Former Mt. Tom Station Power Plant
200 Northampton Street
Holyoke, Massachusetts

History of Construction – Bottom Ash Basin A

Mt. Tom Generating Company LLC
Houston, Texas

February 2026

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SECTION 1 | Introduction

The Mt. Tom Station is a former coal-fired electrical generating plant located at 200 Northampton Street ("Route 5") in Holyoke, Hampden County, Massachusetts (the "site"). The site is approximately 143 acres in size and is located adjacent to the western bank of the Connecticut River, where the river forms the eastern site boundary. Route 5 abuts the site to the west, with a railroad corridor that parallels the roadway immediately to the east. Historical key site features included the former electrical generation plant buildings on the northern portion of the site, a former coal storage location with runoff control area, three former wastewater basins and associated treatment facility located south of the former generation plant building, and several former coal combustion residuals management units ("CCRMUs"). The following Figures are included for the site: Figure 1 (Site Location), Figure 2 (Priority Resources), Figure 3 (Aerial), Figure 4 (Site Plan).

In accordance with the 2018 Massachusetts Department of Environmental Protection ("MassDEP") Administrative Consent Order (ACO-00002589) ("ACO") and corresponding regulatory approvals, the power plant and associated infrastructure and appurtenances have been demolished or abandoned in place. Ash from the combustion of coal and fuel oil has historically been deposited throughout portions of the site, generally south and west of the former generation facility infrastructure. Two traditional solid waste landfills are located at the site; a former municipal landfill that received solid waste from the City of Holyoke, and a former plant dump/landfill that received refuse and solid waste generated on-site. The only remaining structure is an electrical substation located to the east of the former generation plant building, which is owned and operated by Eversource Energy. Transmission lines run both north and south of the substation and run along the eastern portion of the site. At the northern side of Kennedy Brook, the lines cross the Connecticut River east into South Hadley. The lines are supported by ground-mounted pad supports and utility poles. Additionally, overhead electrical distribution lines, owned and operated by South Hadley Electric Light Department and Holyoke Gas and Electric, are present at the site. The lines originate from the substation structure and run south along the eastern portion of the site.

The southernmost portion of the site property was historically used for agriculture but was developed as a photovoltaic solar and battery storage facility in 2016. This portion of the property is improved with multiple solar panels, battery storage, electrical distribution infrastructure and three electrical transformers. The land sides of the site are secure and surrounded by a six-foot tall chain link fence with locked gates. The property boundary along the Connecticut River is not fenced.

The surrounding areas are served by the municipal drinking water system, which formerly served the site, but the connection has since been shut off at the valve located adjacent to Route 5. Sanitary waste from the site was historically managed by multiple on-site septic systems. Each septic system has been properly decommissioned and abandoned in accordance with applicable regulations. There is no municipal sewer service connection at the site. Electricity and communications utilities are provided to the site by the overhead distribution lines along Route 5. Additional private subsurface infrastructure was located across much of the northern portion of the site (north of Kennedy Brook), including underground electrical piping associated with the plant wastewater treatment facility and multiple stormwater structures/outfalls. With the exception of the existing municipal water connection line, subsurface infrastructure at the site has been removed or abandoned in place.

The site is abutted to the north by undeveloped forested land and the City of Easthampton. Residential dwellings are located south of the photovoltaic solar facility. Residential properties are located between 200 and 400 feet west of the photovoltaic facility, across Northampton Street. Additional commercial businesses are located to the west of the site, including a restaurant, hotel, union office, and the Holyoke Country Club.

1.1 Purpose

On behalf of Mt. Tom Generating Company LLC ("MTGC"), a wholly owned indirect subsidiary of ENGIE North America, Inc., Tighe & Bond, Inc. ("Tighe & Bond") has prepared this History of Construction report in accordance with the requirements of the Environmental Protection Agency ("EPA") Coal Combustion Residuals ("CCR") Legacy Surface Impoundments ("LSI'") and CCRMU Final Rule, published at 40 CFR § 257, Subpart D-*Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments*, in tandem with Amendment 89 FR 39099, finalized May 8, 2024 ("CCR Final Rule").

1.2 Rule Requirements

According to § 257.73(b) of the CCR Final Rule, compilation of a History of Construction is required for each LSI that meets the following conditions:

1. Has a height of five feet or more and a storage volume of 20 acre-feet or more; or
2. Has a height of 20 feet or more.

Based on a review of available information, the LSI identified as Bottom Ash Basin A is the only structure on-site that meets the applicable conditions at § 257.73(b). This History of Construction report contains the information outlined in paragraphs (1)(i) through (2) of § 257.73(c), as outlined in the following sections.

SECTION 2 | History of Construction

2.1 §257.73(c)(1)(i)

The name and address of the person(s) owning or operating the CCR unit; the name associated with the CCR unit; and the identification number of the CCR unit if one has been assigned by the state.

The owner/operator of the Legacy CCR Surface Impoundments:

Mt. Tom Generating Company LLC

1360 Post Oak Boulevard, Suite 400
Houston, Texas 77056
(731) 636-0000

Name of the LSI: Bottom Ash Basin A
State Assigned Identification Number: None assigned

2.2 §257.73(c)(1)(ii)

The location of the CCR unit identified on the most recent U.S. Geological Survey (USGS) 7 ½ minute or 15 minute topographical quadrangle map, or a topographic map of equivalent scale if a USGS map is not available.

The Bottom Ash Basin A LSI location is identified on Figure 1 (U.S. Geological Survey Mt. Holyoke Quadrangle, 7.5 Minute Series).

2.3 §257.73(c)(1)(iii)

A statement of purpose for which the CCR unit is being used.

Bottom Ash Basin A is an inactive LSI. The only current input is precipitation on its surface area and a fringe of upland around it. Discharge piping and unit measurement devices have been plugged and removed from the LSI, respectively.

2.4 §257.73(c)(1)(iv)

The name and size in acres of the watershed within which the CCR unit is located.

According to the Massachusetts Geographic Information System (MassGIS) maps of major watersheds, Bottom Ash Basin A is located within the Connecticut River Watershed, which encompasses approximately 427,876 acres.

2.5 §257.73(c)(1)(v)

A description of the physical and engineering properties of the foundation and abutment materials on which the CCR unit is constructed.

Bottom Ash Basin A was constructed as an unlined basin in circa ("c") 1985, in the approximate location of an area historically used for municipal solid waste landfilling. This basin was later lined in 2003, at the behest of the MassDEP via an ACO. The liner was a double HDPE liner with a composite geonet in between. The basin functioned as part of the Mt. Tom facility's industrial waste water treatment plant. The unit received bottom ash and boiler slag from the 1980s through plant closure in 2014. Additionally, stormwater runoff from the uncombusted coal stockpile was sluiced into the unit.

During geotechnical studies conducted by Gibbs & Hill, Inc. ahead of the c1985 construction of the site basins, soil boring OW-10 was advanced off the eastern side of Bottom Ash Basin A. The log summary indicated 0 to 28-feet of a mixture of sand, gravel, and trace silt. Fly ash was noted in the top ten feet of the boring, and fill material (cinders, glass and porcelain) was encountered at depths ranging from 10 to 28 feet. Bedrock was encountered at 28 feet below ground surface (BGS). The bedrock encountered was described as Holyoke Diabase. A copy of the boring log is included in Appendix A, with a corresponding figure depicting the boring location.

According to the report *Initial Site Assessment and Comprehensive Site Assessment – Scope of Work for the Unlined Basins and Associated Inactive Landfill Areas*, dated January 2002, prepared by Northeast Generating Service Company, soils at the site have been mapped as fill, fly ash soils, bottom ash soils, Winooski Series, Hadley Series, and Suncook Series. In the area of Bottom Ash Basin A, soil overlayed pre-existing municipal solid waste that reportedly extended to approximately 25 feet below the 2002 ground level. The seasonal high water table was reported as "somewhat above river level". Approximately 15 feet of gray fine to medium sand-textured fly ash covered the municipal waste. These materials were reportedly deposited between 1958 and 1970. It was noted that "The Bottom Ash soils occupy the bottom ash settling basins located south of the coal pile. The material consists of fine to coarse ash sluiced from the generating plant. The material is being deposited on the Winooski soils." Winooski soils are typically a silt loam, deep moderately well drained, and gently sloping, with water tables that are generally within 2 feet of land surface.

This report also indicates that the bedrock beneath the unconsolidated deposits is composed of two distinct basaltic flows interbedded with sandstone (Holyoke and Hampden formations). The Holyoke formation is composed of thick columnar quartz tholeiite containing gabbroic segregations. The Hampden formation is a thin flow of quartz tholeiite. A sandstone formation is mapped between the basalts, which consists of reddish-brown to pale red arkosic sandstone to siltstone, gray sandstone, gray mudstone, and black shale (source: Bedrock Geology Map of Massachusetts, Zen et al., 1983).

In 2003 Haley & Aldrich conducted a Corrective Action Alternatives Analysis for the site ahead of the basin lining. Activities associated with that analysis included the advancement of soil boring OW-107 (November 2002), within Bottom Ash Basin A. The soil boring was advanced to a depth of 29 feet BGS. Bottom ash was encountered to a depth of 15 feet BGS. The bottom ash was underlain by gray-brown sandy silt to approximately 26 feet BGS, where probable bedrock was encountered. A copy of the boring log is included in Appendix A, with a corresponding figure depicting the boring location. Haley & Aldrich's analysis included the generation of a cross section depicting the soil borings along a transect of the site, that includes Bottom Ash Basin A. A copy of the cross section figure is included in Appendix A.

The report *Round 10 Dam Assessment*, dated May 23, 2011, prepared by GZA GeoEnvironmental, Inc. (GZA) reports that Bottom Ash Basin A was constructed with a combination of excavation into the existing grade and earthen embankment fill. GZA reported the following:

> *"Based on construction plans…the majority of the perimeter berm around the basin appears to have been constructed of earthen embankment fill with a maximum height of approximately 6 feet. The basin has a gradually sloped bottom, approximately 3:1 (Horizontal:Vertical) side slopes, a maximum depth of about 15 feet. The embankment fill section of the basin has a maximum height above natural ground of about 6 feet. The majority of the middle of Basin A appears to have been excavated into natural ground and/or into previously-deposited fill including bottom ash. The low embankments constructed above grade were reportedly constructed with on-site coal ash material, sand, and gravel."*

Appendix B includes As-Built plans for Bottom Ash Basin A, as cited in the reports reviewed above.

2.6 §257.73(c)(1)(vi)

A statement of the type, size, range, and physical and engineering properties of the materials used in constructing each zone or stage of the CCR unit; the method of site preparation and construction of each zone of the CCR unit; and the approximate dates of construction of each zone of the CCR unit; and the approximate dates of construction of each successive stage of construction of the CCR unit.

According to the report *Closure Certification Report Mt. Tom Power Station Bottom Ash Basin A Project*, dated December 2002, prepared by Tighe & Bond, Bottom Ash Basin A was constructed as an unlined basin on pre-existing solid waste in c1980. In 2001, the Holyoke Water Power Company (the owner and operator of the site at that time) entered into an ACO with the Commonwealth of Massachusetts. Compliance with the ACO included lining the basin, which was permitted as a landfill closure, with continued use of the basin permitted as post-closure use. Prior to construction, approximately 31,000 cubic yards of accumulated sediment was removed from the basin. Construction for the lining of Bottom Ash Basin A began in August 2003. Initial work included removal of ledge to establish the shape of the basin. No municipal waste was encountered during preparation of the subgrade. The subgrade of the basin was overlain by a 6-inch compacted bedding sand layer, a 12-ounce non-woven geotextile, and a secondary 40-millimeter polyethylene liner. Record drawings and construction photographs are included in Appendix A.

Subsequently, and pursuant to the MassDEP 2018 ACO, the double liner system at Bottom Ash Basin A was removed in March 2020. This was completed for the purposes of achieving regulatory closure under the 2018 ACO and the Massachusetts Contingency Plan (MCP). In June 2017, prior to liner removal an assessment was conducted of Bottom Ash Basin A. At that time, the basin was generally dewatered and mostly accessible without use of a boat. The depth of the basin contents was measured at five locations throughout the unit, with an average calculated thickness of approximately 2.3-feet. Based on the dimensions of the unit, it was estimated that approximately 9,000 cubic yards of moist CCR was present above the liner at that time.

Basin decommissioning activities were conducted by an environmental contractor, using an excavator to strategically peel back and remove the liner system in sections, exposing the sand bedding material. In accordance with the MassDEP-approved plan, the sediment materials which were present within the basin were left in place after the liner materials were removed. The liner material was transported off-site for proper disposal as a solid waste. Following removal of the liner, four test pits were advanced within the basin (one test pit within each basin quadrant) to further assess and document subsurface soil conditions beneath the basin. Each test pit was performed by the environmental subcontractor and observed by a Tighe & Bond Environmental Scientist. Each of the four test pits was advanced to between six and seven feet below the bottom of the basin, then backfilled with the spoils. Each test pit generally contained brown fine sand and silt with little to trace coal ash. Solid waste was not observed in the four test pits performed within Bottom Ash Basin A. The As Built plan dated April 2021 for Bottom Ash Basin A, from the 2021 Phase IV Completion Report, is in included in Appendix B.

At present, Bottom Ash Basin A is secured on all sides by a dedicated chain link fence. The basin base and interior slopes have partially revegetated through natural succession since the 2020 liner removal activities. Vegetation management is conducted periodically to prevent destabilization of the unit, and hydroseeding of the basin slopes was recently completed in November 2025. The only water held within the unit is associated with stormwater runoff/precipitation and which generally infiltrates soon after rainfall.

2.7 §257.73(c)(1)(vii)

At a scale that details the engineering structures and appurtenances relevant to the design, construction, operation, and maintenance of the CCR unit, detailed dimensional drawings of the CCR unit, including a plan view and cross sections of the length and width of the CCR unit, showing all zones, foundation improvements, drainage provisions, spillways, diversion ditches, outlets, instrument locations, and slope protection, in addition to the normal operating pool surface elevation and the maximum pool surface elevation following peak discharge from the inflow design flood, the expected maximum depth of CCR within the CCR surface impoundment, and any identifiable natural or manmade features that could adversely affect operation of the CCR unit due to malfunction or mis-operation.

Record drawings for the construction, lining, and decommissioning of Bottom Ash Basin A are included as Appendix A. The Structural Stability and Safety Factor Assessment and the Initial Inflow Design and Flood Control Plan for Bottom Ash Basin A are currently under development. Relevant information will be used to update this History of Construction report. This will include a figure depicting a cross section of the basin.

There is currently no normal pooling of liquid at Bottom Ash Basin A, as accumulated precipitation infiltrates nearly immediately following precipitation events.

2.8 §257.73(c)(1)(viii)

A description of the type, purpose, and location of existing instrumentation.

There is no existing instrumentation at Bottom Ash Basin A.

2.9 §257.73(c)(1)(ix)

Area Capacity Curves for the CCR unit.

Figure 2-1 shows area capacity curves for Bottom Ash Basin A based on USGS LiDAR data for Western Massachusetts with 0.5 meter resolution flown in Spring of 2024[1].

[1] https://www.fisheries.noaa.gov/inport/item/78679

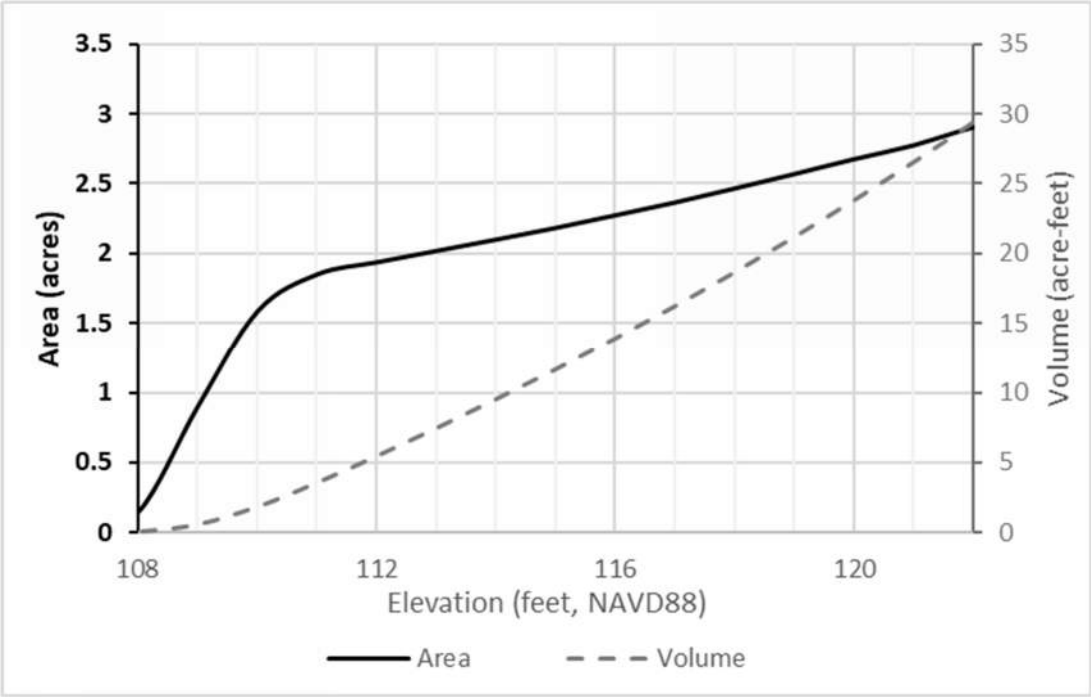


FIGURE 2-1 Area Capacity Curves – Bottom Ash Basin A

2.10 §257.73(c)(1)(x)

A description of each spillway and diversion design features and capacities and calculations used in their determination.

There are no spillways or diversion design features associated with Bottom Ash Basin A.

2.11 §257.73(c)(1)(xi)

The construction specification and provisions for surveillance, maintenance, and repair of the CCR unit.

Original construction specifications from the c1980 construction of the basin are not available. The stability of the structure's embankments will be reviewed during the current assessment activities associated with Structural Stability and Safety Factor Assessment and the Initial Inflow Design and Flood Control Plan for Bottom Ash Basin A.

Currently, surveillance, maintenance, and repair of Bottom Ash Basin A occur through the periodic inspections required under §257.83, and in accordance with applicable MCP regulations (e.g., vegetation management, minor surficial repairs, and maintenance of site security). Major repairs, if warranted, would be designed by a professional engineer and constructed under controlled specifications.

Based on the nature of Bottom Ash Basin A, and the status of the facility (decommissioned and un-manned), the weekly to monthly inspection requirements for CCR Surface Impoundments set forth at §257.83(a)(1)(i-iii) are unnecessary and not likely to provide relevant data. Based on the conditions of the basin and overall facility, the CCR LSI inspections will be conducted quarterly by a qualified person, concurrent with the dust

inspections required under §257.80. Because Bottom Ash Basin A is subject to the periodic structural stability assessment requirements set forth in §257.73(d), it will be inspected on an annual basis by a qualified professional engineer, in accordance with §257.83(b)(1).

2.12 §257.73(c)(1)(xii)

Any record or knowledge of structural instability of the CCR unit.

No records of a stability analysis of the basin embankments were available for review during the 2025 initial annual inspection. Visual observations made at the time of the inspection indicate that the structure appears to be stable. The decommissioned status of the basin with absence of appreciable water storage further benefits its stability. Additional structural evaluations are being conducted in association with the structural stability and safety factor assessment being conducted in accordance with §257.73(d).

SECTION 3 | Recordkeeping and Reporting

3.1 §257.73(c)(2)

If there is a significant change to any information compiled under paragraph (c)(1) of this section, the owner or operator of the CCR unit must update the relevant information and place it in the facility's operating record as required by §257.105(f)(9).

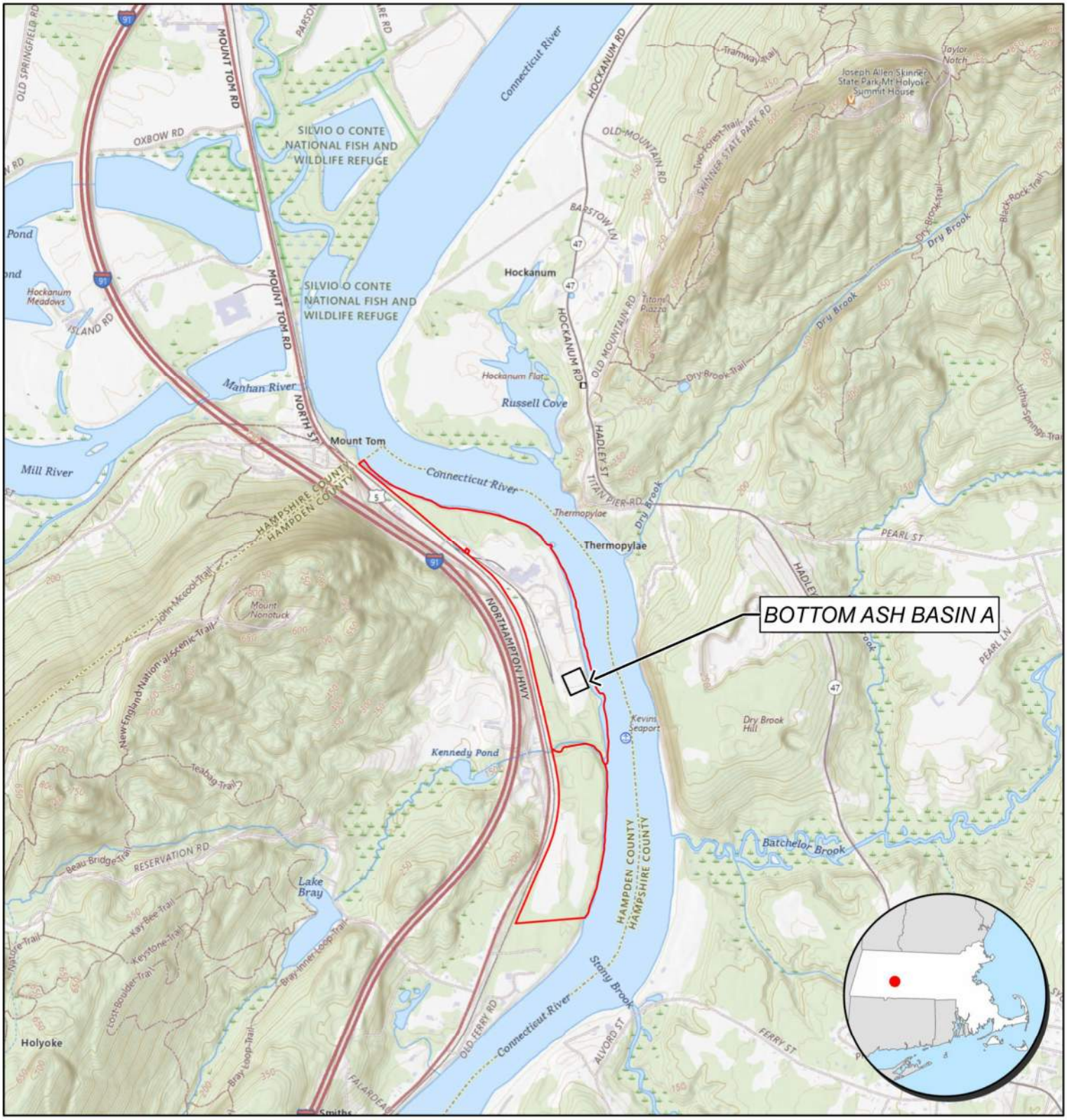
This report will be placed in the facility's operating record and internet site. Identified changes to the history of construction information will be updated within this document and the revised document will be placed in the facility's operating record.

Tighe & Bond

Figures

Former Mt. Tom Station Power Plant
200 Northampton Street
Holyoke, Massachusetts

FIGURE 1
SITE LOCATION
January 2026



N

1:24,000

0 1,000 2,000

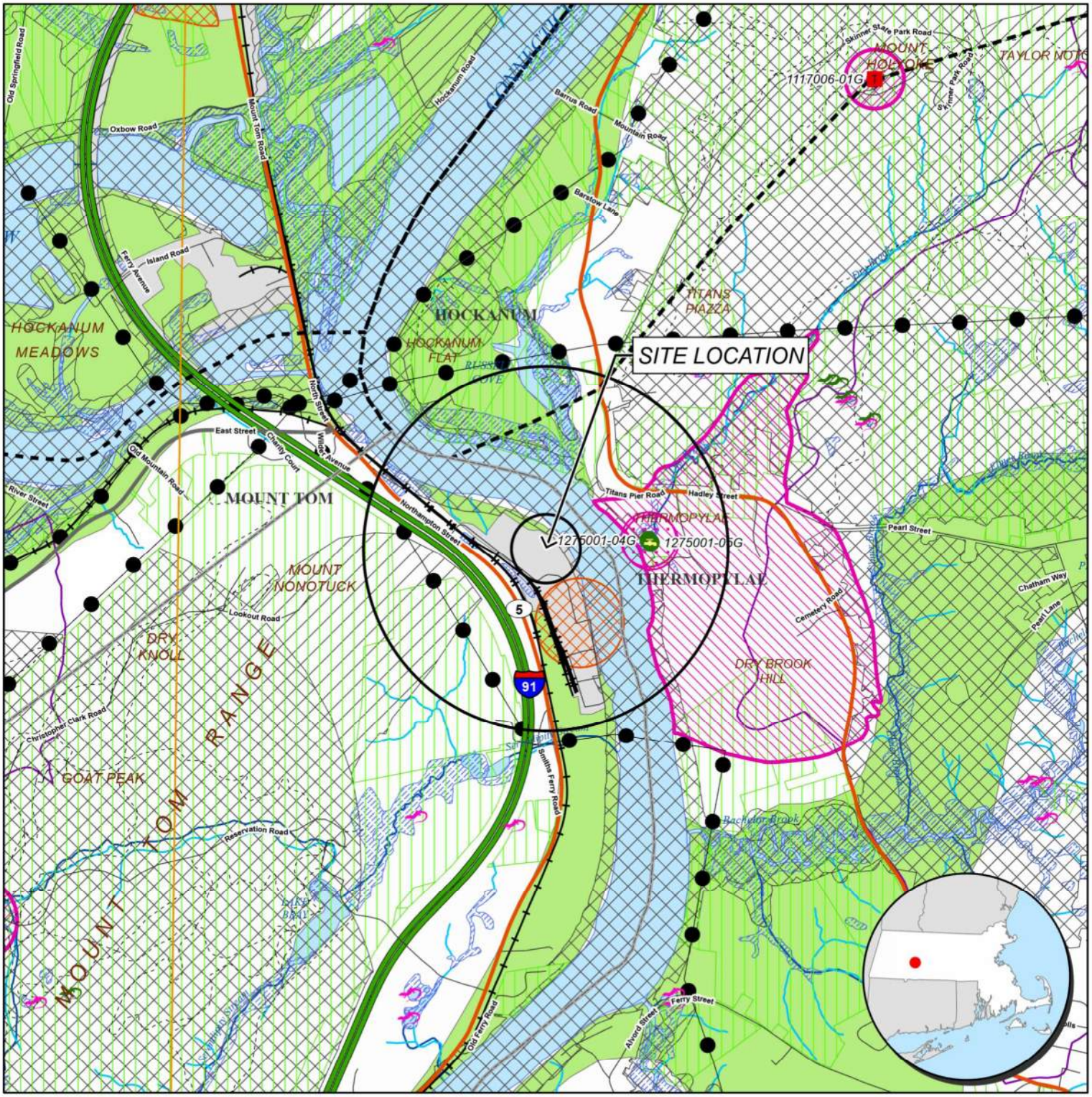
Feet

Based on USGS The National Map Topo Basemap.
Contour Interval Equals 10 Feet.
Circles indicate 500-foot and half-mile radii.

Tighe & Bond

Former Mt. Tom Station Power Plant
200 Northampton Street
Holyoke, Massachusetts

FIGURE 2
PRIORITY RESOURCES
January 2026



- NHESP Certified Vernal Pool
- NHESP Potential Vernal Pool
- Non-Landfill Solid Waste Site
- Proposed Well
- Emergency Surface Water
- Community Public Water Supply - Surface Water
- Community Public Water Supply - Groundwater
- Non-Community Non-Transient Public Water Supply
- Non-Community Transient Public Water Supply
- Limited Access Highway
- Multi-Lane Highway, NOT Limited Access
- Other Numbered Route
- Major Road - Arterials and Collectors
- Minor Street or Road
- Aqueduct
- Hydrologic Connection
- Stream/Intermittent Stream
- Powerline
- Pipeline
- Track or Trail
- Railroad
- Public Surface Water Supply Protection Area (Zone A)
- DEP Approved Wellhead Protection Area (Zone I)
- DEP Approved Wellhead Protection Area (Zone II)
- DEP Interim Wellhead Protection Area (IWPA)
- Protected and Recreational Open Space
- Solid Waste Landfill
- Area of Critical Environmental Concern (ACEC)
- NHESP Priority Habitat for Rare Species
- NHESP Estimated Habitat for Rare Wildlife
- EPA Designated Sole Source Aquifer
- Major Drainage Basin
- Sub Drainage Basin
- MassDEP Inland Wetland
- MassDEP Coastal Wetland
- MassDEP Not Interpreted Wetland
- Public Surface Water Supply (PSWS)
- Water Body
- Non-Potential Drinking Water Source Area - High Yield
- Non-Potential Drinking Water Source Area - Medium Yield
- Potentially Productive Medium Yield Aquifer
- Potentially Productive High Yield Aquifer
- County Boundary
- Municipal Boundary
- USGS Quadrangle Sheet Boundary

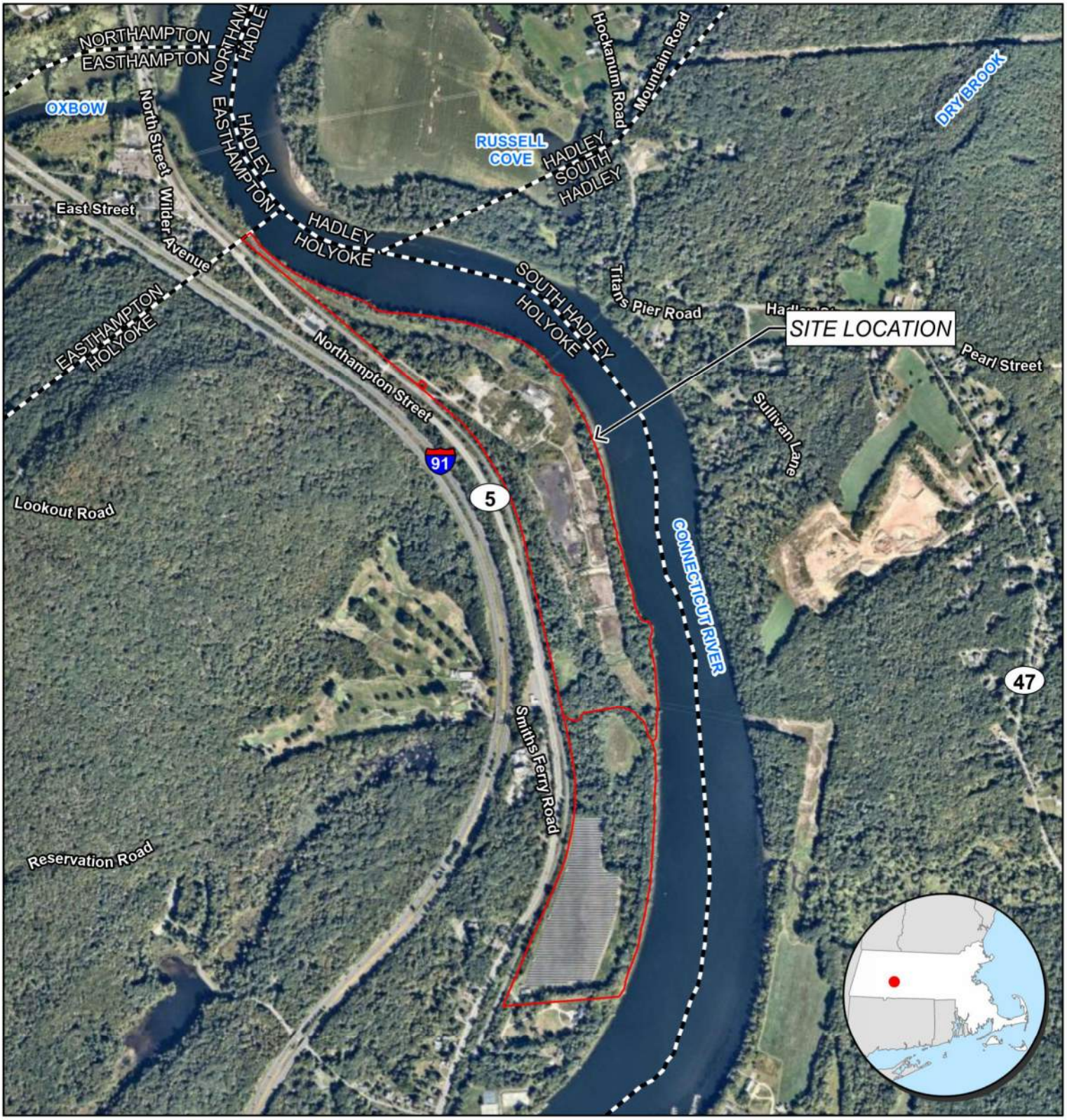
N
1:24,000
0 1,000 2,000
Feet

Data source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology.
Circles indicate 500-foot and half-mile radii.
Data valid as of January 2026.

Tighe & Bond

Former Mt. Tom Station Power Plant
200 Northampton Street
Holyoke, Massachusetts

FIGURE 3
AERIAL
January 2026



Property Boundary

Municipal Boundary

N

1:14,400

0 600 1,200

Feet

Based on latest Nearmap Imagery

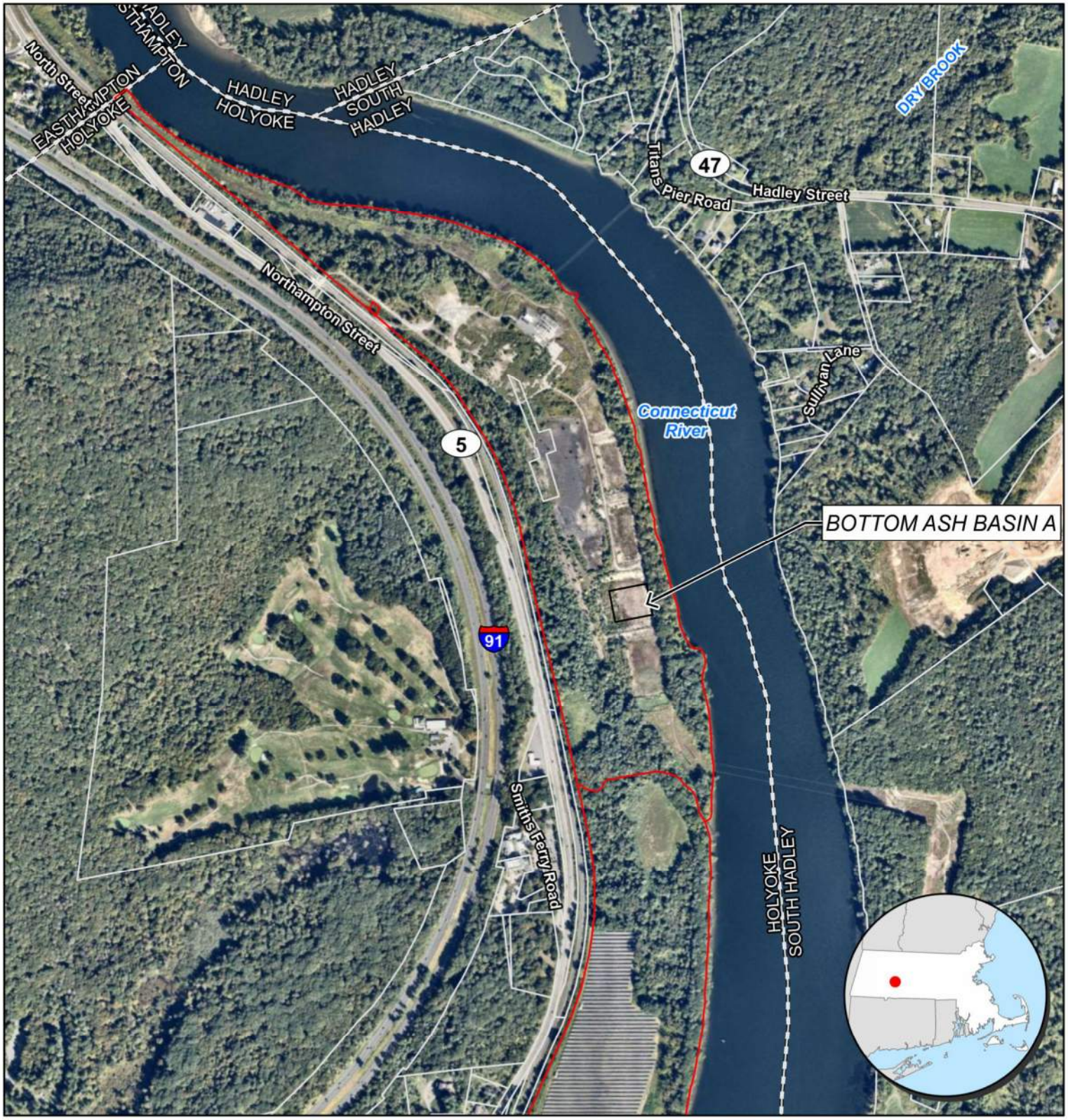
Tighe & Bond

J:\G\G0682 GDF Mt. Tom\037 - Post Closure Compliance & CCR\06 - CCR\Figures\GIS\Figure 3 - Aerial\Figure 3 - Aerial.aprx\Fig3_Aerial [Exported By: ZLepore, 1/30/2026, 3:14 PM]

G-0682

Former Mt. Tom Station Power Plant
200 Northampton Street
Holyoke, Massachusetts

FIGURE 4
SITE PLAN
January 2026



Property Boundary
Parcel Boundary
Municipal Boundary

N
1:10,000
0 416.67 833.33
Feet

Based on latest Nearmap Imagery

Tighe & Bond

Tighe & Bond

Appendix A:
Soil Boring Logs and Figures

Soil Boring Log and Figure – OW-10

Gibbs & Hill, Inc.
ENGINEERS DESIGNERS CONSTRUCTORS

Job No.: 11-2937-004
Boring: OW-10

Summary of Drilling and Sampling Information

Client: NUSCO
Project: Mt. Tom Hydrogeologic Study
Rig: CME-75
Site: Holyoke, Mass.
Contractor: Raymond Int.
Driller: B. McKevitt

Drilling Method:

Cased Hole	0	ft. to 28	ft. Dia. 4	in.
Cored	28	ft. to 38	ft. Dia. NX	in.
	___	ft. to ___	ft. Dia. ___	in.

Drilling Fluid Used: x Yes ___ No Type: Water

Sampler Hammer: Weight 140 lbs. Drop 30 in.

Casing Hammer: Weight - lbs. Drop - in.

Rock Core Diameter 2.125 in. Type core barrel/bit: NQ wireline

Date/Time Drilling Started: 11/21/80 Completed: 11/25/80

Down Time: 6 hrs. Cause(s) Bad weather - heavy rain

Log Summary: Soil: 0-28' mixtures of sand, gravel and trace silt

Rock: Holyoke Diabase

No. Samples: Split Spoon 6 Other: -

Undisturbed: 1

No. Permeability Tests: Constant Head 2 Pressure 1

Falling Head 3 Other: -

No. and Type of Other Tests:

Piezometer Installation:

Pipe:	Type: PVC - Sched. 40	Dia. 2"	Depth: From 0	ft. to 20	ft.
Screen:	Type: Slot 10 PVC	Dia. 2"	Depth: From 20	ft. to 25	ft.
Filter Material:	Type: Coarse Sand		Depth: From 12	ft. to 27	ft.
Seal Material:	Type: Cement		Depth: From 0	ft. to 2	ft.
	Bentonite		Depth: From 2	ft. to 4	ft.
	Bentonite		Depth: From 10	ft. to 12	ft.
	Bentonite		Depth: From 28	ft. to 38	ft.

Remarks: In-situ materials allowed to collapse and fill boring as casing was removed from 28-27.

Inspector R. Barbour

BORING LOG

Sheet 1 of 1

PROJECT: Mt. Tom Geohydrologic Study PROJECT NO. 11-2937-002 BORING NO. OW-10

Location: Holyoke, Mass. Coord: Ground Elev: 117.2

Contractor: Raymond Int. Date Started: 11/21/80 G.W.L. 15'5" Hour: 7:30 Date: 11/26/80

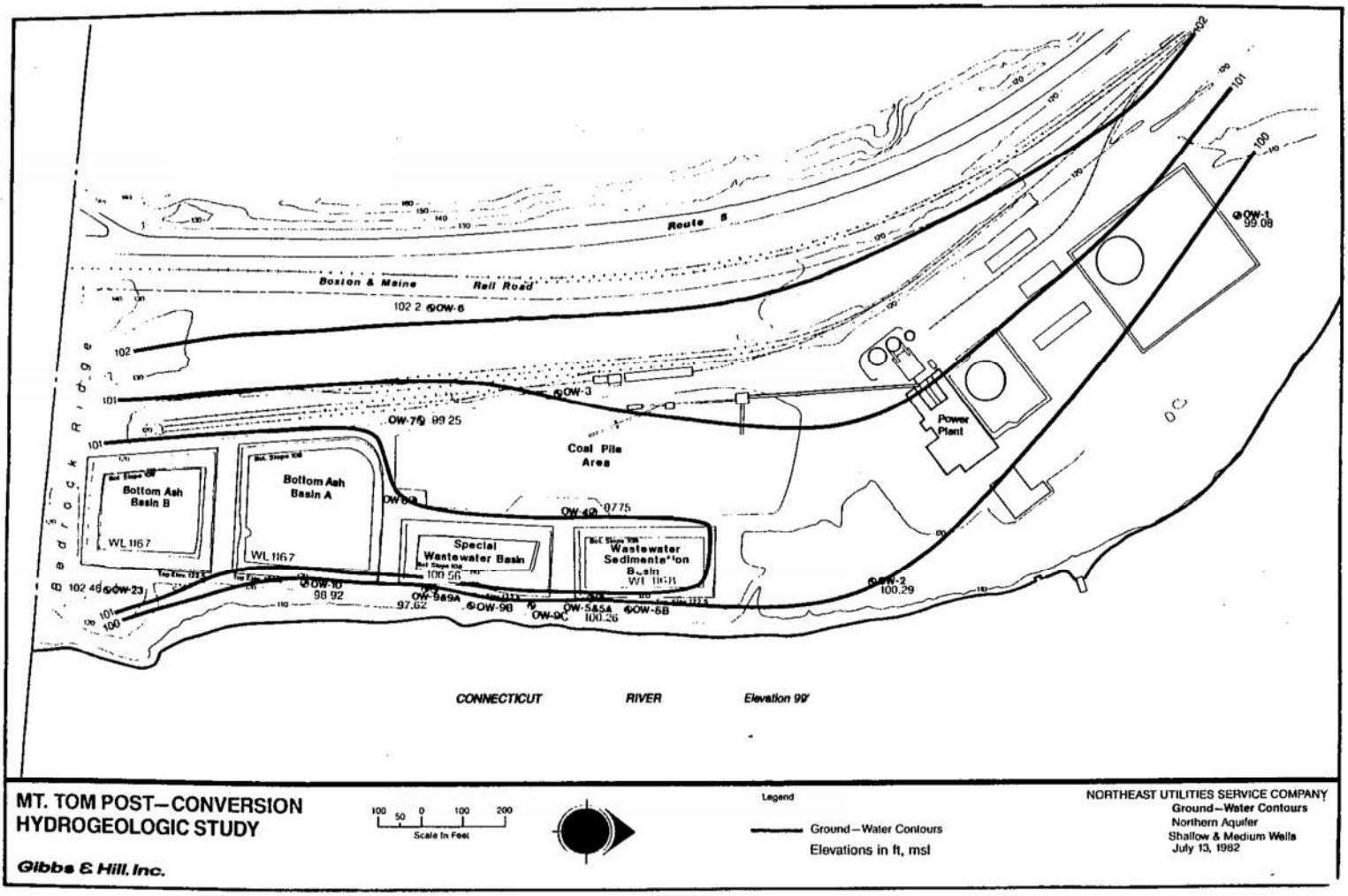
Inspector: R. Barbour Date Completed: 11/25/80 G.W.L. Hour: Date:

Notes: Observation Well Screened from 25-20'

Depth Ft.	Elev. Ft.	Sample Type & No.	Test Type & No.	Blows Casing Per Ft.	Blows Sampler 6"	Blows Sampler 6"	Recovery %	RQD %	Drilling Rate Min./Ft.	Graphic Symbol	Description and Remarks
0		SS-1			1	1				SW	Mixtures of sand size sediment (fine to coarse) with traces of fine gravel.
					2	3	29%				
											FLYASH
5		SS-2			2	5				SP	Well sorted fine sand size sediment.
					6	10	29%				
											FLYASH
10		SS-3	FH-1 CH-1		1	2				GP	Mixtures of fine gravel and coarse sand size sediment. Cinders, glass, and porcelain-Fill material)
					2	3	8%				
15		SS-4	FH-2 CH-2		8	10				GP	Mixtures of fine gravel and coarse sand sed. (cinders, glass and procelain-Fill material)
					11	14	25%				
20		SS-5			2	4				SW	Mixtures of sand (fine to medium) and traces of fine gravel (glass, cinders)
					7	7	8%				
25		*OSS-1 SS-6	FH-3		11	12				SW	Mixtures of sand (coarse to fine) with traces of silt (10%) and glass
					11	13	100%				
											Top of bedrock at 28'
30		Nx			Run	1	59	0	5		Dark gray diabase (Holyoke Diabase)
35		Nx	PT-1		Run	2	100	47	5		
											Bottom of Hole at 38'
40											

I.D. Casing 4"	Wgt. Hammer on Casing	Drilled	Material Notations *Oversize S.S.,
I.D. Spoon 1½"	Wgt. Hammer on Spoon	140	hammered down
Type Core Drill NQ	Drop Hammer on Casing	-	FH=Falling Head Permeability Test
Core Dia. 1185"	Drop Hammer on Spoon	30 inches	CH=Constant Head Permeability Test
Sample & Test Notations	Bedrock pressure tested - PT		

Gibbs & Hill, Inc.



FIGUIRE 5. -- GROUNDWATER CONTOURS IN FEET ABOVE MEAN SEA LEVEL FOR THE NORTHERN AQUIFER FROM JULY 13, 1982, AT THE MOUNT TOM GENERATING STATION PROPERTY IN HOLYOKE, MASSACHUSETTS.

Soil Boring Log and Figures – OW-107

HALEY & ALDRICH

TEST BORING REPORT

Boring No. OW-107

Project Mt. Tom Comprehensive Site Assessment Holyoke, MA
Client Northeast Utilities
Contractor Seaboard Geotechnical & Environmental Drilling Services

File No. 28911-020
Sheet No. 1 of 2
Start November 13, 2002
Finish November 13, 2002
Driller R. Ingraham
H&A Rep. S. Carter
Elevation 123.1
Datum Site
Location N 3,886 W Abs(-6112.91)

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	HW	S	--	Rig Make & Model: ATV, CME-550
Inside Diameter (in.)	4.0	2.375	--	Bit Type: Roller Bit
Hammer Weight (lb.)	300	300	-	Drill Mud: None
Hammer Fall (in.)	24	24	-	Casing: driven
				Hoist/Hammer: Cat-Head / Automatic Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	1/12"* 1* 2*	S1* 14	0.0 2.0				Black BOTTOM ASH, mps = 6 mm, no structure, no odor, dry PID = 0.0 ppm	0	0	5	35	50	10				
5	1* 2* 1* 2*	S2* 14	5.0 7.0				Black BOTTOM ASH, mps = 6 mm, no structure, no odor, dry PID = 0.0 ppm	0	0	5	35	50	10				
10	1* 2* 1* 2*	S3* 14	10.0 12.0				Black BOTTOM ASH, mps = 6 mm, no structure, no odor, dry PID = 0.0 ppm	0	0	5	35	50	10				
15	Not Rec.	S4*	15.0 17.0		107.8 15.3 107.4 15.7	OL/ OH ML	Black BOTTOM ASH, mps = 6 mm, no structure, no odor, dry to moist PID = 0.0 ppm -BOTTOM ASH FILL- Dark gray ORGANIC SOIL (OL/ OH), mps = 0.4 mm, with root material and plant fibers, organic odor, moist PID = 0.0 ppm	0 0 0	0 0 0	15 0 0	65 0 0	35 5 30	5 95 70				
20																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon
G Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (lin. ft.) 26
Rock Cored (lin. ft.)
Samples S1-S6

Boring No. OW-107

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None
Toughness: L-Low, M-Medium, H-High
Plasticity: N-Nonplastic, L-Low, M-Medium, H-High
Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

*** Indicates the use of a 3" sampler and 300 lb hammer**

G:\- PROJECTS\28-28911\GINT\28911TB.GPJ Jan 14, 03
USCSTC3A.GDT USCS1IB5.GLB USCS_TB3B

HALEY & ALDRICH

TEST BORING REPORT

Boring No. OW-107
File No. 28911-020
Sheet No. 2 of 2

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20	Not Rec.	S5*	20.0 – 22.0			ML	-ORGANIC DEPOSITS-	0	0	0	0	15	85				
						ML	Gray-brown sandy SILT (ML), mps = 0.4 mm, no structure, no odor, moist										
							PID = 0.0 ppm										
							Gray-brown sandy SILT (ML), mps = 0.4 mm, no structure, no odor, moist										
							PID = 0.0 ppm										
25	Not Rec.	S6*	25.0 – 27.0			ML	Gray poorly-graded SILT (ML), mps = 0.4 mm, no structure, no odor, wet	0	0	0	0	0	100				
					97.1 / 26.0		PID = 0.0 ppm										
							-ALLUVIAL DEPOSITS-										
							Top of Probable Bedrock at 26.0 ft										
							Note: advanced rollerbit from 26.0 to 29.0 ft. in rock.										
					94.1 / 29.0		-PROBABLE BEDROCK-										
							Bottom of Exploration at 29.0 ft.										
							Monitoring well installed in borehole upon completion.										
							See Monitoring Well Installation Report OW-107 for details.										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size.

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. OW-107

* Indicates the use of a 3" sampler and 300 lb hammer

USCS_TB3B USCSLIB5.GLB USCSTC3A.GDT G:\- PROJECTS\28-\28911\GINT\28911TB.GPJ Jan 14, 03

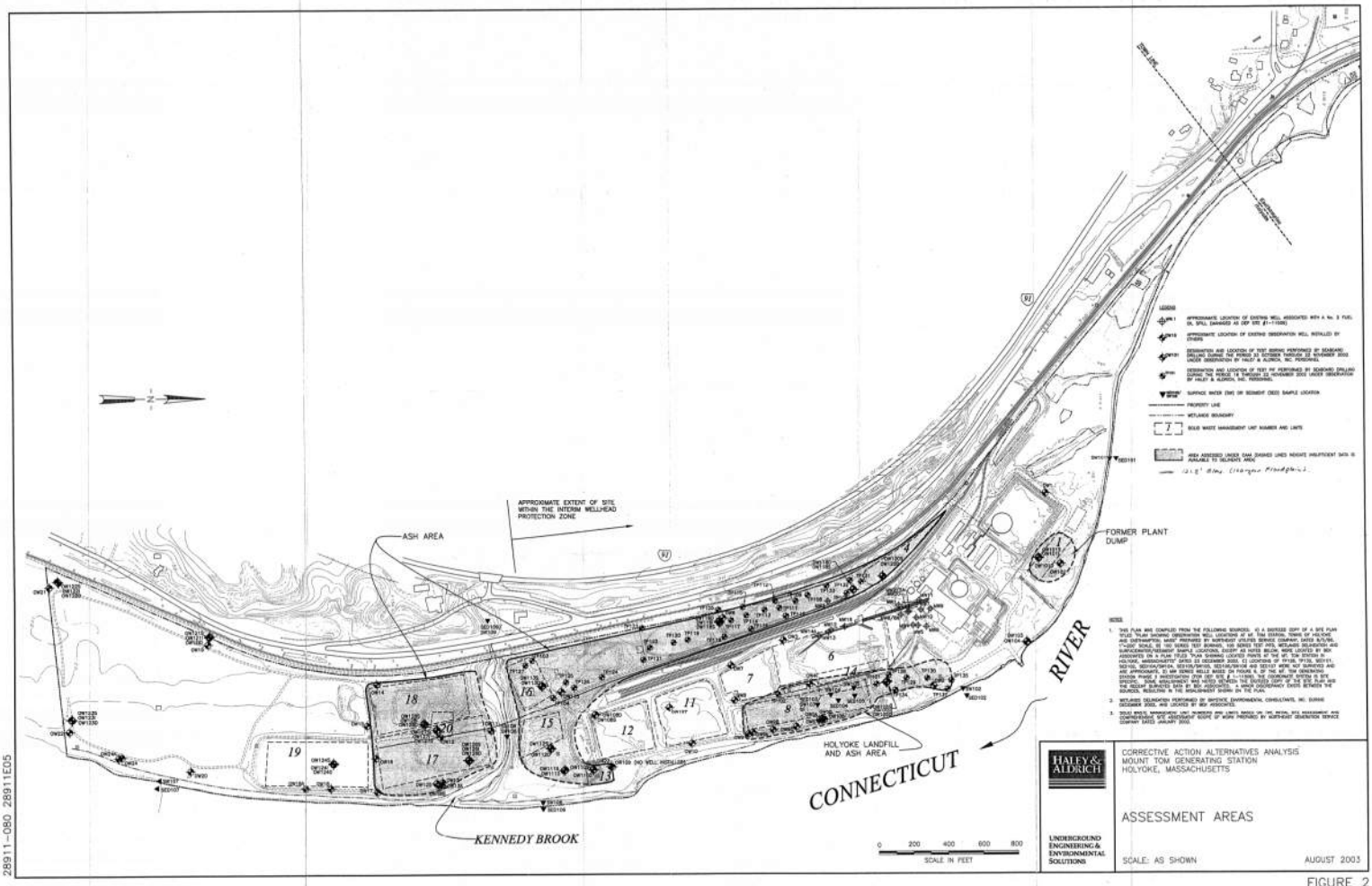
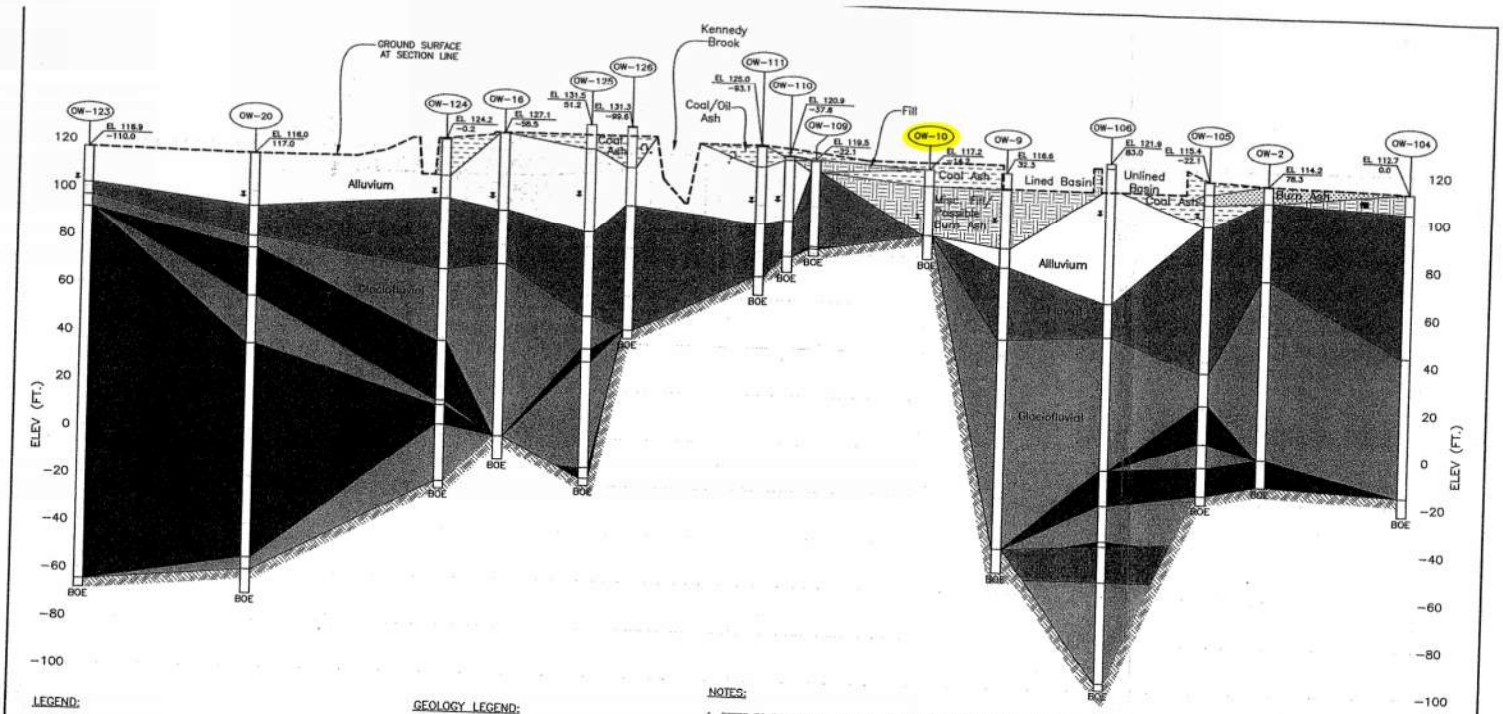


FIGURE 2

28911-080 28911E05



LEGEND:

OW-16 — EXPLORATION DESIGNATION

EL 127.1 / -56.5 — APPROXIMATE GROUND SURFACE ELEVATION (FEET) AT EXPLORATION; APPROXIMATE OFFSET FROM PROFILE BASELINE IN FEET

MAJOR STRATUM BOUNDARY BETWEEN DIFFERENT SOIL TYPES

WATER LEVEL MEASURED IN MONITORING WELL (DECEMBER 2002)

BOE — BOTTOM OF EXPLORATION

GEOLOGY LEGEND:

- Ash (Coal and/or Oil)
- Burn Ash
- Fill/Possible Burn Ash
- Alluvial Deposits
- Fluvial Deposits
- Glaciolacustrine Deposits
- Glaciofluvial Deposits
- Glacial Till
- Probable Rock

NOTES:

1. REFER TO FIGURE 3 FOR LOCATION AND ORIENTATION OF THE SUBSURFACE PROFILES SHOWN ON THIS FIGURE.
2. LINES REPRESENTING CHANGES IN STRATA ARE BASED UPON INTERPOLATION BETWEEN SUBSURFACE EXPLORATIONS AND MAY NOT REPRESENT ACTUAL FIELD CONDITIONS AT OTHER THAN SPECIFIC EXPLORATION LOCATIONS.
3. ELEVATIONS REFER TO MEAN SEA LEVEL DATUM.
4. THE STRATIFICATION LINES SHOWN ON THE GRAPHIC REPRESENTATION OF THE TEST BORINGS REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL OR ROCK TYPES. THE TRANSITION BETWEEN MATERIALS IS APPROXIMATE AND MAY BE GRADUAL.
5. THIS CROSS SECTION WAS DEVELOPED BY INTERPOLATION BETWEEN WIDELY SPACED BORINGS. ONLY AT THE BORING LOCATIONS SHOULD IT BE CONSIDERED AS AN APPROXIMATELY ACCURATE REPRESENTATION AND THEN ONLY TO THE DEGREE IMPLIED BY THE NOTES ON THE BORING LOGS.
6. MULTI-DEPTH WELLS WERE GENERALLY INSTALLED IN THE OW-100 SERIES BORINGS, DEPENDING ON DEPTH. SEE MONITORING WELL INSTALLATION REPORTS FOR DETAILS. THE OW-10 SERIES WELLS WERE INSTALLED BY OTHERS AND TYPICALLY CONTAIN SINGLE DEPTH WELLS.

VERTICAL 0 40 80
HORIZONTAL 0 400 800
SCALE IN FEET
NOTE: 10X VERTICAL EXAGGERATION

HALEY & ALDRICH
UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

COMPREHENSIVE SITE ASSESSMENT
MT. TOM GENERATING STATION
HOLYOKE, MASSACHUSETTS

CROSS SECTION A–A'

SCALE: AS SHOWN JANUARY 2003

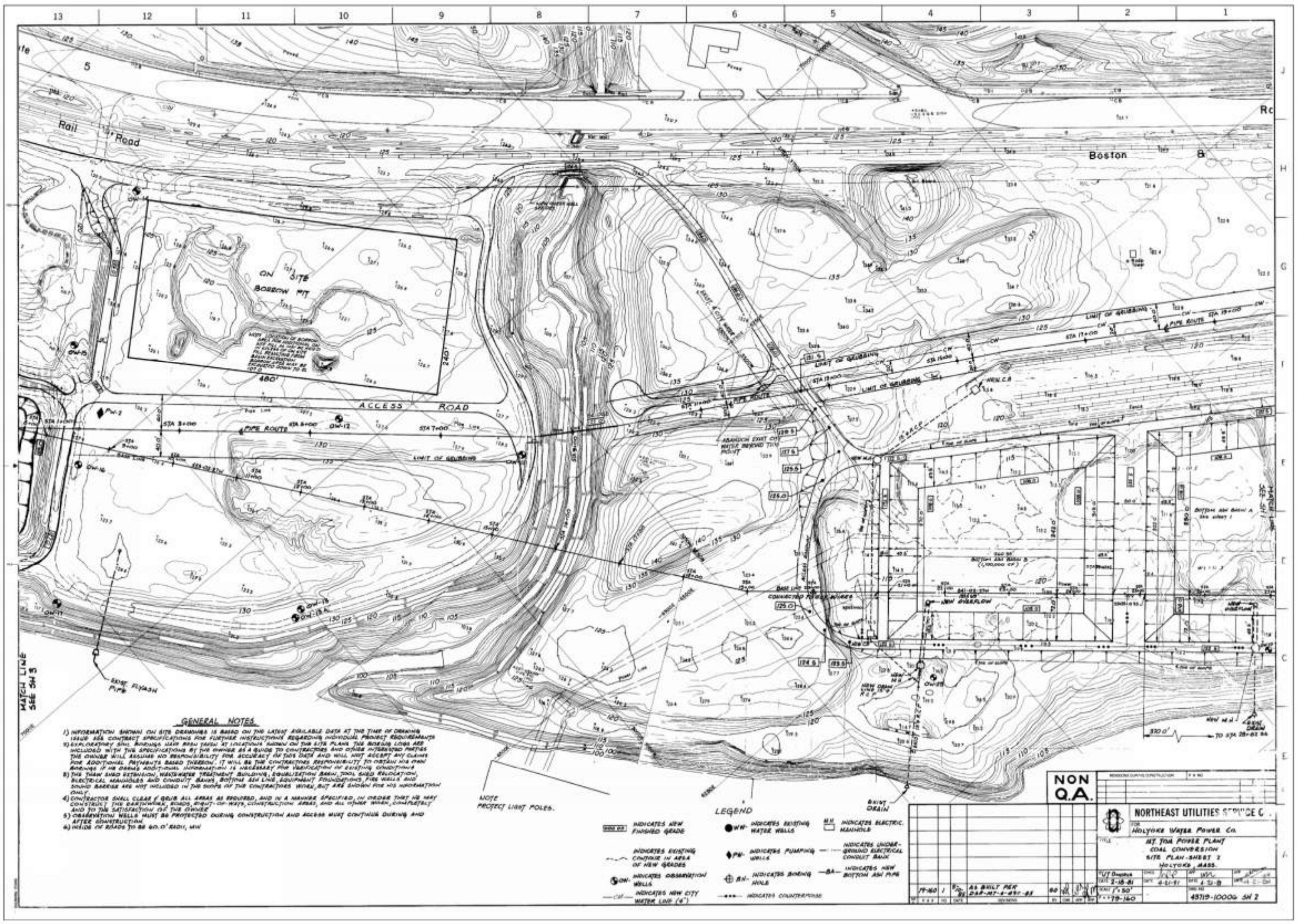
28911-B03

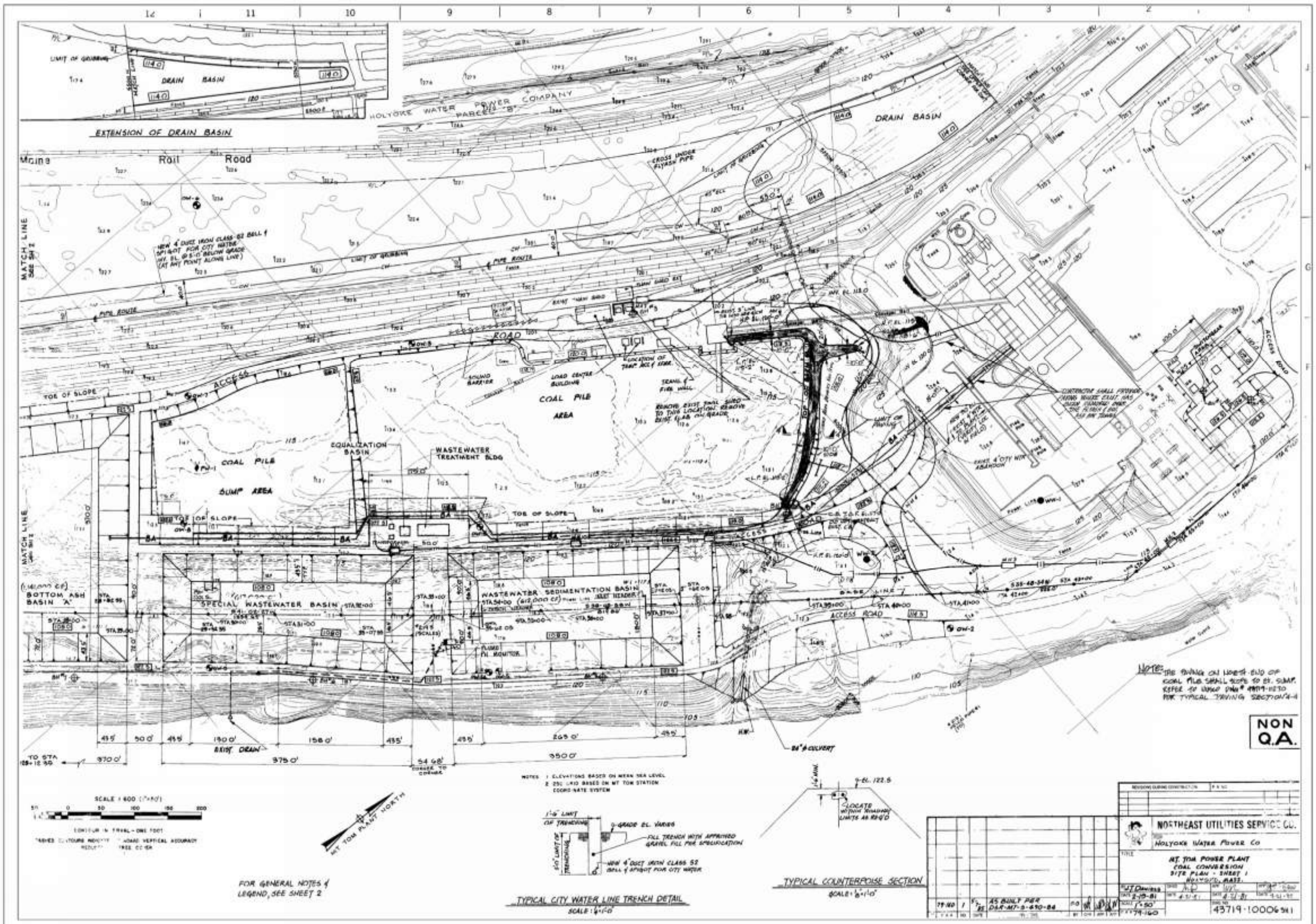
FIGURE 6

Tighe & Bond

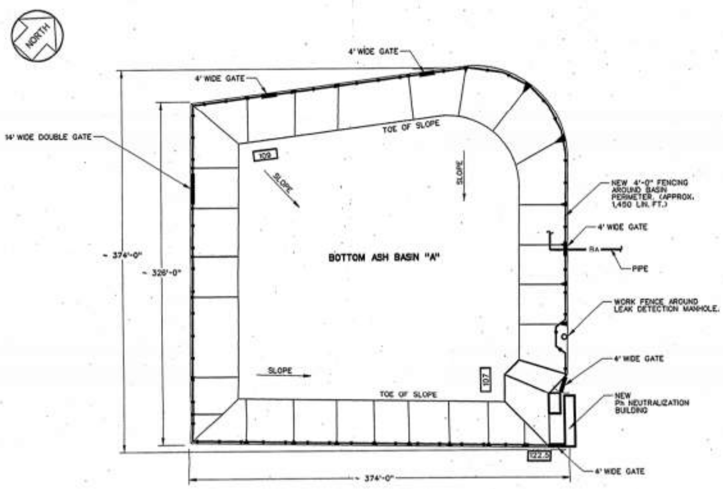
Appendix B:
Record Drawings and Photographs

Bottom Ash Basin A – 1985 As-Built Plan

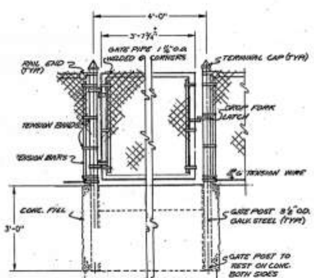

ON SITE BORROW PIT
ACCESS ROAD
PIPE ROUTE
LIMIT OF GRUBBING
Rail Road
Boston
MATCH LINE SEE SH 3
EXIST. FLYASH PIPE
NOTE PROJECT LIGHT POLES.
EXIST DRAIN
GENERAL NOTES
1) INFORMATION SHOWN ON SITE DRAWINGS IS BASED ON THE LATEST AVAILABLE DATA AT THE TIME OF DRAWING ISSUE. SEE CONTRACT SPECIFICATIONS FOR FURTHER INSTRUCTIONS REGARDING INDIVIDUAL PROJECT REQUIREMENTS
2) EXPLORATORY SOIL BORINGS HAVE BEEN TAKEN AT LOCATIONS SHOWN ON THE SITE PLANS. THE BORING LOGS ARE INCLUDED WITH THE SPECIFICATIONS BY THE OWNER AS A GUIDE TO CONTRACTORS AND OTHER INTERESTED PARTIES. THE OWNER WILL ASSUME NO RESPONSIBILITY FOR ACCURACY OF THIS DATA AND WILL NOT ACCEPT ANY CLAIMS FOR ADDITIONAL PAYMENTS BASED THEREON. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO OBTAIN HIS OWN BORINGS IF HE DEEMS ADDITIONAL INFORMATION IS NECESSARY FOR VERIFICATION OF EXISTING CONDITIONS
3) THE THAW SHED EXTENSION, WASTEWATER TREATMENT BUILDING, EQUALIZATION BASIN, TOOL SHED RELOCATION, ELECTRICAL MANHOLES AND CONDUIT BANKS, BOTTOM ASH LINE, EQUIPMENT FOUNDATIONS, FIRE WELLS AND SOUND BARRIER ARE NOT INCLUDED IN THE SCOPE OF THE CONTRACTORS WORK, BUT ARE SHOWN FOR HIS INFORMATION ONLY.
4) CONTRACTOR SHALL CLEAR & GRUB ALL AREAS AS REQUIRED, AND IN A MANNER SPECIFIED, IN ORDER THAT HE MAY CONSTRUCT THE EARTHWORK, ROADS, RIGHT-OF-WAYS, CONSTRUCTION AREAS, AND ALL OTHER WORK, COMPLETELY AND TO THE SATISFACTION OF THE OWNER
5) OBSERVATION WELLS MUST BE PROTECTED DURING CONSTRUCTION AND ACCESS MUST CONTINUE DURING AND AFTER CONSTRUCTION
6) INSIDE OF ROADS TO BE 60.0' RADII, MIN
LEGEND
INDICATES NEW FINISHED GRADE
INDICATES EXISTING CONTOUR IN AREA OF NEW GRADES
OW- INDICATES OBSERVATION WELLS
CW- INDICATES NEW CITY WATER LINE (4")
WW- INDICATES EXISTING WATER WELLS
PW- INDICATES PUMPING WELLS
BH- INDICATES BORING HOLE
INDICATES COUNTERPOISE
MH INDICATES ELECTRIC. MANHOLE
INDICATES UNDERGROUND ELECTRICAL CONDUIT BANK
BA- INDICATES NEW BOTTOM ASH PIPE
NON Q.A.
NORTHEAST UTILITIES SERVICE C
FOR HOLYOKE WATER POWER CO.
MT. TOM POWER PLANT
COAL CONVERSION
SITE PLAN - SHEET 2
HOLYOKE, MASS.
79-160 1 AS BUILT PER DAP-MT-6-491-83
DATE 2-18-81
SCALE 1"=50'
79-160
45719-10006 SH 2


EXTENSION OF DRAIN BASIN
DRAIN BASIN
HOLYOKE WATER POWER COMPANY
Maine Rail Road
MATCH LINE
COAL PILE AREA
COAL PILE
SUMP AREA
EQUALIZATION BASIN
WASTEWATER TREATMENT BLDG
LOAD CENTER BUILDING
TOE OF SLOPE
ACCESS ROAD
BOTTOM ASH BASIN "A"
SPECIAL WASTEWATER BASIN
WASTEWATER SEDIMENTATION BASIN
BASE LINE
NOTE: THE PAVING ON NORTH END OF COAL PILE SHALL SLOPE TO EL. SUMP. REFER TO UE&C DWG # 43719-11230 FOR TYPICAL PAVING SECTION 4-4
NON Q.A.
MT. TOM PLANT NORTH
FOR GENERAL NOTES & LEGEND, SEE SHEET 2
TYPICAL CITY WATER LINE TRENCH DETAIL
TYPICAL COUNTERPOISE SECTION
AS BUILT PER DSR-MT-5-690-84
NORTHEAST UTILITIES SERVICE CO.
HOLYOKE WATER POWER CO
MT. TOM POWER PLANT
COAL CONVERSION
SITE PLAN - SHEET 1
HOLYOKE, MASS.
J.T. Daniels
2-19-81
1" = 50'
79-160
43719-10006 SH 1

Bottom Ash Basin A – 2003 Basin Lining Plans



PLAN OF BOTTOM ASH BASIN "A"
SCALE: NONE



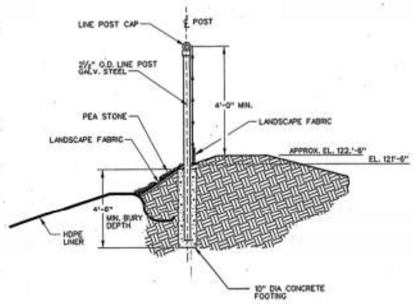
GATE DETAIL
TYPICAL 4 PLACES
SCALE: NONE

GENERAL NOTES:

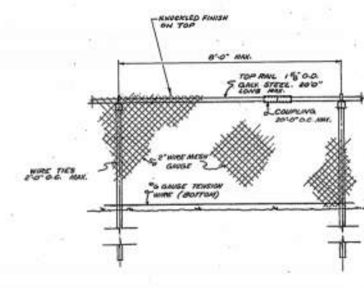
1. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION AS SHOWN ON THE DRAWINGS. MODIFICATIONS TO OR DEVIATIONS FROM DESIGNS OR DETAILS WILL NOT BE PERMITTED EXCEPT AS AUTHORIZED BY THE PROJECT ENGINEER.

FENCING NOTES:

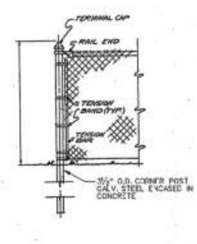
1. TOP OF FENCE SHALL BE 4'-0" (MIN.) ABOVE GRADE.
2. FABRIC SHALL BE ALUMINUM COATED STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A-491. FABRIC SHALL BE WOVEN FROM NINE(9) GAUGE WIRE IN A 2" MESH. THE TOP SELVAGE MUST HAVE A TWISTED AND BARBED FINISH, BOTTOM SELVAGE MUST HAVE A KNUCKLED FINISH. TIE WIRES SHALL BE MINIMUM OF NINE (9) GAUGE ALUMINUM WIRE.
3. LINE POSTS CORNER POSTS, TOP RAIL AND GATES ARE TO BE HOT-DIPPED GALVANIZED INSIDE AND OUT.
   a) LINE POSTS ARE TO BE 2½" O.D. STEEL PIPE
   b) CORNER POSTS ARE TO BE 3½" O.D. STEEL PIPE
   c) TOP RAILS ARE TO BE 1⅝" O.D. STEEL PIPE
   d) GATES ARE TO BE 1⅝" O.D. STEEL PIPE
4. GATE FRAMES ARE TO BE WELDED AT CORNERS. BRACES AND TRUSSES SHALL BE FURNISHED WHEN NECESSARY. HARDWARE SHALL BE ADEQUATE DESIGN AND STRENGTH TO PROVIDE SATISFACTORY OPERATION OF GATES.
5. GATE LATCHES SHALL ACCOMMODATE A PADLOCK FASTENED FROM EITHER SIDE.
6. COUPLINGS FOR TOP RAILS ARE TO BE GALVANIZED WITH A MINIMUM LENGTH OF 12" (6" EMBEDMENT EACH SIDE.)
7. ALL FITTINGS AND ACCESSORIES ARE TO BE SUPPLIED TO COMPLETE THE CONSTRUCTION OF THE FENCE. THESE ARE OF PRESSED STEEL AND SHALL BE PRE-GALVANIZED.
8. ALL LINE, TERMINAL AND GATE POSTS ARE TO BE DRIVEN IN THE GROUND TO A DEPTH OF 4'-6"
9. ALL POSTS SHALL BE EMBEDDED IN CONCRETE.
10. ALL GATES SHALL OPEN TOWARDS BASIN.



GATE TYPICAL CROSS SECTION
SCALE: NONE



TYPICAL FENCE ELEVATION
SCALE: NONE



TYPICAL CORNER POST DETAIL
SCALE: NONE

REVISIONS DURING CONSTRUCTION	P.A. NO.	01-005

Northeast Utilities System

FOR NORTHEAST GENERATING COMPANY

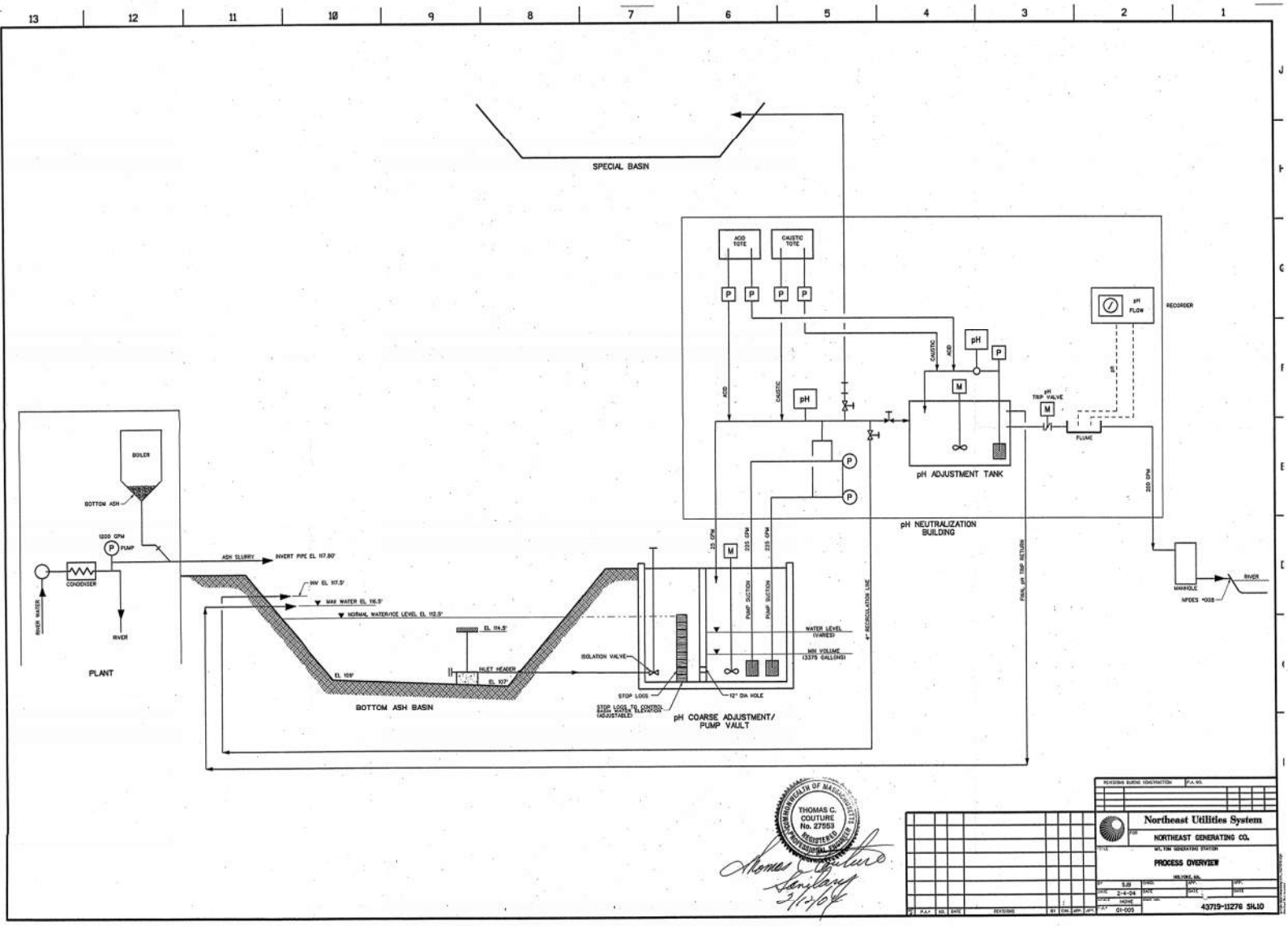
TITLE MT. TOM GENERATING STATION

BOTTOM ASH BASIN "A"
PERIMETER FENCE

HOLYOKE, MA.

BY KBB	CHKD.	APP.	APP.
DATE 3-18-03	DATE	DATE	DATE
SCALE NONE	DWG. NO. 43719-11276 SH7		
P.A.# 01-005			

P.A.#	NO.	DATE	REVISIONS	BY	CHK.	APP.	APP.



THOMAS C. COUTURE No. 27553 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

Thomas C. Couture
Sanitary
2/17/04

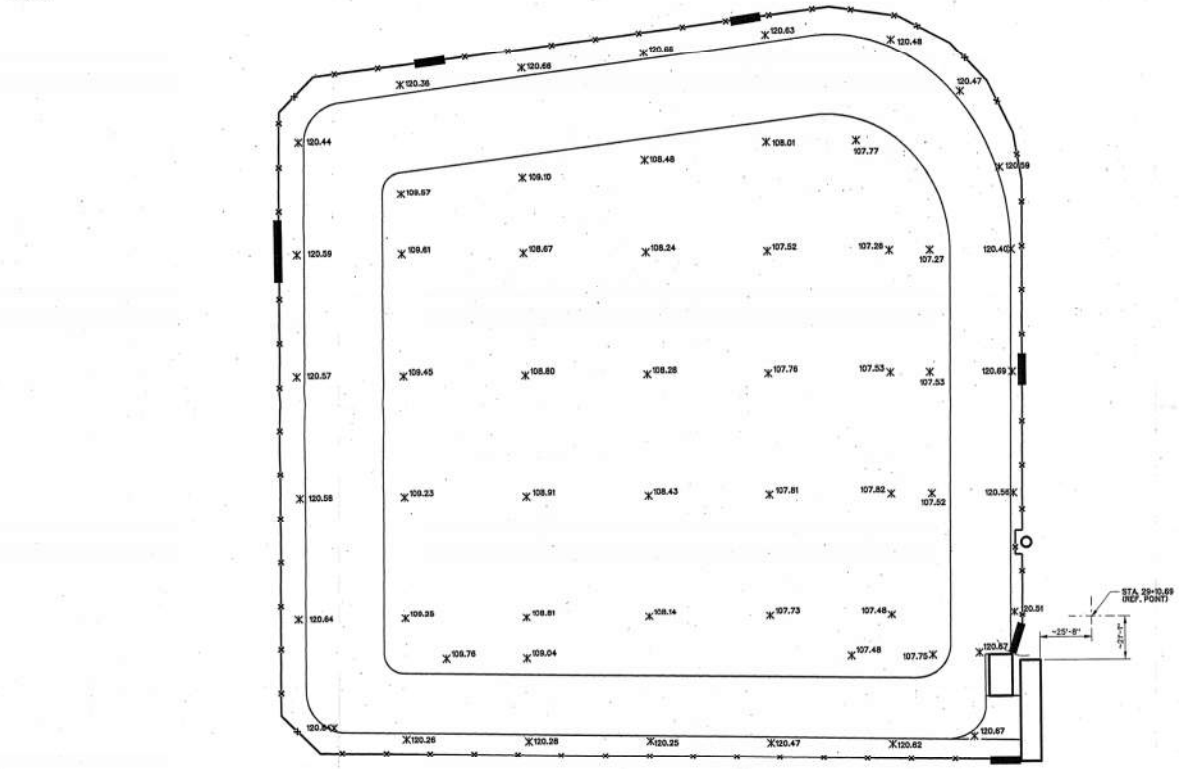
Northeast Utilities System

NORTHEAST GENERATING CO.

MT. TOM GENERATING STATION

PROCESS OVERVIEW

DES.	S.B	CHKD.	APP.
DATE	2-4-04	DATE	DATE
SCALE	NONE	DRAWING NO.	
F.A.Y.	01-005		43719-11276 SH.10



PLAN OF BOTTOM ASH BASIN "A"
SCALE: NTS

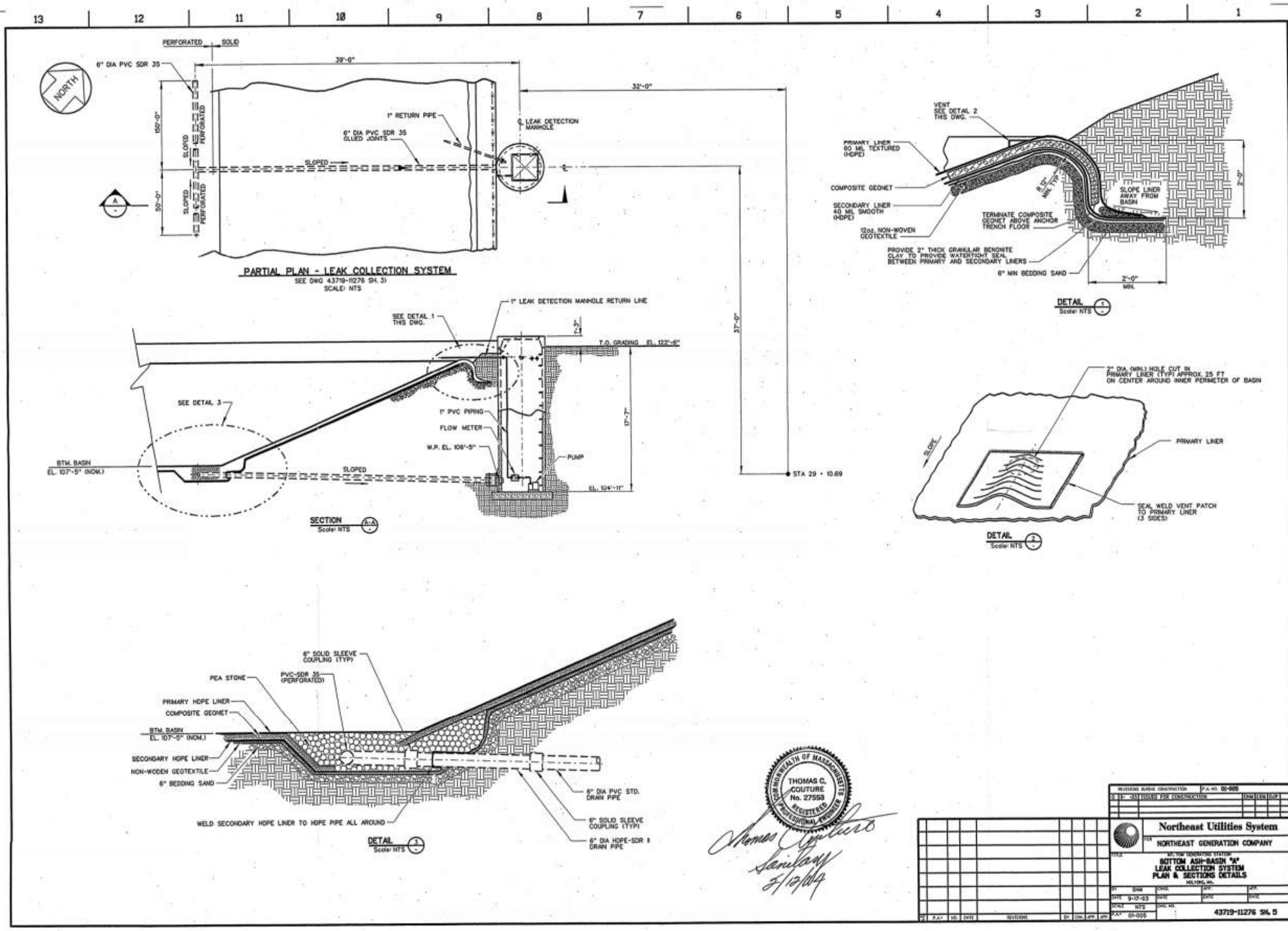
NOTE:
ALL ELEVATIONS WERE TAKEN AT TOP OF LINER.

COMMONWEALTH OF MASSACHUSETTS
THOMAS C. COUTURE
No. 27553
REGISTERED PROFESSIONAL ENGINEER

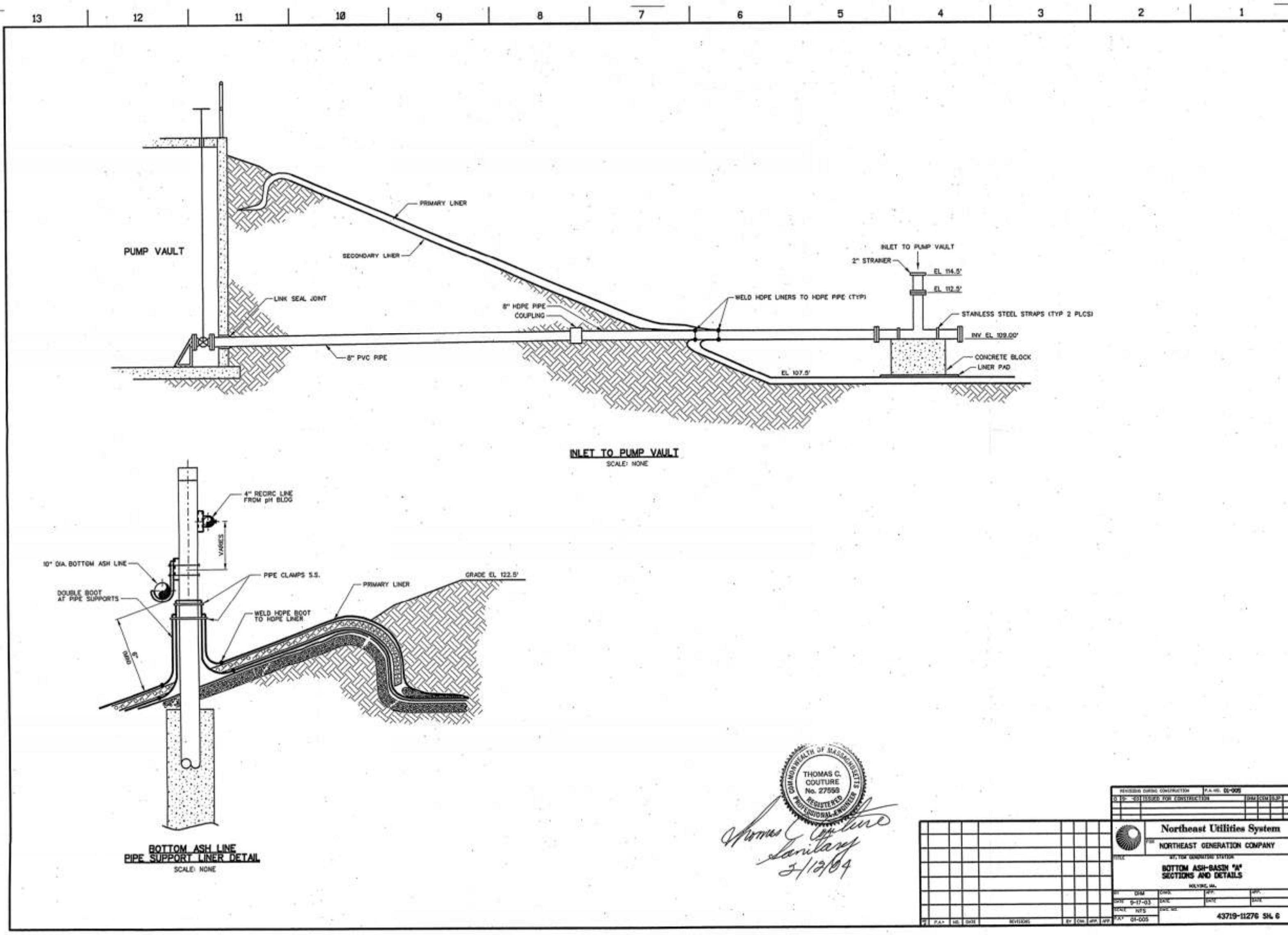
Northeast Utilities System
FOR NORTHEAST GENERATING COMPANY
MT. TOM GENERATING STATION
BOTTOM ASH BASIN "A"
GRID AND ELEVATIONS
HOLYOKE, MA.

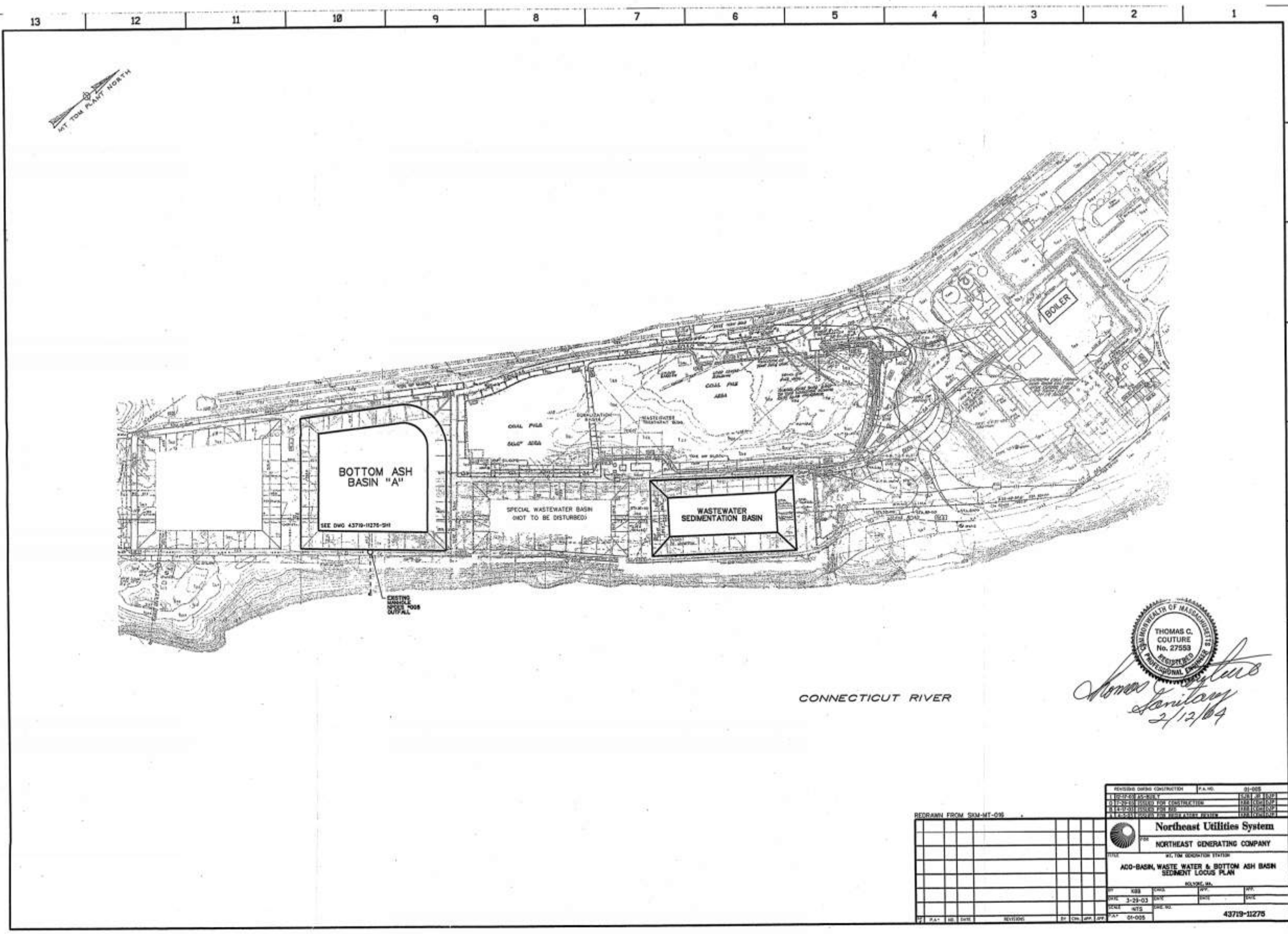
BY	S.R.	CHKD.	APP.
DATE	2-4-04	DATE	DATE
SCALE	NTS	DWG. NO.	
FILE	01-005		43719-11276 SH8

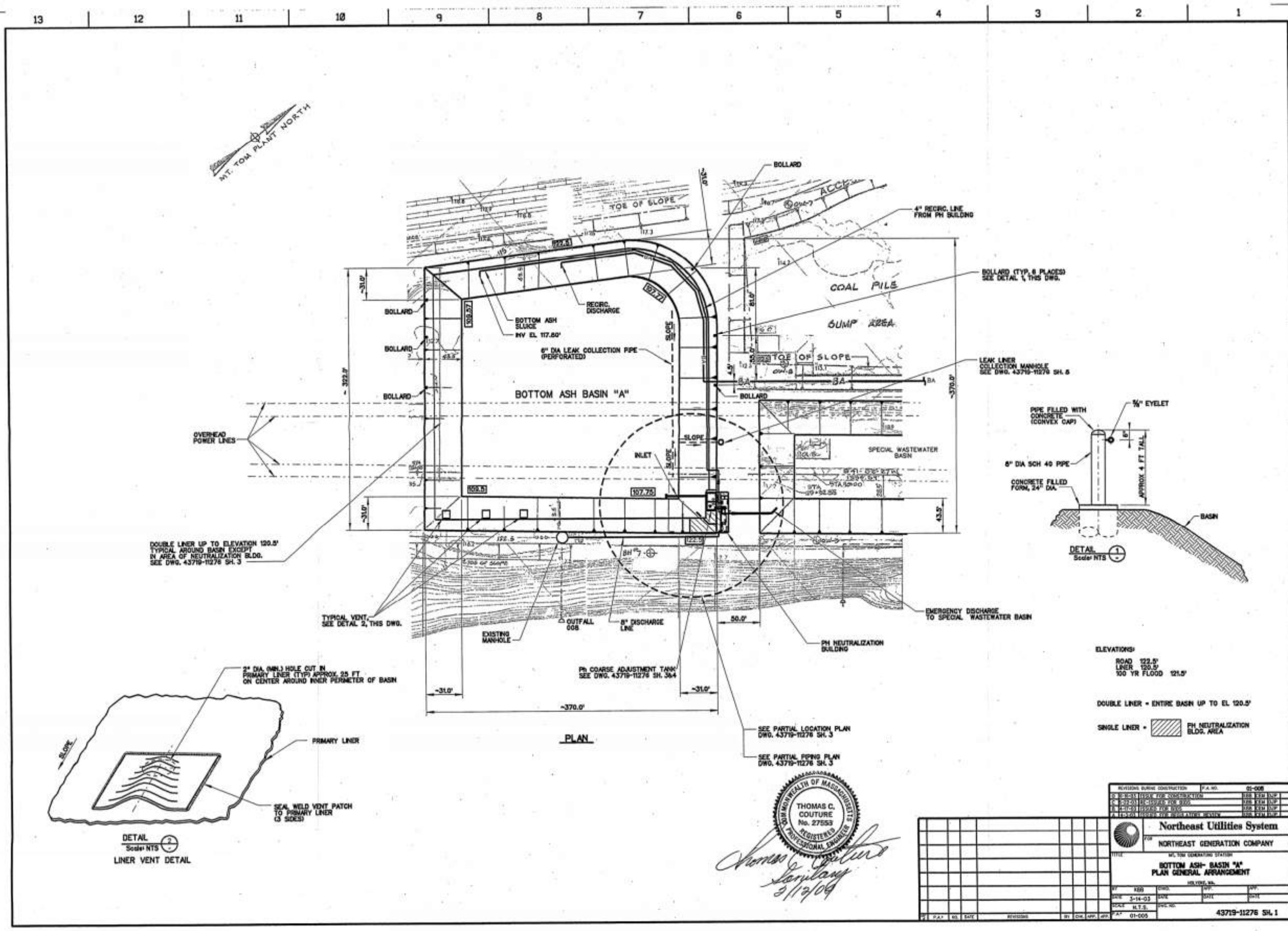
NO.	REVISIONS	BY	CHK.	APP.	DATE
	REVISIONS SHOWN CONSTRUCTION AS-BUILT				



PERFORATED
SOLID
6" DIA PVC SDR 35
NORTH
39'-0"
32'-0"
150'-0"
50'-0"
SLOPED
PERFORATED
1" RETURN PIPE
6" DIA PVC SDR 35 GLUED JOINTS
LEAK DETECTION MANHOLE
A
PARTIAL PLAN - LEAK COLLECTION SYSTEM
SEE DWG 43719-11276 SH. 3)
SCALE: NTS
1" LEAK DETECTION MANHOLE RETURN LINE
SEE DETAIL 1 THIS DWG.
T.O. GRADING EL. 122'-6"
37'-0"
SEE DETAIL 3
1" PVC PIPING
FLOW METER
W.P. EL. 106'-5"
PUMP
17'-7"
BTM. BASIN EL. 107'-5" (NOM.)
SLOPED
EL. 104'-11"
STA 29 + 10.69
SECTION A-A
Scale: NTS
VENT SEE DETAIL 2 THIS DWG.
PRIMARY LINER 60 MIL TEXTURED (HDPE)
COMPOSITE GEONET
SECONDARY LINER 40 MIL SMOOTH (HDPE)
12oz. NON-WOVEN GEOTEXTILE
SLOPE LINER AWAY FROM BASIN
2'-0"
TERMINATE COMPOSITE GEONET ABOVE ANCHOR TRENCH FLOOR
PROVIDE 2" THICK GRANULAR BENONITE CLAY TO PROVIDE WATERTIGHT SEAL BETWEEN PRIMARY AND SECONDARY LINERS
6" MIN BEDDING SAND
2'-0" MIN.
DETAIL 1
Scale: NTS
2" DIA. (MIN.) HOLE CUT IN PRIMARY LINER (TYP) APPROX. 25 FT ON CENTER AROUND INNER PERIMETER OF BASIN
SLOPE
PRIMARY LINER
SEAL WELD VENT PATCH TO PRIMARY LINER (3 SIDES)
DETAIL 2
Scale: NTS
6" SOLID SLEEVE COUPLING (TYP)
PEA STONE
PVC-SDR 35 (PERFORATED)
PRIMARY HDPE LINER
COMPOSITE GEONET
BTM. BASIN EL. 107'-5" (NOM.)
SECONDARY HDPE LINER
NON-WODEN GEOTEXTILE
6" BEDDING SAND
6" DIA PVC STD. DRAIN PIPE
6" SOLID SLEEVE COUPLING (TYP)
WELD SECONDARY HDPE LINER TO HDPE PIPE ALL AROUND
6" DIA HDPE-SDR 11 DRAIN PIPE
DETAIL 3
Scale: NTS
COMMONWEALTH OF MASSACHUSETTS
THOMAS C. COUTURE
No. 27558
REGISTERED PROFESSIONAL ENGINEER
Thomas Couture
Sanitary
2/12/04
ISSUED FOR CONSTRUCTION
P.A. NO. 01-005
Northeast Utilities System
NORTHEAST GENERATION COMPANY
BOTTOM ASH-BASIN "A"
LEAK COLLECTION SYSTEM
PLAN & SECTIONS DETAILS
HOLYOKE, MA.
DATE 9-17-03
SCALE NTS
P.A. 01-005
43719-11276 SH. 5


PUMP VAULT
PRIMARY LINER
SECONDARY LINER
LINK SEAL JOINT
8" PVC PIPE
8" HDPE PIPE
COUPLING
WELD HDPE LINERS TO HDPE PIPE (TYP)
INLET TO PUMP VAULT
2" STRAINER
EL 114.5'
EL 112.5'
STAINLESS STEEL STRAPS (TYP 2 PLCS)
INV EL 109.00'
CONCRETE BLOCK
LINER PAD
EL 107.5'
INLET TO PUMP VAULT
SCALE: NONE
4" RECIRC LINE FROM pH BLDG
VARIES
10" DIA. BOTTOM ASH LINE
DOUBLE BOOT AT PIPE SUPPORTS
PIPE CLAMPS S.S.
WELD HDPE BOOT TO HDPE LINER
PRIMARY LINER
GRADE EL 122.5'
BOTTOM ASH LINE PIPE SUPPORT LINER DETAIL
SCALE: NONE
THOMAS C. COUTURE
No. 27553
REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS
Thomas C. Couture
Sanitary
2/12/04
REVISIONS DURING CONSTRUCTION
P.A. NO. 01-005
ISSUED FOR CONSTRUCTION
DRM
Northeast Utilities System
NORTHEAST GENERATION COMPANY
BOTTOM ASH-BASIN "A"
SECTIONS AND DETAILS
HOLYOKE, MA.
DRM
9-17-03
NTS
01-005
43719-11276 SH. 6


MT TOM PLANT NORTH
BOTTOM ASH BASIN "A"
SEE DWG 43719-11276-SH1
SPECIAL WASTEWATER BASIN (NOT TO BE DISTURBED)
WASTEWATER SEDIMENTATION BASIN
COAL PILE
BOILER
CONNECTICUT RIVER
THOMAS C. COUTURE No. 27553
REGISTERED PROFESSIONAL ENGINEER
2/12/04
REDRAWN FROM SKM-MT-016
REVISIONS DURING CONSTRUCTION
P.A. NO. 01-005
Northeast Utilities System
NORTHEAST GENERATING COMPANY
MT. TOM GENERATION STATION
ACO-BASIN, WASTE WATER & BOTTOM ASH BASIN SEDIMENT LOCUS PLAN
HOLYOKE, MA.
KBB
3-29-03
NTS
01-005
43719-11275


MT. TOM PLANT NORTH
BOLLARD
4" RECIRC. LINE FROM PH BUILDING
TOE OF SLOPE
COAL PILE
SUMP AREA
BOLLARD (TYP. 6 PLACES) SEE DETAIL 1, THIS DWG.
BOTTOM ASH SLUICE INV EL 117.60'
RECIRC. DISCHARGE
6" DIA LEAK COLLECTION PIPE (PERFORATED)
LEAK LINER COLLECTION MANHOLE SEE DWG. 43719-11276 SH. 5
BOTTOM ASH BASIN "A"
OVERHEAD POWER LINES
SLOPE
INLET
SPECIAL WASTEWATER BASIN
~370.0'
~322.0'
~31.0'
43.5'
50.0'
DOUBLE LINER UP TO ELEVATION 120.5' TYPICAL AROUND BASIN EXCEPT IN AREA OF NEUTRALIZATION BLDG. SEE DWG. 43719-11276 SH. 3
TYPICAL VENT, SEE DETAIL 2, THIS DWG.
EXISTING MANHOLE
OUTFALL 008
8" DISCHARGE LINE
EMERGENCY DISCHARGE TO SPECIAL WASTEWATER BASIN
PH NEUTRALIZATION BUILDING
Ph COARSE ADJUSTMENT TANK SEE DWG. 43719-11276 SH. 3&4
PLAN
SEE PARTIAL LOCATION PLAN DWG. 43719-11276 SH. 3
SEE PARTIAL PIPING PLAN DWG. 43719-11276 SH. 3
2" DIA (MIN.) HOLE CUT IN PRIMARY LINER (TYP) APPROX. 25 FT ON CENTER AROUND INNER PERIMETER OF BASIN
SLOPE
PRIMARY LINER
SEAL WELD VENT PATCH TO PRIMARY LINER (3 SIDES)
DETAIL 2 Scale: NTS
LINER VENT DETAIL
PIPE FILLED WITH CONCRETE (CONVEX CAP)
5/8" EYELET
8" DIA SCH 40 PIPE
CONCRETE FILLED FORM, 24" DIA.
APPROX 4 FT TALL
BASIN
DETAIL 1 Scale: NTS
ELEVATIONS:
ROAD 122.5'
LINER 120.5'
100 YR FLOOD 121.5'
DOUBLE LINER = ENTIRE BASIN UP TO EL 120.5'
SINGLE LINER = PH NEUTRALIZATION BLDG. AREA
COMMONWEALTH OF MASSACHUSETTS
THOMAS C. COUTURE
No. 27553
REGISTERED PROFESSIONAL ENGINEER
Sanitary
REVISIONS DURING CONSTRUCTION
F.A. NO. 01-005
Northeast Utilities System
NORTHEAST GENERATION COMPANY
MT. TOM GENERATING STATION
BOTTOM ASH- BASIN "A"
PLAN GENERAL ARRANGEMENT
HOLYOKE, MA.
BY KBB
DATE 3-14-03
SCALE N.T.S.
F.A.# 01-005
43719-11276 SH. 1

Bottom Ash Basin A – 2003 Basin Lining Photographs

Photo 1 - Drained basin viewing north from the southeast corner

Photo 2 - Pre-construction conditions of the north slope

Photo 3 - Pre-construction conditions along the west slope

Photo 4 - Site preparation of the south slope

Photo 5 - Ledge removal along the south slope

Photo 6 - 6" sand bedding over the entire basin

Photo 7 - Compaction testing

Photo 8 - Deployment of non-woven geotextile fabric, viewing from the west to the east

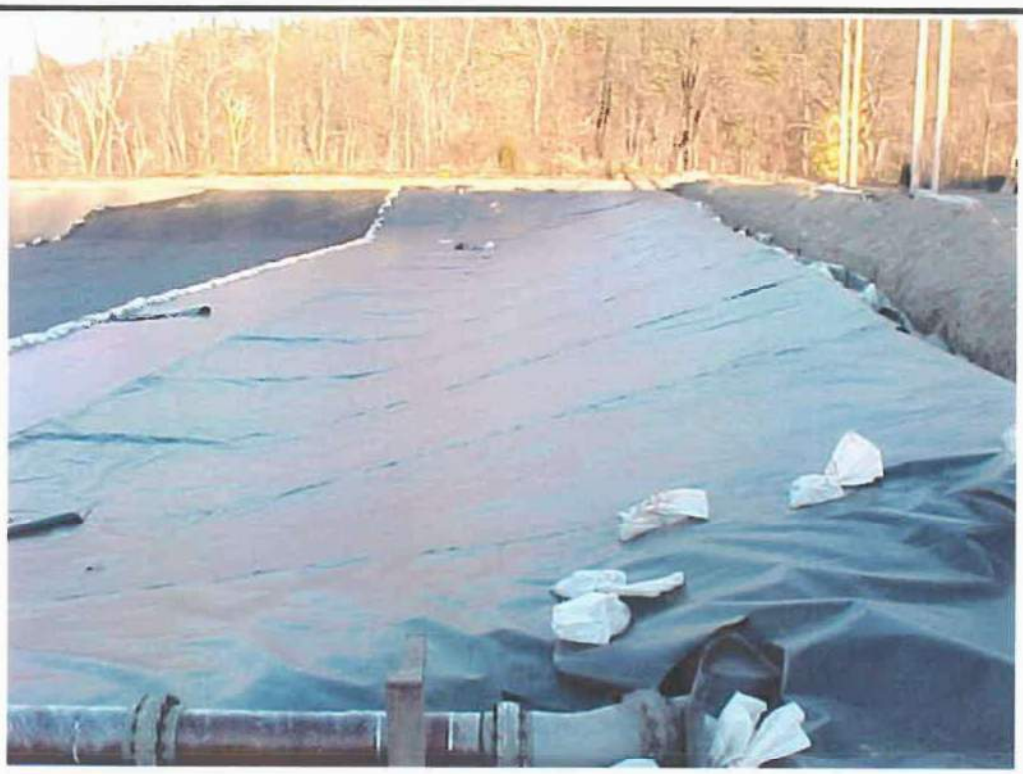


Photo 9 - 40 Mil HDPE liner deployed and seamed along the south slope

Photo 10 - Deployed 40 Mil HDPE liner viewing from the northeast corner looking back to the west

Photo 11 - Deployed and seamed 40 Mil HDPE liner along the north slope

Photo 12 - Typical 40 Mil boots along the top of the west slope

Photo 13 - Completed 40 Mil HDPE liner viewing from the south to the north

Photo 14 - Deployment of geocomposite drainage layer along the south slope

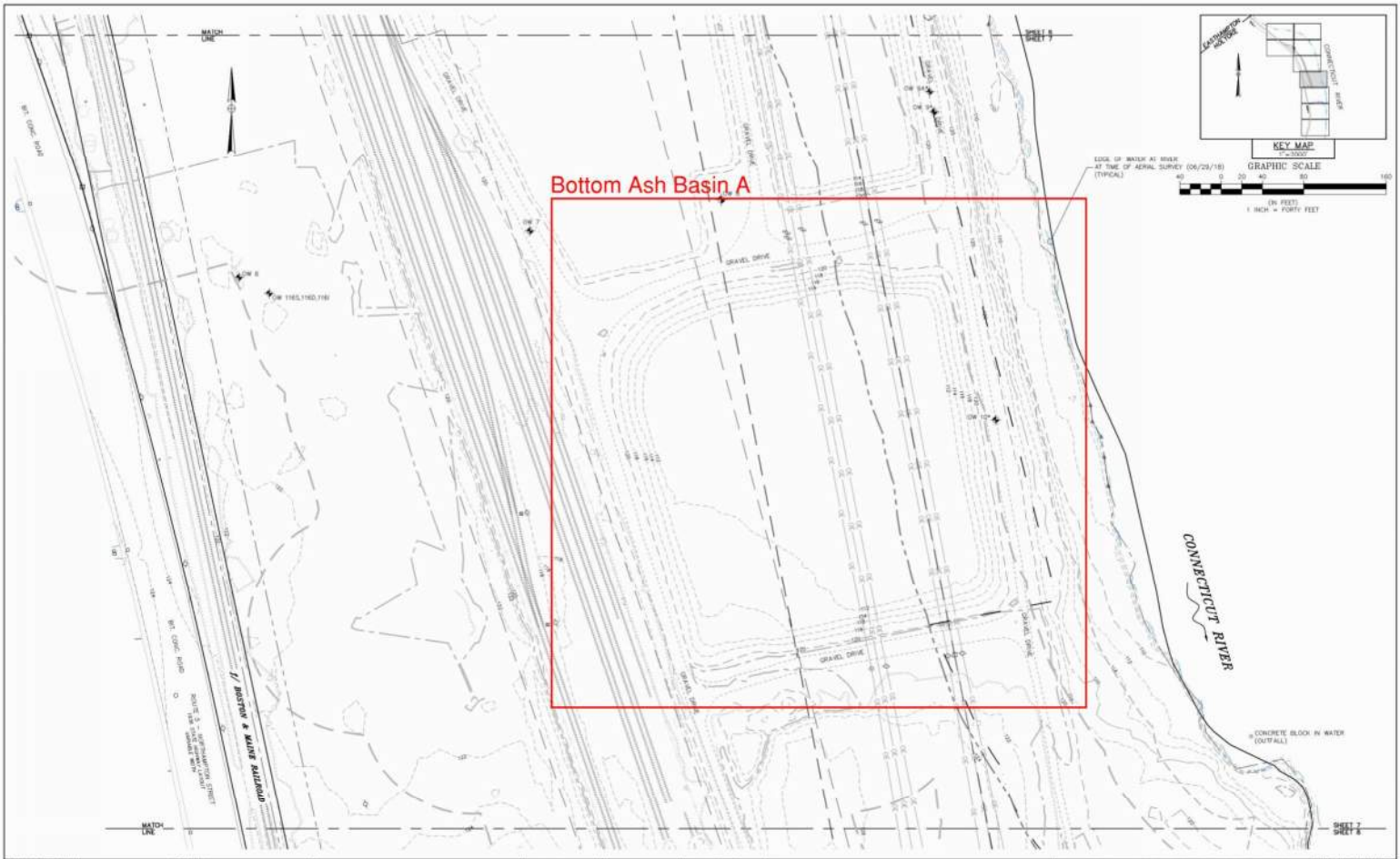
Photo 15 - Deployed geocompsite drainage layer viewing from the west back to the southeast

Photo 16 - Deployment of 60 Mil HDPE liner viewing the south slope from west to east

Photo 17 - Completed 60 Mil HDPE liner along the north slope viewing from west to east

Photo 18 - Completed 60 Mil HDPE liiner viewing from north to south

Bottom Ash Basin A – 2021 Decommissioning As-Built Plan



NO.	DATE	BY	REVISIONS

SHERMAN & FRYDRYK, LLC
Land Surveying and Engineering
3 Converse Street, Suite 203
Palmer, MA 01069

FIELD WORK: JCG/SWP
COMPS: SBW
DRAFTING: SBW
CHECKED: DJF
APPROVED: DJF

SCALE:
HORZ: 1"=40'
VERT: N/A
DATE: 04/13/2021

AS BUILT PLAN

MT. TOM DECOMMISSIONING & SOLID WASTE MANAGEMENT PROJECT

FORMER MT. TOM POWER PLANT
HOLYOKE, MA
PREPARED FOR
MT. TOM GENERATING, LLC

PROJECT NUMBER 05080E
SHEET NUMBER 7 OF 10