

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 B (AP-B)
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 B (AP-B)
Identification Number:	NPDES Permit No. GA0026051

(ii) CCR Unit Location Map:

33.190303 N, 83.305425 W

The location of AP-B 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-B 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 power generation at Plant Branch. AP-B is currently inactive and will be closed by removal.

(iv) Watershed Description:

AP-B 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-B is approximately 118 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-B is impounded by a dam on the south and southwest sides and by natural ground on the other sides. The dam was constructed partially across a cove which was completed in 1967 and incorporated a rock base placed in the cove with an earthen dam built on top. Large rock and soil from construction of Plant Branch were placed into the cove to form the rock base. The bottom elevation of the rock base varies and is approximately at elevation (El.) of 314 ft at the lowest point and the top of rock base is approximately at El. 340 ft to 350 ft (the listed top elevation varies in different site documents). The placed rocks were mostly unweathered biotite gneiss ranging in size from cobbles to boulders.

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

(vi) Summary of Site Preparation and Construction Activities:

Original construction of the AP-B dam to create AP-B consisted of two major phases. The first phase was the construction of the rock base by placing rock fill across the cove. The second phase was the placement of rock mixed with soil from the plant excavation on the rock base on a 1.5 Horizontal to 1 Vertical (1.5H to 1V) slope on both sides. The placed material consisted of biotite gneiss ranging from unweathered to partially weathered rock, with a size distribution similar to the rock base material, and was mixed with soil. The rock used during the second phase was documented to be considerably more tabular than that of the lower rock. Above the rock portion of the dam, a cap approximately three to five feet thick was constructed. The cap consisted of fine micaceous slightly sandy silt with fragments of weathered rock. A plan view of the AP-B dam is presented in the Appendix. As shown in the Appendix, the crest of the AP-B dam is at about elevation 380 ft.

Excluding the bench at the interface between the earthen dam and the rock base, the original design documents show the slopes of the earthen dam and rock base on both the downstream and upstream sides as 1.5H to 1V. Portions of the slopes on the downstream side may be at a gentler slope (2H to 1V), as measured from the site's topographic maps. The lowest toe of Ash Pond B dam is approximately at El. 314 ft where the rock base extends 26 ft below the Lake Sinclair normal pool water surface at approximate El. 340 ft.

Five seepage zones were identified on the downstream slope of the dam in 1968. After the first attempt to stop the seepage by placing crushed stones and clayey soils on the upstream side of the dam in 1968, a grouting program was implemented in January 1969 and completed in March 1969. It was reported in April 1969 that the seepage was successfully stopped after the 1969 grouting program. No additional remedial measures were implemented.

(vii) Engineering Diagrams:

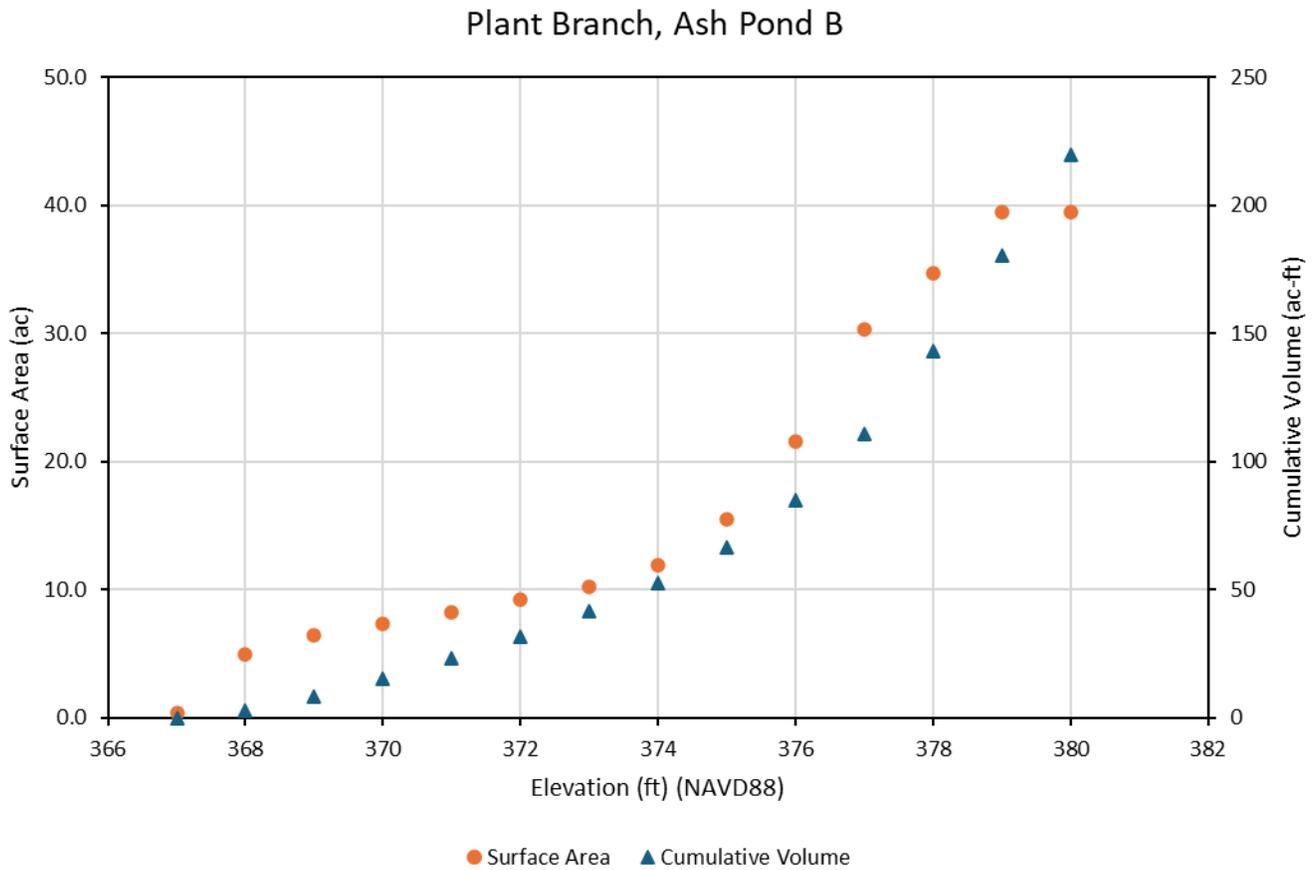
The following drawings, including relevant information on the construction of AP-B, can be found in the Appendix:

- Site Location Map
- Aerial Photo showing 'B' Pond Dike Location (dated June 1966)
- Plant Harllee Branch Future Ash Pond and Dyke (Sheet D-32 dated 11/5/1968)
- Plant Harllee Branch Rock Base for Ash Pond Dyke (Sheet C-4 dated 11/7/1962)
- 'B' Pond Dike Section (dated 4/21/2009)
- Plant Harllee Branch Ash Pond (Sheet C-37, undated)
- Locations of Instrumentations at or near Ash Ponds B, C, and D Dams (Geosyntec, 2025)
- Plant Harllee Branch Ash Pond Overflow Structure (Sheet D-27 dated 9/20/1965)
- Plant Branch, Sitework, Pond D Pipe Culvert Replacement (Sheet E23770 dated 11/6/2017)
- Plant Branch, Field Notes from 12 February 2020 (Georgia Power Company, 2020)
- Plant Harllee Branch Ash Pond Emergency Discharge Structure (Sheet H-84 dated 2/20/1969)
- Pond B and C Outfall Surveys (Jordan Engineering, 2017)

(viii) Description of Instrumentation:

Six piezometers, BP-1 through BP-6, were installed in December 2009 to monitor the phreatic surface in the CCR near the dam. Locations of BP-1 through BP-6 are provided by Georgia Power Company and are presented in the Appendix. Piezometers BP-1 through BP-4 were installed within AP-B, while piezometers BP-5 and BP-6 were installed on the AP-B dam. Readings from these six piezometers are collected 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-B was built with an overflow structure which consisted of a 36-inch (in.) diameter corrugated metal pipe (CMP). The 36-in. diameter CMP was decommissioned by grouting and abandoned in place in 2016. Presently, AP-B has an auxiliary spillway within the southern edge of the pond. The auxiliary spillway, permitted under National Pollutant Discharge Elimination System (NPDES) Permit Number GA0026051, includes a trapezoidal weir with a bottom width of 20 ft, height of 2 ft, and 3H:1V side slopes at El. 378.92 ft. The weir discharges to a 76-ft long, 36-in. diameter CMP with an upgradient invert elevation of El. 371.12 ft and a downgradient invert elevation of El. 369.93 ft.

While the operating water elevation within AP-B is controlled by three pumps working in parallel, only the auxiliary spillway is included in the hydraulic capacity calculations. With a maximum allowable starting water surface elevation of El. 376.10 ft, the auxiliary spillway at AP-B can adequately manage the 1,000-year, 24-hour storm event without overtopping the dam (i.e., El. 380 ft).

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

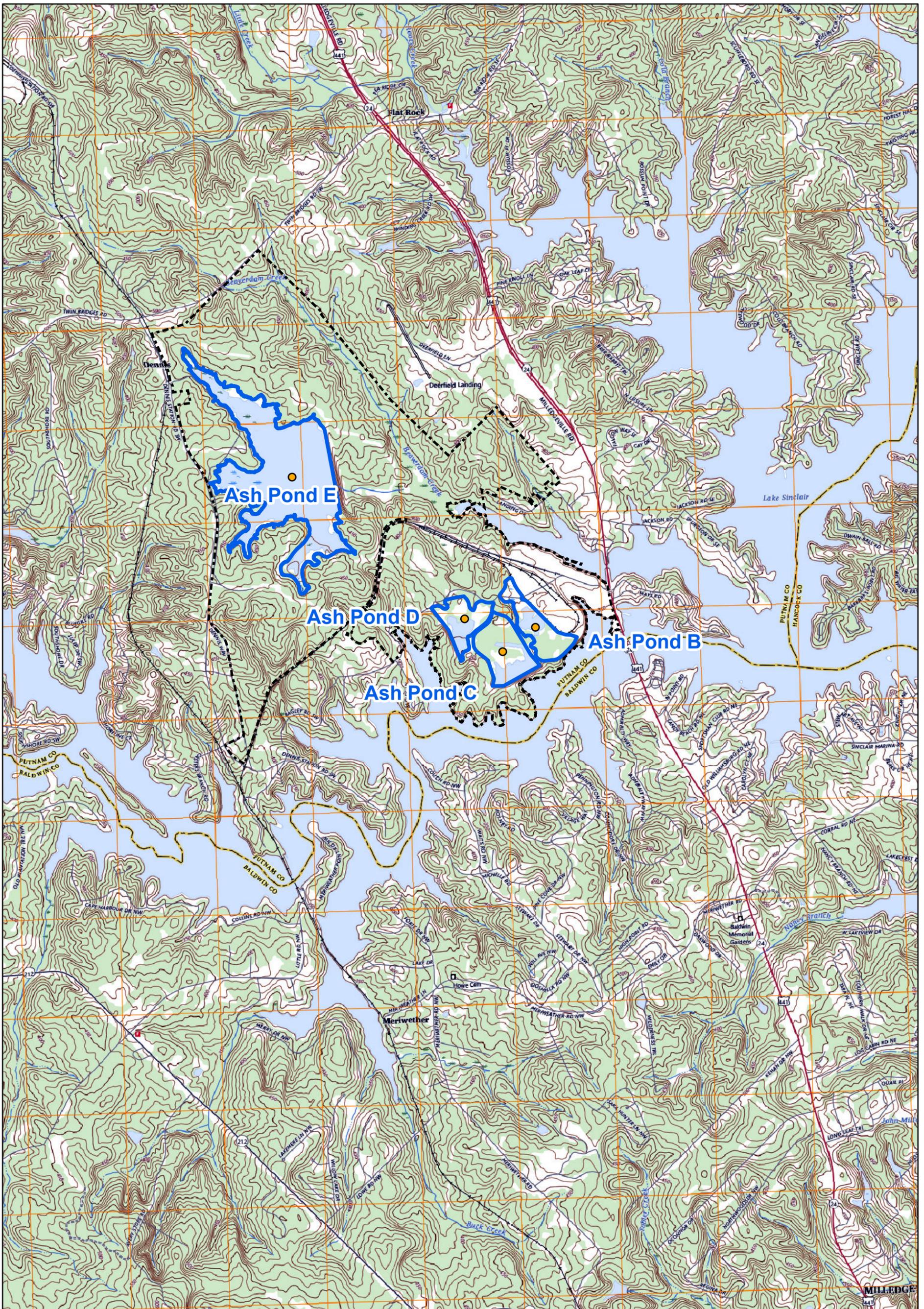
There are no Construction Specifications or provisions related to surveillance, maintenance, and repair of AP-B dam.

Inspections of the AP-B 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 structures are 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, 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 at the CCR unit.

APPENDIX



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

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



**USGS Topographic Map
 Lake Sinclair West Quadrangle**

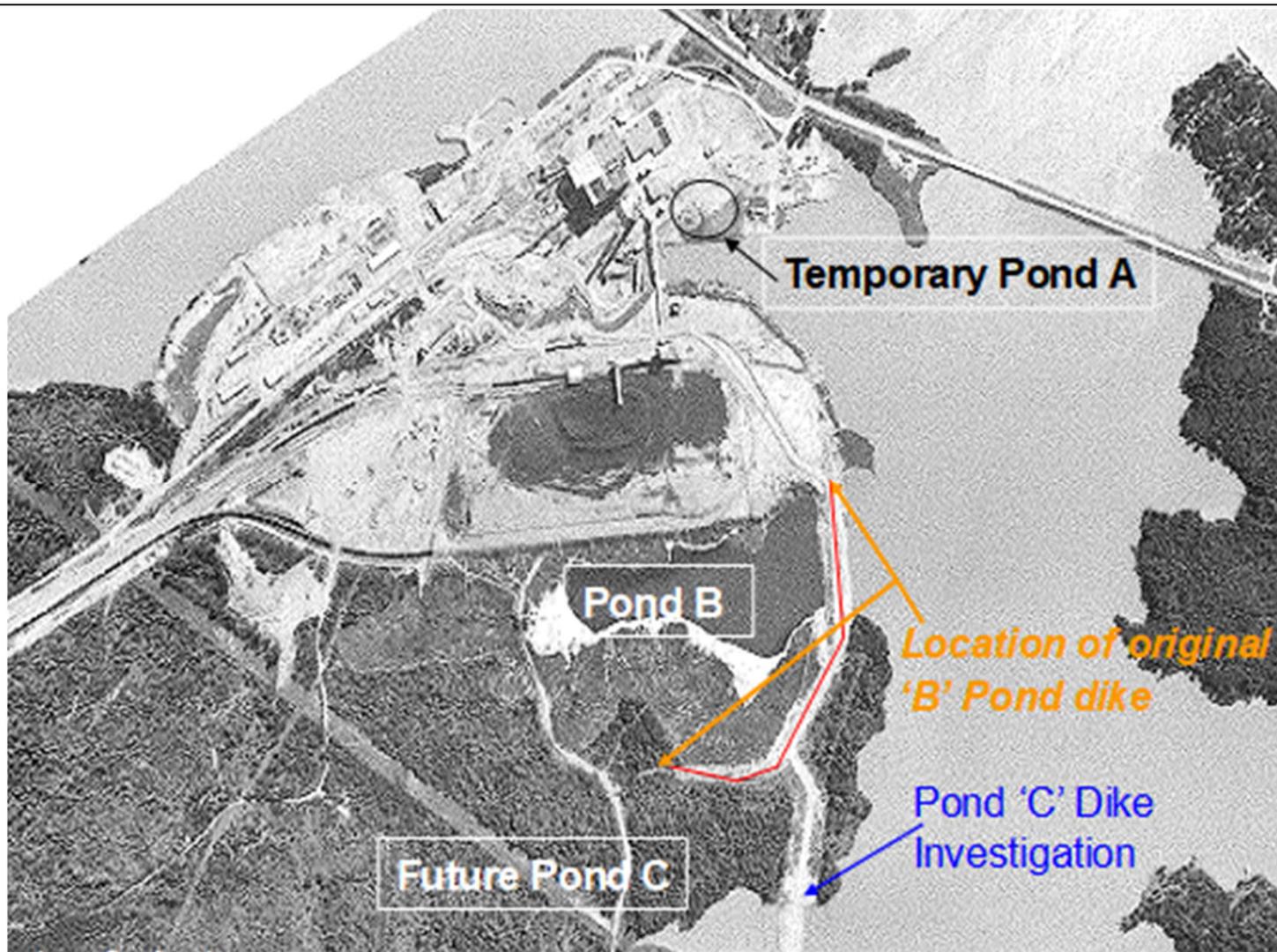
Georgia Power Company
 1100 Milledgeville Road
 Putnam County, GA 31061

Geosyntec
 consultants

Appendix

Kennesaw, GA

February 2026



Aerial Photo showing 'B' Pond Dike Location
 (From File # CSG 61.031, Pocket 1, dated June 1966)
 Georgia Power Company

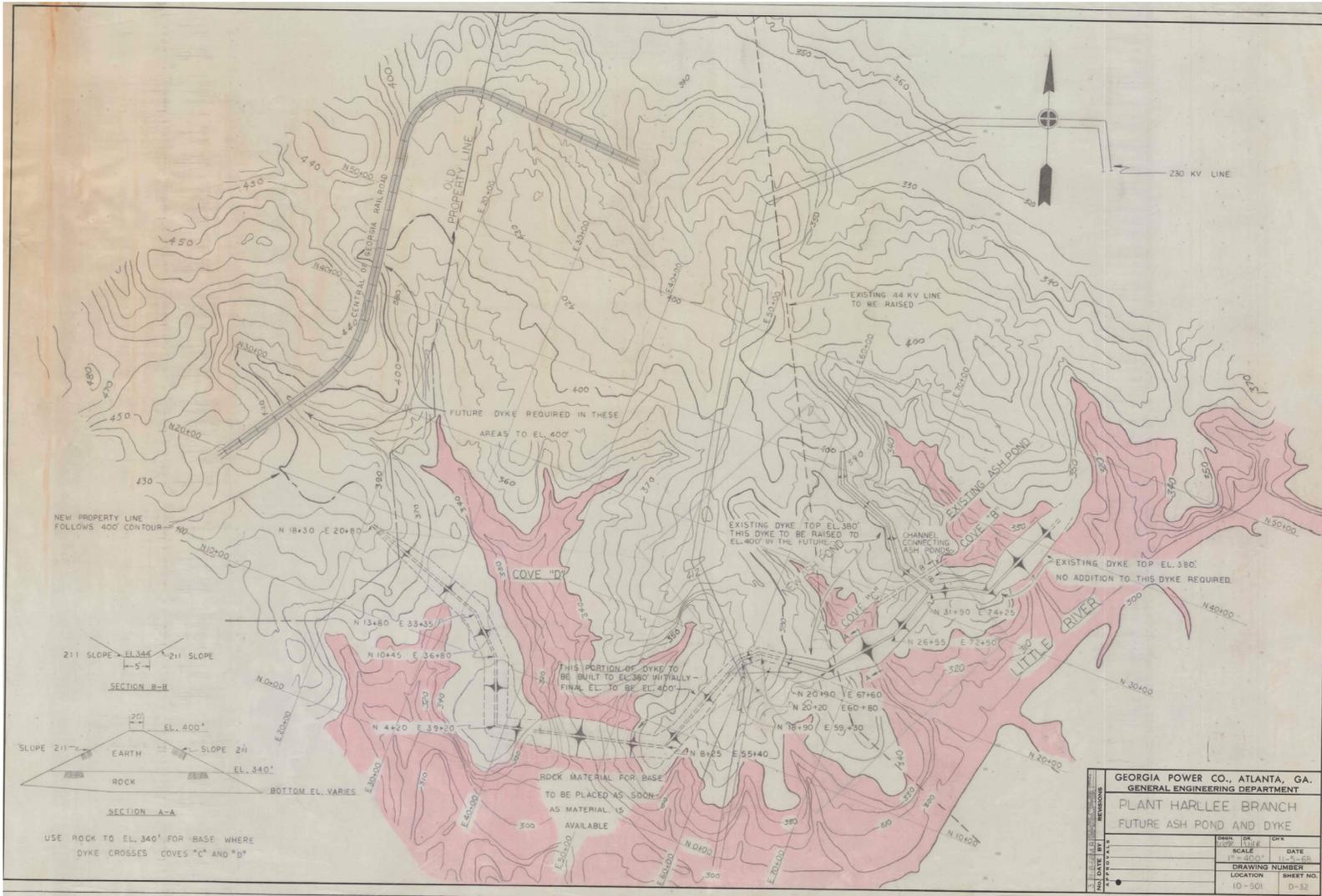
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 consultants



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**Plant Harlee Branch Future Ash Pond and Dyke
(Sheet D-32 dated 11/5/1968)
Georgia Power Company**

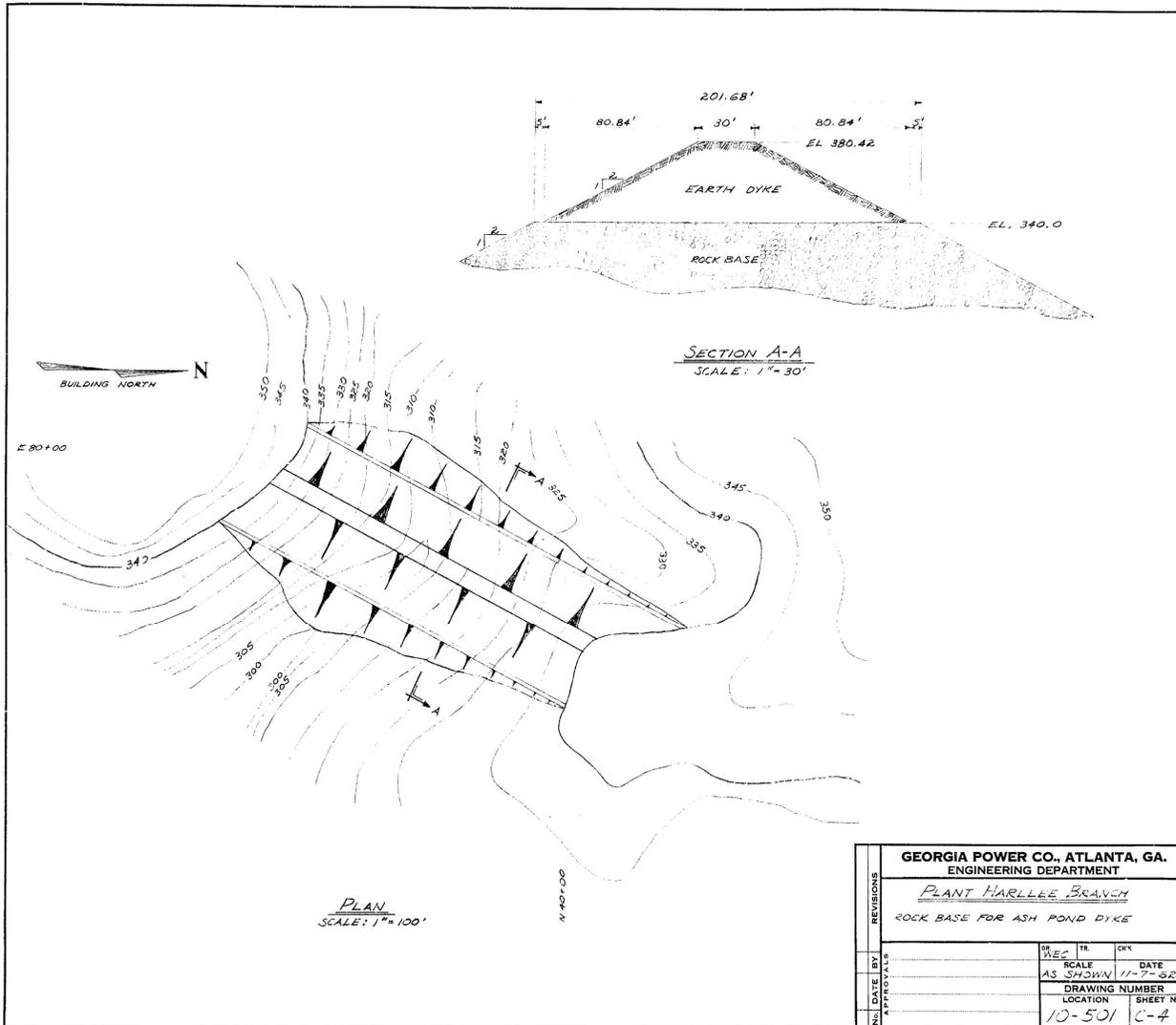
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**Plant Harllee Branch Rock Base for Ash Pond Dyke
(Sheet C-4 dated 11/7/1962)
Georgia Power Company**

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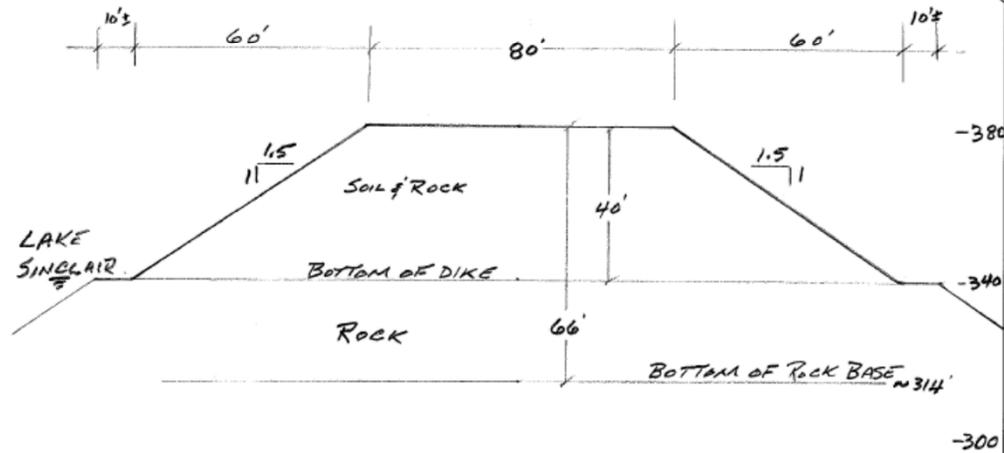
Appendix

Design Calculations

Project	PLANT BRANCH	Prepared by	R.D. WOOD	Date	4/21/09
Subject/Title	'B' POND DIKE	Reviewed by		Date	
	FROM FILE #CSG 61.031, POCKET 1	Calculation Number		Sheet	of

Form No. 60208

'B' POND DIKE SECTION



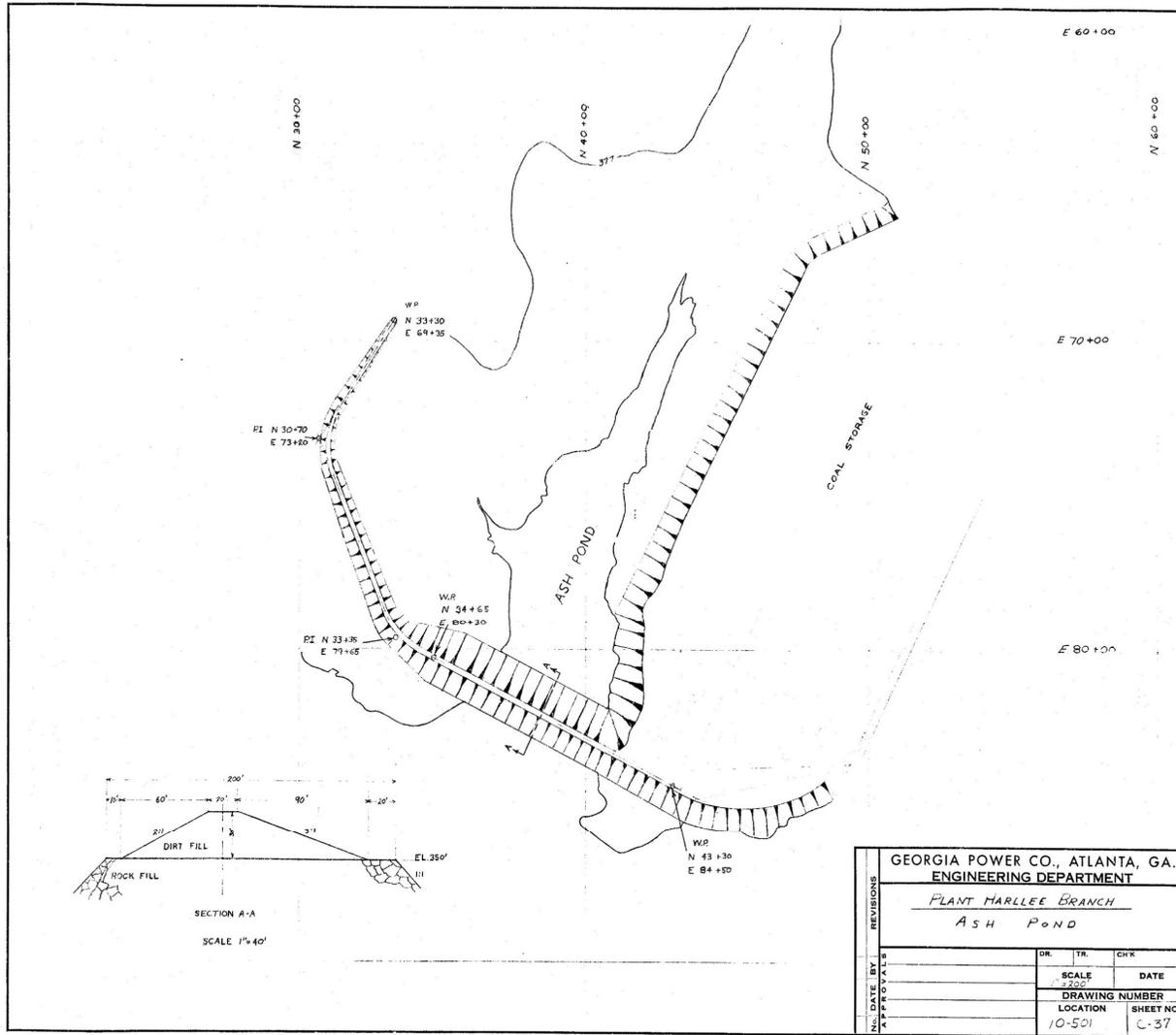
'B' Pond Dike Section
(From File #CSG 61.031, Pocket 1, dated 4/21/2009)
Georgia Power Company



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GEORGIA POWER CO., ATLANTA, GA. ENGINEERING DEPARTMENT		
PLANT HARLLEE BRANCH ASH POND		
DR.	TR.	CHK.
SCALE	DATE	
1"=200'		
DRAWING NUMBER		
LOCATION		SHEET NO.
10-501		C-37

**Plant Harllee Branch Ash Pond
(Sheet C-37, undated)
Georgia Power Company**



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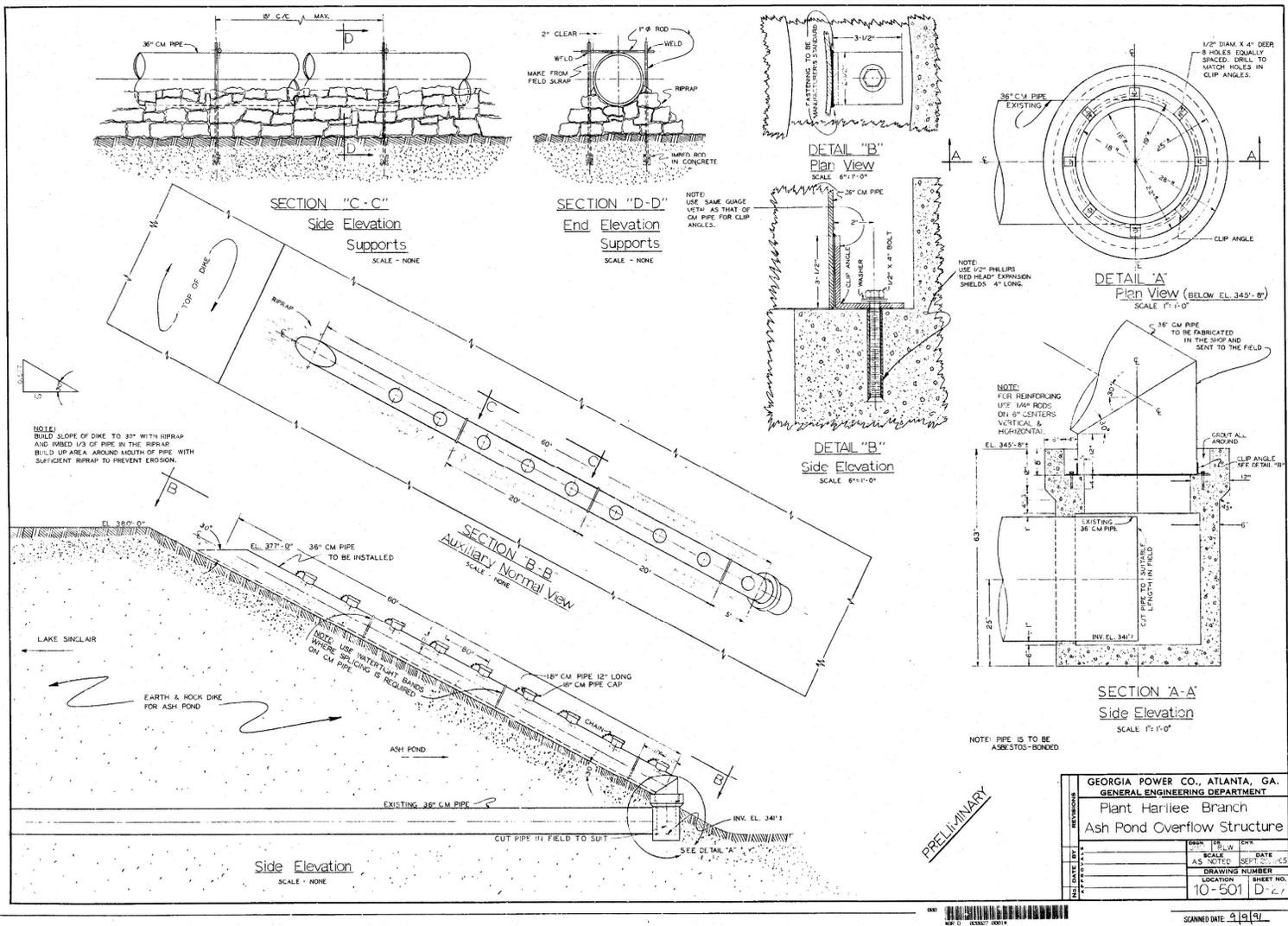
Locations of Instrumentations at or near Ash Ponds B, C, and D Dams (Geosyntec, 2025)
Georgia Power Company



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Note: The pipe was decommissioned by grouting.

**Plant Harllee Branch Ash Pond Overflow Structure
(Sheet D-27 dated 9/20/1965)
Georgia Power Company**

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PLANT BRANCH 02-12-2020 GPC 1117958

STAF GAUGE IN POND "C" TOP DAM 399.86
STAF GAUGE CHECKED ✓

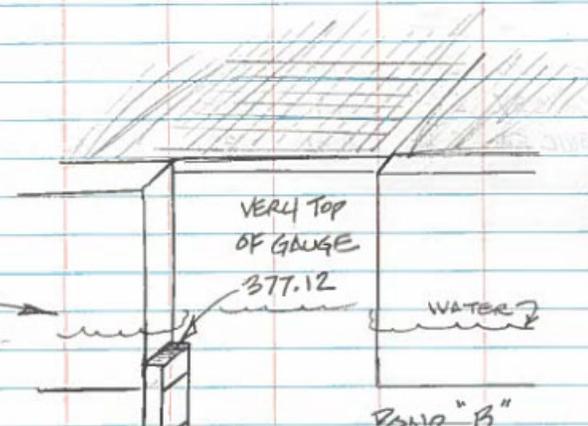
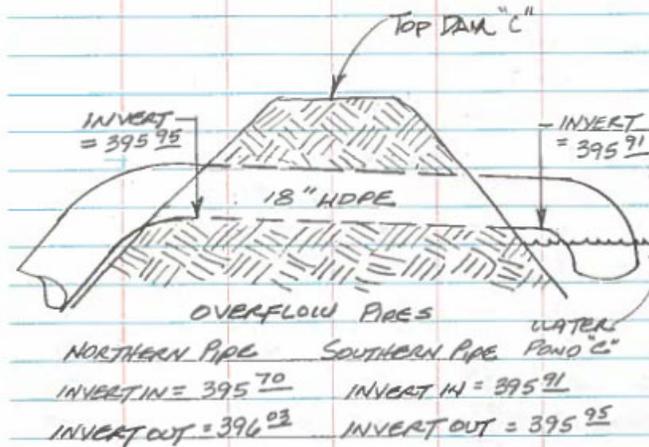
INVERT ELEVATIONS FOR EMERGENCY
OVERFLOW PIPES POND "C" (1.85 TO PIP TO INVERT)
SOUTH PIPE INVERT = 395.91
NORTH PIPE INVERT = 395.70

POND "B" TOP RIP LAP AT RING BERM = 379.42
TOP DIRT AT RING BERM (KANTLI) = 378.92

POND "B" WATER TREATMENT PLANT
PROPOSED BERM LOCATION
S019 N 1162857.69 S020 N 1162822.74
E 2560453.11 E 2560484.72

POND "E" ASH PIPE 1.7' DIAMETER (ENO PIPE)
N 1167001.803
E 2551441.069
TOP PIPE = 429.93
INVERT = 428.23

TOP STAFF GAUGE POND "B" = 377.12



Plant Branch, Field Notes from 12 February 2020
(Georgia Power Company, 2020)
Georgia Power Company

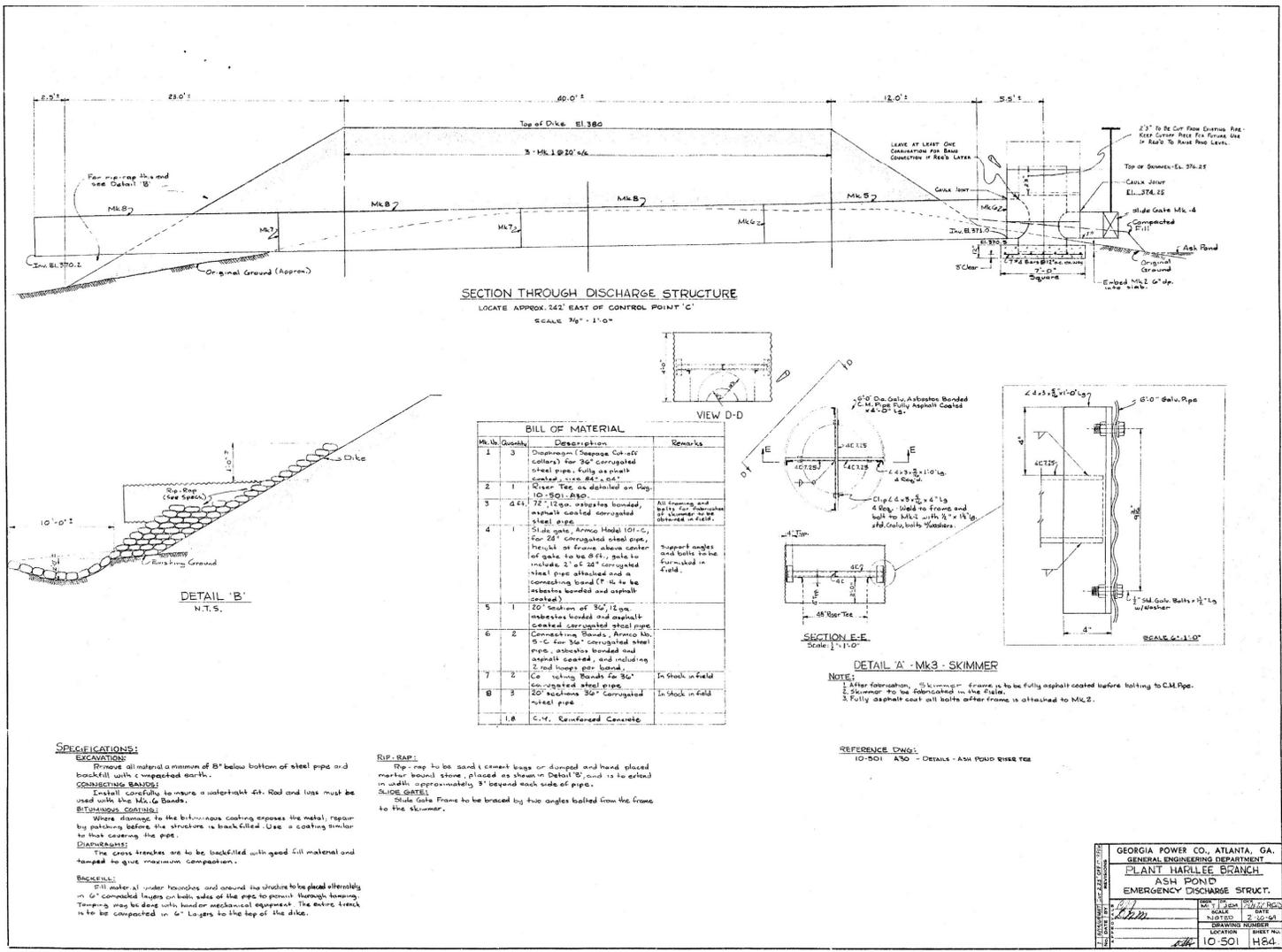
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Plant Harlee Branch Ash Pond Emergency Discharge Structure
 (Sheet H-84 dated 2/20/1969)
 Georgia Power Company



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Point:

