

**FLUVANNA COUNTY PLANNING COMMISSION**  
**WORK SESSION AND REGULAR MEETING AGENDA**  
Circuit Courtroom, Fluvanna Courts Building  
March 7, 2017  
**6:00 PM (Courthouse)**  
**7:00 PM (Courthouse)**

<b>TAB</b>	<b>AGENDA ITEMS</b>
	<b>WORK SESSION</b>
	<b>A – CALL TO ORDER, PLEDGE OF ALLEGIANCE, MOMENT OF SILENCE</b>
	<b>B – PLANNING DIRECTOR COMMENTS</b>
	<b>C – PUBLIC COMMENTS (Limited to 3 minutes per speaker)</b>
	<b>D – WORK SESSION</b>
	Sign Ordinance Discussion – James Newman, Planner
	<b>E – ADJOURN</b>
	<b>REGULAR MEETING</b>
	<b>1 – CALL TO ORDER, PLEDGE OF ALLEGIANCE, MOMENT OF SILENCE</b>
	<b>2 – DIRECTOR’S REPORT</b>
	<b>3 – PUBLIC COMMENTS #1 (3 minutes each)</b>
	<b>4 – MINUTES</b>
	Minutes of January 25, 2017
	<b>5 – PUBLIC HEARING</b>
	None
	<b>6 – PRESENTATIONS</b>
	None
	<b>7 – SITE DEVELOPMENT PLANS</b>
	SDP 16:19 VA Electric & Power Co Amendment – Brad Robinson, Senior Planner
	<b>8 – SUBDIVISIONS</b>
	None
	<b>9 – UNFINISHED BUSINESS</b>
	None
	<b>10 – NEW BUSINESS</b>
	None
	<b>11 – PUBLIC COMMENTS #2 (3 minutes each)</b>
	<b>12 – ADJOURN</b>

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*For the Hearing-Impaired – Listening device available in the Board of Supervisors Room upon request. TTY access number is 711 to make arrangements.  
For Persons with Disabilities – If you have special needs, please contact the County Administrator’s Office at 591-1910.*



Planning/Zoning Administrator Review

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## PLEDGE OF ALLEGIANCE

I pledge allegiance to the flag  
of the United States of America  
and to the Republic for which it stands,  
one nation, under God, indivisible,  
with liberty and justice for all.

\*\*\*\*\*

### ORDER

1. It shall be the duty of the Chairman to maintain order and decorum at meetings. The Chairman shall speak to points of order in preference to all other members.
2. In maintaining decorum and propriety of conduct, the Chairman shall not be challenged and no debate shall be allowed until after the Chairman declares that order has been restored. In the event the Commission wishes to debate the matter of the disorder or the bringing of order; the regular business may be suspended by vote of the Commission to discuss the matter.
3. No member or citizen shall be allowed to use abusive language, excessive noise, or in any way incite persons to use such tactics. The Chairman shall be the judge of such breaches, however, the Commission may vote to overrule both.
4. When a person engages in such breaches, the Chairman shall order the person's removal from the building, or may order the person to stand silent, or may, if necessary, order the person removed from the County property.

### PUBLIC HEARING RULES OF PROCEDURE

1. PURPOSE
  - The purpose of a public hearing is to receive testimony from the public on certain resolutions, ordinances or amendments prior to taking action.
  - A hearing is not a dialogue or debate. Its express purpose is to receive additional facts, comments and opinion on subject items.
2. SPEAKERS
  - Speakers should approach the lectern so they may be visible and audible to the Commission.
  - Each speaker should clearly state his/her name and address.
  - All comments should be directed to the Commission.
  - All questions should be directed to the Chairman. Members of the Commission are not expected to respond to questions, and response to questions shall be made at the Chairman's discretion.
  - Speakers are encouraged to contact staff regarding unresolved concerns or to receive additional information.
  - Speakers with questions are encouraged to call County staff prior to the public hearing.
  - Speakers should be brief and avoid repetition of previously presented comments.
3. ACTION
  - At the conclusion of the public hearing on each item, the Chairman will close the public hearing.
  - The Commission will proceed with its deliberation and will act on or formally postpone action on such item prior to proceeding to other agenda items.
  - Further public comment after the public hearing has been closed generally will not be permitted.

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# COUNTY OF FLUVANNA

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*"Responsive & Responsible Government"*

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P.O. Box 540  
Palmyra, VA 22963  
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Fax (434) 591-1911  
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To: Fluvanna County Planning Commission  
From: Jason Stewart, AICP  
Date: March 7, 2017  
Re: Planning Director's Report

## **Board of Supervisors Actions:**

February 1, 2017

None

February 15, 2017

- I. **ZMP 16:06 Wilson Ready Mix Rezoning** – A request to rezone, from A-1 Agricultural, General to I-2 Industrial, General, 10.5 acres of Tax Map 4, Section A, Parcel 109. The property is located approximately 1,400 ft west of the intersection of Richmond Road (Route 250) and Blue Ridge Dr. (State Route 708). The parcel is within the Zion Crossroads Community Planning Area and the Palmyra Election District. **Approved 5-0.**
- II. **ZMP 16:07 Foster Fuels Rezoning** – A request to rezone, from I-1 Industrial, Limited to I-2 Industrial, General, 1.53 acres of Tax Map 5, Section 23, Parcel 8. The property is located in the Zion Crossroads Industrial Park between Industrial Way and Troy Road (State Route 631), approximately 0.46 miles south of the intersection of Richmond Road (U.S. Route 250). The parcel is within the Zion Crossroads Community Planning Area and the Columbia Election District. **Approved 5-0.**
- III. **SUP 16:12 Foster Fuels Propane Tank** – A request for a special use permit to install a petroleum distribution facility, with respect to 1.53 acres of Tax Map 5, Section 23, Parcel 8. The property is located in the Zion Crossroads Industrial Park between Industrial Way and Troy Road (State Route 631), approximately 0.46 miles south of the intersection of Richmond Road (U.S. Route 250). The parcel is zoned I-1 and within the Zion Crossroads Community Planning Area and the Columbia Election District. **Approved 5-0.**
- IV. **EST 16:01 – Hotel Street Capital LLC et. al.** – An ordinance to establish a new Conservation Easement with respect to 232.003 acres of Tax Map 19, Section A, Parcel 39C and Tax Map 30, Section A, Parcel 110. The property is zoned R-3, Residential, Planned Community and is located on the western side of U.S. Route 15 (James Madison Highway) at its intersection with State Route 644 (Friendship Road), approximately 0.25 miles north of State Route 661 (Rescue Lane). The property is

located in the Palmyra Election District and is within the Rural Preservation Planning Area. **Approved 5-0.**

March 1, 2017

*None*

**Board of Zoning Appeals Actions:**

*None*

**Technical Review Committee for February 9, 2017:**

*None*

**FLUVANNA COUNTY PLANNING COMMISSION**  
**REGULAR MEETING MINUTES**  
**Circuit Court Room--Fluvanna County Courts Building**  
**January 25, 2017**  
**7:00 p.m.**

**MEMBERS PRESENT:** Barry Bibb, Chairman  
Ed Zimmer, Vice Chairman  
Lewis Johnson  
Donald Gaines (arrived 7:05)  
Howard Lagomarsino  
Tony O'Brien, Board of Supervisors Representative

**ALSO PRESENT:** Jason Stewart, Planning and Zoning Administrator  
Brad Robinson, Senior Planner  
James Newman, Planner  
Fred Payne, County Attorney  
Stephanie Keuther, Senior Program Support Assistant

**ABSENT:** None

**Open the Regular Session at 7pm** (Mr. Stewart)  
The Pledge of Allegiance followed by a Moment of Silence.

**2015 Organizational Meeting of the Fluvanna County Planning Commission**

- **Election of Chairman**

Mr. Zimmer moved to elect Barry Bibb as Chairman of the Fluvanna County Planning Commission for the calendar year of 2017. Mr. Johnson seconded the motion and the vote carried with a vote of 3-0-1. Abstained: Bibb

- **Election of Vice Chairman**

Mr. Johnson moved to elect Ed Zimmer as Vice Chairman of the Fluvanna County Planning Commission for the calendar year of 2017. Mr. Lagomarsino seconded the motion and the vote carried with a vote of 3-0-1. Abstained: Mr. Zimmer

- **Selection of Dates for the Commission Meetings**

Mr. Zimmer moved to accept the selected dates of the Fluvanna County Planning Commission meetings for the calendar year of 2017 with the February, March, being changed. The November meeting would be changed to November 6, 2017 due to the election. Seconded by Mr. Lagomarsino the motion carried with a vote of 4-0-0.

**\*Mr. Donald Gaines entered the meeting at this point and participated in voting thereafter\***

- **Resolution entitled "Organizational Meeting of the Fluvanna County Planning Commission 2017"**

On a motion by Mr. Zimmer, seconded by Mr. Johnson, and carried with a vote of 5-0-0  
The "Organizational Meeting of the Fluvanna County Planning Commission 2017" resolution was adopted.

- **Adoption of the Planning Commission By-Laws and Rules of Procedure**

Mr. Gaines moved to adopt the Fluvanna County Planning Commission By-Laws and Rules of Procedure for 2017  
Mr. Lagomarsino seconded the motion and the vote carried with a vote of 5-0-0.

**Director's Report: Mr. Stewart**

**Board of Supervisors Actions:**

**December 20, 2016**

- I. **ZMP 16:02 – Rivanna Heights Rezoning** – A request to rezone from A-1, Agricultural General, to R-3, Residential Planned Community, with respect to 13.81 acres of Tax Map 18, Section A, Parcel 10. The property is located on South Boston Road, roughly 1,000 feet south of the intersection of South Boston Road (State Route 600) and Lake Monticello Road (State Route 618). The parcel is within the Rivanna Community Planning Area and the Palmyra Election District.  
Approved 4-1
- II. **SUP 16:11 – Gardenkeepers of Virginia, LLC** – A request for a Special Use Permit to authorize a Landscape Materials Supply use with respect to 4.0 acres of Tax Map 10, Section A, Parcel 33. The property is located on James Madison Highway (State Route 15), approximately 400 ft. south of the intersection of Union Mills Road (State Road 616)

and James Madison Highway. The parcel is zoned A-1 Agricultural, General. The parcel is within the Rural Residential Community Planning Area and the Columbia Election District. Approved 5-0

**January 4, 2017**

None

**January 18, 2017**

None

**Board of Zoning Appeals Actions:**

**January 10, 2017**

**BZA 16:03 – Paul Sheridan** – A request for a variance to Fluvanna County Code Sec. 22-4-3 (E) of the Zoning Ordinance to allow for the reduction of the minimum setback required from the public right-of-way, from 125 feet to 50 feet in regards to an existing nonconforming single family dwelling, for the purposes of subdividing approximately 2.13 acres from an existing approximately 21.2 acres parcel Tax Map 23, Section A, Parcel 40. The existing nonconforming structure cannot currently meet the setback requirements for the proposed new parcel. The affected property is located in the Columbia Election District at 6147 Venable Road (State Route 601). This is located at the intersection of Venable Road and Covered Bridge Road (State Route 604).

Approved 5-0

**Technical Review Committee for January 12, 2017:**

**I. SDP 16:19 Virginia Electric & Power Co.** – A site development plan request to amend SDP 15:12 for an impoundment closure with respect to a portion of 284.045 acres of Tax Map 58, Section A, Parcel 10 (in part); Tax Map 59, Section 6, Parcels 1, 1A, 2, 2A, 3 & 4; Tax Map 59, Section A, Parcel 24; Tax Map 59, Section 7, Parcels 1, 1A (in part), 1B (two parts) & 26; and Tax Map 62, Section A, Parcels 1, 2, 3 and 4 (in part). The property is zoned A-1, Agricultural, General, and I-1, Industrial, Limited, and is located on the south side of State Route 656 (Bremo Road) approximately .97 miles southeast of its intersection with State Route 15 (James Madison Highway). The property is located in the Fork Union Election District and is within the Rural Residential Planning Area.

**II. EST 16:01 – Hotel Street Capital LLC ET. al.** – An ordinance to establish a new Conservation Easement with respect to 232.003 acres of Tax Map 19, Section A, Parcel 39C and Tax Map 30, Section A, Parcel 110. The property is zoned R-3, Residential, Planned Community and is located on the western side of U.S. Route 15 (James Madison Highway) at its intersection with State Route 644 (Friendship Road), approximately 0.25 miles north of State Route 661 (Rescue Lane). The property is located in the Palmyra Election District and is within the Rural Preservation Planning Area.

**Public Comments:**

None

**Approval of Minutes**

**Motion:**

**Mr. Johnson moved to approve the minutes of the December 12, 2016 Planning Commission meeting as presented.**

**Mr. Lagomarsino seconded. The motion carried a vote of 3-0-2 AYE:** Johnson, Lagomarsino, and Bibb **Nay:** None

**ABSTAIN:** Zimmer, and Gaines **ABSENT:** None

**Public Hearing:**

**FY2018 – FY2022 Capital Improvement Plan (CIP) Presented by Brad Robinson, Senior Planner**

**Overview**

- The proposed Capital Improvement Plan (CIP) for FY 2018-2022 includes 62 projects submitted by several County departments.
- The Planning Commission has identified 27 of the requested projects as ‘#1’ priorities for FY2018.
- The total cost of the all proposed projects is \$44,917,440, of which \$8,730,880 is proposed for FY 2018.

**Priorities**

- The proposed Capital Improvement projects identified as #1 priorities for FY2018 are:

**Parks and Recreation**

- Electronic Message Board
- Pleasant Grove Athletic Field Lighting
- Pleasant Grove Picnic Shelter
- Pleasant Grove Playground Extension

**Public Works**

- Capital Reserve Maintenance Fund
- Public Safety Building Addition

- Treasurer’s Building Upgrades

**Sheriff**

- Courthouse Security Electronic Upgrades

**E-911**

- Technology Upgrades

**Fire & Rescue**

- CPR Assist Devices
- Incident Data Tablets
- Lake Monticello F&R Apparatus Replacement
- Self-Contained Breathing Apparatus Replacement
- Thermal Imaging Camera Replacement
- Vehicle Apparatus – Replacement/Rechassis

**Schools**

- Capital Reserve Maintenance Fund
- Abrams Building Renovation
- Central Elementary HVAC Upgrade & Renovations
- Computer Instructional Technology & Infrastructure Replacement
- Fluvanna Middle School Annex Gymnasium Floor
- School Board Office Renovations
- Underground Fuel Tank Replacement

**Fleet Replacement**

- County Vehicles
- School Buses (\$150K Baseline)
- Sheriff Vehicles (\$125 Baseline)
- Social Services Vehicles
- Student Transport / Facilities Vehicles

**Mr. Bibb:** I know the Computer Instructional Technology should be under the school budget and not the CIP; the CIP is a five year plan that tries to anticipate all new or replaceable capital needs. A capital project is defined as a generally non-recurring asset, both tangible (e.g., buildings, vehicles, land, etc.) and intangible (e.g., software, easements, licenses, studies, services, etc.), that exceeds an established dollar amount ( $\geq$ \$20,000 in Fluvanna County). Projects to be included in the annual budget are identified in the first year of the plan and all other capital projects are planned for later years. An important aspect of the CIP is the projected operational and maintenance costs of a proposed project. In the past we have sent a note to the BOS about this.

We also suggest the BOS study the replacement of the admin building and do a study of the cost effectiveness of this so we have more to go by.

**Public Comment**

None

**Mr. Gaines made a motion to approve FY2018 – FY2022 Capital Improvement Plan (CIP) seconded by Mr. Zimmer 5-0-0**

**AYE:** Gaines, Zimmer, Bibb, Johnson, and Lagomarsino **NAY:** None **ABSTAIN:** None **ABSENT:** None

**ZMP 16:06 Wilson Ready Mix** – Presented by James Newman, Planner

A request to rezone, from A-1 Agricultural, Limited to I-2 Industrial, General, 10.5 acres of Tax Map 4, Section A, Parcel 109. The property is located approximately 1,400 ft. west of the intersection of Richmond Road (Route 250) and Blue Ridge Dr. (State Route 708). The parcel is within the Zion Crossroads Community Planning Area and the Palmyra Election District.

**No conditions required**

**Mr. Zimmer:** Is the existing use multiple houses?

**Mr. Newman:** It’s currently residential

**Mr. O’ Brien:** Why not full enclosure versus partial enclose?

**Applicant; Roy Simmons:** We’re still deciding whether to fully enclose the production facility.

**Mr. O’ Brien:** Would there be a price difference if you chose full enclosure over partial enclosure?

**Applicant:** There’s always a significant cost increase but I can’t really say at this time what the exact amount would be.

**Mr. Bibb:** Mr. Stewart, Is this something we will need to know about now or will it be in the site plan?

**Mr. Stewart:** It will come up in the site plan phase and also during review for erosion and sediment control.

**Mr. O’ Brien:** Will the noise amount change with the enclosure?

**Applicant:** We recognize the benefits of having the enclosure, once determined we anticipate most if not all will be enclosed.

**Mr. Payne:** Remember this is a simple rezoning, an I-2 zoned permits I-2 uses.

**Public Comments**

None



**Mr. Zimmer:** Zoning is currently for existing housing, if rezoned that will make it not compatible for being grandfathered correct?

**Mr. Stewart:** It would be a non-conforming use, for example they couldn't add an addition later on.

**Mr. O' Brien:** How is the run off treated?

**Applicant; Roy Simmons:** The run off pond will be used for any kind of process of production site water needed to collect.

**Mr. O' Brien:** What about the water from the DOC?

**Applicant; Roy Simmons:** No, we have a well on site but we may possibly have county water come through the site at a later time.

**Mr. Zimmer made a motion to approve ZMP 16:06 Wilson Ready Mix seconded by Mr. Lagomarsino 5-0-0 AYE:** Zimmer, Lagomarsino, Bibb, Gaines, and Johnson **NAY:** None **ABSTAIN:** None **ABSENT:** None

**ZMP 16:07 Foster Fuels** - Presented by Brad Robinson, Senior Planner

A request to amend the Fluvanna County Zoning Map with respect to 1.53 acres of Tax Map 5, Section 23, Parcel 8, to rezone the same from I-1, Industrial, Limited, to I-2, Industrial, General. The affected property is located in the Zion Crossroads Industrial Park between Industrial Way and Troy Road (State Route 631), approximately 0.46 miles south of the intersection of Richmond Road (U.S. Route 250). The parcel is within the Zion Crossroads Community Planning Area and the Columbia Election District.

**Mr. Zimmer:** It appears there's a setback problem or would we be creating one?

**Mr. Bibb:** Will the tanks be in the back?

**Mr. Robinson:** Yes

**Mr. Payne:** Note there are no set back requirements for industrial.

**Mr. Bibb:** So there will be a 30,000 gallon propane tank with the possibility of another later. Trucks will use this as a fill up and redistribute. Tanks are also to be 50 ft. off the property line.

**Mr. Robinson:** Yes, there is also going to be fencing around the tank.

**Mr. O' Brien:** Do you plan to expand?

**Applicant; Tim Spicer:** Mainly storage and no, we are limited by the fire code and setbacks therefor there's not enough room.

**Mr. Stewart:** They would have to amend the site plan for a second tank but they wouldn't have to go through the whole process again.

**Mr. O' Brien:** What is the current lifespan?

**Applicant; Tim Spicer:** 60 yrs. plus maintenance.

**Mr. O' Brien:** As we look at the growth in the Zion Crossroads area this is a low intensity use of the property. As we invest in water and sewer and in making Zions a growth area, we need to concentrate on the maximizing the uses that would meet those needs.

#### **Public Comments**

None

**Mr. Gaines made a motion to approve ZMP16:07 Foster Fuels seconded by Mr. Zimmer 5-0-0 AYE:** Gaines, Zimmer, Bibb, Lagomarsino, and Johnson **NAY:** None **ABSTAIN:** None **ABSENT:** None

**SUP 16:12 Foster Fuels** – Presented by Brad Robinson, Senior Planner

Request for a special use permit to install a propane tank (petroleum distribution facility) with respect to 1.53 acres of Tax Map 5, Section 23, Parcel 8. **Approval of this request is subject to rezoning of the property**

**to I-2, Industrial, General.** Rezoning application ZMP 16:07 is being reviewed concurrently with this request.

The affected property is located in the Zion Crossroads Industrial Park between Industrial Way and Troy Road (State Route 631), approximately 0.46 miles south of the intersection of Richmond Road (U.S. Route 250). The parcel is within the Zion Crossroads Community Planning Area and the Columbia Election District.

Conditions

#### **Public Comments**

None

**Mr. Zimmer made a motion to approve SUP 16:12 seconded by Mr. Johnson 5-0-0 AYE:** Zimmer, Johnson, Bibb, Lagomarsino and Gaines **NAY:** None **ABSTAIN:** None **ABSENT:** None

#### **Presentations:**

None

#### **Site Development Plans:**

**SDP 16:18 Nahor Village Dental Office** – Presented by James Newman, Planner

A request for sketch plan approval for a Dental Office, with respect to 3.25 acres of tax map 17, Section (A) Parcel E. The office is to be 26.7' x 81.7', approximately 2,160 sq. ft., and one-story in height. The property is located in Nahor Village, at the intersection of Nahor Manor Road (State Rt. 636) and Thomas Jefferson Parkway (State Route 53). The parcel is zoned R-3 Residential Planned Community, and is within the Rivanna Community Planning Area and Cunningham Election District. The current house on the property will be taken down and the new building would be perpendicular to where it sat.

**Applicant Keith Lancaster;** I am here for any comment or questions you may have.

**Mr. Steve Nichols:** 135 Nahor Dr. I was under the impression the existing houses were owned by HOA. I was just wondering what the ownership status was.

**Applicant Keith Lancaster:** They're owned by the bank, we do not own the homes.

**Mr. Bibb:** Did the bank give you permission for this development plan?

**Applicant Keith Lancaster:** Yes

**Recommended Conditions:**

1. Meeting all final site plan requirements which include, but are not limited to, providing parking, landscaping, tree protection, and outdoor lighting plans;
2. Meeting all applicable building codes, and erosion and sedimentation control requirements;
3. Meeting all VDOT requirements.

**Mr. Lagomarsino made a motion to approve SDP 16:18 seconded by Mr. Gaines 5-0-0 AYE:** Lagomarsino, Gaines, Bibb, Johnson and Zimmer **NAY:** None **ABSTAIN:** None **ABSENT:** None

**Mr. Stewart:** I would like to make a note that there were no applications for the February 7, 2017 meeting. Therefor no meeting will be held on this date.

**Subdivisions:**

None

**Unfinished Business:**

None

**New Business:**

**Public Comments**

None

**Adjourn**

Chairman Bibb adjourned the Planning Commission meeting of January 25, 2017 8:05p.m.

Minutes recorded by Stephanie Keuther

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**Barry A. Bibb, Chairman**  
**Fluvanna County Planning Commission**

DRAFT

**FLUVANNA COUNTY PLANNING COMMISSION**  
**WORK SESSION MEETING MINUTES**  
**Circuit Court Room--Fluvanna County Courts Building**  
**January 25, 2017**  
**6:00 p.m.**

**MEMBERS PRESENT:** Barry Bibb, Chairman  
Ed Zimmer, Vice Chairman  
Lewis Johnson  
Tony O'Brien, Board of Supervisors Representative

**ALSO PRESENT:** Jason Stewart, Planning and Zoning Administrator  
Brad Robinson, Senior Planner  
James Newman, Planner  
Fred Payne, County Attorney  
Stephanie Keuther, Senior Support Assistant

**Absent:** Donald Gaines  
Howard Lagomarsino

**Open the Work Session:** (Mr. Barry Bibb, Chairman)  
Pledge of Allegiance followed by a Moment of Silence

**Director Comments: Jason Stewart**  
None

**Sign Ordinance Discussion:**

**Mr. Jason Smith:** Community and Economic Development

In May of 2016 we had a business forum with some of the community business owners. A lot of the feedback we received from business owners is that most were not even aware of the sign ordinance. The Business owners that are aware would like to make it more flexible.

**Mr. Bibb:** I don't mind being more flexible however we cannot have the banners becoming raggedy and faded.

**Mr. Smith:** We could do a special use permit (SUP) application for up to 30 to 60 days to allow for yard signs. (Ex. Feathered flags)

**Mr. Stewart:** A lot of our businesses are having trouble getting their business name out there.

**Mr. Zimmer:** Many business signs don't allow for adequate space needed.

**Mr. Jason:** Yes, some businesses would need more space for their signs.

**Mr. Bibb:** Usually the first signs that you can see are presentable then the further back you get they tend to go downwards.

**Mr. Zimmer:** We have compared already, I wonder if moving forward with your guidance (Jason Smith) if we get more business' to come with proposals of what they're looking for.

**Mr. Smith:** How about we come back in March with a proposal.

**Mr. Bibb:** Some signs also need to be larger when in a faster speed limit zone.

**Mac: Macs auto center:** As a business owner when we first arrived we had a grand opening with banner flags at Starlight Park. We were opening at 7am, I went out to get something and when I got back there was a violation waiting for me. A temporary sign could be ideal, yet one small aspect of it. You're correct when looking at a small sign while trying to drive is hard to do. We do have an idea of a digital mini board with a colorful design while adding more technology that all the businesses would be able to profit from. We would like to have something enough to let people know that there are businesses towards the back.

**Mac:** I didn't think a grand opening sign would be an issue, it's temporary.

**Mr. Stewart:** I want to note that the code compliance officer is complaint driven only.

**Mr. Bibb:** Maybe we should put in the ordinance about temporary signs. But again if businesses still don't ask about the sign ordinance how will that change anything regardless.

**Mr. Stewart:** It should happen when we're doing the site plan.

**Mr. Bibb:** We do like and want to work with owners, that's how we originally came up with the ordinance that we have, but we do have to have a balance.

**Mr. Stewart:** I believe sign height is also an issue.

**Mr. Bibb:** We did notice the height being an issue when comparing.

**Mr. Payne:** You're never going to be able to come to a consensus when people will always disagree.

You also cannot regulate based on its content. For example if it were to say grand opening that's ok, but a shoe sale is not. I have no feeling on it I just want to make sure you have a rational decision on it.

**Mr. Bibb:** Can different areas have different heights?

**Mr. Payne:** Yes.

**Mr. Bibb:** We will have to continue to talk about this some more.

**Columbia Zoning Discussion:**

**Mr. Robinson:** As you know Columbia dissolved back in July 2016.

We're handing out a draft questionnaire for the residents of Columbia to see if there is any particular zoning they would like to see happen.

**Mr. Stewart:** We have spoken to one of the business owners who would like to come in and participate.

**Mr. Bibb:** I like the drafted questionnaire; will we send it out soon?

**Mr. Stewart:** Yes, we would like to send it out to other business owners as well.

**Mr. Bibb:** Will we send maps with the proposed zoning as well or just the questionnaire?

**Mr. Stewart:** That's still in the preliminary stage.

**Mr. Johnson:** Most of the zoning there is residential property.

**Mr. Stewart:** The residents there should already know what their property is zoned.

**Mr. Payne:** You may want to tweak the language a little.

**Mr. Stewart:** I think it may be a good idea to send out a map also.

**Mr. Zimmer:** Yes, we need to be clear.

**Mr. Bibb:** What happened back in May with the lapidated properties?

**Mr. Nichols:** The Fema grant was approved for \$190,000.00 we have finished the preliminary phase for the appraisals. 3 of the 5 parcels have different owners. If they agree to appraisals we will be able to proceed. If we can't agree then I'm not sure what would happen.

**Mr. Zimmer:** Are they all in the flood zone? **Mr. Nichols:** Yes

**Mr. Payne:** We have authority to remove them if BOS says there a hazard and they cannot be repaired.

**Mr. Nichols:** We were to be done by September but were already coming up on that.

**Mr. Bibb:** What could Columbia be revitalized as? I see the ravaging from the floods when I drive through their. Yes we could tear down some of the buildings but they may be being used.

**Mr. Nichols:** Significant or even light removal would open the gates, removing the old vehicles along the highway would be a big change too. We won't see much more there then what's there now if this was to continue.

**Mr. Payne:** The problem is the location and there are no obvious signs to draw you to it anymore, no rivers ex.

**Mr. Nichols:** No, but it's still a scenic area.

**Mr. Bibb:** At one time it was talked about making a park there.

**Mr. Bibb:** We need to get the surveys done and back on the resident's concerns and information on the dilapidated buildings in order to move forward.

**Mr. Zimmer:** People are excited to move forward with this.

**Mr. Bibb:** Let's wait until we get the surveys back before moving forward.

**Adjourn**

Chairman Bibb adjourned the Planning Commission Work Session meeting of January 25, 2017 6:53 p.m.

Minutes recorded by Stephanie Keuther, Senior Program Support Assistant.

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**Barry A. Bibb, Chairman**  
**Fluvanna County Planning Commission**

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## *Transmittal Report January 2017*

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<i>Line Number</i>	<i>Code</i>	<i>Name</i>	<i>ID#</i>	<i>Amount Received</i>
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*Variances*

ZUP17001            \$200.00

***Sum:***    \$200.00

**10000013-318341**

*SUBDIV*    *Subdivision & Plat Review*

SUB17001            \$225.00

SUB17002            \$350.00

***Sum:***    \$575.00

***Total:***    \$775.00

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## *Transmittal Report February 2017*

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<i>Line Number</i>	<i>Code</i>	<i>Name</i>	<i>ID#</i>	<i>Amount Received</i>
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*Variances*

ZUP17004	\$1,500.00
ZUP17004	\$1,800.00
ZUP17003	\$1,500.00
ZUP17003	\$1,800.00
ZUP17002	\$1,500.00
ZUP17002	\$1,800.00

***Sum:*** \$9,900.00

**10000013-318337**

*SITEPL Site Plan Review*

SDP17001	\$550.00
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***Sum:*** \$550.00

**10000013-318341**

*SUBDIV Subdivision & Plat Review*

SUB17004	\$700.00
SUB17005	\$100.00

***Sum:*** \$800.00

***Total:*** \$11,250.00









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# COUNTY OF FLUVANNA

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*"Responsive & Responsible Government"*

132 Main Street  
P.O. Box 540  
Palmyra, VA 22963  
(434) 591-1910  
Fax (434) 591-1911  
www.fluvannacounty.org

## STAFF REPORT

**To:** Fluvanna County Planning Commission

**Case Number:** SDP 16:19

**Tax Map:** See Attachment A

**From:** Brad Robinson

**District:** Fork Union

**Date:** March 7, 2017

**General Information:**

This item is scheduled to be heard by the Planning Commission on Tuesday, March 7, 2017 at 7:00 p.m. in the Circuit Courtroom in the Courts Building.

**Applicant/Owner:**

Virginia Electric & Power Company

**Representative:**

Amelia Boschen

**Requested Action:**

Approval of a request to amend SDP 15:12 for an impoundment closure with respect to a portion of 284.045 acres of Tax Map 58, Section A, Parcel 10 (in part); Tax Map 59, Section 6, Parcels 1, 1A, 2, 2A, 3 & 4; Tax Map 59, Section A, Parcel 24; Tax Map 59, Section 7, Parcels 1, 1A (in part), 1B (two parts) & 26; and Tax Map 62, Section A, Parcels 1, 2, 3 and 4 (in part). (Attachment A)

**Location:**

The affected property is located on the south side of State Route 656 (Bremo Road) approximately .97 miles southeast of its intersection with State Route 15 (James Madison Highway) (Attachment B)

**Existing Zoning:**

A-1, Agricultural, General and I-1, Industrial, Limited

**Existing Land Use:**

Gas-fired power generation facility (*Utility, Major*)

**Adjacent Land Uses:**

Adjacent properties are zoned A-1

**Comprehensive Plan:**

Rural Residential Planning Area

**Zoning History:**

Bremo Power Station has been operating at its current location since around 1930. A site plan was approved for a 4,800 square foot synthetic fuel facility on November 29, 2004, and a variance was approved to increase the height of the synfuel facility from 45 feet to 60 feet on December 7, 2004. Site plan SDP 13:05 was approved on May 22, 2013 for the coal to gas conversion. SDP 15:12 was approved November 23, 2015 for a closure of impoundment ponds.

## **Analysis:**

The applicant is requesting to amend site development plan SDP 15:12 which approved closure of three coal ash ponds (West, East and North) at Brema Power Station. The conversion of the power station from coal-fired power to gas-fired power in 2013 eliminated the need for the impoundment ponds which are now being closed per governmental regulations. The proposed site plan amendment is considered a major amendment as a result of a slight increase in the amount of land covered by the plan (Sec. 22-23-10).

The current approved plan SDP 15:12 proposed closure by removal of the West Ash Pond and Metals Pond, construction of a new West Treatment Pond for station use, and the capping in place of the East and North Ash Ponds. Stormwater management and Erosion & Sediment Control Plans were prepared and approved on 7/18/16 and 9/13/16, respectively. Subsequent to the approval of these plans, Dominion has prepared the revised site development plan to provide for the closure by removal of the East Ash Pond by relocating the CCR material to the North Ash Pond. The alteration to the East Ash Pond closure strategy requires additional plan revisions to the North Ash Pond.

Specific revisions related to the East Ash Pond include:

1. Relocation of the existing gas pipeline that services the Brema Power Station
2. Relocation of CCR material to the North Ash Pond
3. Importing soil fill material to stabilize the excavated area
4. Repurposing the current East Ash Pond as a new stormwater management pond, post closure
5. Construction of perimeter drainage structures

Specific revisions related to the North Ash Pond include:

1. Additional CCR fill (from the East Ash Pond) above the current permitted design grades per SDP 15:12
2. Additional surface drainage features to manage stormwater runoff

The previous site area involved 284.045 acres. The new boundary, which includes a CSX parcel, covers 285.665 acres

(Attachment C)

### *Parking/Roads*

The site has existing access from State Route 656 (Brema Road), and no new points of access are proposed. The number of employees is not increasing, therefore on-site parking requirements are not changing.

### *Landscaping/Screening*

Landscaping and screening requirements are not applicable to this project. All work to be performed is within the interior of the site. No parking area with five (5) spaces or more is proposed.

### *Signage & Outdoor Lighting*

Signage and outdoor lighting requirements are not applicable to this project. All outdoor lighting must be fully shielded and utilize full cut-off lighting fixtures per Sec. 22-25-5.

### *Stormwater Management*

An erosion and sediment control plan would also be required for review and approval prior to the issuance of any land disturbing permit. The applicant is working with the county E&S inspector, as well as the Department of Environmental Quality (DEQ).

### **Technical Review Committee:**

The following comments were generated from the January 12, 2017 Technical Review Committee meeting:

1. Planning Staff had no comments and asked the applicant to go through the site plan to explain the proposed changes in detail.
2. Fire Chief had no comments.
3. Building Official had no comments.
4. Erosion and Sediment Control had no comments.
5. Health Dept. had no comments.
6. VDOT asked if hauling would take place on the internal roads on the site, to which the applicant stated yes.

### **Conclusion:**

The submitted plan appears to meet the requirements of Section 22-23-8.A of the Fluvanna County Zoning Ordinance. Prior to final approval, a site development plan that meets the requirements of Sections 22-23, 24, 25 and 26 of the Fluvanna County Zoning Ordinance must be submitted for staff review and approval.

### **Recommended Conditions:**

1. Meet all final site plan requirements which include, but are not limited to, providing parking, landscaping, tree protection, and outdoor lighting plans *when and where applicable*;

2. Meet all required Erosion and Sedimentation Control regulations;
3. Meet all required Department of Environmental Quality regulations;
4. Meet all public agency requirements including but not limited to VDOT requirements.

**Suggested Motion:**

I move to approve SDP 16:19, a request to amend SDP 15:12 for the closure of coal combustion residuals impoundment ponds and increase the site area to 285.665 acres of the tax map and parcel numbers in Attachment A, subject to the conditions listed in the staff report.

**Attachments:**

- A – Application & parcel list
- B – Aerial Vicinity Map
- C – Sketch site plan
- D – Overview of ash ponds
- E – Ash ponds existing conditions
- F – Ash ponds post-closure renderings
- G – Project plan

Copy:

Applicant/Owner: Virginia Electric & Power Co., 5000 Dominion Blvd, Glen Allen, VA 23060,  
[david.craymer@dom.com](mailto:david.craymer@dom.com)

Representative: Amelia Boschen via email - [amelia.h.boschen@dom.com](mailto:amelia.h.boschen@dom.com)

File



COMMONWEALTH OF VIRGINIA  
COUNTY OF FLUVANNA  
Site Development Application

**Owner of Record:** Virginia Electric and Power Company **Applicant of Record:** Virginia Electric & Power Company  
 E911 Address: 5000 Dominion Blvd., Glen Allen, VA 23060 E911 Address: 5000 Dominion Blvd., Glen Allen, VA 23060  
 Phone: 804-273-3685 Fax: \_\_\_\_\_ Phone: 804-273-3685 Fax: \_\_\_\_\_  
 Email: david.craymer@dom.com Email: david.craymer@dom.com

**Representative:** Amelia Boschen  
 E911 Address: 5000 Dominion Blvd., Glen Allen, VA 23060  
 Phone: 804-273-3485 Fax: \_\_\_\_\_  
 Email: amelia.h.boschen@dom.com

**Tax Map and Parcel(s):** Attached List **Deed Book Reference:** Attached List  
**Acreeage:** 284.045 **Zoning:** I-1 / A-1 **Deed Restrictions?**  No  Yes (Attach copy)  
**Location:** 1038 Breomo Road, Breomo Bluff, VA 23022

Note: If applicant is anyone other than the owner of record, written authorization by the owner designating the applicant as the authorized agent for all matters concerning the request shall be filed with this application.

Is property in Agricultural Forestal District?  No  Yes

If Yes, what district: \_\_\_\_\_

Description of Property: Existing Power Generation Facility

Proposed Structure: None

Dimensions of Building: N/A

Lighting Standards on Site:  No  Yes

# of Employees: < 50

# of Parking Spaces: 144

Noise Limitations: N/A

I declare that the statements made and information given on this application are true, full and correct to the best of my knowledge and belief. I agree to conform fully to all terms of any certificate or permit which may be issued on account of this application.

David A. Craymer

Applicant Name (Please Print)

Applicant Signature and Date

OFFICE USE ONLY

Date Received: <u>12/19/16</u>	Fee Paid: <u>\$150.00</u>	Application #: <u>SDP 116 : 019</u>
Election District: <u>Fork Union</u>	Planning Area: <u>Rural Residential</u>	Number of Lots: _____
Total Fees Due at Time of Submission		
Sketch Plan: <u>\$150.00</u>	Minor Plan: \$550.00	Major Plan: \$1,100.00
Additional Fees Due at Time of Review		
Health Department Subdivision Review:	\$250.00 + \$25.00 per lot	Existing System Review \$50.00
Street Sign Installation:	\$200.00 Per Intersection	
Amendment of Plan	\$150.00	
Outdoor Lighting Plan Review*	\$ 50.00	
Landscape Plan Review*	\$ 50.00	
Tree Protection Plan Review*	\$ 50.00	
* If not part of a Site Plan Review		

Fluvanna County Department of Planning & Community Development \* Box 540 \* Palmyra, VA 22963 \* (434)591-1910 \* Fax (434)591-1911  
 This form is available on the Fluvanna County website: www.co.fluvanna.va.us

Received

DEC 19 2016

Fluvanna County

**Virginia Electric and Power  
Bremo Power Station  
Fluvanna County Site Development Application  
Supporting Attachment**

Project Property Information (tax map, parcel ID, DB ref.)

1. Virginia Public Service Company  
Tax Parcel: 59-6-4 (in part)  
Deed: D.B. 19, PG. 173  
Plat: D.B. 19, PG. 174 (Lot 4 - in part)
2. Virginia Public Service Company  
Tax Parcel: 59-6-4 (in part)  
Deed: D.B. 19, PG. 173  
Plat: D.B. 19, PG. 174 (Lot 4 - in part)
3. Virginia Public Service Company  
Tax Parcel: 59-6-3  
Deed: D.B. 19, PG. 176  
Plat: D.B. 19, PG. 174 (Lot 3)
4. Virginia Public Service Company  
Tax Parcel: 59-6-2  
Deed: D.B. 19, PG. 177  
Plat: D.B. 19, PG. 174 (Lot 2)
5. Virginia Public Service Company  
Tax Parcel: 59-6-2A  
Deed: D.B. 19, PG. 177
6. Virginia Public Service Company  
Tax Parcel: 59-6-1  
Deed: D.B. 19, PG. 248  
Plat: D.B. 19, PG. 174 (Lot 1)
7. Virginia Public Service Company  
Tax Parcel: 59-6-1A  
Deed: D.B. 19, PG. 248
8. Virginia Electric and Power Company  
Tax Parcel: 59-A-24  
Deed: D.B. 116, PG. 131  
Plat: D.B. 44, PG. 455
9. Virginia Electric and Power Company  
Tax Parcel: 62-A-1  
Deed: D.B. 39, PG. 216  
Plat: D.B. 57, PG. 218
10. Virginia Electric and Power Company  
Tax Parcel: 59-7-1A (in part)  
Deed: D.B. 50, PG. 478  
Plat: D.B. 50, PG. 481 (parcel 1X-C)

Received  
DEC 19 2015  
Fluvanna County

11. Virginia Electric and Power Company  
Tax Parcel: 59-7-1A (in part)  
Deed: D.B. 50, PG. 478  
Plat: D.B. 50, PG. 481 (parcel 1X-A)
12. Virginia Electric and Power Company  
Tax Parcel: 59-7-1A (in part)  
Deed: D.B. 50, PG. 478  
Plat: D.B. 50, PG. 481 (parcel 1X-B)
13. Virginia Electric and Power Company  
Tax Parcel: 59-7-1B (two parts)  
Deed: D.B. 97, PG. 291  
Plat: D.B. 97, PG. 293
14. Virginia Electric and Power Company  
Tax Parcel: 59-7-1  
Deed: D.B. 116, PG. 131  
Plat: D.B. 3, PG. 318 (Lot 1 - in part)
15. Virginia Electric and Power Company  
Tax Parcel: 59-7-26  
Deed: D.B. 101, PG. 432  
Plat: D.B. 101, PG. 434
16. Virginia Electric and Power Company  
Tax Parcel: 62-A-4 (in part, not mapped)  
Chancery Book 13, PG. 360
17. Virginia Electric and Power Company  
Tax Parcel: 62-A-3  
Deed: D.B. 50, PG. 241  
Deed: D.B. 50, PG. 246  
Plat: D.B. 50, PG. 245 & 248
18. Virginia Electric and Power Company  
Tax Parcel: 62-A-2  
Deed: D.B. 57, PG. 274  
Plat: D.B. 57, PG. 276  
Deed: D.B. 50, PG. 283  
Plat: D.B. 50, PG. 286
19. Virginia Electric and Power Company  
Tax Parcel: 62-A-4 (in part)  
Deed: D.B. 154, PG. 56  
Deed: D.B. 154, PG. 47  
Plat: D.B. 154, PG. 55 (Parcel "X-3")
20. Virginia Electric and Power Company  
Tax Parcel: 58-A-10 (in part)  
Deed: D.B. 975, PG. 919  
Plat: P.B. 3, PG. 227



Dominion Resource Services, Inc.  
5000 Dominion Boulevard, Glen Allen, VA 23060  
dom.com

**BY HAND DELIVERY**

December 19, 2016

Jason Stewart  
Fluvanna County  
Department of Planning and Community Development  
Box 540  
Palmyra, VA 22963

**RE: Dominion – Bremo Power Station  
CCR Surface Impoundment Closure Project  
Site Plan Amendment SDP 15:12**

Dear Mr. Stewart,

Site Plan approval for the above referenced project was initially received from the County on November 23, 2015 (SDP 15:12). A revised site plan is being submitted to reflect changes resulting from the decision to close the station's East Pond by removal of CCRs. The attached material is being submitted in support of the site plan revision. Note that no permanent structures or roads are being constructed as part of this project.

The County should have a Secretary's Certificate for Mr. David A. Craymer, VP, Power Generation System Operations on file.

Should you have any questions or require additional information, please contact Amelia Boschen at 804-273-3485 or [amelia.h.boschen@dom.com](mailto:amelia.h.boschen@dom.com).

Sincerely,

A handwritten signature in black ink that reads "Cathy C. Taylor".

Cathy C. Taylor  
Sr. Environmental and Sustainability Advisor

Enclosures

Received  
DEC 19 2016  
Fluvanna County



**File Documentum**

**File Name:** BR CCR Impoundment Closure Project Revised Site Plan Submittal\_Dec  
2016

**Facility Name:** Bremo Power Station

**Environmental Program:** Water - NPDES

**Document Type:** Permits - Applications

**Date on Document:** 12/19/2015

etc:

D.A. Craymer

P.F. Faggert

C.C. Taylor

P. Hamel

K. Canody

J.E. Williams

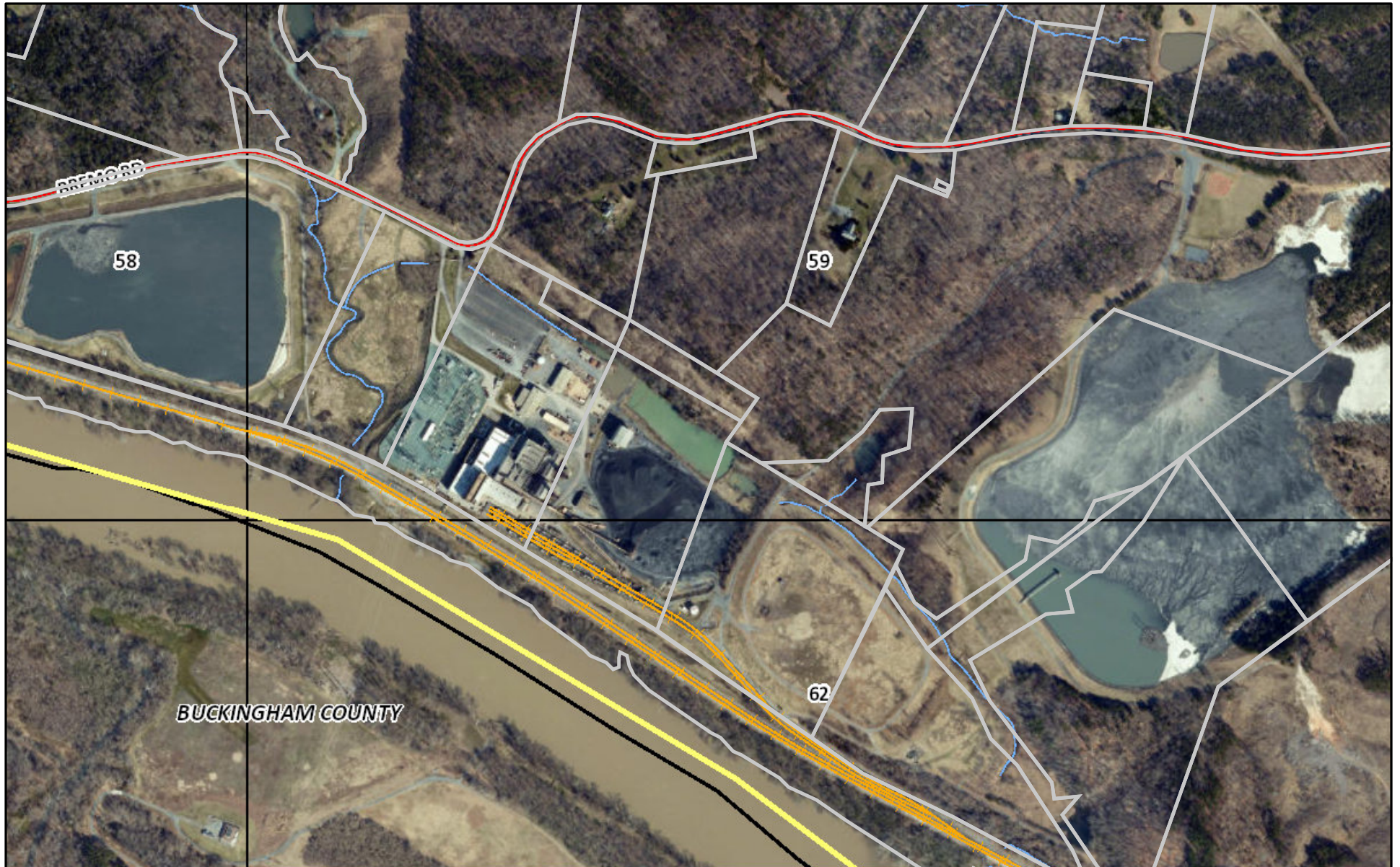
A. Boschen

K. Roller

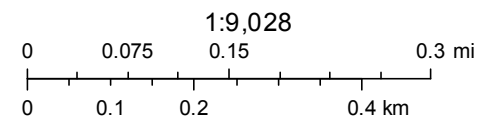
O. Shehab

I. Whitlock

# SDP 16:19 Aerial View



March 3, 2017



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

# DOMINION BREMO POWER STATION CCR SURFACE IMPOUNDMENT CLOSURE MAJOR SITE DEVELOPMENT PLAN

**FORK UNION MAGISTERIAL DISTRICT  
FLUVANNA COUNTY, VIRGINIA  
DECEMBER 2016**



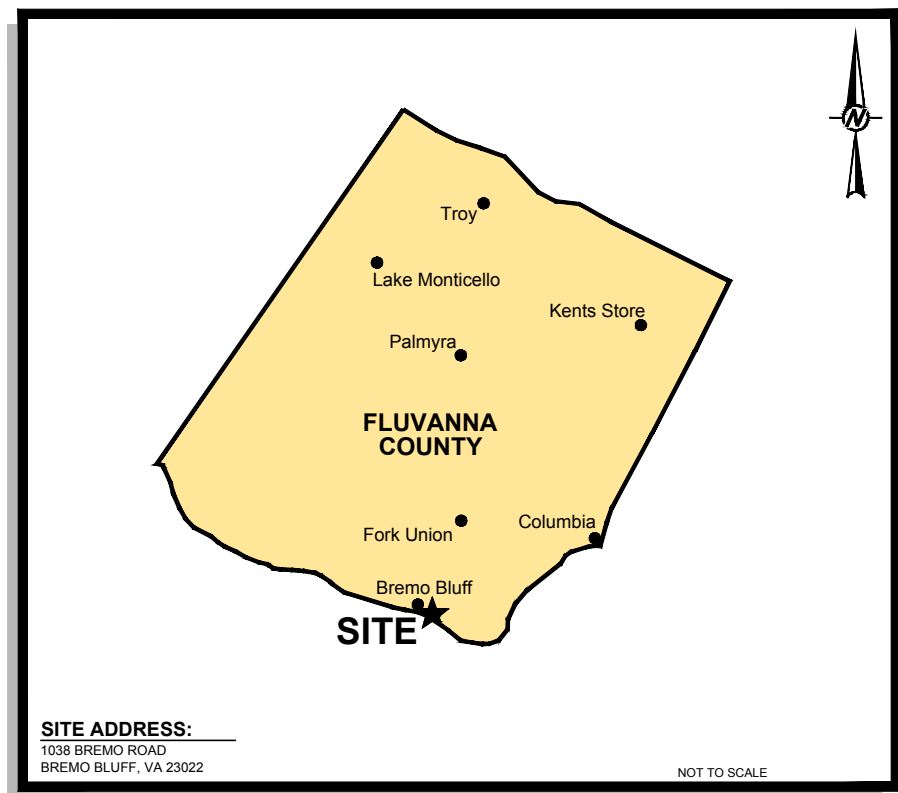
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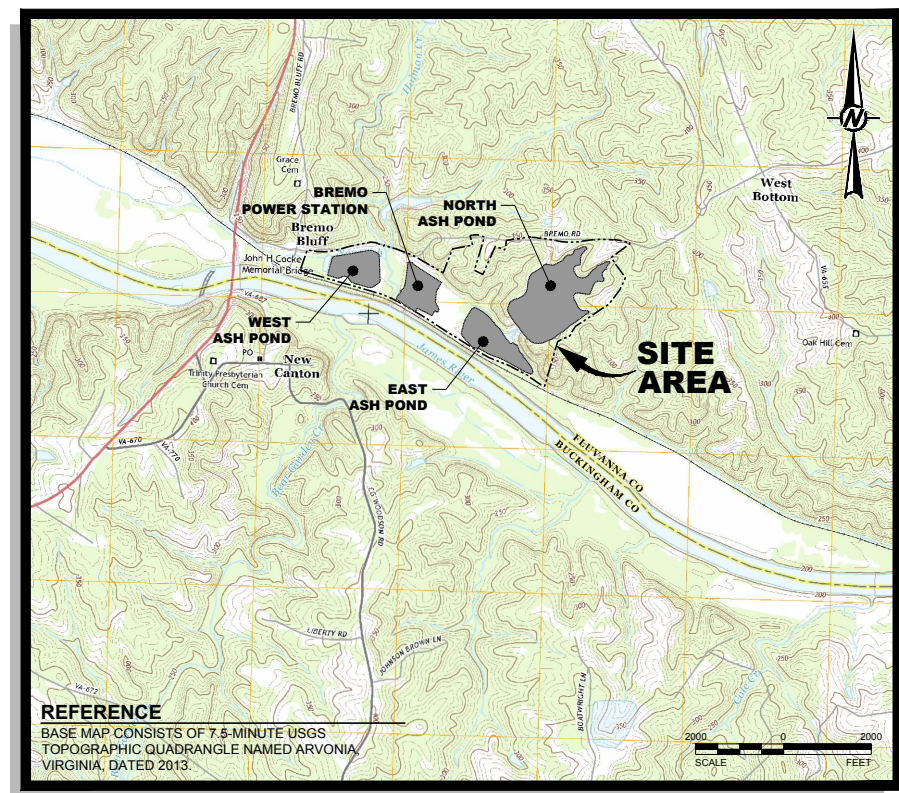
**DOMINION  
BREMO POWER STATION  
CCR SURFACE IMPOUNDMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA**

COVER SHEET			
PROJECT	TITLE	PROJECT No.	FILE No.
		15-20347	1520347X01-MSDP
REV	SCALE	AS SHOWN	
DESIGN	JRD	12/16/16	
CADD	ATN	12/16/16	
CHECK	ATN	12/16/16	
REVIEW	JRD	12/16/16	

**DRAWING 1**



DRAWING INDEX	
Sheet Number	Sheet Title
1	COVER SHEET
2	BOUNDARY SURVEY (1 OF 4)
3	BOUNDARY SURVEY (2 OF 4)
4	BOUNDARY SURVEY (3 OF 4)
5	BOUNDARY SURVEY (4 OF 4)
6	EXISTING CONDITIONS (INDEX SHEET)
7	EXISTING CONDITIONS (1 OF 3)
8	EXISTING CONDITIONS (2 OF 3)
9	EXISTING CONDITIONS (3 OF 3)
10	FINAL GRADING PLAN (INDEX SHEET)
11	FINAL GRADING PLAN (1 OF 3)
12	FINAL GRADING PLAN (2 OF 3)
13	FINAL GRADING PLAN (3 OF 3)
14	CROSS SECTIONS (WEST ASH POND)
15	CROSS SECTIONS (EAST ASH POND)
16	CROSS SECTIONS (NORTH ASH POND)
17	EAST ASH POND EXCAVATION PLAN (PHASE 1 & 2)
18	EAST ASH POND EXCAVATION PLAN (PHASE 3)
19	EAST ASH POND EXCAVATION PLAN (PHASE 4)
20	EAST ASH POND EXCAVATION PLAN (PHASE 5)
21	EAST ASH POND EXCAVATION PLAN PHASE 5 SOIL FILL
22	NORTH ASH POND FILL PLAN (PHASE 1 & 2)
23	NORTH ASH POND FILL PLAN (PHASE 3)
24	NORTH ASH POND FILL PLAN (PHASE 4)
25	NORTH ASH POND FILL PLAN (PHASE 5)
26	NORTH ASH POND HAUL ROAD PLAN & PROFILE
27	NORTH ASH POND HAUL ROAD CROSS SECTION AND DETAILS
28	NORTH ASH POND TOE DRAIN CONVEYANCE SYSTEM
29	NORTH ASH POND TOE DRAIN CONVEYANCE SYSTEM DETAILS
30	GROUNDWATER MONITORING PLAN
31	MISCELLANEOUS CONSTRUCTION DETAILS (1 OF 3)
32	MISCELLANEOUS CONSTRUCTION DETAILS (2 OF 3)
33	MISCELLANEOUS CONSTRUCTION DETAILS (3 OF 3)
ESC-1	EROSION AND SEDIMENT CONTROL PLAN (INDEX SHEET)
ESC-2	EROSION AND SEDIMENT CONTROL PLAN (1 OF 3)
ESC-3	EROSION AND SEDIMENT CONTROL PLAN (2 OF 3)
ESC-4	EROSION AND SEDIMENT CONTROL PLAN (3 OF 3)
ESC-5	EROSION AND SEDIMENT CONTROL NOTES AND NARRATIVE
ESC-6	EROSION AND SEDIMENT CONTROL DETAILS (1 OF 2)
ESC-7	EROSION AND SEDIMENT CONTROL DETAILS (2 OF 2)
ESC-8	EROSION AND SEDIMENT CONTROL MATTING PLAN
SWM-1	SWM NOTES & NARRATIVE AND VRRM CALCULATIONS
SWM-2	PRE-DEVELOPMENT DRAINAGE AREA CALCULATIONS
SWM-3	POST DEVELOPMENT DRAINAGE AREA CALCULATIONS
SWM-4	CHANNEL CROSS SECTIONS (1 OF 2)
SWM-5	CHANNEL CROSS SECTIONS (2 OF 2)
SWM-6	CULVERT AND OUTLET DETAILS (1 OF 3)
SWM-7	CULVERT AND OUTLET DETAILS (2 OF 3)
SWM-8	CULVERT AND OUTLET DETAILS (3 OF 3)
SMW-9	STORMWATER MANAGEMENT LIMITS OF ANALYSIS



- GENERAL NOTES**
- EXISTING CONDITIONS COMPILED FROM:
    - AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 1/16/15 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)]
    - AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 8/12/16. [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)], (WITHIN LIMITS OF NORTH ASH POND ONLY)
    - FIELD RUN TOPOGRAPHY BY H&B SURVEYING & MAPPING, COLLECTED ON 6/9/16 [WITHIN LIMITS OF WEST ASH POND ONLY]
    - BOUNDARY SURVEY PREPARED BY H&B SURVEYING AND MAPPING, LLC DATED 04/27/15.
    - HISTORICAL DATA FOR THE DEVELOPMENT OF THE EAST ASH POND.
    - APPROXIMATE BOTTOM OF CCR IN THE EAST POND IS BASED ON HISTORICAL FIELD SURVEY AND GEOTECHNICAL INVESTIGATIONS BY GOLDER.
  - SITE DATUM: NAD83 / NAVD88, VIRGINIA STATE PLANE SOUTH.
  - WETLAND DELINEATION BY DOMINION ENVIRONMENTAL SERVICES ON 01/30/15 & 02/05/15 AND BY GOLDER ASSOCIATES ON 03/16/15 & 03/25/15. WATERS OF THE U.S. CONFIRMED BY THE USACE DURING JUNE 4, 2015, JUNE 16, 2016, AND JULY 21, 2016 SITE VISITS.
  - 100 YEAR FLOOD PLAIN DELINEATION BASED ON FLOOD ELEVATION DATA REPRESENTED ON FEMA FLOOD INSURANCE RATE MAP (FIRM), MAP NUMBER 51065C0260C, EFFECTIVE DATE: 05/16/2008.
  - PLAN FOR BID USE ONLY. ISSUED FOR CONSTRUCTION DRAWINGS TO BE BASED ON FINAL DESIGN, AND ARE SUBJECT TO CHANGE PER STATE AND COUNTY PERMITTING.
  - PREVIOUS SITE DEVELOPMENT PLAN (SDP 15:12) APPROVED BY FLUVANNA COUNTY ON 11/23/2015.

**FLUVANNA CO. DIRECTOR OF PLANNING APPROVAL**

NAME \_\_\_\_\_ DATE \_\_\_\_\_

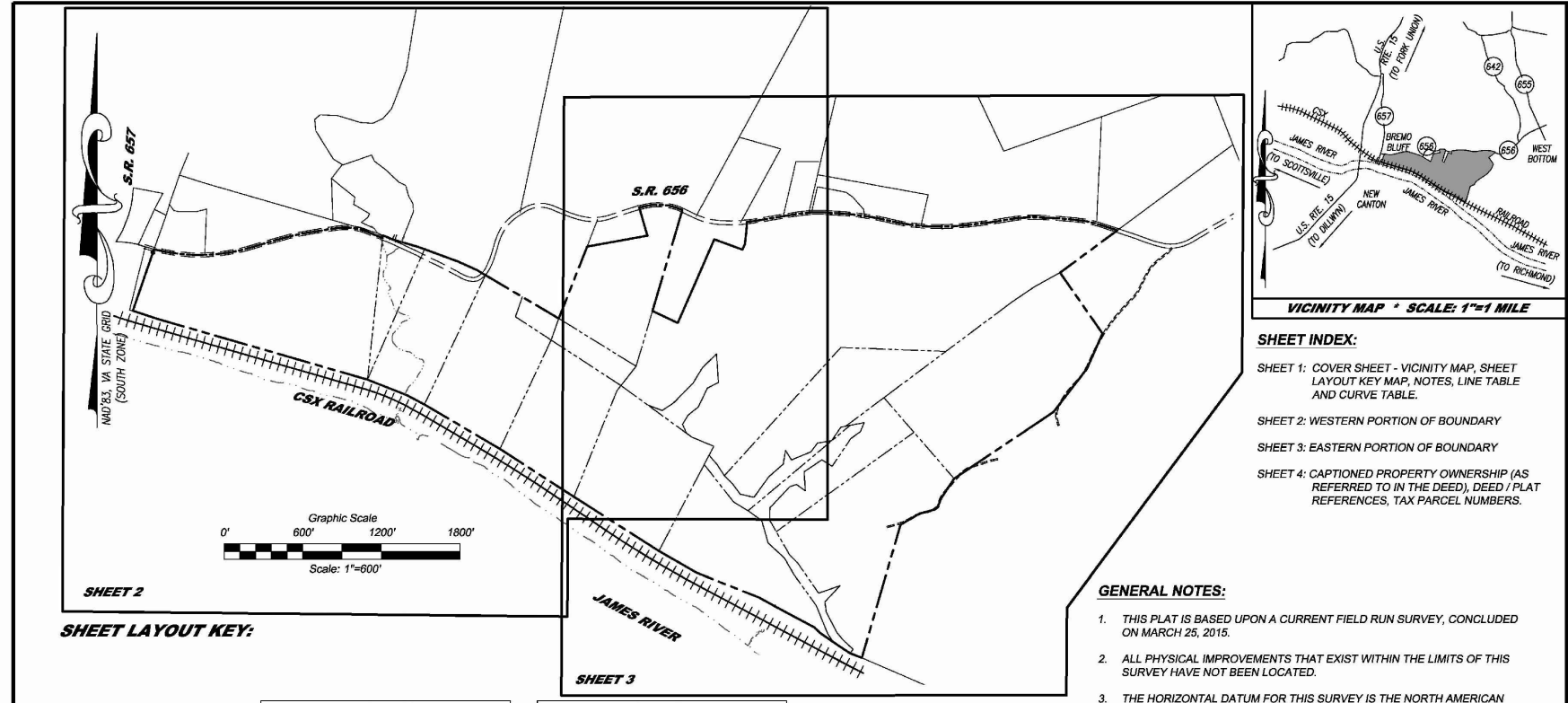
**PREPARED BY:**

GOLDER ASSOCIATES, INC.  
MAIN CONTACT: RON DIFRANCESCO, PE  
2108 W. LABURNUM AVE., SUITE 200  
RICHMOND, VIRGINIA 23227  
PHONE: (804) 358-7900  
EMAIL: RON\_DIFRANCESCO@GOLDER.COM

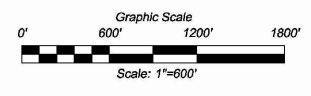
**PREPARED FOR:**

DOMINION - BREMO POWER STATION  
MAIN CONTACT: MIKE GLAGOLA  
5000 DOMINION BLVD.  
GLEN ALLEN, VA 23060  
PHONE: (804) 273-4547  
EMAIL: MICHAEL.A.GLAGOLA@DOM.COM

G:\Plan Production Data Files\Drawing Data Files\15-20347X - Site Plan Rev3\Active Drawings\1520347X01-MSDP.dwg



SHEET LAYOUT KEY:

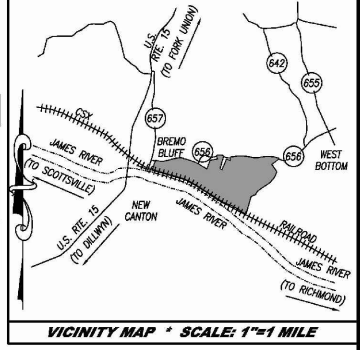


LINE	BEARING	DISTANCE
L1	N 73°41'53" E	217.55'
L2	N 81°17'48" E	189.74'
L3	S 68°45'09" E	142.54'
L4	N 06°05'47" E	19.85'
L5	S 73°36'51" E	42.43'
L6	S 73°36'51" E	29.22'
L7	S 73°36'51" E	138.36'
L8	S 65°35'01" E	155.03'
L9	S 59°36'36" E	39.08'
L10	S 59°42'47" E	37.75'
L11	N 16°07'54" W	222.21'
L12	S 64°38'05" E	213.91'
L13	N 23°38'38" E	282.77'
L14	S 69°57'19" E	228.99'
L15	N 24°34'47" E	46.58'
L16	N 05°54'24" E	142.08'
L17	N 00°40'07" E	27.15'
L18	N 79°40'52" E	8.78'
L19	S 86°36'17" E	128.46'

LINE	BEARING	DISTANCE
L20	S 77°12'19" E	52.06'
L21	N 83°33'47" E	39.48'
L22	N 80°29'25" E	22.98'
L23	S 84°50'20" E	74.39'
L24	S 72°08'05" E	114.59'
L25	S 23°49'05" W	292.00'
L26	S 33°24'57" W	171.71'
L27	S 23°07'16" W	75.68'
L28	S 57°25'49" W	50.24'
L29	S 74°45'40" W	100.67'
L30	S 59°59'54" W	167.39'
L31	N 88°43'55" W	97.17'
L32	N 57°02'09" W	93.47'
L33	N 55°28'16" W	60.60'
L34	N 55°28'16" W	120.60'
L35	N 46°18'16" W	62.40'
L36	N 61°04'16" W	160.00'
L37	N 62°10'05" W	155.00'
L38	N 71°46'28" W	195.45'

CURVE	RADIUS	ARC LENGTH	DELTA ANGLE	TANGENT	CHORD BEARING	CHORD LENGTH
C1	1400.24'	746.79'	30°33'27"	382.50'	N 88°58'37" E	737.97'
C2	2042.80'	270.91'	7°35'55"	135.66'	N 77°29'50" E	270.72'
C3	416.98'	217.97'	29°57'04"	111.54'	S 83°43'40" E	215.50'
C4	3245.84'	78.48'	1°23'07"	39.24'	S 67°23'38" E	78.48'
C5	1150.00'	59.10'	2°56'40"	29.56'	N 77°06'26" E	59.09'
C6	437.23'	277.60'	36°22'40"	143.66'	S 83°13'54" E	272.96'
C7	1111.13'	13.08'	0°40'27"	6.54'	N 83°07'58" E	13.08'
C8	3400.26'	184.84'	3°06'53"	92.44'	N 81°14'18" E	184.82'
C9	4749.10'	175.72'	2°07'12"	87.87'	N 80°44'28" E	175.71'
C10	1688.64'	127.69'	4°19'57"	63.88'	N 83°58'02" E	127.66'
C11	542.46'	68.75'	7°15'42"	34.42'	N 89°45'52" E	68.71'
C12	2254.61'	369.87'	9°23'58"	185.35'	S 81°54'18" E	369.46'
C13	1556.67'	380.42'	14°00'07"	191.16'	S 84°12'22" E	379.47'
C14	2181.34'	199.11'	5°13'48"	99.62'	N 86°10'41" E	199.04'
C15	4802.59'	257.56'	3°04'22"	128.81'	N 82°01'36" E	257.53'
C16	1069.90'	213.73'	11°26'45"	107.22'	N 86°12'48" E	213.38'
C17	3946.54'	222.14'	3°13'30"	111.10'	S 86°27'05" E	222.11'
C18	800.13'	177.41'	12°42'15"	89.07'	S 78°29'12" E	177.05'
C19	5677.88'	26.83'	0°16'15"	13.41'	S 71°59'58" E	26.83'

Sheet Status:  
**FINAL**  
Submittal Date:  
05-04-2016



**SHEET INDEX:**  
SHEET 1: COVER SHEET - VICINITY MAP, SHEET LAYOUT KEY MAP, NOTES, LINE TABLE AND CURVE TABLE.  
SHEET 2: WESTERN PORTION OF BOUNDARY  
SHEET 3: EASTERN PORTION OF BOUNDARY  
SHEET 4: CAPTIONED PROPERTY OWNERSHIP (AS REFERRED TO IN THE DEED), DEED / PLAT REFERENCES, TAX PARCEL NUMBERS.

- GENERAL NOTES:**
- THIS PLAT IS BASED UPON A CURRENT FIELD RUN SURVEY, CONCLUDED ON MARCH 25, 2015.
  - ALL PHYSICAL IMPROVEMENTS THAT EXIST WITHIN THE LIMITS OF THIS SURVEY HAVE NOT BEEN LOCATED.
  - THE HORIZONTAL DATUM FOR THIS SURVEY IS THE NORTH AMERICAN DATUM OF 1983 (NAD83). COORDINATE VALUES AS SHOWN HEREON ARE ON THIS DATUM AND ARE REPORTED ON VIRGINIA STATE GRID COORDINATE SYSTEM, SOUTH ZONE. THE UNIT OF MEASURE FOR THIS SURVEY IS THE U.S. SURVEY FOOT.
  - THE PROPERTY SHOWN HEREON FALLS IN THE FOLLOWING FLOOD HAZARD ZONES: "X"(UNSHADED)-AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD PLAIN, "X"(SHADED)-AREAS IN THE 0.2% ANNUAL CHANCE FLOOD PLAIN, AND "AE ELEVATION"-BASE FLOOD ELEVATIONS DETERMINED (NAVD88). A FLOODWAY BOUNDARY ALSO EXISTS WITHIN THE "AE" FLOOD HAZARD ZONE. THE APPROXIMATE BOUNDARY LIMITS OF THESE AREAS ARE SHOWN AS SCALED FROM FEMA FLOOD INSURANCE RATE MAP, MAP NUMBER 51065C0260C, EFFECTIVE DATE: 05-16-2008.
  - DURING THE COURSE OF OUR PERIMETER SURVEY, NO CEMETERIES WERE OBSERVED TO EXIST. NO FURTHER INVESTIGATIONS HAVE BEEN MADE TO VERIFY THE EXISTENCE (OR NON-EXISTENCE) OF ANY POSSIBLE CEMETERIES LOCATED ON THE SUBJECT PREMISES.
  - THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT AND THEREFORE DOES NOT NECESSARILY SHOW ALL EASEMENTS THAT MAY AFFECT THE SUBJECT PREMISES. THE PARCELS OF LAND SHOWN HEREON ARE SUBJECT TO ALL ENCUMBRANCES AND/OR EASEMENTS OF RECORD.

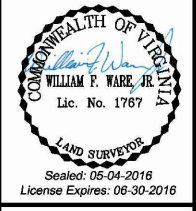
**OVERALL EXTERIOR BOUNDARY SURVEY CONSISTING OF**  
**NINETEEN (19) PARCELS OF**  
**LAND LYING SOUTH OF**  
**S.R. 656 (BREMO ROAD)**  
**CONTAINING 284.045 ACRES**  
**FORK UNION DISTRICT, FLUVANNA COUNTY, VIRGINIA**  
**SCALE: AS SHOWN**

REVISION #1: CORRECT TAX PARCEL NUMBER FOR PARCELS ① & ②

Job #: GO1501.01  
Date: 04-27-2015  
Sheet: 1 of 4  
Drawn By: WFW  
Checked By: WFW

Rev. #	Rev. Date
#1	05-04-2016

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TITLE	DATE	DES	CHK	REV
PLAN APPROVED BY FLUVANNA COUNTY	5/13/16			
PLAN APPROVED BY DEQ WATER DIVISION	7/16/16			
REVISION DESCRIPTION				



**DOMINION**  
**BREMO POWER STATION**  
**CCR SURFACE IMPOUNDMENT**  
**CLOSURE PLAN**  
**FLUVANNA COUNTY, VIRGINIA**

**BOUNDARY SURVEY**  
**(1 OF 4)**

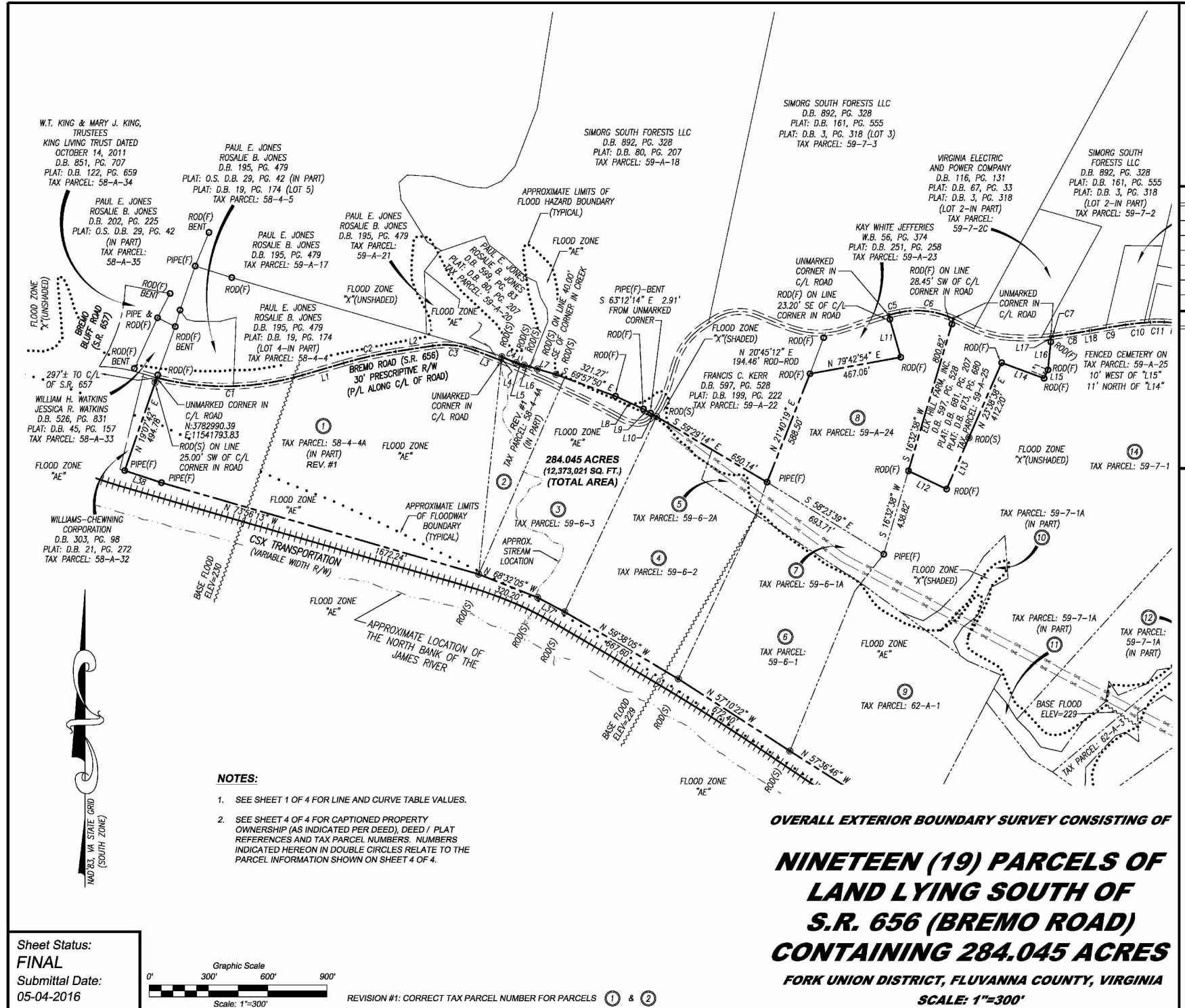
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FILE No.	1520347X02-05		
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CADD	ATN	09/21/15	
CHECK	ATN	12/16/16	
REVIEW	JRD	12/16/16	

**DRAWING 2**

G:\Plan Production Data Files\Drawing Data Files\15-20347.X - Site Plan Rev05 Active Drawing.plt 1520347X02-05.dwg



REVISION DESCRIPTION	DATE	CHK	REV
PLAN APPROVED BY FLUVANNA COUNTY	05/13/16	CAWD	
PLAN APPROVED BY DEQ WATER DIVISION	07/16/16		



Job #: GO1501.01  
Date: 04-27-2015  
Sheet: 2 of 4  
Drawn By: WFW  
Checked By: WFW

Rev. #	Rev. Date
#1	05-04-2016

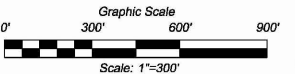
**Professional Seal**

Sealed: 05-04-2016  
License Expires: 06-30-2016

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**OVERALL EXTERIOR BOUNDARY SURVEY CONSISTING OF NINETEEN (19) PARCELS OF LAND LYING SOUTH OF S.R. 656 (BREMO ROAD) CONTAINING 284.045 ACRES FORK UNION DISTRICT, FLUVANNA COUNTY, VIRGINIA SCALE: 1"=300'**

Sheet Status:  
**FINAL**  
Submittal Date:  
05-04-2016



PROJECT

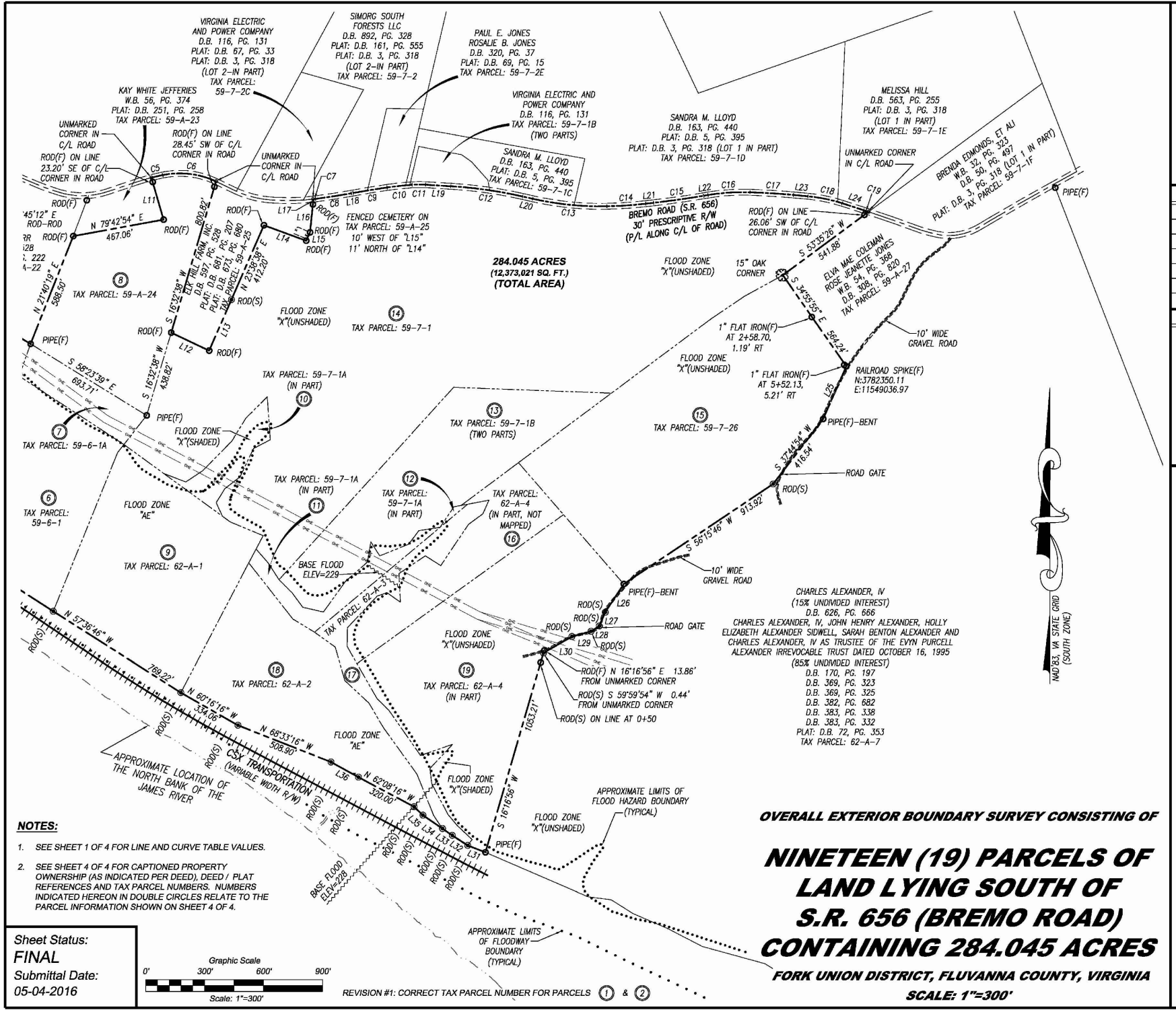
**DOMINION BREMO POWER STATION CCR SURFACE IMPOUNDMENT CLOSURE PLAN FLUVANNA COUNTY, VIRGINIA**

TITLE

**BOUNDARY SURVEY (2 OF 4)**

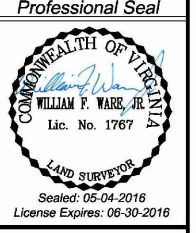
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FILE No.	1520347X02-05	
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CADD	ATN	09/21/15
CHECK	ATN	12/16/16
REVIEW	JRD	12/16/16

**DRAWING 3**



Job #: GO1501.01  
 Date: 04-27-2015  
 Sheet: 3 of 4  
 Drawn By: WFW  
 Checked By: WFW

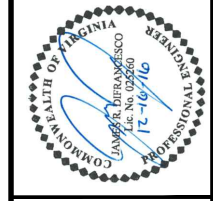
Rev. #	Rev. Date
#1	05-04-2016



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TITLE	DATE	BY	CHK	R/W
PLAN APPROVED BY FLUVANNA COUNTY				
PLAN APPROVED BY DEQ WATER DIVISION				
REVISION DESCRIPTION				
DES				
DATE				
REV				



**DOMINION BREMO POWER STATION CCR SURFACE IMPOUNDMENT CLOSURE PLAN**  
 FLUVANNA COUNTY, VIRGINIA

**BOUNDARY SURVEY (3 OF 4)**

PROJECT No.	15-20347
FILE No.	1520347X02-05
REV. 0	SCALE AS SHOWN
DESIGN	JRD 09/21/15
CADD	ATN 09/21/15
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

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**CAPTIONED PROPERTY OWNERSHIP & REFERENCES**

①  
 VIRGINIA PUBLIC SERVICE COMPANY  
 D.B. 19, PG. 173  
 PLAT: D.B. 19, PG. 174 (LOT 4-IN PART)  
 TAX PARCEL: 58-4-4A (IN PART)  
 REV. #1

⑥  
 VIRGINIA PUBLIC SERVICE COMPANY  
 D.B. 19, PG. 248  
 PLAT: D.B. 19, PG. 174 (LOT 1)  
 TAX PARCEL: 59-6-1

⑪  
 VIRGINIA ELECTRIC AND POWER COMPANY  
 D.B. 50, PG. 478  
 PLAT: D.B. 50, PG. 481 (PARCEL 1X-A)  
 TAX PARCEL: 59-7-1A (IN PART)

⑫  
 VIRGINIA ELECTRIC AND POWER COMPANY  
 CHANCERY BOOK 13, PG. 360  
 TAX PARCEL: 62-A-4  
 (IN PART, NOT MAPPED)

②  
 VIRGINIA PUBLIC SERVICE COMPANY  
 D.B. 19, PG. 173  
 PLAT: D.B. 19, PG. 174 (LOT 4-IN PART)  
 TAX PARCEL: 58-4-4A (IN PART)  
 REV. #1

⑦  
 VIRGINIA PUBLIC SERVICE COMPANY  
 D.B. 19, PG. 248  
 TAX PARCEL: 59-6-1A

⑫  
 VIRGINIA ELECTRIC AND POWER COMPANY  
 D.B. 50, PG. 478  
 PLAT: D.B. 50, PG. 481 (PARCEL 1X-B)  
 TAX PARCEL: 59-7-1A (IN PART)

⑬  
 VIRGINIA ELECTRIC AND POWER COMPANY  
 D.B. 50, PG. 241  
 D.B. 50, PG. 246  
 PLAT: D.B. 50,  
 PG. 245 & 248  
 TAX PARCEL: 62-A-3

③  
 VIRGINIA PUBLIC SERVICE COMPANY  
 D.B. 19, PG. 176  
 PLAT: D.B. 19, PG. 174 (LOT 3)  
 TAX PARCEL: 59-6-3

⑧  
 VIRGINIA ELECTRIC AND POWER COMPANY  
 D.B. 116, PG. 131  
 PLAT: D.B. 44, PG. 455  
 TAX PARCEL: 59-A-24

⑬  
 VIRGINIA ELECTRIC AND POWER COMPANY  
 D.B. 97, PG. 291  
 PLAT: D.B. 97 PG. 293  
 TAX PARCEL: 59-7-1B  
 (TWO PARTS)

⑭  
 VIRGINIA ELECTRIC AND POWER COMPANY  
 D.B. 57, PG. 274  
 PLAT: D.B. 57, PG. 276  
 D.B. 50, PG. 283  
 PLAT: D.B. 50, PG. 286  
 TAX PARCEL: 62-A-2

④  
 VIRGINIA PUBLIC SERVICE COMPANY  
 D.B. 19, PG. 177  
 PLAT: D.B. 19, PG. 174 (LOT 2)  
 TAX PARCEL: 59-6-2

⑨  
 VIRGINIA ELECTRIC AND POWER COMPANY  
 D.B. 39, PG. 216  
 PLAT: D.B. 57, PG. 218  
 TAX PARCEL: 62-A-1

⑭  
 VIRGINIA ELECTRIC AND POWER COMPANY  
 D.B. 116, PG. 131  
 PLAT: D.B. 3, PG. 318 (LOT 1-IN PART)  
 TAX PARCEL: 59-7-1

⑮  
 VIRGINIA ELECTRIC AND POWER COMPANY  
 D.B. 154, PG. 56  
 D.B. 154, PG. 47  
 PLAT: D.B. 154, PG. 55 (PARCEL "X-3")  
 TAX PARCEL: 62-A-4 (IN PART)

⑤  
 VIRGINIA PUBLIC SERVICE COMPANY  
 D.B. 19, PG. 177  
 TAX PARCEL: 59-6-2A

⑩  
 VIRGINIA ELECTRIC AND POWER COMPANY  
 D.B. 50, PG. 478  
 PLAT: D.B. 50, PG. 481 (PARCEL 1X-C)  
 TAX PARCEL: 59-7-1A (IN PART)

⑮  
 VIRGINIA ELECTRIC AND POWER COMPANY  
 D.B. 101, PG. 432  
 PLAT: D.B. 101, PG. 434  
 TAX PARCEL: 59-7-26

**NOTES:**  
 1. SEE SHEETS 2 AND 3 OF 4 FOR LOCATIONS OF CAPTIONED PROPERTY PARCELS AND TAX PARCEL NUMBERS. NUMBERS INDICATED HEREON IN DOUBLE CIRCLES RELATE TO THE PARCEL LOCATIONS.

Sheet Status:  
**FINAL**  
 Submittal Date:  
 05-04-2016

REVISION #1: CORRECT TAX PARCEL NUMBER FOR PARCELS ① & ②

**OVERALL EXTERIOR BOUNDARY SURVEY CONSISTING OF**  
**NINETEEN (19) PARCELS OF**  
**LAND LYING SOUTH OF**  
**S.R. 656 (BREM ROAD)**  
**CONTAINING 284.045 ACRES**  
 FORK UNION DISTRICT, FLUVANNA COUNTY, VIRGINIA  
 SCALE: AS SHOWN

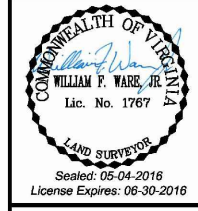
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Job #: GO1501.01  
 Date: 04-27-2015  
 Sheet: 4 of 4  
 Drawn By: WFW  
 Checked By: WFW

Rev. #	Rev. Date
#1	05-04-2016

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REV	DATE	DES	CHK	RW



PROJECT  
**DOMINION BREMO POWER STATION CCR SURFACE IMPOUNDMENT CLOSURE PLAN**  
 FLUVANNA COUNTY, VIRGINIA

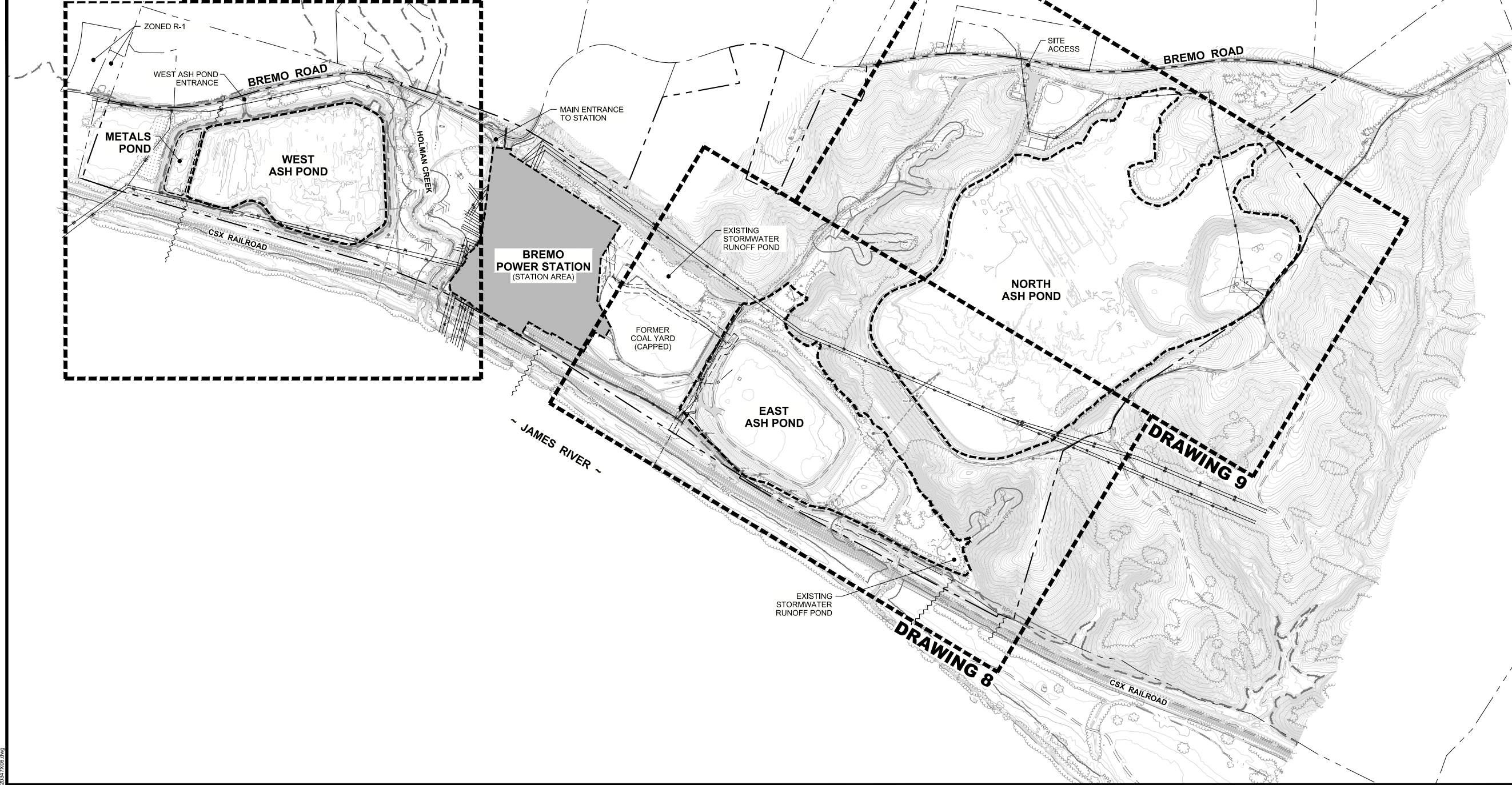
TITLE  
**BOUNDARY SURVEY (4 OF 4)**

PROJECT No.	15-20347
FILE No.	1520347X02-05
REV. 0	SCALE AS SHOWN
DESIGN	JRD 09/21/15
CADD	ATN 09/21/15
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

**DRAWING 5**



**DRAWING 7**



REV	DATE	DES	CHK	R/W
1	12/16/16	JRD	ATN	JRD
2	01/13/16	JRD	SIB	
3	01/13/16	JRD	ATN	
4	01/13/16	JRD	ATN	
5	01/13/16	JRD	ATN	
6	01/13/16	JRD	ATN	
7	01/13/16	JRD	ATN	
8	01/13/16	JRD	ATN	
9	01/13/16	JRD	ATN	
10	01/13/16	JRD	ATN	
11	01/13/16	JRD	ATN	
12	01/13/16	JRD	ATN	
13	01/13/16	JRD	ATN	
14	01/13/16	JRD	ATN	
15	01/13/16	JRD	ATN	
16	01/13/16	JRD	ATN	
17	01/13/16	JRD	ATN	
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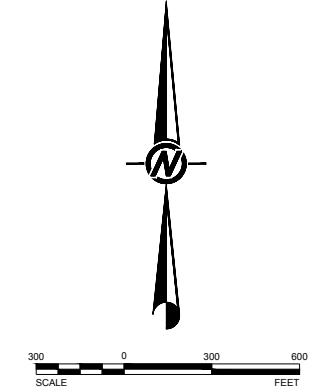
**PROJECT**  
 DOMINION POWER STATION  
 BREMO POWER STATION  
 CCR SURFACE IMPOUNDMENT  
 CLOSURE PLAN  
 FLUVANNA COUNTY, VIRGINIA

**TITLE**  
 EXISTING CONDITIONS  
 (INDEX SHEET)

PROJECT No.	15-20347
FILE No.	1520347X06
REV. 5	SCALE AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

**DRAWING 6**

- GENERAL NOTES**
- EXISTING CONDITIONS COMPILED FROM:
    - AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 1/16/15 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)]
    - AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 8/12/16 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)], (WITHIN LIMITS OF NORTH ASH POND ONLY)
    - FIELD RUN TOPOGRAPHY BY H&B SURVEYING & MAPPING, COLLECTED ON 6/9/16 [WITHIN LIMITS OF WEST ASH POND ONLY]
    - BOUNDARY SURVEY PREPARED BY H&B SURVEYING AND MAPPING, LLC DATED 04/27/15.
    - HISTORICAL DATA FOR THE DEVELOPMENT OF THE EAST ASH POND.
    - APPROXIMATE BOTTOM OF CCR IN THE EAST POND IS BASED ON HISTORICAL FIELD SURVEY AND GEOTECHNICAL INVESTIGATIONS BY GOLDER.
  - SITE DATUM: NAD83 / NAVD88
  - WETLAND DELINEATION BY DOMINION ENVIRONMENTAL SERVICES ON 01/30/15 & 02/05/15 AND BY GOLDER ASSOCIATES ON 03/16/15 & 03/25/15. WATERS OF THE U.S. CONFIRMED BY THE USACE DURING JUNE 4, 2015, JUNE 16, 2016, AND JULY 21, 2016 SITE VISITS.
  - 100 YEAR FLOOD PLAIN DELINEATION BASED ON FLOOD ELEVATION DATA REPRESENTED ON FEMA FLOOD INSURANCE RATE MAP (FIRM), MAP NUMBER 51065C0260C, EFFECTIVE DATE: 05/16/2008.
  - NO IMPROVEMENTS OR CHANGES TO EXISTING STRUCTURES WITHIN THE STATION AREA ARE PROPOSED.
  - ADJACENT PARCELS ARE ZONED A-1 WITH THE EXCEPTION OF THE TWO NOTED PARCELS AT THE NORTH WEST CORNER OF THE PROPERTY BOUNDARY.



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**LEGEND**

- DOMINION PROPERTY BOUNDARY (SEE BOUNDARY SURVEY DRAWINGS 2-5)
- ADJACENT PROPERTY BOUNDARY
- APPROXIMATE LIMITS OF EXISTING ASH PONDS
- 300 --- EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS)
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING RAILROAD
- ☐ WETLANDS
- CREEK/STREAM CENTERLINE
- RPA LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
- APPROXIMATE EDGE OF SURFACE WATER
- LIMITS OF 100-YR FLOOD PLAIN
- 230 --- BASE FLOOD ELEVATION
- EXISTING TREE LINE
- EXISTING FENCE
- EXISTING OVERHEAD UTILITY LINE
- ⊕ MW-8 EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
- MH EXISTING MANHOLE
- ⊕ NB-02 EXISTING PIEZOMETER AND IDENTIFICATION

**GENERAL NOTES**

1. EXISTING CONDITIONS COMPILED FROM:
  - a. AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC. DATE OF AERIAL PHOTO: 1/16/15 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)]
  - b. BOUNDARY SURVEY PREPARED BY H&B SURVEYING AND MAPPING, LLC DATED 04/27/15.
  - c. BATHYMETRIC SURVEYS PREPARED BY H&B. SURVEYS PERFORMED IN FEBRUARY 2015.
  - d. HISTORICAL DATA FOR THE DEVELOPMENT OF THE WEST ASH POND, EAST ASH POND AND NORTH ASH POND.
  - e. EXISTING TOPOGRAPHY WITHIN THE LIMITS OF THE WEST ASH POND AND NORTH ASH POND ARE BASED ON A CONCEPTUAL POST DREDGING SURFACE.
2. SITE DATUM: NAD83 / NAVD88
3. WETLAND DELINEATION BY DOMINION ENVIRONMENTAL SERVICES ON 01/30/15 & 02/05/15 AND BY GOLDR ASSOCIATES ON 03/16/15 & 03/25/15. WATERS OF THE U.S. CONFIRMED BY THE USACE DURING JUNE 4, 2015 SITE VISIT.
4. 100 YEAR FLOOD PLAIN DELINEATION BASED ON FLOOD ELEVATION DATA REPRESENTED ON FEMA FLOOD INSURANCE RATE MAP (FIRM), MAP NUMBER 51065C0260C, EFFECTIVE DATE: 05/16/2008.
5. NO IMPROVEMENTS OR CHANGES TO EXISTING STRUCTURES WITHIN THE STATION AREA ARE PROPOSED.
6. ADJACENT PARCELS ARE ZONED A-1 WITH THE EXCEPTION OF THE TWO NOTED PARCELS AT THE NORTH WEST CORNER OF THE PROPERTY BOUNDARY.

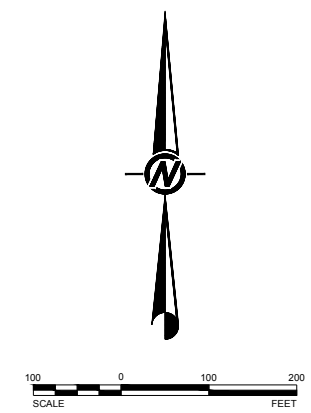
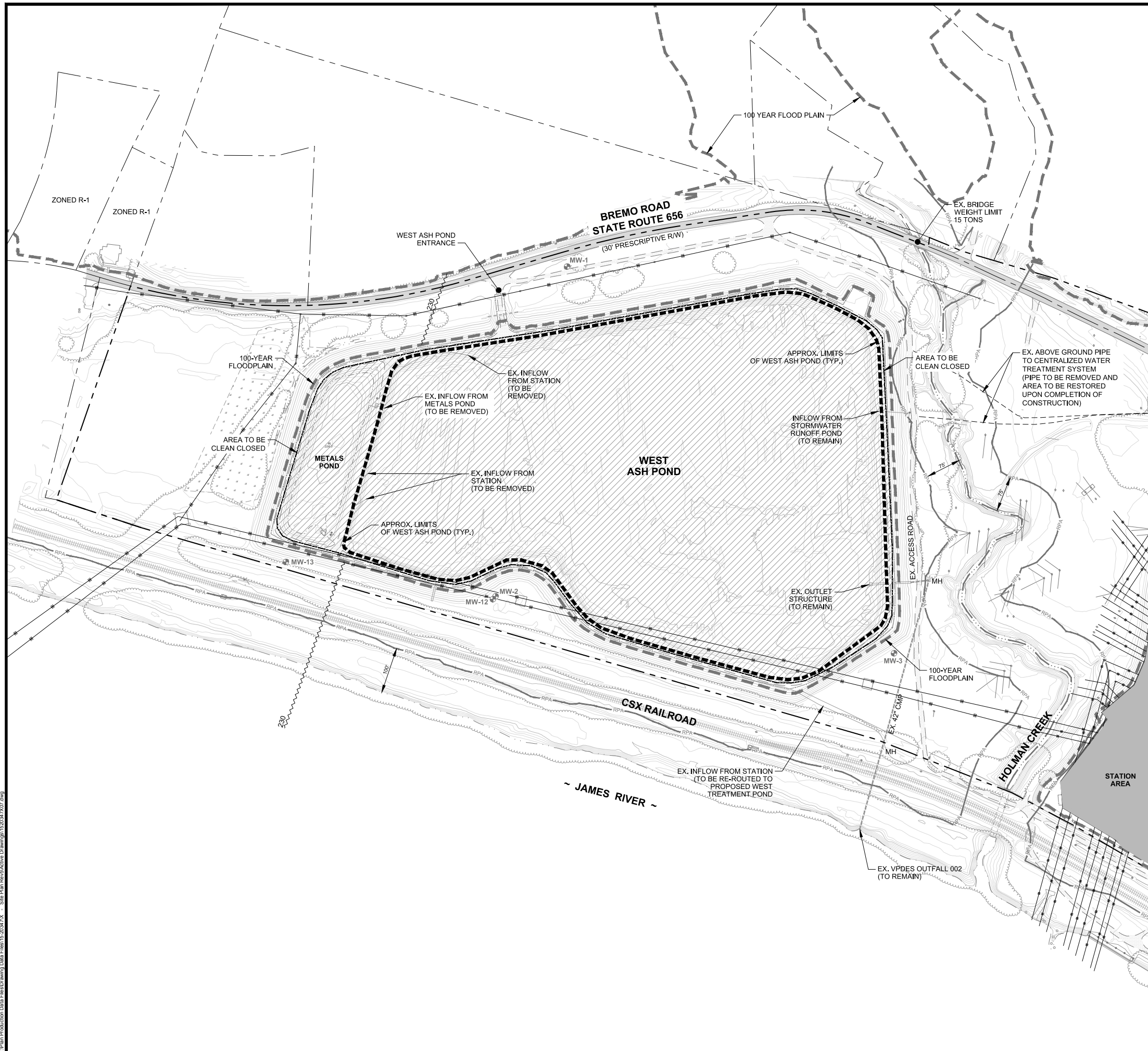


**DOMINION POWER STATION  
 BREMO ROAD SURFACE IMPOUNDMENT  
 CCR SURFACE IMPOUNDMENT  
 CLOSURE PLAN**  
 FLUVANNA COUNTY, VIRGINIA

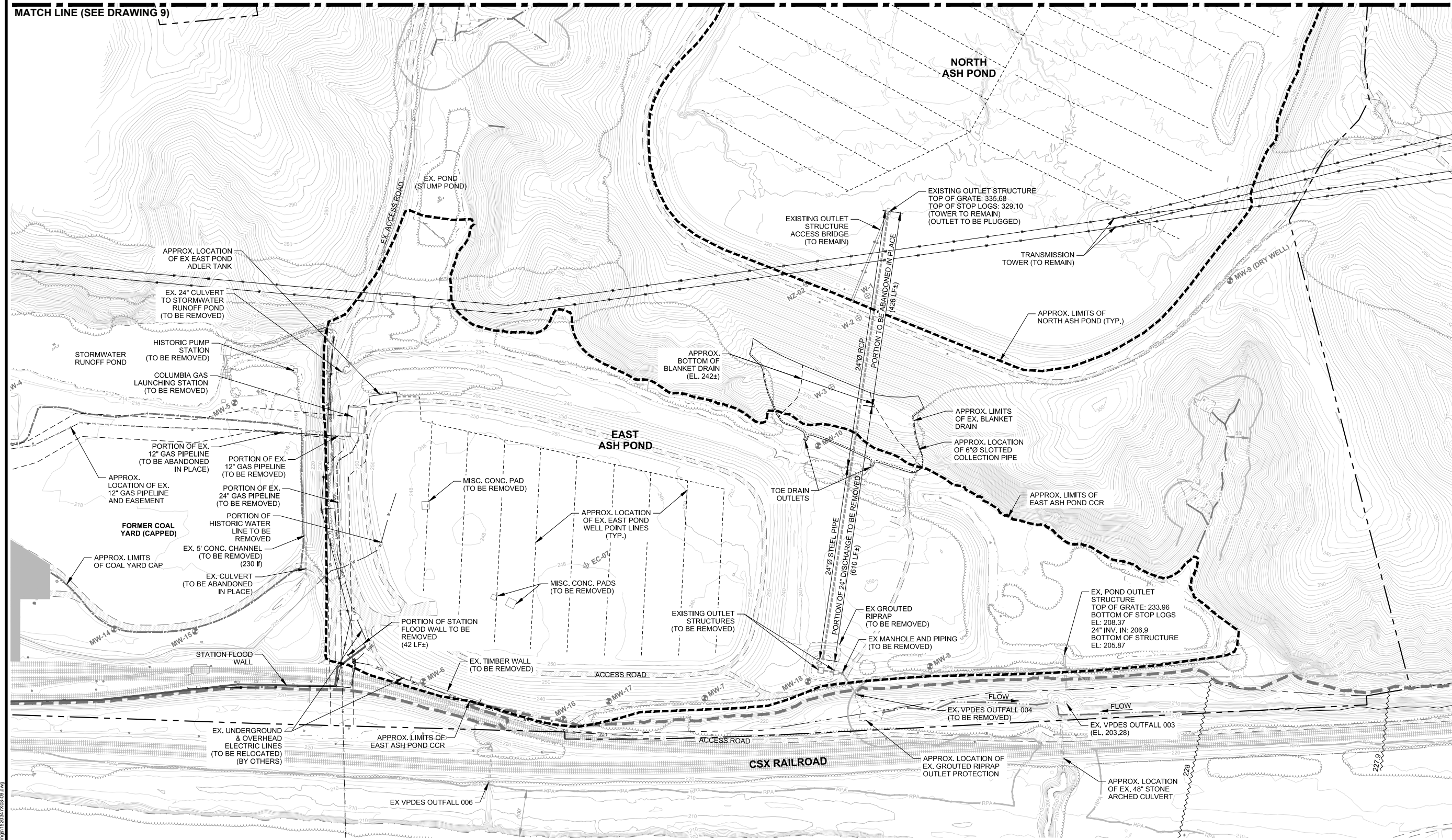
**EXISTING CONDITIONS  
 (1 OF 3)**

PROJECT No. 15-20347		
FILE No. 1520347X07		
REV. 0	SCALE	AS SHOWN
DESIGN	JRD	09/21/15
CADD	ATN	09/21/15
CHECK	ATN	12/16/16
REVIEW	JRD	12/16/16

**DRAWING 7**



G:\Plan Production Data Files\Drawing Data Files\15-20347X - Site Plan Rev0\Active Drawings\1520347X07.dwg



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)
	LIMITS OF 100-YR FLOOD PLAIN
	BASE FLOOD ELEVATION
	EX. GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
	EX. PIEZOMETER AND IDENTIFICATION
	EX. WELL POINT LINES

**NOTES**

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

REV	DATE	DES	CADD	CHK	RW
1	12/16/16	JRD	ATN	KLL	JRD
PLAN AMENDMENT FOR THE REMOVAL OF THE EAST ASH POND					
REVISION DESCRIPTION					

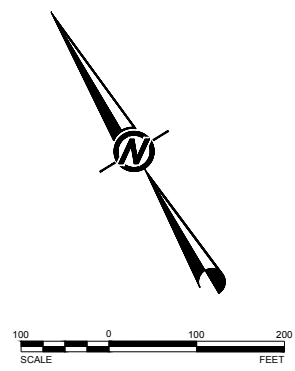


**DOMINION POWER STATION  
BREMO POWER STATION  
CCR SURFACE IMPOUNDMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA**

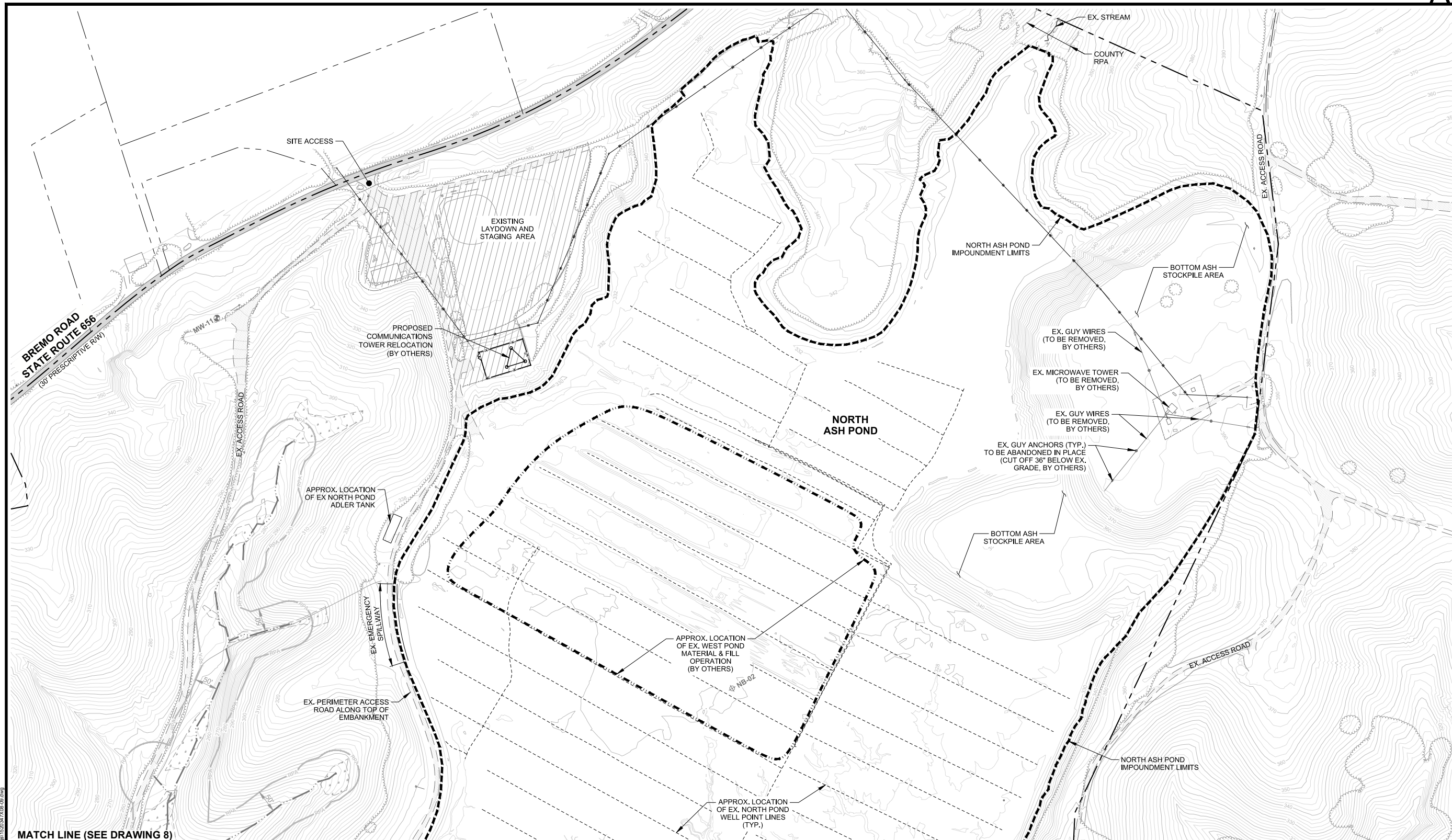
**EXISTING CONDITIONS  
(2 OF 3)**

PROJECT	TITLE
15-20347	EXISTING CONDITIONS (2 OF 3)
1520347X08-09	
REV 5	SCALE AS SHOWN
DESIGN JRD	11/01/16
CADD ATN	11/01/16
CHECK ATN	12/16/16
REVIEW JRD	12/16/16

**DRAWING 8**

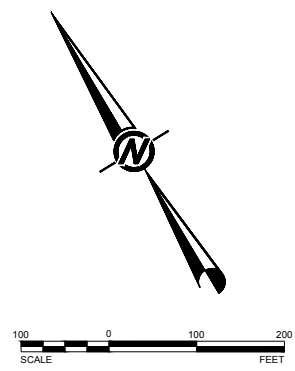


G:\Plan Production Data Files\Drawing Data Files\15-20347X - Site Plan Rev0\Active Drawings\1520347X08-09.dwg



MATCH LINE (SEE DRAWING 8)

LEGEND	
--- (dashed line)	DOMINION PROPERTY BOUNDARY
--- (long dashed line)	ADJACENT PROPERTY BOUNDARY
--- (thick dashed line)	APPROX. LIMITS OF EX. ASH PONDS
--- (contour line)	EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
--- (solid line)	EX. PAVED ROAD
--- (dashed line)	EX. UNPAVED ROAD
--- (line with cross-ticks)	EX. RAILROAD
--- (line with dots)	EX. TREE LINE
--- (line with vertical dashes)	EX. FENCE
--- (line with horizontal dashes)	EX. OVERHEAD UTILITY LINE
□ (square)	EX. MANHOLE
--- (dotted line)	CREEK/STREAM CENTERLINE
--- (line with wavy dashes)	APPROX. EDGE OF SURFACE WATER
□ (square with cross)	WETLANDS
--- (line with wavy dashes)	LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
--- (dashed line)	LIMITS OF 100-YR FLOOD PLAIN
--- (line with wavy dashes)	BASE FLOOD ELEVATION
⊕ (circle with cross)	EX. GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
⊕ (circle with cross)	EX. PIEZOMETER AND IDENTIFICATION
--- (dashed line)	EX. WELL POINT LINES



REV	DATE	DES	CADD	CHK	R/W
1	12/16/16	JRD	ATN	KLL	JRD
2					
3					
4					
5					



PROJECT TITLE  
**DOMINION POWER STATION  
 BREOMO POWER STATION  
 CCR SURFACE IMPOUNDMENT  
 CLOSURE PLAN**  
 FLUVANNA COUNTY, VIRGINIA

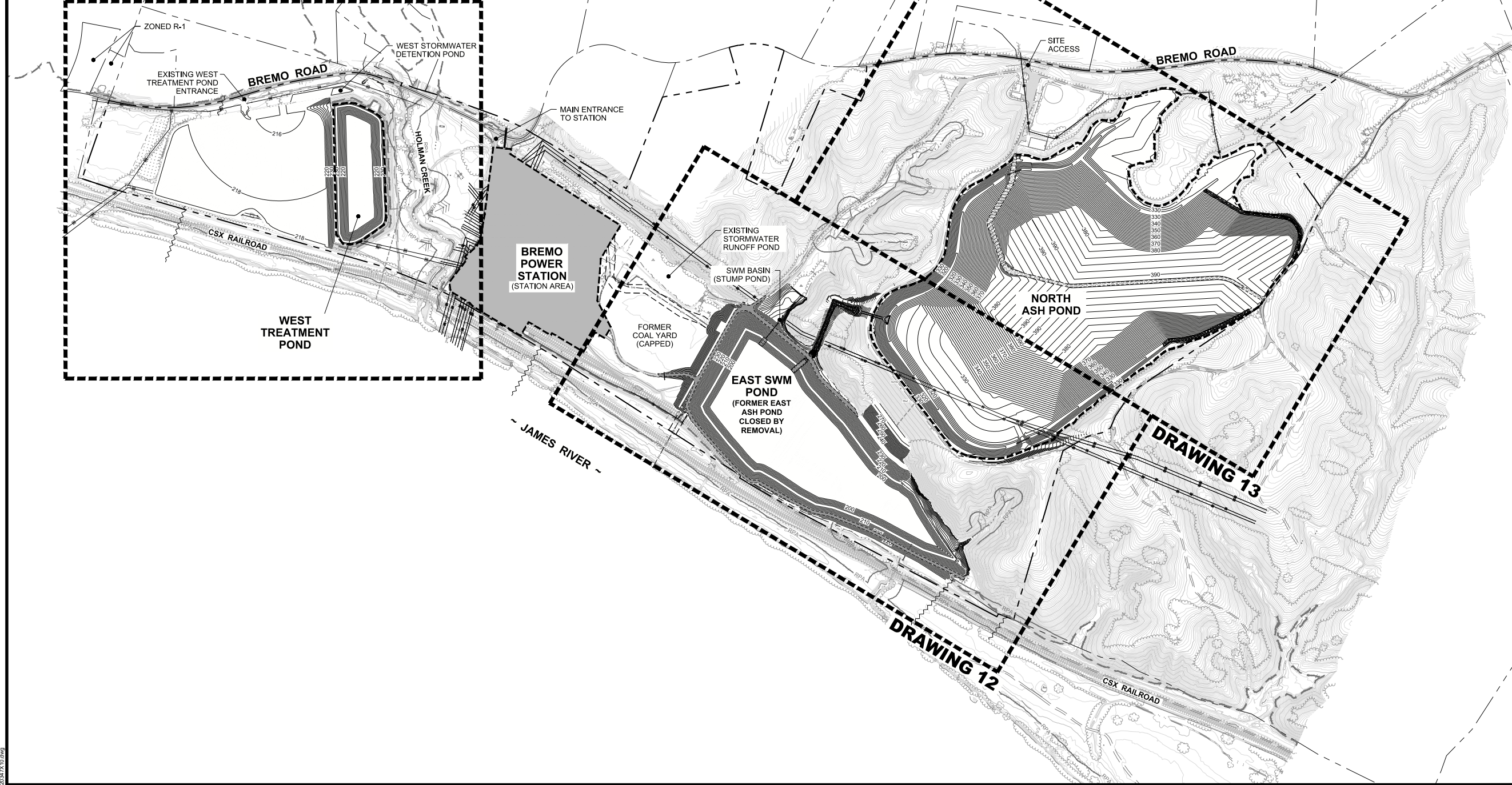
EXISTING CONDITIONS (3 OF 3)		
PROJECT	15-20347	
FILE No.	1520347X08-09	
REV. 5	SCALE	AS SHOWN
DESIGN	JRD	11/01/16
CADD	ATN	11/01/16
CHECK	ATN	12/16/16
REVIEW	JRD	12/16/16

**DRAWING 9**

G:\Plan Production Data Files\Drawing Data Files\15-20347X - Site Plan Rev5\Active Drawings\1520347X08-09.dwg



**DRAWING 11**



REV	DATE	DES	CHK	R/W
1	12/16/16	JRD	ATN	JRD
2		JRD	ATN	JRD
3		JRD	ATN	JRD
4		JRD	ATN	JRD
5		JRD	ATN	JRD
6		JRD	ATN	JRD
7		JRD	ATN	JRD
8		JRD	ATN	JRD
9		JRD	ATN	JRD
10		JRD	ATN	JRD
11		JRD	ATN	JRD
12		JRD	ATN	JRD
13		JRD	ATN	JRD
14		JRD	ATN	JRD
15		JRD	ATN	JRD
16		JRD	ATN	JRD
17		JRD	ATN	JRD
18		JRD	ATN	JRD
19		JRD	ATN	JRD
20		JRD	ATN	JRD



PROJECT  
**DOMINION POWER STATION  
 CCR SURFACE IMPOUNDMENT  
 CLOSURE PLAN**  
 FLUVANNA COUNTY, VIRGINIA

TITLE  
**FINAL GRADING PLAN  
 (INDEX SHEET)**

PROJECT No.	15-20347
FILE No.	1520347X10
REV. 5	SCALE AS SHOWN
DESIGN	JRD 08/18/15
CADD	ATN 08/18/15
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

**DRAWING 10**

**GENERAL NOTES**

- EXISTING CONDITIONS COMPILED FROM:
  - AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 1/16/15 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)]
  - AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 8/12/16 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)], (WITHIN LIMITS OF NORTH ASH POND ONLY)
  - FIELD RUN TOPOGRAPHY BY H&B SURVEYING & MAPPING, COLLECTED ON 6/9/16 [WITHIN LIMITS OF WEST ASH POND ONLY]
  - BOUNDARY SURVEY PREPARED BY H&B SURVEYING AND MAPPING, LLC DATED 04/27/15.
  - HISTORICAL DATA FOR THE DEVELOPMENT OF THE EAST ASH POND.
  - APPROXIMATE BOTTOM OF CCR IN THE EAST POND IS BASED ON HISTORICAL FIELD SURVEY AND GEOTECHNICAL INVESTIGATIONS BY GOLDBER.
- SITE DATUM: NAD83 / NAVD88
- WETLAND DELINEATION BY DOMINION ENVIRONMENTAL SERVICES ON 01/30/15 & 02/05/15 AND BY GOLDBER ASSOCIATES ON 03/16/15 & 03/25/15. WATERS OF THE U.S. CONFIRMED BY THE USACE DURING JUNE 4, 2015, JUNE 16, 2016, AND JULY 21, 2016 SITE VISITS.
- 100 YEAR FLOOD PLAIN DELINEATION BASED ON FLOOD ELEVATION DATA REPRESENTED ON FEMA FLOOD INSURANCE RATE MAP (FIRM), MAP NUMBER 51065C0260C, EFFECTIVE DATE: 05/16/2008.
- NO IMPROVEMENTS OR CHANGES TO EXISTING STRUCTURES WITHIN THE STATION AREA ARE PROPOSED.
- ADJACENT PARCELS ARE ZONED A-1 WITH THE EXCEPTION OF THE TWO NOTED PARCELS AT THE NORTH WEST CORNER OF THE PROPERTY BOUNDARY.



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**LEGEND**

	DOMINION PROPERTY BOUNDARY
	ADJACENT PROPERTY BOUNDARY
	LIMITS OF BATHYMETRIC SURVEYS
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS)
	EXISTING BATHYMETRIC SURFACE CONTOURS (2' INTERVALS)
	EXISTING PAVED ROAD
	EXISTING UNPAVED ROAD
	EXISTING RAILROAD
	WETLANDS
	CREEK CENTERLINE
	APPROXIMATE EDGE OF SURFACE WATER
	EXISTING TREE LINE
	EXISTING FENCE
	EXISTING OVERHEAD ELECTRIC LINE
	EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
	EXISTING MANHOLE
	PROPOSED ANCHOR TRENCH LOCATION
	PROPOSED LIMITS OF CLEARING
	PROPOSED MONITORING WELL
	PROPOSED OBSERVATION WELL

REV	DATE	DES	CADD	CHK	RWW

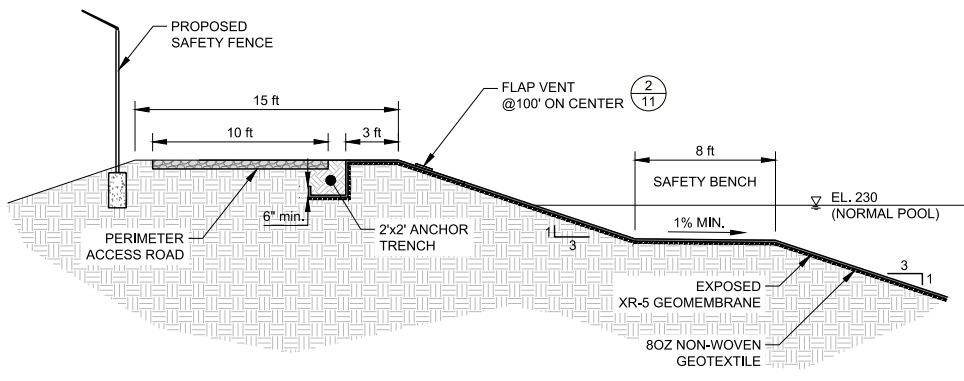
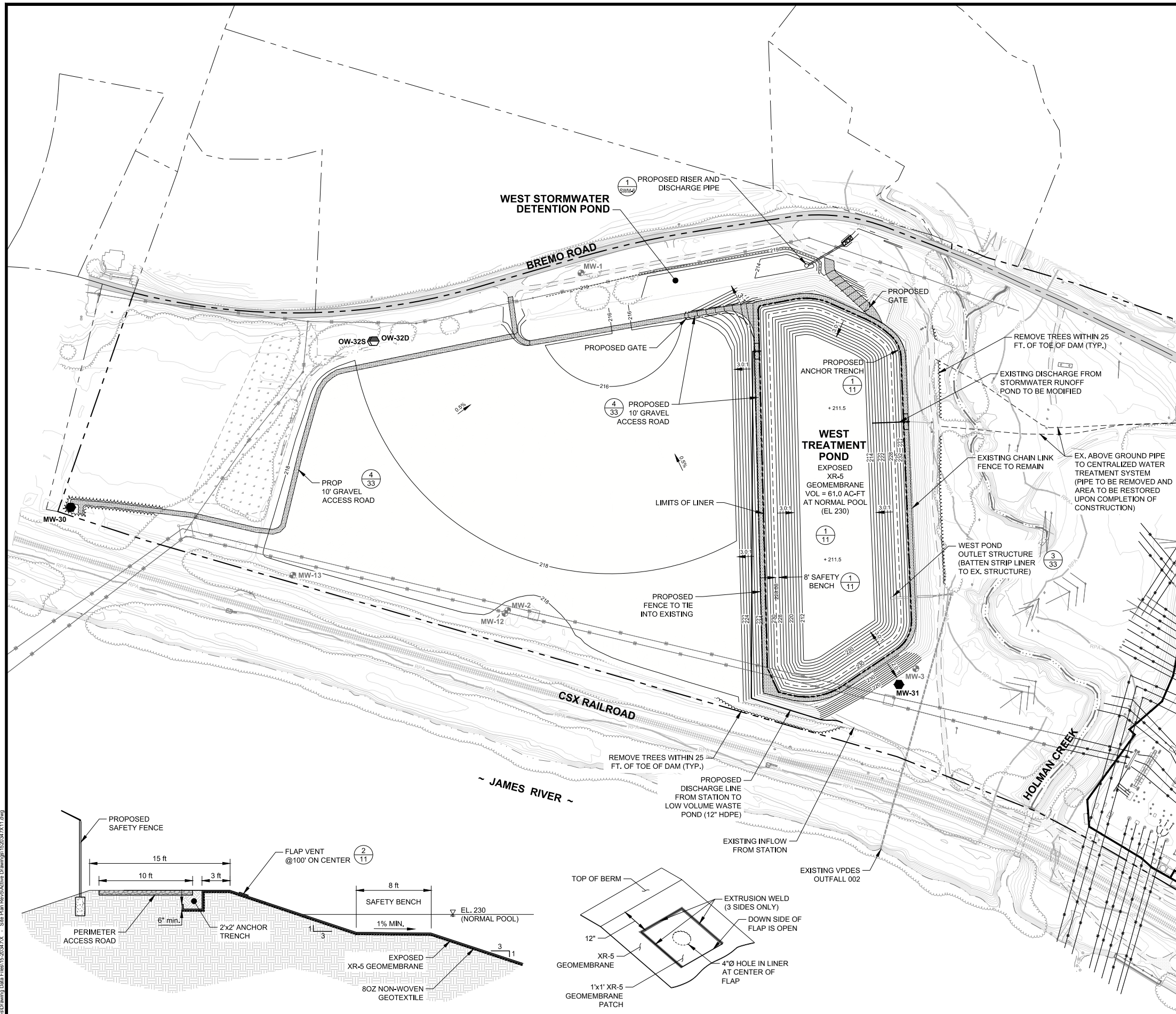


**DOMINION POWER STATION  
BREMO ROAD SURFACE IMPROVEMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA**

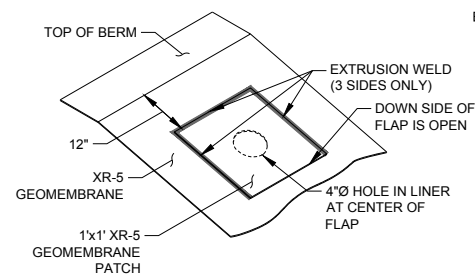
**FINAL GRADING PLAN  
(1 OF 3)**

PROJECT	BREMO ROAD SURFACE IMPROVEMENT CLOSURE PLAN				
TITLE	FINAL GRADING PLAN (1 OF 3)				
PROJECT No.	15-20347	SCALE	AS SHOWN		
FILE No.	1520347X11	DESIGN	JRD	08/18/15	
REV. 0		CADD	ATN	08/18/15	
		CHECK	ATN	12/16/16	
		REVIEW	JRD	12/16/16	

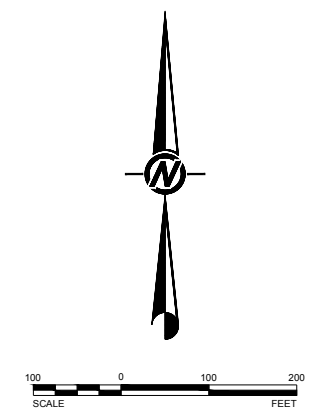
**DRAWING 11**



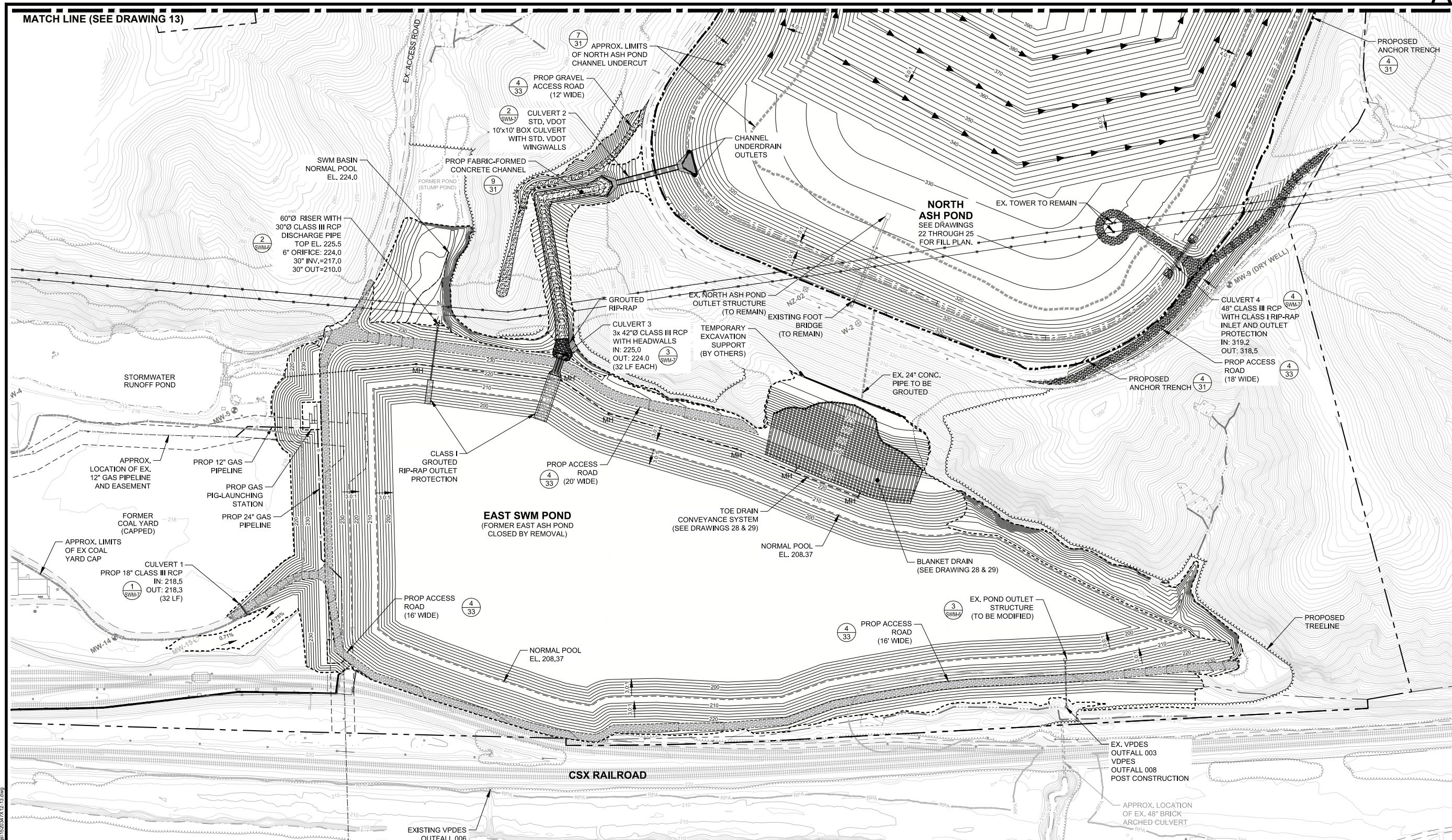
**1**  
**11** WEST TREATMENT POND SAFETY BENCH  
NOT TO SCALE



**2**  
**11** FLAP VENT  
NOT TO SCALE

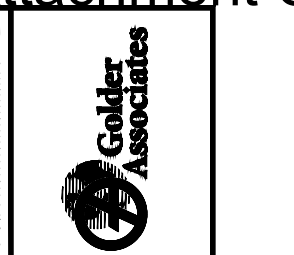


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**LEGEND**

---	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)	---	RPA
---	EX. PAVED ROAD	---	LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
---	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	---	PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
---	EX. OVERHEAD UTILITY LINE	---	PROP. LIMITS OF CHANNEL UNDERCUT
□ MH	EX. MANHOLE	---	DIVERSION BERM



REV	DATE	DES	CHK	APP	BY
1	12/16/16	JRD	ATN	JRD	JRD
2					
3					
4					
5					

PLAN AMENDMENT FOR THE REMOVAL OF THE EAST ASH POND

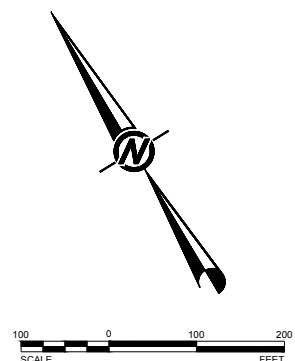


**DOMINION POWER STATION  
CCR SURFACE IMPOUNDMENT  
CLOSURE PLAN**

FLUVANNA COUNTY, VIRGINIA

**FINAL GRADING PLAN  
(2 OF 3)**

PROJECT	15-20347
FILE No.	1520347X12-13
REV. 5	SCALE AS SHOWN
DESIGN	JRD 09/28/16
CADD	ATN 09/28/16
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16



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REV	DATE	DES	CADD	CHK	R/W
1	12/16/16	JRD	ATN	KLL	JRD
2					
3					
4					
5					

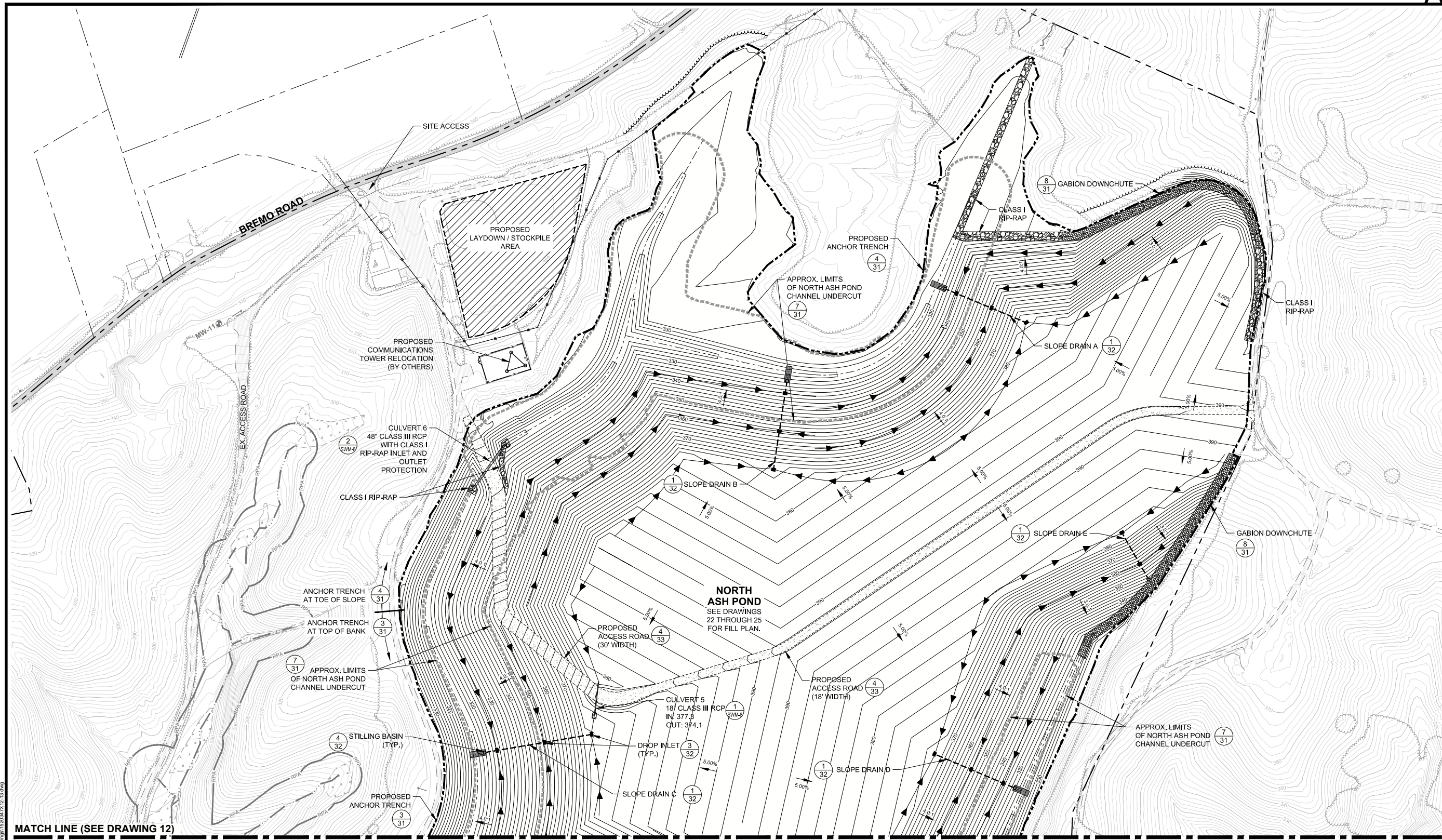


PROJECT  
**DOMINION POWER STATION  
 BREMO ROAD IMPOUNDMENT  
 CCR SURFACE IMPOUNDMENT  
 CLOSURE PLAN**  
 FLUVANNA COUNTY, VIRGINIA

TITLE  
**FINAL GRADING PLAN  
 (3 OF 3)**

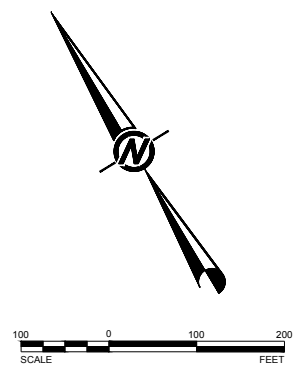
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FILE No.	1520347X12-13
REV. 5	SCALE AS SHOWN
DESIGN	JRD 09/28/16
CADD	ATN 09/28/16
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

**DRAWING 13**

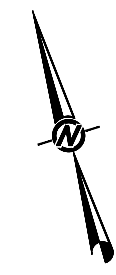
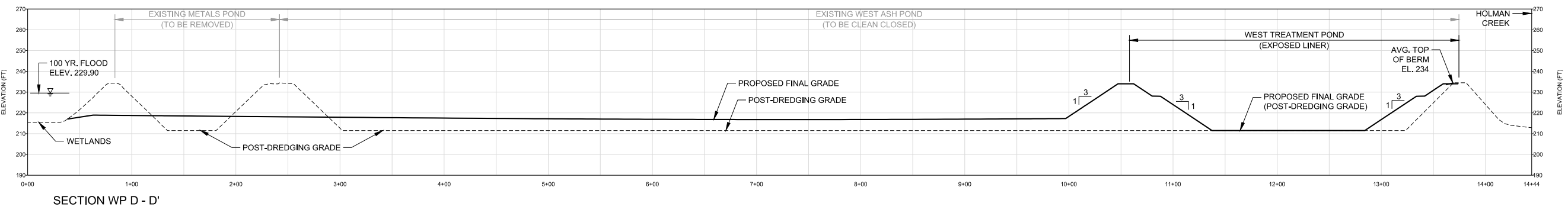
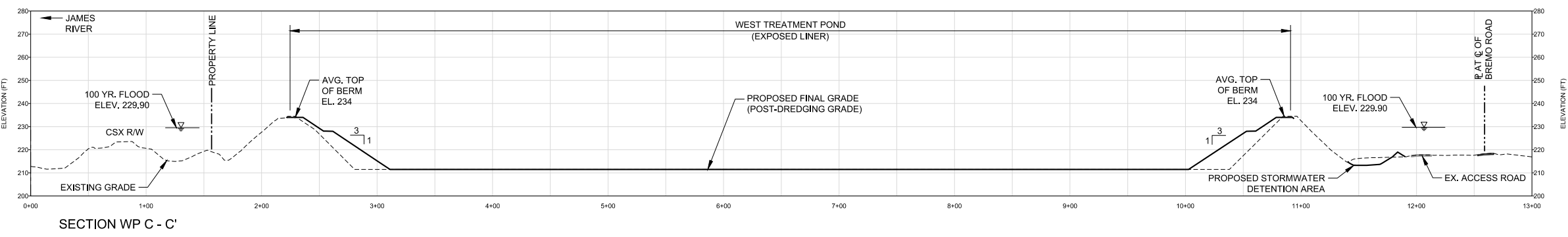
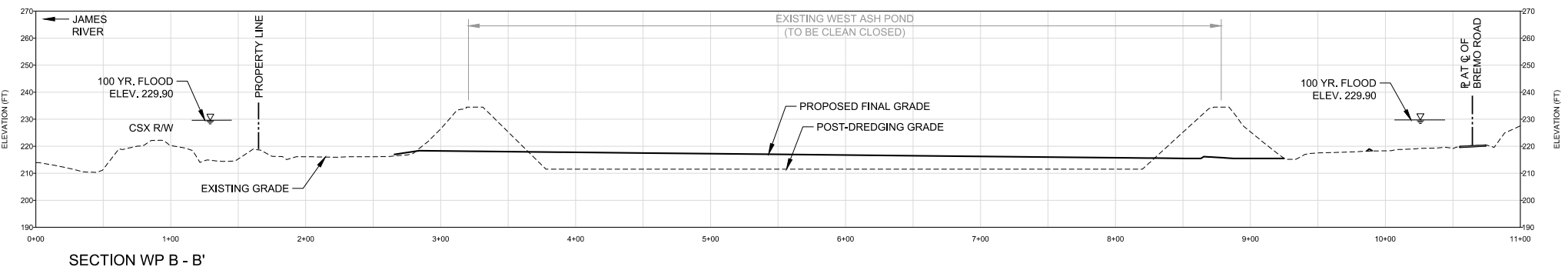
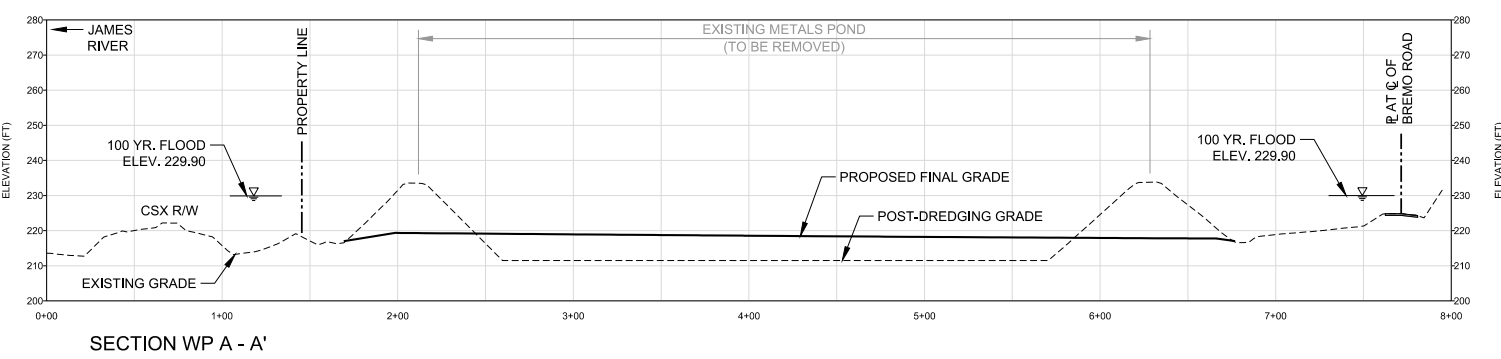
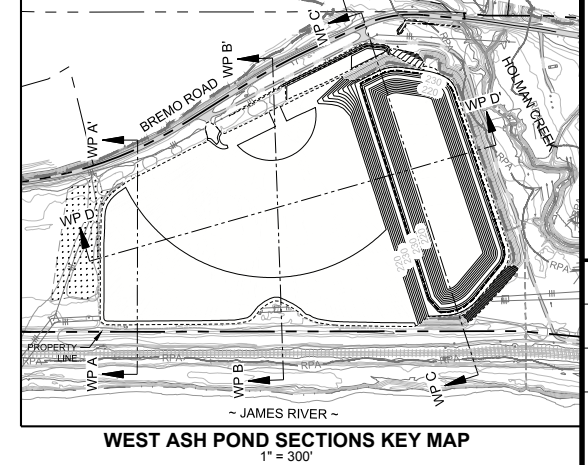


**LEGEND**

--- 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)	--- RPA --- LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
--- EX. PAVED ROAD	⊕ MW-8 EX. GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
--- EX. UNPAVED ROAD	⊕ NB-02 EX. PIEZOMETER AND IDENTIFICATION
--- EX. RAILROAD	--- PROP. LIMITS OF CLEARING
--- EX. TREE LINE	--- 300 --- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
--- EX. FENCE	--- PROP. LIMITS OF CHANNEL UNDERCUT
--- EX. OVERHEAD UTILITY LINE	--- DIVERSION BERM
□ MH	



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REV	DATE	DES	CHK	R/W
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2	7/16/16	ATN	ATN	ATN



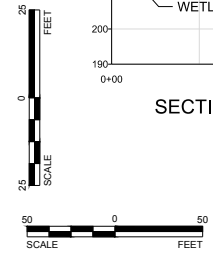
**DOMINION POWER STATION  
BREMO ROAD SURFACE IMPROVEMENT  
CCR SURFACE IMPROVEMENT  
CLOSURE PLAN**  
FLUVANNA COUNTY, VIRGINIA

**CROSS SECTIONS  
(WEST ASH POND)**

PROJECT	15-20347		
FILE No.	1520347X14-16		
REV.	0	SCALE	AS SHOWN
DESIGN	JRD	DATE	08/18/15
CADD	ATN	DATE	08/18/15
CHECK	ATN	DATE	12/16/16
REVIEW	JRD	DATE	12/16/16

**DRAWING 14**

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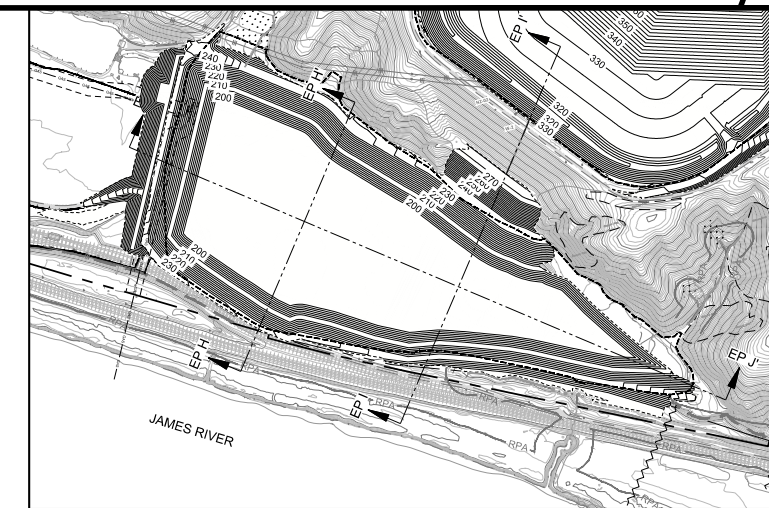
REV	DATE	DES	CHK	R/W
1	12/16/16	JRD	KLL	JRD
PLAN AMENDMENT FOR THE REMOVAL OF THE EAST ASH POND		REVISION DESCRIPTION		



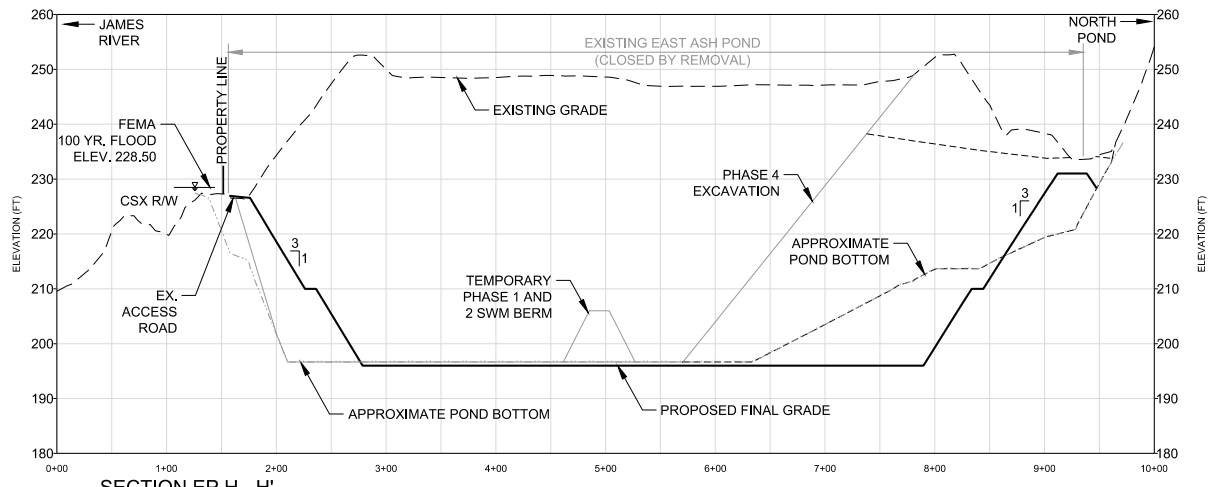
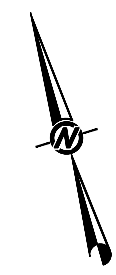
PROJECT  
**DOMINION POWER STATION  
 BREMO SURFACE IMPOUNDMENT  
 CLOSURE PLAN**  
 FLUVANNA COUNTY, VIRGINIA

TITLE	<b>CROSS SECTIONS (EAST ASH POND)</b>			
PROJECT No.	15-20347			
FILE No.	1520347X14-16			
REV	SCALE	AS SHOWN		
DESIGN	JRD	08/18/15		
CADD	ATN	08/18/15		
CHECK	ATN	12/16/16		
REVIEW	JRD	12/16/16		

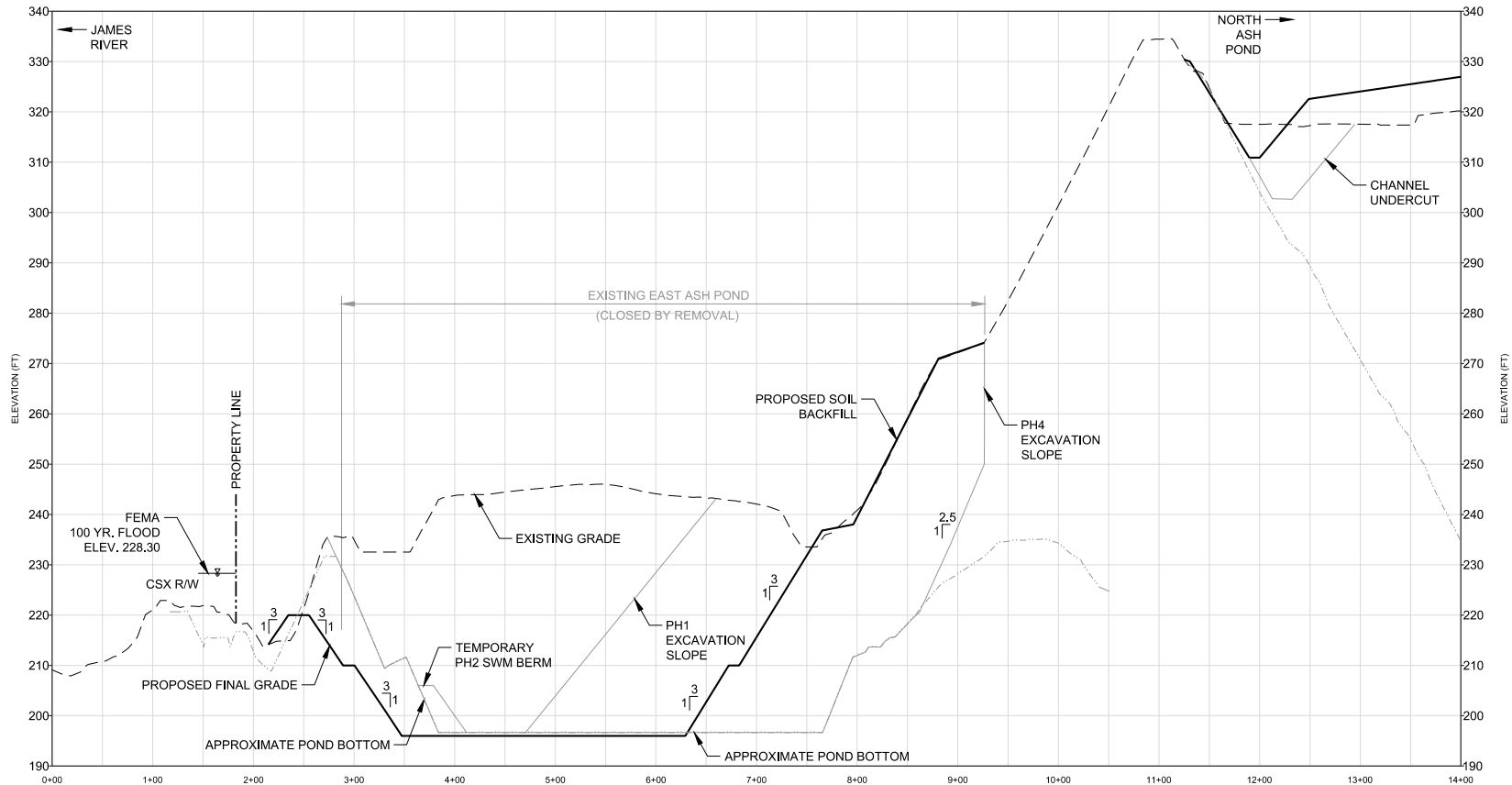
**DRAWING 15**



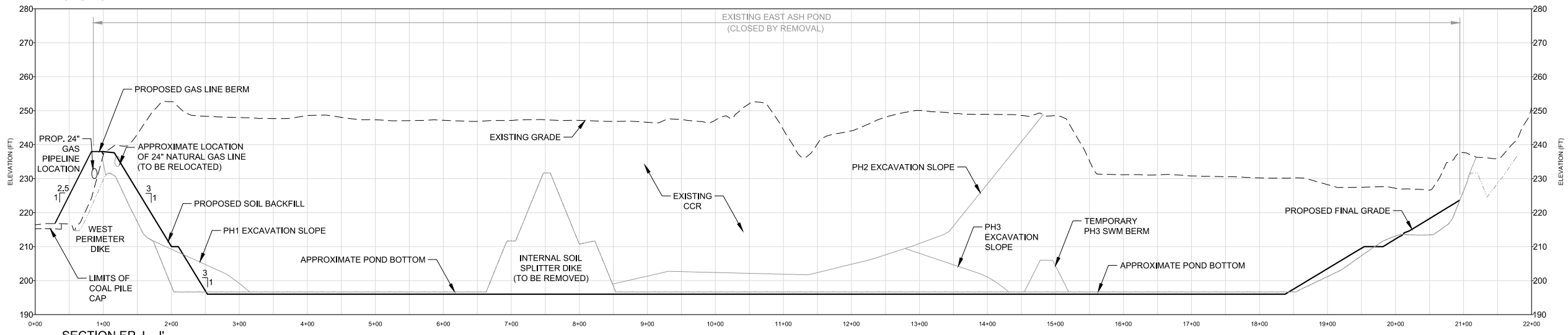
**EAST ASH POND SECTIONS KEY MAP**  
 1" = 300'



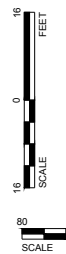
**SECTION EP H - H'**



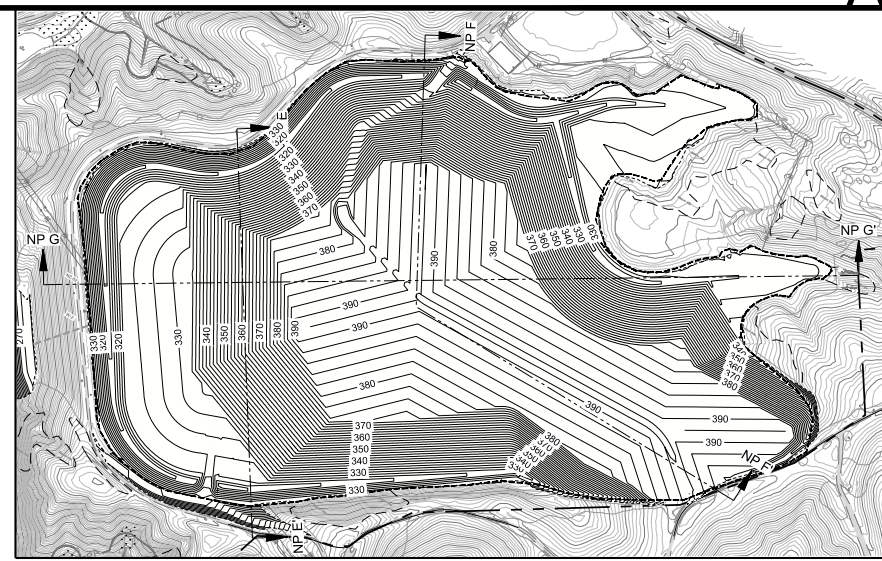
**SECTION EP I - I'**



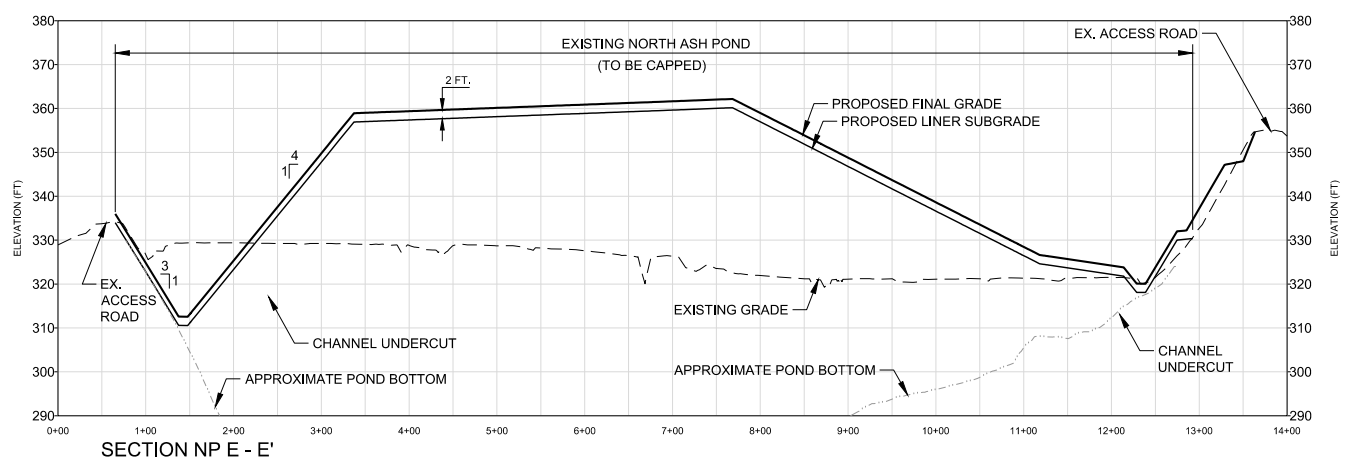
**SECTION EP J - J'**



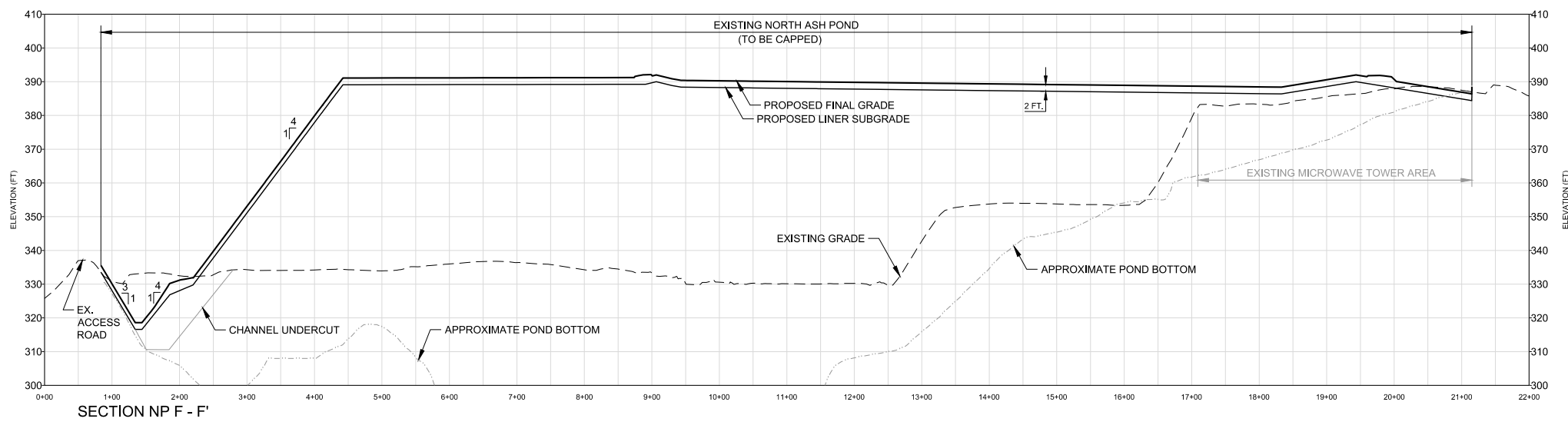
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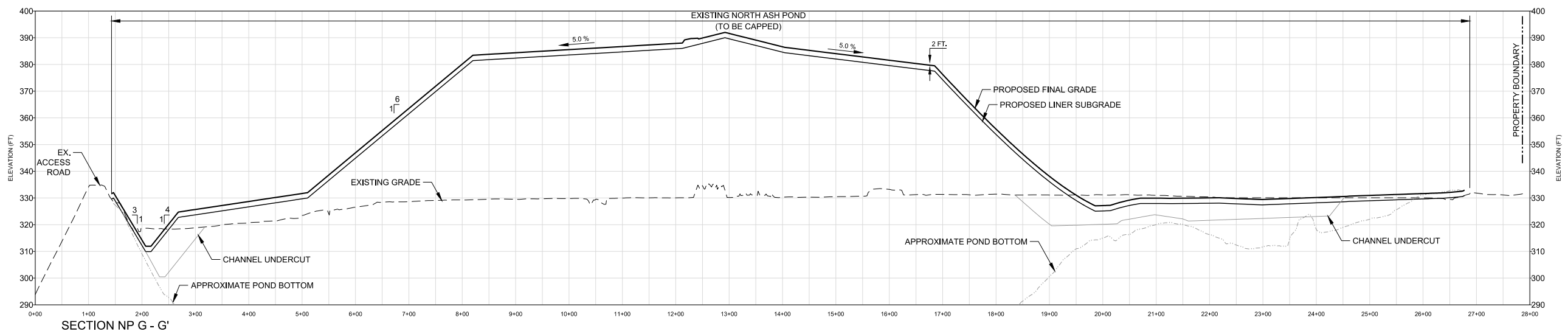
**NORTH ASH POND SECTIONS KEY MAP**  
NOT TO SCALE



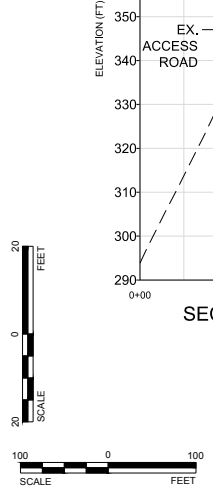
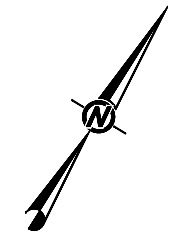
**SECTION NP E - E'**



**SECTION NP F - F'**



**SECTION NP G - G'**



REV	DATE	DES	CHK	R/W
1	12/16/16	JRD	ATN	JRD
2		JRD	KLL	JRD
3		JRD	ATN	JRD
4		JRD	ATN	JRD
5		JRD	ATN	JRD

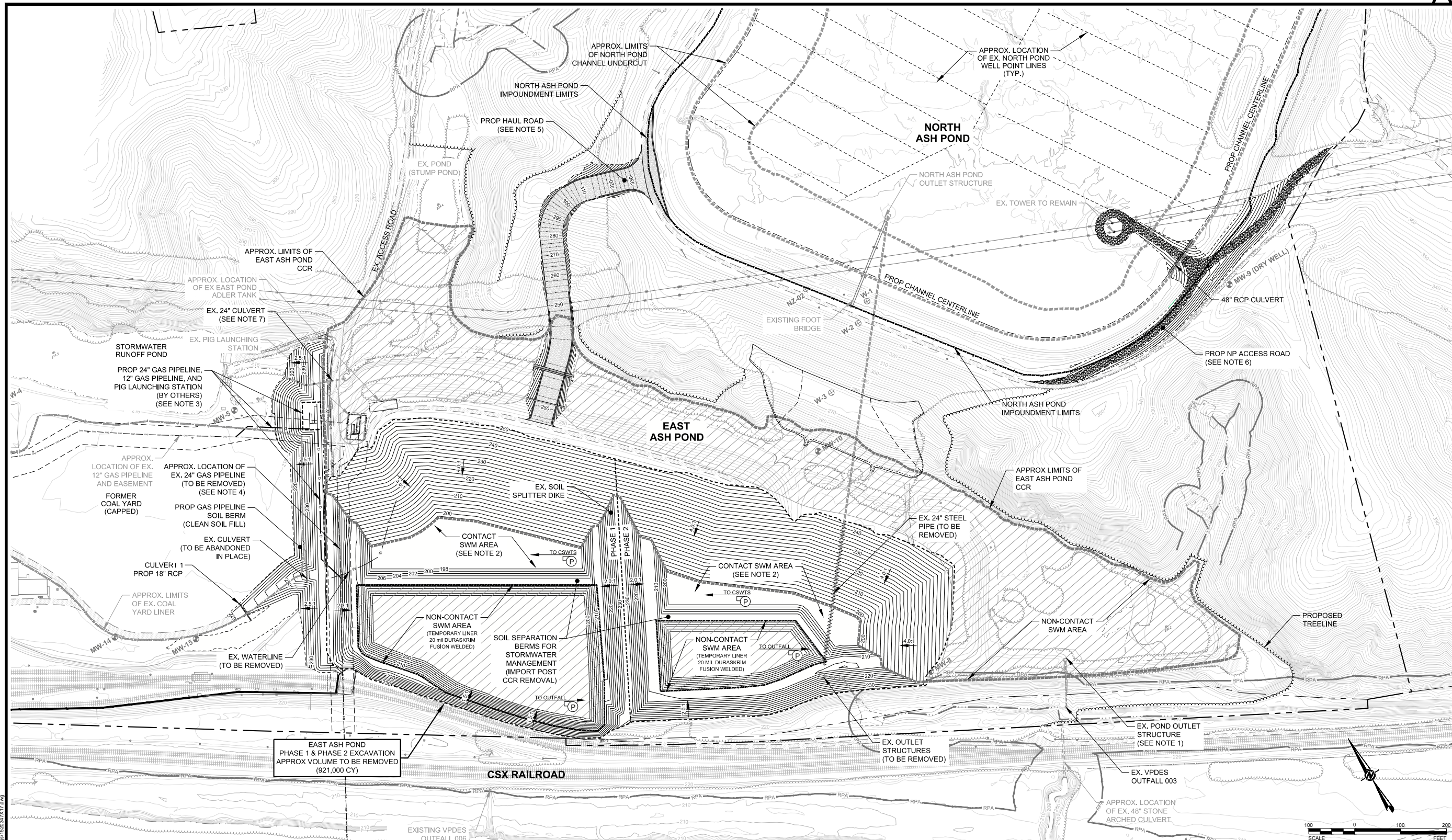


**DOMINION  
BREMO POWER STATION  
CCR SURFACE IMPOUNDMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA**

**CROSS SECTIONS  
(NORTH ASH POND)**

PROJECT No.	15-20347
FILE No.	1520347X14-16
REV. 5	SCALE AS SHOWN
DESIGN	JRD 08/18/15
CADD	ATN 08/18/15
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

G:\Plan Production Data Files\Drawing Data Files\15-20347X - Site Plan Rev5\Active Drawings\1520347X14-16.dwg



REV	DATE	DES	CHK	RWV
1	12/16/16	JRD	ATN	JRD
2				
3				
4				
5				
6				
7				



**DOMINION POWER STATION  
CCR SURFACE IMPOUNDMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA**

**EAST ASH POND  
EXCAVATION PLAN  
(PHASE 1 & PHASE 2)**

PROJECT	TITLE
PROJECT No. 15-20347	
FILE No. 1520347X17	
REV 5 SCALE AS SHOWN	
DESIGN JRD 11/01/16	
CADD ATN 11/01/16	
CHECK ATN 12/16/16	
REVIEW JRD 12/16/16	

**LEGEND**

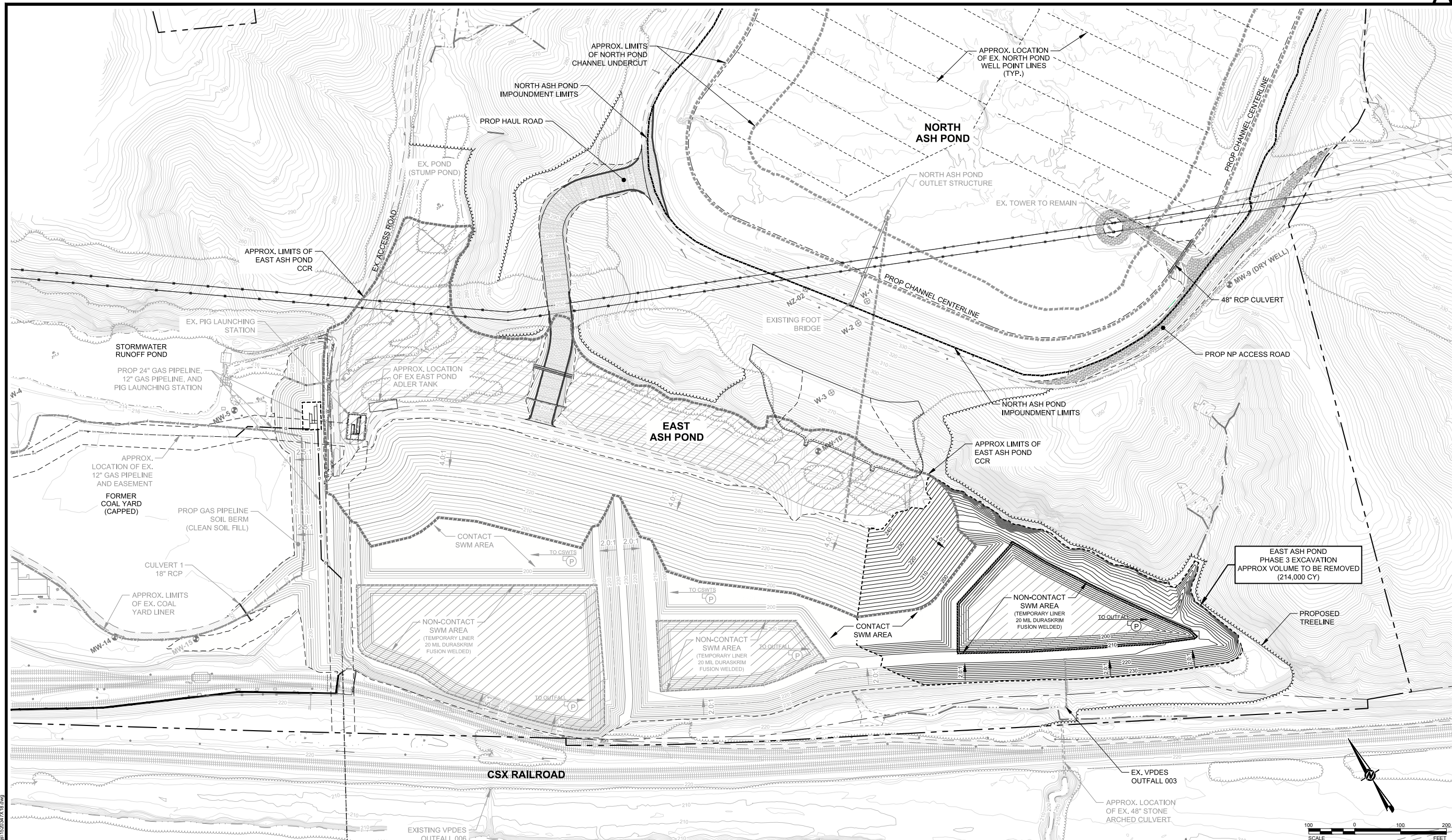
--- DOMINION PROPERTY BOUNDARY	--- CREEK/STREAM CENTERLINE
--- ADJACENT PROPERTY BOUNDARY	--- APPROX. EDGE OF SURFACE WATER
--- APPROX. LIMITS OF EX. ASH PONDS	WETLANDS
--- EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)	--- RPA --- LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
--- EX. PAVED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

**EXCAVATION NOTES**

- 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.
- TEMPORARY GRADES SHOWN ON THE PHASED EXCAVATION DRAWINGS ARE ESTIMATED LIMITS AND SHOULD NOT BE TAKEN AS ENGINEERED SLOPES.
- CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING TO MAINTAIN SLOPE STABILITY AT ALL TIMES.
- RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR CCR MATERIALS SHALL BE 4 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 4:1).
- 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.
- EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
- RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR SOIL MATERIALS SHALL BE 2 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 2:1).
- 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.
- EXCAVATED SOIL SLOPES STEEPER THAN 2:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL BE HAVE OWNER'S WRITTEN APPROVAL.
- 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.
- ALL FINAL SOIL SLOPES SHALL BE LEFT NO STEEPER THAN 3:1 UNLESS APPROVED IN WRITING BY OWNER.

**NOTES**

- 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.
- CONTACT STORM WATER RUNOFF TO BE COLLECTED AND SENT TO CENTRALIZED SOURCE WATER TREATMENT SYSTEM (CSWTS).
- 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.
- PIPELINE TO REMAIN COVERED BY CCR UNTIL CONNECTION OF NEW LINE IS MADE.
- SEE DRAWINGS 26 & 27 FOR DETAILS. STORMWATER RUNOFF FROM HAUL ROAD TO BE COLLECTED AND SENT TO CSWTS.
- NAP ACCESS ROAD TO PROVIDE ACCESS FOR FILLING OPERATION. PORTION OF RAMP WITHIN LIMITS OF NAP MAY BE CONSTRUCTED OF COMPACTED CCR MATERIAL.
- 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.



REV	DATE	DES	CHK	RW
1	12/16/16	JRD	ATN	JRD
2				
3				
4				
5				



DOMINION POWER STATION  
BREMO POWER STATION  
CCR SURFACE IMPOUNDMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA

**EAST ASH POND EXCAVATION PLAN (PHASE 3)**

PROJECT	BREMO POWER STATION CCR SURFACE IMPOUNDMENT CLOSURE PLAN		
TITLE	EAST ASH POND EXCAVATION PLAN (PHASE 3)		
PROJECT No.	15-20347		
FILE No.	1520347X18		
REV	SCALE	AS SHOWN	
DESIGN	JRD	11/01/16	
CADD	ATN	11/01/16	
CHECK	ATN	12/16/16	
REVIEW	JRD	12/16/16	

**DRAWING 18**

**LEGEND**

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

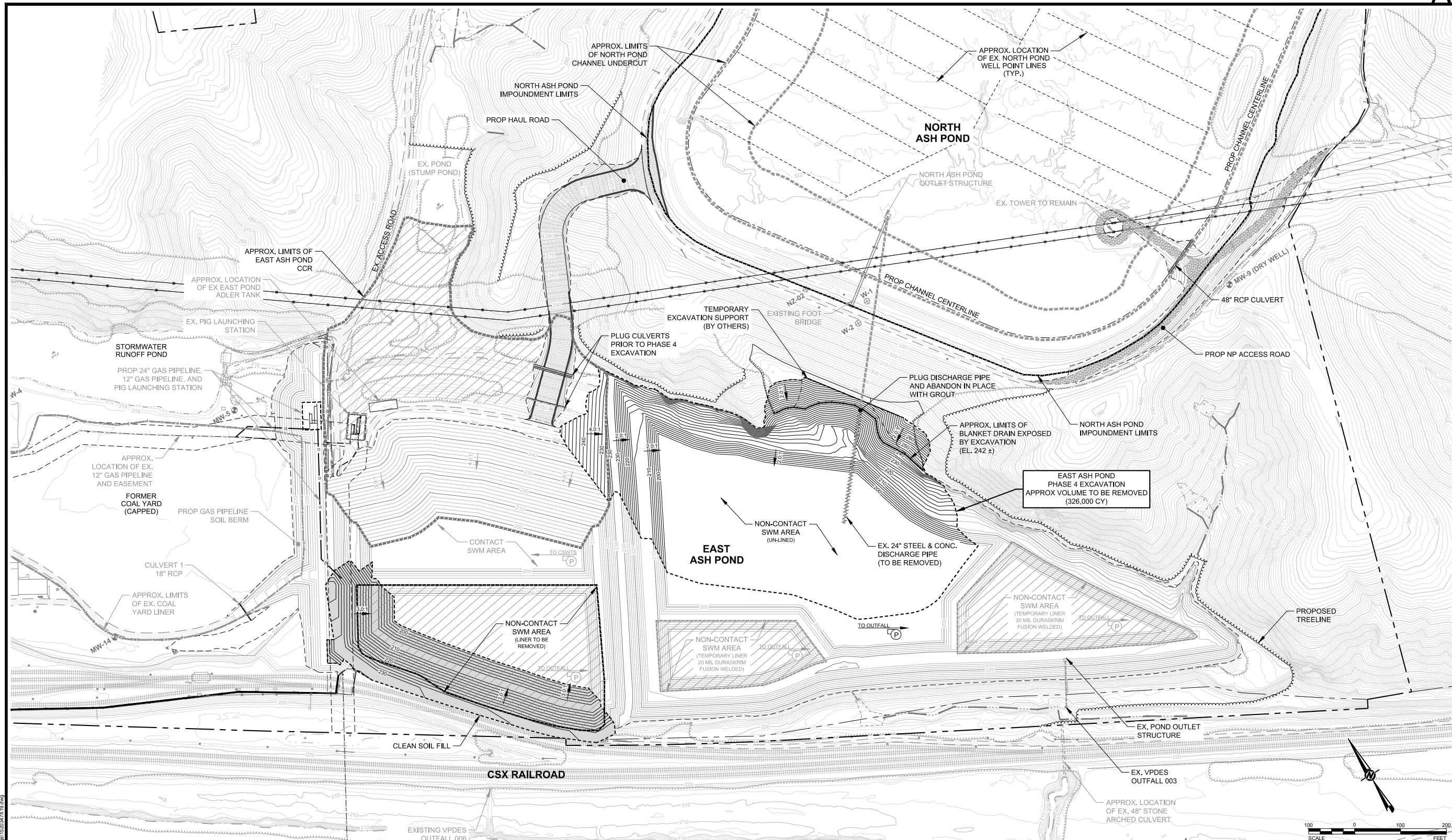
**EXCAVATION NOTES**

- 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.
- TEMPORARY GRADES SHOWN ON THE PHASED EXCAVATION DRAWINGS ARE ESTIMATED LIMITS AND SHOULD NOT BE TAKEN AS ENGINEERED SLOPES.
- CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING TO MAINTAIN SLOPE STABILITY AT ALL TIMES.
- RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR CCR MATERIALS SHALL BE 4 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 4:1).
- 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.
- EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
- RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR SOIL MATERIALS SHALL BE 2 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 2:1).
- 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.
- EXCAVATED SOIL SLOPES STEEPER THAN 2:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
- 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.
- ALL FINAL SOIL SLOPES SHALL BE LEFT NO STEEPER THAN 3:1 UNLESS APPROVED IN WRITING BY OWNER.

**NOTES**

- OUTLET STRUCTURE TO BE SEALED WITH TEMPORARY PLUG PRIOR TO PHASE 3 EXCAVATION.

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**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. MONITORING WELL LOCATION AND IDENTIFICATION
	EX. UNPAVED ROAD		EX. PIEZOMETER AND IDENTIFICATION
	EX. RAILROAD		PROP. TREELINE
	EX. TREE LINE		PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	EX. FENCE		PROP. LIMITS OF CHANNEL UNDERCUT
	EX. OVERHEAD UTILITY LINE		
	EX. MANHOLE		

**EXCAVATION NOTES**

- 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.
- TEMPORARY GRADES SHOWN ON THE PHASED EXCAVATION DRAWINGS ARE ESTIMATED LIMITS AND SHOULD NOT BE TAKEN AS ENGINEERED SLOPES.
- CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING TO MAINTAIN SLOPE STABILITY AT ALL TIMES.
- RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR CCR MATERIALS SHALL BE 4 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 4:1).
- 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.
- EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
- RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR SOIL MATERIALS SHALL BE 2 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 2:1).

**NOTES**

- 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.
- EXCAVATED SOIL SLOPES STEEPER THAN 2:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
- 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.
- ALL FINAL SOIL SLOPES SHALL BE LEFT NO STEEPER THAN 3:1 UNLESS APPROVED IN WRITING BY OWNER.

REV	DATE	DES	CHK	RW
1	12/16/16	JRD	ATN	JRD
2				
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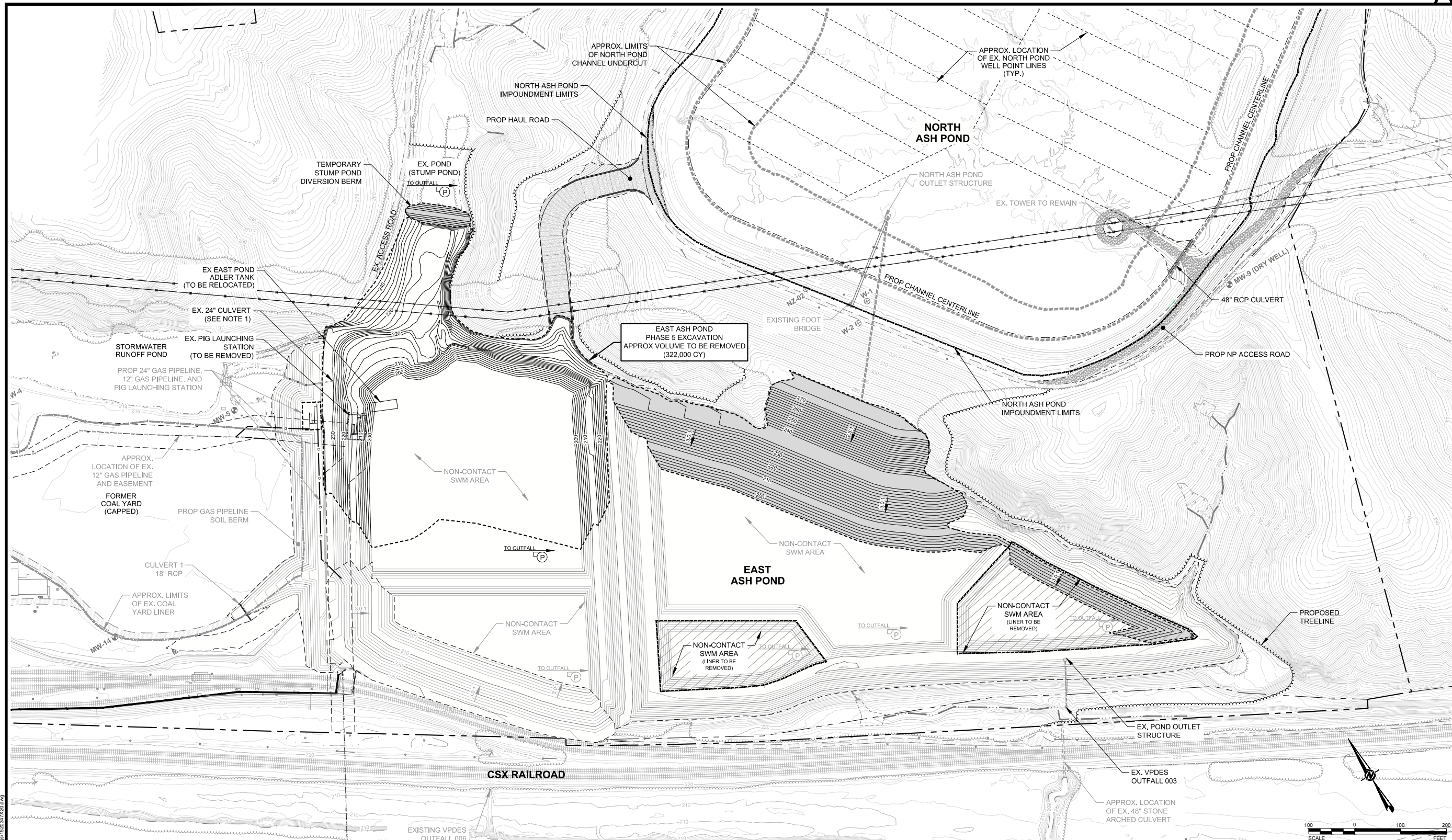


PROJECT  
**DOMINION POWER STATION  
 BREMO SURFACE IMPOUNDMENT  
 CCR SURFACE IMPOUNDMENT  
 CLOSURE PLAN**  
 FLUVANNA COUNTY, VIRGINIA

TITLE  
**EAST ASH POND  
 EXCAVATION PLAN  
 (PHASE 4)**

PROJECT No.	15-20347	
FILE No.	1520347X19	
REV	SCALE	AS SHOWN
DESIGN	JRD	11/01/16
CADD	ATN	11/01/16
CHECK	ATN	12/16/16
REVIEW	JRD	12/16/16

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REV	DATE	DES	JRD	ATN	JRD	CHK	RW
1	12/16/16	JRD	JRD	ATN	JRD	CHK	RW



DOMINION POWER STATION  
BREMO POWER STATION  
CCR SURFACE IMPOUNDMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA

PROJECT	TITLE
DOMINION POWER STATION BREMO POWER STATION CCR SURFACE IMPOUNDMENT CLOSURE PLAN FLUVANNA COUNTY, VIRGINIA	EAST ASH POND EXCAVATION PLAN (PHASE 5)

**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. MONITORING WELL LOCATION AND IDENTIFICATION
--- EX. UNPAVED ROAD	--- EX. PIEZOMETER AND IDENTIFICATION
--- EX. RAILROAD	--- PROP. TREELINE
--- EX. TREE LINE	--- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
--- EX. FENCE	--- PROP. LIMITS OF CHANNEL UNDERCUT
--- EX. OVERHEAD UTILITY LINE	
○ MH	

**EXCAVATION NOTES**

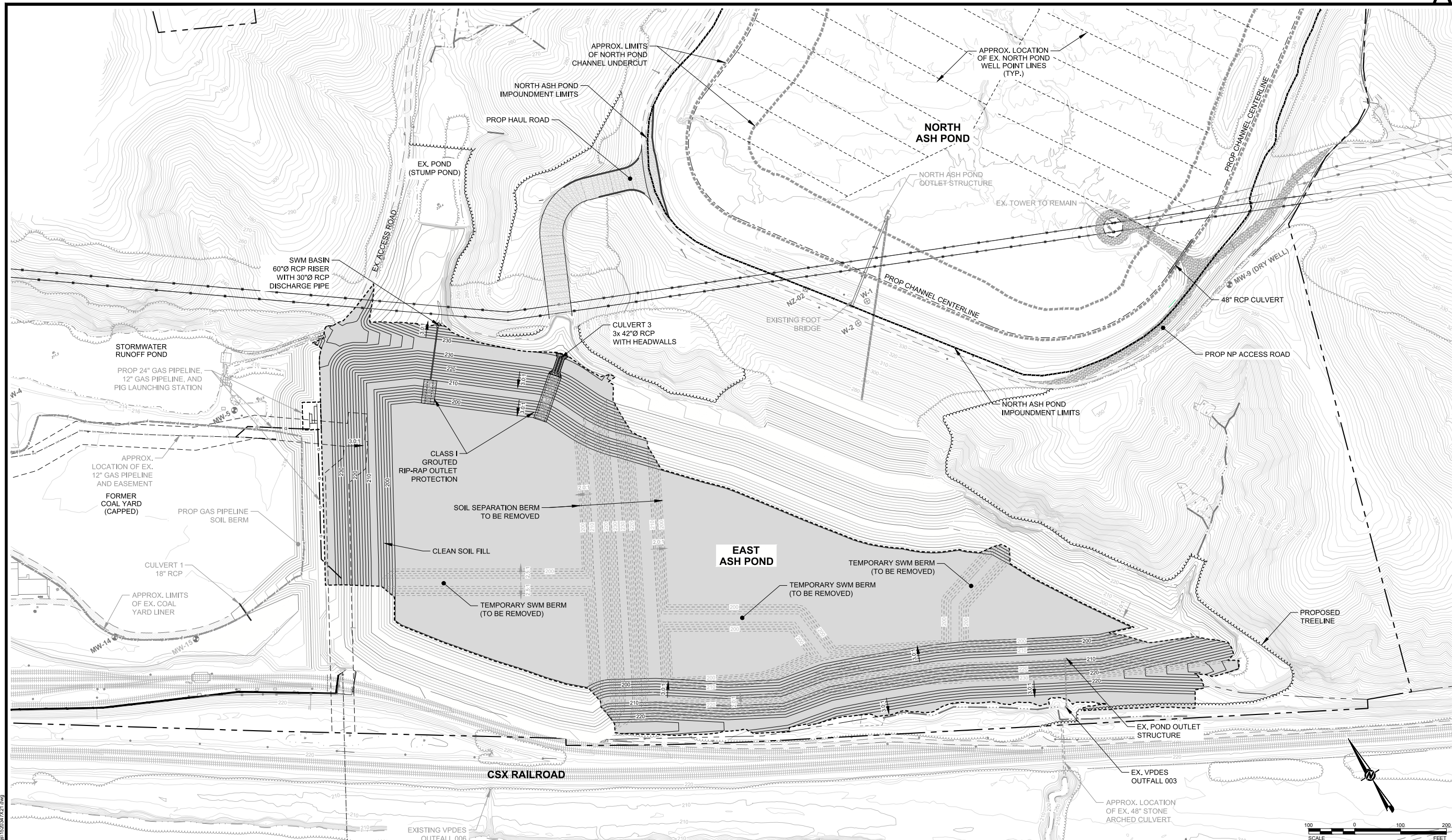
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY AND SAFETY OF ALL CUT AND FILL SLOPES DURING CONSTRUCTION, WITH ALL SLOPES EXCAVATED IN ACCORDANCE WITH OSHA REQUIREMENTS.
- TEMPORARY GRADES SHOWN ON THE PHASED EXCAVATION DRAWINGS ARE ESTIMATED LIMITS AND SHOULD NOT BE TAKEN AS ENGINEERED SLOPES.
- CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING TO MAINTAIN SLOPE STABILITY AT ALL TIMES.
- RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR CCR MATERIALS SHALL BE 4 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 4:1).
- 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.
- EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
- RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR SOIL MATERIALS SHALL BE 2 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 2:1).

**NOTES**

- 24" PIPE AND RISER TO BE REMOVED.
- 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.
- EXCAVATED SOIL SLOPES STEEPER THAN 2:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
- 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.
- ALL FINAL SOIL SLOPES SHALL BE LEFT NO STEEPER THAN 3:1 UNLESS APPROVED IN WRITING BY OWNER.



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REV	DATE	DES	CHK	RWD
1	12/16/16	JRD	ATN	JRD
2			KLL	
3			CAD	



**DOMINION POWER STATION  
BREMO SURFACE IMPOUNDMENT  
CCR SURFACE IMPOUNDMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA**

REV	SCALE	AS SHOWN
DESIGN	JRD	11/01/16
CADD	ATN	11/01/16
CHECK	ATN	12/16/16
REVIEW	JRD	12/16/16

**DRAWING 21**

**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)	--- RPA
--- EX. PAVED ROAD	--- LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
--- EX. UNPAVED ROAD	--- MW-8
--- EX. RAILROAD	--- NB-02
--- EX. TREE LINE	--- EX. MONITORING WELL LOCATION AND IDENTIFICATION
--- EX. FENCE	--- EX. PIEZOMETER AND IDENTIFICATION
--- EX. OVERHEAD UTILITY LINE	--- PROP. TREE LINE
○ MH	--- PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	--- PROP. LIMITS OF CHANNEL UNDERCUT

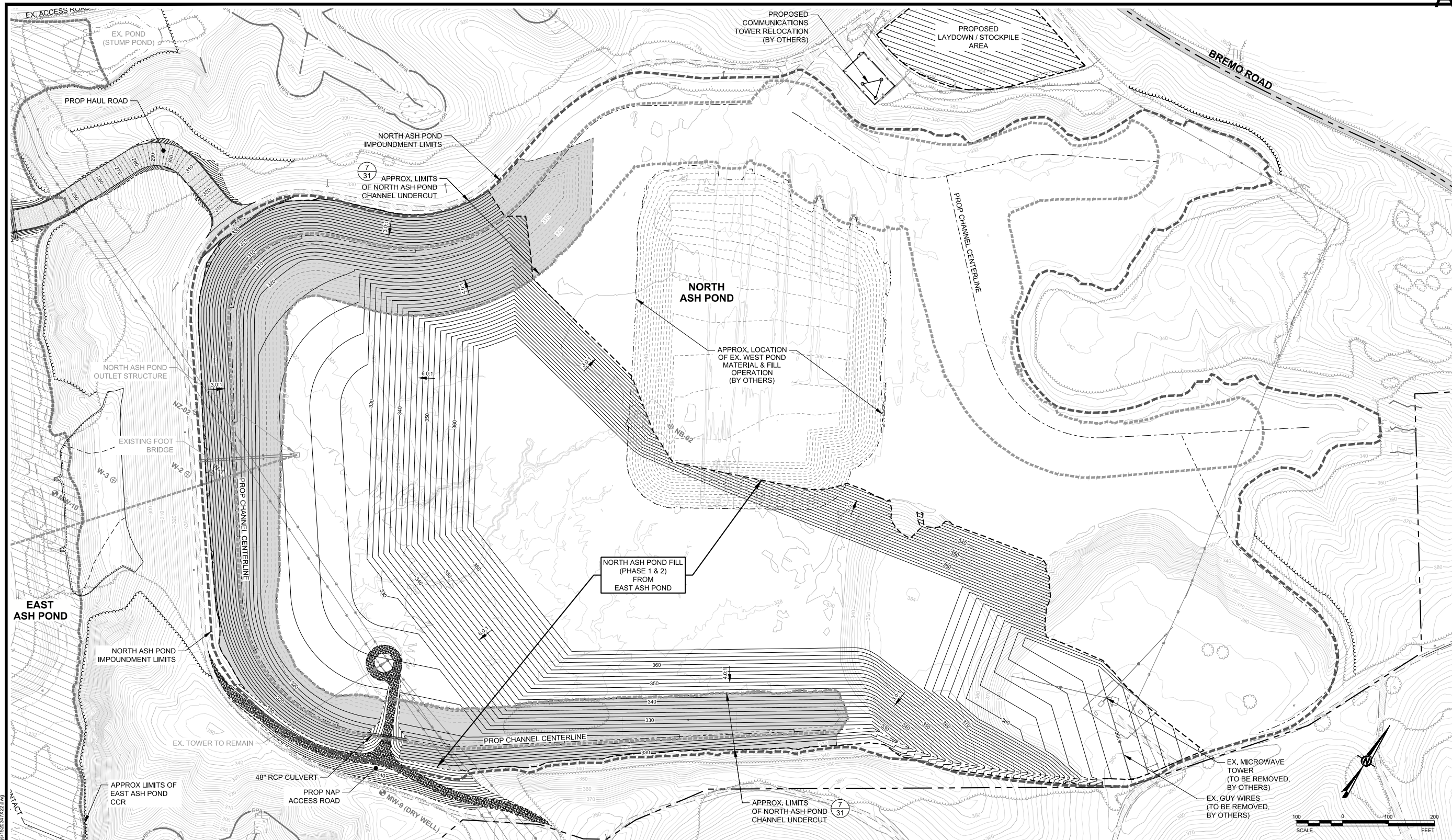
**EXCAVATION NOTES**

- 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.
- TEMPORARY GRADES SHOWN ON THE PHASED EXCAVATION DRAWINGS ARE ESTIMATED LIMITS AND SHOULD NOT BE TAKEN AS ENGINEERED SLOPES.
- CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING TO MAINTAIN SLOPE STABILITY AT ALL TIMES.
- RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR CCR MATERIALS SHALL BE 4 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 4:1).
- 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.
- EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
- RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR SOIL MATERIALS SHALL BE 2 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 2:1).

**NOTES**

- 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.
- EXCAVATED SOIL SLOPES STEEPER THAN 2:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL BE HAVE OWNER'S WRITTEN APPROVAL.
- 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.
- ALL FINAL SOIL SLOPES SHALL BE LEFT NO STEEPER THAN 3:1 UNLESS APPROVED IN WRITING BY OWNER.

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**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	⊕ MW-8	EX. MONITORING WELL LOCATION AND IDENTIFICATION
---	EX. UNPAVED ROAD	⊕ NB-02	EX. PIEZOMETER AND IDENTIFICATION
---	EX. RAILROAD	---	PROP. TREELINE
---	EX. TREE LINE	---	PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
---	EX. FENCE	---	PROP. LIMITS OF CHANNEL UNDERCUT
---	EX. OVERHEAD UTILITY LINE	□ MH	
---	EX. MANHOLE		

**NOTES**

1. GRADES REPRESENT TOP OF ASH.
2. AREAS ARE TO BE LINED WITH GEOMEMBRANE LINER OR TEMPORARY RAIN COVER AS FINAL TOP OF ASH IS ACHIEVED.
  - 2.1. AREAS THAT HAVE BEEN LINED WITH GEOMEMBRANE ARE TO BE PROTECTED FROM SURFACE RUNOFF FROM OPEN CCR AREAS AT ALL TIMES.
  - 2.2. AREAS THAT HAVE BEEN LINED WITH TEMPORARY RAIN COVER AND HAVE BEEN DECLARED NON-CONTACT RUNOFF AREAS, ARE TO BE PROTECTED FROM SURFACE RUNOFF FROM OPEN CCR AREAS AT ALL TIMES.
  - 2.3. AREAS THAT HAVE BEEN LINED WITH TEMPORARY RAIN COVER AND HAVE NOT BEEN DECLARED NON-CONTACT RUNOFF (CHANNELS, TEMPORARY DOWNCUTES, ETC.) SHALL BE CLEANED OF ALL CCR (TO A VISUAL INSPECTION STANDARD) PRIOR TO BEING DECLARED NON-CONTACT AREAS.

REV	DATE	DES	CHK	RW
1	12/16/16	JRD	ATN	JRD
2				
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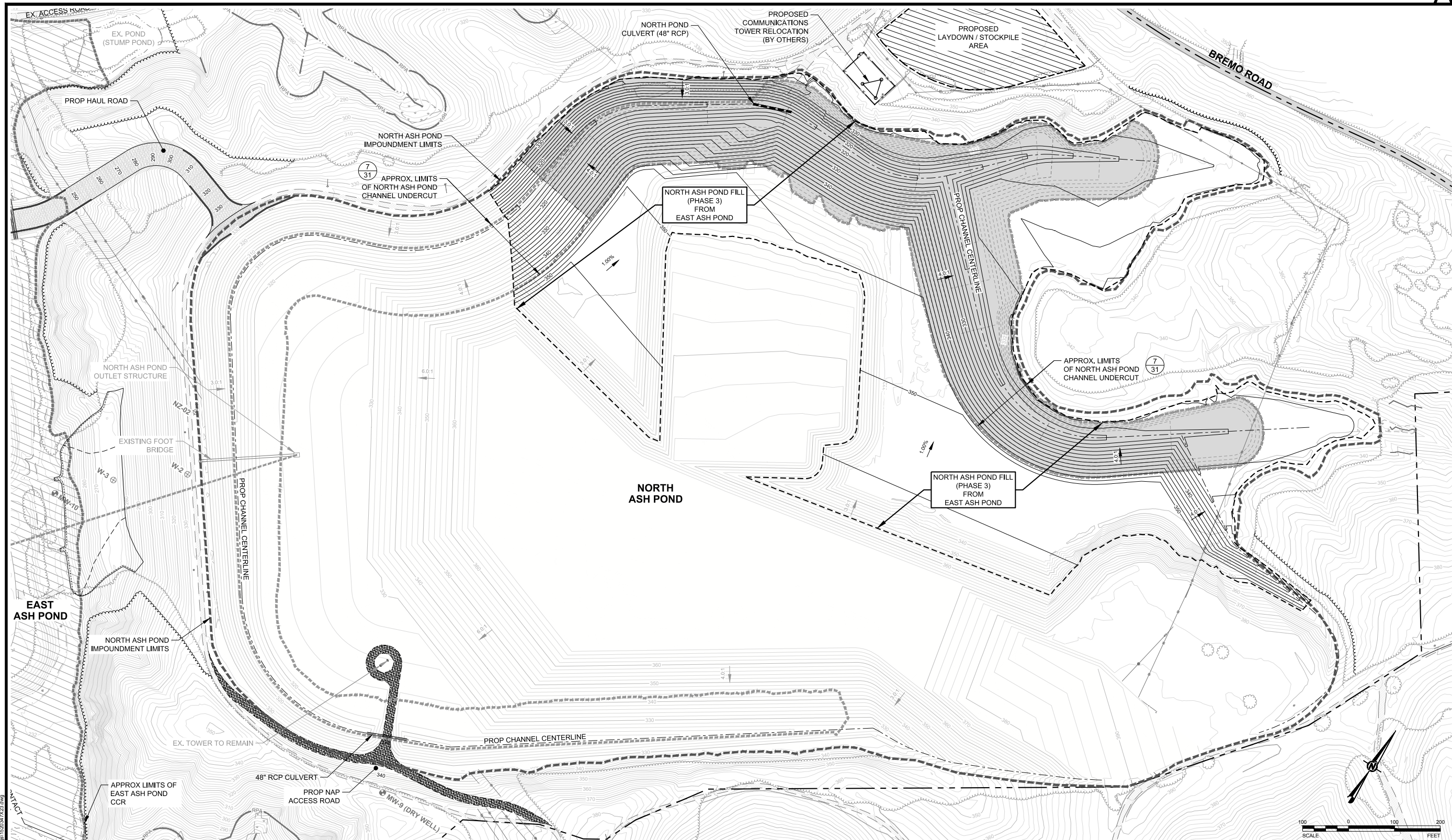


PROJECT  
**DOMINION POWER STATION  
 BREMO ROAD CCR SURFACE IMPOUNDMENT  
 CLOSURE PLAN**  
 FLUVANNA COUNTY, VIRGINIA

TITLE	PROJECT No.
<b>NORTH ASH POND                  FILL PLAN                  (PHASE 1 &amp; PHASE 2)</b>	15-20347
FILE No.	1520347X22
REV. 5	SCALE AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

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REV	DATE	DES	CHK	R/W
1	12/16/16	JRD	ATN	JRD
2		JRD	KLL	JRD
3		JRD	CAO	JRD



PROJECT  
**DOMINION POWER STATION  
 BREMO ROAD SURFACE IMPOUNDMENT  
 CLOSURE PLAN**  
 FLUVANNA COUNTY, VIRGINIA

TITLE

**NORTH ASH POND  
 FILL PLAN  
 (PHASE 3)**

PROJECT No.	15-20347
FILE No.	1520347X23
REV. 5	SCALE AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

**DRAWING 23**

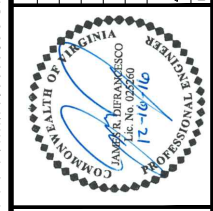
LEGEND	
	DOMINION PROPERTY BOUNDARY
	ADJACENT PROPERTY BOUNDARY
	APPROX. LIMITS OF EX. ASH PONDS
	EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	EX. PAVED ROAD
	EX. UNPAVED ROAD
	EX. RAILROAD
	EX. TREE LINE
	EX. FENCE
	EX. OVERHEAD UTILITY LINE
	EX. MANHOLE
	CREEK/STREAM CENTERLINE
	APPROX. EDGE OF SURFACE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

- NOTES**
- GRADES REPRESENT TOP OF ASH.
  - AREAS ARE TO BE LINED WITH GEOMEMBRANE LINER OR TEMPORARY RAIN COVER AS FINAL TOP OF ASH IS ACHIEVED.
    - AREAS THAT HAVE BEEN LINED WITH GEOMEMBRANE ARE TO BE PROTECTED FROM SURFACE RUNOFF FROM OPEN CCR AREAS AT ALL TIMES.
    - AREAS THAT HAVE BEEN LINED WITH TEMPORARY RAIN COVER AND HAVE BEEN DECLARED NON-CONTACT RUNOFF AREAS, ARE TO BE PROTECTED FROM SURFACE RUNOFF FROM OPEN CCR AREAS AT ALL TIMES.
    - AREAS THAT HAVE BEEN LINED WITH TEMPORARY RAIN COVER AND HAVE NOT BEEN DECLARED NON-CONTACT RUNOFF (CHANNELS, TEMPORARY DOWNCUTES, ETC.) SHALL BE CLEANED OF ALL CCR (TO A VISUAL INSPECTION STANDARD) PRIOR TO BEING DECLARED NON-CONTACT AREAS.

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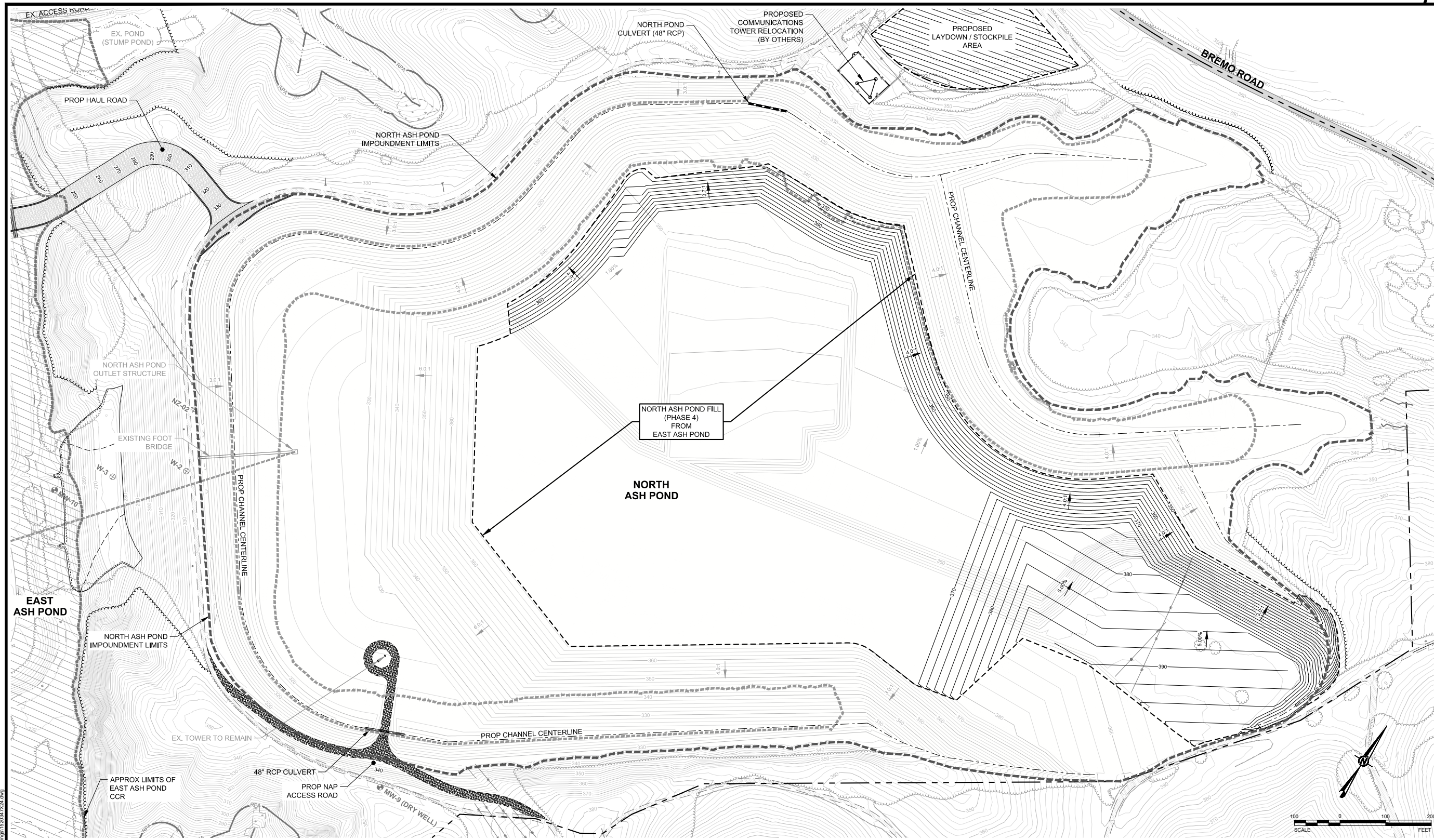
REV	DATE	DES	CHK	RW
1	12/16/16	JRD	ATN	JRD
2		JRD	KLL	JRD
3		JRD	CAO	JRD



**DOMINION POWER STATION  
BREMO ROAD CCR SURFACE IMPOUNDMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA**

TITLE	PROJECT No.
<b>NORTH ASH POND FILL PLAN (PHASE 4)</b>	15-20347
FILE No.	1520347X24
REV. 5	SCALE AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

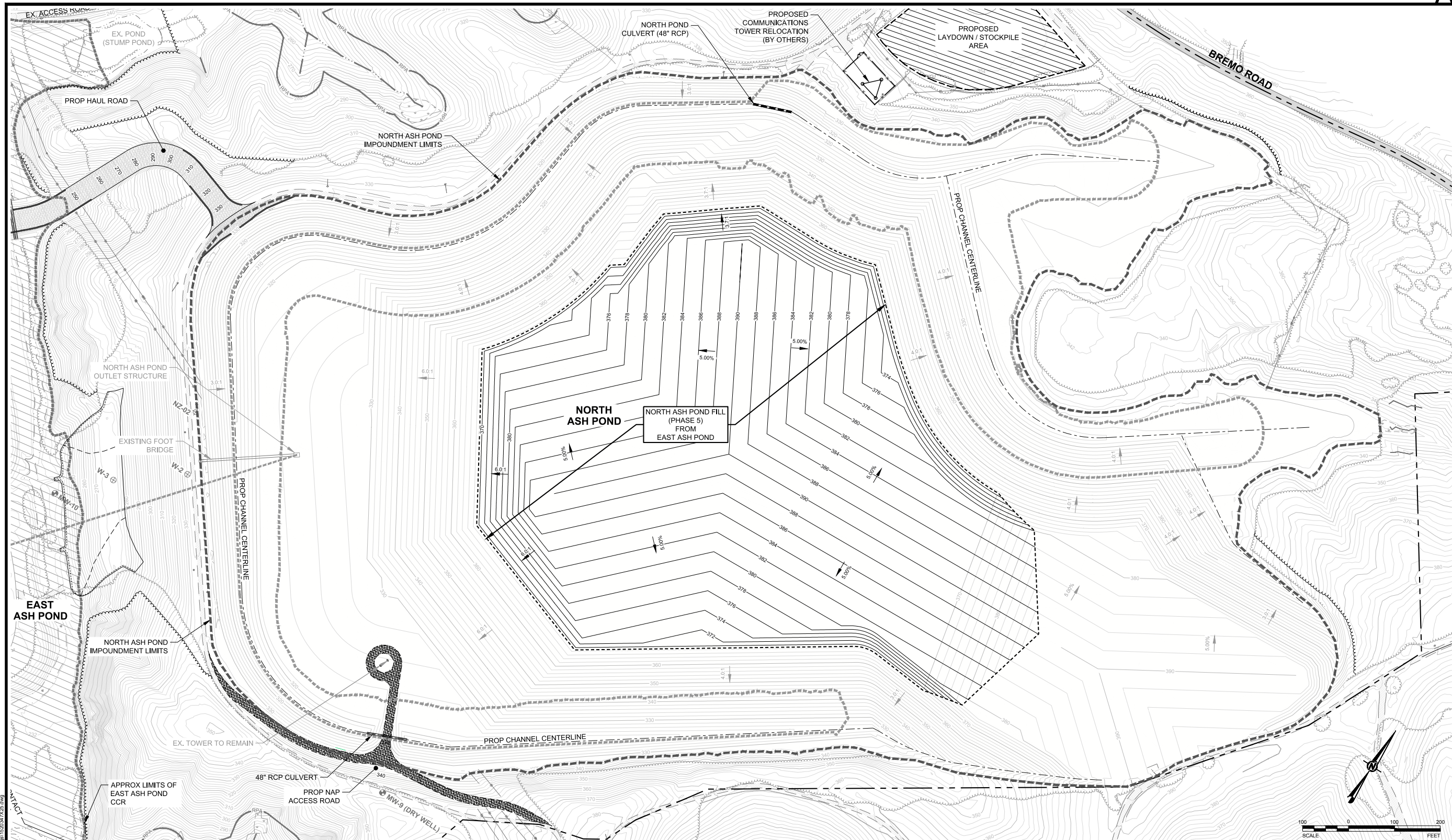
**DRAWING 24**



LEGEND	
--- (dashed line)	DOMINION PROPERTY BOUNDARY
--- (long dashed line)	ADJACENT PROPERTY BOUNDARY
--- (thick dashed line)	APPROX. LIMITS OF EX. ASH PONDS
--- (thin solid line)	EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
--- (solid line)	EX. PAVED ROAD
--- (dashed line)	EX. UNPAVED ROAD
--- (dotted line)	EX. RAILROAD
--- (wavy line)	EX. TREE LINE
--- (solid line with ticks)	EX. FENCE
--- (solid line with cross-ticks)	EX. OVERHEAD UTILITY LINE
□ (square)	EX. MANHOLE
--- (dashed line)	CREEK/STREAM CENTERLINE
--- (dotted line)	APPROX. EDGE OF SURFACE WATER
□ (square with cross)	WETLANDS
--- (dashed line)	LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
● (circle with cross)	EX. MONITORING WELL LOCATION AND IDENTIFICATION
⊕ (circle with cross and dot)	EX. PIEZOMETER AND IDENTIFICATION
--- (dotted line)	PROP. TREELINE
--- (thin solid line)	PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
--- (thick solid line)	PROP. LIMITS OF CHANNEL UNDERCUT

- NOTES**
- GRADES REPRESENT TOP OF ASH.
  - AREAS ARE TO BE LINED WITH GEOMEMBRANE LINER OR TEMPORARY RAIN COVER AS FINAL TOP OF ASH IS ACHIEVED.
    - AREAS THAT HAVE BEEN LINED WITH GEOMEMBRANE ARE TO BE PROTECTED FROM SURFACE RUNOFF FROM OPEN CCR AREAS AT ALL TIMES.
    - AREAS THAT HAVE BEEN LINED WITH TEMPORARY RAIN COVER AND HAVE BEEN DECLARED NON-CONTACT RUNOFF AREAS, ARE TO BE PROTECTED FROM SURFACE RUNOFF FROM OPEN CCR AREAS AT ALL TIMES.
    - AREAS THAT HAVE BEEN LINED WITH TEMPORARY RAIN COVER AND HAVE NOT BEEN DECLARED NON-CONTACT RUNOFF (CHANNELS, TEMPORARY DOWNCUTES, ETC.) SHALL BE CLEANED OF ALL CCR (TO A VISUAL INSPECTION STANDARD) PRIOR TO BEING DECLARED NON-CONTACT AREAS.

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REV	DATE	DES	CHK	RW
1	12/16/16	JRD	ATN	JRD
2		JRD	KLL	JRD
3		JRD	ATN	JRD
4		JRD	CHK	JRD
5		JRD	CHK	JRD



**DOMINION POWER STATION  
BREMO ROAD CCR SURFACE IMPOUNDMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA**

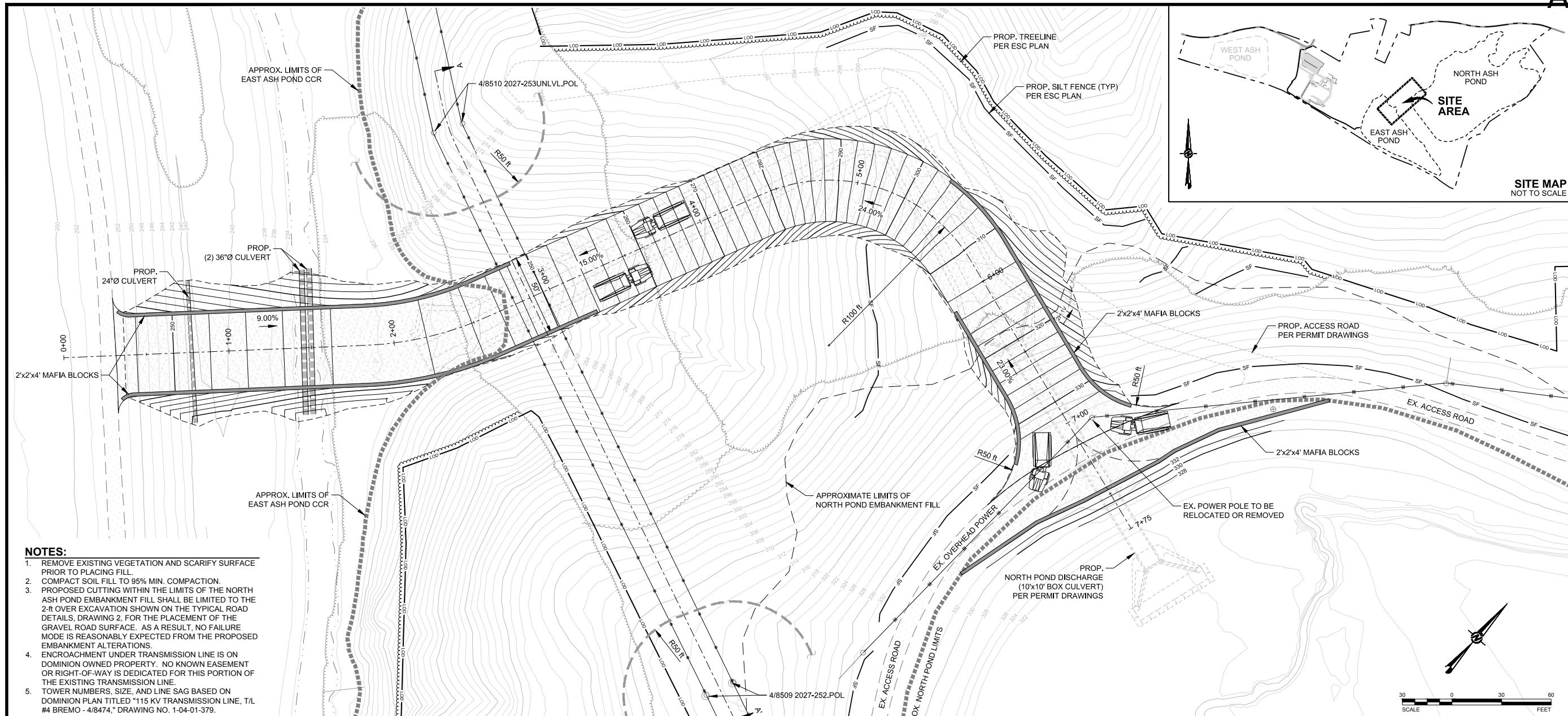
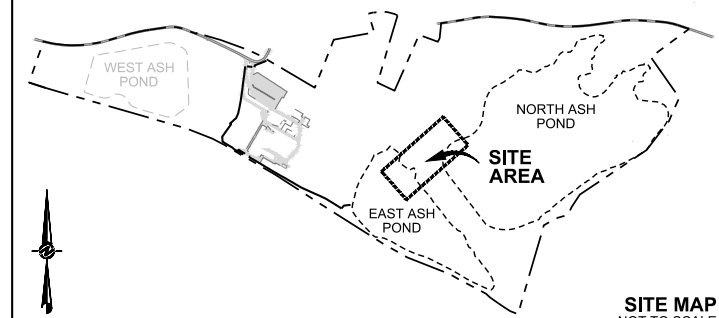
TITLE	PROJECT No.
<b>NORTH ASH POND FILL PLAN (PHASE 5)</b>	15-20347
FILE No.	1520347X25
REV. 5	SCALE AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

**DRAWING 25**

LEGEND	
--- --	DOMINION PROPERTY BOUNDARY
--- - -	ADJACENT PROPERTY BOUNDARY
-----	APPROX. LIMITS OF EX. ASH PONDS
300	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

- NOTES**
- GRADES REPRESENT TOP OF ASH.
  - AREAS ARE TO BE LINED WITH GEOMEMBRANE LINER OR TEMPORARY RAIN COVER AS FINAL TOP OF ASH IS ACHIEVED.
    - AREAS THAT HAVE BEEN LINED WITH GEOMEMBRANE ARE TO BE PROTECTED FROM SURFACE RUNOFF FROM OPEN CCR AREAS AT ALL TIMES.
    - AREAS THAT HAVE BEEN LINED WITH TEMPORARY RAIN COVER AND HAVE BEEN DECLARED NON-CONTACT RUNOFF AREAS, ARE TO BE PROTECTED FROM SURFACE RUNOFF FROM OPEN CCR AREAS AT ALL TIMES.
    - AREAS THAT HAVE BEEN LINED WITH TEMPORARY RAIN COVER AND HAVE NOT BEEN DECLARED NON-CONTACT RUNOFF (CHANNELS, TEMPORARY DOWNCUTES, ETC.) SHALL BE CLEANED OF ALL CCR (TO A VISUAL INSPECTION STANDARD) PRIOR TO BEING DECLARED NON-CONTACT AREAS.

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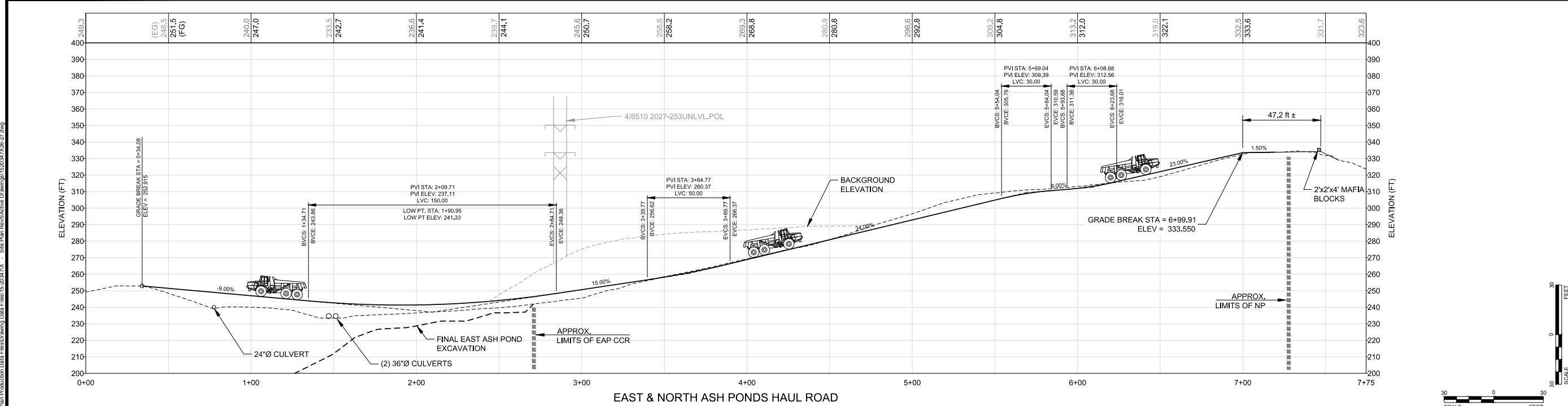


- NOTES:**
1. REMOVE EXISTING VEGETATION AND SCARIFY SURFACE PRIOR TO PLACING FILL.
  2. COMPACT SOIL FILL TO 95% MIN. COMPACTION.
  3. PROPOSED CUTTING WITHIN THE LIMITS OF THE NORTH ASH POND EMBANKMENT FILL SHALL BE LIMITED TO THE 2-FI OVER EXCAVATION SHOWN ON THE TYPICAL ROAD DETAILS, DRAWING 2, FOR THE PLACEMENT OF THE GRAVEL ROAD SURFACE. AS A RESULT, NO FAILURE MODE IS REASONABLY EXPECTED FROM THE PROPOSED EMBANKMENT ALTERATIONS.
  4. ENCROACHMENT UNDER TRANSMISSION LINE IS ON DOMINION OWNED PROPERTY. NO KNOWN EASEMENT OR RIGHT-OF-WAY IS DEDICATED FOR THIS PORTION OF THE EXISTING TRANSMISSION LINE.
  5. TOWER NUMBERS, SIZE, AND LINE SAG BASED ON DOMINION PLAN TITLED "115 KV TRANSMISSION LINE, T/L #4 BREMO - 4/8474," DRAWING NO. 1-04-01-379.

REV	DATE	DES	CHK	R/W
1	12/16/16	JRD	ATN	JRD
2				
3				
4				
5				



**DOMINION  
BREMO POWER STATION  
CCR SURFACE IMPROVEMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA**

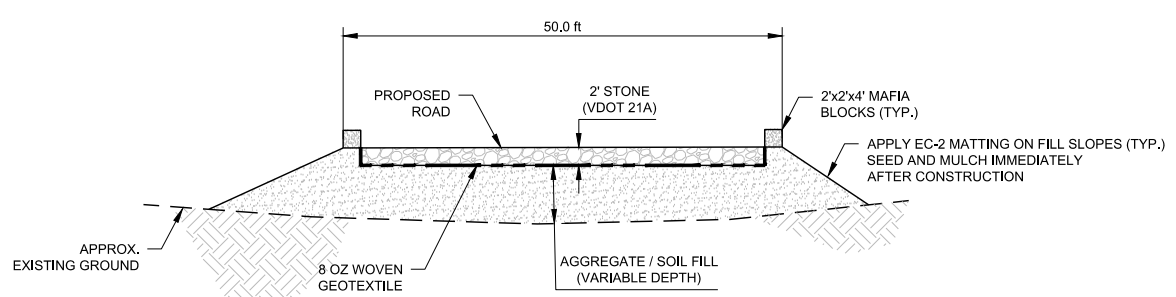
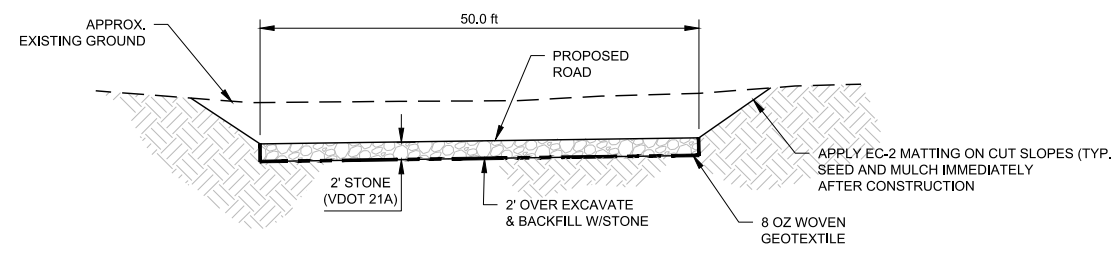
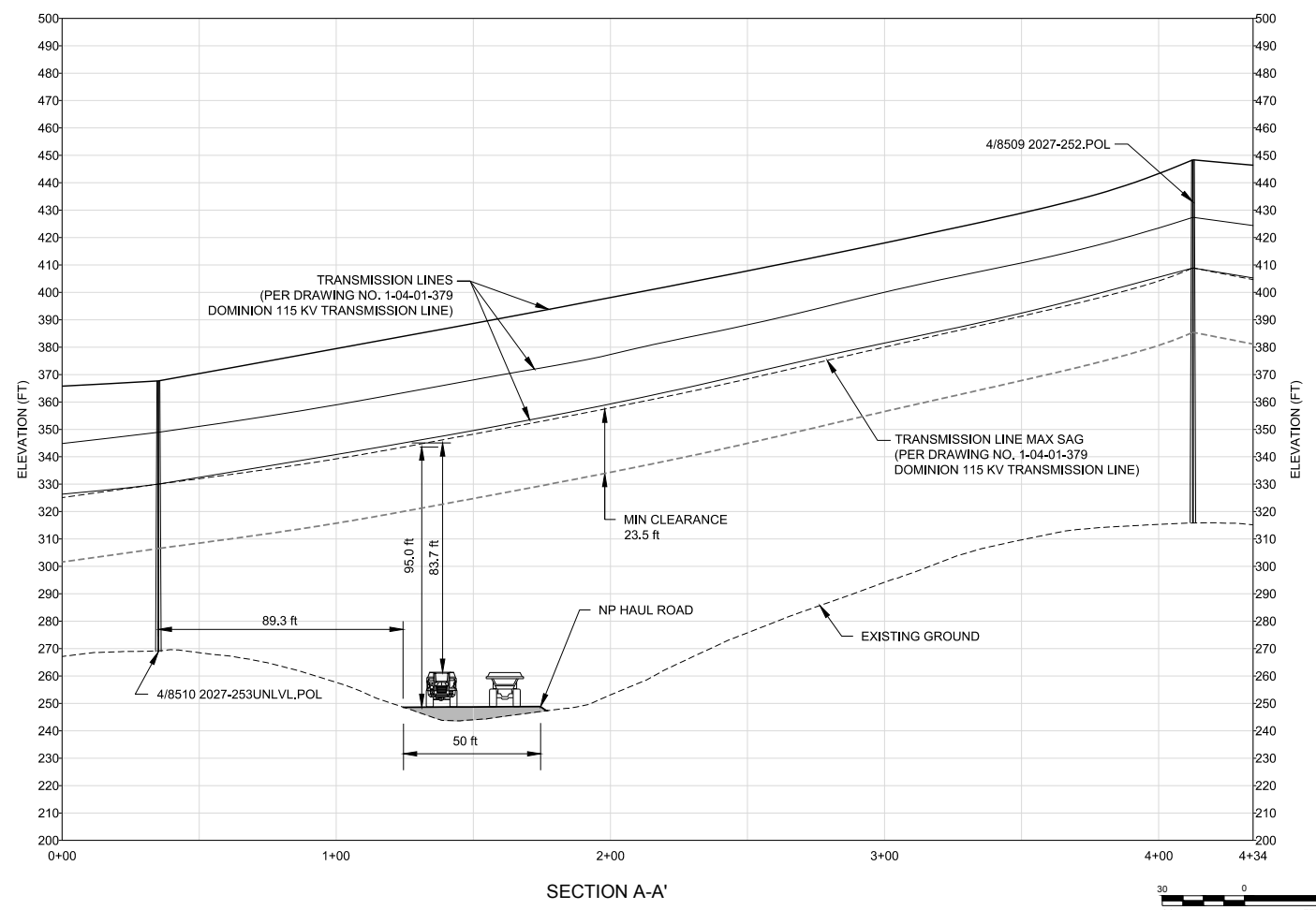


**NORTH ASH POND  
HAUL ROAD PLAN &  
PROFILE**

REV	SCALE	AS SHOWN
5		
DESIGN	JRD	11/01/16
CADD	ATN	11/01/16
CHECK	ATN	12/16/16
REVIEW	JRD	12/16/16

**DRAWING 26**

G:\Plan Production Data Files\Drawing Data Files\15-20347X - Site Plan\Rev\Active Drawings\1520347X26-27.dwg



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2			KLL	CAD
3				
4				
5				

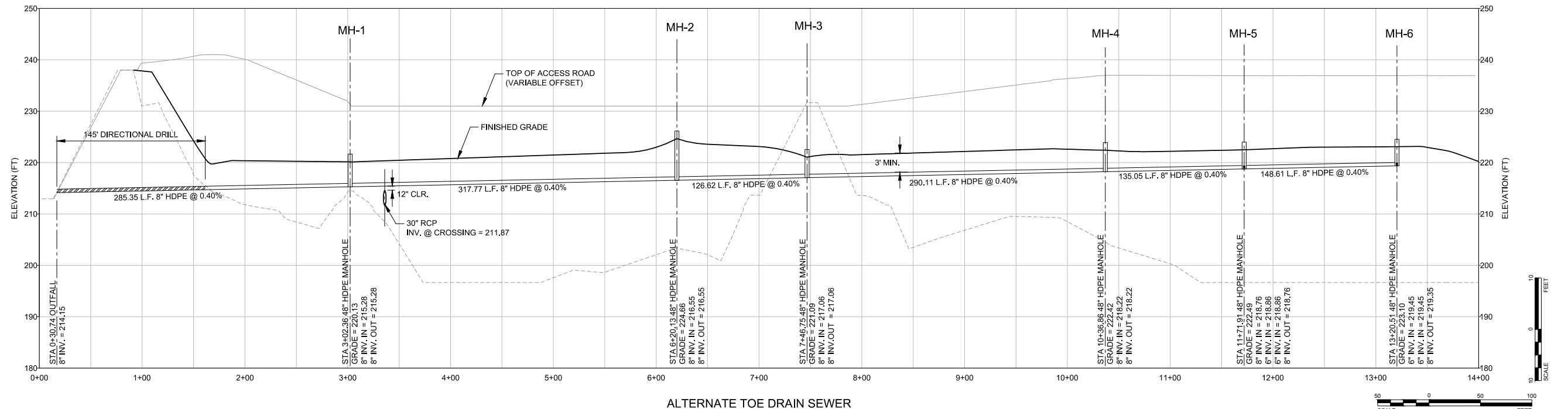
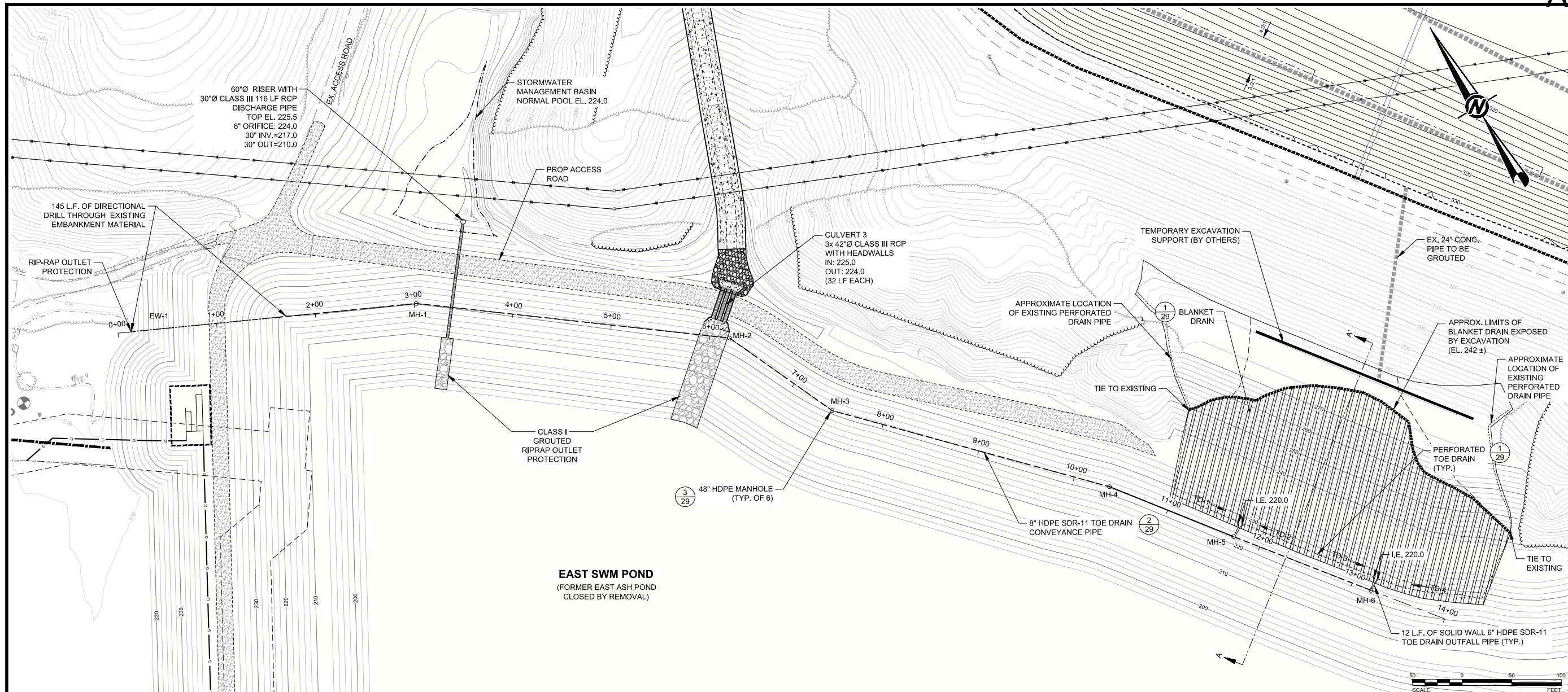


**PROJECT**  
 DOMINION  
 BREMO POWER STATION  
 CCR SURFACE IMPOUNDMENT  
 CLOSURE PLAN  
 FLUVANNA COUNTY, VIRGINIA

**TITLE**  
 NORTH ASH POND  
 HAUL ROAD CROSS  
 SECTION AND  
 DETAILS

REV	SCALE	AS SHOWN
DESIGN	JRD	11/01/16
CADD	ATN	11/01/16
CHECK	ATN	12/16/16
REVIEW	JRD	12/16/16

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ALTERNATE TOE DRAIN SEWER

REV	DATE	DES	CAD	CHK	R/W
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2		JRD	DES	CHK	R/W

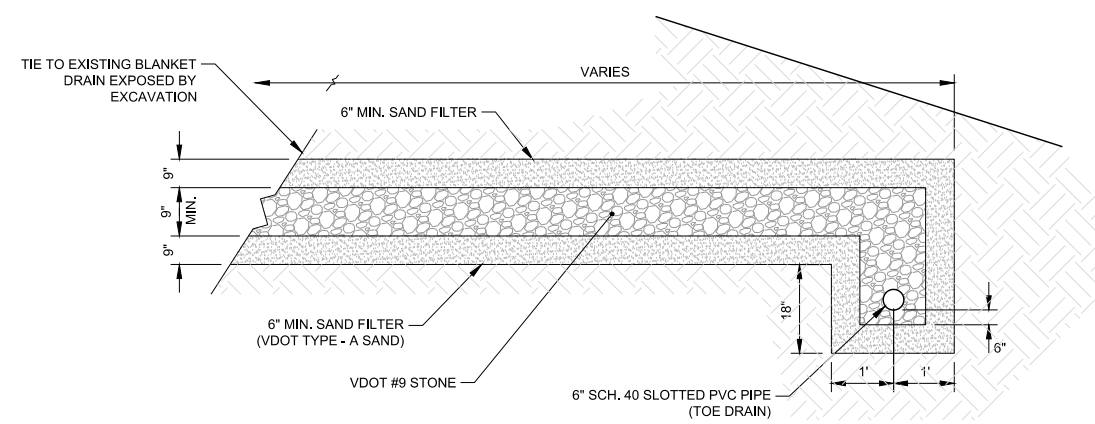


**DOMINION  
BREMO POWER STATION  
CCR SURFACE IMPOUNDMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA**

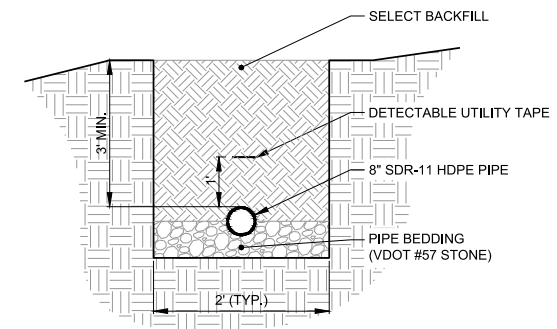
**NORTH ASH POND  
TOE DRAIN  
CONVEYANCE  
SYSTEM**

PROJECT No.	15-20347
FILE No.	1520347X28-29
REV. 5	SCALE AS SHOWN
DESIGN	JRD 09/28/16
CADD	ATN 09/28/16
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

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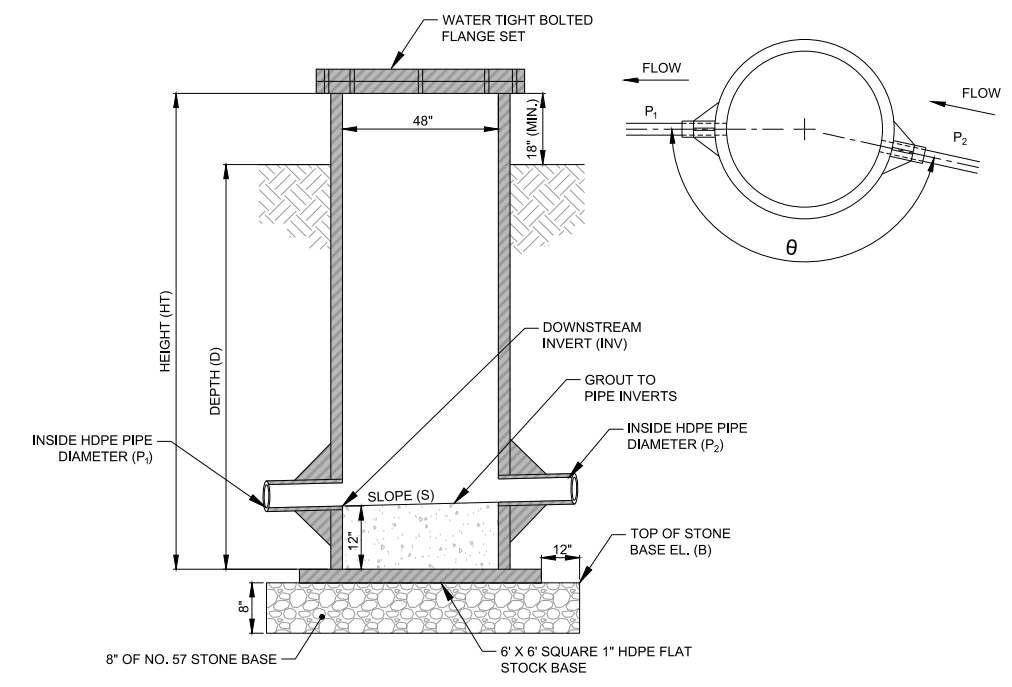


**1**  
**29** **TYPICAL DRAINAGE BLANKET**  
NOT TO SCALE



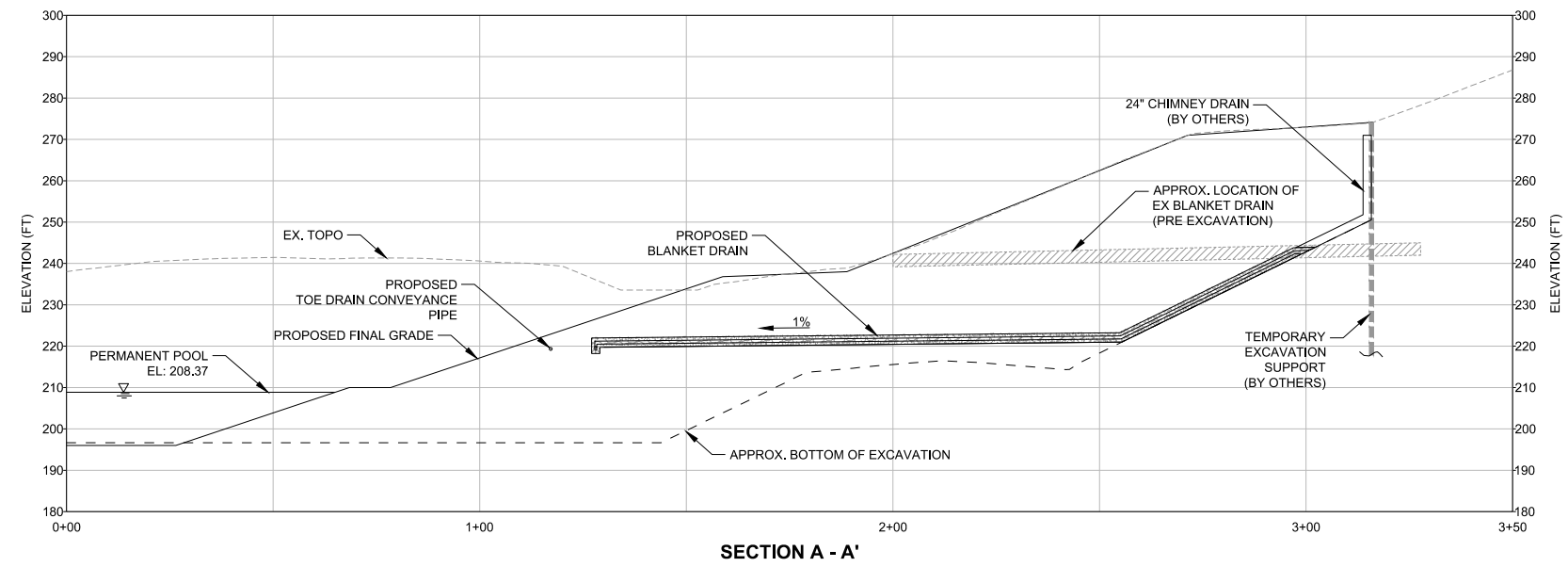
**2**  
**29** **TYPICAL TRENCH DETAIL**  
NOT TO SCALE

	MH-1	MH-2	MH-3	MH-4	MH-5	MH-6
HT	7.5'	11.0'	7.0'	7.0'	7.0'	7.0'
D	5.87'	9.11'	5.00'	5.20'	4.73'	4.70'
INV	215.28	216.55	217.06	218.22	218.76	219.35
S	-0.004 1/1'	-0.004 1/1'	-0.004 1/1'	-0.004 1/1'	-0.004 1/1'	-0.004 1/1'
P <sub>1</sub>	8"	8"	8"	8"	8"	8"
P <sub>2</sub>	8"	8"	8"	8"	8"	—
B	214.28	215.55	216.06	217.22	217.76	218.35
θ	168°	151°	200°	173°	180°	—



**3**  
**29** **TYPICAL 48" HDPE MANHOLE**  
NOT TO SCALE

NOTE:  
1. 6" CONNECTIONS AT MH-5 AND MH-6 TO BE MADE IN THE FIELD.  
2. MANHOLES PER ASTM F-894.



**SECTION A - A'**

REV	DATE	DES	CHK	RWD
1	12/16/16	JRD	ATN	JRD
2		JRD	ATN	JRD
3		JRD	ATN	JRD
4		JRD	ATN	JRD
5		JRD	ATN	JRD
6		JRD	ATN	JRD
7		JRD	ATN	JRD
8		JRD	ATN	JRD
9		JRD	ATN	JRD
10		JRD	ATN	JRD
11		JRD	ATN	JRD
12		JRD	ATN	JRD
13		JRD	ATN	JRD
14		JRD	ATN	JRD
15		JRD	ATN	JRD
16		JRD	ATN	JRD
17		JRD	ATN	JRD
18		JRD	ATN	JRD
19		JRD	ATN	JRD
20		JRD	ATN	JRD
21		JRD	ATN	JRD
22		JRD	ATN	JRD
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28		JRD	ATN	JRD
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37		JRD	ATN	JRD
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39		JRD	ATN	JRD
40		JRD	ATN	JRD
41		JRD	ATN	JRD
42		JRD	ATN	JRD
43		JRD	ATN	JRD
44		JRD	ATN	JRD
45		JRD	ATN	JRD
46		JRD	ATN	JRD
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49		JRD	ATN	JRD
50		JRD	ATN	JRD

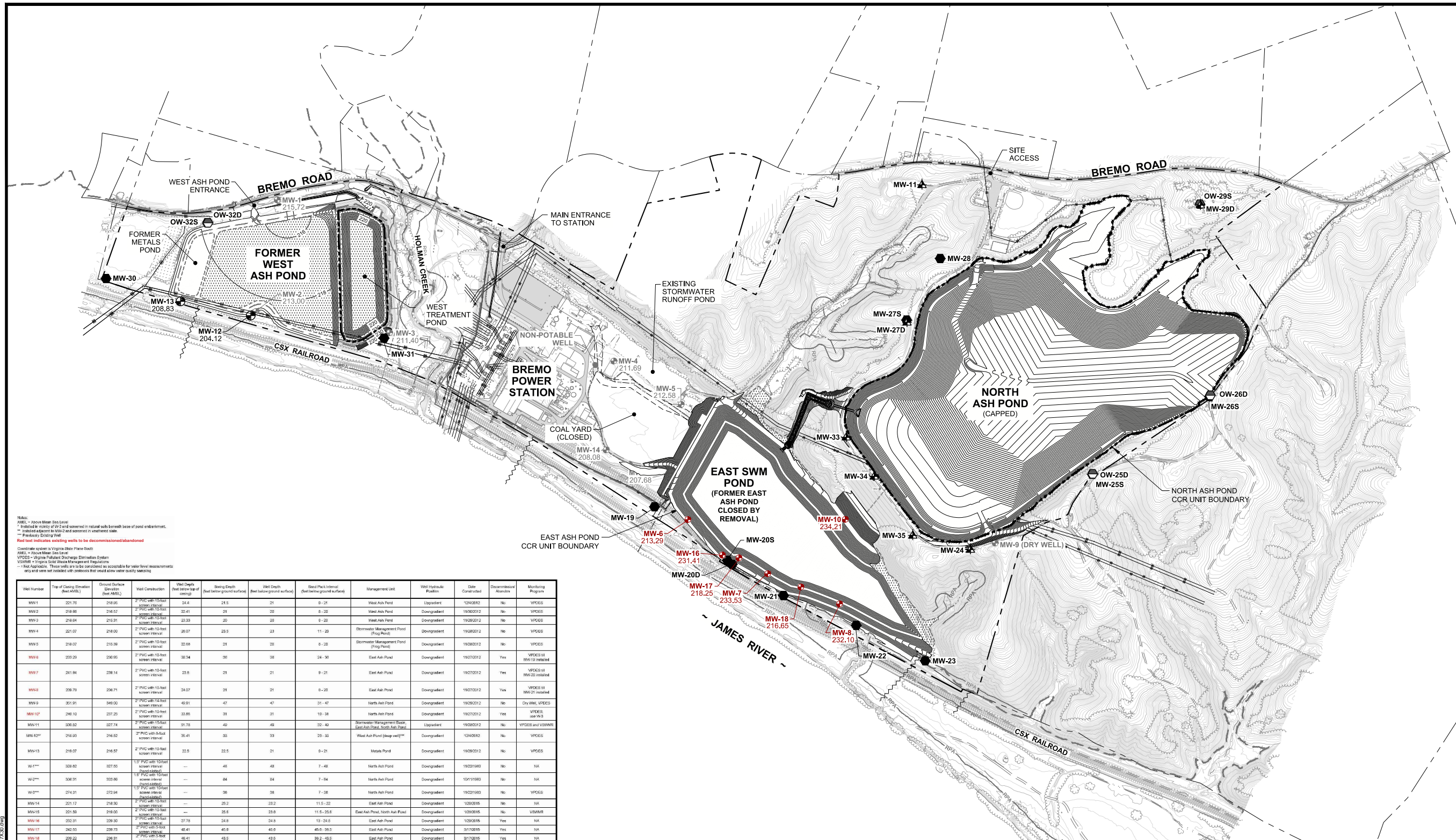


PROJECT  
**DOMINION  
BREMO POWER STATION  
CCR SURFACE IMPOUNDMENT  
CLOSURE PLAN  
FLUVANNA COUNTY, VIRGINIA**

TITLE  
**NORTH ASH POND  
TOE DRAIN CONVEYANCE  
SYSTEM DETAILS**

PROJECT No.	15-20347
FILE No.	1520347X28-29
REV.	SCALE AS SHOWN
DESIGN	JRD 09/28/16
CADD	ATN 09/28/16
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

G:\Plan Production Data Files\Drawing Data Files\15-20347X - Site Plan Rev0\Active Drawings\1520347X28-29.dwg



Notes:  
 AMSL - Above Mean Sea Level  
 \* Indicates a history of 90' and screened in red rock beneath base of pond embankment.  
 \*\* Indicates a history of 90' and screened in weathered shale.  
 \*\*\* Indicates a history of 90' and screened in weathered shale.  
 --- Indicates a history of 90' and screened in weathered shale.  
 Red text indicates existing wells to be decommissioned/abandoned.  
 Construction system is Virginia State Place Seal  
 AMSL - Above Mean Sea Level  
 VPDES - Virginia Pollutant Discharge Elimination System  
 VDRS - Virginia Solid Waste Management Regulations  
 --- Not Applicable. These wells are to be considered as acceptable for water level measurements and are not intended with red rock beneath base of pond embankment.

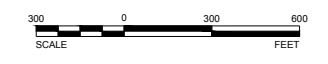
Well Number	Top of Casing Elevation (feet AMSL)	Ground Surface Elevation (feet AMSL)	Well Construction	Well Depth (feet below ground surface)	Screening Depth (feet below ground surface)	Well Depth (feet below ground surface)	Steel Pipe Interval (feet below ground surface)	Management Unit	Well Hydraulic Function	Date Constructed	Decommissioned	Monitoring Program
MW-1	221.76	218.36	2" PVC with 10-foot screen interval	24.4	24.5	21	8'-21"	West Ash Pond	Upgradient	12/02/12	No	VPDES
MW-2	218.86	216.52	2" PVC with 10-foot screen interval	32.41	31	23	8'-25"	West Ash Pond	Downgradient	18/02/12	No	VPDES
MW-3	218.84	215.31	2" PVC with 10-foot screen interval	33.53	30	23	9'-20"	West Ash Pond	Downgradient	18/02/12	No	VPDES
MW-4	221.07	218.00	2" PVC with 10-foot screen interval	26.07	23.5	23	11'-25"	Stormwater Management Pond (Frog Pond)	Downgradient	18/02/12	No	VPDES
MW-5	219.07	215.39	2" PVC with 10-foot screen interval	33.68	31	28	9'-25"	Stormwater Management Pond (Frog Pond)	Downgradient	18/02/12	No	VPDES
MW-6	228.20	206.95	2" PVC with 10-foot screen interval	38.34	36	38	24'-30"	East Ash Pond	Downgradient	18/02/12	Yes	VPDES and MW-10 installed
MW-7	241.84	238.14	2" PVC with 10-foot screen interval	33.6	31	21	9'-21"	East Ash Pond	Downgradient	18/02/12	Yes	VPDES and MW-25 installed
MW-8	239.75	236.71	2" PVC with 10-foot screen interval	33.07	31	21	9'-20"	East Ash Pond	Downgradient	18/02/12	Yes	VPDES and MW-21 installed
MW-9	231.91	249.00	2" PVC with 10-foot screen interval	49.91	47	47	31'-47"	North Ash Pond	Downgradient	18/02/12	No	Dry Well, VPDES and BGS
MW-10	246.10	237.25	2" PVC with 10-foot screen interval	33.85	31	31	13'-33"	North Ash Pond	Downgradient	18/02/12	Yes	VPDES and BGS
MW-11	300.82	327.74	2" PVC with 15-foot screen interval	31.73	49	49	33'-49"	Stormwater Management Basin, East Ash Pond, North Ash Pond	Upgradient	18/02/12	No	VPDES and VDRS
MW-12	218.03	216.52	2" PVC with 10-foot screen interval	35.41	33	33	23'-33"	West Ash Pond (deep well)	Downgradient	12/02/12	No	VPDES
MW-13	218.07	216.52	2" PVC with 10-foot screen interval	22.5	22.5	21	9'-21"	Metals Pond	Downgradient	18/02/12	No	VPDES
MW-14	328.62	327.55	1.5" PVC with 10-foot screen interval	---	48	48	7'-48"	North Ash Pond	Downgradient	18/02/1983	No	NA
MW-15	328.91	323.89	1.5" PVC with 10-foot screen interval	---	54	54	7'-54"	North Ash Pond	Downgradient	10/19/83	No	NA
MW-16	374.31	372.94	1.5" PVC with 10-foot screen interval	---	36	36	7'-36"	North Ash Pond	Downgradient	18/02/1983	No	VPDES
MW-17	221.11	218.30	2" PVC with 10-foot screen interval	---	23.2	23.2	11.5'-23.2"	East Ash Pond	Downgradient	10/09/85	No	NA
MW-18	221.58	218.00	2" PVC with 10-foot screen interval	---	23.6	23.6	11.5'-23.6"	East Ash Pond, North Ash Pond	Downgradient	10/09/85	No	VDRS
MW-19	232.31	228.30	2" PVC with 10-foot screen interval	37.78	24.8	24.8	13'-24.8"	East Ash Pond	Downgradient	10/09/85	Yes	NA
MW-20	242.55	238.73	2" PVC with 10-foot screen interval	40.41	45.8	45.8	45.8'-38.5"	East Ash Pond	Downgradient	3/17/85	Yes	NA
MW-21	239.22	236.91	2" PVC with 10-foot screen interval	46.41	43.5	43.5	38.2'-43.5"	East Ash Pond	Downgradient	3/17/85	Yes	NA

**LEGEND**

	APPROXIMATE PROPERTY BOUNDARY		EXISTING MONITORING WELL PROPOSED FOR INCLUSION WITHIN THE STATE GROUNDWATER MONITORING NETWORK AND IDENTIFICATION WITH STATIC GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL (AMSL))
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE NOTE 8)		PROPOSED FEDERAL CCR RULE COMPLIANCE WELL LOCATION AND IDENTIFICATION
	PROPOSED TOPOGRAPHIC CONTOURS (2' INTERVALS)		EXISTING VPDES MONITORING WELL WITH STATIC GROUNDWATER ELEVATION (FEET AMSL)
	WETLANDS		EXISTING CPT BORING AND GROUNDWATER OBSERVATION WELL (CONSTRUCTED AND ACCEPTABLE FOR WATER LEVEL MEASUREMENTS ONLY) WITH STATIC GROUNDWATER ELEVATION (FEET AMSL)
	SURFACE WATER BOUNDARY		EXISTING GROUNDWATER OBSERVATION WELL CONSTRUCTED WITH 1.5-INCH PVC CASING (CONSTRUCTED AND ACCEPTABLE FOR WATER LEVEL MEASUREMENTS ONLY)
	SURFACE WATER ELEVATION		PROPOSED GROUNDWATER OBSERVATION WELL LOCATION AND IDENTIFICATION
	APPROXIMATE LIMITS OF EXISTING ASH PONDS		PROPOSED STATE GROUNDWATER COMPLIANCE WELL LOCATION AND IDENTIFICATION
	PROPOSED LIMITS OF FINAL COVER SYSTEM (ANCHOR TRENCH)		
	LIMITS OF 100-YR FLOOD PLAIN		

**NOTES**

- TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET
- GROUNDWATER SURFACE CONTOUR INTERVAL = 10 FEET
- STATIC WATER LEVELS MEASURED ON MAY 5, 2015.
- CPT BORING WATER LEVELS MEASURED IN MARCH 2015, UTILIZED FOR INTERPRETING WATER TABLE IN ASH PONDS.
- MW-7, MW-8, MW-10 AND MW-16 SCREENED WITHIN FILL AND IN HYDRAULIC CONNECTION WITH PERCHED (MOUNDED) GROUNDWATER SURFACE IN EAST ASH POND. MW-12 WATER ELEVATION NOT UTILIZED FOR INTERPRETATION AS WELL IS SCREENED IN BEDROCK.
- GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATUM, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MAY NOT REFLECT ACTUAL GROUNDWATER CONDITIONS.
- GROUNDWATER CONTOUR LINES SHOW THE WATER TABLE SHAPE AND ELEVATION. THESE CONTOURS ARE INFERRED LINES FOLLOWING THE GROUNDWATER SURFACE AT A CONSTANT ELEVATION ABOVE SEA LEVEL. THE GROUNDWATER FLOW DIRECTION IS GENERALLY PERPENDICULAR TO THE GROUNDWATER SURFACE CONTOURS, SIMILAR TO THE RELATIONSHIP BETWEEN SURFACE WATER FLOW AND TOPOGRAPHIC CONTOURS.
- BASEMAP INFORMATION (e.g., EXISTING TOPOGRAPHY, ROADS, TREE LINES, FENCE LINES, ETC.) TAKEN FROM AERIAL SURVEY PREPARED BY MCKENZIE SNYDER. DATE OF AERIAL PHOTOGRAPHY: JANUARY 16, 2015.
- NON-POTABLE WELL LOCATION IS TO BE CONSIDERED APPROXIMATE.
- WELLS SHOWN IN GRAY ARE NOT PROPOSED FOR GROUNDWATER MONITORING WELL NETWORK.



REV	DATE	DES	CHK	R/W
1	12/16/16	JRD	ATN	JRD
2	01/18/16	JRD	KLL	JRD
3	01/18/16	JRD	ATN	JRD
4	01/18/16	JRD	ATN	JRD
5	01/18/16	JRD	ATN	JRD



**DOMINION POWER STATION  
 BREMO POWER STATION  
 CCR SURFACE IMPOUNDMENT  
 CLOSURE PLAN  
 FLUVANNA COUNTY, VIRGINIA**

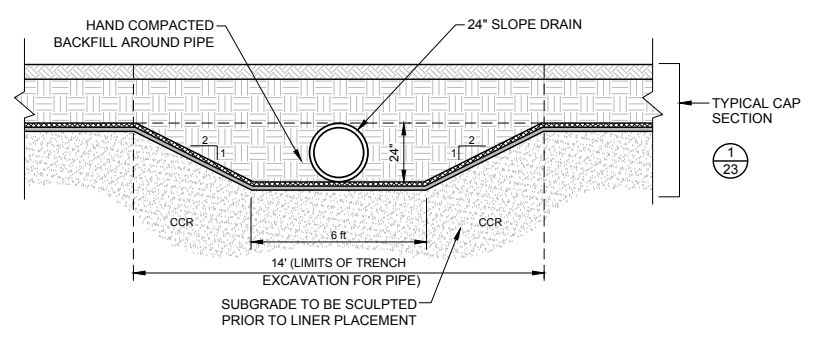
**GROUNDWATER MONITORING PLAN**

**DRAWING 30**

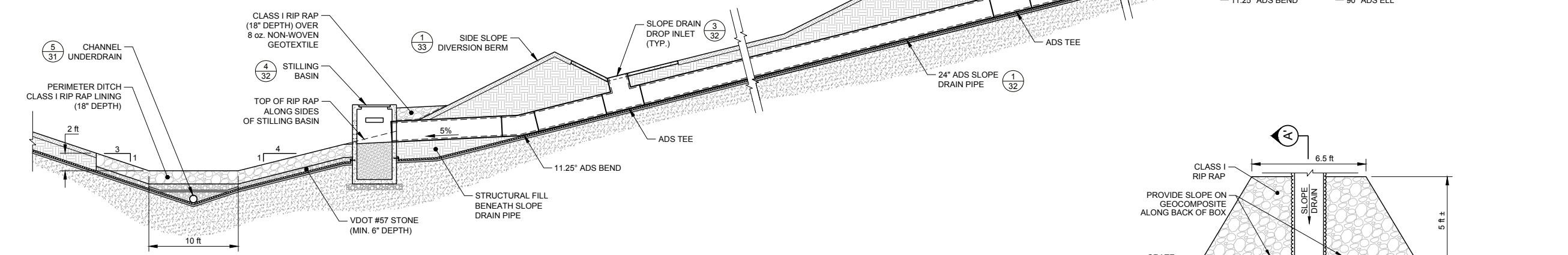
PROJECT	15-20347		
TITLE	GROUNDWATER MONITORING PLAN		
PROJECT No.	15-20347		
FILE No.	1520347X30		
REV	5	SCALE	AS SHOWN
DESIGN	JRD	DATE	11/18/15
CADD	BPG	DATE	11/18/15
CHECK	ATN	DATE	12/16/16
REVIEW	JRD	DATE	12/16/16



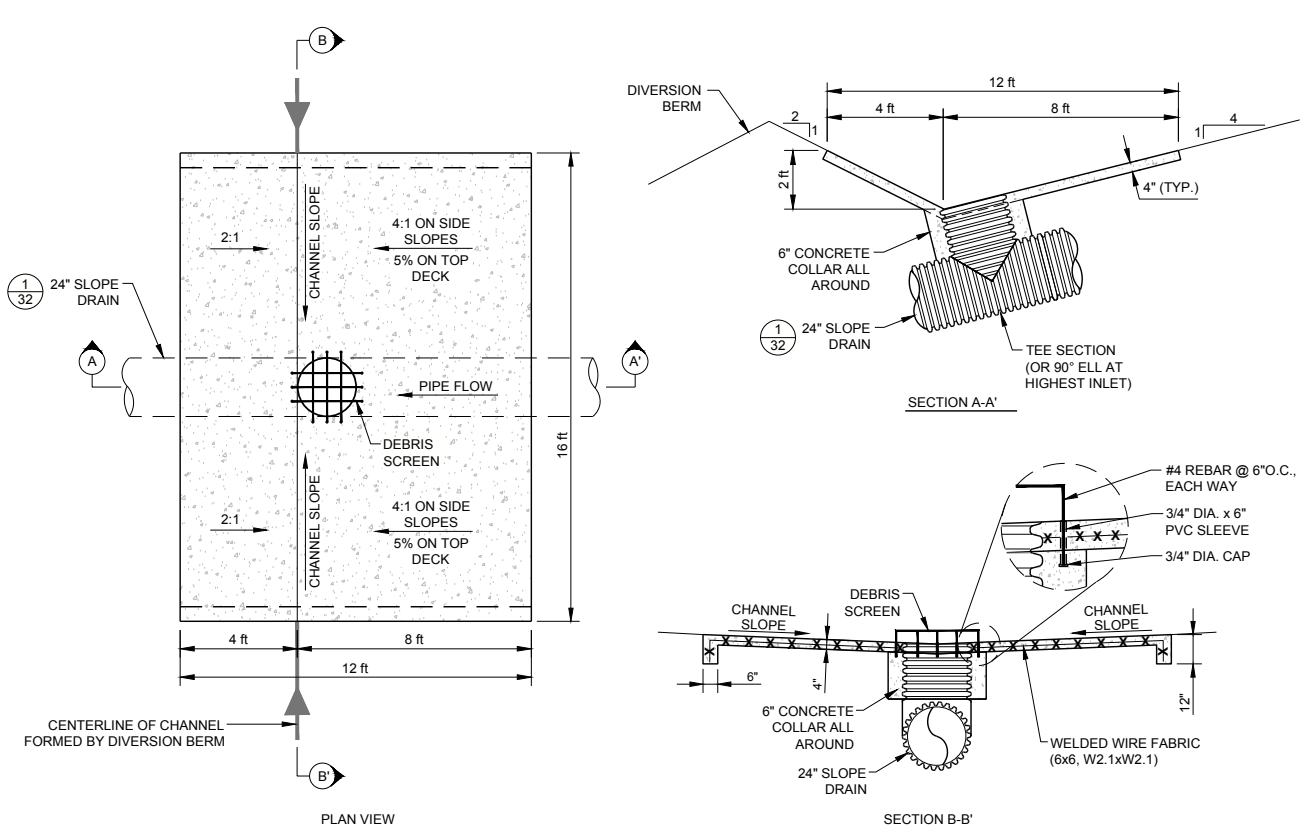




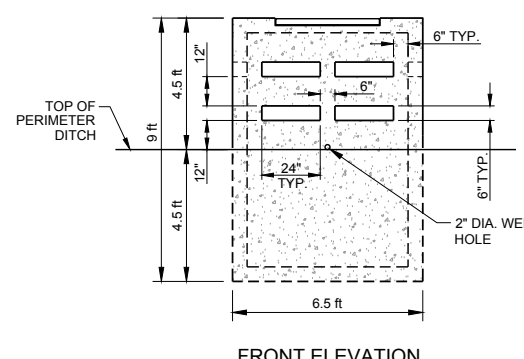
**1 SLOPE DRAIN CROSS SECTION**  
32 NOT TO SCALE



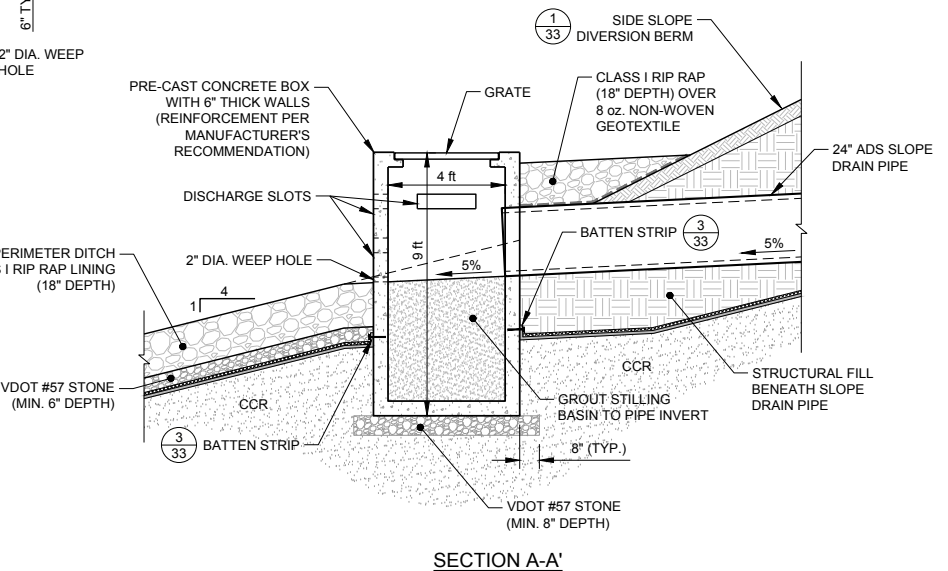
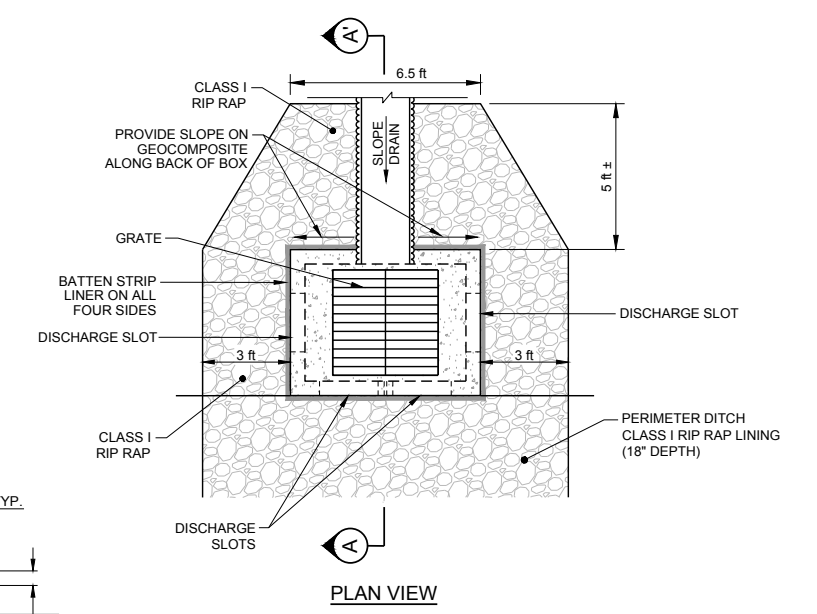
**2 SLOPE DRAIN DETAIL**  
32 NOT TO SCALE



**3 SLOPE DRAIN DROP INLET DETAIL**  
32 NOT TO SCALE



**4 STILLING BASIN DETAIL**  
32 NOT TO SCALE



**SECTION A-A'**

REV	DATE	DES	CADD	CHK	RWV
1	12/16/16	JRD	ATN	JRD	JRD
2	09/21/15	JRD	ATN	ATN	ATN
3	09/21/15	JRD	ATN	ATN	ATN
4	12/16/16	JRD	ATN	ATN	ATN

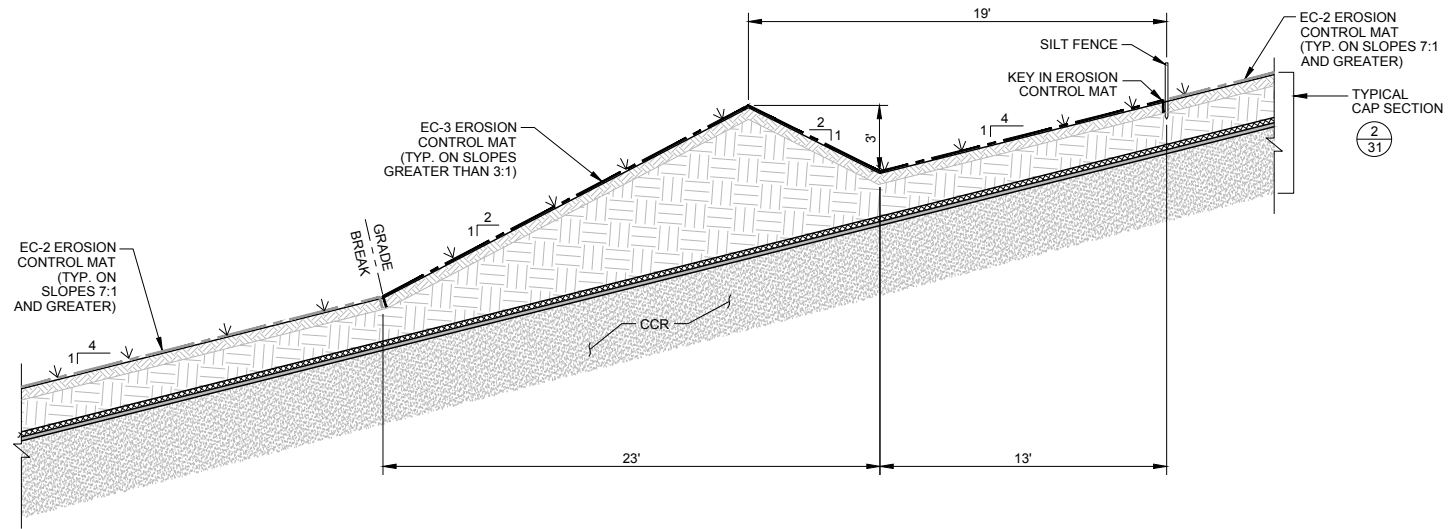


PROJECT  
**DOMINION POWER STATION  
 BREMO SURFACE IMPOUNDMENT  
 CCR SURFACE IMPOUNDMENT  
 CLOSURE PLAN**  
 FLUVANNA COUNTY, VIRGINIA

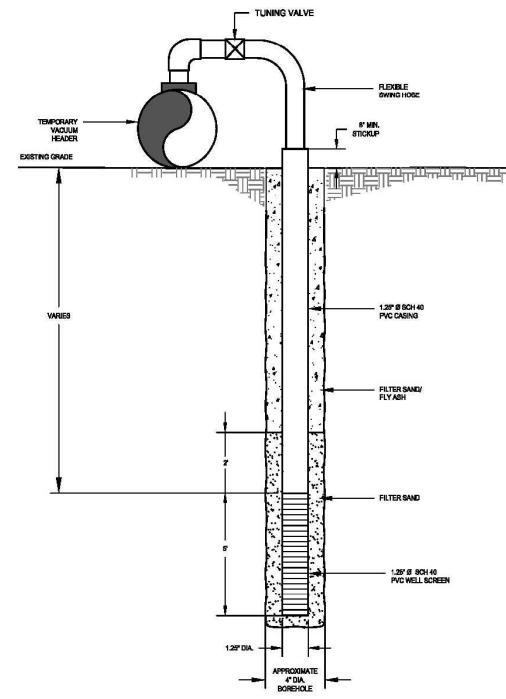
TITLE  
**MISCELLANEOUS  
 CONSTRUCTION DETAILS  
 (2 OF 3)**

PROJECT No.	15-20347
FILE No.	1520347X31-33
REV. 5	SCALE AS SHOWN
DESIGN	JRD 09/21/15
CADD	ATN 09/21/15
CHECK	ATN 12/16/16
REVIEW	JRD 12/16/16

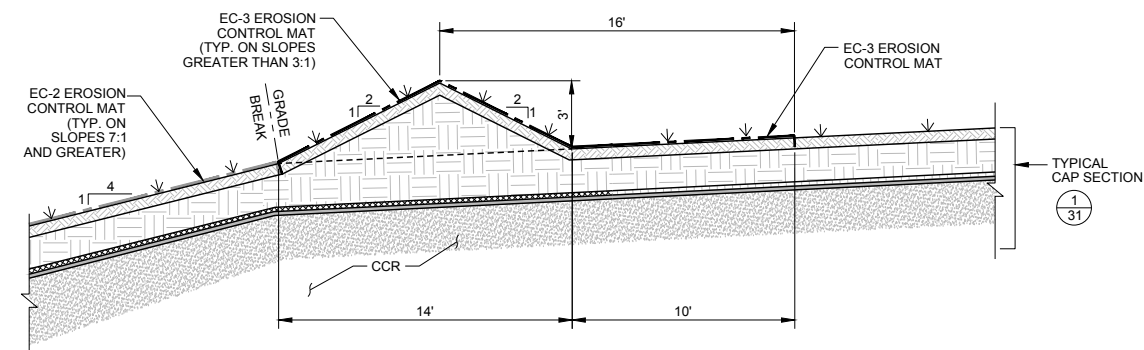
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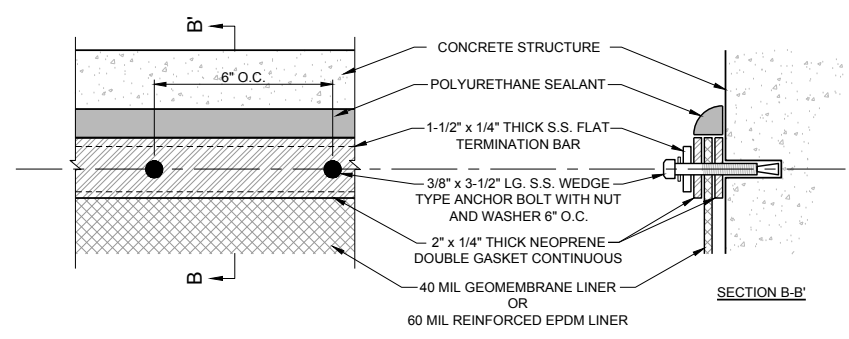
**1** SIDE SLOPE DIVERSION BERM  
33 NOT TO SCALE



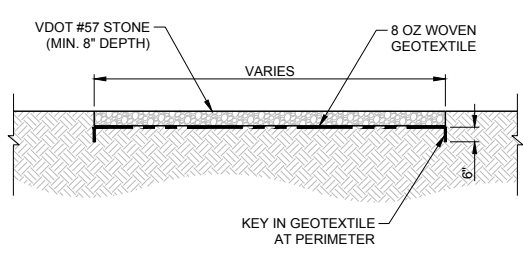
**5** TYPICAL DEWATERING WELL  
33 NOT TO SCALE



**2** TOP DECK DIVERSION BERM  
33 NOT TO SCALE



**3** BATTEN STRIP DETAIL  
33 NOT TO SCALE



**4** ACCESS ROAD DETAIL  
33 NOT TO SCALE

REV	DATE	DES	CADD	CHK	R/W
1	12/16/16	JRD	ATN	KLL	JRD
2					
3					
4					
5					



PROJECT  
**DOMINION  
 BREMO POWER STATION  
 CCR SURFACE IMPOUNDMENT  
 CLOSURE PLAN**  
 FLUVANNA COUNTY, VIRGINIA

TITLE  
**MISCELLANEOUS  
 CONSTRUCTION DETAILS  
 (3 OF 3)**

PROJECT No.	15-20347
FILE No.	1520347X31-33
REV. 5	SCALE AS SHOWN
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CHECK	ATN 12/16/16
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**DRAWING 33**

G:\Plan Production Data\Drawings\15-20347X - Site Plan Rev5\Active Drawings\1520347X31-33.dwg

# Dominion Bremo Station - Ash Ponds



# Dominion Bremo “North Pond”



# Bremo “East Pond” – a legacy pond

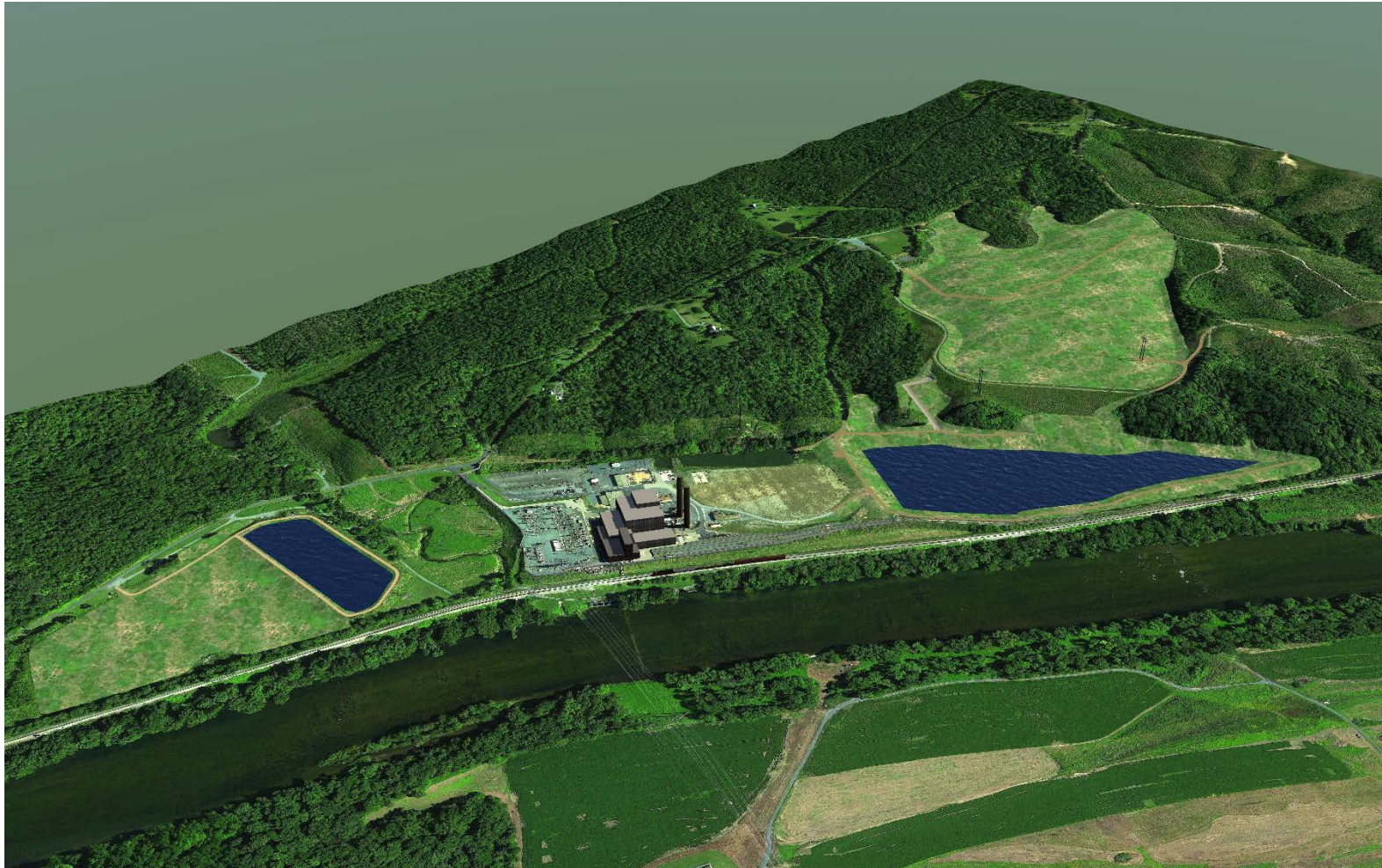


BACKUS AERIAL PHOTOGRAPHY

# Bremo “West Pond” – repurpose as a Low Volume Waste Pond

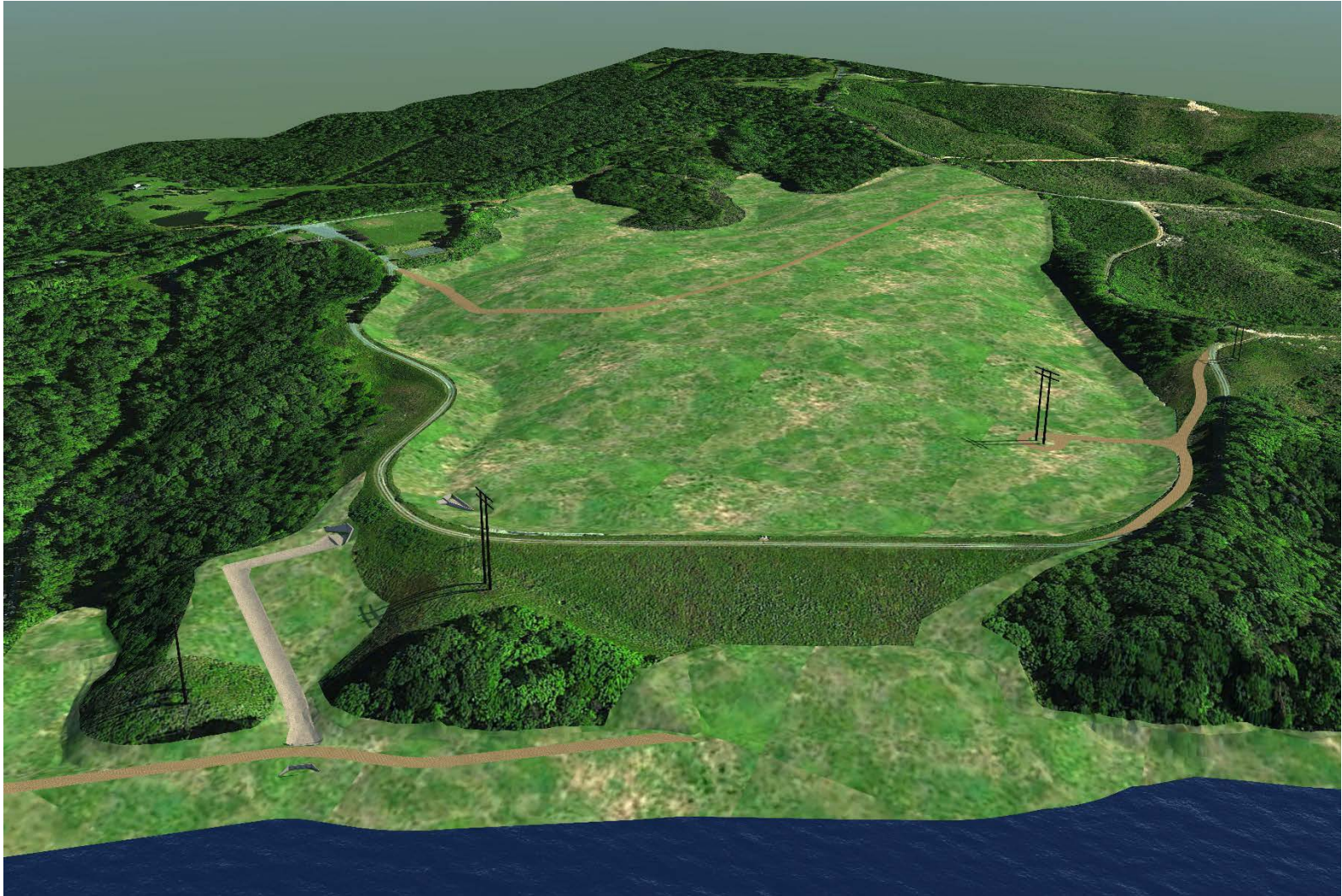


# Conceptual Rendering of Ash Ponds Post Closure

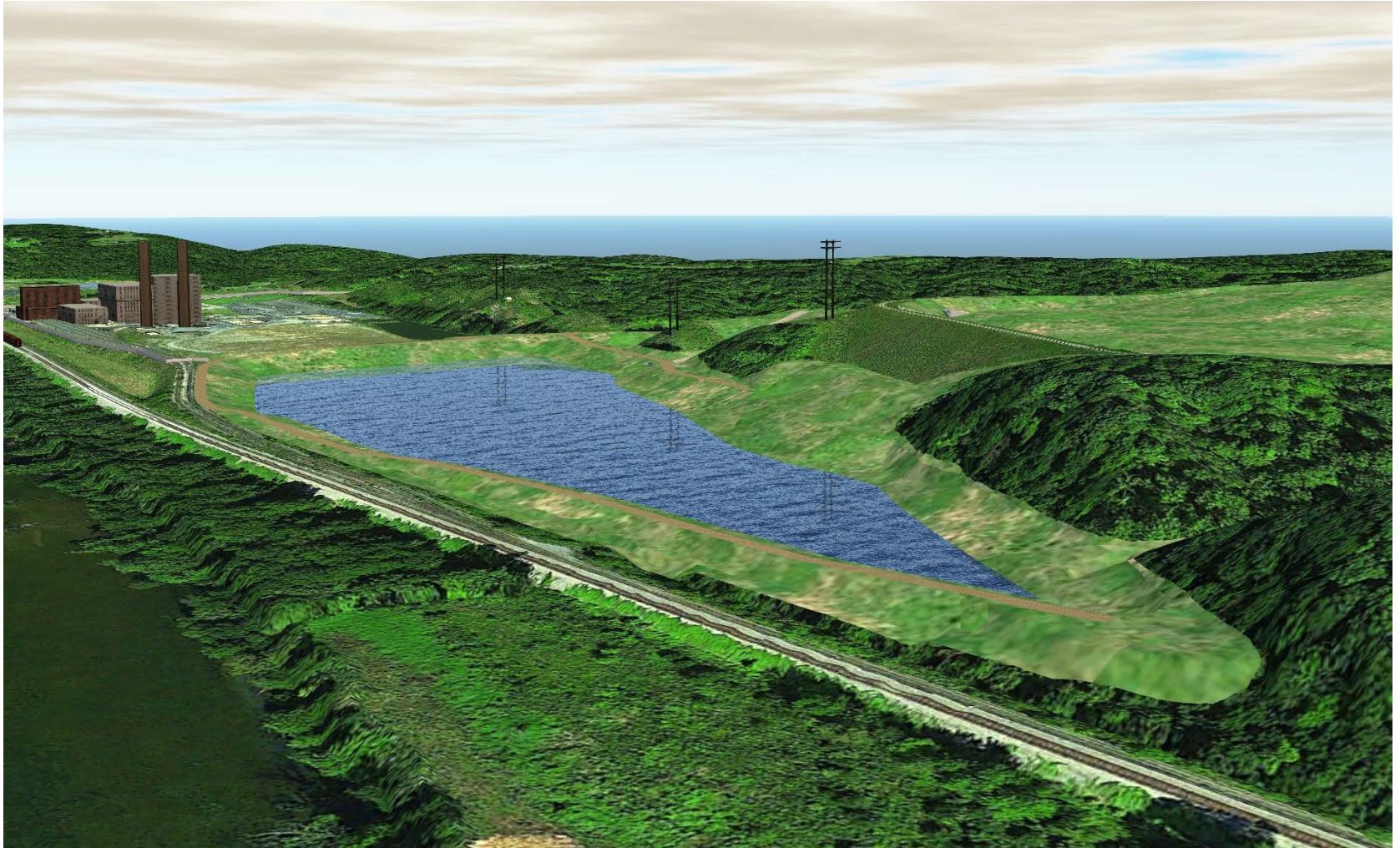




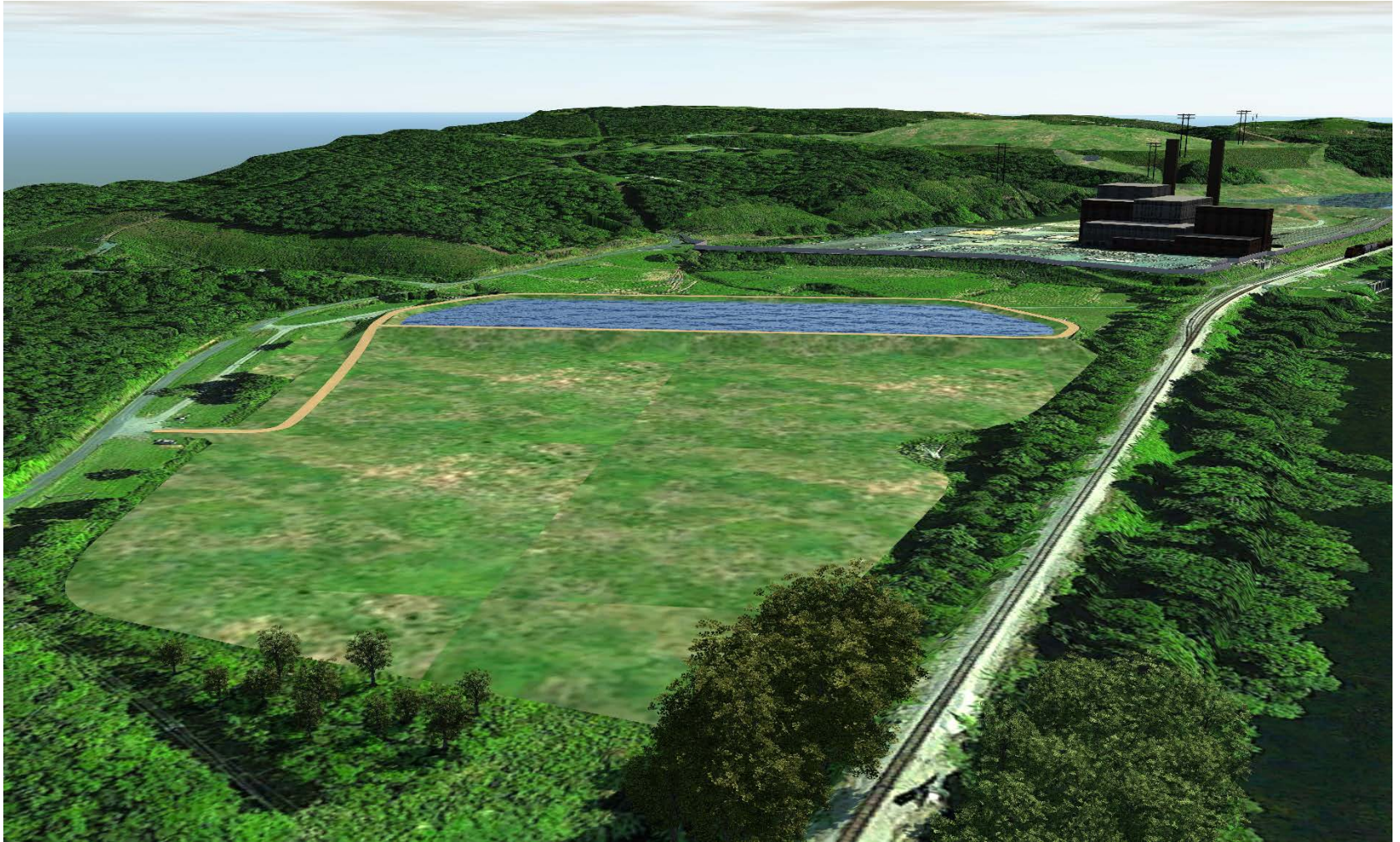
# Bremo “North Pond” Capped



# Bremo “East Pond” Closed by Removal



# Bremo “West Pond” Repurposed



# Project Plan

- Bremo
  - Bremo West and East Close by Removal of CCRs
    - Move ash (excavate and haul) by April 1, 2018 to Bremo North
    - Ash transportation from East to North by internal haul road
  - HDPE cap and cover for Bremo North
  - Close Bremo East by removal of CCRz and repurpose as Stormwater Management Pond
  - Install new lined low volume waste pond where Bremo West pond was located.
  - Ground water monitoring as required
  - Complete in 3 years or earlier