CLOSURE DRAWINGS

FOR

GEORGIA POWER
PLANT YATES
EXISTING CCR SURFACE IMPOUNDMENT - ASH POND 2

COWETA COUNTY, GEORGIA

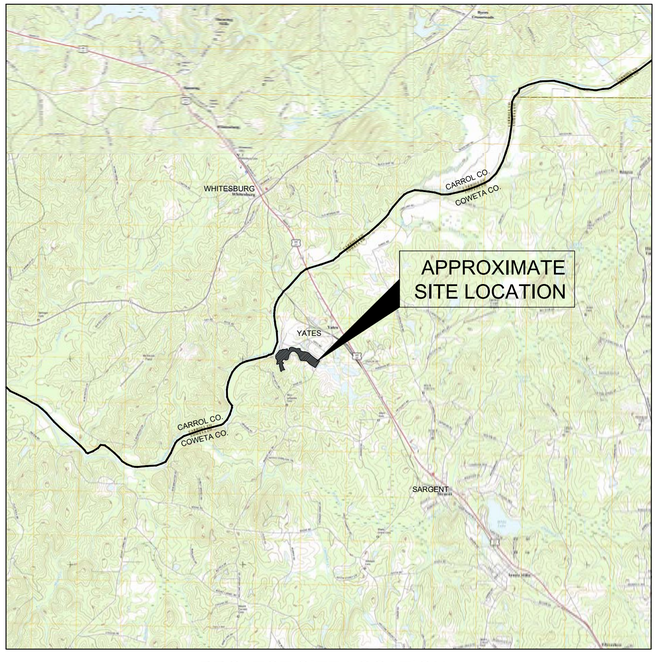
NOVEMBER 2018

PREPARED FOR:

GEORGIA POWER COMPANY
241 RALPH MCGILL BLVD, NE
ATLANTA, GA 30308
TELEPHONE: (404) 506-6505

SITE ADDRESS

PLANT YATES
708 DYER ROAD
NEWNAN, GA30263
(770) 252-0650



PROJECT SITE LOCATION
SCALE: 1" = 1 MILE
SOURCES: USGS QUAD MAP DATED 2017 WHITESBURG, GA
USGS QUAD MAP DATED 2017 NEWNAN NORTH, GA
USGS QUAD MAP DATED 2017 HULETT, GA
USGS QUAD MAP DATED 2017 RICO, GA

REVISION HISTORY

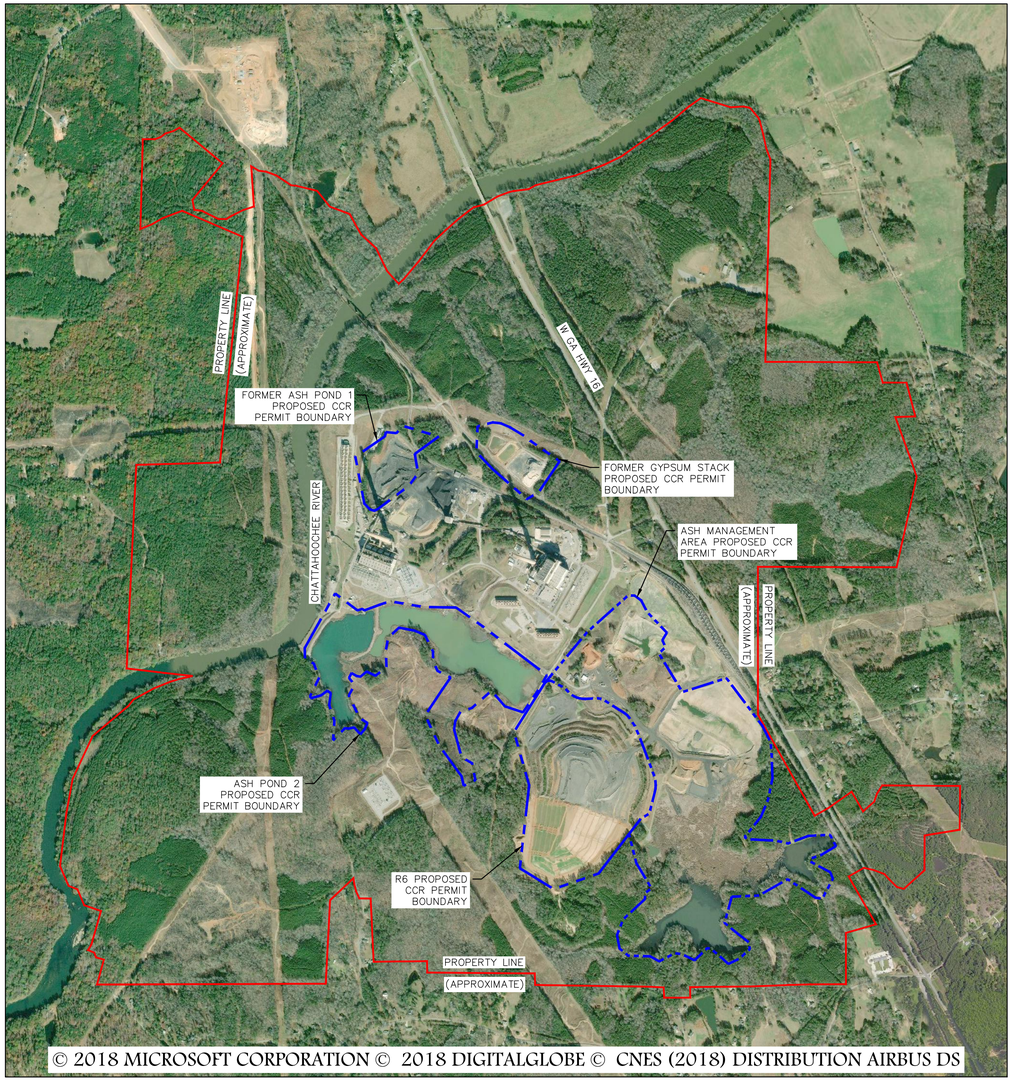
DATE	SHEETS	REQUESTED BY

INDEX OF DRAWINGS

Atlantic Coast Consulting, Inc.
630 Colonial Park Drive, Suite 110, Roswell, GA 30075
770-594-5998

GEORGIA REGISTERED PROFESSIONAL ENGINEER ELIZABETH HENDRICK
11-12-18

Georgia Power



SOURCE: BING MAP 2018
SCALE: 1" = 1000'

N

LEGEND

EXISTING	NEW	DESCRIPTION
		APPROXIMATE PROPERTY BOUNDARY
		CCR PERMIT BOUNDARY
10	10	10' CONTOUR
		2' CONTOUR
		STORMWATER FLOW PATH
		PAVED ROAD
		TREELINE
		RAILROAD
YGWA-43		GROUNDWATER MONITORING WELL
PZ-13S		PIEZOMETER
OHP		OVERHEAD POWER LINE
		POWER POLE
		TRANSMISSION LINE TOWER
		PERMANENT IDENTIFICATION MARKER

GENERAL NOTES:

1. EXISTING PLANT YATES AERIAL TOPOGRAPHY PROVIDED BY GEORGIA POWER DATED MAY 26, 2017.
2. PROPERTY BOUNDARY SHOWN PROVIDED BY SOUTHERN COMPANY SERVICES IN ELECTRONIC FORMAT AND IS APPROXIMATE.
3. ALL DESIGN BY OTHERS. THESE PLANS ARE A REPRESENTATION OF THE PHASES TO CLOSE ASH POND 2 THROUGH REMOVAL OF CCR.
4. ALL EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA." STORMWATER CONTROLS AND BEST MANAGEMENT PRACTICES SHALL BE DESIGNED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPLICABLE NPDES CONSTRUCTION STORMWATER DISCHARGE GENERAL PERMIT, NPDES INDUSTRIAL STORMWATER DISCHARGE GENERAL PERMIT AND/OR THE FACILITY'S NPDES INDUSTRIAL WASTEWATER DISCHARGE INDIVIDUAL PERMIT.
5. STORM WATER DISCHARGES ASSOCIATED WITH ASH POND CLOSURE ACTIVITIES WILL BE COVERED UNDER THE APPLICABLE NPDES CONSTRUCTION STORMWATER DISCHARGE GENERAL PERMIT, NPDES INDUSTRIAL STORMWATER DISCHARGE GENERAL PERMIT AND/OR THE FACILITY'S NPDES INDUSTRIAL WASTEWATER DISCHARGE INDIVIDUAL PERMIT.
6. STATE WATERS BUFFERS SHALL REMAIN UNDISTURBED, EXCEPT WHERE ENCROACHMENT IS REQUIRED TO FACILITATE ASH POND CLOSURE ACTIVITIES. UNLESS OTHERWISE EXEMPTED BY THE APPROPRIATE NPDES CONSTRUCTION STORMWATER DISCHARGE GENERAL PERMIT, A STATE WATERS BUFFER VARIANCE SHALL BE OBTAINED FROM GEORGIA EPD'S WATERSHED PROTECTION BRANCH PRIOR TO BUFFER ENCROACHMENT. GEORGIA EPD'S SOLID WASTE MANAGEMENT BRANCH SHALL BE NOTIFIED WHEN GEORGIA POWER ENVIRONMENTAL AFFAIRS APPLIES FOR A STATE WATERS BUFFER VARIANCE. CONTACT GEORGIA POWER ENVIRONMENTAL AFFAIRS FOR ASSISTANCE.
7. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES FOR THIS PROJECT, THE PERMITTED BOUNDARY, THE LIMITS OF DISTURBANCE AND ALL WETLANDS AND STATE WATERS BUFFERS WITHIN 200 FEET OF THE LIMITS OF DISTURBANCE OR WITHIN THE PROPERTY BOUNDARY (WHICHEVER IS CLOSER) SHALL BE CLEARLY FLAGGED AND STAKED. THESE MARKINGS SHALL BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION / CLOSURE ACTIVITIES. SHOULD ANY OF THE MARKINGS BE DISTURBED, THE CONTRACTOR SHALL NOTIFY GEORGIA POWER COMPANY IMMEDIATELY. ALL CONSTRUCTION PERSONNEL SHALL BE SHOWN THE LOCATION OF THE LIMITS OF DISTURBANCE, STATE WATER BUFFERS, STATE WATERS AND WETLANDS OUTSIDE THE LIMITS OF DISTURBANCE TO PREVENT HEAVY EQUIPMENT ENCROACHMENT INTO THESE AREAS.

GEORGIA REGISTERED PROFESSIONAL ENGINEER ELIZABETH HEADRICK 11-12-18

Georgia Power

PROPERTY BOUNDARY & INDEX

CLOSURE DRAWINGS

FOR
GEORGIA POWER
PLANT YATES
EXISTING CCR SURFACE IMPOUNDMENT - ASH POND 2
COWETA COUNTY, GEORGIA

Atlantic Coast Consulting, Inc.
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630 Colonial Park Dr.
Suite 110
Roswell, GA 30075

PROJ. NO.	I054-107-AP2	DWG.	EDIT 11/12/18
SCALE	1" = 1,000'	SHEET 2 OF 11	
	NOVEMBER 2018		

P:\Industrial\I054 - Southern Company\I07 - Plant Yates CCR Permitting\4 - CCR Permit AP2\1-Drawing\I054-107-AP2-002 (Index).dwg 11/14/18 MATHIEU TRUNNELL

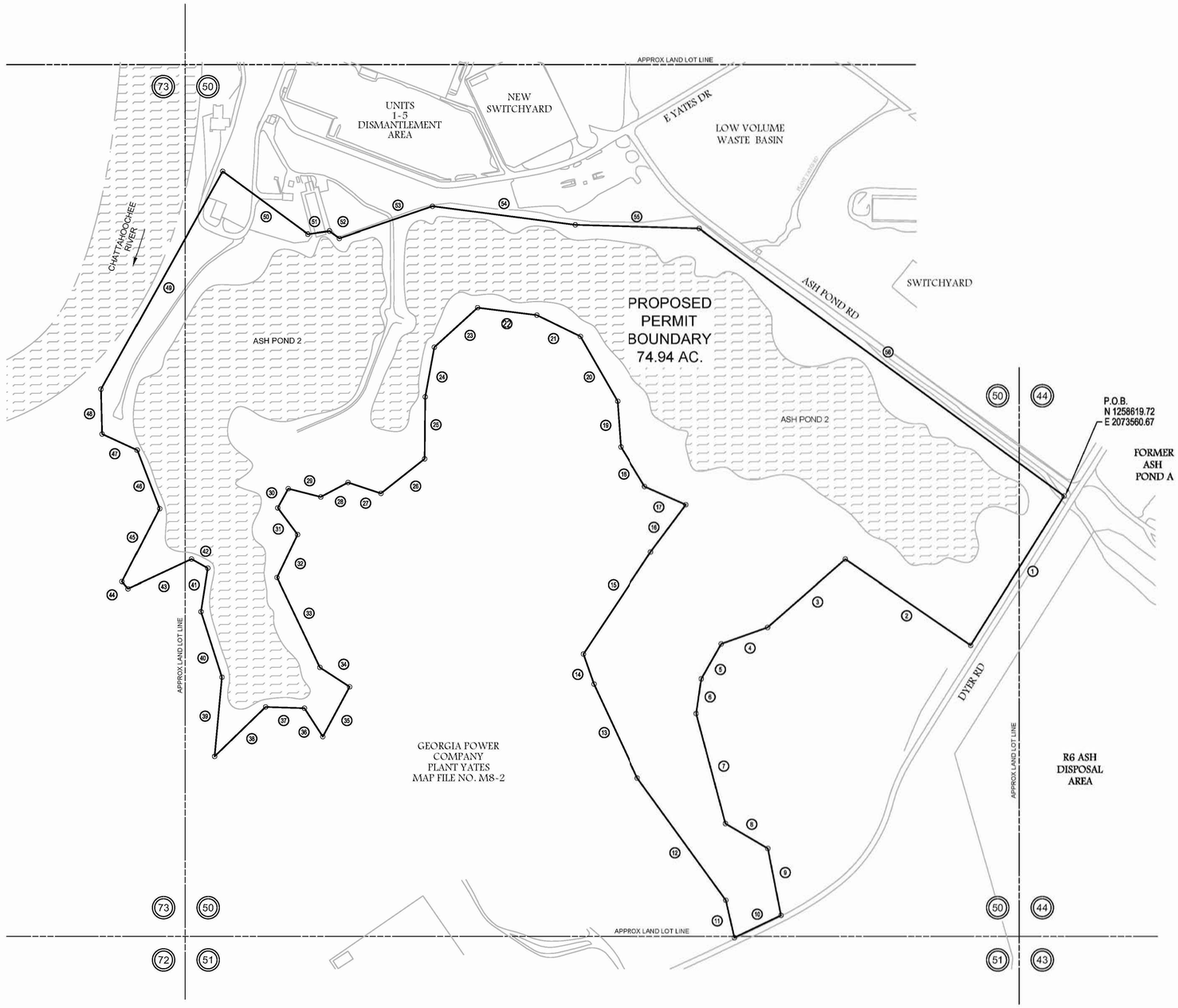
NORTH ARROW & PLAT BEARINGS
BASED ON - GEORGIA STATE PLANE
NAD83(2011) WEST

Plant Yates – CCR Permitted Lands – Ash Pond 2

All that parcel or tract of land lying and being in land lots 44, 50, 51 and 73 of the 4th District, Heard County, Georgia and being more particularly described as follows:

The Point of Beginning is located at the Georgia State Plane, West Zone, NAD83 coordinates of: N 1262995.61 and E 2078620.13; thence running South 32 degrees 03 minutes 53 seconds West a distance of 616.71 feet to a point; Thence running North 55 degrees 34 minutes 29 seconds West a distance of 532.72 feet to a point; Thence running South 48 degrees 47 minutes 12 seconds West a distance of 362.34 feet to a point; Thence running South 70 degrees 28 minutes 04 seconds West a distance of 172.41 feet to a point; Thence running South 29 degrees 38 minutes 19 seconds West a distance of 141.02 feet to a point; Thence running South 08 degrees 29 minutes 47 seconds West a distance of 123.25 feet to a point; Thence running South 14 degrees 55 minutes 42 seconds East a distance of 398.99 feet to a point; Thence running South 59 degrees 29 minutes 07 seconds East a distance of 172.33 feet to a point; Thence running South 11 degrees 09 minutes 07 seconds East a distance of 238.98 feet to a point; Thence running South 64 degrees 22 minutes 55 seconds West a distance of 181.06 feet to a point; Thence running North 12 degrees 56 minutes 15 seconds West a distance of 134.71 feet to a point; Thence running North 35 degrees 58 minutes 15 seconds West a distance of 529.27 feet to a point; Thence running North 24 degrees 59 minutes 31 seconds West a distance of 363.77 feet to a point; Thence running North 19 degrees 21 minutes 59 seconds West a distance of 111.61 feet to a point; Thence running North 33 degrees 38 minutes 00 seconds East a distance of 428.61 feet to a point; Thence running North 36 degrees 43 minutes 14 seconds East a distance of 207.00 feet to a point; Thence running North 66 degrees 13 minutes 34 seconds West a distance of 157.87 feet to a point; Thence running North 31 degrees 31 minutes 02 seconds West a distance of 162.88 feet to a point; Thence running North 04 degrees 05 minutes 17 seconds West a distance of 160.87 feet to a point; Thence running North 29 degrees 55 minutes 03 seconds West a distance of 281.98 feet to a point; Thence running North 63 degrees 58 minutes 35 seconds West a distance of 170.15 feet to a point; Thence running North 82 degrees 47 minutes 33 seconds West a distance of 209.22 feet to a point; Thence running South 47 degrees 35 minutes 23 seconds West a distance of 205.49 feet to a point; Thence running South 10 degrees 22 minutes 06 seconds West a distance of 177.15 feet to a point; Thence running South 00 degrees 33 minutes 15 seconds West a distance of 217.42 feet to a point; Thence running South 51 degrees 40 minutes 08 seconds West a distance of 195.18 feet to a point; Thence running North 71 degrees 41 minutes 13 seconds West a distance of 121.55 feet to a point; Thence running South 62 degrees 04 minutes 07 seconds West a distance of 108.22 feet to a point; Thence running North 75 degrees 42 minutes 03 seconds West a distance of 117.57 feet to a point; Thence running South 28 degrees 37 minutes 30 seconds West a distance of 76.61 feet to a point; Thence running South 36 degrees 29 minutes 26 seconds East a distance of 116.71 feet to a point; Thence running South 25 degrees 35 minutes 54 seconds West a distance of 166.66 feet to a point; Thence running South 25 degrees 32 minutes 03 seconds East a distance of 348.45 feet to a point; Thence running South 56 degrees 49 minutes 07 seconds East a distance of 124.39 feet to a point; Thence running South 28 degrees 17 minutes 26 seconds West a distance of 198.18 feet to a point; Thence running North 32 degrees 51 minutes 39 seconds West a distance of 118.50 feet to a point; Thence running North 88 degrees 08 minutes 42 seconds West a distance of 136.23 feet to a point; Thence running South 45 degrees 53 minutes 03 seconds West a distance of 248.97 feet to a point; Thence running North 05 degrees 18 minutes 02 seconds East a distance of 278.74 feet to a point; Thence running North 17 degrees 42 minutes 03 seconds West a distance of 241.24 feet to a point; Thence running North 08 degrees 50 minutes 29 seconds East a distance of 153.67 feet to a point; Thence running North 60 degrees 48 minutes 12 seconds West a distance of 65.37 feet to a point; Thence running South 64 degrees 55 minutes 37 seconds West a distance of 244.56 feet to a point; Thence running North 40 degrees 30 minutes 11 seconds West a distance of 33.07 feet to a point; Thence running North 27 degrees 18 minutes 11 seconds West a distance of 287.09 feet to a point; Thence running North 20 degrees 59 minutes 14 seconds West a distance of 220.03 feet to a point; Thence running North 65 degrees 19 minutes 32 seconds West a distance of 134.60 feet to a point; Thence running North 01 degrees 25 minutes 40 seconds West a distance of 157.43 feet to a point; Thence running North 29 degrees 10 minutes 20 seconds East a distance of 873.68 feet to a point; Thence running South 53 degrees 40 minutes 15 seconds East a distance of 370.53 feet to a point; Thence running North 81 degrees 56 minutes 16 seconds East a distance of 76.36 feet to a point; Thence running South 53 degrees 40 minutes 35 seconds East a distance of 42.96 feet to a point; Thence running North 71 degrees 04 minutes 58 seconds East a distance of 344.91 feet to a point; Thence running South 82 degrees 34 minutes 57 seconds East a distance of 504.95 feet to a point; Thence running South 88 degrees 20 minutes 51 seconds East a distance of 437.17 feet to a point; Thence running South 53 degrees 46 minutes 24 seconds East a distance of 1585.66 feet to a point and The Point of Beginning.

Said tract contains 74.94 acres (3,264,306 square feet).



CCR PERMIT ASH POND 2

74.94 AC. 3,264,306 SQ.FT.

GRAPHIC SCALE

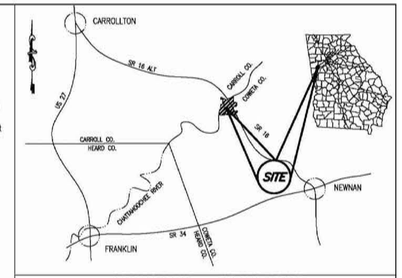
200 0 100 200 300 600

(IN FEET)

1 INCH = 200 FEET

UTILITY LEGEND

- Electric Manhole
- Electric Meter
- Gas Manhole
- Gas Valve
- Gas Meter
- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- Storm Sewer Manhole
- Telephone Manhole
- Water Manhole
- Water Valve
- Water Meter
- Fire Hydrant
- Well
- Power Pole
- Transmission Tower
- Guy Wire



LOCATION MAP – NOT TO SCALE

PLAT ABBREVIATIONS

IPF – Iron Pin Found
IPS – Iron Pin Set
FPS – Fence Post Set
OTP – Open Top Pipe
CTP – Crimp Top Pipe
Conc. – Concrete
Alumn. – Aluminum
P/L – Property Line
R/W – Right of Way
C/L – Centerline
F/L – Fenceline
T/L – Transmission Line
N/F – Now or Formerly
DB – Deed Book
PB – Plat Book
MF – Map File No.
N.T.S. – Not to Scale
P.O.C.– Point of Commencement
P.O.B.– Point of Beginning
GBH – Geotechnical Bore Hole
UGP – Underground Power
OHU – Overhead Utilities
GPC – Georgia Power Company

(1173) Land Lot

Land Lot Line

Open Water / Ash Pond

Proposed CCR Permit Boundary

MONUMENTATION LEGEND

- Iron Pin Set
- Iron Pin Found
- Monument Set
- Monument Found
- Computed Point
- Control or Traverse Point
- Geodetic Control Point
- Benchmark or Temporary Benchmark (TBM)

Plant Yates CCR Permit Ash Pond 2 Call Table

Course	Bearing	Distance
1	S 32°03'53" W	616.71'
2	N 55°34'29" W	532.72'
3	S 48°47'12" W	362.34'
4	S 70°28'04" W	172.41'
5	S 29°38'19" W	141.02'
6	S 08°29'47" W	123.25'
7	S 14°55'42" E	398.99'
8	S 59°29'07" E	172.33'
9	S 11°09'07" E	238.98'
10	S 64°22'55" W	181.06'
11	N 12°56'15" W	134.71'
12	N 35°58'15" W	529.27'
13	N 24°59'31" W	363.77'
14	N 19°21'59" W	111.61'
15	N 33°38'00" E	428.61'
16	N 36°43'14" E	207.00'
17	N 66°13'34" W	157.87'
18	N 31°31'02" W	162.88'
19	N 04°05'17" W	160.87'
20	N 29°55'03" W	281.98'
21	N 63°58'35" W	170.15'
22	N 82°47'33" W	209.22'
23	S 47°35'23" W	205.49'
24	S 10°22'06" W	177.15'
25	S 00°33'15" W	217.42'
26	S 51°40'08" W	195.18'
27	N 71°41'13" W	121.55'
28	S 62°04'07" W	108.22'
29	N 75°42'03" W	117.57'
30	S 28°37'30" W	76.61'
31	S 36°29'26" E	116.71'
32	S 25°35'54" W	166.66'
33	S 25°32'03" E	348.45'
34	S 56°49'07" E	124.39'
35	S 28°17'26" W	198.18'
36	N 32°51'39" W	118.50'
37	N 88°08'42" W	136.23'
38	S 45°53'03" W	248.97'
39	N 05°18'02" E	278.74'
40	N 17°42'03" W	241.24'
41	N 08°50'29" E	153.67'
42	N 60°48'12" W	65.37'
43	S 64°55'37" W	244.56'
44	N 40°30'11" W	33.07'
45	N 27°18'11" E	287.09'
46	N 20°59'14" W	220.03'
47	N 65°19'32" W	134.60'
48	N 01°25'40" W	157.43'
49	N 29°10'20" E	873.68'
50	S 53°40'15" E	370.53'
51	N 81°56'16" E	76.36'
52	S 53°40'35" E	42.96'
53	N 71°04'58" E	344.91'
54	S 82°34'57" E	504.95'
55	S 88°20'51" E	437.17'
56	S 53°46'24" E	1585.66'

PERMIT BOUNDARY & LEGAL DESCRIPTION

CLOSURE DRAWINGS

FOR
GEORGIA POWER
PLANT YATES
EXISTING CCR SURFACE IMPOUNDMENT - ASH POND 2
COWETA COUNTY, GEORGIA

PATH – T:\Working2\Ash\Yates\20180900027 Plant Yates – Ash Pond CCR Permitting – Surveying Support

SHEET 3 OF 11

NOTE: NO FIELD WORK WAS PERFORMED

NOTE: BACKGROUND IMPROVEMENTS PER YATES CCR BOUNDARIES DRAWING PROVIDED BY GPC, DATED SEPTEMBER 4, 2018

REFERENCES:

1. GPC DRAWING 2018-9-4 YATES CCR BOUNDARIES

2. PROPOSED CCR PERMIT BOUNDARIES BY ATLANTIC COAST CONSULTING, DATED AUGUST 2018.

SURVEYOR: WILLIAM J. DANIEL III
P.L.S. #2257
LOWE ENGINEERS LLC
990 HAMMOND DRIVE SUITE 900
ATLANTA, GA 30328
PHONE (770) 857-8400

GEORGIA REGISTERED No. 2257 PROFESSIONAL LAND SURVEYOR WILLIAM J. DANIEL III

I hereby certify that this survey has been prepared in conformity with The Technical Standards for Property Surveys in Georgia as set forth in Chapter 180-7 on the Rules of the Georgia Board of Registration for Professional Engineers and Land Surveyors and as set forth in the Georgia Plat Act O.C.G.A. 15-6-67.

And further certify that according to Georgia Code Section 15-6-67(d), this plat is not required to be reviewed by any local governing authorities prior to recording. Per said section, "No approval shall be required if no new streets or roads are created or no new utility improvements are required or no new sanitary sewer or approval of a septic tank is required." No such improvements are required hereon.

Date: October 19, 2018

APPROVALS

BOUNDARY BLOCK

GEORGIA POWER CO., ATLANTA, GA.
Land Department

Survey of
Plant Yates – Former Ash Pond 2
Permitted Site Boundary

LAND LOTS 44, 50, 51 & 73, 4TH DISTRICT, COWETA COUNTY, GEORGIA

DR.	TR.	Checked
DE		WJDIII
SCALE		DATE
1" = 200'		10.22.2018

DRAWING NUMBER

P469-8(2)

NPDES OUTFALL 01

NPDES SUMP

PERMANENT IDENTIFICATION MARKER FOR ASH POND 2. (MAY BE RELOCATED AS NECESSARY FOR OPERATIONS)

YGWC-26S
YGWC-26I

CHATTAHOOCHEE RIVER

YGWC-27I
YGWC-27S

YGWC-28I
YGWC-28S

ASH POND 2 WEST

EMERGENCY OVERFLOW

YGWC-29I

CROSS SECTION (TYP.)

EMERGENCY DISSIPATION DIKE

UNITS 1-5 DISMANTLEMENT AREA

NEW SWITCHYARD

ON-SITE WASTEWATER TREATMENT SYSTEM

LOW VOLUME WASTE BASIN

COOLING TOWERS

ASH POND 2 EAST

AMAX COVE DAM (DETAIL SHEET 11)

TOP ELEV. 728

YGWA-30I

PZ-31S

CCR PERMIT BOUNDARY (TYP.)

OVERHEAD TRANSMISSION LINES (TYP.)

AMAX COVE (CLOSED BY REMOVAL)

PZ-13I
PZ-13S

YGWA-14S
PZ-14I

R6 CCR LANDFILL PERMIT # 038-011D(LI)

YGWC-43

YGWA-1I
YGWA-1D
PZ-01S

YGWA-3I

YGWA-2I

YGWC-42

YGWA-6I
YGWA-6S

PZ-06D

PZ-48

YGWC-49

FORMER ASH POND A

PZ-25I
PZ-25S

DYER ROAD

YGWC-24S
PZ-24I

PZ-35

YGWC-36

YGWC-33S

(PROPOSED) YGWC-50

N

200 0 100 200 400 800

SCALE (IN FEET)

NOTES:

1. EXISTING PLANT YATES AERIAL TOPOGRAPHY PROVIDED BY GEORGIA POWER DATED MAY 26, 2017.

GEORGIA REGISTERED NO. 27857 PROFESSIONAL ENGINEER ELIZABETH HEADRICK 11-12-18

Georgia Power

EXISTING CONDITIONS

CLOSURE DRAWINGS

FOR

GEORGIA POWER

PLANT YATES

EXISTING CCR SURFACE IMPOUNDMENT - ASH POND 2

COWETA COUNTY, GEORGIA

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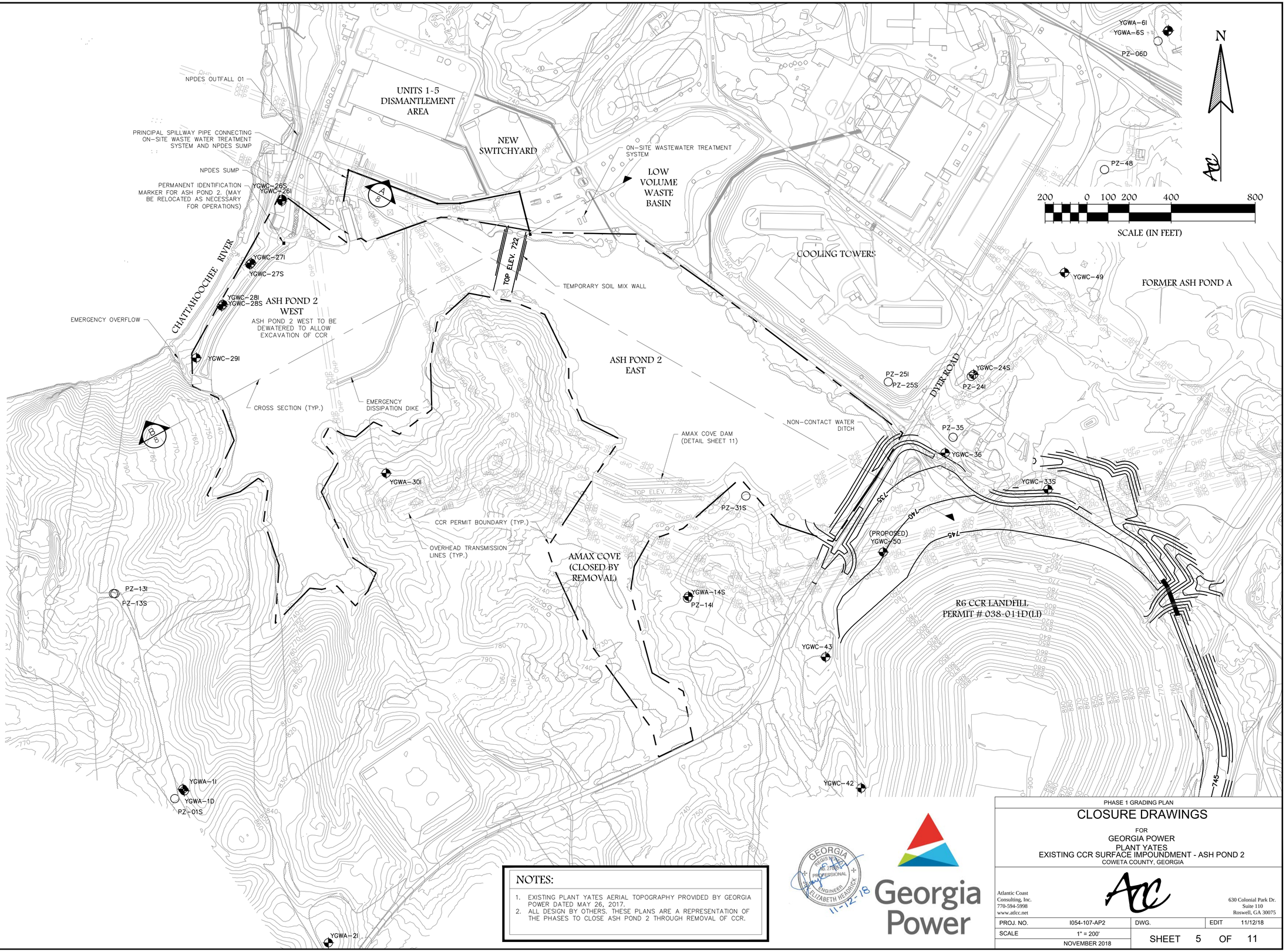
630 Colonial Park Dr.
Suite 110
Roswell, GA 30075

PROJ. NO.	I054-107-AP2	DWG.	EDIT	11/12/18
SCALE	1" = 200'	SHEET 4 OF 11		
	NOVEMBER 2018			

P:\Vickers\I054 - Southern Company\I07 - Plant Yates CCR Permitting\4 - CCR Permit AP2\1-Drawings\I054-107-AP2-004 (AP2 Existing).dwg 11/15/18 BETH HEADRICK



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GEORGIA REGISTERED NO. 27857 PROFESSIONAL ENGINEER ELIZABETH HEADRICK 11-12-18

Georgia Power

PHASE 1 GRADING PLAN

CLOSURE DRAWINGS

FOR

GEORGIA POWER

PLANT YATES

EXISTING CCR SURFACE IMPOUNDMENT - ASH POND 2

COWETA COUNTY, GEORGIA

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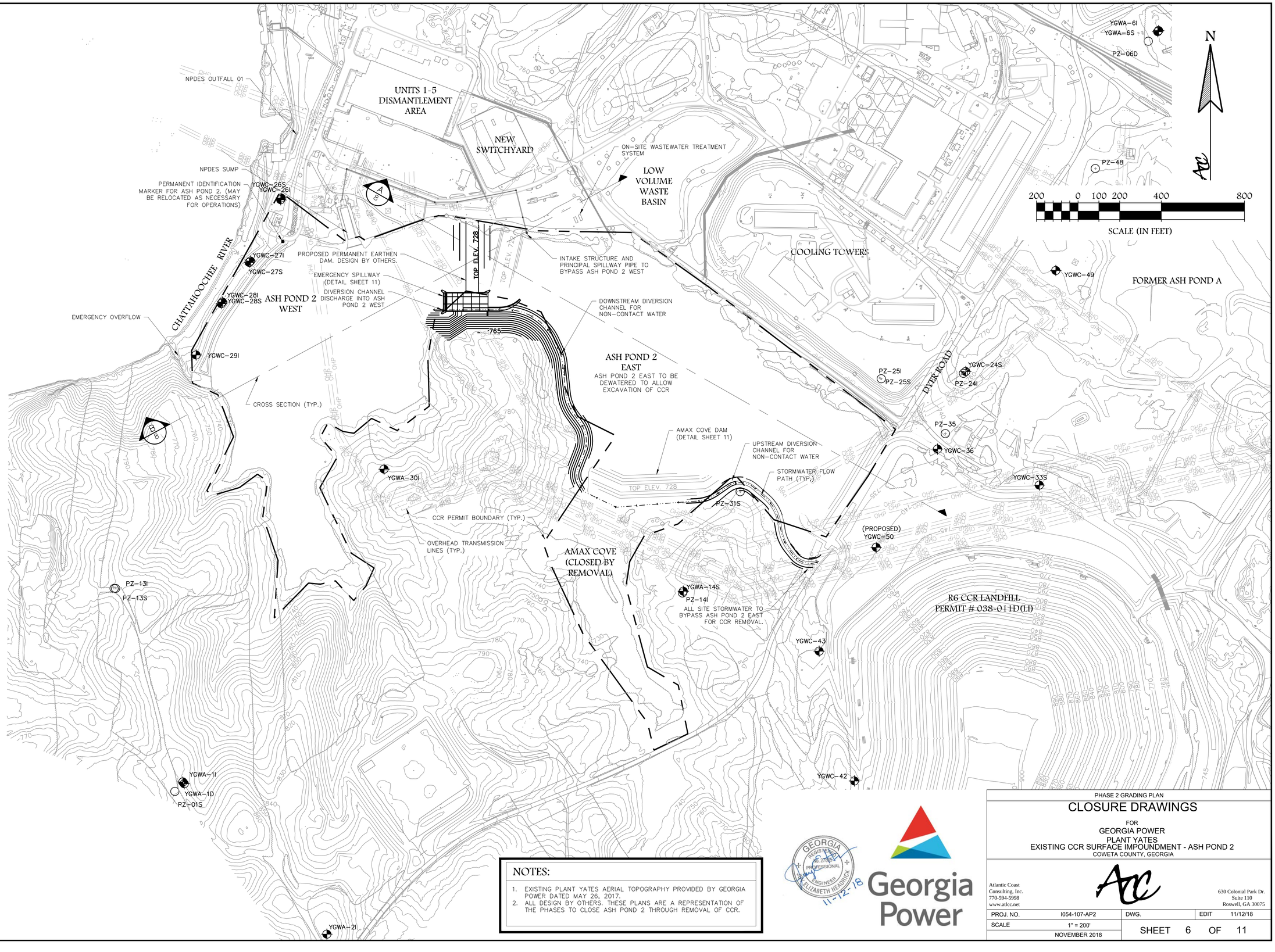
SCALE	1" = 200'	SHEET 5 OF 11		
	NOVEMBER 2018			

P:\Vickers\I054 - Southern Company\I07 - Plant Yates CCR Permitting\4 - CCR Permit AP2\1-Drawings\I054-107-AP2-005 (AP2 Phase 1).dwg 11/19/18 BETH HEADRICK



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GEORGIA REGISTERED PE 27862 PROFESSIONAL ENGINEER BETH ELIZABETH HEADRICK 11-12-18

Georgia Power

PHASE 2 GRADING PLAN

CLOSURE DRAWINGS

FOR

GEORGIA POWER

PLANT YATES

EXISTING CCR SURFACE IMPOUNDMENT - ASH POND 2

COWETA COUNTY, GEORGIA

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SCALE	1" = 200'	SHEET 6 OF 11	
	NOVEMBER 2018		

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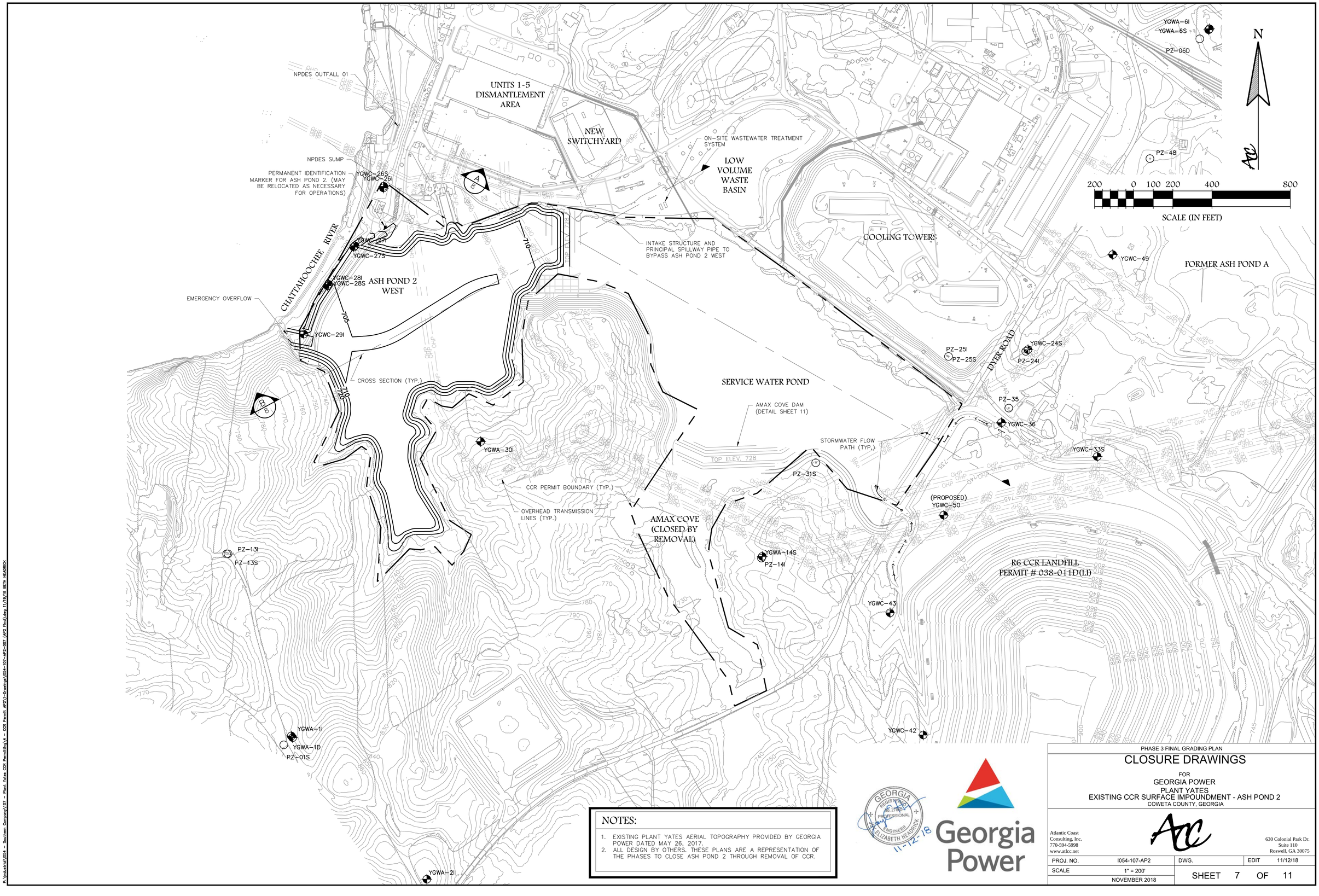

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GEORGIA REGISTERED PROFESSIONAL ENGINEER ELIZABETH HEADRICK 11-12-18

Georgia Power

PHASE 3 FINAL GRADING PLAN

CLOSURE DRAWINGS

FOR

GEORGIA POWER

PLANT YATES

EXISTING CCR SURFACE IMPOUNDMENT - ASH POND 2

COWETA COUNTY, GEORGIA

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SCALE	1" = 200'	SHEET 7 OF 11	
	NOVEMBER 2018		

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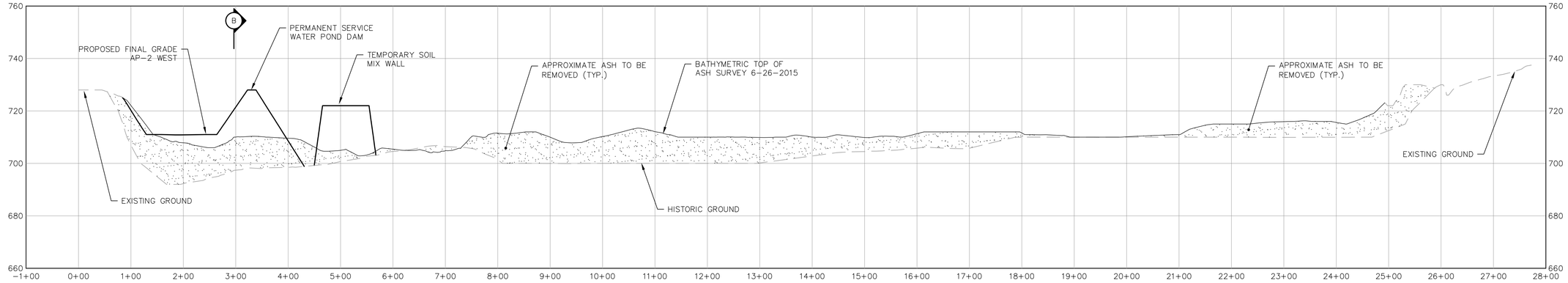
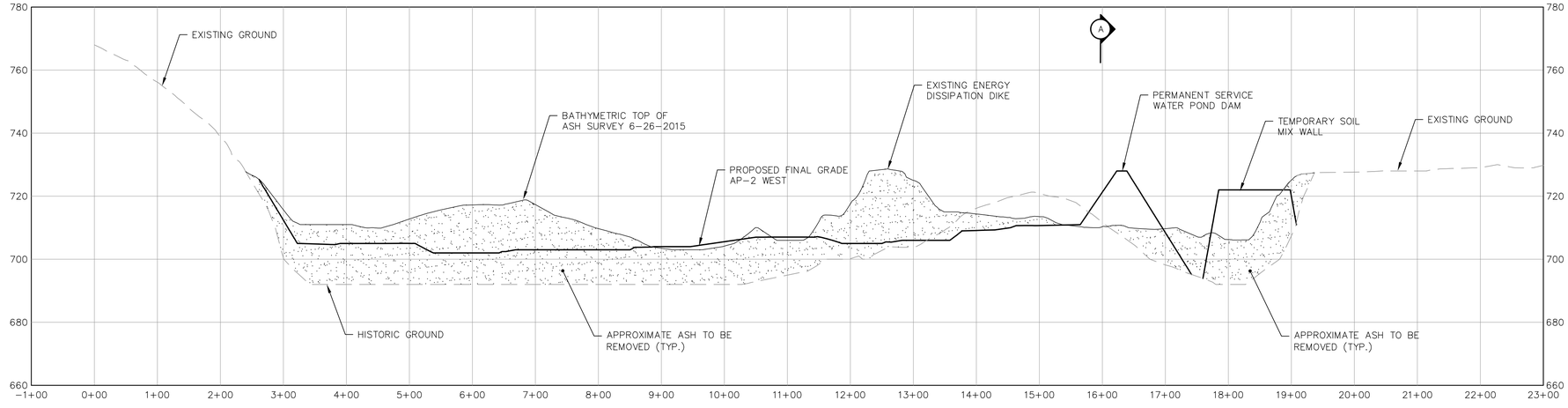
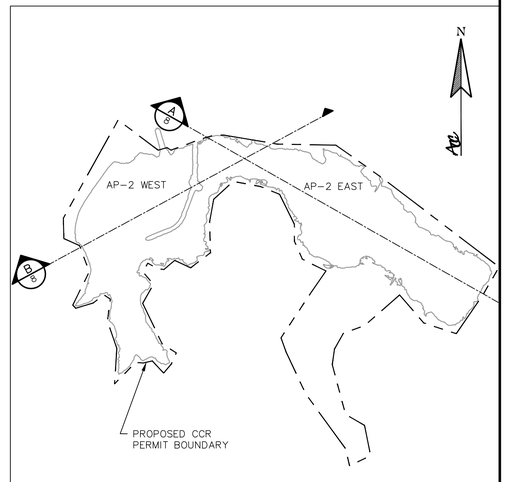


SECTION A
SCALE: 1"=100' HORIZONTAL
1"=20' VERTICAL



SECTION B
SCALE: 1"=100' HORIZONTAL
1"=20' VERTICAL



AP-2 SECTION KEY

NOTES:

1. EXISTING GROUND FROM PLANT YATES AERIAL TOPOGRAPHY PROVIDED BY GEORGIA POWER DATED MAY 26, 2017.
2. BATHYMETRIC TOP OF ASH SURVEY PROVIDED BY GEORGIA POWER DATED JUNE 26, 2015.
3. HISTORIC GROUND PROVIDED BY GEORGIA POWER.
4. ASH WILL BE MECHANICALLY EXCAVATED TO HISTORIC GROUND OR BELOW BASED ON VISUAL INSPECTION. A MINIMUM OF SIX INCHES OF SUBGRADE SOIL WILL REMOVED AFTER VISIBLE ASH REMOVED.
5. UPON COMPLETION OF ASH REMOVAL AND CLOSURE CERTIFICATION AP-2 WEST WILL BE FILLED IN TO PROPOSED FINAL GRADES AND AP-2 EAST WILL SERVE AS THE SERVICE WATER POND FOR PLANT OPERATIONS.

GEORGIA REGISTERED PE 27844 PROFESSIONAL ENGINEER ELIZABETH HEADRICK 11-12-18

Georgia Power

SECTIONS

CLOSURE DRAWINGS

FOR
GEORGIA POWER
PLANT YATES
EXISTING CCR SURFACE IMPOUNDMENT - ASH POND 2
COWETA COUNTY, GEORGIA

Atlantic Coast Consulting, Inc.
770-594-5998
www.atlcc.net

630 Colonial Park Dr.
Suite 110
Roswell, GA 30075

PROJ. NO.	I054-107-AP2	DWG.	EDIT	11/12/18
SCALE	N/A	SHEET 8 OF 11		
	NOVEMBER 2018			

P:\Vickers\V054 - Southern Company\107 - Plant Yates CCR Permits\14 - CCR Permit AP2\1-Drawings\I054-107-AP2-008 (AP2 SECTION).dwg 11/14/18 MATHIEU TRUNNELL

NPDES OUTFALL 01

NPDES SUMP

PERMANENT IDENTIFICATION MARKER FOR ASH POND 2. (MAY BE RELOCATED AS NECESSARY FOR OPERATIONS)

YGWC-26S
YGWC-26I

UNITS 1-5 DISMANTLEMENT AREA

NEW SWITCHYARD

ON-SITE WASTEWATER TREATMENT SYSTEM

LOW VOLUME WASTE BASIN

A
A'

B
B'

C
C'

CHATTAHOOCHEE RIVER

YGWC-27I
YGWC-27S

Ch
CHANNEL STABILIZATION

EMERGENCY OVERFLOW

YGWC-28I
YGWC-28S

ASH POND 2 WEST

Ds3
ALL DISTURBED AREAS

Du
Ds1 Ds2
ALL DISTURBED AREAS

YGWC-29I

CROSS SECTION (TYP.)

INTAKE STRUCTURE AND PRINCIPAL SPILLWAY PIPE TO BYPASS ASH POND 2 WEST

TOP ELEV. 728

COOLING TOWERS

SERVICE WATER POND

AMAX COVE DAM (DETAIL SHEET 11)

STORMWATER FLOW PATH (TYP.)

YGWA-30I

CCR PERMIT BOUNDARY (TYP.)

OVERHEAD TRANSMISSION LINES (TYP.)

AMAX COVE (CLOSED BY REMOVAL)

PZ-31S

Du
Ds3
Ds1 Ds2
ALL DISTURBED AREAS

YGWA-14S
PZ-14I

(PROPOSED) YGWC-50

R6 CCR LANDFILL PERMIT # 038-011D(LI)

YGWC-43

YGWC-42

YGWA-1I
YGWA-1D
PZ-01S

YGWA-3I
YGWA-3D
PZ-03S

YGWA-2I

YGWA-6I
YGWA-6S
PZ-06D

PZ-48

YGWC-49

FORMER ASH POND A

PZ-25I
PZ-25S

DYER ROAD

YGWC-24S
PZ-24I

Co
CONSTRUCTION EXIT

PZ-35

YGWC-36

YGWC-33S

N

200 0 100 200 400 800
SCALE (IN FEET)

NOTES:

1. EXISTING PLANT YATES AERIAL TOPOGRAPHY PROVIDED BY GEORGIA POWER DATED MAY 26, 2017.
2. ALL DESIGN BY OTHERS. THESE PLANS ARE A REPRESENTATION OF THE PHASES TO CLOSE ASH POND 2 THROUGH REMOVAL OF CCR.
3. ALL EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA." STORMWATER CONTROLS AND BEST MANAGEMENT PRACTICES SHALL BE DESIGNED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPLICABLE NPDES CONSTRUCTION STORMWATER DISCHARGE GENERAL PERMIT, NPDES INDUSTRIAL STORMWATER DISCHARGE GENERAL PERMIT AND/OR THE FACILITY'S NPDES INDUSTRIAL WASTEWATER DISCHARGE INDIVIDUAL PERMIT.
4. STORM WATER DISCHARGES ASSOCIATED WITH ASH POND CLOSURE ACTIVITIES WILL BE COVERED UNDER THE APPLICABLE NPDES CONSTRUCTION STORMWATER DISCHARGE GENERAL PERMIT, NPDES INDUSTRIAL STORMWATER DISCHARGE GENERAL PERMIT AND/OR THE FACILITY'S NPDES INDUSTRIAL WASTEWATER DISCHARGE INDIVIDUAL PERMIT.
5. STATE WATERS BUFFERS SHALL REMAIN UNDISTURBED, EXCEPT WHERE ENCROACHMENT IS REQUIRED TO FACILITATE ASH POND CLOSURE ACTIVITIES. UNLESS OTHERWISE EXEMPTED BY THE APPROPRIATE NPDES CONSTRUCTION STORMWATER DISCHARGE GENERAL PERMIT, A STATE WATERS BUFFER VARIANCE SHALL BE OBTAINED FROM GEORGIA EPD'S WATERSHED PROTECTION BRANCH PRIOR TO BUFFER ENCROACHMENT. GEORGIA EPD'S SOLID WASTE MANAGEMENT BRANCH SHALL BE NOTIFIED WHEN GEORGIA POWER ENVIRONMENTAL AFFAIRS APPLIES FOR A STATE WATERS BUFFER VARIANCE. CONTACT GEORGIA POWER ENVIRONMENTAL AFFAIRS FOR ASSISTANCE.
6. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES FOR THIS PROJECT, THE PERMITTED BOUNDARY, THE LIMITS OF DISTURBANCE AND ALL WETLANDS AND STATE WATERS BUFFERS WITHIN 200 FEET OF THE LIMITS OF DISTURBANCE OR WITHIN THE PROPERTY BOUNDARY (WHICHEVER IS CLOSER) SHALL BE CLEARLY FLAGGED AND STAKED. THESE MARKINGS SHALL BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION / CLOSURE ACTIVITIES. SHOULD ANY OF THE MARKINGS BE DISTURBED, THE CONTRACTOR SHALL NOTIFY GEORGIA POWER COMPANY IMMEDIATELY. ALL CONSTRUCTION PERSONNEL SHALL BE SHOWN THE LOCATION OF THE LIMITS OF DISTURBANCE, STATE WATER BUFFERS, STATE WATERS AND WETLANDS OUTSIDE THE LIMITS OF DISTURBANCE TO PREVENT HEAVY EQUIPMENT ENCROACHMENT INTO THESE AREAS.

GEORGIA REGISTERED NO. 27867 PROFESSIONAL ENGINEER HEATHER ELIZABETH HEADRICK 11-12-18

Georgia Power

EROSION & SEDIMENTATION CONTROL PLAN

CLOSURE DRAWINGS

FOR
GEORGIA POWER
PLANT YATES
EXISTING CCR SURFACE IMPOUNDMENT - ASH POND 2
COWETA COUNTY, GEORGIA

Atlantic Coast Consulting, Inc.
770-594-5998
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630 Colonial Park Dr.
Suite 110
Roswell, GA 30075

PROJ. NO.	I054-107-AP2	DWG.	EDIT	11/12/18
SCALE	1" = 200'	SHEET 9 OF 11		
	NOVEMBER 2018			

P:\Vulcan\I054 - Southern Company\107 - Plant Yates CCR Permitting\4 - CCR Permit AP2\1-Drawings\I054-107-AP2-009 (AP2 EAS).dwg 11/19/18 BETH HEADRICK

DEFINITION
IMPROVING, CONSTRUCTING OR STABILIZING AN OPEN CHANNEL FOR WATER CONVEYANCE.

CONDITIONS
THIS STANDARD APPLIES TO THE IMPROVEMENT, CONSTRUCTION OR STABILIZATION OF OPEN CHANNELS AND EXISTING DITCHES WITH DRAINAGE AREAS LESS THAN ONE SQUARE MILE. THIS STANDARD APPLIES ONLY TO CHANNELS CONVEYING INTERMITTENT FLOW, NOT TO CHANNELS CONVEYING A CONTINUOUS, LIVE STREAM. AN ADEQUATE OUTLET FOR THE MODIFIED CHANNEL LENGTH MUST BE AVAILABLE FOR DISCHARGE BY GRAVITY FLOW. CONSTRUCTION OR OTHER IMPROVEMENTS OF THE CHANNEL SHOULD NOT ADVERSELY AFFECT THE ENVIRONMENTAL INTEGRITY OF THE AREA AND MUST NOT CAUSE SIGNIFICANT EROSION UPSTREAM OR FLOODING AND/OR SEDIMENT DEPOSITION DOWNSTREAM.

CHANNEL LININGS AND STRUCTURAL MEASURES
WHERE CHANNEL VELOCITIES EXCEED SAFE VELOCITIES FOR VEGETATED LINING DUE TO INCREASED GRADE OR A CHANGE IN CHANNEL CROSS-SECTION, OR WHERE DURABILITY OF VEGETATIVE LINING IS ADVERSELY AFFECTED BY SEASONAL CHANGES, CHANNEL LININGS OF ROCK, CONCRETE OR OTHER DURABLE MATERIAL MAY BE NEEDED. GRADE STABILIZATION STRUCTURES MAY ALSO BE NEEDED. CHANNELS MAY BE STABILIZED BY USING ONE OR MORE OF THE FOLLOWING METHODS:

CATEGORY 1 LINING (0-5 FT/SEC) (Ch-1)

VEGETATED LINING SHALL BE DESIGNED TO RESIST EROSION WHEN THE CHANNEL IS FLOWING AT THE BANKFULL DISCHARGE OR 25-YEAR FREQUENCY DISCHARGE, WHICHEVER IS THE LESSER. TEMPORARY EROSION CONTROL BLANKETS OR SOD SHALL BE USED ON ALL CHANNELS AND CONCENTRATED FLOW AREAS TO AID IN THE ESTABLISHMENT OF THE VEGETATED LINING.

CATEGORY 2 LININGS (5-10 FT/SEC) (Ch-2)

VEGETATED LINING

IF A VEGETATED LINING IS DESIRED IN A CHANNEL WITH VELOCITIES BETWEEN 5-10 FT/SEC, TURF REINFORCEMENT MATTING (TRM) SHALL BE USED. TRM IS PERMANENT GEOSYNTHETIC EROSION CONTROL MATTING THAT IS USED IN CHANNELS TO STABILIZE THE SOIL WHILE PERMANENT VEGETATION IS ROOTING, AND TO PROVIDE ADDITIONAL LONG-TERM PROTECTION. REFER TO SPECIFICATIONS DS3 – DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION) AND DS4 – DISTURBED AREA STABILIZATION (WITH SODDING).

ROCK RIPRAP LINING

ROCK RIPRAP SHALL BE DESIGNED TO RESIST DISPLACEMENT WHEN THE CHANNEL IS FLOWING AT THE BANKFULL DISCHARGE OR 25-YEAR FREQUENCY DISCHARGE, WHICHEVER IS THE LESSER. ROCK RIPRAP LINING SHOULD BE USED WHEN CHANNEL VELOCITIES ARE BETWEEN 5 AND 10 FT/SEC. DUMPED AND MACHINE PLACED RIPRAP SHOULD NOT BE INSTALLED ON SLOPES STEEPER THAN 1-1/2 HORIZONTAL TO 1 VERTICAL. ROCK SHALL BE DENSE, RESISTANT TO THE ACTION OF AIR AND WATER, AND SUITABLE IN ALL OTHER RESPECTS FOR THE PURPOSE INTENDED. ROCK SHALL BE INSTALLED ACCORDING TO STANDARDS SPECIFIED IN RIPRAP, APPENDIX C.

A FILTER BLANKET LAYER CONSISTING OF AN APPROPRIATELY DESIGNED GRADED FILTER SAND AND/OR GRAVEL OR GEOTEXTILE MATERIAL SHALL BE PLACED BETWEEN THE RIPRAP AND BASE MATERIAL. THE GRADATION OF THE FILTER BLANKET MATERIAL SHALL BE DESIGNED TO CREATE A GRADED FILTER BETWEEN THE BASE MATERIAL AND THE RIPRAP. A GEOTEXTILE CAN BE USED AS A SUBSTITUTION FOR A LAYER OF SAND IN A GRADED FILTER OR AS THE FILTER BLANKET. CRITERIA FOR SELECTING AN APPROPRIATE GEOTEXTILE AND GUIDANCE FOR RECOMMENDED DROP HEIGHTS AND STONE WEIGHTS ARE FOUND IN AASH-TO M288-96 SECTION 7.5, PERMANENT EROSION CONTROL SPECIFICATIONS.

CATEGORY 3 LININGS (>10 FT/SEC) (Ch-3)

CONCRETE LINING

IF A CHANNEL HAS VELOCITIES HIGH ENOUGH TO REQUIRE A CONCRETE LINING (WHEN CHANNEL VELOCITIES EXCEED 10 FT/SEC), METHODS SHOULD BE UTILIZED TO REDUCE THE VELOCITY OF THE RUNOFF AND REDUCE EROSION AT THE OUTLET – A COMMON PROBLEM CREATED BY THE SMOOTH, CONCRETE LINING. REFER TO SPECIFICATION ST – STORM DRAIN OUTLET PROTECTION FOR INFORMATION REGARDING ENERGY DISSIPATORS. IF A CONCRETE LINING IS CHOSEN, IT SHALL BE DESIGNED ACCORDING TO CURRENTLY ACCEPTED GUIDES FOR STRUCTURAL AND HYDRAULIC ADEQUACY. IT MUST BE DESIGNED TO CARRY THE REQUIRED DISCHARGE AND TO WITHSTAND THE LOADING IMPOSED BY SITE CONDITIONS. A SEPARATION GEOTEXTILE SHOULD BE PLACED UNDER CONCRETE LININGS TO PREVENT UNDERMINING IN THE EVENT OF STRESS CRACKS DUE TO SETTLEMENT OF THE BASE MATERIAL. THE SEPARATION GEOTEXTILE WILL KEEP THE BASE MATERIAL SOILS IN PLACE AND MINIMIZE THE LIKELIHOOD OF A SYSTEM FAILURE.

GRADE STABILIZATION STRUCTURES

GRADE STABILIZATION STRUCTURES ARE USED TO REDUCE OR PREVENT EXCESSIVE EROSION BY REDUCTION OF VELOCITIES IN THE WATERCOURSE OR BY PROVIDING STRUCTURES THAT CAN WITHSTAND AND REDUCE THE HIGHER VELOCITIES. THEY MAY BE CONSTRUCTED OF CONCRETE, ROCK, MASONRY, STEEL, ALUMINUM, OR TREATED WOOD.
THESE STRUCTURES ARE CONSTRUCTED WHERE THE CAPABILITY OF EARTH AND VEGETATIVE MEASURES IS EXCEEDED IN THE SAFE HANDLING OF WATER AT PERMISSIBLE VELOCITIES, WHERE EXCESSIVE GRADES OR OVERALL CONDITIONS ARE ENCOUNTERED OR WHERE WATER IS TO BE LOWERED STRUCTURALLY FROM ONE ELEVATION TO ANOTHER. THESE STRUCTURES SHOULD GENERALLY BE PLANNED AND INSTALLED ALONG WITH OR AS A PART OF OTHER EROSION CONTROL PRACTICES. THE STRUCTURES SHALL BE DESIGNED HYDRAULICALLY TO ADEQUATELY CARRY THE CHANNEL DISCHARGE AND STRUCTURALLY TO WITHSTAND LOADINGS IMPOSED BY THE SITE CONDITIONS. THE STRUCTURE SHALL MEET REQUIREMENTS OF GR – GRADE STABILIZATION STRUCTURE.

SPECIFICATIONS

1. WHERE NEEDED, ALL TREES, BRUSH, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED SO THEY WILL NOT INTERFERE WITH THE CONSTRUCTION OR PROPER FUNCTIONING OF THE CHANNEL.
2. WHERE POSSIBLE, TREES WILL BE LEFT STANDING, AND STUMPS WILL NOT BE REMOVED.
3. EXCAVATION SHALL BE AT THE LOCATIONS AND GRADES SHOWN ON THE DRAWINGS. THE LINING SHALL NOT COMPROMISE THE CAPACITY OF THE CHANNEL, E.G. THE EMERGENCY SPILLWAY SHALL BE OVER-EXCAVATED SO THAT THE LINING WILL BE FLUSH WITH THE SLOPE SURFACE.
4. THE GEOTEXTILE SHALL BE PLACED ON A SMOOTH GRADED SURFACE. THE GEOTEXTILE SHALL BE PLACED IN SUCH A MANNER THAT IT WILL NOT EXCESSIVELY STRETCH OR TEAR UPON PLACEMENT OF THE OVERLYING MATERIALS. CARE SHOULD BE TAKEN TO PLACE THE GEOTEXTILE IN INTIMATE CONTACT WITH THE SOIL SUCH THAT NO VOID SPACES EXIST BETWEEN THE UNDERLYING SOIL AND THE GEOTEXTILE.
5. CONSTRUCTION PLANS WILL SPECIFICALLY DETAIL THE LOCATION AND HANDLING OF SPOILS. SPOIL MATERIAL RESULTING FROM CLEARING, GRUBBING AND CHANNEL EXCAVATION SHALL BE DISPOSED OF IN A MANNER WHICH WILL:
   A. NOT CAUSE AN INCREASE IN FLOOD STAGE,
   B. MINIMIZE OVERBANK WASH,
   C. NOT CAUSE AN ADVERSE EFFECT ON THE ENVIRONMENTAL INTEGRITY OF THE AREA,
   D. PROVIDE FOR THE FREE FLOW OF WATER BETWEEN THE CHANNEL AND FLOOD PLAIN UNLESS THE VALLEY ROUTING AND WATER SURFACE PROFILE ARE BASED ON CONTINUOUS DIKES BEING INSTALLED,
   E. LEAVE THE RIGHT-OF-WAY IN THE BEST CONDITION FEASIBLE, AND
   F. IMPROVE THE AESTHETIC APPEARANCE OF THE SITE TO THE EXTENT FEASIBLE.
6. CHANNEL LININGS SHALL BE ESTABLISHED OR INSTALLED IMMEDIATELY AFTER CONSTRUCTION OR AS SOON AS WEATHER CONDITIONS PERMIT.
7. STRUCTURES SHALL BE INSTALLED ACCORDING TO LINES AND GRADES SHOWN ON THE PLAN. THE FOUNDATION FOR STRUCTURES SHALL BE CLEARED OF ALL UNDESIRABLE MATERIALS PRIOR TO THE INSTALLATION OF THE STRUCTURES.
8. MATERIALS USED IN CONSTRUCTION SHALL BE OF PERMANENCY COMMENSURATE WITH THE DESIGN FREQUENCY AND LIFE EXPECTANCY OF THE FACILITY.
9. EARTHFILL, WHEN USED AS A PART OF THE STRUCTURES, SHALL BE PLACED ACCORDING TO THE INSTALLATION REQUIREMENTS FOR SEDIMENT BASIN EMBANKMENTS.
10. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE COMPLIED WITH.
11. VEGETATION SHALL BE ESTABLISHED ON ALL DISTURBED AREAS IMMEDIATELY AFTER CONSTRUCTION. IF WEATHER CONDITIONS CAUSE A DELAY IN ESTABLISHING VEGETATION, THE AREA SHALL BE MULCHED IN ACCORDANCE WITH THE STANDARD FOR MULCHING. REFER TO SPECIFICATION DS1 – DISTURBED AREA STABILIZATION (WITH MULCHING ONLY). SEEDING, FERTILIZING AND MULCHING SHALL CONFORM TO THE STANDARD FOR PERMANENT VEGETATIVE COVER. REFER TO SPECIFICATION DS3-DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION).
12. ALL TEMPORARY ACCESS ROADS OR TRAVELWAYS SHALL BE APPROPRIATELY CLOSED TO EXCLUDE TRAFFIC.
13. TREES AND OTHER FALLEN NATURAL VEGETATION NOT CAUSING A DETERRENT TO STREAM FLOW SHOULD BE LEFT FOR THE PURPOSE OF HABITAT.

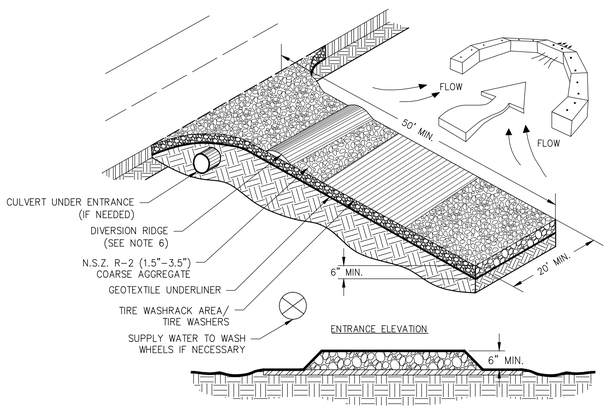
CHANNEL STABILIZATION (Ch)
N.T.S.

SEEDING RATES FOR TEMPORARY SEEDING

SPECIES BROADCAST	RATES	PLANTING DATES J F M A M J J A S O N D	COMMENTS
BARLEY ALONE	144 LBS./AC		WINTER HARDY, USE ON PRODUCTIVE SOILS
BARLEY IN MIXTURE	24 LBS./AC		
LESPEDEZA, ANNUAL ALONE	40 LBS./AC		MAY VOLUNTEER FOR SEVERAL YEARS. USE INOCULANT EL.
LESPEDEZA, ANNUAL IN MIXTURE	10 LBS./AC		
LOVEGRASS, WEEPING ALONE LOVEGRASS, WEEPING IN MIXTURE	4 LBS./AC 2 LBS./AC		MAY LAST FOR SEVERAL YEARS. MIX WITH SERICEA LESPEDEZA.
MILLET, BROWNTOP ALONE	40 LBS./AC		QUICK DENSE COVER. WILL PROVIDE TOO MUCH COMPETITION IN MIXTURES IF SEEDED AT HIGH RATES.
MILLET, BROWNTOP IN MIXTURE	10 LBS./AC		
MILLET, PEARL ALONE	50 LBS./AC		QUICK DENSE COVER. MAY REACH 5 FEET IN HEIGHT. NOT RECOMMENDED FOR MIXTURES.
OATS ALONE	128 LBS./AC		USE ON PRODUCTIVE SOILS. NOT AS WINTER HARDY AS RYE OR BARLEY.
OATS IN MIXTURE	32 LBS./AC		
RYE ALONE	168 LBS./AC		QUICK COVER. DROUGHT TOLERANT AND WINTER HARDY.
RYE IN MIXTURE	28 LBS./AC		
RYEGRASS, ANNUAL ALONE	40 LBS./AC		DENSE COVER. VERY COMPETITIVE AND NOT TO BE USED IN MIXTURES.
SUDANGRASS ALONE	60 LBS./AC		GOOD ON DROUGHTY SITES. NOT RECOMMENDED FOR MIXTURES.
TRITICALE ALONE	144 LBS./AC		USE ON LOWER PART OF SOUTHERN COASTAL PLAIN AND IN ATLANTIC COASTAL FLATWOODS ONLY.
TRITICALE IN MIXTURE	24 LBS./AC		
WHEAT ALONE	180 LBS./AC		WINTER HARDY.
WHEAT W/OTHER PERENNIALS	30 LBS./AC		

SOLID LINES INDICATE OPTIMUM DATES, DOTTED LINES INDICATE PERMISSIBLE BUT MARGINAL DATES.

DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING) Ds2



NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

CONSTRUCTION EXIT (Co)
N.T.S.

DEFINITION
APPLYING PLANT RESIDUES OR OTHER SUITABLE MATERIALS, PRODUCED ON THE SITE IF POSSIBLE, TO THE SOIL SURFACE.

REQUIREMENT FOR REGULATORY COMPLIANCE
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS, BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, DEPENDING ON THE MATERIAL USED, ANCHORED AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE.

MAINTENANCE SHALL BE REQUIRED TO MAINTAIN APPROPRIATE DEPTH AND 90% COVER. TEMPORARY VEGETATION MAY BE EMPLOYED INSTEAD OF MULCH IF THE AREA WILL REMAIN UNDISTURBED FOR LESS THAN SIX MONTHS.

IF ANY AREA WILL REMAIN UNDISTURBED FOR GREATER THAN SIX MONTHS, PERMANENT VEGETATIVE TECHNIQUES SHALL BE EMPLOYED. REFER TO Ds2-DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING), AND Ds3 – DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING).

SPECIFICATIONS
MULCHING WITHOUT SEEDING:
THIS STANDARD APPLIES TO GRADED OR CLEARED AREAS WHERE SEEDING MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDANT COVER, BUT CAN BE STABILIZED WITH A MULCH COVER.

SITE PREPARATION:
1. GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
2. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DIKES, DIVERSIONS, BERMS, TERRACES AND SEDIMENT BARRIERS.
3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

MULCHING MATERIALS
SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED:
1. DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE. ONE ADVANTAGE OF THIS MATERIAL IS EASY APPLICATION.
2. WOOD WASTE (CHIPS, SAWDUST OR BARK) SHALL BE APPLIED AT A DEPTH OF 2 TO 3 INCHES. ORGANIC FROM THE CLEARING STAGE OF DEVELOPMENT REMAIN SITE, BE CHIPPED, AND APPLIED AS MULCH. THIS METHOD OF MULCHING CAN GREATLY REDUCE EROSION CONTROL COSTS.
3. POLYETHYLENE FILM SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION. THIS MATERIAL CAN BE SALVAGED AND RE-USED.

APPLYING MULCH
WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.
1. DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL BE APPLIED UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT.
2. IF THE AREA WILL EVENTUALLY BE COVERED WITHPERENNIAL VEGETATION, 20-30 POUNDS OF NITROGEN PER ACRE IN ADDITION TO THE NORMAL AMOUNT SHALL BE APPLIED TO OFFSET THE UPTAKE OF NITROGEN CAUSED BY THE DECOMPOSITION OF THE ORGANIC MULCHES.
3. APPLY POLYETHYLENE FILM ON EXPOSED AREAS.

ANCHORING MULCH
1. STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK HARROW WITH THE DISK SET STRAIGHT OR WITH A SPECIAL "PACKER DISK." DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISK SHOULD BE DULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE SOIL LEAVING MUCH OF IT IN AN ERECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION. STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED. TACKIFERS, BINDERS AND HYDRAULIC MULCH WITH TACKIFIER SPECIFICALLY DESIGNED FOR TACKING STRAW CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. REFER TO MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION, SPECIFICATION TAC-TACKIFERS. PLASTIC MESH OF NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE OF THE WOOD WASTE CHIPS.
3. POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AS WELL AS INCREMENTALLY AS NECESSARY.

DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) Ds1

FERTILIZER REQUIREMENTS

WARM SEASON GRASSES			
YEAR	EQUIVALENT N-P-K	ANALYSIS OR RATE	N TOP DRESSING RATE
FIRST	6-12-12	1500 LBS./AC.	50-100 LBS./AC. 2/6/
SECOND	6-12-12	800 LBS./AC.	50-100 LBS./AC. 2/
MAINTENANCE	10-10-10	400 LBS./AC.	30 LBS./AC.
COOL SEASON GRASSES			
YEAR	EQUIVALENT N-P-K	ANALYSIS OR RATE	N TOP DRESSING RATE
FIRST	6-12-12	1500 LBS./AC.	50 LBS./AC./6/
SECOND	0-10-10	1000 LBS./AC.	------
MAINTENANCE	0-10-10	400 LBS./AC.	------

PLANT, PLANTING RATE & PLANTING DATE FOR PERMANENT COVER

SPECIES	BROADCAST RATES	PLANTING DATES J F M A M J J A S O N D	PLANTING DATE REMARKS
LESPEDEZA SERICEA SCARIFIED	60 LBS./AC		WIDELY ADAPTED. LOW MAINTENANCE. MIX WITH COMMON BERMUDA OR TALL FESCUE. INOCULATE SEED WITH EL INOCULANT.
LESPEDEZA SERICEA UNSCARIFIED	75 LBS./AC		MIX WITH TALL FESCUE.
PENSACOLA BAHIA ALONE OR WITH TEMPORARY COVER	60 LBS./AC		LOW GROWING, SOD FORMING, SLOW TO ESTABLISH. PLANT WITH A COMPANION CROP. WILL SPREAD INTO BERMUDA PASTURES AND LAWNS. MIX WITH SERICEA LESPEDEZA.
WILMINGTON BAHIA WITH OTHER PERENNIALS	30 LBS./AC		
TALL FESCUE ALONE	50 LBS./AC		USE ALONE ONLY ON BETTER SITES. MIX WITH PERENNIAL LESPEDEZA OR CROWNVETCH. APPLY TOP DRESSING IN SPRING FOLLOWING FALL PLANTINGS. NOT FOR HEAVY USE AREAS OR ATHLETIC FIELDS.
TALL FESCUE WITH OTHER PERENNIALS	30 LBS./AC		
REED CANARY GRASS ALONE	50 LBS./AC		
REED CANARY GRASS WITH OTHER PERENNIALS	30 LBS./AC		GROWS SIMILAR TO TALL FESCUE.
COMMON BERMUDA UNHULLED SEED WITH TEMPORARY COVER	10 LBS./AC		PLANT WITH WINTER ANNUALS
COMMON BERMUDA UNHULLED SEED W/OTHER PERENNIALS	6 LBS./AC		PLANT WITH TALL FESCUE.

SOLID LINES INDICATE OPTIMUM DATES, DOTTED LINES INDICATE PERMISSIBLE BUT MARGINAL DATES.

DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION) Ds3

DEFINITION
CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADS, AND DEMOLITION SITES.

CONDITIONS
THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON AND OFF-SITE DAMAGE MAY OCCUR WITHOUT TREATMENT.

METHODS AND MATERIALS
A. TEMPORARY METHODS
MULCHES. SEE STANDARD Ds1 – DISTURBED AREA STABILIZATION (WITH MULCHING ONLY). SYNTHETIC RESINS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL. REFER TO SPECIFICATION TAC-TACKIFIERS IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION. RESINS SUCH AS CURASOL OR TERRATACK SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

VEGETATIVE COVER. SEE SPECIFICATION Ds2 – DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING) IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.

S[RAU-ON ADHESIVES. THESE ARE USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS. REFER TO SPECIFICATION TAC-TACKIFIERS IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.

DUST CONTROL ON DISTURBED AREAS (Du)

TILLAGE. THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

IRRIGATION. THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.

BARRIERS. SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACES AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.

CALCIUM CHLORIDE. APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

B. PERMANENT METHODS
PERMANENT VEGETATION. SEE SPECIFICATION Ds3 – DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION) IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION. EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.

TOPSOILING. THIS ENTAILS COVERING THE SURFACE WITH LESS EROSIVE SOIL MATERIAL. SEE SPECIFICATION Tp – TOPSOILING IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.

STONE. COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. SEE SPECIFICATION Cr – CONSTRUCTION ROAD STABILIZATION.

GEORGIA REGISTERED 27822 PROFESSIONAL ENGINEER ELIZABETH HEADRICK 11-12-18

Georgia Power

EROSION & SEDIMENTATION CONTROL DETAILS
CLOSURE DRAWINGS
FOR
GEORGIA POWER
PLANT YATES
EXISTING CCR SURFACE IMPOUNDMENT - ASH POND 2
COWETA COUNTY, GEORGIA

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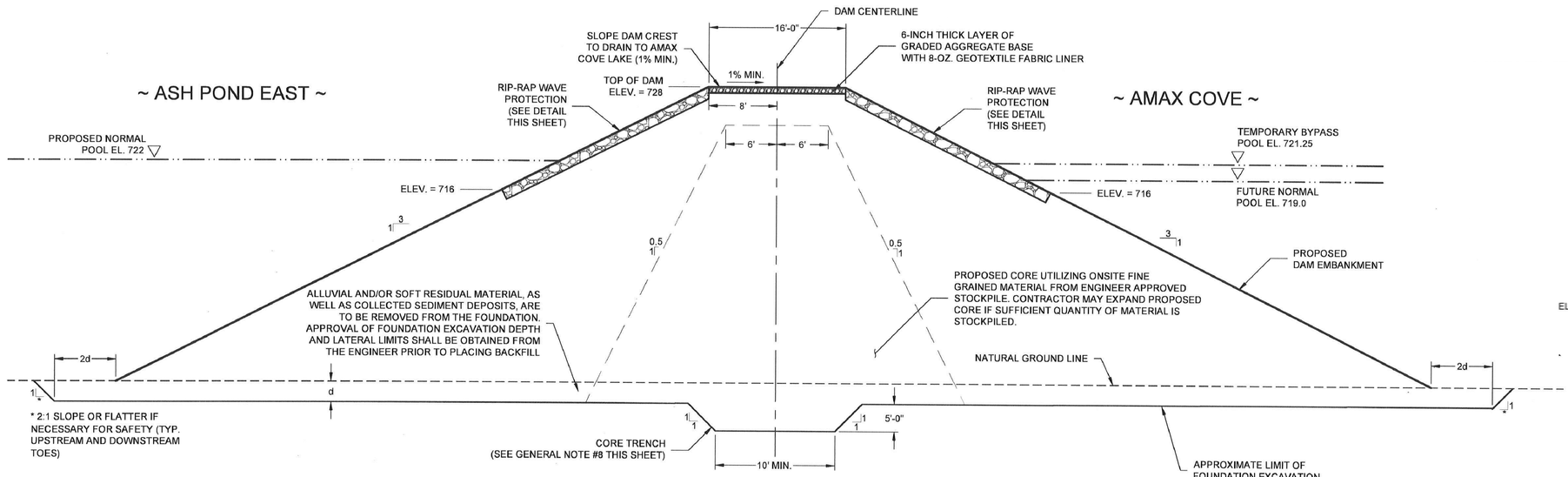
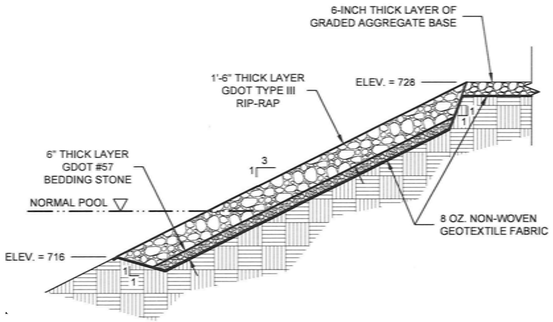
PROJ. NO.	I054-107-AP2	DWG.	EDIT	11/12/18
SCALE	N/A	SHEET 10 OF 11		
NOVEMBER 2018				



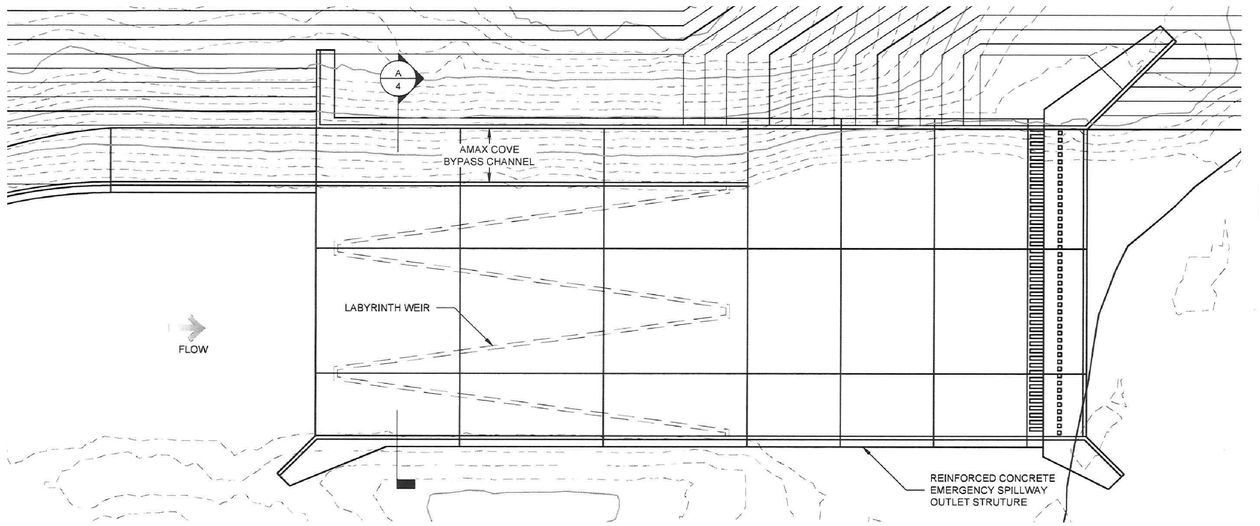
AMAX COVE DAM DETAIL

N.T.S.



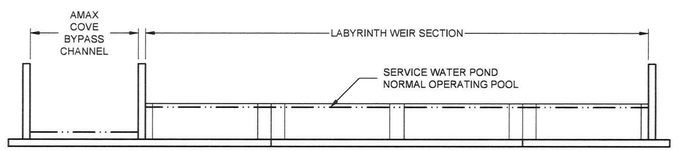
RIP RAP WAVE PROTECTION DETAIL

N.T.S.



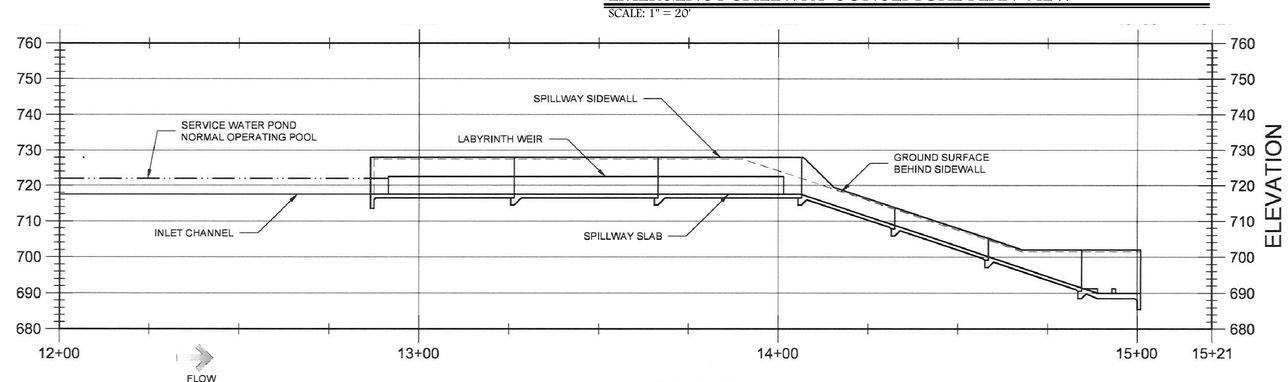
EMERGENCY SPILLWAY CONCEPTUAL PLAN VIEW

SCALE: 1" = 20'



EMERGENCY SPILLWAY CONCEPTUAL UPSTREAM SECTION

SCALE: 1" = 20'



EMERGENCY SPILLWAY CONCEPTUAL PROFILE

SCALE: 1" = 20'

NOTES

DESIGN AND DETAILS PROVIDED BY SCHNABEL ENGINEERING. ALL DESIGN BY OTHERS. DETAILS PROVIDED FOR INFORMATION AND PERMITTING PURPOSES ONLY.

GEORGIA REGISTERED PROFESSIONAL ENGINEER ELIZABETH HEADRICK 11-12-18

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