Dominion Resources Services, Inc.
5000 Dominion Boulevard, Glen Allen, VA 23060

dom.com

Overnight Mail
Return Receipt Requested

February 15, 2017

Ms. Beverley Carver
Senior Water Permit Writer
Virginia Department of Environmental Quality
Valley Regional Office
4411 Early Road, Harrisonburg, VA 22801

RE: Dominion Bremo Power Station VPDES Permit No. VA0004138: Revised Notice of Planned Change

Dear Ms. Carver,

Enclosed is Revision 3 to the Notice of Planned Change (NPC) concerning the East Ash Pond Stormwater Management Phasing Plan that was transmitted to you by cover letter dated December 15, 2016. Revision 2 of the NPC, submitted January 20, 2017, has been revised as follows:

- A new contact stormwater area B2 has been added to receive drainage from the new access road to the North Ash Pond. The collected water will be directed to the CSWTS.
- The existing Stormwater Management Pond has been identified as a location that may received collected non-contact stormwater.
- Narrative was added to recognize that excavation in the Phase 4 area may begin during the excavation in the Phase 3 area in preparation for the North Ash Pond toe excavation activities.
- Narrative was added to recognize that excavation in the Phase 5 area may occur in conjunction with excavation of the Phase 4 area.

Dominion is submitting this revised Notice of Planned Change in accordance with Part II.J of the subject permit and requests DEQ concurrence with the East Ash Pond Stormwater Management Phasing Plan. Dominion understands that regulatory authorizations beyond DEQ's concurrence may be needed and we will obtain all such authorizations as required to carry out this project.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please contact Ken Roller at (804) 273-3494 should you have any questions related to this submittal.

Sincerely,

Paula A. Hamel
Director, Generation Environmental Services

ec: Brandon Kiracofe: brandon.kiracofe@deq.virginia.gov
Beverley Carver: beverley.carver@deq.virginia.gov

EAST ASH POND EXCAVATION STORMWATER MANAGEMENT PHASING PLAN

The East Ash Pond Stormwater Management Phasing Plan was created for stormwater management during the removal and relocation to the North Ash Pond (NAP) of the Coal Combustion Residuals (CCR) from the East Ash Pond (EAP) at the Bremo Power Station. This plan is for the interim condition between the existing conditions and the establishment of the East Stormwater Management Pond. The plan was designed with the following objectives:

- Close the EAP through removal of the CCR and repurpose the area as a stormwater management basin;
- Phase CCR removal activities to maintain separation of the CCR contact water and non-contact water throughout the period of CCR removal from the EAP through the use of separation berms and temporary lined areas (e.g., geomembrane rain cover material);
- Manage CCR contact water within the EAP during construction;
- Pump CCR contact water from areas of the EAP to the Centralized Source Water Treatment System (CSWTS) for treatment;
- Pump non-contact water from areas of the EAP to established permitted Outfalls 003, 006, and the existing stormwater management pond as appropriate;
- Maintain existing Outfall 003 as a non-contact stormwater discharge point until its retirement in the phased plan, and;
- Dismantle and refurbish existing Outfall 003 to become the newly established non-contact stormwater discharge point of Outfall 008.

Closure of the East Ash Pond will involve the sequential construction of non-contact stormwater management areas, which will be generated in each phase by removal of CCR from sections of the pond and certifying the remaining soil subgrade as "clean closed." The removal protocol will involve removing accumulated CCR such that no residual materials remain visible, followed by over-excavating the removal footprints by approximately 6 inches. Certification of the clean closure will be provided by a registered Professional Engineer.

The following sections provide a narrative description of the phased CCR removal activities and how stormwater (CCR contact and non-contact water) will be managed. The attached series of figures support this narrative description and represent the conceptual construction excavation and stormwater management plans to be implemented.

Figure 1 - East Ash Pond Excavation Stormwater Management Phasing Plan

Figure 1 depicts an overview of the EAP locations associated with the 5 phases of CCR removal and stormwater management. Phase 1 begins in the southwest corner of the EAP with subsequent phases moving counterclockwise until Phase 5 is complete. Existing non-contact stormwater Outfalls 003 and 006 are depicted on this figure along the southern Dominion property line.

Figure 2 - Existing Conditions

Figure 2 depicts the six existing drainage areas that will be affected by the phased project, stormwater flow directions, and stormwater type (i.e., CCR contact verses non-contact) for each area based on the existing field conditions pre-construction. As outlined in the figure, stormwater flows from each drainage area as follows:

- Areas A and B drain to the existing Stormwater Management Pond
- Area C infiltrates
- Area D drains to the existing stone arched culvert beneath the railroad tracks
- Area E discharges through Outfall 003
- Area F is pumped to the CSWTS

Outfall 004 will be retired, and the DEQ-Valley Regional Office will be notified within seven days of its retirement in accordance with part I.G.20 of the Virginia Pollutant Discharge Elimination System (VPDES) Permit No. VA0004138.

Figure 3 - Phase 1 and Phase 2

Figure 3 depicts the result of alternating CCR excavation between Phases 1 and 2 until both phases are complete. An existing non-CCR soil splitter dike will separate the Phase 1 and Phase 2 locations after CCR excavation, and each phase area will be separated into CCR contact and non-contact stormwater management areas by the construction of additional berms using clean fill material. The CCR contact stormwater will be pumped to the CSWTS for treatment prior to discharge through Outfall 504. The non-contact stormwater drainage areas will be temporarily lined, and the collected stormwater will be pumped to Outfall 006, Outfall 003, or the existing Stormwater Management Pond. Stormwater may also be pumped from one temporary lined area to another for management purposes.

Prior to the initiation of CCR excavation activities, a haul road will be constructed connecting the NAP and the EAP. The road will be graded to divert stormwater that contacts the road to a designated contact stormwater management area located in Area B2. The contact stormwater will then be pumped to the CSWTS.

Non-contact stormwater will continue to drain from the existing non-contact drainage areas containing the stump pond and adjacent to the connecting NAP and EAP haul road (Areas A and B1, respectively) to the Stormwater Management Pond.

The NAP toe drain water will continue to drain into Area B2 and ultimately discharge into the contact stormwater management area and be pumped to the CSWTS.

Non-contact stormwater from Area E will continue to drain into the existing non-contact Outfall 003.

Figure 4 - Phase 3

Figure 4 depicts the result of the CCR excavation in the Phase 3 area. Prior to the Phase 3 CCR excavation, Outfall 003 will be sealed to prohibit discharges during the Phase 3 CCR excavation activities. The DEQ-Valley Regional Office will be notified in writing of Outfall 003's retirement within seven days of its retirement, in accordance with part I.G.20 of the VPDES Permit No. VA0004138. CCR contact stormwater during excavation will be pumped to the CSWTS for treatment prior to discharge through Outfall 504.

After CCR removal, the newly created non-contact drainage area will be temporarily lined, and the stormwater will be pumped to Outfall 006, 008 (Outfall 003 to reopen as Outfall 008 post CCR removal), or the existing Stormwater Management Pond. Stormwater may also be pumped from one temporary lined area to another for management purposes. The road's CCR contact stormwater will continue to drain into a CCR contact stormwater management area created during Phase 1. Non-contact stormwater will continue to drain through the existing non-contact drainage areas A and B1.

The NAP toe drain water will continue to drain into the contact stormwater management area (Area B2) and ultimately be pumped to the CSWTS.

Figure 5 - Phase 4

Figure 5 depicts the CCR removal in the Phase 4 area as well as the toe excavation of the NAP. Soil excavated from the NAP toe will be used to shape the final side slopes of the non-contact drainage area created in Phase 1. During excavation activities, CCR contact stormwater will be pumped to the CSWTS to be treated prior to discharge through Outfall 504. After the excavation and CCR removal, the former CCR contact stormwater management areas created by Phases 2 and 3 will be expanded by Phase 4 and become a non-contact drainage area. The northwestern corner will use the existing soil splitter dike as the drainage divide between the CCR contact stormwater management area created by Phase 1 and the non-contact drainage areas to the east of the splitter dike. Stormwater in the non-contact drainage areas may be pumped to Outfall 006, 008, or the existing Stormwater Management Pond. Stormwater may also be pumped from one temporary lined area to another for management purposes. The road's CCR contact stormwater will continue to drain into a CCR contact stormwater management area created during Phase 1.

Non-contact stormwater will continue to drain through the existing drainage areas A and B1.

The NAP toe drain water will cease to drain during excavation of the NAP toe through installation of a series of toe drain wells installed on the NAP embankment. The toe drain water will be pumped to the Stormwater Management Pond or CSWTS for treatment prior to discharge.

Phase 4 excavation may begin during the Phase 3 excavation in preparation of the North Ash Pond Embankment toe excavation.

Figure 6 - Phase 5

Figure 6 depicts the CCR removal in the Phase 5 area which includes the area known as the Stump Pond. A temporary non-contact water diversion berm will be created prior to the Phase 5 excavation, and the non-contact stormwater from the Stump Pond will be directed to the Stormwater Management Pond, Outfall 006, or Outfall 008 (Outfall 003 to reopen as Outfall 008 post CCR removal). Stormwater may also be pumped from one temporary lined area to another for management purposes. The 24" culvert previously used to drain Area A into the Stormwater Management Pond will be removed as well as the NAP and EAP haul road in part.

During the Phase 5 excavation, clean soil structural fill will be brought in to the NAP embankment to complete the buttress that was excavated as part of Phase 4. Prior to terminating the toe drain well operations used during the Phase 4 excavation, the NAP toe drain system will be reconstructed, and a gravity drain system will be installed to collect the toe drain water.

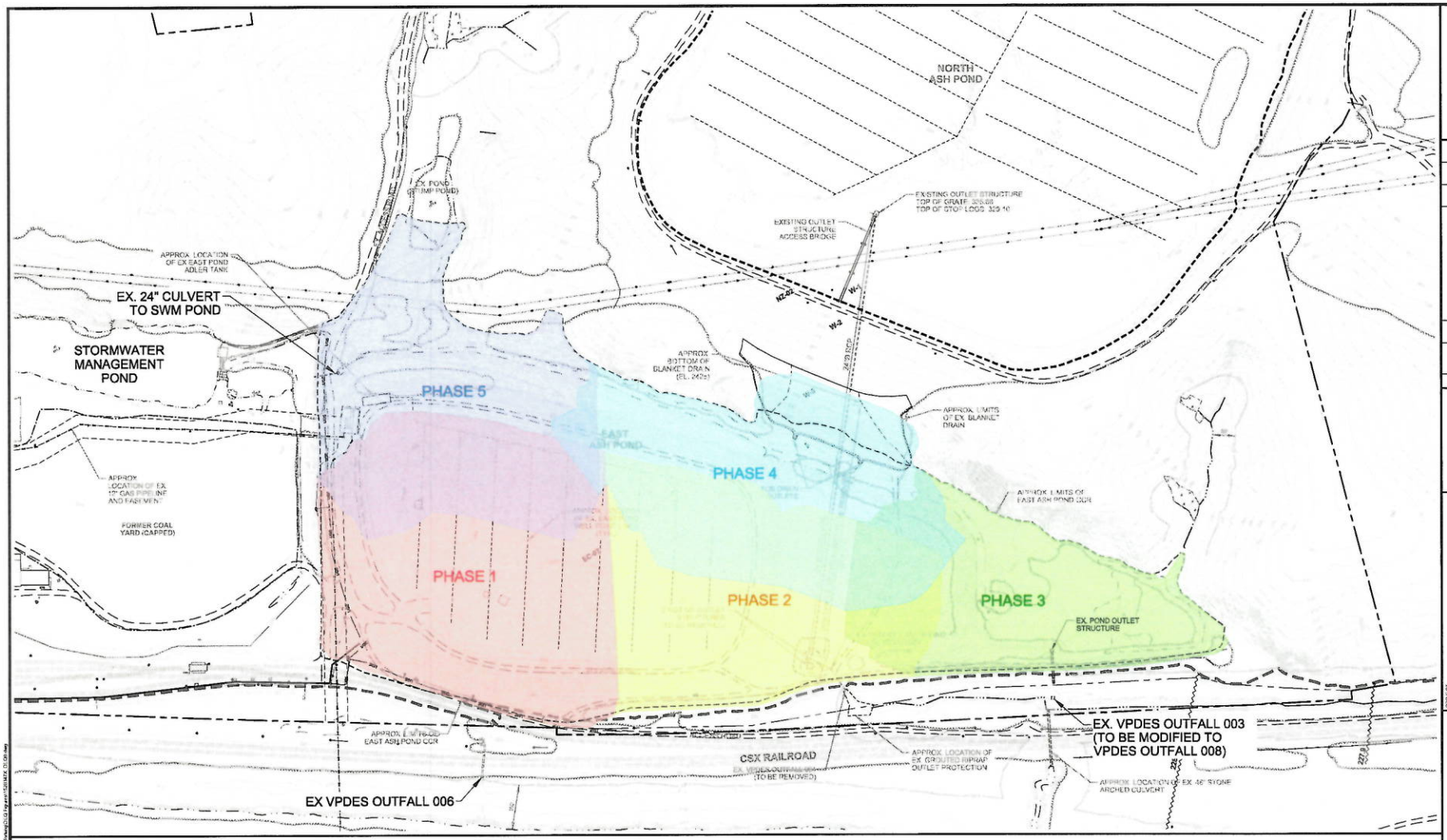
After CCR removal, temporary liners and their interim berms will be removed along with the splitter dike. Those clean soil fill sources will be used to shape the remainder of the EAP area for repurposing as a stormwater management basin.

Phase 5 may be excavated in conjunction with the Phase 4.

Figure 7 - Final Grading Plan

Figure 7 depicts the final grading plan of the proposed East Stormwater Management Pond. When the final grading plan is achieved, the CCR will have been removed from the EAP, the side slopes will have been reconstructed, and non-contact stormwater will be permitted to fill the area and discharge through the newly established Outfall 008. When Outfall 008 is put into service, the DEQ-Valley Regional Office will be notified in writing within seven days, in accordance with part I.G.20 of the VPDES Permit No. VA0004138. The permanent pool of water retained by the East Stormwater Management Pond will be approximately 15-feet in depth due to the pond being an incised excavation. A permanent safety bench will be provided around the perimeter of the pond, and all areas will be stabilized with vegetation. All

stormwater flowing into and from the East Stormwater Management Pond will be post construction non-contact water and will discharge through Outfall 008.



LEGEND

DOMINION PROPERTY BOUNDARY	CREEK/STREAM CENTERLINE
ADJACENT PROPERTY BOUNDARY	APPROX. EDGE OF SURFACE WATER
APPROX. LIMITS OF EX. ASH PONDS	WETLANDS
EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)	LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
EX. PAVED ROAD	LIMITS OF 100-YR FLOOD PLAIN
EX. UNPAVED ROAD	BASE FLOOD ELEVATION
EX. RAILROAD	EX. GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
EX. TREE LINE	EX. PIEZOMETER AND IDENTIFICATION
EX. FENCE	EX. WELL POINT LINES
EX. OVERHEAD UTILITY LINE	
EX. MANHOLE	

NOTES

1. GROUNDWATER MONITORING WELLS MW-6, 7, 8, 10, 16, 17, AND 18 TO BE ABANDONED AND REMOVED.

SCALE 100 0 100 200 FEET

Golder Associates

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
1	15/27/2016	JRD	REVISED PER DLQ COMMENTS	KLL		

PROJECT

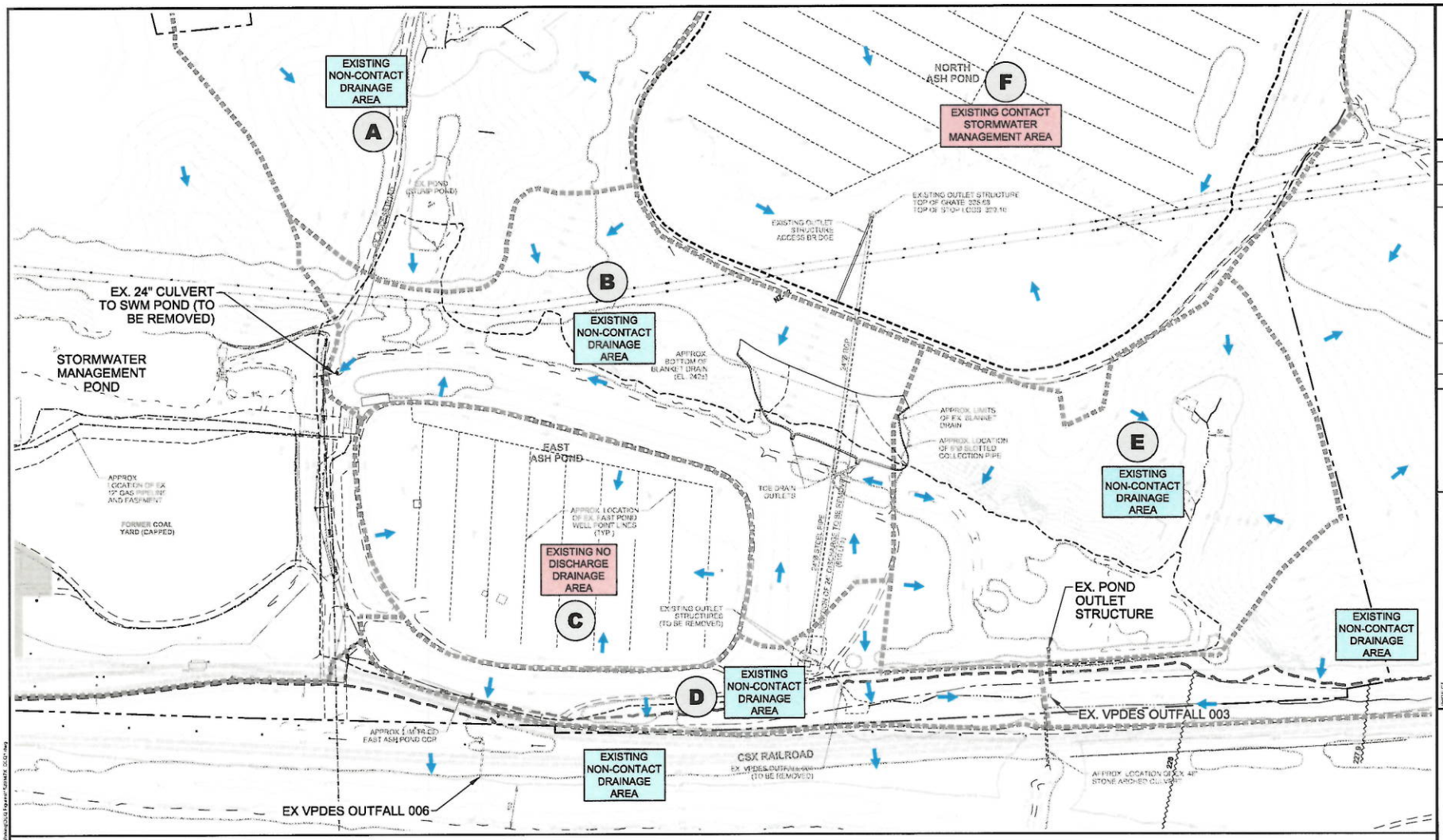
DOMINION
BREMO POWER STATION
EAST ASH POND EXCAVATION PLAN
FLUVANNA COUNTY, VIRGINIA

TITLE

EAST ASH POND EXCAVATION STORMWATER MANAGEMENT PHASING PLAN

PROJECT No		15-20347
FILE No		1520347X DEQ0
REV 0	SCALE	AS SHOWN
DESIGN	JRD	11/01/16
CADD	ATN	11/01/16
CHECK		
REVIEW		

FIGURE 1



LEGEND

DOMINION PROPERTY BOUNDARY	CREEK/STREAM CENTERLINE
ADJACENT PROPERTY BOUNDARY	APPROX. EDGE OF SURFACE WATER
APPROX. LIMITS OF EX. ASH PONDS	WETLANDS
EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)	LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
EX. PAVED ROAD	LIMITS OF 100-YR FLOOD PLAIN
EX. UNPAVED ROAD	BASE FLOOD ELEVATION
EX. RAILROAD	EX. GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
EX. TREE LINE	EX. PIEZOMETER AND IDENTIFICATION
EX. FENCE	EX. WELL POINT LINES
EX. OVERHEAD UTILITY LINE	
EX. MANHOLE	

NOTES

1. GROUNDWATER MONITORING WELLS MW-6, 7, 8, 10, 16, 17, AND 18 TO BE ABANDONED AND REMOVED.

DRAINAGE AREA BOUNDARY

STORMWATER FLOW DIRECTION

SCALE FEET

Golder Associates

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
1	12/27/2016	JRD	REVISED PER DEQ COMMENTS	KLL		

PROJECT

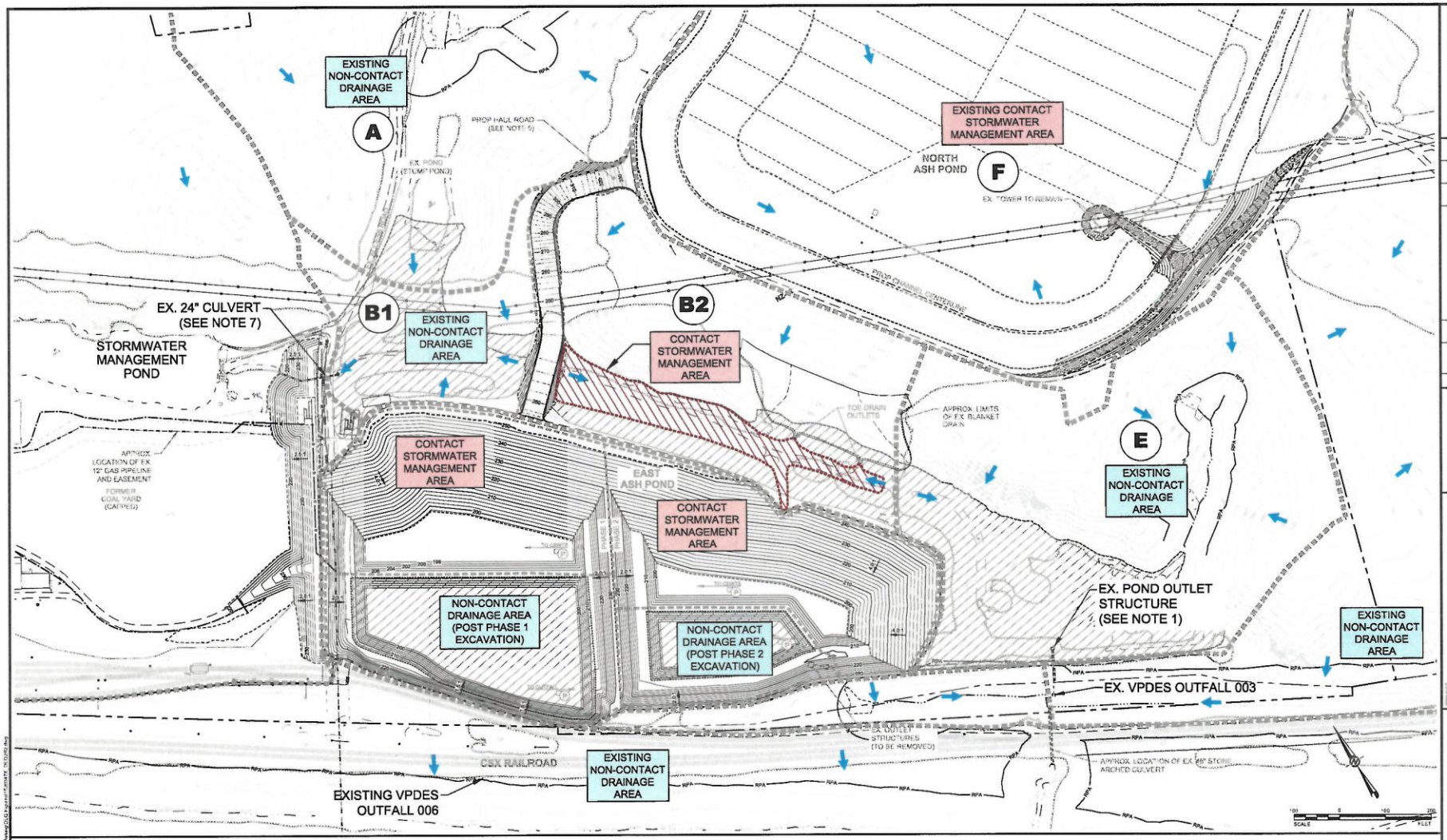
DOMINION
BREMO POWER STATION
EAST ASH POND EXCAVATION PLAN
FLUVANNA COUNTY, VIRGINIA

TITLE

EXISTING CONDITIONS

PROJECT No		15-20347
FILE No		1520347X_DEQ1
REV 0	SCALE	AS SHOWN
DESIGN	JRD	11/01/16
CADD	ATN	11/01/16
CHECK		
REVIEW		

FIGURE 2



LEGEND

- DOMINION PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- APPROX. LIMITS OF EX. ASH PONDS
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EX. PAVED ROAD
- EX. UNPAVED ROAD
- EX. RAILROAD
- EX. TREE LINE
- EX. FENCE
- EX. OVERHEAD UTILITY LINE
- MH EX. MANHOLE
- CREEK/STREAM CENTERLINE
- APPROX. EDGE OF SURFACE WATER
- WETLANDS
- LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
- MW-6 EX. MONITORING WELL LOCATION AND IDENTIFICATION
- NB-02 EX. PIEZOMETER AND IDENTIFICATION
- PROP. TREELINE
- 300 PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. LIMITS OF CHANNEL UNDERCUT

EXCAVATION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY AND SAFETY OF ALL CUT AND FILL SLOPES DURING CONSTRUCTION, WITH ALL SLOPES EXCAVATED IN ACCORDANCE WITH OSHA REQUIREMENTS.
2. TEMPORARY GRADES SHOWN ON THE PHASED EXCAVATION DRAWINGS ARE ESTIMATED LIMITS AND SHOULD NOT BE TAKEN AS ENGINEERED SLOPES.
3. CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING TO MAINTAIN SLOPE STABILITY AT ALL TIMES.
4. RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR CCR MATERIALS SHALL BE 4 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 4:1).
5. EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 SHALL BE AT THE CONTRACTORS OWN RISK AND SHALL NOT BE LEFT UNMONITORED FOR MOVEMENT FOR MORE THAN 14 CALENDAR DAYS.
6. EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
7. RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR SOIL MATERIALS SHALL BE 2 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 2:1).
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9. EXCAVATED SOIL SLOPES STEEPER THAN 2:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL BE HAVE OWNER'S WRITTEN APPROVAL.
10. ALL EXCAVATION SLOPES GREATER THAN 30 VERTICAL FEET SHALL BE PROTECTED FROM EROSION BY BENCHING OR TEMPORARY BERMS WITH DOWNCHUTES UNLESS APPROVED IN WRITING OTHERWISE BY OWNER.
11. ALL FINAL SOIL SLOPES SHALL BE LEFT NO STEEPER THAN 3:1 UNLESS APPROVED IN WRITING BY OWNER.

- DRAINAGE AREA BOUNDARY
- STORMWATER FLOW DIRECTION

NOTES

1. EXISTING OUTFALL 003 TO REMAIN A NON-CONTACT STORM WATER OUTFALL THROUGH THE PHASE 1 & PHASE 2 EXCAVATION. AREA TO BE PROTECTED FROM CONTACT RUNOFF.
2. CONTACT STORM WATER RUNOFF TO BE COLLECTED AND SENT TO CENTRALIZED SOURCE WATER TREATMENT SYSTEM (CSWTS).
3. GAS PIPELINE RELOCATION TO BE SEQUENCED TO MINIMIZE STATION OUTAGE. CONTRACTOR SHALL BE RESPONSIBLE FOR SOIL BERM CONSTRUCTION, PIPE WORKS, AND PIG LAUNCHER BY OTHERS.
4. PIPELINE TO REMAIN COVERED BY CCR UNTIL CONNECTION OF NEW LINE IS MADE.
5. STORMWATER RUNOFF FROM HAUL ROAD TO BE COLLECTED AND SENT TO CSWTS.
6. NAP ACCESS ROAD TO PROVIDE ACCESS FOR FILLING OPERATION. PORTION OF RAMP WITHIN LIMITS OF NAP MAY BE CONSTRUCTED OF COMPACTED CCR MATERIAL.
7. EXISTING 24" CULVERT TO BE EXTENDED WITH 24" HDPE DURING CONSTRUCTION OF GAS PIPELINE BERM. EXTENSION AND EXISTING PIPE TO BE REMOVED PRIOR TO PHASE 5 EXCAVATION.

Golder Associates

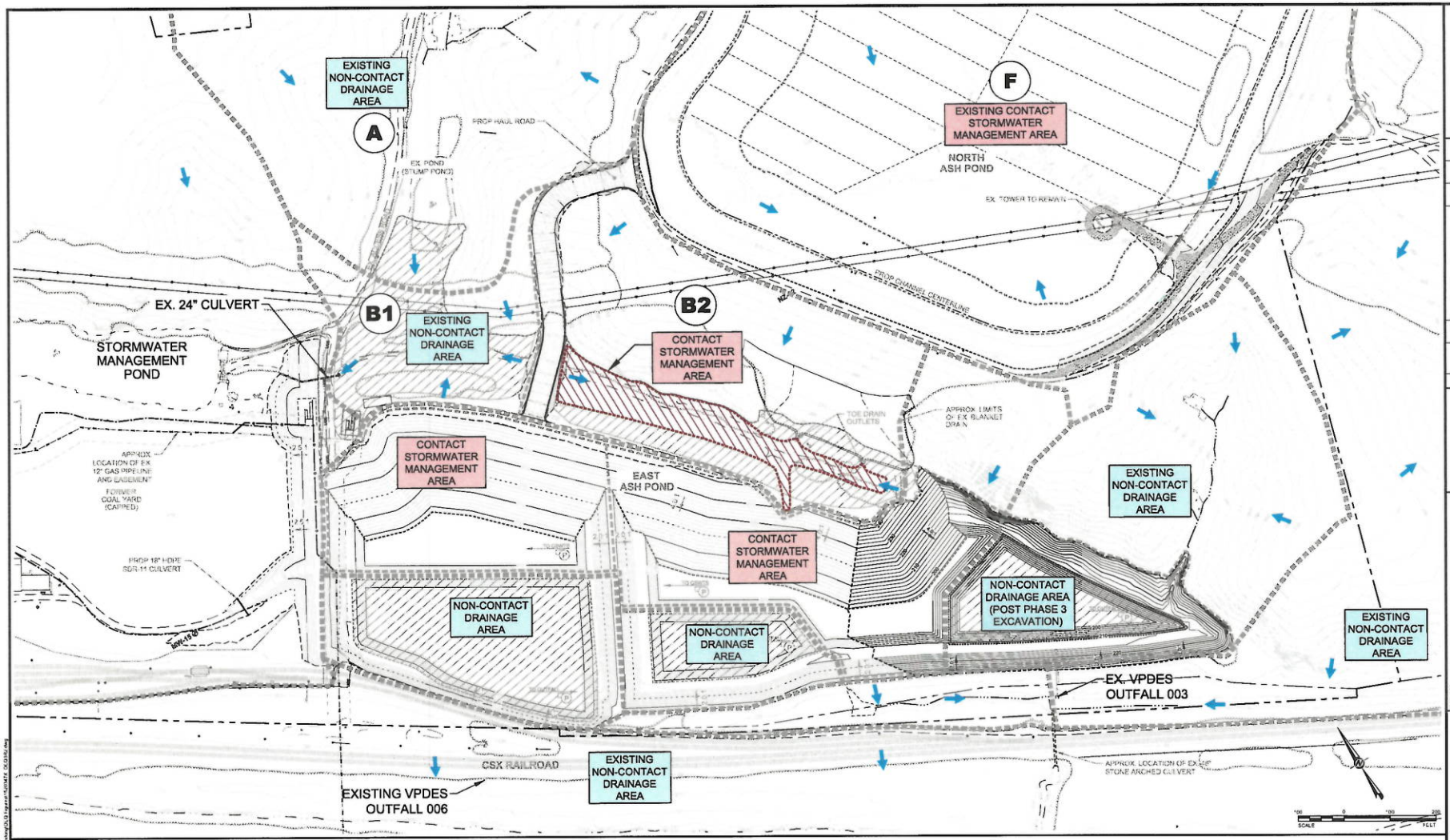
REV	DATE	BY	REVISION DESCRIPTION	CADD	CHK	REVIEW
1	10/06/2017	JRD	HAUL ROAD CONTACT SWM AREA	ATN	RLL	ATN	JRD
0	12/27/2016	JRD	REVISED PER OLD COMMENTS			
		GAL				

PROJECT: DOMINION BREMO POWER STATION EAST ASH POND EXCAVATION PLAN FLUVANNA COUNTY, VIRGINIA

TITLE: EAST ASH POND EXCAVATION PLAN (PHASE 1 & PHASE 2)

PROJECT No	15-20347
FILE No	1520347X_DEQ2R2
REV 0 SCALE	AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	ATN 11/01/16
REVIEW	JRD 11/01/16

FIGURE 3



LEGEND

- DOMINION PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- APPROX. LIMITS OF EX. ASH PONDS
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EX. PAVED ROAD
- EX. UNPAVED ROAD
- EX. RAILROAD
- EX. TREE LINE
- EX. FENCE
- EX. OVERHEAD UTILITY LINE
- MH — EX. MANHOLE
- CREEK/STREAM CENTERLINE
- APPROX. EDGE OF SURFACE WATER
- WETLANDS
- LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
- MW-8 — EX. MONITORING WELL LOCATION AND IDENTIFICATION
- NB-02 — EX. PIEZOMETER AND IDENTIFICATION
- PROP. TREELINE
- 300 — PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. LIMITS OF CHANNEL UNDERCUT

EXCAVATION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY AND SAFETY OF ALL CUT AND FILL SLOPES DURING CONSTRUCTION, WITH ALL SLOPES EXCAVATED IN ACCORDANCE WITH OSHA REQUIREMENTS.
2. TEMPORARY GRADES SHOWN ON THE PHASED EXCAVATION DRAWINGS ARE ESTIMATED LIMITS AND SHOULD NOT BE TAKEN AS ENGINEERED SLOPES.
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NOTES

1. OUTFALL 003 TO BE SEALED WITH TEMPORARY PLUG PRIOR TO PHASE 3 EXCAVATION.

- DRAINAGE AREA BOUNDARY
- STORMWATER FLOW DIRECTION

Golder Associates

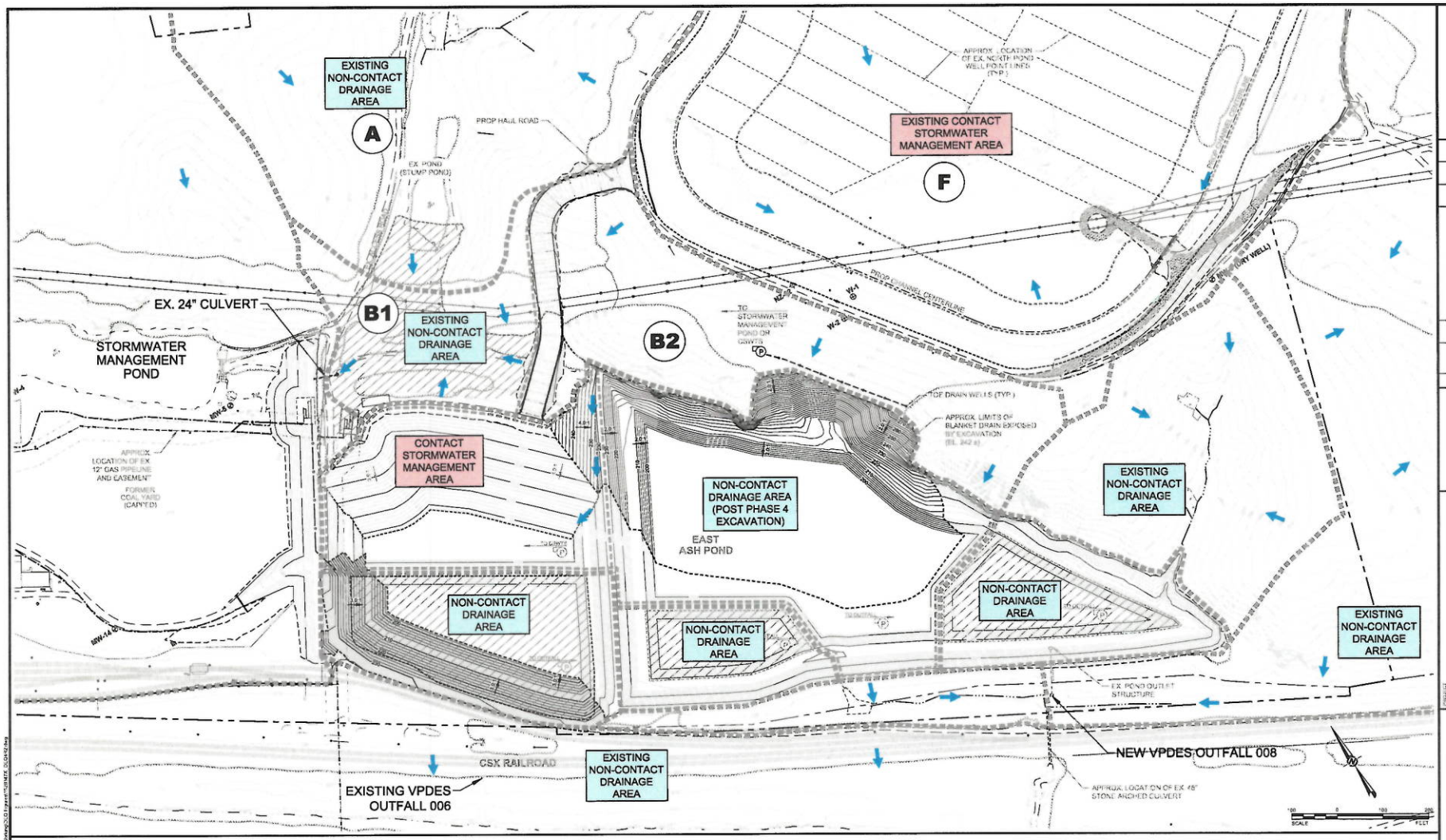
REV	SUBMITTED	DRAWN	REVISION DESCRIPTION	CHKD	APR	APP
0	JRD	JRD	HAUL ROAD CONTACT SWMA AREA	ATN	ATN	JRD
1	JRD	JRD	REVISED PER DEQ COMMENTS	ALL	ATN	JRD

PROJECT: DOMINION BREMO POWER STATION EAST ASH POND EXCAVATION PLAN FLUVANNA COUNTY, VIRGINIA

TITLE: EAST ASH POND EXCAVATION PLAN (PHASE 3)

PROJECT No	15-20347
FILE No	1520347X_DEQ3R2
REV 0 SCALE	AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	ATN 11/01/16
REVIEW	JRD 11/01/16

FIGURE 4



LEGEND

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- ADJACENT PROPERTY BOUNDARY
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- EX. MANHOLE
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11. ALL FINAL SOIL SLOPES SHALL BE LEFT NO STEEPER THAN 3:1 UNLESS APPROVED IN WRITING BY OWNER.

NOTES

1. REPURPOSING OF OUTFALL 003 TO OUTFALL 008 INCLUDES, BUT IS NOT LIMITED TO: DECOMMISSIONING EXISTING WOODEN ACCESS STRUCTURE INCLUDING STEPS AND PLATFORM, REPLACING EXISTING STOP LOGS INLET STRUCTURE WITH PERMANENT ORIFICE DEWATERING STRUCTURE, AND INSTALLING OPTIONAL TRASH RACK ON INLET STRUCTURE.

- DRAINAGE AREA BOUNDARY
- STORMWATER FLOW DIRECTION

Golder Associates

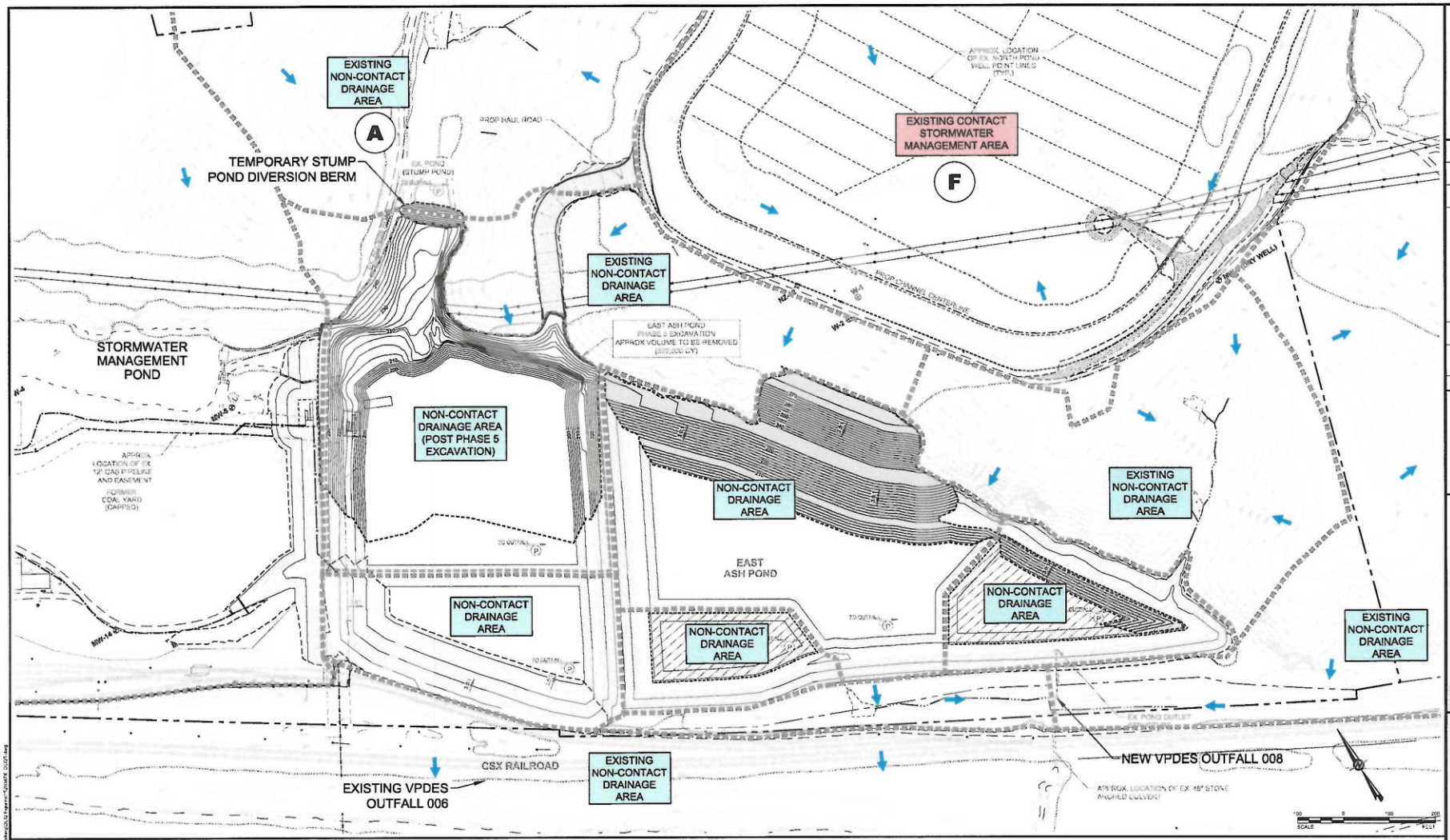
REV	DATE	DESCRIPTION	BY	CHK	APP
1	10/19/2017	IDALL POND CONTACT SWM AREA	ATN	RLL	JRD
2	11/27/2018	REVISED PER CCR COMMENTS	ATN	CHK	RWM

DOMINION
BREMO POWER STATION
EAST ASH POND EXCAVATION PLAN
FLUVANNA COUNTY, VIRGINIA

EAST ASH POND EXCAVATION PLAN (PHASE 4)

PROJECT No	18-20347
FILE No	1520347X DEQ4R2
REV 0	SCALE AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	ATN 11/01/16
REVIEW	JRD 11/01/16

FIGURE 5



LEGEND

- DOMINION PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- APPROX. LIMITS OF EX. ASH PONDS
- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EX. PAVED ROAD
- EX. UNPAVED ROAD
- EX. RAILROAD
- EX. TREE LINE
- EX. FENCE
- EX. OVERHEAD UTILITY LINE
- EX. MANHOLE
- CREEK/STREAM CENTERLINE
- APPROX. EDGE OF SURFACE WATER
- WETLANDS
- LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
- MW-8 — EX. MONITORING WELL LOCATION AND IDENTIFICATION
- NB-02 — EX. PIEZOMETER AND IDENTIFICATION
- PROP. TREELINE
- 300 — PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
- PROP. LIMITS OF CHANNEL UNDERCUT

EXCAVATION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY AND SAFETY OF ALL CUT AND FILL SLOPES DURING CONSTRUCTION, WITH ALL SLOPES EXCAVATED IN ACCORDANCE WITH OSHA REQUIREMENTS.
2. TEMPORARY GRADES SHOWN ON THE PHASED EXCAVATION DRAWINGS ARE ESTIMATED LIMITS AND SHOULD NOT BE TAKEN AS ENGINEERED SLOPES.
3. CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING TO MAINTAIN SLOPE STABILITY AT ALL TIMES.
4. RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR CCR MATERIALS SHALL BE 4 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 4:1).
5. EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 SHALL BE AT THE CONTRACTORS OWN RISK AND SHALL NOT BE LEFT UNMONITORED FOR MOVEMENT FOR MORE THAN 14 CALENDAR DAYS.
6. EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
7. RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR SOIL MATERIALS SHALL BE 2 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 2:1).
8. EXCAVATED SOIL SLOPES STEEPER THAN 2:1 SHALL BE AT THE CONTRACTORS OWN RISK AND SHALL NOT BE LEFT UNMONITORED FOR MOVEMENT FOR MORE THAN 14 CALENDAR DAYS.
9. EXCAVATED SOIL SLOPES STEEPER THAN 2:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL BE HAVE OWNER'S WRITTEN APPROVAL.
10. ALL EXCAVATION SLOPES GREATER THAN 30 VERTICAL FEET SHALL BE PROTECTED FROM EROSION BY BENCHING OR TEMPORARY BERMS WITH DOWNCHUTES UNLESS APPROVED IN WRITING OTHERWISE BY OWNER.
11. ALL FINAL SOIL SLOPES SHALL BE LEFT NO STEEPER THAN 3:1 UNLESS APPROVED IN WRITING BY OWNER.

NOTES

1. 24" PIPE AND RISER TO BE REMOVED.

- DRAINAGE AREA BOUNDARY
- STORMWATER FLOW DIRECTION

Golder Associates

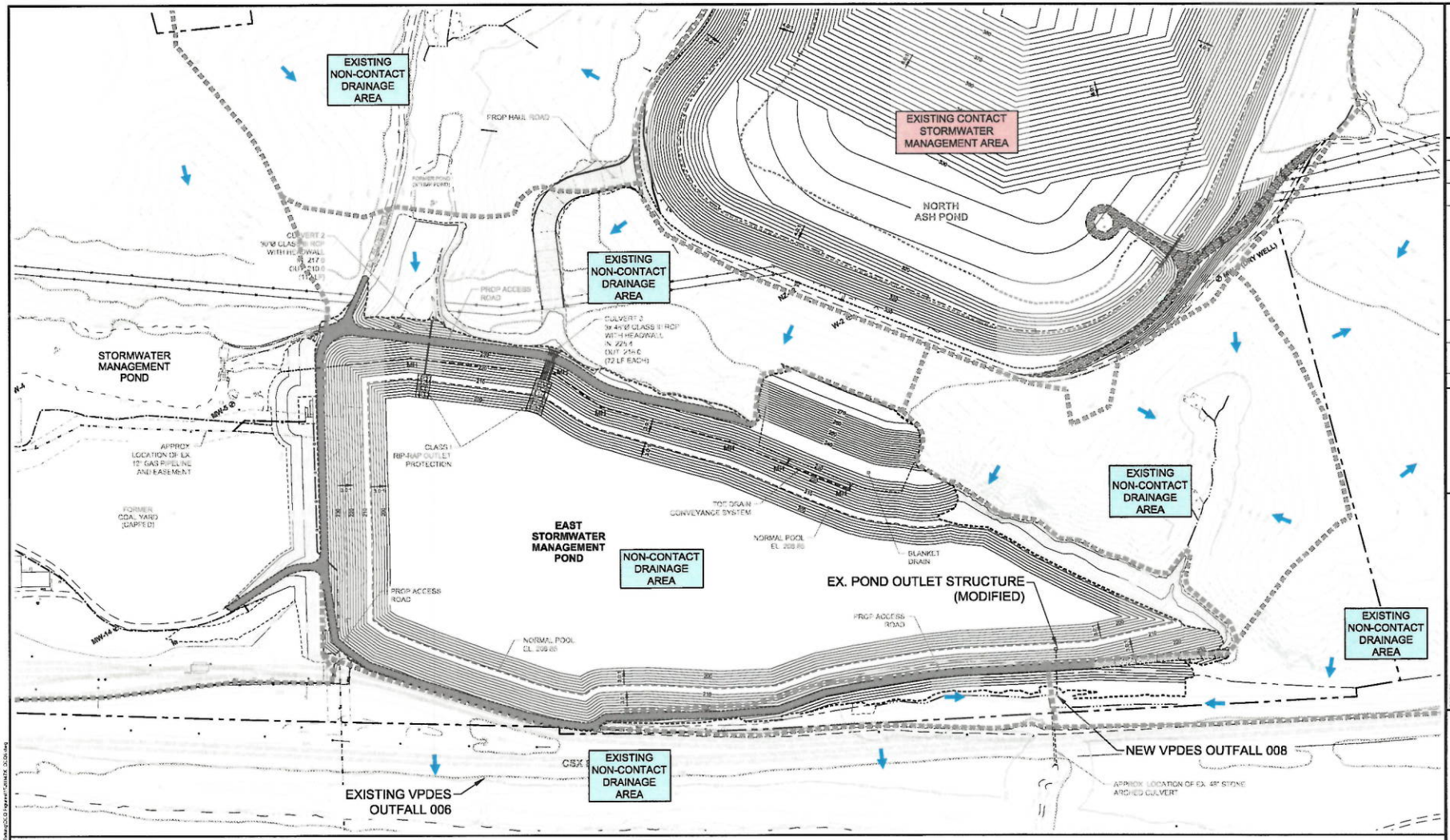
REV	DATE	DR	CK	REVISION	APP
0	12/07/2016	JRD	BLB	ISSUED FOR CLIENT ANALYSIS	KLL

PROJECT: DOMINION BREMO POWER STATION EAST ASH POND EXCAVATION PLAN FLUVANNA COUNTY, VIRGINIA

EAST ASH POND EXCAVATION PLAN (PHASE 5)

PROJECT No	15-20347
FILE No	1520347A_DE05
REV 0 SCALE	AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	
REVIEW	

FIGURE 6



LEGEND

DOMINION PROPERTY BOUNDARY	CREEK/STREAM CENTERLINE
ADJACENT PROPERTY BOUNDARY	APPROX. EDGE OF SURFACE WATER
APPROX. LIMITS OF EX. ASH PONDS	WETLANDS
EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)	LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
EX. PAVED ROAD	
EX. UNPAVED ROAD	MW-8 EX. GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
EX. RAILROAD	NB-02 EX. PIEZOMETER AND IDENTIFICATION
EX. TREE LINE	PROP. LIMITS OF CLEARING
EX. FENCE	300 PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
EX. OVERHEAD UTILITY LINE	PROP. LIMITS OF CHANNEL UNDERCUT
MH EX. MANHOLE	

DRAINAGE AREA BOUNDARY

STORMWATER FLOW DIRECTION

N

SCALE 100 0 100 200 FEET

Golder Associates

REV	DATE	DRN	CHK	REVISION DESCRIPTION	CADD	EIR	APPR
1	12/27/2016	JRD	EIR	REVISED PER DEQ COMMENTS	ALL		

PROJECT: DOMINION BREMO POWER STATION EAST ASH POND EXCAVATION PLAN FLUVANNA COUNTY, VIRGINIA

TITLE: FINAL GRADING PLAN

PROJECT No	15-20347
FILE No	1520347A DE06
REV 0	SCALE AS SHOWN
DESIGN	JRD 09/28/16
CADD	ATN 09/28/16
CHECK	
REVIEW	

FIGURE 7