HISTORY OF CONSTRUCTION FOR EXISTING CCR SURFACE IMPOUNDMENT
PLANT GADSDEN ASH POND
40 CFR 257.73(c)(1)(i)-(xii)

(i) Site Name and Ownership Information:

Site Name:	Gadsden Steam Plant
Site Location:	Gadsden, AL
Site Address:	1000 Goodyear Avenue Gadsden, AL 35903
Owner:	Alabama Power Company
Address:	1313 6th Ave N, Birmingham, AL 35203 Birmingham, AL 35203
CCR Impoundment Name:	Plant Gadsden Ash Pond
NID ID:	No. 1428

EPA's "Disposal of Coal Combustion Residuals from Electric Utilities" Final Rule (40 C.F.R. Part 257 and Part 261), §257.73(c)(1), requires the owner or operator of an existing CCR surface impoundment to compile a history of construction. To the extent feasible, the following information is provided:

(ii) Location of CCR Unit:

N 34.0189°, W 85.9731°
See Location Map in the Appendix

(iii) Purpose of CCR Impoundment:

The Gadsden Steam Plant (Plant Gadsden) is a two-unit, natural gas-fired, power generation facility. Plant Gadsden was originally coal fired but was converted to natural gas in 2015. The Plant Gadsden Ash Pond was constructed to receive and store coal combustion residuals and process water produced by Plant Gadsden. The Ash Pond has not received ash since 2015.

(iv) Watershed Description:

Plant Gadsden and the Ash Pond are located within the Turkey Town Creek HUC 12 watershed which has an area of 57,412 acres. The Turkey Town Creek watershed is part of the larger Middle Coosa HUC 8 watershed which has an area of 1,653,549 acres. The inflow into the Ash Pond consists of the rainfall that falls within the limits of the surface impoundment and its perimeter access road only.

(v) Description of physical and engineering properties of CCR impoundment foundation/abutments:

Plant Gadsden's Ash Pond is located within the Appalachian thrust belt of the Cumberland Plateau physiographic province. The Appalachian thrust belt is a series of northeast trending thrust sheets and folds of Cambrian and

Pennsylvanian age. The thrust sheets represent décollment detached at the base of the Paleozoic sedimentary strata which overlie Precambrian crystalline basement rock. Alluvial and high terrace deposits are exposed at Plant Gadsden and are underlain by Conasauga and Knox formations. These consist of varying amounts of sand, silt, clay, and gravel associated with river deposition.

(vi) Summary of Site Preparation and Construction Activities:

The Plant Gadsden Ash Pond was constructed in 1949 by creating an earthen dike around an existing bottom area upslope from the Coosa River. The Ash Pond's original discharge structure was constructed on the Coosa River side of the impoundment and discharged into a channel feeding the river. This is shown on D-77547 attached in the Appendix A.

The first expansion of the Ash Pond occurred in 1976 and included the construction of a new western impoundment and emergency discharge structure. The new dike was constructed against the western dike face of the original (1949) impoundment while the pond's discharge structure was relocated so that it discharged into a nearby lake that feeds the Coosa River. This is shown on E-312011 attached in Appendix A.

The final expansion came in 1978 when the western pond dike (constructed in 1976) was expanded to the northwest toward the Twin Bridges golf course. The final expansion led to the discharge structure being located once again on the Coosa River. This new discharge structure served to not only manage emergency storm water flows but to serve as a treated water draw source for the plant's processes. This is shown on E-318035 attached in Appendix A.

The Ash Pond stopped receiving coal ash in 2015 when Units 1 and 2 were converted to natural gas; however, it continued to receive process water from the plant. The discharge structure continued to function as designed until early 2017 when closure construction began.

Closure activities began in 2016. The CCR has been graded to its final configuration and covered. Remaining activities necessary to achieve compliance with regulatory closure requirements should be completed by mid-year 2018.

Drawings showing the topography and location of the Ash Pond are included in the appendix as engineering diagrams.

(vii) Engineering Diagram:

The following drawings relevant to the location and topography of the Plant Gadsden Ash Pond can be found in Appendix A:

- 1967 USGS Topography Map
- Gadsden Steam Plant Ash Disposal Area – drawing D-77547 dated December 1949
- Gadsden Ash Pond Extension Stage II – drawing E-312011 dated April 1976 (2 sheets)
- Gadsden Ash Pond Extension Stage III – drawing E-318035 dated July 1978 (2 sheets)
- Gadsden Ash Pond Closure Project – drawing E523667 dated May 2016
- Gadsden Ash Pond Closure Project – drawing E523668 dated May 2016
- Gadsden Ash Pond Closure Project – drawing E523666 Sections and Details – Sheet 6 dated May 2016

(viii) Description of Instrumentation:

There is no instrumentation at the Plant Gadsden Ash Pond.

(ix) Storm water management and area-capacity curves:

There is no stage-storage curve data available as the ash pond has been dewatered and the ash has been covered by an engineered, relatively impermeable cover system. Storm water runoff from the cover system is managed in the southwest detention pond; however, there is no permanent storage of water within the closed impoundment.

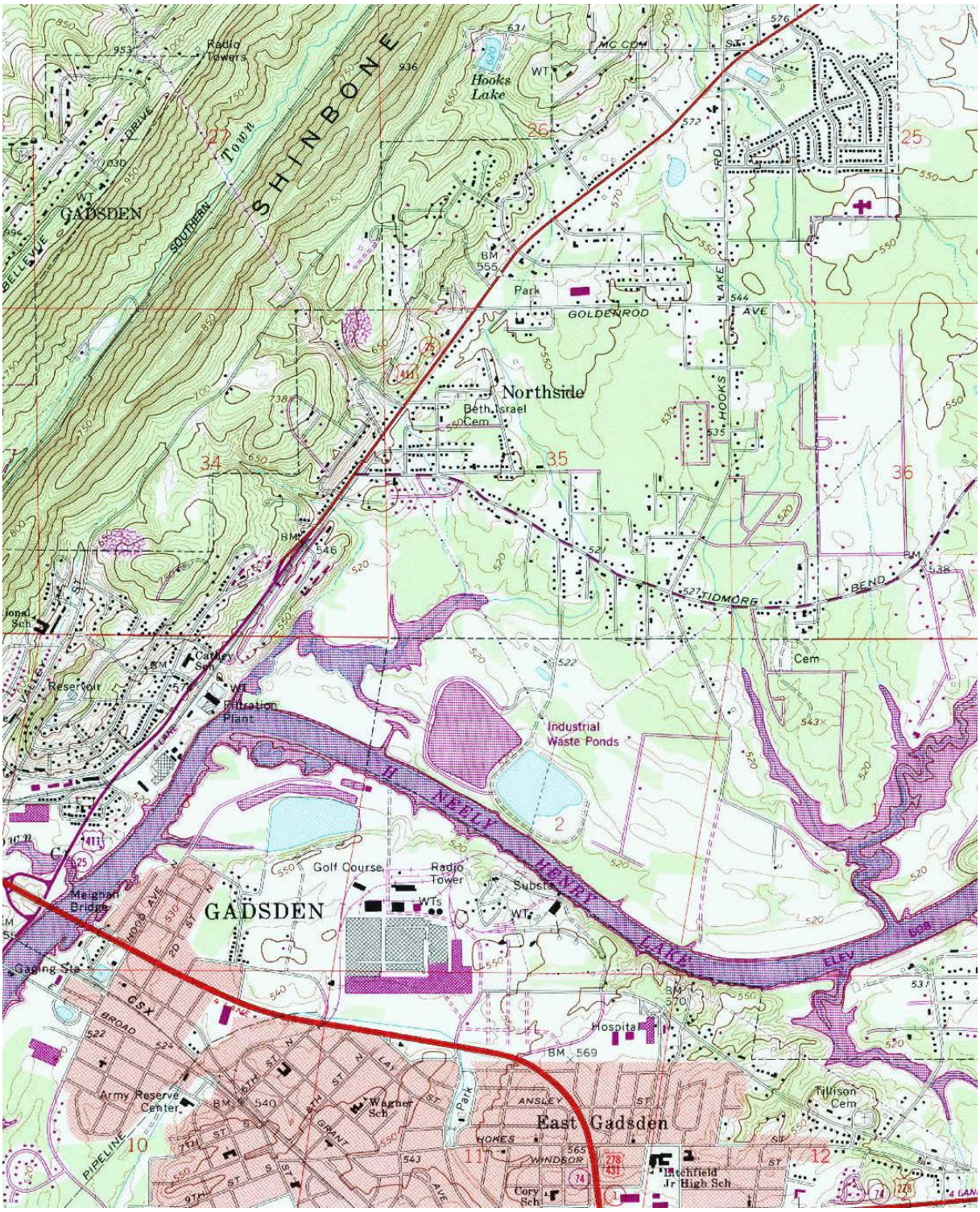
(x) Provisions for surveillance, maintenance and repair:

Inspections of dikes are critical components and were conducted on a regular basis prior to and during closure construction—at least annually by professional dam safety engineers and at least weekly by trained plant personnel. In addition, inspections were performed after significant events such as storms. The inspections provided assurance that the structures were sound and that action was taken, as needed, based on the findings. Safety inspections included numerous checklist items. Specific items vary from site to site but may include observations of such things as pond levels, weather conditions, rainfall since the prior inspection, instrument readings, conditions of slopes and drains, erosion, animal damage, ant hills, alignment of retaining structures and more. 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 plant personnel inspections.

(xii) Known record of structural instability:

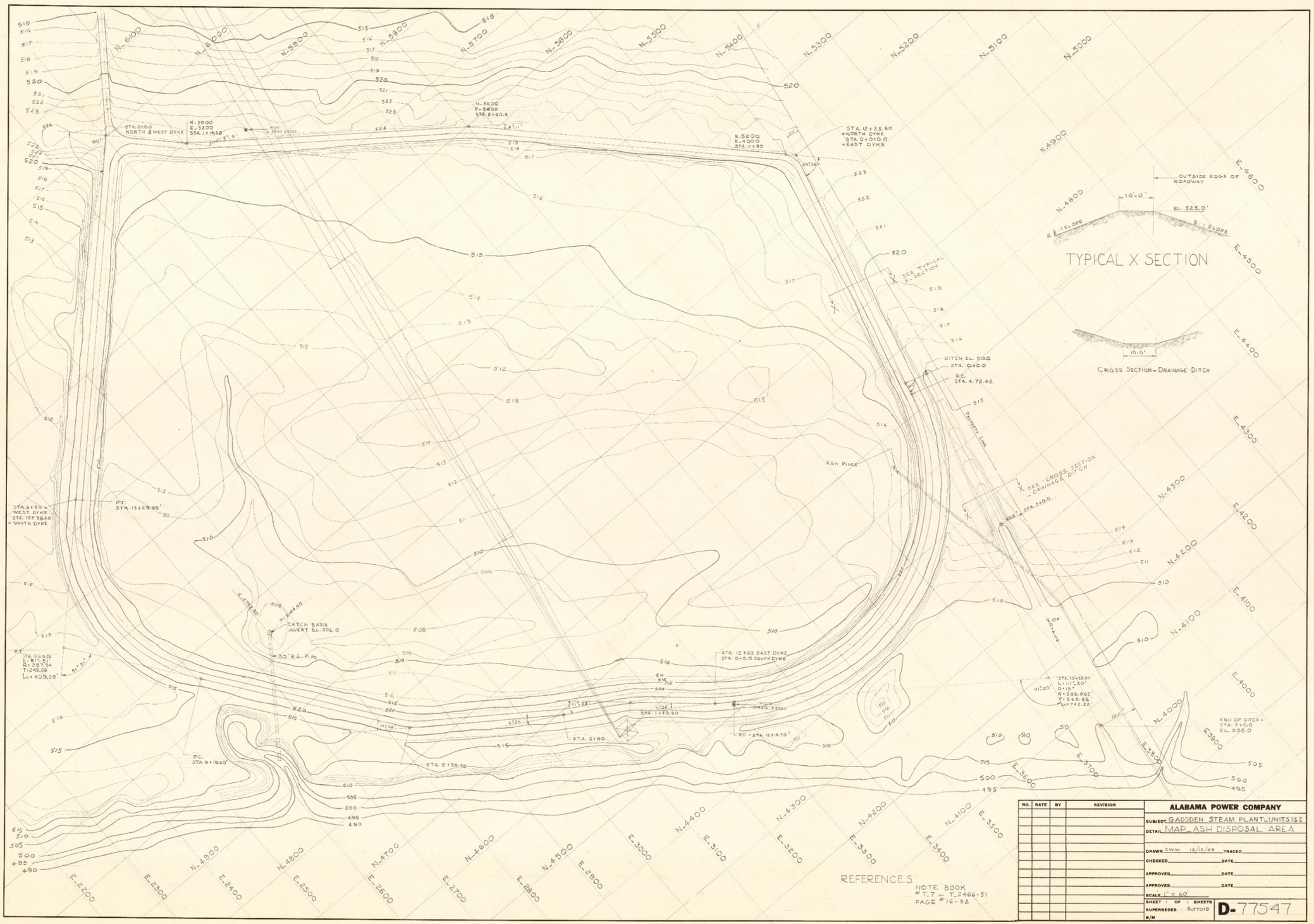
There are no known instances of structural instability at the CCR unit.

Appendix A



Plant Gadsden USGS Topo

USGS -1967 – Scale: 1 = 24,000



NO.	DATE	BY	REVISION

ALABAMA POWER COMPANY

SUBJECT GADSDEN STEAM PLANT-UNITS 1 & 2

DETAIL MAP-ASH DISPOSAL AREA

DRAWN C.W.W. 12/12/49 TRACED

CHECKED DATE

APPROVED DATE

APPROVED DATE

SCALE 1" = 60'

SHEET OF SHEETS

SUPERSEDES B-77019

B/M

D-77547