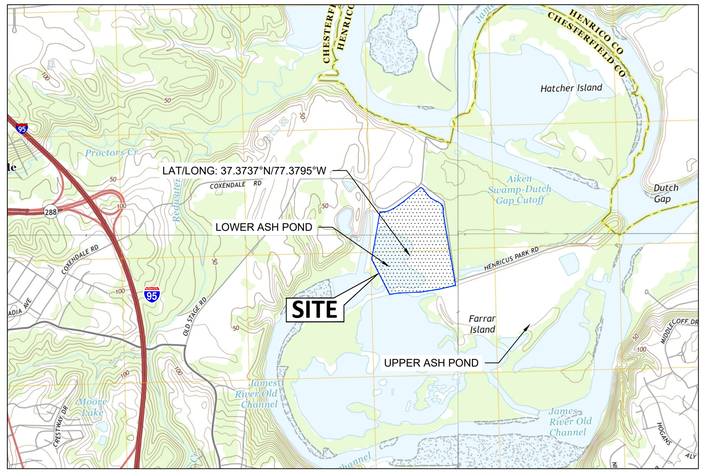
CONTACT INFORMATION

OWNER: DOMINION ENERGY
CHRIS M. GEE
600 E. CANAL ST.
RICHMOND, VIRGINIA 23219
PHONE: (804) 205-0527
FAX: (804) 273-2876
EMAIL: CHRIS.M.GEE@DOMINIONENERGY.COM

ENGINEER: AECOM
STEPHEN WALKER, P.E.
564 WHITE POND DRIVE
AKRON, OHIO 44313
PHONE: (330) 289-4233
EMAIL: STEVE.WALKER@AECOM.COM

DOMINION ENERGY
CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
PERMIT APPLICATION DRAWINGS
NOT FOR CONSTRUCTION
CHESTERFIELD COUNTY, VIRGINIA
JULY 22, 2024



SOURCE: 2013 USGS VIRGINIA QUAD MAPS: CHESTER, DREWRY'S BLUFF, DUTCH GAP AND HOPEWELL.

VICINITY MAP
1" = 2,000'

0 2000 4000 6000
GRAPHIC SCALE (IN FEET)

N

NO.	DWG DESCRIPTION
001	COVER SHEET
002	EXISTING CONDITIONS AND UTILITY PLAN
003	DEMOLITION PLAN
004	ESTIMATED BOTTOM OF CCR MATERIAL PLAN
005	FINAL GRADING PLAN
006	EROSION AND SEDIMENT CONTROL PLAN
007	FINAL GRADING PROFILE AND CROSS SECTIONS LAYOUT PLAN
008	FINAL GRADING PROFILES AND CROSS SECTIONS I
009	FINAL GRADING PROFILES AND CROSS SECTIONS II
010	PROPOSED STORMWATER STRUCTURES
011	FINAL GRADING AND STORMWATER DETAILS
012	DAM DECOMMISSIONING PLAN
013	DAM DECOMMISSIONING CROSS SECTIONS

GENERAL SITE INFORMATION	
PARCEL ADDRESS (AS RECORDED IN CHESTERFIELD COUNTY GIS):	701 COXENDALE ROAD CHESTER, VIRGINIA 23836
LAT-LONG:	37.3737°N 77.3795°W
TAX ID:	808-6612255-00000
GPIN NUMBER:	8086612255
OFFSITE LAND DISTURBANCE:	NONE
COUNTY LAND DISTURBANCE PERMIT:	A CHESTERFIELD COUNTY LAND DISTURBANCE PERMIT IS REQUIRED FOR THIS PROJECT
VIRGINIA STORMWATER MANAGEMENT PROGRAM PERMIT (VSMP):	UMBRELLA VSMP VAR10G662 IS ALREADY IN PLACE.
FLOODPLAIN:	FLOOD ZONE A AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FIRM PANELS 51041C0335D AND 51041C0169D, EFFECTIVE DATE: DECEMBER 18, 2012.
NAME OF RECEIVING WATERS	JAMES RIVER
VA HU6 FOUR-DIGIT WATERSHED CODE	JL06
VA HU6 TWELVE-DIGIT WATERSHED CODE:	020802060106
FIRE:	EXISTING FIRE HYDRANT LOCATION SUFFICIENT FOR THIS PROJECT
WETLANDS:	WETLANDS AND RPA FIELD DELINEATED BY GOLDER ASSOCIATES JUNE 2018 AND BY AECOM ON MARCH 11, 2020.

ZONING/LAND USE INFORMATION	
MAGISTERIAL DEVELOPMENT DISTRICT:	BERMUDA
ZONING/LAND USE OF AREA IN QUESTION:	I-3 (HEAVY INDUSTRIAL)
EXISTING ZONING/LAND USE OF WHOLE PROPERTY (PER CITIZEN GIS, 2010):	I-3 (HEAVY INDUSTRIAL)
LAND USE (PER CITIZEN GIS 2010):	INDUSTRIAL 151 ACRES
VPDES PERMIT NUMBER	VA0004146
ZONING CASE(S)	15SN0647

VSMP COMPLIANCE
WATER QUALITY COMPLIANCE IN ACCORDANCE WITH 9VAC25-870-65 IS ACHIEVED THROUGH THE CHIAP PROJECT VSMP VAR10G662.

THIS PROJECT IS COVERED UNDER THE UMBRELLA VSMP VAR10G662.

IMPACTS TO WETLAND AND OTHER WATERS OF THE U.S. ARE BEING SUBMITTED FOR APPROVAL UNDER SECTION 404 AND 401 OF THE CLEAN WATER ACT AND THE VIRGINIA TIDAL WETLANDS ACT THROUGH A PENDING *MINOR PERMIT MODFICATION REQUEST - CHESTERFIELD POWER STATION FOSSIL FUEL COMBUSTION PRODUCTS MANAGEMENT FACILITY, DEPARTMENT OF THE ARMY PERMIT NO. 2007-02441; 10-V1787 AND VIRGINIA WATER PROTECTION PERMIT NO. 10-1787*. THESE PLANS MAY REQUIRE MODIFICATIONS PENDING PERMIT CONDITIONS AS REQUIRED BY FEDERAL OR STATE REVIEW AGENCIES. PERMIT CONDITIONS AMENDED TO THE PLANS SHALL BE FOLLOWED.

CBPA COMPLIANCE
A. TIDAL WETLANDS MINIMALLY IMPACTED
B. NON-TIDAL WETLANDS PERMITTED VIA USACE JD #NAO-2007-02441
C. TIDAL SHORES NOT IMPACTED
D. VEGETATED CONSERVATION AREA WITHIN 100 FEET OF PROPERTY LINE NOT IMPACTED
E. 100-YEAR FLOODPLAIN NOT FILLED
F. HIGHLY ERODIBLE SOILS OR STEEP SLOPES SHOWN ON PLANS AND PROTECTED BY EROSION AND SEDIMENT CONTROL MEASURES SHOWN IN THIS SITE PLAN
G. NO HIGHLY PERMEABLE SOILS
H. THE PURPOSE OF THE PROJECT IS TO COMPLY WITH THE FEDERAL CCR RULE TO PERMANENTLY CLOSE THE EXISTING CCR IMPOUNDMENT. WATER QUALITY COMPLIANCE IN ACCORDANCE WITH 9VAC 25-870-65.

THIS PROJECT WILL HAVE A LAND DISTURBANCE GREATER THAN 2,500 S.F.; THEREFORE THE VSMP REGULATIONS FOR STORMWATER ARE APPLICABLE AND ADMINISTERED BY THE COUNTY.

Stormwater Outfall Table

Site Area (Acres)	117 +/-														
	Outfall W1			Outfall W2			Outfall E1			Outfall E2			Outfall E3		
Drainage Area (Acres)	39.3			31.8			10.7			9.8			15.6		
Runoff Reduction (cf)	0			0			0			0			0		
	Natural			Natural			Natural			Natural			Natural		
Channel Protection Compliance Method	N/A			N/A			N/A			N/A			N/A		
Flood Protection Compliance Method	N/A			N/A			N/A			N/A			N/A		
	1 - Year	2 - Year	10 - Year	1 - Year	2 - Year	10 - Year	1 - Year	2 - Year	10 - Year	1 - Year	2 - Year	10 - Year	1 - Year	2 - Year	10 - Year
CN Existing [1]	N/A			N/A			N/A			N/A			N/A		
$RV_{Existing}$ (AC-FT) [1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
$Q_{Existing}$ (CFS) [1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CN Developed	84			84			84			84			84		
$RV_{Developed}$ (AC-FT)	4.36	5.96	11.05	3.53	4.82	8.95	1.18	1.62	3.00	1.08	1.48	2.74	1.73	2.37	4.39
$Q_{Developed}$ (CFS)	30.35	41.10	71.22	25.49	34.60	61.54	12.93	17.56	30.70	13.75	18.75	33.82	20.78	28.09	46.73
$Q_{Allowed}$ (CFS) [1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
$V_{Developed}$ (ft/s)	6.87	7.28	8.09	6.51	6.90	7.73	4.98	5.35	6.09	3.28	3.64	4.43	3.77	4.17	5.84
Outfall Location (Lats/Long)	N 37.3751 W 77.3828			N 37.3716 W 77.3820			N 37.3787 W 77.3780			N 37.3755 W 77.3759			N 37.3724 W 77.3752		

[1] Not computed since the existing condition was a regulated basin.

Stormwater Compliance Table

Site Area (acres)	117 +/-		A BMP is not needed because the TP load is zero following the VRRM	Location of BMP (Lat/Long)	N/A
Required Removal for the Site (lbs)	0	BMP Type		Receiving water	James River
Total Load Removed (lbs)	0	BMP Service Area (list sections/phases)		VAHUC6	20802
Offset Generating Facility		Design Removal Efficiency (%)		MS4 Operator	Dominion Virginia Power
Amount of Phosphorus Purchased (lbs)		Drainage Area Used for Sizing BMP (ac)		TMDL	Not Required *
Equivalent Nitrogen Amount (lbs)	N/A	Previous Acres Treated	N/A	Downstream BMP	N/A
		Treatment Volume (cf)		Location of storm sewer outfalls 30 inches in diameter	W1, W2, E1
8-digit HUC of Generating Facility		Load Removed (lbs)			

* The Farrar Gut is considered a category 4A water, and so a TMDL s not required because the TMDL for specific pollutant(s) is complete.

TOTAL SITE ACREAGE:	151 ±	DISTURBED AREA ACREAGE:	117 ±

CALL MISS UTILITY BEFORE DIGGING
1-800-552-7001
OR
811

PREPARED FOR:
DOMINION ENERGY (OWNER)
500 COXENDALE RD
CHESTER, VA 23836

PREPARED BY:
AECOM
4840 COX RD
GLEN ALLEN, VA 23060

REVISIONS

REV NO	DATE	INITIALS	DESCRIPTION
1	8/12/2022	AMC	ADD TRD ALIGNMENT TO FINAL GRADING PLAN
2	7/19/2024	AMC	REMOVE LOW PERM FILL FROM BACKFILL DETAIL

AECOM

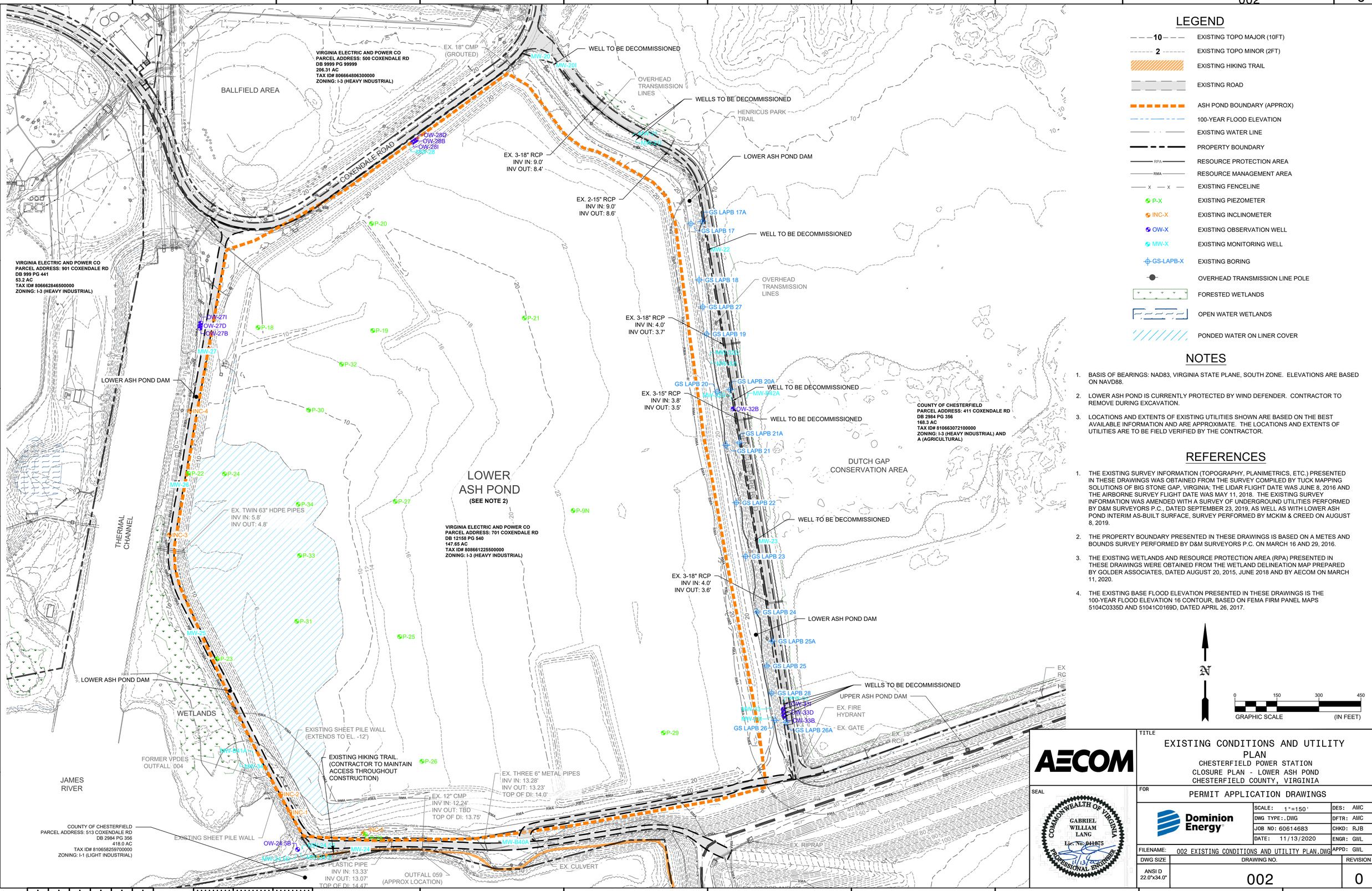
SEAL
COMMONWEALTH OF VIRGINIA
STEPHEN C WALKER
Lic. No. 0402067705
6/5/24
PROFESSIONAL ENGINEER

TITLE
COVER SHEET
CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

FOR
PERMIT APPLICATION DRAWINGS

Dominion Energy

SCALE: NONE	DES: AMC		
DWG TYPE:.DWG	DFTR: AMC		
JOB NO: 60614683	CHKD: RJB		
DATE: 07/22/2024	ENGR: SCW		
FILENAME: 001 COVER SHEET DEQ R2.DWG	APPD: SCW		
DWG SIZE: ANSI D 22.0"x34.0"	DRAWING NO.: 001	REVISION: 2	



002

REV. 0

LEGEND

- EXISTING TOPO MAJOR (10FT)
- EXISTING TOPO MINOR (2FT)
- EXISTING HIKING TRAIL
- EXISTING ROAD
- ASH POND BOUNDARY (APPROX)
- 100-YEAR FLOOD ELEVATION
- EXISTING WATER LINE
- PROPERTY BOUNDARY
- RESOURCE PROTECTION AREA
- RESOURCE MANAGEMENT AREA
- EXISTING FENCELINE
- P-X EXISTING PIEZOMETER
- INC-X EXISTING INCLINOMETER
- OW-X EXISTING OBSERVATION WELL
- MW-X EXISTING MONITORING WELL
- GS-LAPB-X EXISTING BORING
- OVERHEAD TRANSMISSION LINE POLE
- FORESTED WETLANDS
- OPEN WATER WETLANDS
- PONDED WATER ON LINER COVER

NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
2. LOWER ASH POND IS CURRENTLY PROTECTED BY WIND DEFENDER. CONTRACTOR TO REMOVE DURING EXCAVATION.
3. LOCATIONS AND EXTENTS OF EXISTING UTILITIES SHOWN ARE BASED ON THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. THE LOCATIONS AND EXTENTS OF UTILITIES ARE TO BE FIELD VERIFIED BY THE CONTRACTOR.

REFERENCES

1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH LOWER ASH POND INTERIM AS-BUILT SURFACE, SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 8, 2019.
2. THE PROPERTY BOUNDARY PRESENTED IN THESE DRAWINGS IS BASED ON A METES AND BOUNDS SURVEY PERFORMED BY D&M SURVEYORS P.C. ON MARCH 16 AND 29, 2016.
3. THE EXISTING WETLANDS AND RESOURCE PROTECTION AREA (RPA) PRESENTED IN THESE DRAWINGS WERE OBTAINED FROM THE WETLAND DELINEATION MAP PREPARED BY GOLDER ASSOCIATES, DATED AUGUST 20, 2015, JUNE 2018 AND BY AECOM ON MARCH 11, 2020.
4. THE EXISTING BASE FLOOD ELEVATION PRESENTED IN THESE DRAWINGS IS THE 100-YEAR FLOOD ELEVATION 16 CONTOUR, BASED ON FEMA FIRM PANEL MAPS 5104C0335D AND 51041C0169D, DATED APRIL 26, 2017.

N

0 150 300 450
GRAPHIC SCALE (IN FEET)

AECOM

SEAL

COMMONWEALTH OF VIRGINIA
GABRIEL WILLIAM LANG
Lic. No. 041875
PROFESSIONAL ENGINEER
13 JAN 2021

TITLE

EXISTING CONDITIONS AND UTILITY PLAN

CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

FOR

PERMIT APPLICATION DRAWINGS

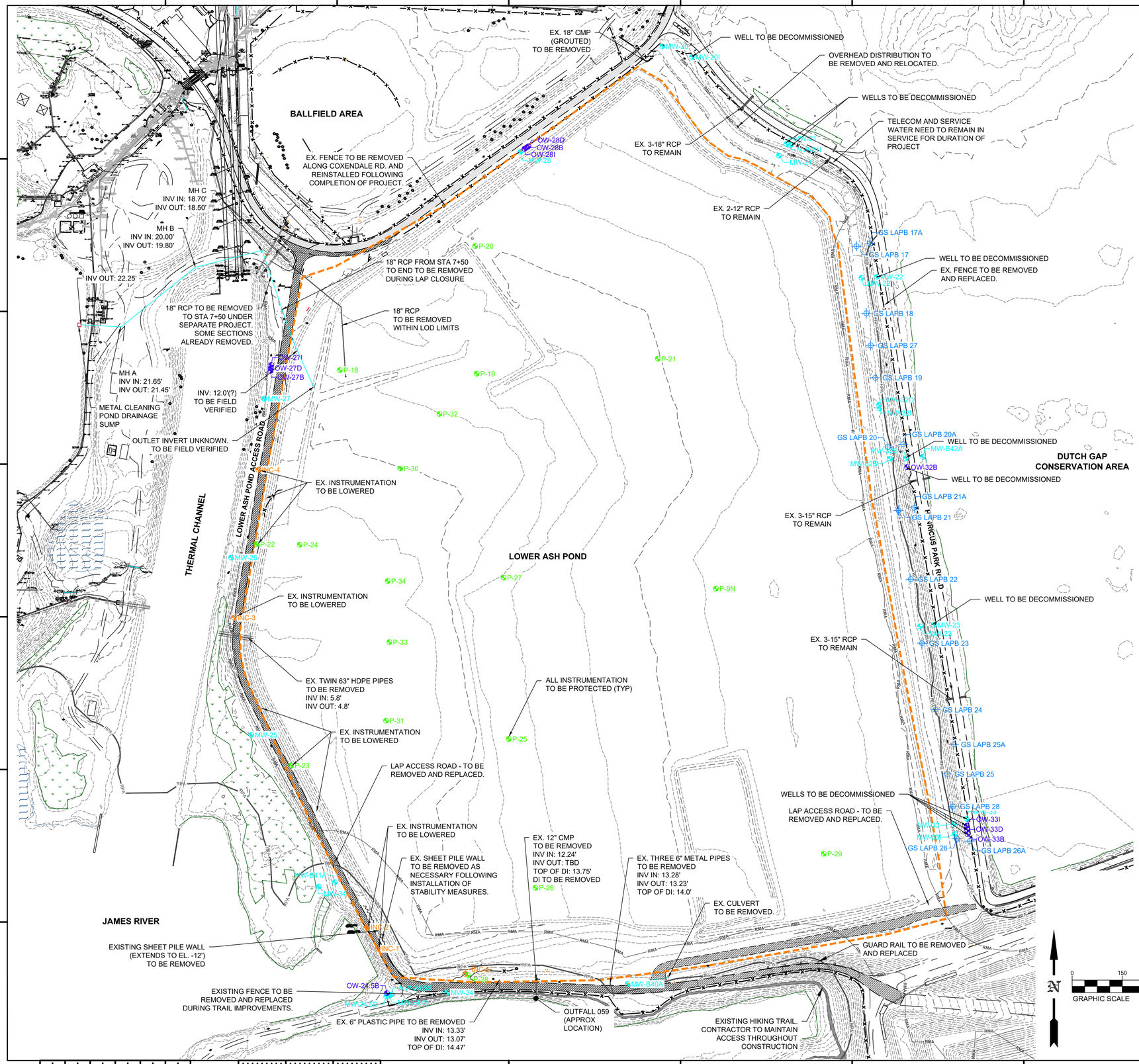
Dominion Energy

SCALE: 1"=150'	DES: AMC
DWG TYPE:.DWG	DFTR: AMC
JOB NO: 60614683	CHKD: RJB
DATE: 11/13/2020	ENGR: GWL
	APPD: GWL

FILENAME: 002 EXISTING CONDITIONS AND UTILITY PLAN.DWG

DWG SIZE	DRAWING NO.	REVISION
ANSI D 22.0"x34.0"	002	0

002 REV. 0



LEGEND

- EXISTING TOPO MAJOR (10FT)
- EXISTING TOPO MINOR (2FT)
- EXISTING ROAD
- EXISTING ROAD TO BE REMOVED
- ASH POND BOUNDARY (APPROX)
- RESOURCE PROTECTION AREA
- RESOURCE MANAGEMENT AREA
- EXISTING UG TELEPHONE
- UNKNOWN UG UTILITY
- FORESTED WETLANDS
- OPEN WATER WETLANDS
- EXISTING UG ELECTRIC
- EXISTING UG WATER
- EXISTING FENCELINE
- EXISTING UG PIPE
- EXISTING CULVERT
- PROPERTY LINE
- EXISTING PIEZOMETER
- EXISTING INCLINOMETER
- EXISTING OBSERVATION WELL
- EXISTING MONITORING WELL
- EXISTING BORING
- OVERHEAD TRANSMISSION LINE POLE

REFERENCES

1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH LOWER ASH POND INTERIM AS-BUILT SURFACE, SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 8, 2019.
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NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
2. HENRICUS PARK ROAD IMPROVEMENTS ARE ANTICIPATED TO BE COMPLETED IN ADVANCE OF THE LAP CLOSURE. COORDINATION OF ACTIVITIES BETWEEN THE TWO PROJECTS WILL BE REQUIRED.
3. EXISTING MONITORING WELLS TO BE PROTECTED.
4. EXISTING INSTRUMENTATION ALONG THE WESTERN LAP ACCESS ROAD TO BE LOWERED DURING DAM DECOMMISSIONING.
5. EXISTING PIEZOMETERS AND INCLINOMETERS MAY BE MODIFIED, WITH APPROVAL FROM DOMINION, FOLLOWING COMPLETION OF CONSTRUCTION.
6. LOWERING AND REMOVAL OF SPECIFIED EXISTING MONITORING WELLS TO BE PERFORMED IN ACCORDANCE WITH WELL MODIFICATION AND WELL ABANDONMENT SPECIFICATION SECTIONS, RESPECTIVELY..
7. LOCATIONS AND EXTENTS OF EXISTING UTILITIES SHOWN ARE BASED ON THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. THE LOCATIONS AND EXTENTS OF UTILITIES ARE TO BE FIELD VERIFIED BY THE CONTRACTOR.
8. DOMINION TO COORDINATE ALL UTILITY RELOCATION. CONTRACTOR TO COORDINATE UTILITY RELOCATION TIMING WITH DOMINION.
9. DCR STORMWATER COMPLIANCE ITEMS CANNOT BE REMOVED UNTIL APPROVED BY DCR. DOMINION TO COORDINATE WITH DCR, AND CONTRACTOR TO COORDINATE TIMING WITH DOMINION.

AECOM

SEAL

COMMONWEALTH OF VIRGINIA
GABRIEL WILLIAM LANG
Lic. No. 041875
PROFESSIONAL ENGINEER
11/13/2020

TITLE

DEMOLITION PLAN

CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

FOR

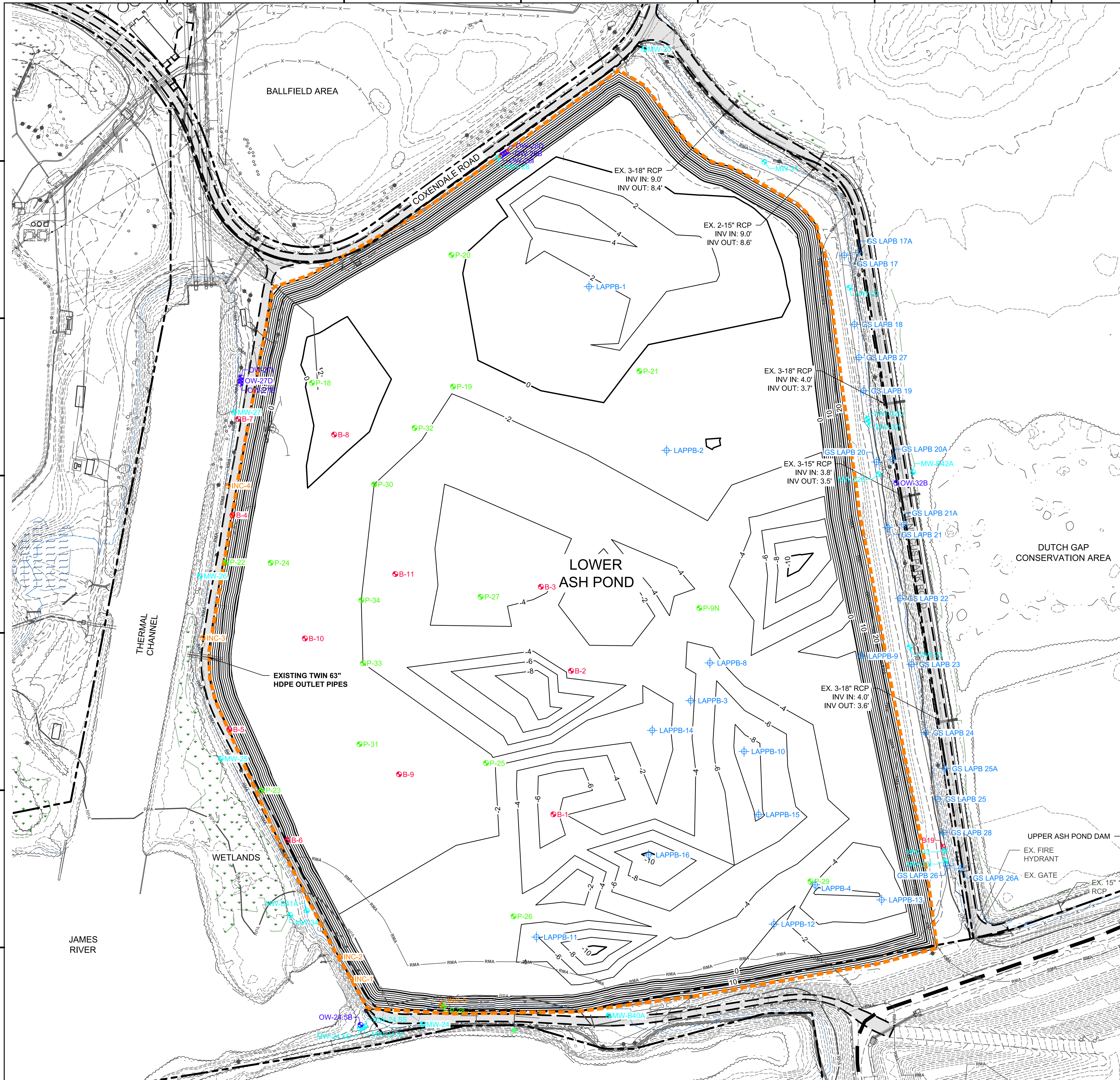
PERMIT APPLICATION DRAWINGS

Dominion Energy

	SCALE: 1"=150'	DES:	AMC
	DWG TYPE:.DWG	DFTR:	AMC
	JOB NO: 60614683	CHKD:	RJB
	DATE: 11/13/2020	ENGR:	GWL
FILENAME:	003 DEMOLITION PLAN.DWG	APPD:	GWL

DWG SIZE	DRAWING NO.	REVISION
ANSI D 22.0"x34.0"	003	0

003 REV. 0



LEGEND

10	EXISTING TOPO MAJOR (10FT)	P-34	EXISTING PIEZOMETER
2	EXISTING TOPO MINOR (2FT)	B-2	EXISTING BORING
10	BOTTOM OF CCR CONTOUR MAJOR (10FT)	INC-4	EXISTING INCLINOMETER
2	BOTTOM OF CCR CONTOUR MINOR (2FT)	OW-33B	EXISTING OBSERVATION WELL
	ASH POND BOUNDARY (APPROX)	MW-24	EXISTING MONITORING WELL
	100-YEAR FLOOD ELEVATION	LAPPB-11	EXISTING ASH EXPLORATION BORING
	PROPERTY BOUNDARY		OVERHEAD TRANSMISSION LINE POLE
RPA	RESOURCE PROTECTION AREA		FORESTED WETLANDS
RMA	RESOURCE MANAGEMENT AREA		OPEN WATER WETLANDS
X	EXISTING FENCELINE		EXISTING ROAD
	EXISTING HIKING TRAIL		

REFERENCES

1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH LOWER ASH POND INTERIM AS-BUILT SURFACE, SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 8, 2019.
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NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
2. THE ESTIMATED QUANTITY OF CCR MATERIAL (PROVIDED IN THE TABLE ON THIS SHEET) IS BASED ON A COMPARISON OF THE EXISTING TOPOGRAPHY AND THE ESTIMATED BOTTOM OF CCR MATERIAL GRADES UTILIZING AUTOCAD CIVIL 3D (VERSION 2018) AND IS APPROXIMATE AND SUBJECT TO CHANGE BASED ON ACTUAL CONDITIONS ENCOUNTERED IN THE FIELD.
3. ESTIMATED BOTTOM OF CCR MATERIAL GRADES SHOWN ARE APPROXIMATE AND ARE PROVIDED FOR REFERENCE PURPOSES ONLY. CONTRACTOR TO VERIFY ACTUAL BOTTOM OF CCR MATERIAL GRADES IN THE FIELD.
4. CONTRACTOR SHALL ASSUME THE MAXIMUM DEPTH OF CCR MATERIAL IS 5 FEET BELOW THE ESTIMATED GRADES SHOWN ON THIS SHEET FOR DEWATERING PURPOSES. CONTRACTOR SHALL MAINTAIN THE WATER ELEVATION A MINIMUM OF 5 FEET BELOW THE WORKING SURFACE/AREA (I.E., A MINIMUM OF 10 FEET BELOW THE GRADES SHOWN ON THIS SHEET).
5. ALL WATER, EXCEPT NON-CONTACT STORMWATER, WILL REQUIRE TREATMENT PRIOR TO BEING DISCHARGED.
6. CONTRACTOR TO KEEP CONTACT WATER, WATER FROM DEWATERING EFFORTS, AND ANY OTHER NON-STORMWATER FLOWS SEPARATE FROM STORMWATER AT ALL TIMES DURING CONSTRUCTION.
7. CONTRACTOR TO PROVIDE LINED CONTACT WATER BASINS WITH SUFFICIENT CAPACITY TO MANAGE CONTACT STORMWATER FROM A 100-YEAR, 24-HOUR STORM EVENT.
8. CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 0.9 PROBABLE MAXIMUM PRECIPITATION (PMP) EVENT UNTIL ALL CCR HAS BEEN REMOVED. ONCE CCR HAS BEEN REMOVED, CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 100-YEAR EVENT.
9. THE MINIMUM DAM ELEVATION MUST BE MAINTAINED AT ELEVATION 16.0 FEET OR HIGHER TO PREVENT THE 100-YEAR FLOODPLAIN FROM COMING IN CONTACT WITH CCR MATERIAL.
10. CONTRACTOR TO MAINTAIN COMPLIANCE WITH DCR AND VPDES PERMITS DURING ALL PHASES UNTIL ALL CCR HAS BEEN REMOVED.
11. ANY AREA CERTIFIED AS ACHIEVING CLOSURE BY REMOVAL IS TO BE PROTECTED FROM CCR AND CONTACT STORMWATER, AND MAY BE FILLED AND/OR RESHAPED AS NEEDED PRIOR TO ACHIEVING FINAL GRADES.
12. ACCUMULATED CCR SHALL BE REMOVED FROM SURFACES WITHIN THE POND LIMITS SUCH THAT NO CCR REMAINS VISIBLE.
13. FOLLOWING VISUAL-CLEAN CONDITIONS, OVER-EXCAVATE THE REMOVAL FOOTPRINT BY AT LEAST SIX INCHES.
14. VISUAL INSPECTION AND TARGETED SUBGRADE VISUAL SAMPLING TO BE OVERSEEN BY OWNER'S ENGINEER REPRESENTATIVE. SAMPLING TO BE PERFORMED AT A FREQUENCY OF AT LEAST ONE TEST PER ACRE. TARGETED SAMPLING TO CONSIST OF HAND-DUG HOLES AT LEAST SIX INCHES DEEP.

ESTIMATED CCR MATERIAL QUANTITIES (CY)

CCR MATERIAL VOLUME	6-INCH OVEREXCAVATION VOLUME	TOTAL VOLUME
2,820,000	79,000	2,899,000

N

GRAPHIC SCALE 0 150 300 450 (IN FEET)

AECOM

SEAL

COMMONWEALTH OF VIRGINIA
GABRIEL WILLIAM LANG
Lic. No. 041875
PROFESSIONAL ENGINEER
11/13/20

TITLE

ESTIMATED BOTTOM OF CCR MATERIAL PLAN
CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

FOR

PERMIT APPLICATION DRAWINGS

Dominion Energy

SCALE:	1"=150'	DES:	AMC
DWG TYPE:	.DWG	DFTR:	AMC
JOB NO:	60614683	CHKD:	RJB
DATE:	11/13/2020	ENGR:	GWL
FILENAME:	004 ESTIMATED BOTTOM OF CCR MATERIAL PLAN.DWG	APPD:	GWL

DWG SIZE	DRAWING NO.	REVISION
ANSI D 22.0"x34.0"	004	0

004 REV. 0

LEGEND

- EXISTING TOPO MAJOR (10FT)
- EXISTING TOPO MINOR (2FT)
- PROPOSED TOPO MAJOR (10FT)
- PROPOSED TOPO MINOR (2FT)
- STORMWATER FLOW PATH
- PROPERTY BOUNDARY
- RESOURCE PROTECTION AREA
- RESOURCE MANAGEMENT AREA
- EXISTING FENCELINE
- EXISTING HIKING TRAIL
- PROPOSED HIKING TRAIL
- TRD WALL
- SHEET PILE WALL
- OVERHEAD TRANSMISSION LINE POLE
- FORESTED WETLANDS
- OPEN WATER WETLANDS
- EXISTING ROAD
- PROPOSED ROAD
- TYPICAL CLOSURE BACKFILL
- PROPOSED CONCRETE-LINED STORMWATER CONVEYANCE CHANNEL
- PROPOSED SECURITY FENCE
- PROPOSED PRIVACY FENCE
- APPROX. LIMIT OF DISTURBANCE

REFERENCES

1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH LOWER ASH POND INTERIM AS-BUILT SURFACE, SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 8, 2019.
2. THE PROPERTY BOUNDARY PRESENTED IN THESE DRAWINGS IS BASED ON A METES AND BOUNDS SURVEY PERFORMED BY D&M SURVEYORS P.C. ON MARCH 16 AND 29, 2016.
3. THE EXISTING WETLANDS AND RESOURCE PROTECTION AREA (RPA) PRESENTED IN THESE DRAWINGS WERE OBTAINED FROM THE WETLAND DELINEATION MAP PREPARED BY GOLDER ASSOCIATES, DATED AUGUST 20, 2015, JUNE 2018, AND BY AECOM ON MARCH 11, 2020.
4. THE EXISTING BASE FLOOD ELEVATION PRESENTED IN THESE DRAWINGS IS THE 100-YEAR FLOOD ELEVATION 16 CONTOUR, BASED ON FEMA FIRM PANEL MAPS 5104C0335D AND 51041C0169D, DATED APRIL 26, 2017.

NOTES

1. BASIS OF BEARINGS: NAD83 VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
2. CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 0.9 PROBABLE MAXIMUM PRECIPITATION (PMP) EVENT UNTIL ALL CCR HAS BEEN REMOVED. ONCE CCR HAS BEEN REMOVED, CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 100-YEAR EVENT.
3. THE MINIMUM DAM ELEVATION MUST BE MAINTAINED AT ELEVATION 16.0 FEET OR HIGHER TO PREVENT THE 100-YEAR FLOODPLAIN FROM COMING IN CONTACT WITH CCR MATERIAL.
4. TRD WALL AND SHEET PILE WALL SHOWN IN THESE PLANS WERE DESIGNED BY HAI, AND SHOWN ON THE PLAN SETS TITLED "LAP TRUCK WASH" DATED DECEMBER 3, 2021, "LAP SW CORNER IMPROVEMENTS (IFC)" DATED MARCH 9, 2022, AND "TRD WALL CONSTRUCTION (IFP)" DATED JUNE 7, 2022.

REVISIONS

REV NO	DATE	INITIALS	DESCRIPTION
1	8/12/2022	AMC	ADD TRD WALL AND SHEET PILE WALL ALIGNMENTS

0 150 300 450
GRAPHIC SCALE (IN FEET)

AECOM

TITLE

FINAL GRADING PLAN

CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

FOR
PERMIT APPLICATION DRAWINGS

SEAL
COMMONWEALTH OF VIRGINIA
GABRIEL WILLIAM LANG
Lic. No. 041875
PROFESSIONAL ENGINEER

Dominion Energy

SCALE: 1"=150'	DES: AMC
DWG TYPE:.DWG	DFTR: AMC
JOB NO: 60614683	CHKD: RJB
DATE: 8/12/2022	ENGR: GWL
FILENAME: 005 FINAL GRADING PLAN DEQ REV1.DWG	APPD: GWL
DWG SIZE: ANSI D 22.0"x34.0"	DRAWING NO.: 005	REVISION: 1

005 REV. 1

PROPOSED OUTLET PIPE AND STRUCTURE SCHEDULE

OUTLET LOCATION	STRUCTURE TYPE	INVERT IN	INVERT OUT
PROP W1	ENDWALL	6.30	5.20
PROP W2	ENDWALL	6.00	5.00
PROP E1	ENDWALL	9.30	8.65
PROP E2	DROP INLET	4.12	3.60
PROP E3	DROP INLET	5.55	5.00
MOD W3	CULVERT	19.83	16.80

REFERENCES

1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH LOWER ASH POND INTERIM AS-BUILT SURFACE, SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 8, 2019.
2. THE PROPERTY BOUNDARY PRESENTED IN THESE DRAWINGS IS BASED ON A METES AND BOUNDS SURVEY PERFORMED BY D&M SURVEYORS P.C. ON MARCH 16 AND 29, 2016.
3. THE EXISTING WETLANDS AND RESOURCE PROTECTION AREA (RPA) PRESENTED IN THESE DRAWINGS WERE OBTAINED FROM THE WETLAND DELINEATION MAP PREPARED BY GOLDER ASSOCIATES, DATED AUGUST 20, 2015, JUNE 2018, AND BY AECOM ON MARCH 11, 2020.
4. THE EXISTING BASE FLOOD ELEVATION PRESENTED IN THESE DRAWINGS IS THE 100-YEAR FLOOD ELEVATION 16 CONTOUR, BASED ON FEMA FIRM PANEL MAPS 5104C0335D AND 51041C0169D, DATED APRIL 26, 2017.

NOTES

1. BASIS OF BEARINGS, NAD83, VIRGINIA STATE PLAN SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
2. ONCE VEGETATION IS ESTABLISHED AND SITE IS CONSIDERED STABILIZED, REMOVE TEMPORARY SEDIMENT BASINS AND TEMPORARY SEDIMENT BASIN RISERS AND RECONFIGURE WEST AND EAST OUTLETS BASED ON FINAL POST CLOSURE CONDITIONS. TEMPORARY CULVERT INLET PROTECTION MAY BE REQUIRED IN THE INTERIM CONDITION.
3. CULVERT OUTLET PROTECTION FOR OUTLETS W1, W2, E2, AND E3 SHALL BE TIED CONCRETE BLOCK MAT. OUTLET PROTECTION FOR E1 SHALL BE RIPRAP.
4. CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 0.9 PROBABLE MAXIMUM PRECIPITATION (PMP) EVENT UNTIL ALL CCR HAS BEEN REMOVED. ONCE CCR HAS BEEN REMOVED, CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 100-YEAR EVENT.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL MEET THE GENERAL REQUIREMENTS OF THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (VDEQ) EROSION & SEDIMENT CONTROL HANDBOOK (VESCH).

LEGEND

- EXISTING TOPO MAJOR (10FT)
- EXISTING TOPO MINOR (2FT)
- PROPOSED TOPO MAJOR (10FT)
- PROPOSED TOPO MINOR (2FT)
- STORMWATER FLOW PATH
- 100-YEAR FLOOD ELEVATION
- PROPERTY BOUNDARY
- RESOURCE PROTECTION AREA (RPA)
- RESOURCE MANAGEMENT AREA (RMA)
- EXISTING FENCELINE
- EXISTING HIKING TRAIL
- PROPOSED HIKING TRAIL
- OVERHEAD TRANSMISSION LINE POLE
- FORESTED WETLANDS
- OPEN WATER WETLANDS
- EXISTING ROAD
- PROPOSED ROAD
- PROPOSED CONCRETE-LINED STORMWATER CONVEYANCE CHANNEL
- PROPOSED SECURITY FENCE
- PROPOSED PRIVACY FENCE
- LIMIT OF DISTURBANCE
- SSF — SUPER SILT FENCE
- TC — TURBIDITY CURTAIN
- FGM — HYDRAULICALLY APPLIED FLEXIBLE GROWTH MEDIUM (FLEXTERRA OR APPROVED EQUAL)
- CIP — CULVERT INLET PROTECTION
- OP — CULVERT OUTLET PROTECTION (SEE NOTE 6)
- CD — ROCK CHECK DAM
- IP — INLET PROTECTION
- PS — PERMANENT SEEDING
- MU — MULCHING
- SB — SEDIMENT BASIN
- SCC — CONCRETE-LINED STORMWATER CONVEYANCE CHANNEL

0 150 300 450
GRAPHIC SCALE (IN FEET)

N

AECOM

TITLE
EROSION AND SEDIMENT CONTROL PLAN
CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

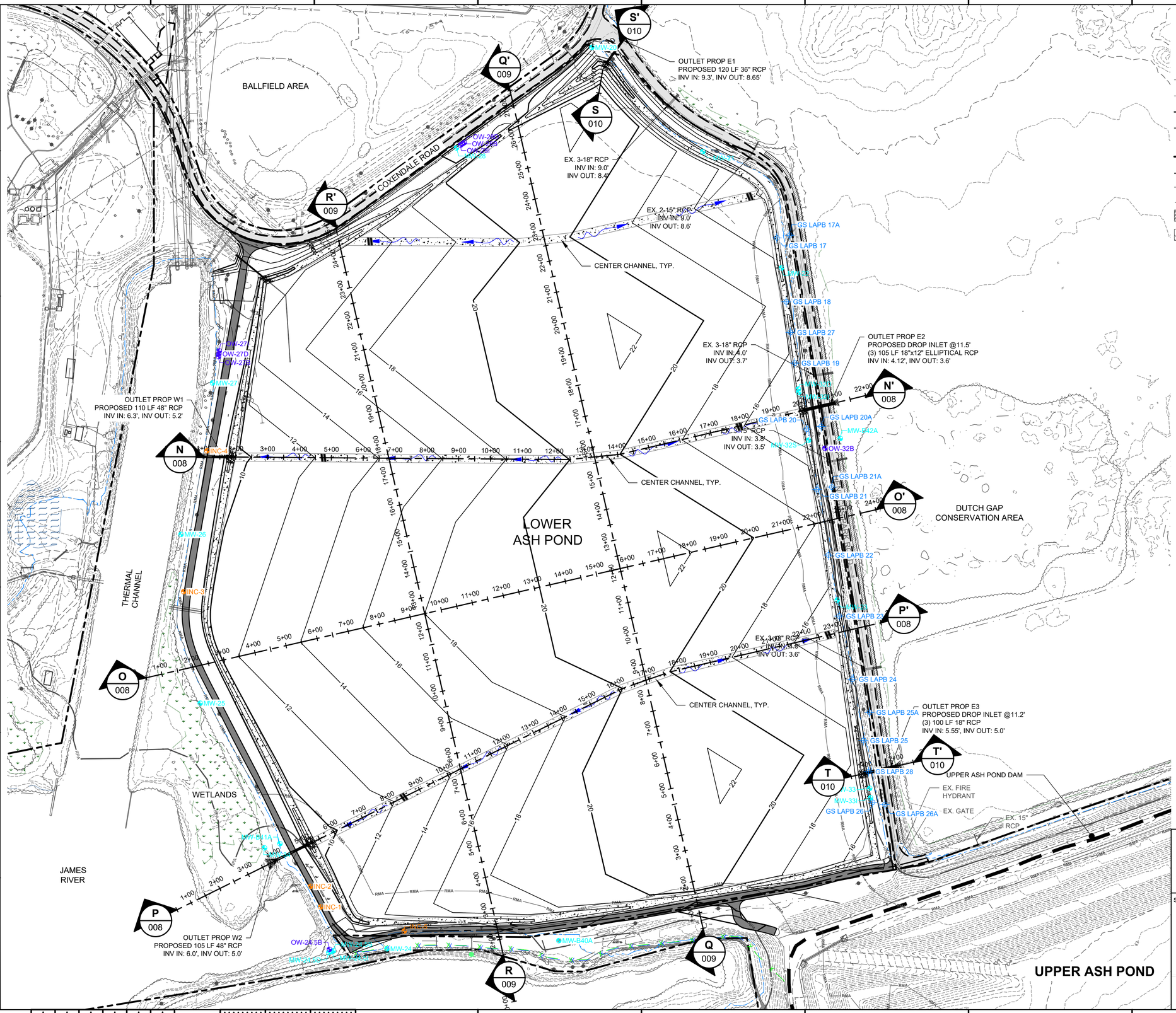
FOR
PERMIT APPLICATION DRAWINGS

SEAL
COMMONWEALTH OF VIRGINIA
GABRIEL WILLIAM LANG
Lic. No. 041875
PROFESSIONAL ENGINEER
11/13/2020

Dominion Energy

SCALE: NONE		DES: AMC	
DWG TYPE:.DWG		DFTR: AMC	
JOB NO: 60614683		CHKD: RJB	
DATE: 11/13/2020		ENGR: GWL	
FILENAME: 006 EROSION AND SEDIMENT CONTROL PLAN.DWG		APPD: GWL	
DWG SIZE	DRAWING NO.	REVISION	
ANSI D 22.0"x34.0"	006	0	

006 REV. 0



LEGEND

- EXISTING TOPO MAJOR (10FT)
- EXISTING TOPO MINOR (2FT)
- PROPOSED TOPO MAJOR (10FT)
- PROPOSED TOPO MINOR (2FT)
- STORMWATER FLOW PATH
- PROPERTY BOUNDARY
- RESOURCE PROTECTION AREA
- RESOURCE MANAGEMENT AREA
- EXISTING FENCELINE
- EXISTING HIKING TRAIL
- PROPOSED HIKING TRAIL
- OVERHEAD TRANSMISSION LINE POLE
- FORESTED WETLANDS
- OPEN WATER WETLANDS
- EXISTING ROAD
- PROPOSED ROAD
- PROPOSED CONCRETE-LINED STORMWATER CONVEYANCE CHANNEL
- PROPOSED SECURITY FENCE
- PROPOSED PRIVACY FENCE
- APPROX. LIMIT OF DISTURBANCE
- EXISTING INCLINOMETER
- EXISTING OBSERVATION WELL
- EXISTING MONITORING WELL
- EXISTING BORING

REFERENCES

1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH LOWER ASH POND INTERIM AS-BUILT SURFACE, SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 8, 2019.
2. THE PROPERTY BOUNDARY PRESENTED IN THESE DRAWINGS IS BASED ON A METES AND BOUNDS SURVEY PERFORMED BY D&M SURVEYORS P.C. ON MARCH 16 AND 29, 2016.
3. THE EXISTING WETLANDS AND RESOURCE PROTECTION AREA (RPA) PRESENTED IN THESE DRAWINGS WERE OBTAINED FROM THE WETLAND DELINEATION MAP PREPARED BY GOLDER ASSOCIATES, DATED AUGUST 20, 2015, JUNE 2018, AND BY AECOM ON MARCH 11, 2020.
4. THE EXISTING BASE FLOOD ELEVATION PRESENTED IN THESE DRAWINGS IS THE 100-YEAR FLOOD ELEVATION 16 CONTOUR, BASED ON FEMA FIRM PANEL MAPS 5104C0335D AND 51041C0169D, DATED APRIL 26, 2017.

NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS BASED ON NAVD88.

N

0 150 300 450
GRAPHIC SCALE (IN FEET)

0 INCHES 1 2 3
TENTHS 10 20 30

AECOM

TITLE
FINAL GRADING PROFILE AND CROSS SECTIONS LAYOUT PLAN
CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

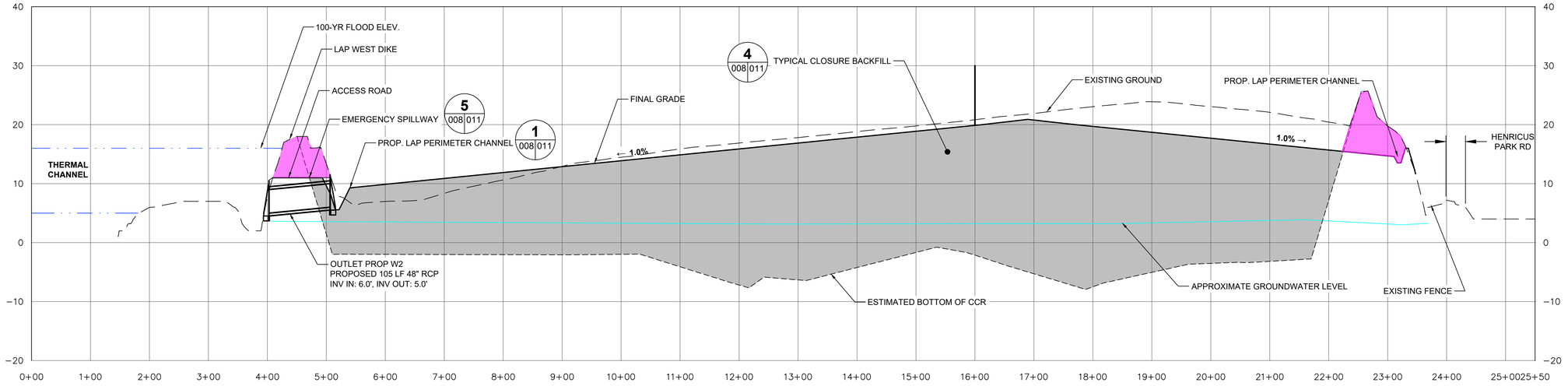
FOR
PERMIT APPLICATION DRAWINGS

SEAL
COMMONWEALTH OF VIRGINIA
GABRIEL WILLIAM LANG
Lic. No. 041875
PROFESSIONAL ENGINEER
12/17/2020

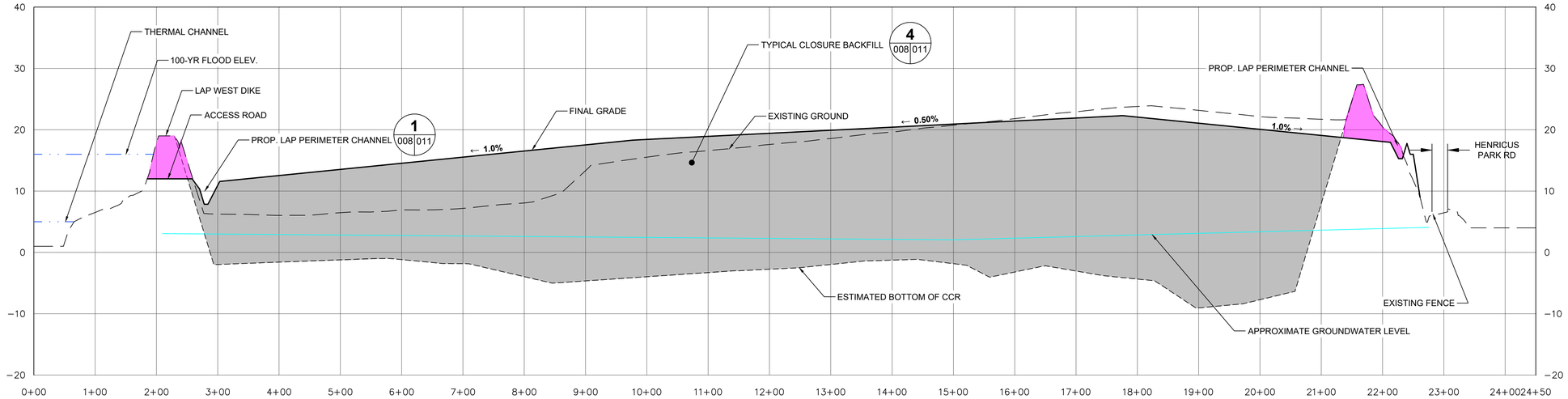
Dominion Energy

SCALE: 1"=150'		DES: AMC	
DWG TYPE:.DWG		DFTR: AMC	
JOB NO: 60614683		CHKD: RJB	
DATE: 11/13/2020		ENGR: GWL	
FILENAME: 007 FINAL GRADING CROSS SECTIONS II.DWG		APPD: GWL	
DWG SIZE	DRAWING NO.		REVISION
ANSI D 22.0"x34.0"	007		0

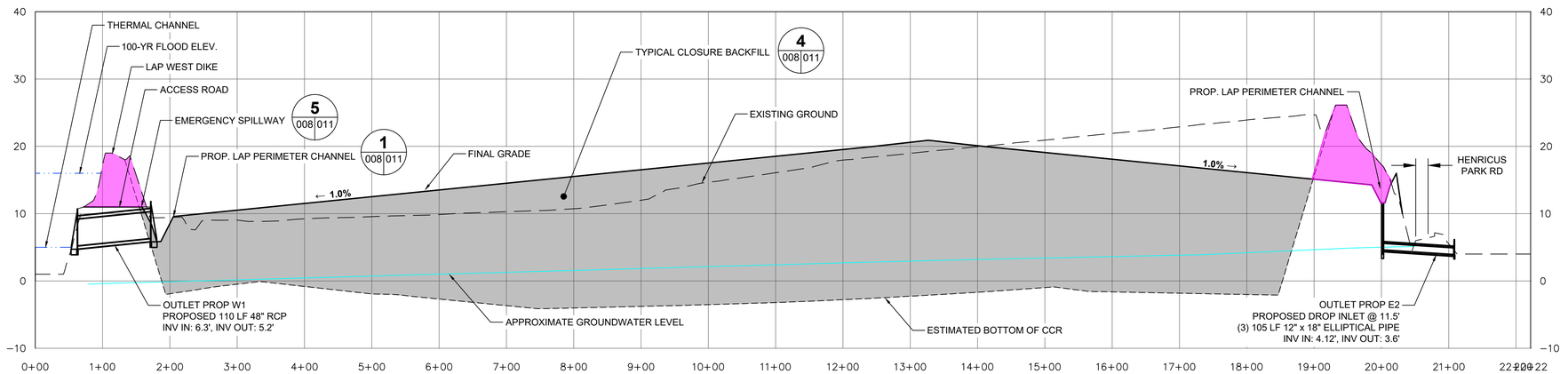
007 REV. 0



PROFILE - P-P'



PROFILE - O-O'



PROFILE - N-N'

LEGEND

- EXISTING GRADES
- ESTIMATED BOTTOM OF CCR
- ESTIMATED GROUNDWATER LEVEL
- WATER ELEVATION
- PROPOSED FINAL GRADE
- TYPICAL CLOSURE BACKFILL
- AREA OF DIKE REMOVAL

NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS BASED ON NAVD88.
2. APPROXIMATE EXISTING GROUNDWATER LEVELS ARE BASED UPON A SINGLE DATA POINT AND ARE PROVIDED FOR REFERENCE ONLY. CONTRACTOR IS TO VERIFY INFORMATION PROVIDED IN DEVELOPMENT OF WATER MANAGEMENT PLAN.

0 100 200 300
HORIZONTAL SCALE (IN FEET)

0 10 20 30
VERTICAL SCALE (IN FEET)

AECOM

SEAL

COMMONWEALTH OF VIRGINIA
GABRIEL WILLIAM LANG
Lic. No. 041875
PROFESSIONAL ENGINEER
11/13/20

TITLE

FINAL GRADING PROFILES AND CROSS SECTIONS I

CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

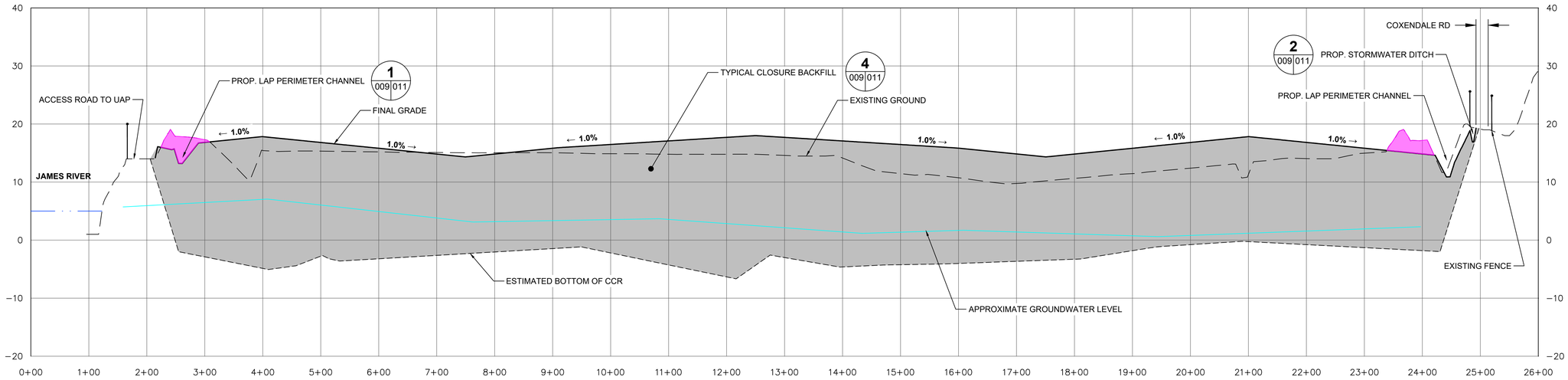
FOR

PERMIT APPLICATION DRAWINGS

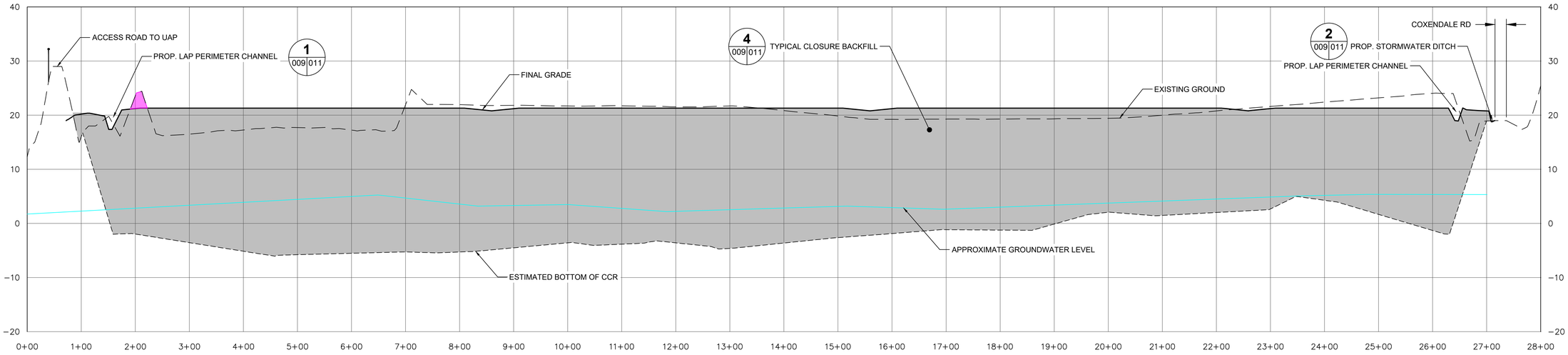
Dominion Energy®

SCALE: 1"=100'	DES: AMC
DWG TYPE:.DWG	DFTR: AMC
JOB NO: 60614683	CHKD: RJB
DATE: 11/13/2020	ENGR: GWL
FILENAME: 007 FINAL GRADING CROSS SECTIONS II.DWG	APPD: GWL
DWG SIZE: ANSI D 22.0"x34.0"	DRAWING NO.: 008	REVISION: 0

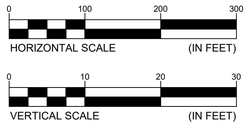
008 REV. 0



PROFILE - R-R'



PROFILE - Q-Q'



LEGEND

- EXISTING GRADES
- ESTIMATED BOTTOM OF CCR
- ESTIMATED GROUNDWATER LEVEL
- WATER ELEVATION
- PROPOSED FINAL GRADE
- TYPICAL CLOSURE BACKFILL
- AREA OF DIKE REMOVAL

NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS BASED ON NAVD88.
2. APPROXIMATE EXISTING GROUNDWATER LEVELS ARE BASED UPON A SINGLE DATA POINT AND ARE PROVIDED FOR REFERENCE ONLY. CONTRACTOR IS TO VERIFY INFORMATION PROVIDED IN DEVELOPMENT OF WATER MANAGEMENT PLAN.

AECOM

SEAL

COMMONWEALTH OF VIRGINIA
GABRIEL WILLIAM LANG
Lic. No. 041875
PROFESSIONAL ENGINEER
11/13/2020

TITLE

FINAL GRADING PROFILES AND CROSS SECTIONS II
CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

FOR

PERMIT APPLICATION DRAWINGS

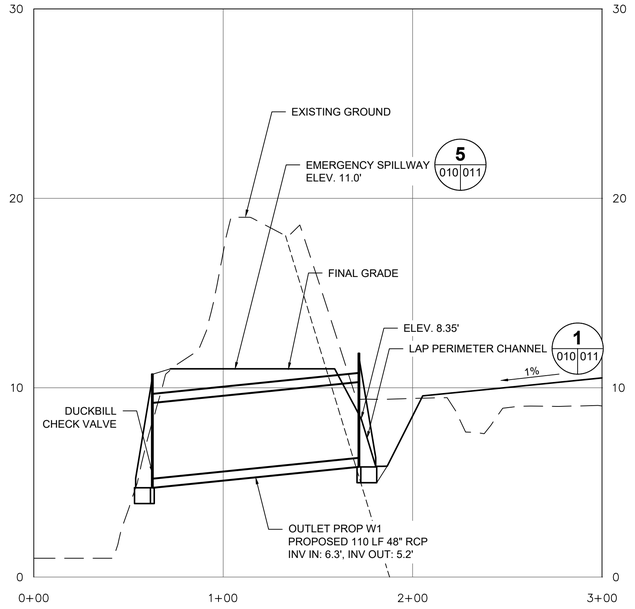
Dominion Energy

SCALE: 1"=100'	DES: AMC
DWG TYPE:.DWG	DFTR: AMC
JOB NO: 60614683	CHKD: RJB
DATE: 11/13/2020	ENGR: GWL
	APPD: GWL

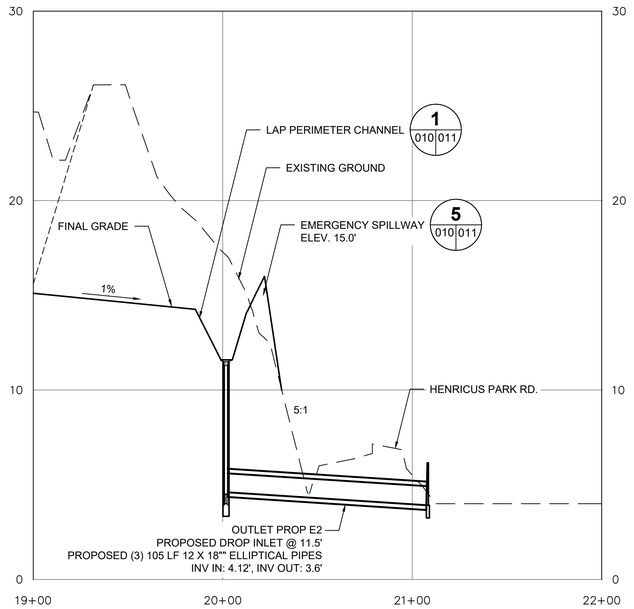
FILENAME: 007 FINAL GRADING CROSS SECTIONS II.DWG

DWG SIZE	DRAWING NO.	REVISION
ANSI D 22.0"x34.0"	009	0

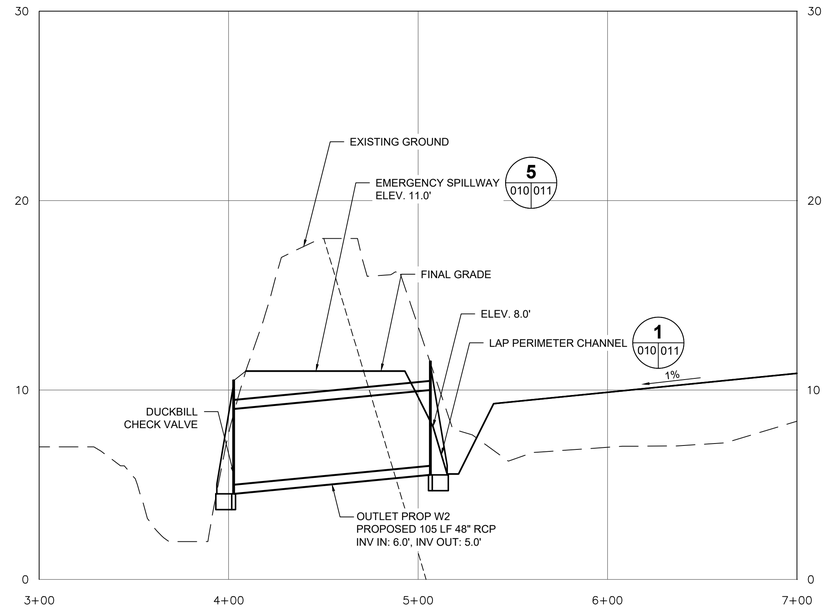
009 REV. 0



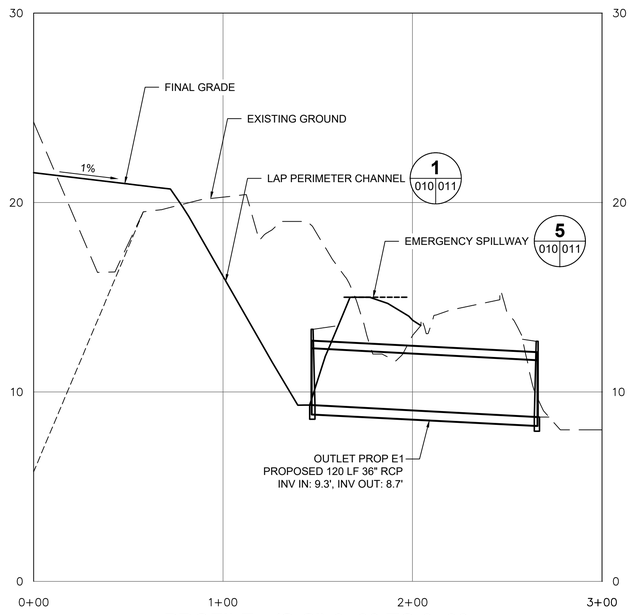
PROFILE - (N-N') 0+00 TO 3+00



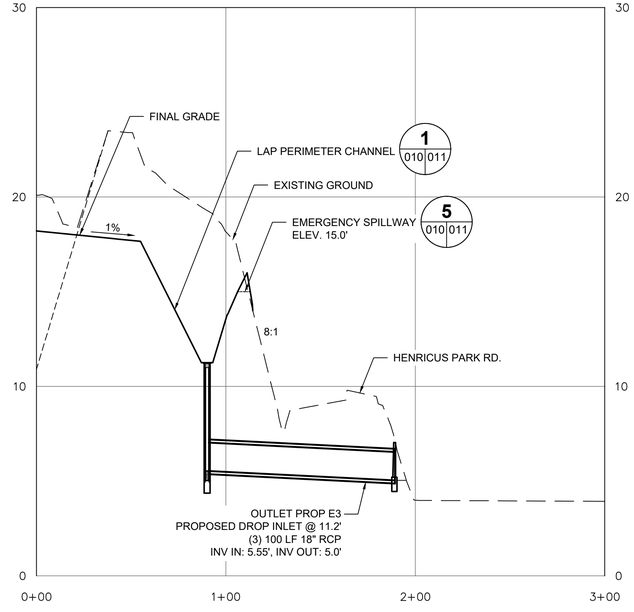
PROFILE - (N-N') 19+00 TO 22+00



PROFILE - (P-P') 3+00 TO 7+00



PROFILE - (S-S') 0+00 TO 3+00



PROFILE - (T-T') 0+00 TO 3+00

NOTE:

1. FOR PROFILE REFERENCES, SEE FINAL GRADING CROSS SECTIONS PLAN, SHEET 007.

LEGEND

- EXISTING GRADES
- ESTIMATED BOTTOM OF CCR
- PROPOSED FINAL GRADE

AECOM

SEAL

COMMONWEALTH OF VIRGINIA
GABRIEL WILLIAM LANG
Lic. No. 041875
PROFESSIONAL ENGINEER
11/13/2020

TITLE

PROPOSED STORMWATER STRUCTURES

CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

FOR

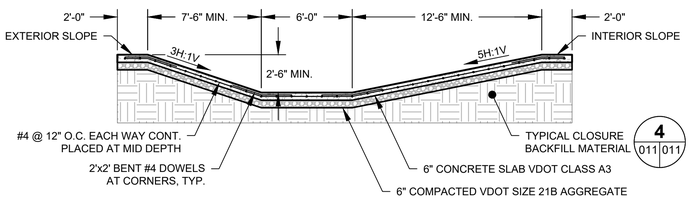
PERMIT APPLICATION DRAWINGS

Dominion Energy

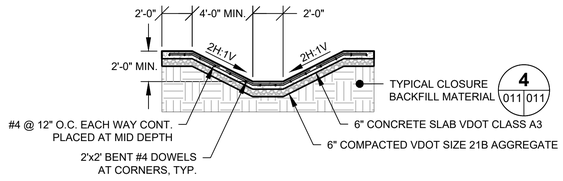
	SCALE: NONE	DES: AMC	
	DWG TYPE:.DWG	DFTR: AMC	
	JOB NO: 60614683	CHKD: RJB	
	DATE: 11/13/2020	ENGR: GWL	
FILENAME: 010 FINAL GRADING DETAILS I.DWG		APPD: GWL	

DWG SIZE	DRAWING NO.	REVISION
ANSI D 22.0"x34.0"	010	0

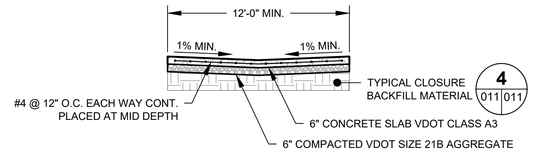
010 REV. 0



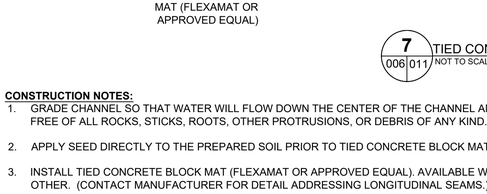
1 005|011 TYPICAL PERIMETER DITCH
NOT TO SCALE



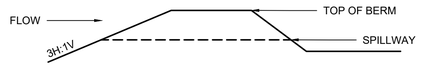
2 005|011 TYPICAL STORMWATER DITCH
NOT TO SCALE



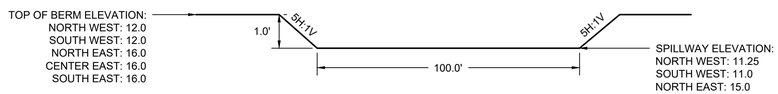
3 005|011 TYPICAL CENTER CHANNEL
NOT TO SCALE



4 005|011 TYPICAL CLOSURE BACKFILL DETAIL
NOT TO SCALE



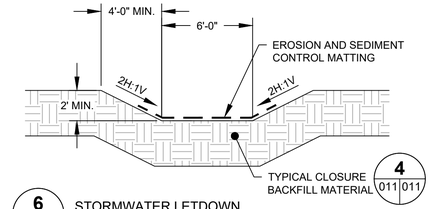
PROFILE



SECTION

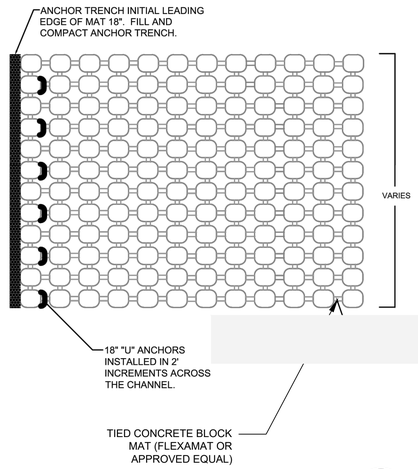
NOTES:
1. SOIL STABILIZATION BLANKET AND MATTING SHALL BE INSTALLED AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN ON SHEET 006.
2. EMERGENCY SPILLWAY SIZED TO CONVEY THE 100-YEAR STORM EVENT.
3. THESE ELEVATIONS REPRESENT POST-CLOSURE CONDITIONS.

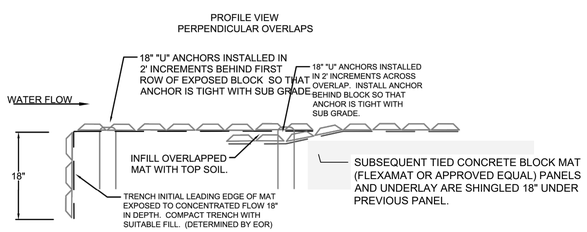
5 005|011 EMERGENCY SPILLWAY DETAIL
NOT TO SCALE

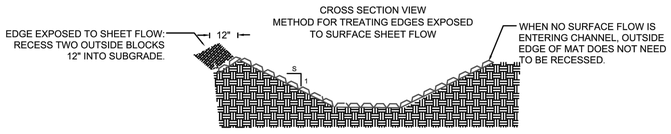


6 005|011 STORMWATER LETDOWN
NOT TO SCALE

NOTES:
1. EROSION AND SEDIMENT CONTROL MATTING TO EXTEND A MINIMUM HEIGHT OF 1 FOOT ABOVE DITCH INVERT.



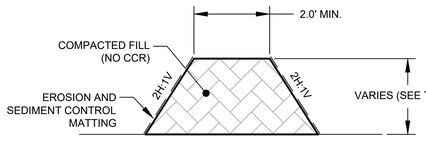




7 006|011 TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL) STORMWATER CONVEYANCE CHANNEL (ALTERNATE)
NOT TO SCALE

CONSTRUCTION NOTES:

1. GRADE CHANNEL SO THAT WATER WILL FLOW DOWN THE CENTER OF THE CHANNEL AND BE CONTAINED TO THE CHANNEL. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND. THE PREPARED SURFACE SHALL PROVIDE A FIRM, UNYIELDING FOUNDATION FOR THE MATS.
2. APPLY SEED DIRECTLY TO THE PREPARED SOIL PRIOR TO TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL) INSTALLATION. USE SEED PER PROJECT SPECIFICATIONS.
3. INSTALL TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL). AVAILABLE WIDTHS ARE 5', 5.5', 8', 10', 12' & 16'. AVAILABLE IN CUSTOM LENGTHS. FOR WIDER WIDTHS, INSTALL MATS ADJACENT TO EACH OTHER. (CONTACT MANUFACTURER FOR DETAIL ADDRESSING LONGITUDINAL SEAMS.)
4. AT THE TOP OF THE CHANNEL, THE INITIAL LEADING EDGE OF TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL) EXPOSED TO CONCENTRATED FLOWS SHALL BE EMBEDDED 18" VERTICALLY INTO THE SUBGRADE TO SERVE AS AN ANCHOR TRENCH. THE TRENCH SHALL BE FILLED AND COMPACTED WITH SUITABLE FILL OR OTHER (AS SPECIFIED BY ENGINEER OF RECORD).
5. FOR ADDITIONAL SECTIONS OF MAT, OVERLAP THE DOWNSTREAM SECTION 18" WITH UPSTREAM SECTION OF MAT. PRIOR TO INSTALLING OVERLAP, FLIP UPSTREAM MAT BACK 24". EXCAVATE 2.25" OF SOIL 18" FROM END OF UPSTREAM MAT. DOWNSTREAM SECTION IS LAID IN THE SHALLOW TRENCH. LIGHTLY SPREAD TOPSOIL OVER INITIAL EDGE. FLIP END OF UPSTREAM MAT OVER THE SOIL-COVERED INITIAL LEADING EDGE OF DOWNSTREAM MAT.
6. INSTALL 18" "U" ANCHORS IN 2' INCREMENTS ACROSS THE OVERLAP. INSTALL ANCHORS DIRECTLY BEHIND BLOCKS. "U" ANCHORS CONSIST OF #3 REBAR "U" ANCHOR WITH 18" LEGS.
7. AT THE END OF THE ARMORED CHANNEL, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH SOIL.



DRAINAGE ACREAGE	BERM HEIGHT (FT)
10	2.0
15	2.5
20	2.5
25	3.0
30	3.5
35	3.5
40	4.0

8 011|011 TYPICAL DIVERSION BERM
NOT TO SCALE

NOTES:
1. DIVERSION BERMS SIZED TO HANDLE THE 100-YEAR STORM EVENT WITHOUT OVERTOPPING.
2. THE ESTIMATED BERM HEIGHT (PROVIDED IN THE TABLE ON THIS SHEET) IS BASED ON AN ESTIMATED DRAINAGE AREA. CONTRACTOR TO CONFIRM THE REQUIRED BERM HEIGHT BASED ON THE ACTUAL DRAINAGE AREA DURING CONSTRUCTION.

REVISIONS

REV NO	DATE	INITIALS	DESCRIPTION
2	7/22/2024	AMC	REMOVE LOW PERMEABILITY FILL FROM BACKFILL DETAIL

AECOM

SEAL
COMMONWEALTH OF VIRGINIA
STEPHEN C WALKER
Lic. No. 0402067705
6/5/24
PROFESSIONAL ENGINEER

TITLE
FINAL GRADING AND STORMWATER DETAILS
CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

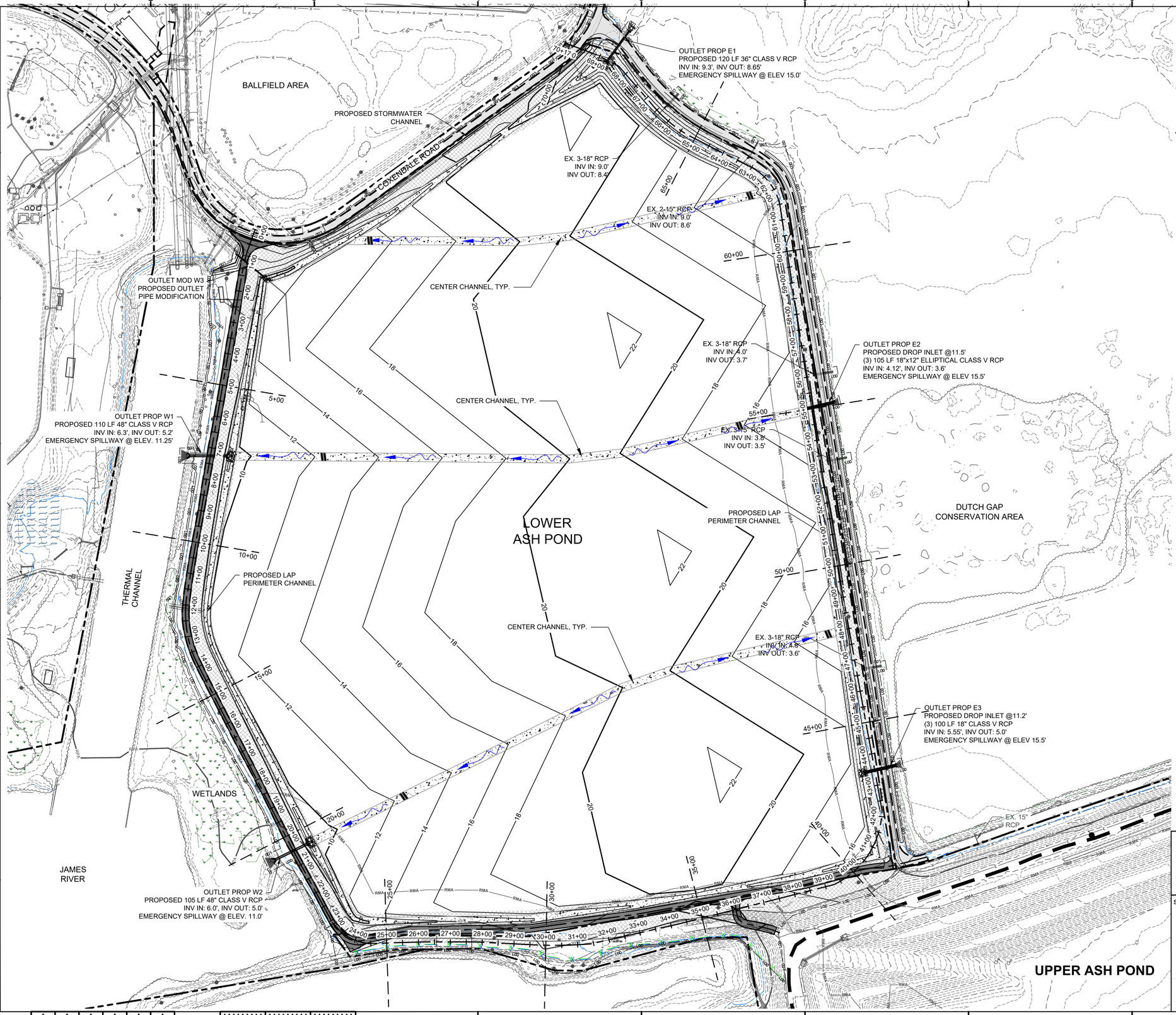
FOR
PERMIT APPLICATION DRAWINGS

Dominion Energy

SCALE: NONE	DES: AMC
DWG TYPE:.DWG	DFTR: AMC
JOB NO: 60614683	CHKD: RJB
DATE: 07/22/2024	ENGR: SCW
FILENAME: 010 FINAL GRADING DETAILS I.DWG	APPD: SCW

DWG SIZE	DRAWING NO.	REVISION
ANSI D 22.0"x34.0"	011	2

011 REV. 2



LEGEND

- EXISTING TOPO MAJOR (10FT)
- EXISTING TOPO MINOR (2FT)
- PROPOSED TOPO MAJOR (10FT)
- PROPOSED TOPO MINOR (2FT)
- STORMWATER FLOW PATH
- PROPERTY BOUNDARY
- RESOURCE PROTECTION AREA
- RESOURCE MANAGEMENT AREA
- EXISTING FENCELINE
- EXISTING HIKING TRAIL
- PROPOSED HIKING TRAIL
- OVERHEAD TRANSMISSION LINE POLE
- FORESTED WETLANDS
- OPEN WATER WETLANDS
- EXISTING ROAD
- PROPOSED ROAD
- PROPOSED CONCRETE-LINED STORMWATER CONVEYANCE CHANNEL
- PROPOSED SECURITY FENCE
- PROPOSED PRIVACY FENCE
- APPROX. LIMIT OF DISTURBANCE

REFERENCES

1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH LOWER ASH POND INTERIM AS-BUILT SURFACE, SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 8, 2019.
2. THE PROPERTY BOUNDARY PRESENTED IN THESE DRAWINGS IS BASED ON A METES AND BOUNDS SURVEY PERFORMED BY D&M SURVEYORS P.C. ON MARCH 16 AND 29, 2016.
3. THE EXISTING WETLANDS AND RESOURCE PROTECTION AREA (RPA) PRESENTED IN THESE DRAWINGS WERE OBTAINED FROM THE WETLAND DELINEATION MAP PREPARED BY GOLDER ASSOCIATES, DATED AUGUST 20, 2015, JUNE 2018, AND BY AECOM ON MARCH 11, 2020.
4. THE EXISTING BASE FLOOD ELEVATION PRESENTED IN THESE DRAWINGS IS THE 100-YEAR FLOOD ELEVATION 16 CONTOUR, BASED ON FEMA FIRM PANEL MAPS 5104C0335D AND 51041C0169D, DATED APRIL 26, 2017.

NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
2. PERIMETER DIKE CAN BE LOWERED WITH THE EXCAVATION OR SLOPED TEMPORARILY AT 3H:1V OR FLATTER. THE DIKE MUST REMAIN ABOVE ELEVATION 16 FEET UNTIL ALL CCR IS REMOVED TO PROVIDE ADEQUATE SEPARATION FROM THE 100-YEAR FLOOD. IF SLOPES ARE CONSTRUCTED, THE CONTRACTOR SHALL ASSESS CONSTRUCTION STABILITY OF THE SLOPES AND DETERMINE IN ADDITIONAL MEASURES ARE NECESSARY TO SUPPORT CONSTRUCTION LOADS.
3. THE CONTRACTOR IS REQUIRED TO LOWER PERIMETER DIKE AS NECESSARY TO INSTALL EMERGENCY SPILLWAYS AT EACH FINAL STORMWATER OUTLET, PER DETAIL 5 ON SHEET 011.
4. IF CCR MATERIAL IS DISCOVERED IN THE PERIMETER DIKE, CONTRACTOR TO SUBMIT A PLAN FOR THE REMOVAL TO THE OWNER AND OWNER'S ENGINEER FOR APPROVAL.

N

0 150 300 450
GRAPHIC SCALE (IN FEET)

0 INCHES 1 2 3
TENTHS 10 20 30

AECOM

TITLE
DAM DECOMMISSIONING PLAN
CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

FOR
PERMIT APPLICATION DRAWINGS

SEAL
COMMONWEALTH OF VIRGINIA
GABRIEL WILLIAM LANG
Lic. No. 041075
PROFESSIONAL ENGINEER
11/13/20

Dominion Energy

SCALE: 1"=150'	DES: AMC
DWG TYPE:.DWG	DFTR: AMC
JOB NO: 60614683	CHKD: RJB
DATE: 11/13/2020	ENGR: GWL
FILENAME: 012 DAM DECOMMISSIONING PLAN.DWG	APPD: GWL

DWG SIZE	DRAWING NO.	REVISION
ANSI D 22.0"x34.0"	012	0

012 REV. 0

LEGEND

- EXISTING GRADES
- ESTIMATED BOTTOM OF ASH
- PROPOSED FINAL GRADE

NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
2. PERIMETER DIKE CAN BE LOWERED WITH THE EXCAVATION OR SLOPED TEMPORARILY AT 3H:1V OR FLATTER. THE DIKE MUST REMAIN ABOVE ELEVATION 16 FEET UNTIL ALL CCR IS REMOVED TO PROVIDE ADEQUATE SEPARATION FROM THE 100-YEAR FLOOD. IF SLOPES ARE CONSTRUCTED, THE CONTRACTOR SHALL ASSESS CONSTRUCTION STABILITY OF THE SLOPES AND DETERMINE IN ADDITIONAL MEASURES ARE NECESSARY TO SUPPORT CONSTRUCTION LOADS.
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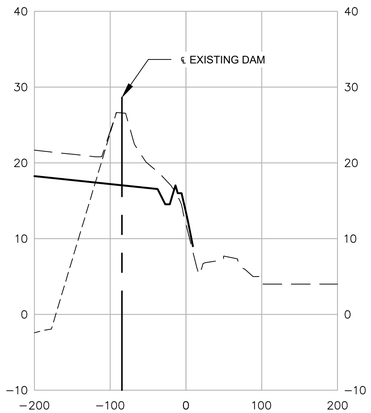
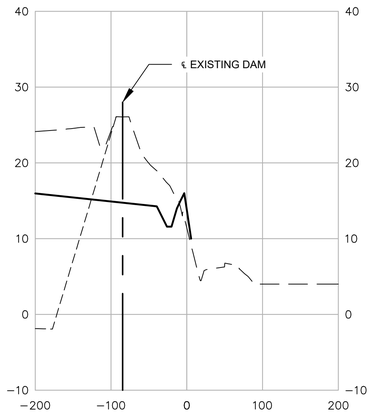
4. IF CCR MATERIAL IS DISCOVERED IN THE PERIMETER DIKE, CONTRACTOR TO SUBMIT A PLAN FOR THE REMOVAL TO THE OWNER AND OWNER'S ENGINEER FOR APPROVAL.



STA. 50+00



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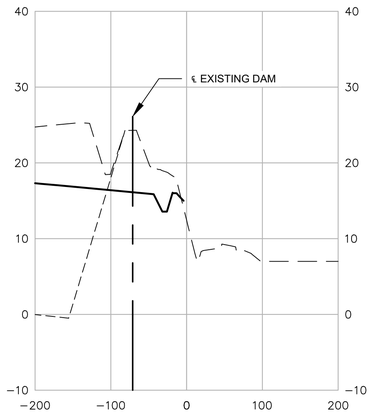

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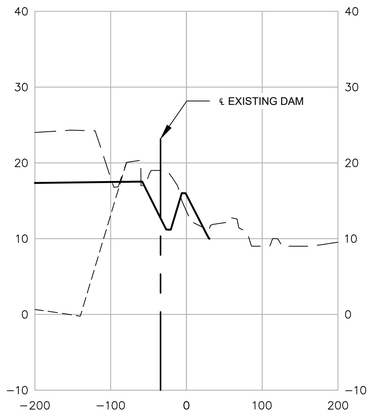

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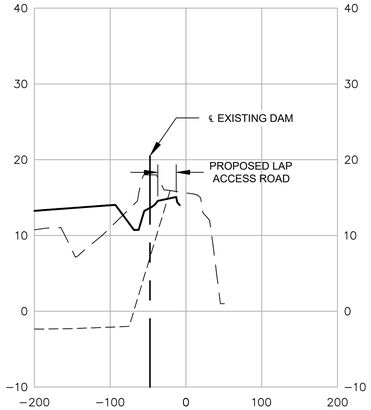

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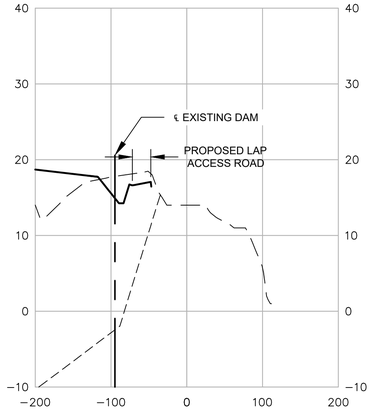

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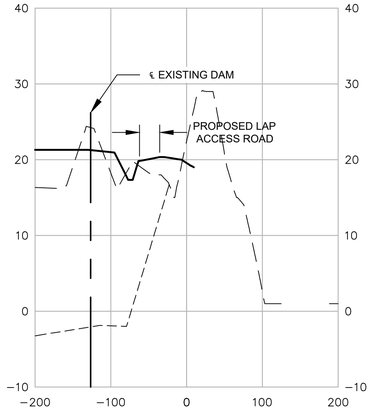

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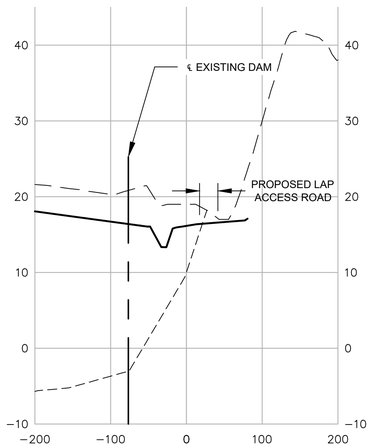

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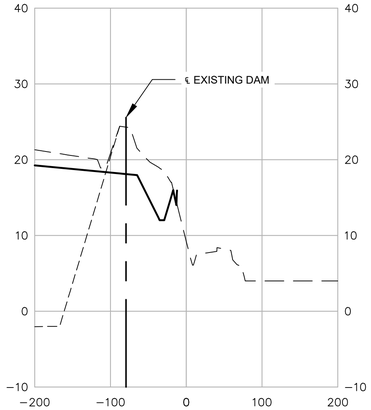

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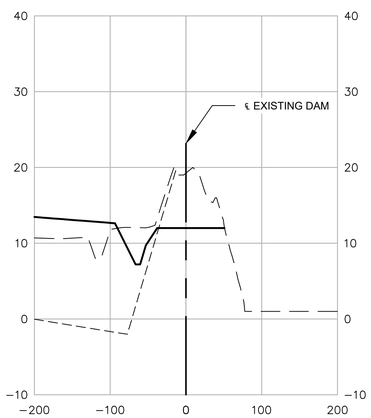

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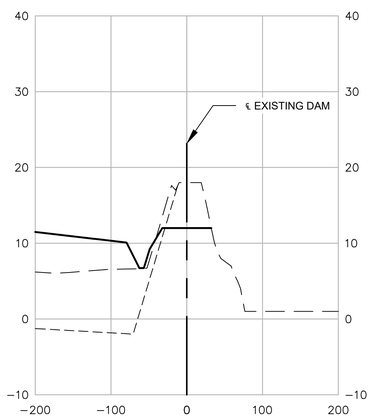

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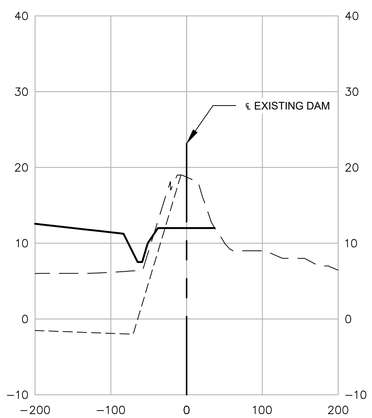

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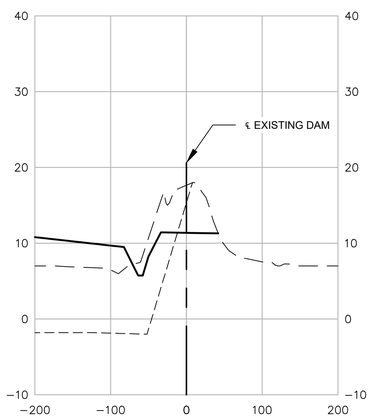

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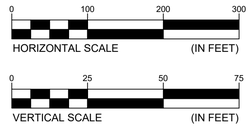

REVISIONS			
REV NO	DATE	INITIALS	DESCRIPTION
1	8/21/2020	AMC	UPDATE HENRICUS PARK RD GRADING, ADD PAVEMENT IMPROVEMENTS LOD

AECOM

TITLE

DAM DECOMMISSIONING PLAN
CROSS SECTIONS
CHESTERFIELD POWER STATION
CLOSURE PLAN - LOWER ASH POND
CHESTERFIELD COUNTY, VIRGINIA

FOR

PERMIT APPLICATION DRAWINGS

SEAL

COMMONWEALTH OF VIRGINIA
GABRIEL WILLIAM LANG
Lic. No. 041675
PROFESSIONAL ENGINEER
11/13/20

Dominion Energy®

SCALE: 1"=100'	DES: AMC	
DWG TYPE:.DWG	DFTR: AMC	
JOB NO: 60614683	CHKD: RJB	
DATE: 11/13/2020	ENGR: GWL	
FILENAME: 012 DAM DECOMMISSIONING PLAN.DWG	APPD: GWL	

DWG SIZE	DRAWING NO.	REVISION
ANSI D 22.0"x34.0"	013	0

013 REV. 0