HISTORY OF CONSTRUCTION
40 C.F.R. § 257.100(f)(2)(ii) and 40 C.F.R. § 257.73(c)(1)(i)-(xii)
PLANT BRANCH ASH POND D (AP-D)
GEORGIA POWER COMPANY

A rule amendment to the Federal Coal Combustion Residuals (CCR) Rule (40 C.F.R. Part 257) became effective on November 8, 2024. *See* Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Legacy CCR Surface Impoundments, 89 Fed. Reg. 38950 ("Legacy Rule"). The Legacy Rule defines the term "legacy CCR surface impoundment" and establishes regulatory requirements for units that meet the definition of a legacy CCR surface impoundment. The Legacy Rule requires the owner or operator of a legacy CCR surface impoundment to compile a history of construction. *See* 40 C.F.R. § 257.100(f)(2)(ii); 40 C.F.R. § 257.73(c)(1)(i)-(xii). To the extent feasible, the following information is provided:

(i) Site Name and Ownership Information:

Site Name:	Plant Branch
Site Location:	Putnam County
Site Address:	1100 Milledgeville Rd Milledgeville, GA 31061
Owner:	Georgia Power Company
Owner Address:	241 Ralph McGill Blvd Atlanta, GA 30308
Point of Contact:	Manager Environmental Affairs Georgia Power Company BIN 10221 Atlanta, Georgia 30308 (404) 506-6505
CCR Impoundment Name:	Plant Branch Ash Pond D (AP-D)
Identification Number:	NPDES Permit No. GA0026051

(ii) CCR Unit Location Map:

33.190303 N, -83.305425W

The location of AP-D is shown on the United States Geological Survey (USGS) 7½-minute topographic quadrangle map presented in the Appendix.

(iii) Purpose of CCR Unit:

Plant Branch formerly operated as a four unit, coal-fired power plant that commenced power generation in 1965, ceased generating electricity prior to April 2015, and was decommissioned in 2019. AP-D is one of the five ash ponds (A, B, C, D, and E) that were constructed to receive and store coal combustion residuals (CCR) during the power generating process at Plant Branch. AP-D is currently inactive and will be closed by removal. It is

noted that two ash ponds, Ash Pond D-1 (AP-D1) and AP-D were initially proposed during the design phase, with only AP-D1 being constructed. In the historical drawings and documents, both AP-D and AP-D1 were used interchangeably to refer to the constructed pond located northwest of Ash Pond C (AP-C). In this document, "AP-D" will be used to refer to the existing pond which is the given name of the unit.

(iv) Watershed Description:

AP-D is located within the Beaverdam Creek – Lake Sinclair Subwatershed (HUC-12), which encompasses 13,618 acres. This subwatershed is part of the Big Cedar Creek Watershed (HUC-10), which encompasses 139,574 acres. Plant Branch is located entirely within the Big Cedar Creek Watershed. The drainage area associated with AP-D is approximately 60 acres, which includes direct rainfall and runoff from adjacent areas.

(v) Description of Physical and Engineering Properties of CCR Unit Foundation/Abutments:

Plant Branch is located within the Piedmont physiographic province, which lies between the Blue Ridge Mountains to the northwest and the Upper Coastal Plain to the south. This province is underlain by regionally metamorphosed rocks including granitic gneisses, amphibolites, and mica schists. Physical and chemical weathering of metamorphic and igneous rocks in the humid climate of the southern Piedmont results in a variably thick blanket of residual soils and saprolite above the bedrock. The degree of weathering decreases gradually with depth, with no clear boundary typically present between the weathered zones. Because of such variations in rock types and structure, the depth of weathering can vary significantly over short horizontal distances. The thickness of the residual soil encountered in borings is variable, ranging from approximately 10 feet (ft) to as much as 75 ft. The observed saprolite thickness is consistent with other Piedmont areas in the southeastern United States. The saprolite is thicker in upland areas, and generally thinner in lowland areas. Between the residual soil/saprolite zone and the underlying bedrock there is a zone of partially weathered rock (PWR), as defined by standard penetration test data, where available. The PWR at the site was encountered at depths between 2 and 60 ft below ground surface (ft bgs) and accounts for a majority of the "transition zone" that lies between the saprolite and underlying competent bedrock. The transition zone, consisting of PWR and the upper fractured bedrock, is relatively thin with thicknesses generally being less than 10 feet. The top of rock surface generally follows topography which has been largely uniformly weathered. The top of rock surface across the site ranged from within a few feet of ground surface to approximately 90 ft bgs.

AP-D is impounded by a dam on the southwest side of the pond and by natural ground on the other sides. Prior to the construction of AP-D Dam, 21 borings (D-1 through D-21) were drilled along the proposed AP-D Dam footprint as shown in the Appendix. These borings present medium stiff to stiff granular and cohesive residual soils which consist of silty and clayey sand, silt, clayey silt, and plastic clay. Below the residual soil, PWR was encountered. Soil identified as alluvium was also encountered above the residual materials at borings (D-5 through D-8, and D15 through D-21) near the center of proposed AP-D Dam footprint. The reported alluvium was generally stiff to very stiff and included silty and clayey sand, high plasticity clay, silty clay and silt. However, alluvium in isolated areas were reported to be soft or very loose to loose, and deemed unsuitable for the dam foundation. As noted in design drawings, the alluvium not suitable for the dam foundation was to be removed to approximate Elevation (El.) 338 ft and the area backfilled to El. 343 ft with suitable materials as designated by the Georgia Power field representatives.

AP-D Dam is regulated as a Category II Dam under the Georgia Safe Dams Program.

(vi) Summary of Site Preparation and Construction Activities:

Prior to the construction of AP-D Dam, exploration for dam foundation and borrow areas, including drilling and lab testing, were completed in August 1978. Boring locations and the borrow area are presented in the Appendix, and findings from the dam foundation exploration are summarized in the previous section. Original construction of AP-D was completed in 1980. AP-D Dam design drawing showed a crest elevation of 403 ft, a 2.5 Horizontal to 1 Vertical (2.5H to 1V) slope on the downstream side and a 2:25H:1V slope on the upstream side. The approximate crest elevation currently stands at 402 ft, with a 2.5 Horizontal to 1 Vertical (2.5H to 1V) slope on the downstream side and a 2.25H:1V slope on the upstream side. The materials used in AP-D Dam construction were sourced from the borrow area which is the northeastern portion of AP-D. The cross section shows that the most impervious material was to be placed in the core of the dam, while the less impervious material was to be placed on the shell of the dam. According to AP-D Dam Construction Specifications and QC Procedures, all fill material was to be compacted to at least 98% of the maximum dry density and within -2% to +2% range of the optimum moisture content determined by standard Proctor compaction test. The initial construction of AP-D Dam also included installation of a blanket drain at the bottom of the dam. All sand for internal blanket drains and laterals was to be compacted to at least 75% of the maximum dry density as determined by the standard Proctor compaction tests. Engineering design parameters were obtained from soil samples collected and tested during the pre-construction geotechnical investigation, pre-construction borrow studies, and subsequent exploration, and were presented in the original stability analysis.

(vii) Engineering Diagrams:

The following drawings including relevant information on the construction of AP-D can be found in the Appendix:

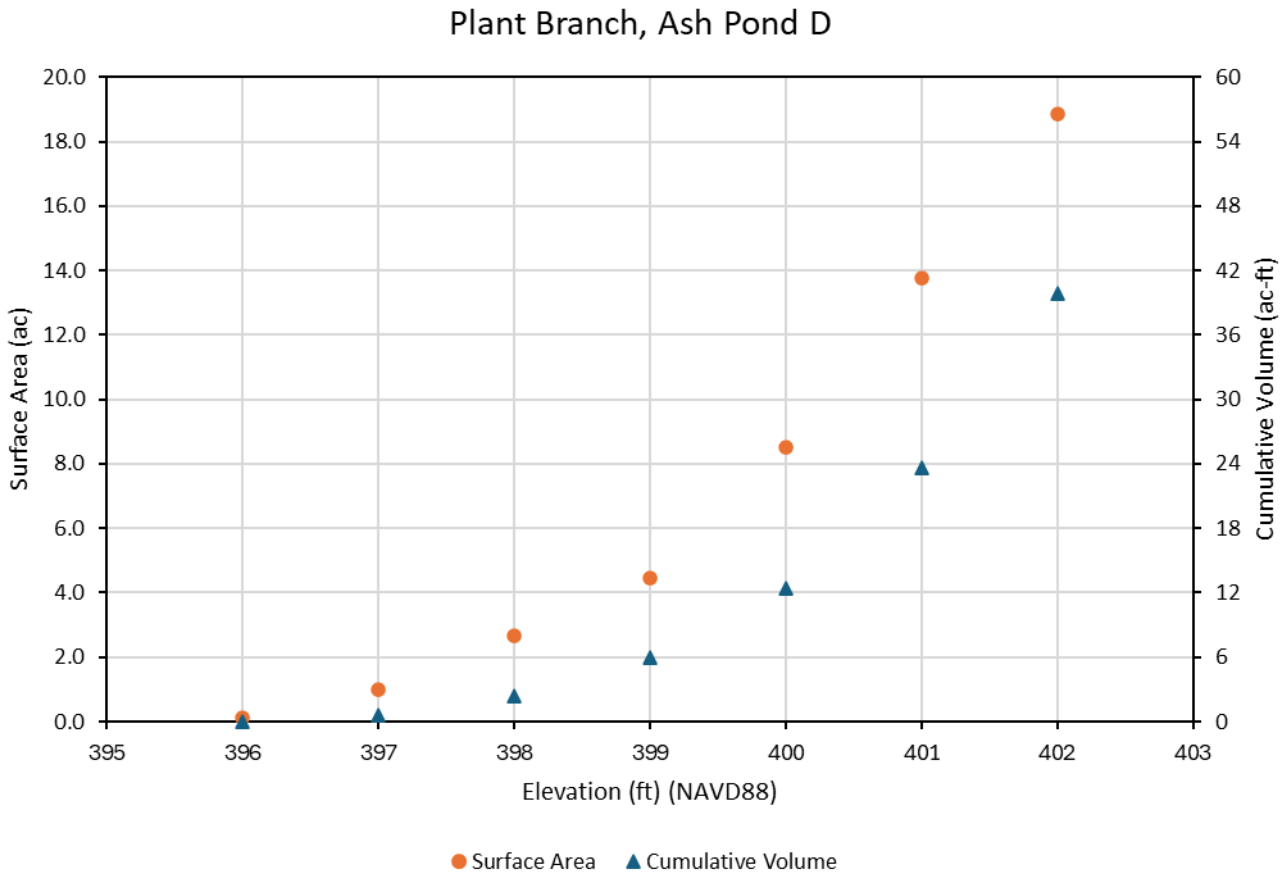
- Site Location Map
- Plant Harllee Branch Proposed Ash Pond “D” & “D-1” (Sheet E-65 dated 11/16/1978)
- Plant Harllee Branch Ash Pond ‘D1’ Borrow Location & Boring Plan (Sheet E-13 dated 3/26/1979)
- Plant Harllee Branch Ash Pond D1 Sections & Details (Sheet E-12 dated 2/26/1979)
- Plant Harllee Branch Ash Pond D1 Dike Alignment (Sheet E-11 dated 3/26/1979)
- Plant Harllee Branch Ash Pond D-1 Slope Stability Analysis (Maximum Section) (Sheet E-14 dated 3/29/1979)
- Locations of Instrumentations at or near Ash Ponds B, C, and D Dikes (Geosyntec, 2025)
- Plant Branch Ash Pond “D” Water Collection Project Sump Location Plan and Details (Sheet E23345 dated 1/9/2012)
- Plant Branch, Sitework, Pond D Pipe Culvert Replacement (Sheet E23770 dated 11/6/2017)
- Plant Harllee Branch Ash Pond ‘D-1’ Emergency Spillway (Sheet E-89 dated 1/9/1981)
- Plant Harllee Branch Ash Pond D1 Dike Toe Drain (Sheet E-92 dated 5/1/1981)

(viii) Description of Instrumentation:

Seventeen piezometers (A1 through G1, G1A, H1 through S1, and S2), were installed to monitor the phreatic surface around the AP-D Dam. Locations of the piezometers are provided by Georgia Power Company and are presented in the Appendix. Eight piezometers (A1 through G1, and G1A) are located near the downstream toe of AP-D Dam, and two piezometers (M1 and N1) are located downstream of AP-D Dam. Two piezometers (S1 and S2) were installed near the mid point of the downstream slope, and five piezometers (H1 through L1) are

located on the crest of AP-D Dam. Readings at these seventeen piezometers are collected at least every 30-days by qualified personnel. There are also four finger drains and two sumps installed to monitor the dam. Two finger drains (SD-1 and SD-2) of the four finger drains are dry. The sumps are measured at least every 30-days by qualified personnel.

(ix) Area-Capacity Curves:



Note: The surface area of the highest closed contour available from the LiDAR was used as the surface area for elevations above the highest closed contour.

(x) Spillway and Diversion Design Features and Capacity Calculations:

AP-D has a primary outlet structure within the southeastern region of the pond. The primary outlet structure, including a high-density polyethylene (HDPE) culvert with accompanying upgradient and downgradient concrete flumes, discharges by gravity to AP-C. The upgradient concrete flume features a trapezoidal configuration with a top width of 8 ft, bottom width of 6 ft, depth of 2 ft, and length of 109 ft. The upgradient invert elevation (i.e., toe of the flume within AP-D) is El. 397.69 ft. The 48-inch (in.) diameter HDPE culvert connecting AP-D and AP-C is 48 ft long with an upgradient invert elevation of El. 398.45 ft and a downgradient invert elevation of El. 398.05 ft. The downgradient concrete flume features a trapezoidal configuration with a top width of 8 ft, bottom width of 6 ft, depth of 2 ft, and length of 46 ft. The downgradient invert elevation (i.e., toe of the flume within AP-C) is El. 396.99 ft. The auxiliary spillway of AP-D and the toe drain adjacent to the southwest concrete ditch were

constructed in 1981. The auxiliary spillway was later backfilled to facilitate the construction of the perimeter access road.

With a maximum allowable starting water surface elevation of El. 397.80 ft, the primary outlet structure at AP-D adequately can manage the 1,000-year, 24-hour storm event without overtopping the dam (i.e., El. 402 ft).

(xi) Construction Specifications and Provisions for Surveillance, Maintenance and Repair:

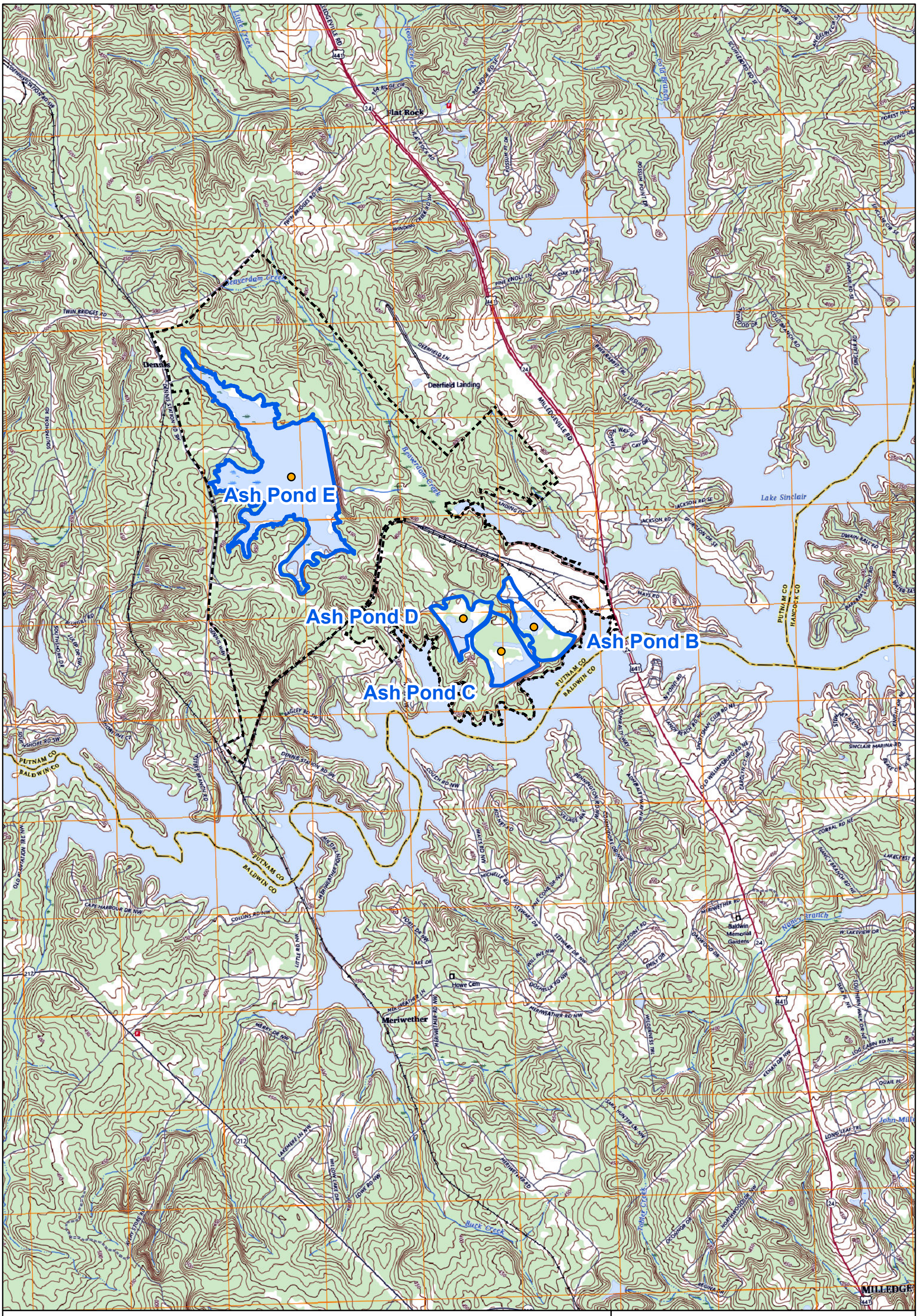
Construction specifications and QC procedures for AP-D Dam construction are discussed in Section vi.

Inspections of AP-D Dam are conducted on a regular basis; semi-annually by professional dam safety engineers and at 7-day intervals by trained plant personnel or qualified staff. In addition, inspections are performed after any unusual circumstance, which is procedurally defined as an elevated rain event, post storm (hurricane, flood, etc.), post flood event (if adjacent to a river or stream), high tide (if applicable), earthquake, or blasting or demolition activities with vibrational impacts (stack drops, etc.). The inspections provide a visual assessment that the structure is sound and that action is taken, as needed, based on the findings. Safety inspections include numerous checklist items. Specific items vary from site to site but generally include observations for pond levels, weather conditions, rainfall since the prior inspection, instrument readings, condition of retaining structures, slopes, drains and discharge structures, and surface anomalies such as erosion, settlement, animal burrows, or ant hills. Dam safety engineers assess instrument readings, inspect any maintenance or remediation performed since the previous inspection, check the status of work recommended at prior inspections, ensure that emergency notification information is current, and evaluate any items noted during 7-day interval inspections performed by qualified personnel.

(xii) Known Record of Structural Instability:

There is no known record of structural instability for AP-D.

APPENDIX



Legend

- Property Boundary
- Pond Boundary
- Topographic Contour (10-ft intervals)

Notes:
1. Topography data obtained from USGS 7.5-Minute Series, 2023.

N

0 5,000 Feet

USGS Topographic Map
Lake Sinclair West Quadrangle

Georgia Power Company
1100 Milledgeville Road
Putnam County, GA 31061

Geosyntec consultants

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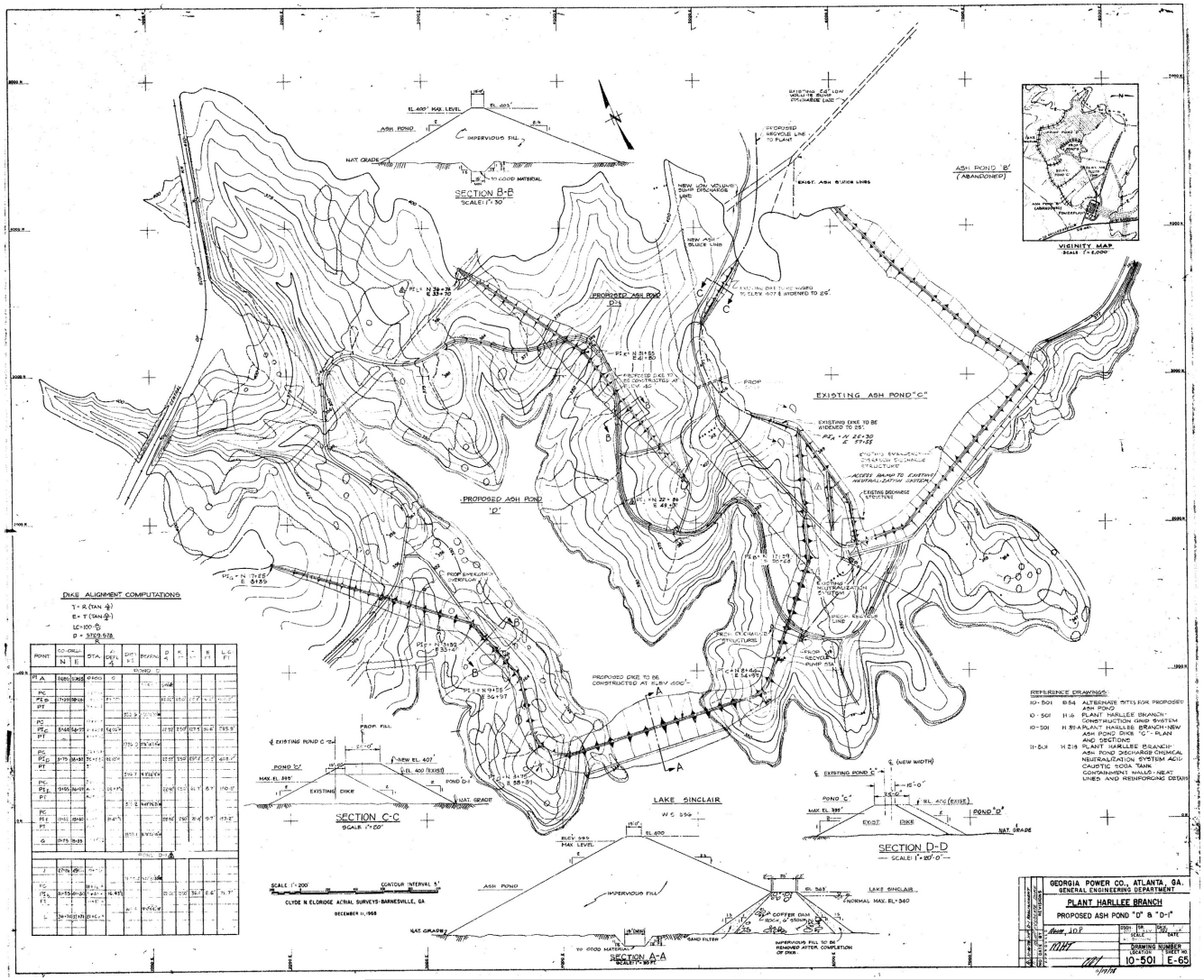
Appendix

(ARO) N:\GA Power\Plant Branch\GIS\APRX\Site_Layout_BCD\Site_Layout_BCD.aprx\USGS Topographic Map - Lake Sinclair West Quadrangle 9/15/2025



Plant Harllee Branch Proposed Ash Pond "D" & "D-1"
(Sheet E-65 dated 11/16/1978)
Georgia Power Company

Geosyntec consultants

Georgia Power

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Appendix

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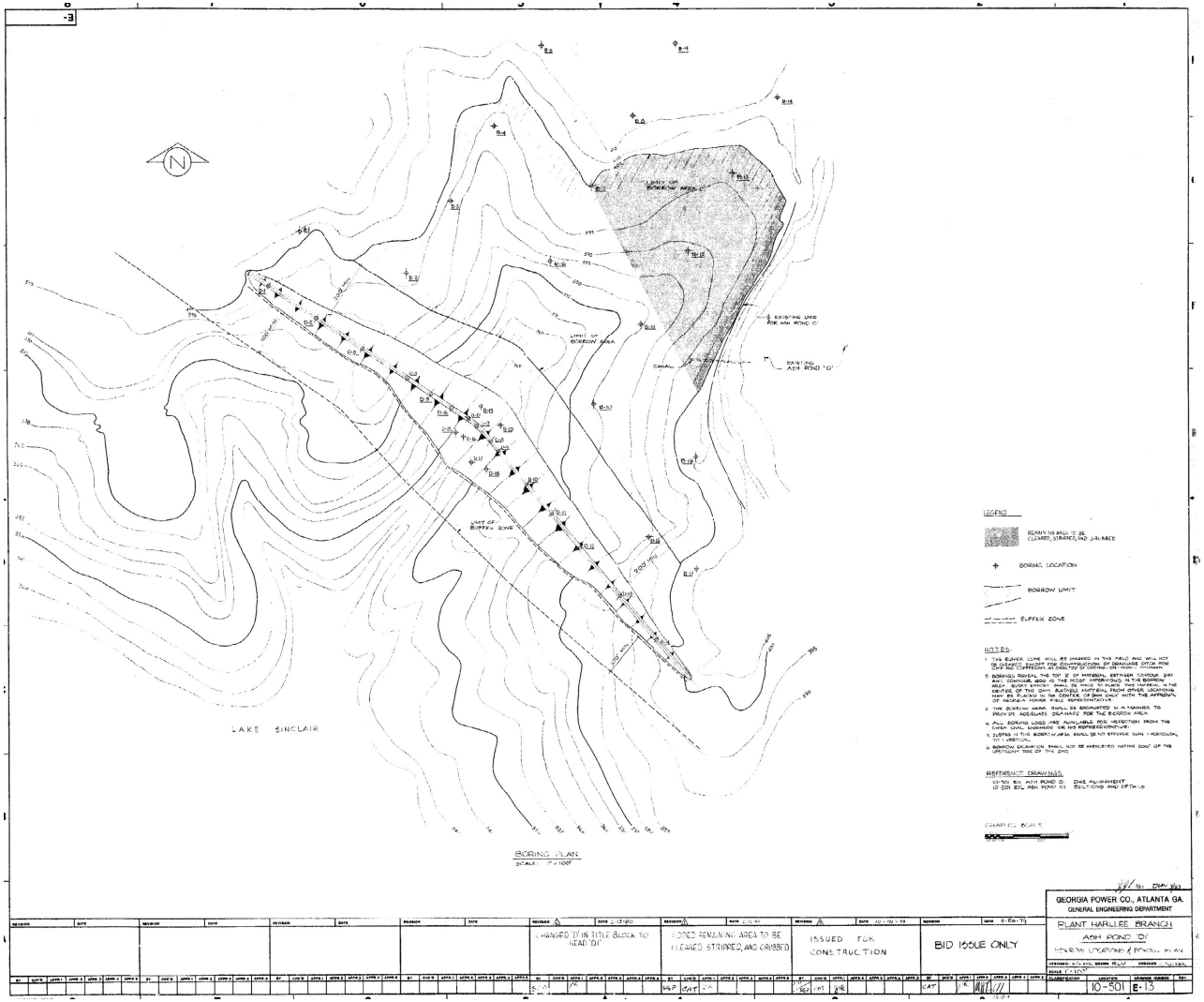

Plant Harllee Branch Ash Pond 'D1' Borrow Location & Boring Plan (Sheet E-13 dated 3/26/1979) Georgia Power Company

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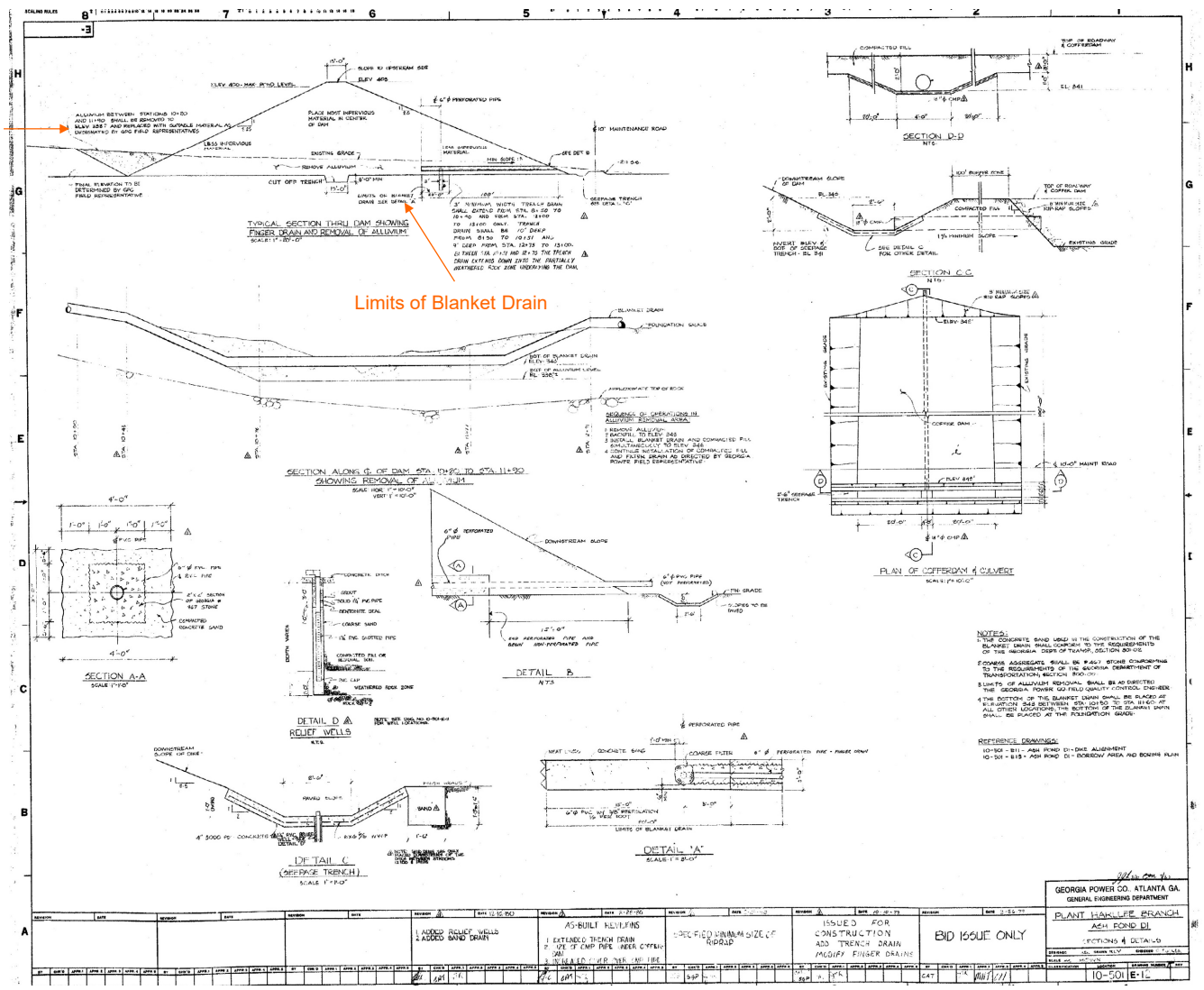
Alluvium between Stations 10+20 and 11+90 shall be removed to Elev. 338' and replaced with suitable materials as designated by GPC field representatives.



Plant Harllee Branch Ash Pond D1 Sections & Details
(Sheet E-12 dated 2/26/1979)
Georgia Power Company

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Georgia Power

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Appendix

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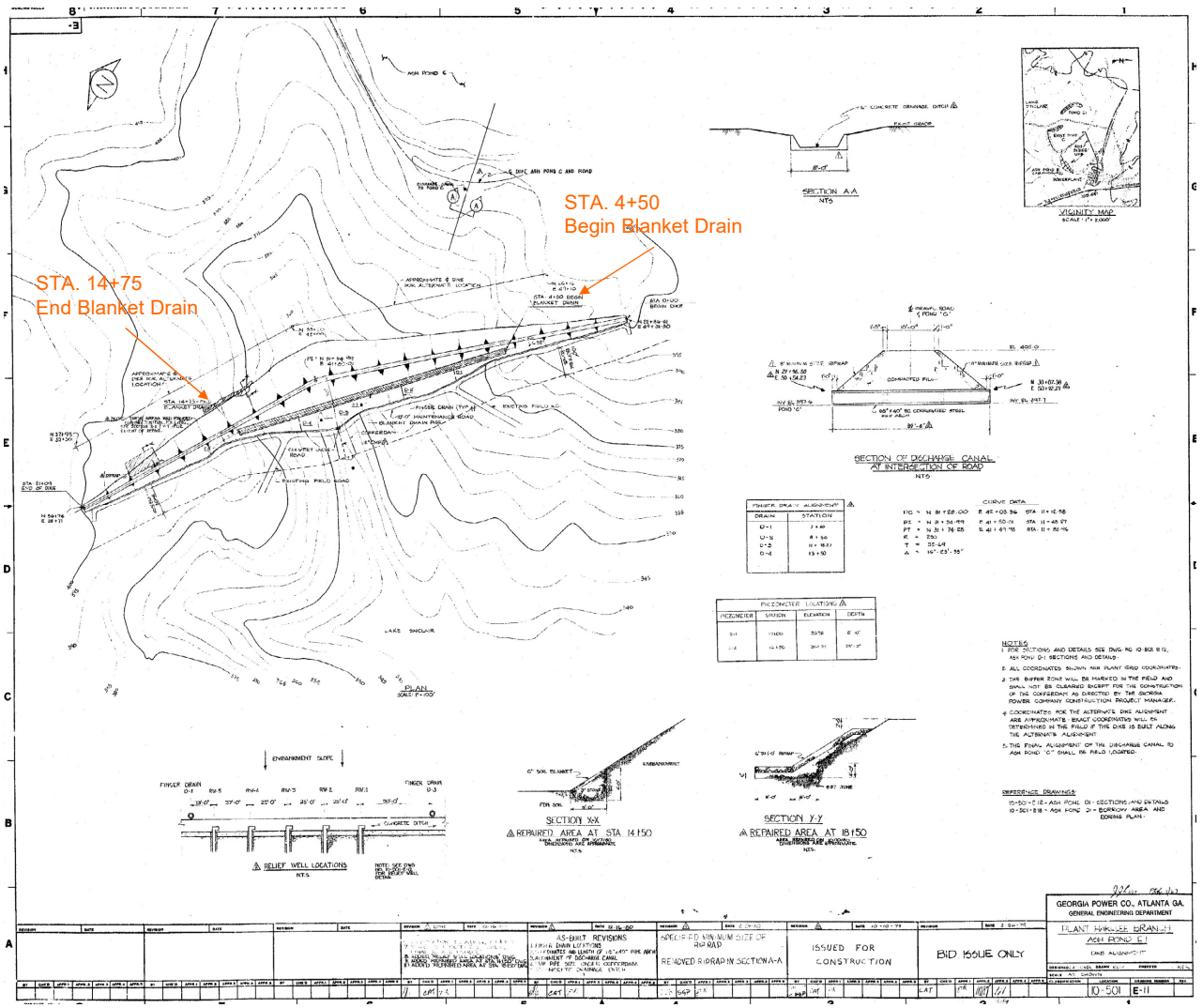

Plant Harllee Branch Ash Pond D1 Dike Alignment
(Sheet E-11 dated 3/26/1979)
Georgia Power Company

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Appendix

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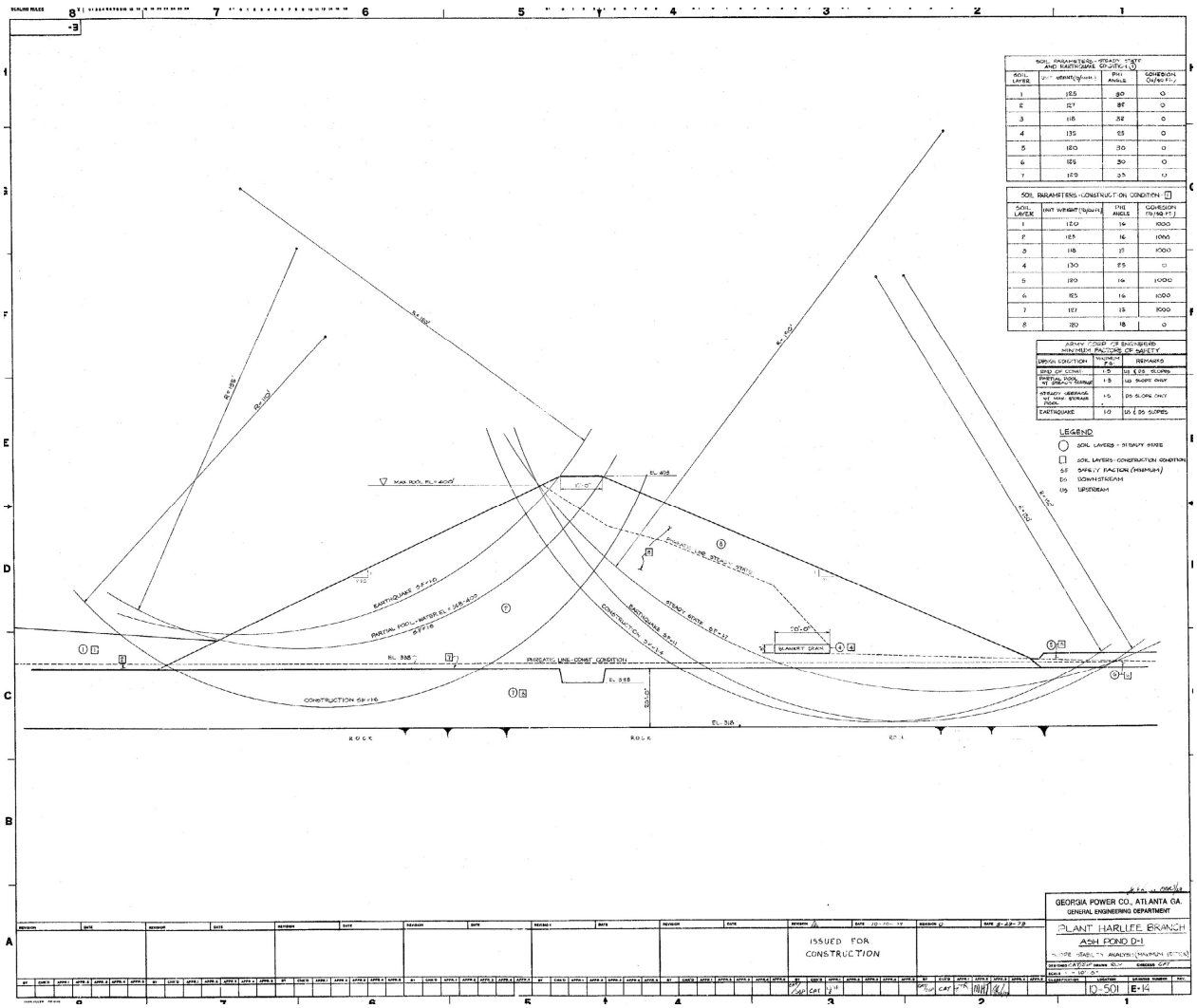

Plant Harllee Branch Ash Pond D-1 Slope Stability Analysis (Maximum Section) (Sheet E-14 dated 3/29/1979) Georgia Power Company

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Appendix

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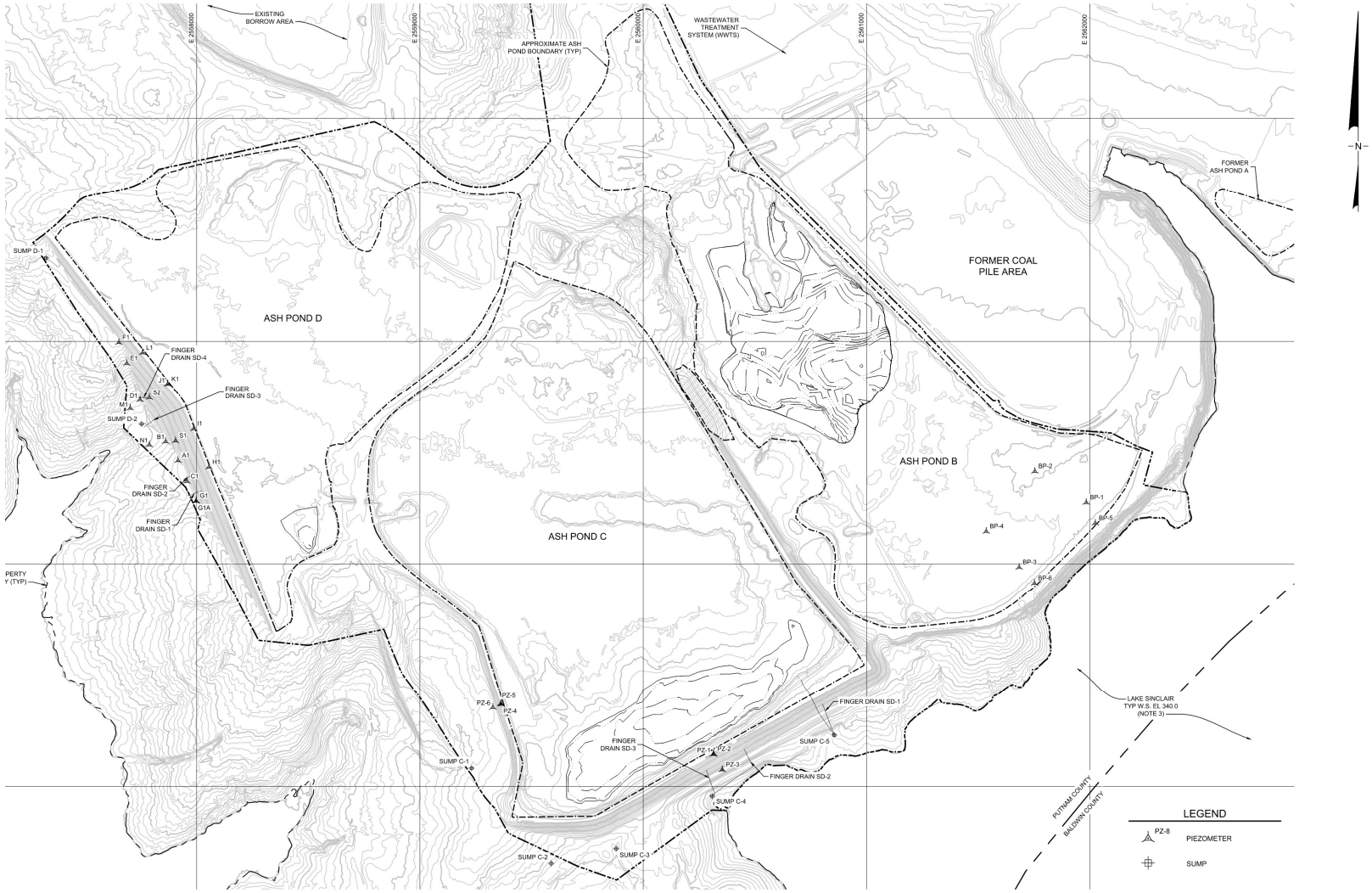

Locations of Instrumentation at or near Ash Ponds B, C, and D Dikes (Geosyntec, 2025)
Georgia Power Company

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Appendix

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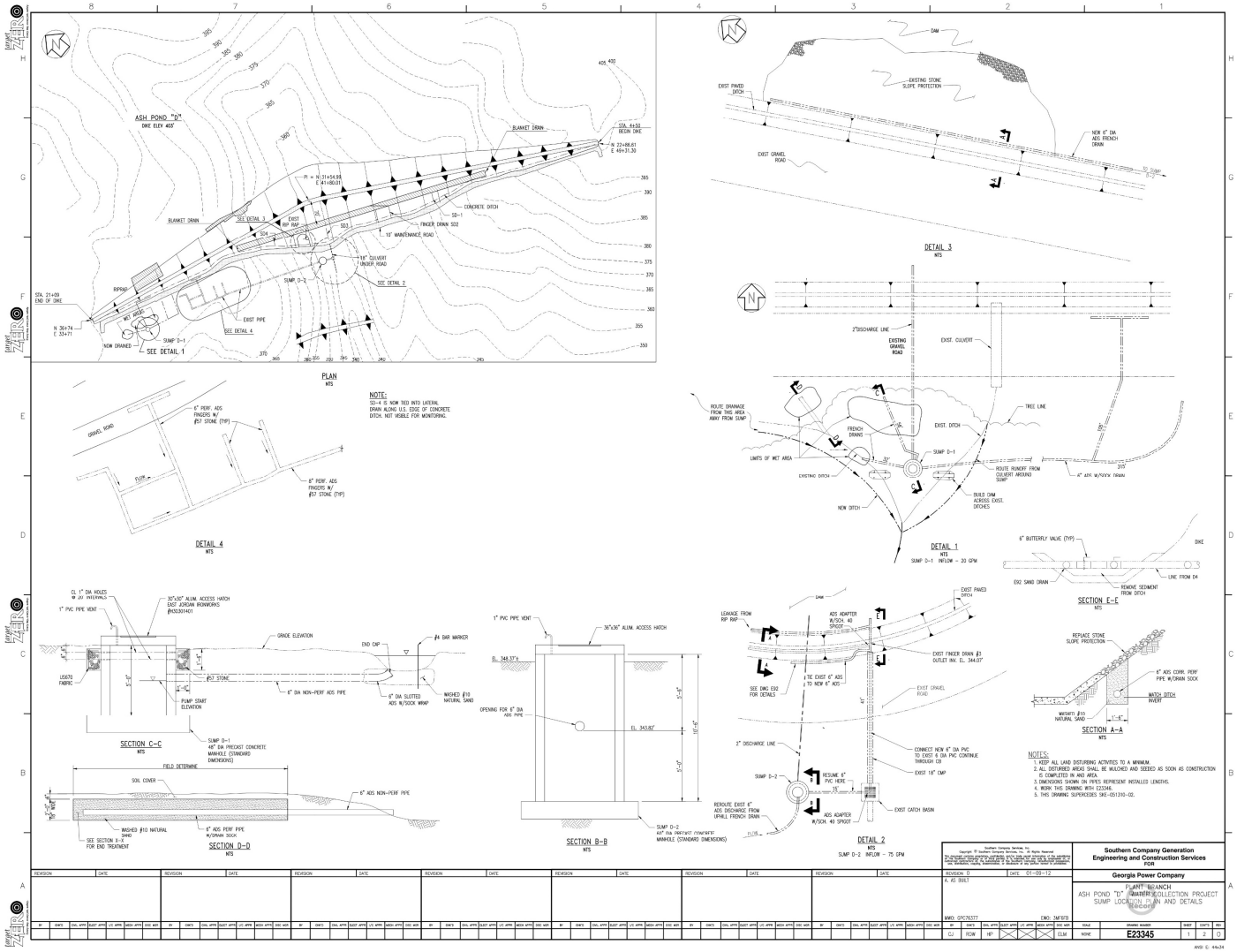

Plant Branch Ash Pond "D" Water Collection Project Sump Location Plan and Details (Sheet E23345 dated 1/9/2012) Georgia Power Company

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Appendix

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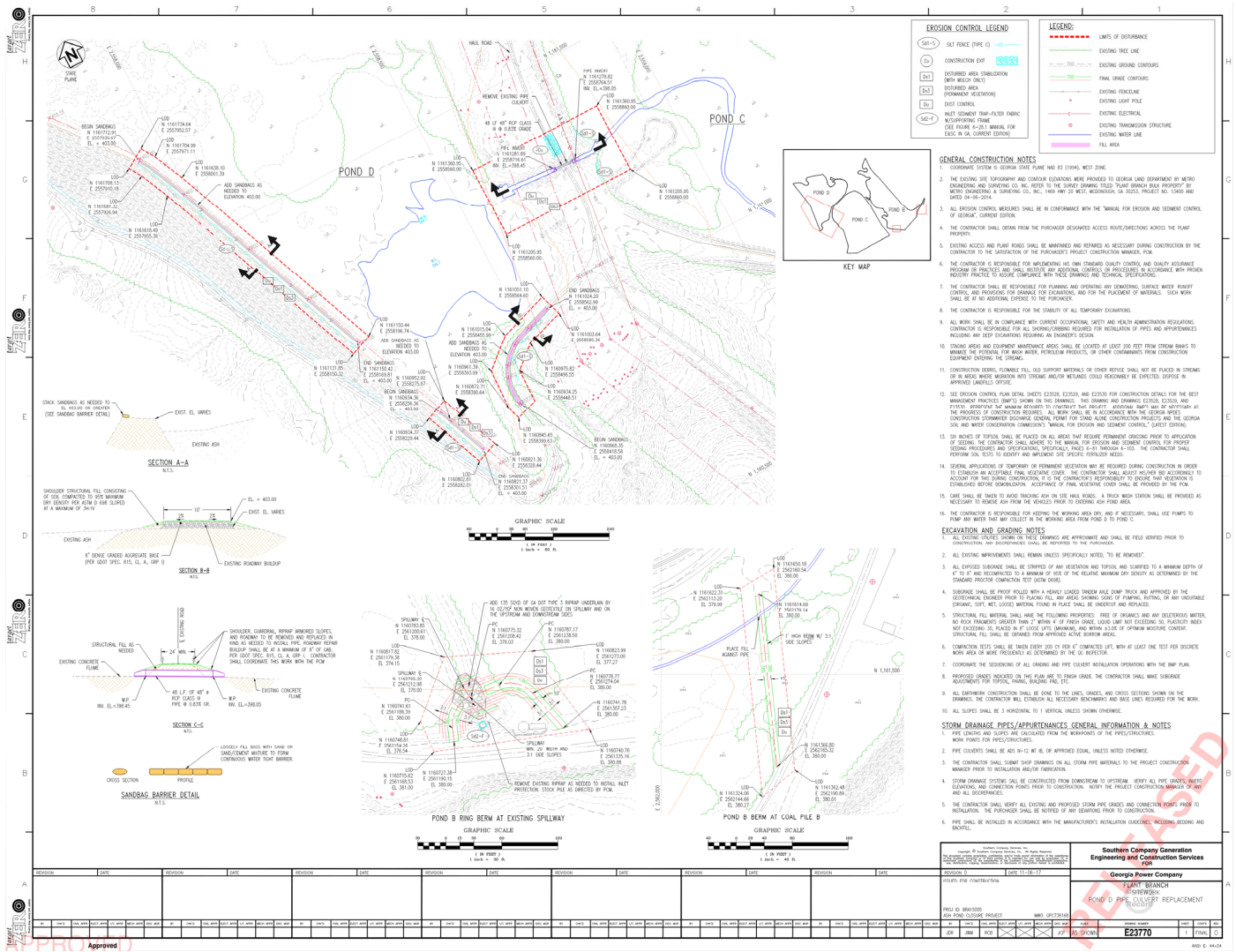

Plant Branch, Sitework, Pond D Pipe Culvert Replacement (Sheet E23770 dated 11/6/2017) Georgia Power Company

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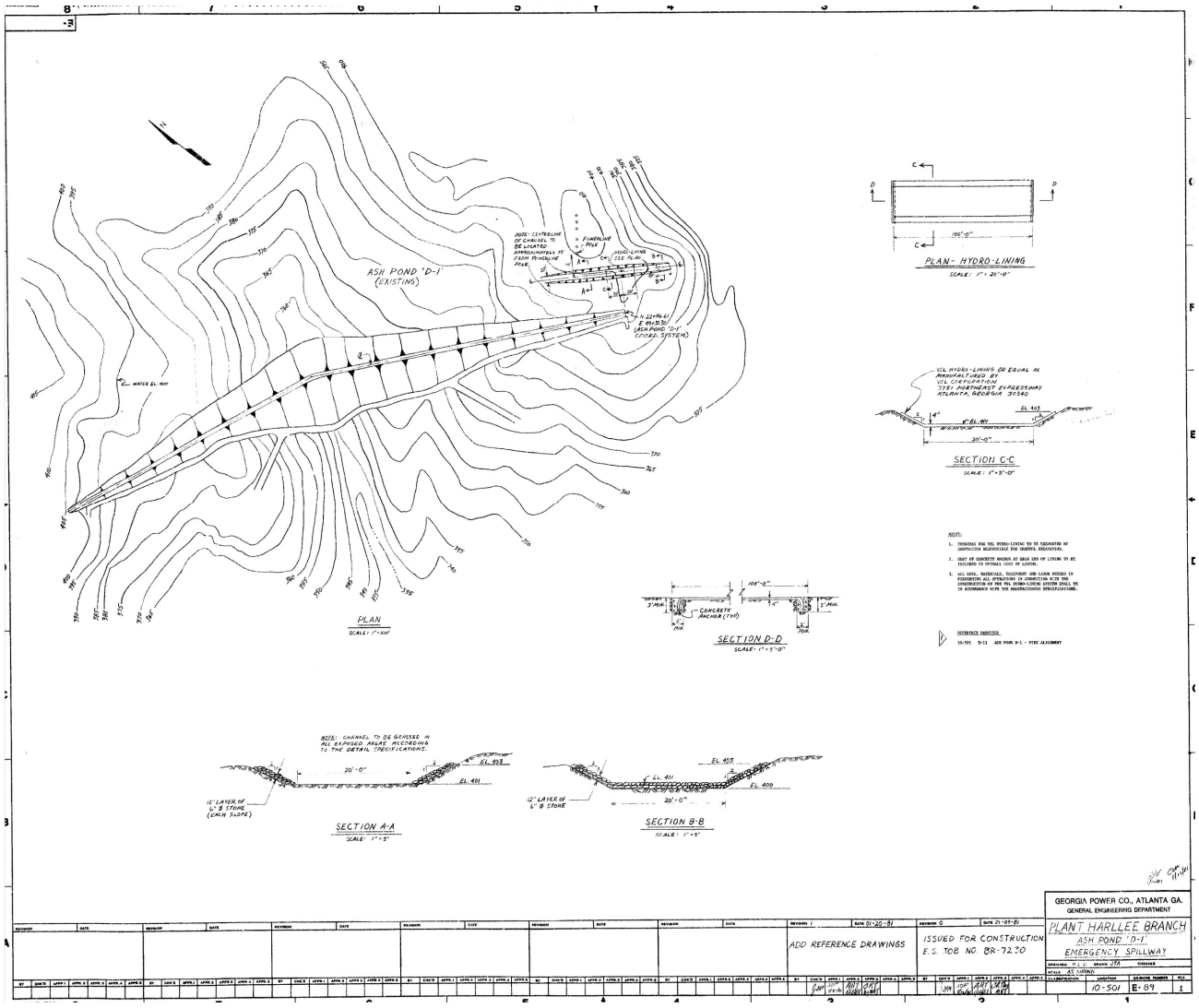

Plant Harllee Branch Ash Pond 'D-1' Emergency Spillway
(Sheet E-89 dated 1/9/1981)
Georgia Power Company

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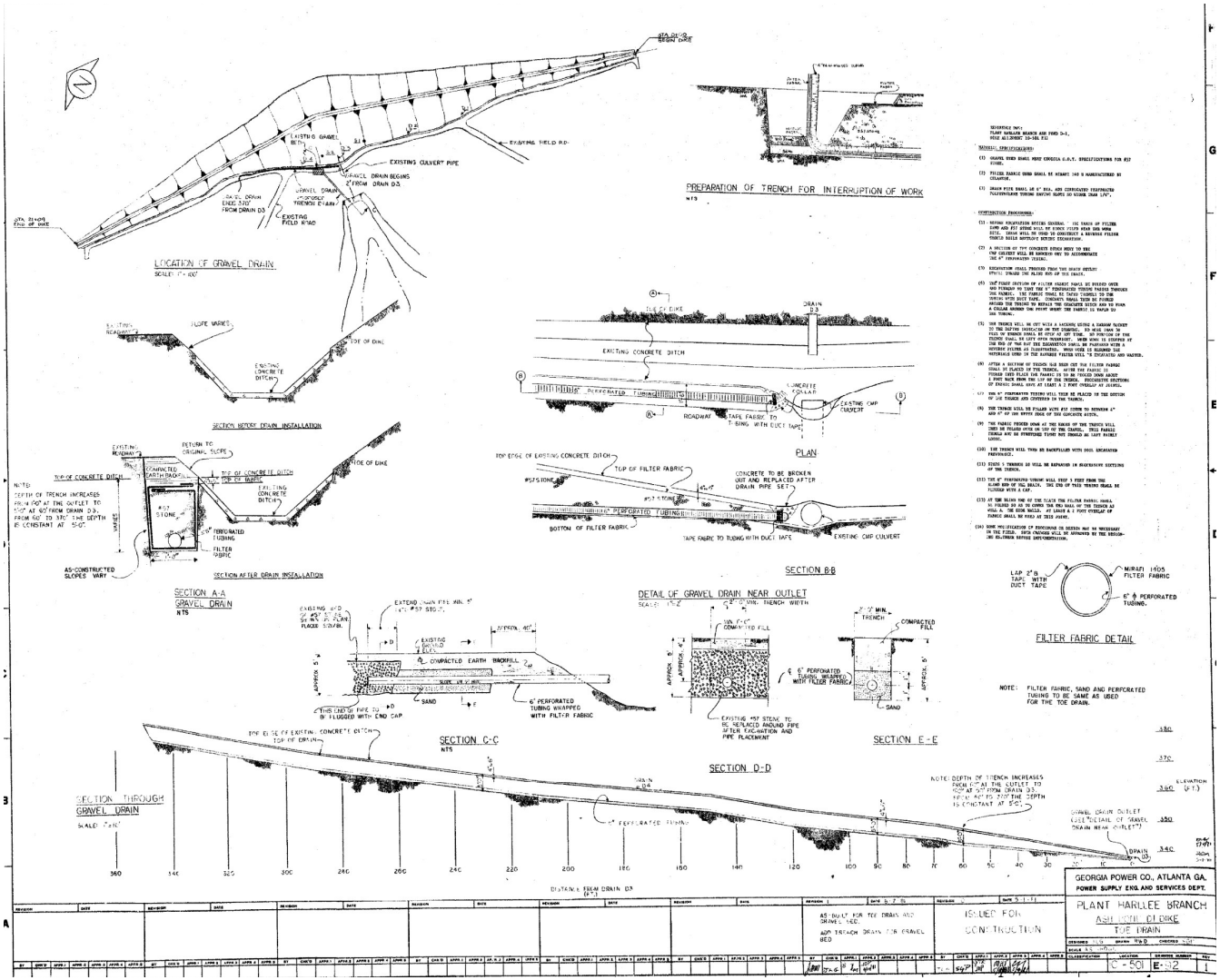

Plant Harllee Branch Ash Pond D1 Dike Toe Drain
(Sheet E-92 dated 5/1/1981)
Georgia Power Company

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Georgia Power

Project No. GW11718

February 2026

Appendix

Path: