site**) located at the above referenced address on behalf of the owner, Piney Point LLC (**PP LLC**). The Site Location Map is provided as **Figure 1**, attached. This work plan describes the assessment work to be performed to determine whether evidence of potential spills, releases, and/or discharges is most likely to be present around the former terminal's above ground storage tanks (**ASTs**) and associated fuel transfer piping. The Site is permanently closing all ASTs and removing most of the ASTs and all fuel transfer oil piping and delivery equipment associated with the referenced Oil Operations Permit issued by the Maryland Department of Environment's (**MDE's**) Oil Control Program.

The scope of the SA has been designed to satisfy the site assessment requirements for the requested Oil Operations Permit Permanent Closure Notification submitted to MDE on March 19, 2025. The investigation has been designed in accordance with COMAR 26.10.17.13D.1b and 26.10.18.12C.1b and includes the collection of soil samples within the footprint of the former ASTs, around the perimeter of the former ASTs, within the ASTs' secondary containment areas, immediately outside the ASTs' secondary containment areas, and at locations immediately adjacent to the underground (**UG**) fuel transfer pipelines (**pipelines**) that are to be removed.

Sampling Approach and Strategy

There are forty-four (44) historic ASTs associated with the Site. All ASTs and pipelines have been emptied and cleaned (or planned to be emptied and cleaned) prior to their demolition and removal. Thirty-five (35) of the ASTs and all fuel transfer pipelines and delivery equipment are planned to be removed as part of the redevelopment of the Site. This demolition and removal work will be completed prior to implementation of the SA.

Figure 2, attached, depicts the tank farm investigation areas:

Area 1, located to the northwest, includes eight historic tanks:

-
- Tank 50051,
 - Tank 50052, tank to remain
 - Tank 50053, tank to remain
 - Tank 50054,
 - American Heater Bunker, tank to remain in service
 - Pipeline Pressure relief,
 - Pipeline Cat D346,
 - Front Gate Fuel, tank to remain in service

Area 2, located to the northeast, includes two historic tanks:

- Tank 27821,
- Tank 27822, tank to remain

Area 3, located to the southwest, includes twenty historic tanks:

- Tank 5423,
- Tank 9607,
- Tank 9608,
- Tank 9609,
- Tank 9610,
- Tank 9611,
- Tank 9612,
- Tank 9614,
- Tank 9615,
- Tank 9616,
- Tank 9617,
- Tank 15001,
- Tank 15002,
- Tank 15013,
- Tank 15026,
- #3 Hopkins Bunker,
- #3 Hopkins Therminol,
- #3 Hopkins Vent,
- Asphalt Pump Fuel,
- Cummins Fuel, tank to remain in service

Area 4, located to the southeast, includes fourteen historic tanks:

- Tank 9620,
- Tank 15003,
- Tank 15004,
- Tank 15005,
- Tank 15006,

-
- Tank 26818,
 - Tank 26819,
 - Steam Boiler Bunker,
 - #1 and #2 Hopkins Vent,
 - Plant Main Supply Fuel, tank to remain in service
 - VST, tank to remain in service
 - #3 Asphalt Pump,
 - Worthington Fuel,
 - Generator Fuel

In addition to investigating the historic tank locations, secondary containment, and nearby areas, there are also approximately 5,500 linear feet of UG pipeline onsite that are scheduled to be removed, and the pipeline corridor will be investigated, as well.

In the areas where the larger tanks were individually located within their own secondary containment area, there are a minimum of eight borings per tank. In some of the containment areas that contain multiple tanks, there's a minimum of two AST footprint borings and two perimeter borings around each tank. Sampling information and boring density for each tank location are shown on **Tables 1 and 2**. There are currently one hundred forty-five (145) AST borings planned, and their locations are presented as red dots on **Figures 3-7**, attached. In addition to each historic AST, petroleum containing infrastructure will be investigated. Sample locations and boring densities are listed in **Table 3**. Each boring is planned to be installed to an approximate depth of two (2) feet below ground surface (**ft bgs**) or 2 ft below any existing concrete pad at each location. For the UG pipeline, there are currently fifty-five (55) soil borings planned approximately every 100 linear feet of UG pipeline to be removed. Pipeline soil samples will be collected at the bottom of the piping trench in natural undisturbed soils. Field screening will be conducted using a photo-ionization detector (PID) approximately every 20 linear feet. Should field PID readings, visual inspections, and/or olfactory observations indicate the presence of petroleum impacts from the samples at 2 ft bgs, additional/deeper soil samples may be collected. Removal of the UG pipeline will be completed with oversight of an MDE certified underground storage tank (UST) system technician or remover.

Along with the proposed soil sampling, the on-site potable groundwater well will be sampled as part of the AST closure activities.

Detailed findings from the work plan implementation will identify soils that may exceed analyte-specific exposure limits indicating whether special management, handling, and/or remedial efforts will be required in accordance with MDE regulations.

Site features including historic ASTs, piping, and other related petroleum containing infrastructure are currently documented in Site Plot Plan in CAD format. These locations are geolocated and can be confirmed in the field using a hand-held GPS unit. Upon completion of all demolition work soil boring locations will be staked in the field and located using the GPS unit to verify that they are placed accurately to investigate each historical site feature that has been removed.

Two Underground Storage Tank locations were shown on the set of figures submitted with the sampling plan first submitted in December 2025. These locations have been reviewed with staff from the former Terminal and have been determined to be taken out of service and removed. Former Terminal staff also indicated that abandonment/removal records were filed with MDE.

Sampling Procedures

Soil samples will be collected in individual clean, disposable macrocore sleeve direct-push sleeves.

The Unified Soil Classification System (**USCS**) will be used to visually classify soils, and photo documentation will be conducted for all sample cores. All samples will be visually classified, and boring logs will be prepared for each location. All soil samples will be discretely measured for Volatile Organic Carbon (**VOC**) vapors with a photo ionization detector (**PID**) meter using a 10.6 eV lamp at the midpoint of the sample range (i.e., macrocore/sleeve) unless visual evidence indicates the potential presence of impact, in which case additional discrete PID readings will be collected. The PID meter will be calibrated daily, prior to each day's use. Calibration information will be documented in the field notes.

Each soil boring location will be backfilled with the soil removed from it following soil characterization and sample collection.

Boring locations will be surveyed using a hand-held GPS unit. Should utilities be encountered or refusal met prior to achieving the desired sampling depths, the boring will be offset approximately five (5) feet from the original attempted location and will be guided by referencing historic utility and subgrade infrastructure maps. All attempted locations will be included on an as-built plan.

One set of groundwater samples will be collected from the potable groundwater well located on-site. The potable well is still in service and samples will be collected from outside the hose bib.

Laboratory Testing

Soil samples will be collected at each designated boring location in laboratory supplied bottles. Each sample container will be labeled, packaged, preserved on ice, and shipped/transported under industry standard chain-of-custody procedures to a Maryland licensed analytical laboratory.

Soils samples will be analyzed for the following chemical and physical constituents:

- VOCs via EPA Method 8260, inclusive of
 - Oxygenates and
 - Naphthalene;
- Total Petroleum Hydrocarbons via EPA Method 8015B, inclusive of
 - Diesel Range Organics (TPH-DRO)
 - Gasoline Range Organics (TPH-GRO)
 - Oil Range Organics (TPH-ORO)
- SVOCs via EPA Method 8270.

Reportable levels will be employed sufficient to meet MDE reportable concentration requirements. Trip blanks (one per cooler), equipment blanks (one per day), and duplicate samples (one duplicate for every 10 boring locations) will also be collected to aid in the assessment of data quality. The sample ID names will not indicate to the lab which samples are duplicates for which boring location to ensure a lack of bias from the analytical laboratory.

Groundwater samples will be collected from the on-site potable well in laboratory supplied bottles. Each sample container will be labeled, packaged, preserved on ice, and shipped/transported under industry standard chain-of-custody procedures to a Maryland licensed analytical laboratory.

Groundwater samples will be analyzed for the following chemical constituents:

- VOCs via EPA Method 8260, inclusive of
 - Oxygenates and
 - Naphthalene;
- SVOCs via EPA Method 8270

Reportable levels will be employed sufficient to meet MDE reportable concentration requirements. Trip blanks (one per cooler) will also be collected to aid in the assessment of data quality. The sample ID names will not indicate to the lab which samples are duplicates for which boring location to ensure a lack of bias from the analytical laboratory.

Management of Petroleum Impacted Soils

An Environmental Professional (EP) will be available to inspect if soils show evidence of the presence of Oil and Grease or TPH present as NAPL during boring installation and excavation of the UG pipeline. The EP will monitor drilling and excavation activities for signs of potential contamination. Soils will be monitored with a hand-held PID for potential VOCs and will be visually inspected for the presence of staining, petroleum waste materials, or other indications of Oil and Grease or TPH contamination. If impacted soil is encountered during field work, the extent of the impacts shall be delineated by excavating trenches or installing four soil borings (two in each direction) perpendicular to the soil boring or excavation to examine the soil for physical evidence of petroleum impacts.

Drilling spoils or excavated material that is visibly stained or that exhibits a sustained PID reading of greater than 10 ppm will be segregated and placed in a stockpile on polyethylene or impervious surface until the material can be analyzed for appropriate disposal. Stockpiles of impacted soil will be placed on an impervious area (**pavement**) covered with a plastic tarp and anchored. Samples of impacted soil will be collected and sent to the laboratory and analyzed for VOCs, SVOCs, and TPH (TPH-DRO, TPH-GRO, TPH-ORO).

Data Evaluation

Soil data obtained from this investigation will be utilized to determine whether any petroleum impacts exist in the subsurface near the historic ASTs and along the UG pipeline. If impacts are indicated, and per the MDE AST Permanent Closure Fact Sheet from June 2023, the Site will be

further evaluated and the data used to develop appropriate remedial response actions necessary to remediate or mitigate any exceedance(s), if applicable, per MDE requirements.

An Oil Operations Permit Permanent Closure Report (**Closure Report**) will be prepared that includes the following documentation:

- A narrative of the work completed,
- A scaled site diagram identifying all boring locations with sample depths, including any failed attempt location with notes pertaining to the failed attempt;
- Analytical results and laboratory reports;
- Documentation verifying proper soil disposal of any generated waste materials
- A summary of findings and conclusions with recommendations;
- Any photographic documentation; and
- Any other pertinent documentation deemed appropriate to support the Closure Report.

This SA will be implemented upon completion of all demolition activities at the Site and upon approval by MDE.

Schedule

The following schedule has been developed to provide an approximate time frame for completion of the proposed work:

- Demolition
 - Tentative start date of August 3, 2026
 - Expected duration of demolition work is six months
 - Demolition work will be completed in one area at a time (Areas 1-4)
- Closure Sampling Plan
 - Implement following completion of demolition work
 - Field work and sample collection – four weeks
 - Laboratory Analysis – four weeks
 - Closure Report – eight weeks after receipt of all analyses

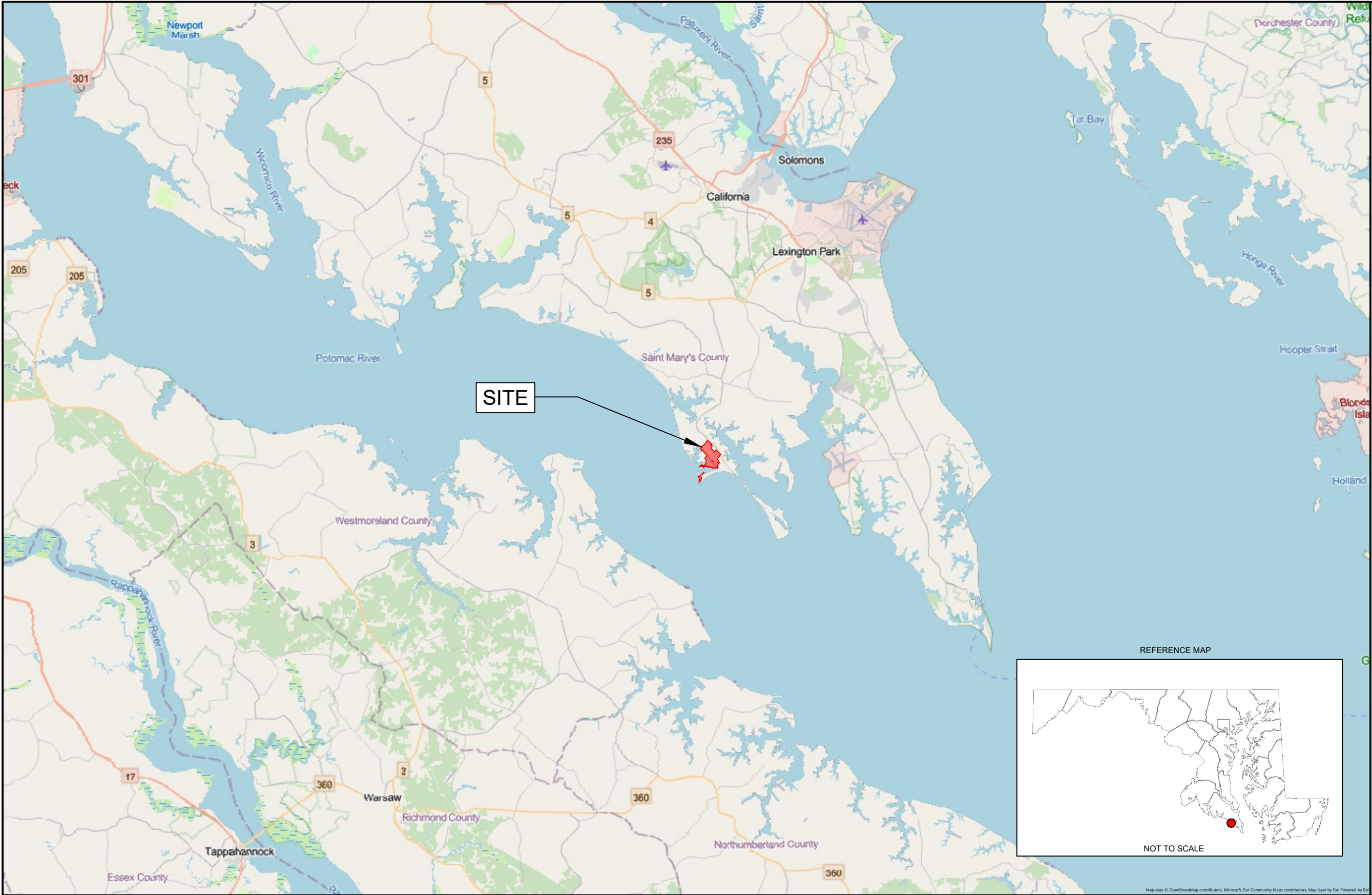
Should the MDE have any questions or comments related to this work plan please do not hesitate to contact the undersigned.

Sincerely,

James Calenda
EnviroAnalytics Group, LLC
(314) 620-3056
jcalenda@enviroanalyticsgroup.com

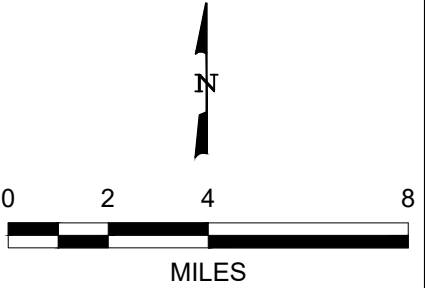
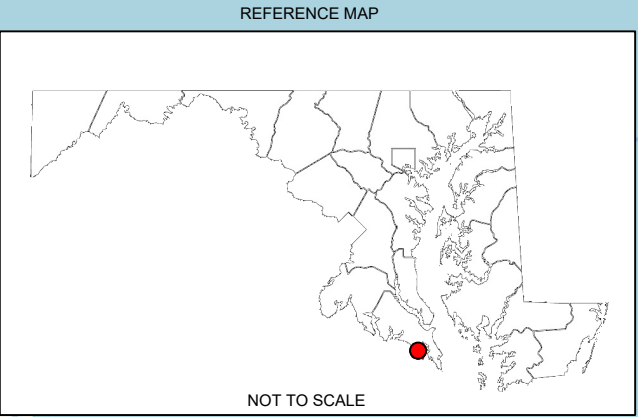
Enclosures: Figure 1 – Site Location Map
Figure 2 – Investigation Areas
Figure 3 – Proposed Boring Locations
Figure 4 – Proposed Boring Locations Area 1
Figure 5 – Proposed Boring Locations Area 2
Figure 6 – Proposed Boring Locations Area 3
Figure 7 – Proposed Boring Locations Area 4

Table 1 – Field Erected AST Systems
Table 2 – Shop Fabricated AST Systems
Table 3 – Petroleum Containing Infrastructure
Table 4 – Analytical Methods

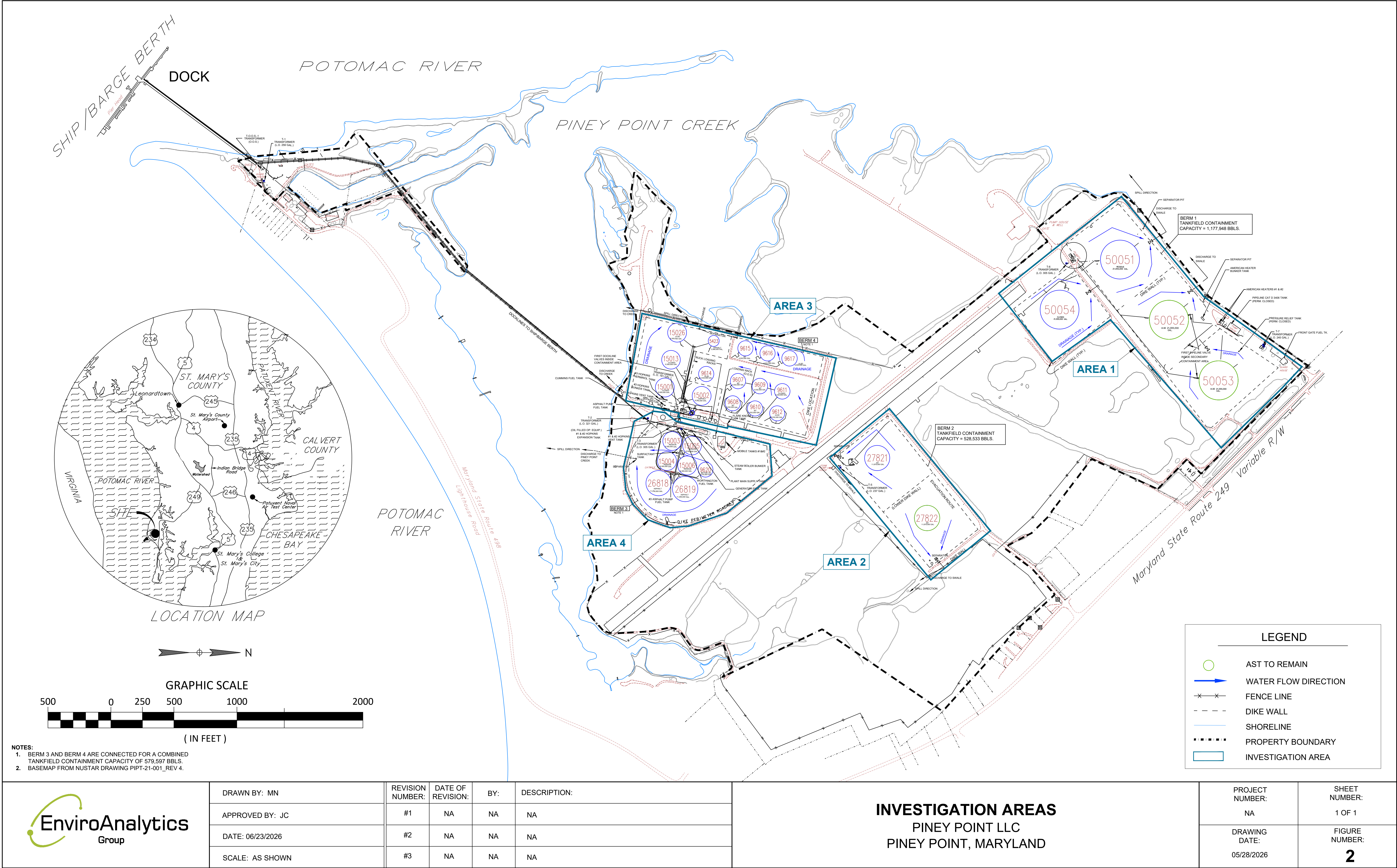


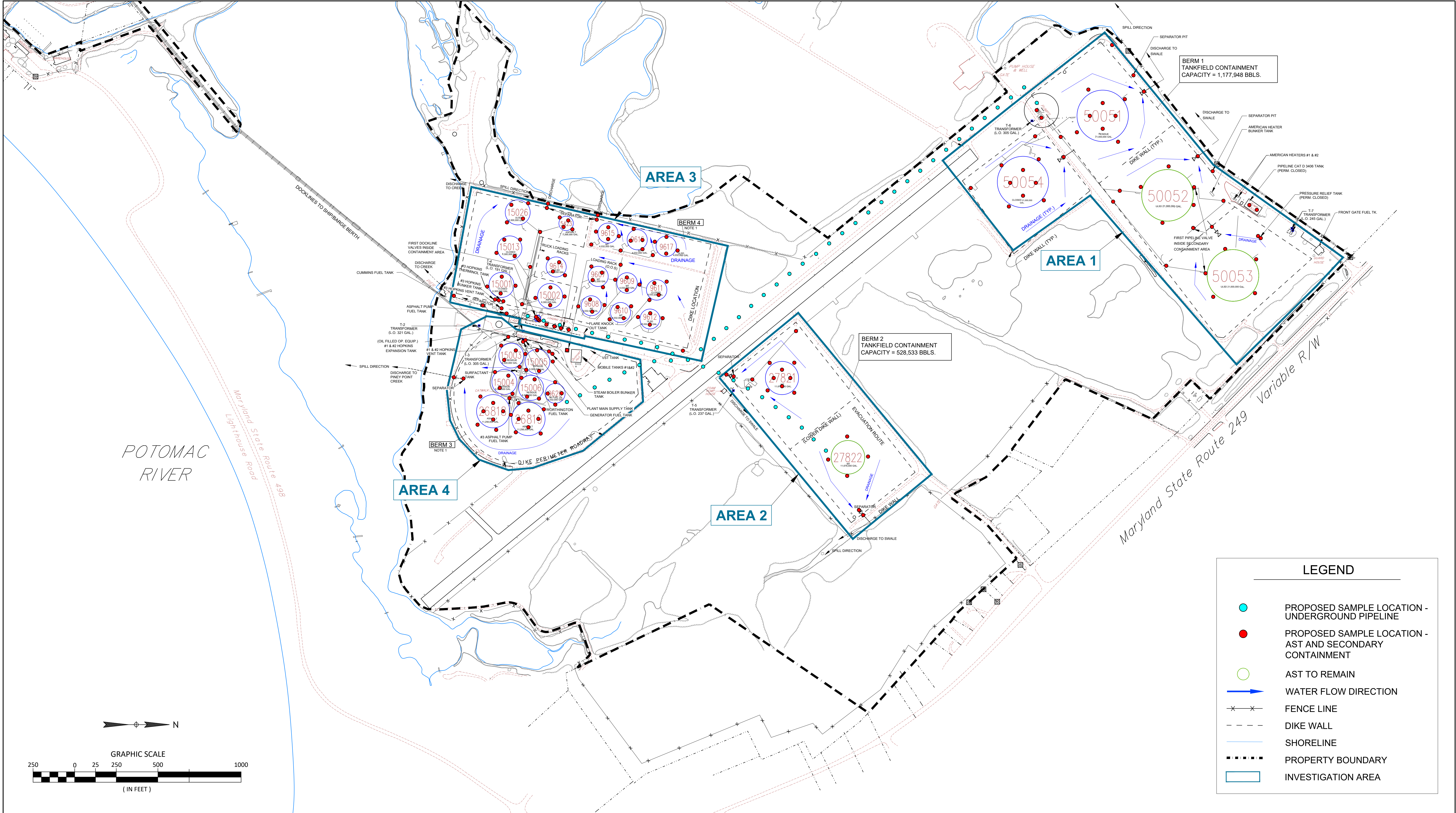
LEGEND

PROPERTY BOUNDARY



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	APPROVED BY: JC	#1	NA	NA	NA		NA	1 OF 1
	DATE: 12/23/2025	#2	NA	NA	NA		DRAWING DATE:	FIGURE NUMBER:
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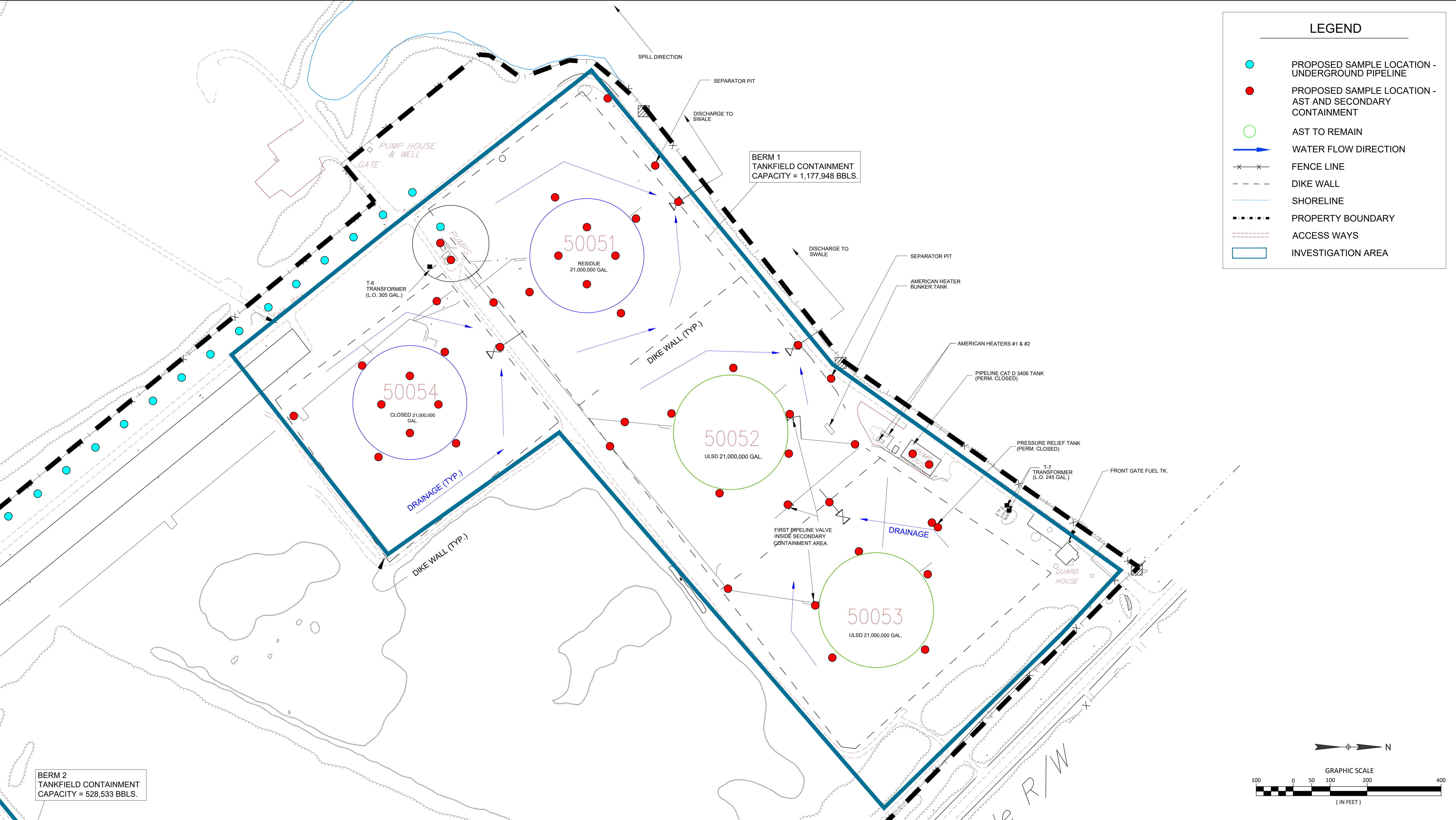




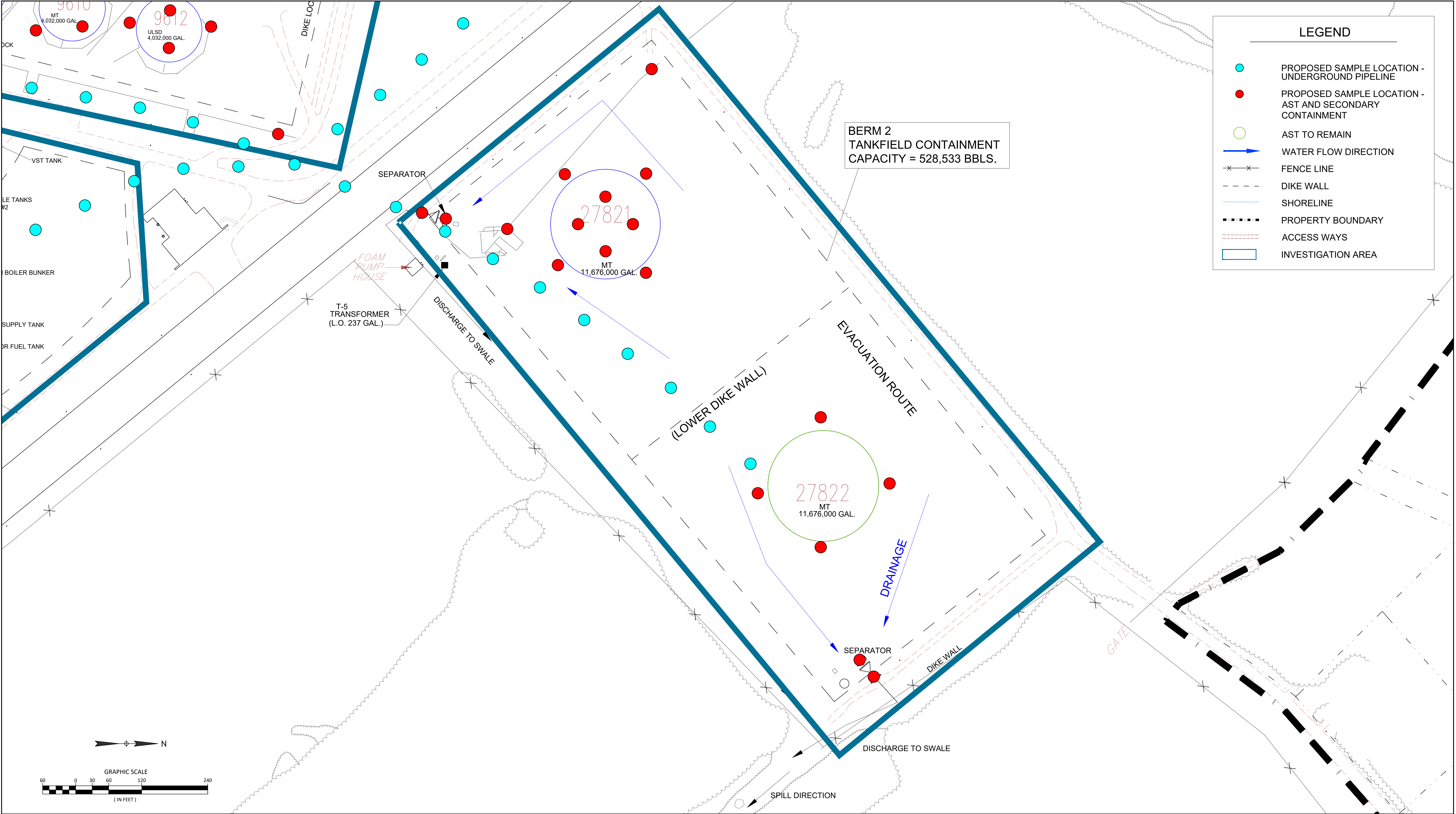
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APPROVED BY: JC	#1	NA	NA	NA
DATE: 07/01/2026	#2	NA	NA	NA
SCALE: AS SHOWN	#3	NA	NA	NA

PROPOSED BORING LOCATIONS
PINEY POINT LLC
PINEY POINT, MARYLAND

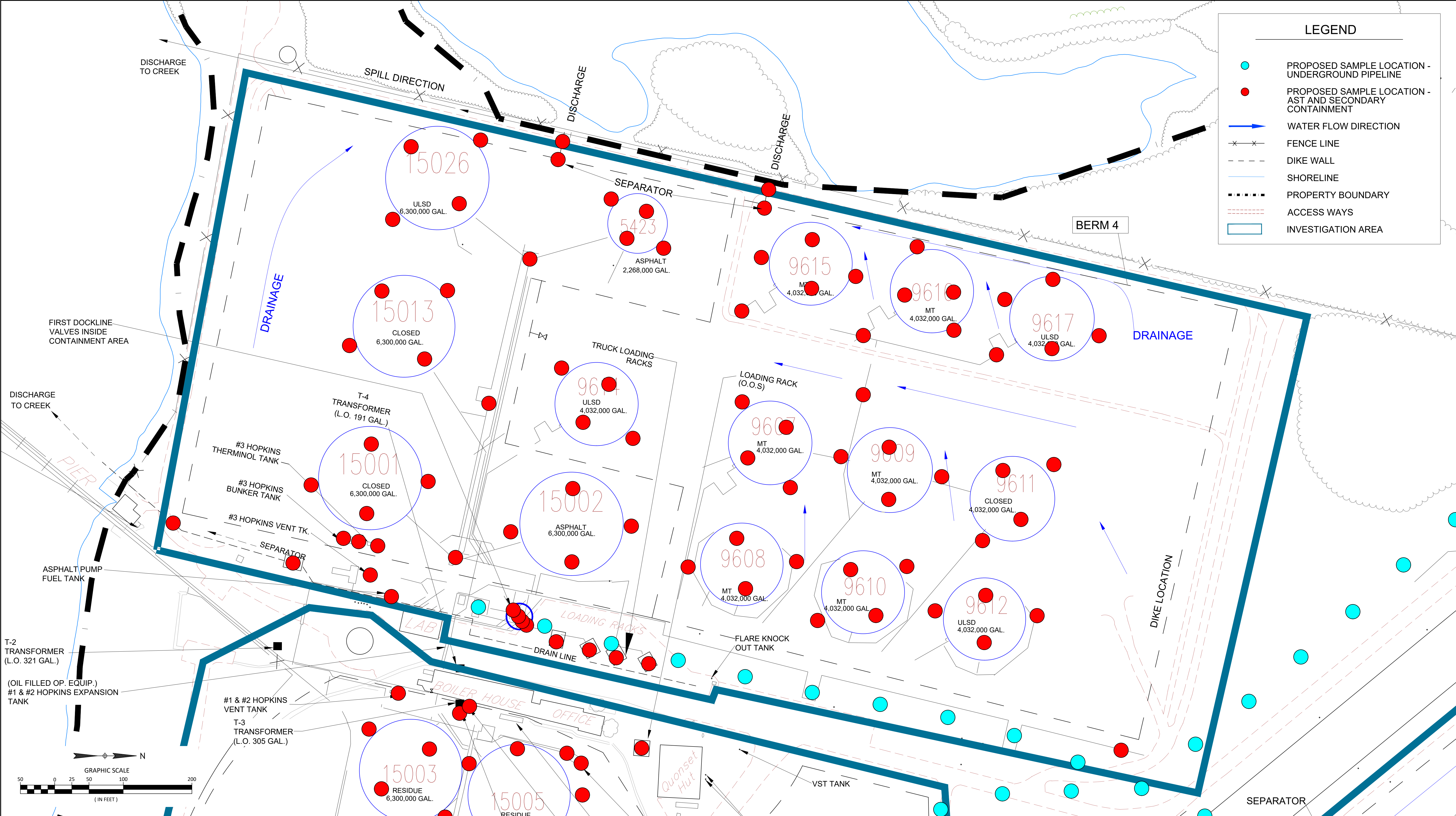
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DRAWING DATE: 05/27/2026	FIGURE NUMBER: 3



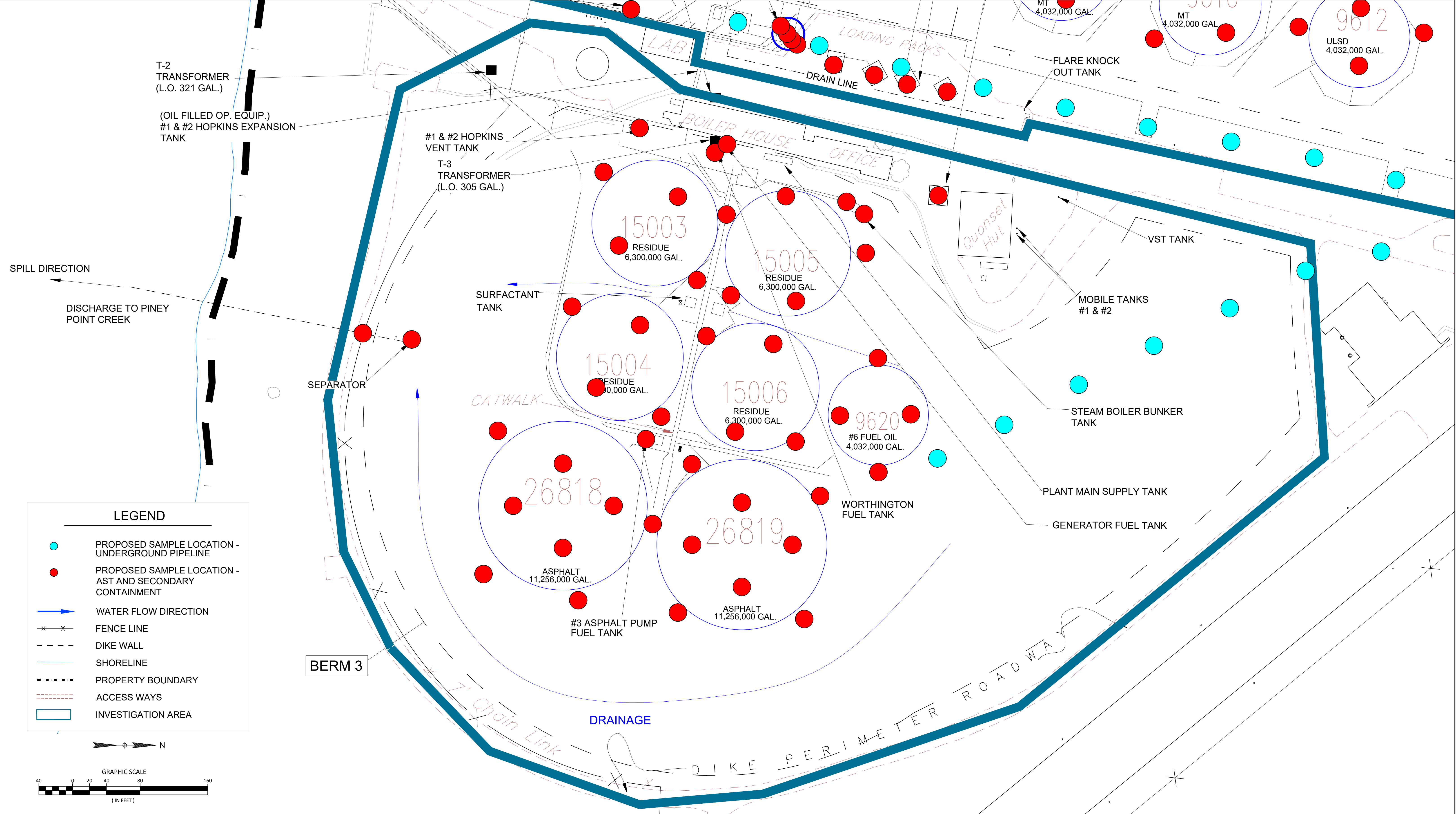
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	DATE: 07/01/2026	#2	NA	NA	NA			
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	DATE: 07/01/2026	#2	NA	NA	NA		DRAWING DATE:	FIGURE NUMBER:
	SCALE: AS SHOWN	#3	NA	NA	NA		05/28/2026	6



DRAWN BY: MN	REVISION NUMBER:	DATE OF REVISION:	BY:	DESCRIPTION:
APPROVED BY: JC	#1	NA	NA	NA
DATE: 07/01/2026	#2	NA	NA	NA
SCALE: AS SHOWN	#3	NA	NA	NA

PROPOSED BORING LOCATIONS
INVESTIGATION AREA 4
PINEY POINT LLC
PINEY POINT, MARYLAND

PROJECT NUMBER: NA	SHEET NUMBER: 1 OF 1
DRAWING DATE: 05/28/2026	FIGURE NUMBER: 7

Table 1 - AST Systems under Individual Oil Operations Permit 2019-OPT-3484

Field-Erected AST Systems						
Permit ID #	Size (gallons)	AST Location	Product	Analytical Method (see Codes below)	# Footprint Samples	# Perimeter Samples
5423	2,268,000	Area 3	Asphalt	1,2,3,4,5	2	2
9607	4,032,000	Area 3	Diesel	1,2,3	2	2
9608	4,032,000	Area 3	Jet Fuel	1,2,3	2	2
9609	4,032,000	Area 3	Diesel	1,2,3	2	2
9610	4,032,000	Area 3	Jet Fuel	1,2,3	2	2
9611	4,032,000	Area 3	Diesel	1,2,3	2	2
9612	4,032,000	Area 3	Diesel	1,2,3	2	2
9614	4,032,000	Area 3	Jet Fuel	1,2,3	2	2
9615	4,032,000	Area 3	Diesel	1,2,3	2	2
9616	4,032,000	Area 3	Diesel	1,2,3	2	2
9617	4,032,000	Area 3	Jet Fuel	1,2,3	2	2
9620	4,032,000	Area 4	No. 6 Fuel	1,2,3,4,5	2	2
15001	6,300,000	Area 3	Asphalt	1,2,3,4,5	2	2
15002	6,300,000	Area 3	No. 6 Fuel	1,2,3,4,5	2	2
15003	6,300,000	Area 4	No. 6 Fuel	1,2,3,4,5	2	2
15004	6,300,000	Area 4	No. 6 Fuel	1,2,3,4,5	2	2
15005	6,300,000	Area 4	No. 6 Fuel	1,2,3,4,5	2	2
15006	6,300,000	Area 4	No. 6 Fuel	1,2,3,4,5	2	2
15013	6,300,000	Area 3	Asphalt	1,2,3,4,5	2	2
15026	6,300,000	Area 3	Diesel	1,2,3	2	2
26818	11,256,000	Area 4	Asphalt	1,2,3,4,5	4	4
26819	11,256,000	Area 4	Asphalt	1,2,3,4,5	4	4
27821	11,676,000	Area 2	Diesel	1,2,3	4	4
27822	11,256,000	Area 2	Jet Fuel	1,2,3		4
50051	21,000,000	Area 1	No. 6 Fuel	1,2,3,4,5	4	4
50052	21,000,000	Area 1	Diesel	1,2,3		4
50053	21,000,000	Area 1	Diesel	1,2,3		4
50054	21,000,000	Area 1	Jet Fuel	1,2,3	4	4

Highlighted to remain, but out of service

Table 2 - AST Systems under Individual Oil Operations Permit 2019-OPT-3484

Shop-Fabricated AST Systems						
Permit ID #	Size (gallons)	AST Location	Product	Analytical Method (see Codes below)	# Footprint Samples	# Perimeter Samples
#3 Hopkins Vent	1,000	Area 3	Therminol [mineral oil]	1,2,3	1	
#3 Hopkins Bunker	20,000	Area 3	No. 6 Fuel	1,2,3,4,5	2	
#3 Hopkins Therminol	4,000	Area 3	Therminol [mineral oil]	1,2,3	1	
Asphalt Pump Fuel	1,000	Area 3	No. 2 Heating Oil	1,2,3	1	
#1 Hopkins Vent	2,000	Area 4	Therminol [mineral oil]	1,2,3	1	
Worthington Fuel	275	Area 4	No. 2 Heating Oil	1,2,3	1	
Generator Fuel	275	Area 4	No. 2 Heating Oil	1,2,3	1	
Plant main supply fuel	2,000	Area 4	Diesel			
American Heater Bunker	20,000	Area 1	Diesel			
Front Gate Fuel	275	Area 1	No. 2 Heating Oil			
#3 Asphalt Pump	550	Area 4	Diesel	1,2,3	1	
VST	1,500	Area 4	Gasoline			
Steam Boiler Bunker	20,000	Area 4	No. 6 Fuel	1,2,3,4,5	2	
Cummins Fuel	550	South of Area 3	Diesel			
Pipeline Cat D346	2,000	Area 1	Diesel			
Pipeline Pressure Relief	12,000	Area 1	No. 4 Oil	1,2,3,4,5	2	

Highlighted to remain and stay in service

Table 3 - AST Systems under Individual Oil Operations Permit 2019-OPT-3484

Petroleum Containing Infrastructure				
Type	Location	Analytical Method (see Codes below)	# Samples	Comments
Containment Berm Outfall	Area 1	1,2,3	4	One sample at each outfall location
Oil/Water Separator	Area 1	1,2,3	2	One sample at each location
Pipeline - Above Ground	Area 1	1,2,3	7	One sample every 500 LF
Pipeline Valve	Area 1	1,2,3	3	One sample at each location
Pump House	Area 1	1,2,3	4	Two samples within footprint at each location

Table 3 - AST Systems under Individual Oil Operations Permit 2019-OPT-3484

Petroleum Containing Infrastructure				
Type	Location	Analytical Method (see Codes below)	# Samples	Comments
Containment Berm Outfall	Area 2	1,2,3	2	One sample at each outfall location
Oil/Water Separator	Area 2	1,2,3	2	One sample at each location
Pipeline - Above Ground	Area 2	1,2,3	2	One sample every 500 LF
Pipeline - Underground	Area 2	1,2,3	8	One sample every 100 LF

Table 3 - AST Systems under Individual Oil Operations Permit 2019-OPT-3484

Petroleum Containing Infrastructure				
Type	Location	Analytical Method (see Codes below)	# Samples	Comments
Containment Berm Outfall	Area 3	1,2,3	3	Three samples at each outfall location
Loading Rack	Area 3	1,2,3	4	One sample at each location
Oil/Water Separator	Area 3	1,2,3	3	One sample at each location
Pipeline - Above Ground	Area 3	1,2,3	7	One sample every 500 LF
Pipeline - Underground	Area 3	1,2,3	4	One sample every 100 LF
Pipeline Valve	Area 3	1,2,3	4	One sample at each location

Table 3 - AST Systems under Individual Oil Operations Permit 2019-OPT-3484

Petroleum Containing Infrastructure				
Type	Location	Analytical Method (see Codes below)	# Samples	Comments
Containment Berm Outfall	Area 4	1,2,3	1	One sample at each outfall location
Loading Rack	Area 4	1,2,3	1	One sample at each location
Oil/Water Separator	Area 4	1,2,3	1	One sample at each location
Pipeline - Above Ground	Area 4	1,2,3	2	One sample every 500 LF
Pipeline - Underground	Area 4	1,2,3	2	One sample every 100 LF

Table 3 - AST Systems under Individual Oil Operations Permit 2019-OPT-3484

Petroleum Containing Infrastructure				
Type	Location	Analytical Method (see Codes below)	# Samples	Comments
Pipeline - Underground	Outside Area 1-4	1,2,3	41	One sample every 100 LF

Codes for Sampling Analytical Methods

1. EPA Method 8260 (Analyze for full suite volatile organic compounds, including fuel oxygenates and naphthalene)
2. EPA Method 8015B for Total Petroleum Hydrocarbons - Diesel Range Organics (TPH-DRO)
3. EPA Method 8015B for Total Petroleum Hydrocarbons - Gasoline Range Organics (TPH-GRO)
4. EPA Method 8015B for Total Petroleum Hydrocarbons - Oil Range Organics (TPH-ORO)
5. EPA Method 8270 for Semi-Volatile Organic Compounds (SVOCs)