

INDIANA-KENTUCKY ELECTRIC CORPORATION

3932 U. S. Route 23 P. O. Box 468 Piketon, Ohio 45661 740-289-7200

WRITER'S DIRECT DIAL NO: 740-289-7259

February 1, 2025

Delivered Electronically

Mr. Brian Rockensuess and Incoming Commissioner Commissioner Indiana Department of Environmental Management 100 N. Senate Avenue Mail Code 50-01 Indianapolis, IN 46204-2251

Re: Indiana-Kentucky Electric Corporation
Clifty Creek Station's 2024 Annual CCR Landfill

Inspection Posting Notification

Dear Mr. Rockensuess and Incoming Commissioner:

As required by 40 CFR 257.106(g)(7) and 257.84(b), the Indiana-Kentucky Electric Corporation (IKEC) is providing notification to the Commissioner (State Director) of the Indiana Department of Environmental Management that a qualified professional engineer has completed the 2024 CCR Annual Landfill Inspection for IKEC's Clifty Creek Station. The inspection report has been placed in the facility's operating record as well as the company's publicly accessible internet site, which can be viewed at: http://www.ovec.com/CCRCompliance.php

If you have any questions, or require any additional information, please call me at (740) 289-7259.

Sincerely,

Jeremy Galloway

Environmental Specialist

JDG:zsh



2024 CCR Rule – Landfill Clifty Creek Landfill Inspection



Clifty Creek Generating Station Madison, Indiana Jefferson County

January 19, 2025

Prepared for:

Indiana-Kentucky Electric Corporation Piketon, Ohio

Prepared by:

Stantec Consulting Services Inc. Cincinnati, Ohio

Sign-off Sheet

This document entitled 2024 CCR Rule – Landfill, Clifty Creek Landfill Inspection was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of Indiana-Kentucky Electric Corporation (IKEC) (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule, and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use that a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by

(signature)

Gokul Katri, E.I.T.

Reviewed by

(signature)

Kyle R. Blakley, P.E.

Reviewed by

(signature)

Jacqueline S. Harmon, P.E.

No. 10911138

STATE OF

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2024 CCR RULE - LANDFILL CLIFTY CREEK LANDFILL INSPECTION

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2024 CCR RULE – LANDFILL CLIFTY CREEK LANDFILL INSPECTION

Overview January 19, 2025

1.0 OVERVIEW

Stantec Consulting Services Inc. (Stantec) performed the annual landfill inspection of the existing coal combustion residuals (CCR) landfill at the Clifty Creek Generating Station in Madison, Indiana on October 23, 2024.

This annual landfill inspection is intended to fulfill the requirements of 40 CFR 257.84(b) for the *Disposal of Coal Combustion Residuals from Electric Utilities* rule (CCR Rule) signed by the U.S. Environmental Protection Agency (EPA) Administrator on December 19, 2014, and published in the Federal Register on April 17, 2015.

The landfill is a restricted waste site (RWS) Type I, operating permit number 39-04, managed in accordance with the Indiana Department of Environmental Management's (IDEM's) regulations. Below is a summary of conditions for the day of the inspection:

Date performed:	October 23, 2024		
Weather:	Sunny, 70°F - 80°F		
	October 20, 2024 – 0.00 inch		
	October 21, 2024 – 0.00 inch		
	October 22, 2024 – 0.00 inch		
Rainfall over previous 72 hours:	October 23, 2024 – 0.00 inch		

Precipitation data was collected by the National Centers for Environmental Information (NCEI), a service provided by the National Oceanic and Atmospheric Administration (NOAA), for the Madison Sewage Plant, Indiana (USC00125237). Precipitation during the 72-hour period prior to the site visit was 0.00 inches. Rain was not observed during the actual site visit.

Stantec's team that performed the fieldwork included:

- Jacqueline Harmon, P.E., Principal, Project Manager
 29 years of experience in geotechnical engineering, including pump stations, levees, and CCR storage facility design, closure, and operation.
- Kyle R. Blakley, P.E., Senior Project Engineer/Geotechnical
 15 years of geotechnical engineering experience for supervision of geotechnical field
 explorations, design of dams, landslide remediation, and CCR storage facility design, closure,
 and operation.

The estimated volume of CCR contained in the landfill is 2,957,277 cubic yards as of October 23, 2024.

IDEM regulations require monthly inspections of the landfill facility, which are performed by plant personnel. Inspections are being performed by plant personnel according to the CCR Rule at least once every seven days. Weekly reports performed between October 31, 2023 and October 23, 2024, and monthly reports

2024 CCR RULE – LANDFILL CLIFTY CREEK LANDFILL INSPECTION

Description of Clifty Creek Landfill January 19, 2025

for October 2023 through October 2024 were provided for review (IKEC 2024a and 2024b). The reports indicated minor issues were observed, such as development of erosion rills, maintenance of check dams, maintenance of silt fence, and reseeding of bare areas. Subsequent reports indicate the issues were addressed regularly following identification. Weekly and monthly inspection reports also tracked the progress of construction in Phases 2 and 3 of the Type 1 landfill and ongoing maintenance within the minor landfill permit modification related to the sediment and leachate ponds.

IDEM is scheduled to inspect the facility on a routine/quarterly basis. The inspection reports are available on IDEM's online virtual filing cabinet. Reports dated October 23 and December 5, 2023 and January 30, April 23, May 21, and September 25, 2024 were downloaded (IDEM, 2024a through 2024d). The plant also provides annual drawing submittals to IDEM, showing existing and estimated five-year conditions (Stantec 2024a and 2024b).

Fieldwork was coordinated with Brooke Canter and Brent Gray, Clifty Creek Station's environmental manager and landfill manager, respectively. Observations were briefly discussed with onsite personnel during and after completion of the field activities. Mr. Gray track the maintenance needs and activities through the weekly and monthly inspections. Ms. Canter, Mr. Gray, Scott Moff of the station's environmental team, and Jeremy Galloway and Zachary Hammond of Ohio Valley Electric Corporation's (OVEC) Environmental Affairs group accompanied Stantec's personnel during the inspection. Observations were briefly discussed with onsite personnel during and after completion of the field activities.

2.0 DESCRIPTION OF CLIFTY CREEK LANDFILL

The Clifty Creek Generating Station is a coal-combustion generating station located in Madison, Jefferson County, Indiana. It is owned and operated by Indiana-Kentucky Electric Corporation (IKEC), a wholly owned subsidiary of OVEC. Clifty Creek Station's six units began producing electricity in 1955 and have a total generating capacity of 1,304 megawatts (IKEC, 2016).

In the late 1980s, IKEC converted the plant from ash sluicing to dry fly ash collection facilities. IKEC submitted a restricted waste construction/operation permit application to IDEM in 1986 to begin landfilling boiler slag and fly ash produced by the Clifty Creek Station. IDEM approved the fly ash landfill permit application as a Type III restricted waste landfill in 1988, and operations began in 1991.

In December 2006, IKEC applied for a major modification to its landfill permit to modify the existing Type III landfill to a Type I restricted waste landfill. The modification would enable the landfill to accept synthetic gypsum materials generated by the newly constructed flue gas desulfurization (FGD) systems. IKEC's major permit modification application proposed repurposing 109 acres of the originally permitted 200-acre Type III facility as a Type I facility to accept fly ash, boiler slag, synthetic gypsum, and other miscellaneous gypsum-related materials. IDEM approved IKEC's major permit modification in April 2008.

The Type I landfill has a capacity of 13.9 million cubic yards (FMSM, 2006) and included:

 A composite liner system consisting of a Type 3 geosynthetics clay liner and a 30-mil flexible polyvinyl chloride (PVC) geomembrane in all phases,

2024 CCR RULE – LANDFILL CLIFTY CREEK LANDFILL INSPECTION

Description of Clifty Creek Landfill January 19, 2025

- A leachate collection system, which historically directed flow eastward from part of Phase 1 to the West Boiler Slag Pond (WBSP) and the remainder flowed westward to the Landfill Runoff Collection Pond (LRCP),
- A contact and non-contact surface water management system, including sedimentation ponds, multiple sediment traps, drainage channels, and chimney drains that segregate water that comes into contact with the CCR and water that does not encounter the CCR,
- A groundwater monitoring system, and
- A final closure cap design.

See Appendix A for a station overview. Two ponds that have been historically associated with the landfill are:

- West Boiler Slag Pond (WBSP) a permanent pond that accepted sluiced boiler slag, which was
 periodically dredged, and the material transported to the landfill for beneficial reuse. The pond also
 accepted most of the leachate from Subphases 1A and 1B, as well as surface water from the eastern
 side of the landfill.
- Leachate Runoff Collection Pond (LRCP) a permanent pond at the southwestern end of the landfill that accepted the remainder of the leachate and surface water from Subphases 1A, 1B, 1C, and the area between Phase I and the pond.

Initial site development and construction activities for Phase 1 of the new Type I landfill began in May 2008. The original Type III facility was soil capped during the site development. Subphases 1A, 1B, and portions of 1C were constructed and certified for waste by late 2012. Subphase 1D was constructed in 2023 and certified for waste by December 2023.

At the time of this annual inspection, the active landfill consisted of all of Phase 1. Subphases 1A and 1B are subdivided into Areas 1A1, 1A2, 1B1, and 1B2. Areas 1A1 and 1B1 were approved for waste placement in 2008. Areas 1A2 and 1B2 were approved for waste placement in 2013. Area 1C was approved for waste placement in 2016. Subphases 1A and 1B are near permitted grade for CCR and have been covered with temporary soil and vegetation. Subphases 1C and 2D are actively receiving CCR, which are being placed in one-foot lifts in accordance with the facility's Construction Quality Assurance/Quality Control Plan (FMSM, 2008).

Phase 2 construction includes structural fill placement to create the bottom grades of the cell. IDEM attended a third preconstruction meeting on March 17, 2022, to include Phase 3 construction, allowing boiler slag underdrain placement. Structural fill placement in the floor and the south side of phase 2A was completed in 2023. Riverside has bypassed the entry into phase 2 with a temporary slag road and is continuing to build up the road berm for phase 2A. Phase 2C structural fill placement is ongoing.

In June 2021, IKEC requested authorization under Indiana's Regional General Permit for initiation of a northern ditch to reroute noncontact stormwater around the WBSP and directing it to a National Pollutant Discharge Elimination System (NPDES) permitted stormwater outfall, reducing flows to the WBSP. Appendix C includes a reference drawing for the northern ditch (Stantec, 2021b).

2024 CCR RULE - LANDFILL CLIFTY CREEK LANDFILL INSPECTION

Observations January 19, 2025

In July 2021, IKEC requested a minor permit modification for the Type I RWS landfill and inactive Type III RWS landfill. The purpose was to manage anticipated plant flows and process water streams to meet new federal effluent guidelines. The minor modification allowed construction of two leachate collection ponds and two sediment basins at the Type I landfill. One leachate collection pond and one sediment basin were constructed on the Type III portion of the landfill (northeast ponds) and are permanent units at the facility, reducing flows to the WBSP. The other leachate collection pond and sediment basin were constructed within the boundaries of the Type I landfill (southwest ponds) near the LRCP and are temporary, reducing flows to the LRCP. The southwest ponds will be removed when the Type I landfill is developed to the landfill's permitted boundaries. IDEM approved IKEC's minor permit modification in May 2022. Construction of the two leachate collection ponds and two sediment basins was completed in 2023.

IKEC's five-year landfill permit was renewed by IDEM in October 2019. A permit renewal was submitted to IDEM in June 2024.

Long-term plans require reducing flows to the WBSP and LRCP (through diversion channels and lined pond construction), decommissioning and repurposing of the existing WBSP, closure of the LRCP, and modifications necessary to continue disposal of solids in the active landfill. These plans have been completed or are preparing for construction at the time of this report. Appendices A and C include figures showing the recent aerial conditions and the proposed five-year conditions.

3.0 OBSERVATIONS

The following sections present observations made during the site visit within the active Type I footprint and including the associated surface drainage features, northeast and southwest leachate ponds and sediment basins, and remaining closed Type 3 landfill area. Observations identify maintenance items but also may include photograph and slope locations and items of interest. Refer to Appendix A for figures and observation points along with the photographs and descriptions in Appendix B. Slopes noted were estimated using a rangefinder on a handheld GPS unit.

3.1 SURFACE CHANNELS, STORMWATER/SEDIMENT BASINS, AND LEACHATE PONDS

Four riprap-lined surface water drainage channels are constructed east of the Type I active landfill. Two channels, one north of the paved haul road and one nearest the natural ridge (Devil's Backbone) to the south, convey flow from the surrounding watershed. These two channels have been rerouted to the northern stormwater ditch (Appendix C), bypassing the WBSP and flowing to a NPDES-permitted outfall.

The two drainage channels towards the middle (south of the paved haul road) were originally intended to manage stormwater flow once final cover is placed in Phase I. The two middle channels have been shortened to allow construction of the northeast sediment basin. The remaining channels flow eastward into the collection basin at the limits of the closed portion of the Type III landfill. A culvert connects the basin to the northern stormwater ditch, bypassing the WBSP.

2024 CCR RULE - LANDFILL CLIFTY CREEK LANDFILL INSPECTION

Observations January 19, 2025

This section includes observations made on October 23, 2024, beginning with the stormwater channel connecting the landfill to the WBSP, the new northern stormwater ditch, the northeast sediment basin and leachate pond, and the southwest sediment basin and leachate pond.

Southwest

- The riser structure at the southeast corner of the Southwest Sediment Basin is clear of obstructions and appears to be functioning property (Point 1, Appendix A; Photo 1, Appendix B).
- The lined stormwater channel on the west and south sides of the Southwest Sediment Basin and
 on the south side of the Southwest Leachate Pond had shallow standing water. No obstructions
 or other hindrances to flow were observed (Point 2, Appendix A; Photos 2 and 3, Appendix B).
- An erosion rill, approximately 12 inches deep, is present at the exterior slope of the stormwater channel outside the southwest corner of the Southwest Sediment Basin (Point 3, Appendix A; Photo 3, Appendix B).
- The riprap protection along the rim of the Southwest Leachate Pond is lower in elevation than the road, including the area surrounding the power pole at its southeast corner and near the western pipe ends (Points 4 and 6, Appendix A; Photos 4 through 6, Appendix B).
- Exposed geotextile fabric is present at the southwest corner of the Southwest Leachate Pond at the perimeter covering of the riprap (Point 5, Appendix A; Photo 5, Appendix B).

Northeast

- Two holes approximately two feet deep and two to four feet in dimension are in the temporary soil cover next to the North Leachate Pond on its south side. A second slightly larger hole is (Points 30 and 31, Appendix A).
- Tire rutting is present on the crest of the Northeast Leachate Pond and of the Northeast Sedimentation Basin (Points 32 and 33, Appendix A; Photos 30 and 31, Appendix B).
- A hole is present on the north side of the Northeast Sediment Basin, near the perimeter haul road (Point 34, Appendix A; Photo 32, Appendix B).
- The riprap protection surrounding the Northeast Sediment Basin is lower in elevation than the surrounding temporary cover. Erosion is visible at the material change.
- An area of bare earth is present on the west perimeter of the Northeast Sediment Basin (Point 36, Appendix A; Photo 34, Appendix B).

2024 CCR RULE – LANDFILL CLIFTY CREEK LANDFILL INSPECTION

Recommendations January 19, 2025

3.2 TYPE I LANDFILL

The Phase I Type I landfill began accepting CCR in 2008. No subphases within the waste footprint have been permanently capped and closed. Areas nearing final grades have temporary cover, are vegetated, or are mulched and seeded. The slopes are relatively uniform.

- The limits of CCRs along the haul road along the west side of Phase 3 is noted at the intersection of the haul road and active placement (Point 7, Appendix A; Photo 7, Appendix B).
- Temporary cover has been established within Phase 1, beyond the waste limits to the north and side sides of the CCR landfill for Phases 1 through 3. The cover is protected by grass seed and straw matting (Points 8 through 17, Appendix A; Photos 8 through 15, Appendix B). Instability and significant depressions were not noted in the area with temporary cover.
- Bare spots were identified at numerous locations in the temporary cover of Phase 1 (Points 18, 19, 22, 25, 26, 27, and 29, Appendix A; Photos 16, 17, 20, 23, 24, 25, and 27, Appendix B).
- Surficial erosion rills were noted in the temporary cover of Phase 1 (Points 20, 21, and 23, Appendix A; Photos 18, 19, and 21, Appendix B).
- Taller vegetation is present at the southeast slopes of Phase 1, from the approximate midpoint length of the phase proceeding northeast to the Northeast Sedimentation Basin (Point 24, Appendix A; Photo 22, Appendix B).
- Small holes are present on the southeast side of the Phase 1 landfill (Point 28, Appendix A; Photo 26, Appendix B).

4.0 RECOMMENDATIONS

The following recommendations are offered for the Clifty Creek Station's surface water channels, stormwater and sediment basins, leachate ponds, and CCR landfill. The recommendations are listed in no particular order.

Stability Issues:

None noted.

Operational Issues:

 Conduct field surveys to measure current topography and compare to design geometry. Regrade surface as needed to conform to design. Areas near permitted CCR grades are recommended to be capped, closed, and vegetated (Subphases 1A1, 1B1, 1A2, 1B2, and 1C).

2024 CCR RULE – LANDFILL CLIFTY CREEK LANDFILL INSPECTION

References January 19, 2025

- Monitor and analyze the data obtained from the installed instrumentation to confirm the water level at the southwest sedimentation and leachate pond.
- Monitor the northeast sediment basin and leachate ponds constructed in 2023 for settlement, erosion, and surface water/leachate drainage. Contact an engineer if anomalies are observed that may indicate that the channels or ponds are not functioning as intended.

Maintenance Issues:

- Continue to conduct weekly and monthly field inspections to schedule and maintain the necessary best management practices for the stormwater channels, sediment traps, and rock check dams serving the landfill.
- Maintain the vegetation along the exterior slopes and within the surface drainage channels to facilitate inspections. Remove taller weeds and woody vegetation or reestablish vegetation as needed. Temporary cover should be monitored, maintained, and regraded if needed to reduce ponding.
- Monitor the noted depressions, erosion rills, and areas of exposed ash and regrade or address the areas as needed.
- Backfill the documented animal burrows with compacted native soils or a mud-pack of soil and cement, ensuring all voids are filled and the entrance(s) are properly sealed.

5.0 REFERENCES

Fuller, Mossbarger, Scott & May Engineers, Inc. (FMSM) (2008). Clifty Creek Fly Coal Ash Landfill Construction. Construction Quality Assurance/Quality Control Plan. Coal Ash Landfill, Type I Restricted Waste Landfill. Attachment 21 (Revised). May 13.

Fuller, Mossbarger, Scott & May Engineers, Inc. (FMSM) (2006). Permit Drawings. Indiana-Kentucky Electric Corporation. Clifty Creek Coal Ash Landfill Modification. Jefferson County, Madison Township, Indiana. Prepared for American Electric Power, Columbus, Ohio. November. Cincinnati, Ohio.

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2024 CCR RULE - LANDFILL CLIFTY CREEK LANDFILL INSPECTION

References January 19, 2025

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Indiana Department of Environmental Management (2024d). Inspection Summary Letter. IKEC Clifty Creek RWS I Landfill. EPA ID #: IND 085 048 700. SW Program ID: 39-04. Madison, Jefferson County. September 25.

Indiana Department of Environmental Management (2023a). Inspection Summary Letter. IKEC Clifty Creek RWS I Landfill. EPA ID #: IND 085 048 700. SW Program ID: 39-04. Madison, Jefferson County. October 23.

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Stantec Consulting Services Inc. (2024b). "Estimated 5-Year Construction Limits (June 2029)." Indiana-Kentucky Electric Corporation. Clifty Creek Coal Ash Landfill. Drawing no. 10747c-02-5yrcl-2024.dwg. June 5.

Stantec Consulting Services Inc. (2024c). "2023 CCR Rule Inspection, Clifty Creek Landfill (January)." Indiana-Kentucky Electric Corporation. Clifty Creek Coal Ash Landfill.

Stantec Consulting Services Inc. (2023c). "2022 CCR Rule Inspection, Clifty Creek Landfill (June)." Indiana-Kentucky Electric Corporation. Clifty Creek Coal Ash Landfill.

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2024 CCR RULE - LANDFILL CLIFTY CREEK LANDFILL INSPECTION

References January 19, 2025

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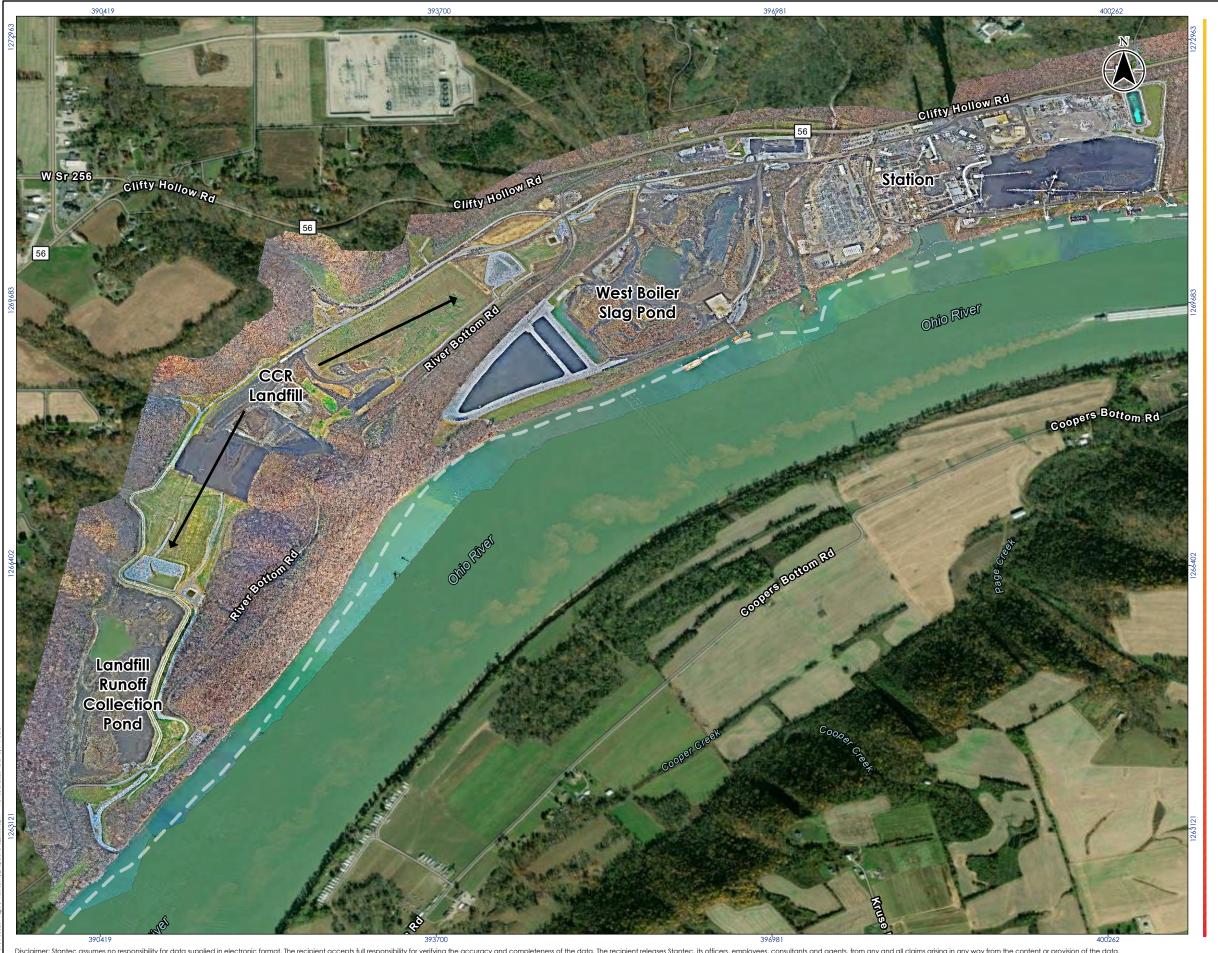
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APPENDIX A

Figures





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- NOTES

 1. Coordinate System: Latitude/Longitude NAD83

 2. Base features ESRI

 3. Ortho-Imagery represents conditions from November 2023.



Project Location Clifty Creek Station Jefferson County, IN 173410747 Prepared by ANP on 2023-12-21 Technical Review by DP on 2023-12-21 Independent Review by JSH on 2023-12-21

Client/Project Indiana - Kentucky Electric Corporation Clifty Creek Station

Figure No.

2024 Annual CCR Facility Inspections -**Station Overview**





Legend

 $exttt{1} o exttt{Photo Location}$

Inspection Locations 2024



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- NOTES

 1. Coordinate System: Latitude/Longitude NAD83

 2. Base features ESRI

 3. Ortho-Imagery represents conditions from November 2023.



Project Location Clifty Creek Station Jefferson County, IN 173410747 Prepared by ANP on 2025-01-14 Technical Review by JS on 2025-01-14 Independent Review by JSH on 2025-01-14

Indiana - Kentucky Electric Corporation
CCR Landfill

2024 Annual CCR Landfill Inspection

Clifty Creek CCR Landfill Jefferson County, Indiana

Point ID	Photo ID				
No.	No(s).	Comment	Latitude	Longitude	Location
1		Top/End of Outlet Pipe	38.724054	-85.445824	Landfill
2		Southwest Sedimentation Pond Spillway	38.724454	-85.446996	Landfill
3		Erosion Rill (12 in. Deep Max.)	38.724774	-85.447599	Landfill
4		Southwest Leachate Collection Pond Power Pole	38.723823	-85.445092	Landfill
5		Geotextile Exposed (Southwest Leachate Collection Pond)	38.724041	-85.445406	Landfill
6		Pump Pipes - Low Elevation (Southwest Leachate Collection Pond)	38.724192	-85.445313	Landfill
7		Exposed Ash	38.727317	-85.443981	Landfill
8		Edge of Temporary Cover	38.731812	-85.438335	Landfill
9		Edge of Temporary Cover, Straw	38.731918	-85.438453	Landfill
10		Edge of Temporary Cover, Straw	38.732075	-85.438315	Landfill
11		Edge of Temporary Cover, Straw	38.732329	-85.438321	Landfill
12		Edge of Temporary Cover, Straw	38.732360	-85.438380	Landfill
13		Edge of Temporary Cover, Straw	38.731990	-85.438790	Landfill
14		Edge of Temporary Cover, Straw	38.732093	-85.439186	Landfill
15		Edge of Temporary Cover, Straw	38.732031	-85.439778	Landfill
16		Edge of Ash and Temporary Cover, Straw	38.731767	-85.439472	Landfill
17		Edge of Ash and Temporary Cover, Straw	38.731889	-85.438789	Landfill
18		Ash and Bare Spots, Top of Ditch	38.731576	-85.437947	Landfill
19		Bare Areas Along Ditch	38.731934	-85.437556	Landfill
20		Erosion Rill	38.732152	-85.437718	Landfill
21		Small Erosion Rill	38.732103	-85.437838	Landfill
22		Bare Spot on Top of Temporary Cover	38.732307	-85.437385	Landfill
23		Small Erosion Rill	38.732323	-85.437583	Landfill
24		Taller Vegetation from Point to East	38.732427	-85.437318	Landfill
25		Bare Spot	38.732523	-85.437206	Landfill
26		Bare Spot	38.732788	-85.437242	Landfill
27		Bare Spot	38.733054	-85.436640	Landfill
28		Rodent Holes	38.733086	-85.436369	Landfill
29		Several Bare and Rocky Areas	38.733861	-85.435546	Landfill
30		Depression Next to Pond	38.735994	-85.432636	Landfill
31		Depression Next to Pond 2	38.735964	-85.432761	Landfill
32		Tire Rutting	38.735962	-85.432890	Landfill
33		Tire Rutting	38.735610	-85.434068	Landfill
34		Small Hole	38.735756	-85.434808	Landfill
35		Truck Wash Headwall	38.735668	-85.435199	Landfill
36		Bare Spot	38.735197	-85.435123	Landfill
37		Riprap Spillway to Sedimentation Pond	38.734563	-85.435020	Landfill

APPENDIX B

Photographic Log





Photo 1, Point 1
Southwest Sediment Basin – Top of riser/inlet structure.



Photo 2, Point 2 Lined stormwater channel adjacent to Southwest Sediment Basin.



Photo 3, Point 3

Southwest Sediment Basin – Erosion rill, approximately 12 inches deep.





Photo 4, Point 4

Southwest Leachate Pond - Power pole at edge of pond.



Photo 5, Point 5 Southwest Leachate Pond – Geotextile fabric exposed in riprap protection.



Photo 6, Point 6
Southwest Leachate Pond – Pump piles.





Photo 7, Point 7

Phase 3 – Limits of CCR along the haul road.



Photo 8, Point 8
Phase 1 – Edge of temporary cover.



Photo 9, Point 9

Phase 1 – Edge of temporary cover with straw protection.





Photo 10, Point 10

Phase 1 – Edge of temporary cover with straw protection.



Photo 11, Point 11
Phase 1 – Edge of temporary cover with straw protection.



Photo 12, Point 12

Phase 1 – Edge of temporary cover with straw protection.





Photo 13, Point 13
Phase 1 – Edge of temporary cover with straw protection.



Photo 14, Point 14 Phase 1 – Edge of temporary cover with straw protection.



Photo 15, Point 15

Phase 1 – Edge of temporary cover with straw protection.





Photo 16, Point 18

Phase 1 – Bare spots on top of the temporary cover.



Photo 17, Point 19
Phase 1 – Bare spots on southeast slope of temporary cover.



Photo 18, Point 20
Phase 1 – Erosion rill in temporary cover.





Photo 19, Point 21
Phase 1 – Erosion rill in temporary cover.



Photo 20, Point 22 Phase 1 – Bare spot on top of the temporary cover.



Photo 21, Point 23
Phase 1 – Erosion rill in temporary cover.



from point.



Photo 22, Point 24
Phase 1 – Taller vegetation looking east



Photo 23, Point 25
Phase 1 – Erosion rill in temporary cover.



Photo 24, Point 26

Phase 1 – Bare spot on top of the temporary cover.





Photo 25, Point 27
Phase 1 – Bare spot on top of the temporary cover.



Photo 26, Point 28
Phase 1 – Small holes in the temporary cover.



Photo 27, Point 29

Phase 1 – Bare spots and rocky soil on top of the temporary cover.





Photo 28, Point 30
Northeast Leachate Pond –
Depression in temporary soil cover next to pond.



Photo 29, Point 31

Northeast Leachate Pond –

Depression in temporary soil cover next to pond.



Photo 30, Point 32 Northeast Leachate Pond – Tire rutting near its perimeter.





Photo 31, Point 33

Northeast Sedimentation Basin –

Tire rutting in the temporary cover.



Photo 32, Point 34

Northeast Leachate Pond – Hole next to pond in temporary cover.



Photo 33, Point 35 Northeast Sedimentation Basin – Headwall to truck washing station.





Photo 34, Point 36

Northeast Sedimentation Basin —
Bare spots on the temporary cover.



Photo 35, Point 37

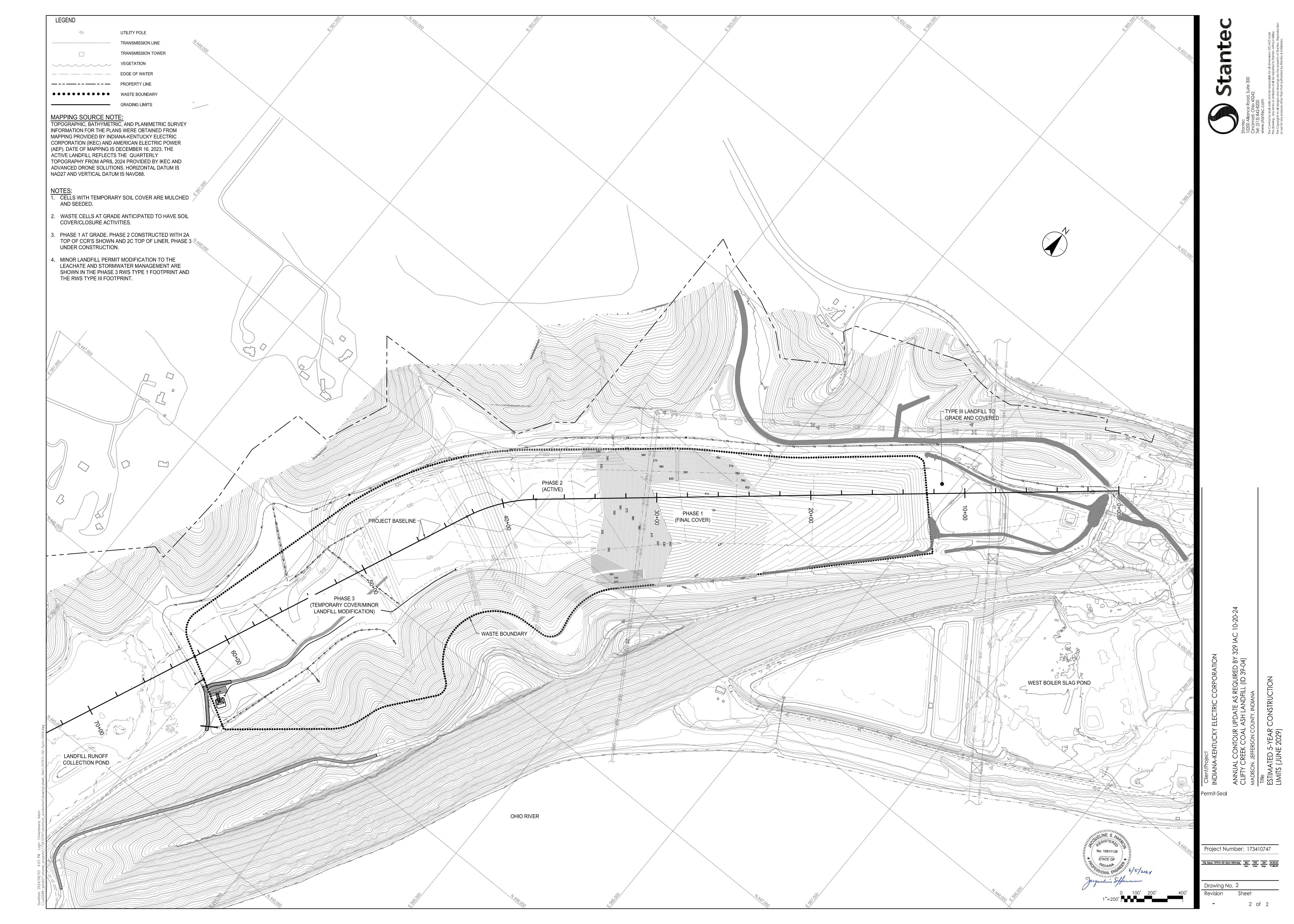
Northeast Sedimentation Basin —
Riprap spillway to the
Sedimentation Pond.

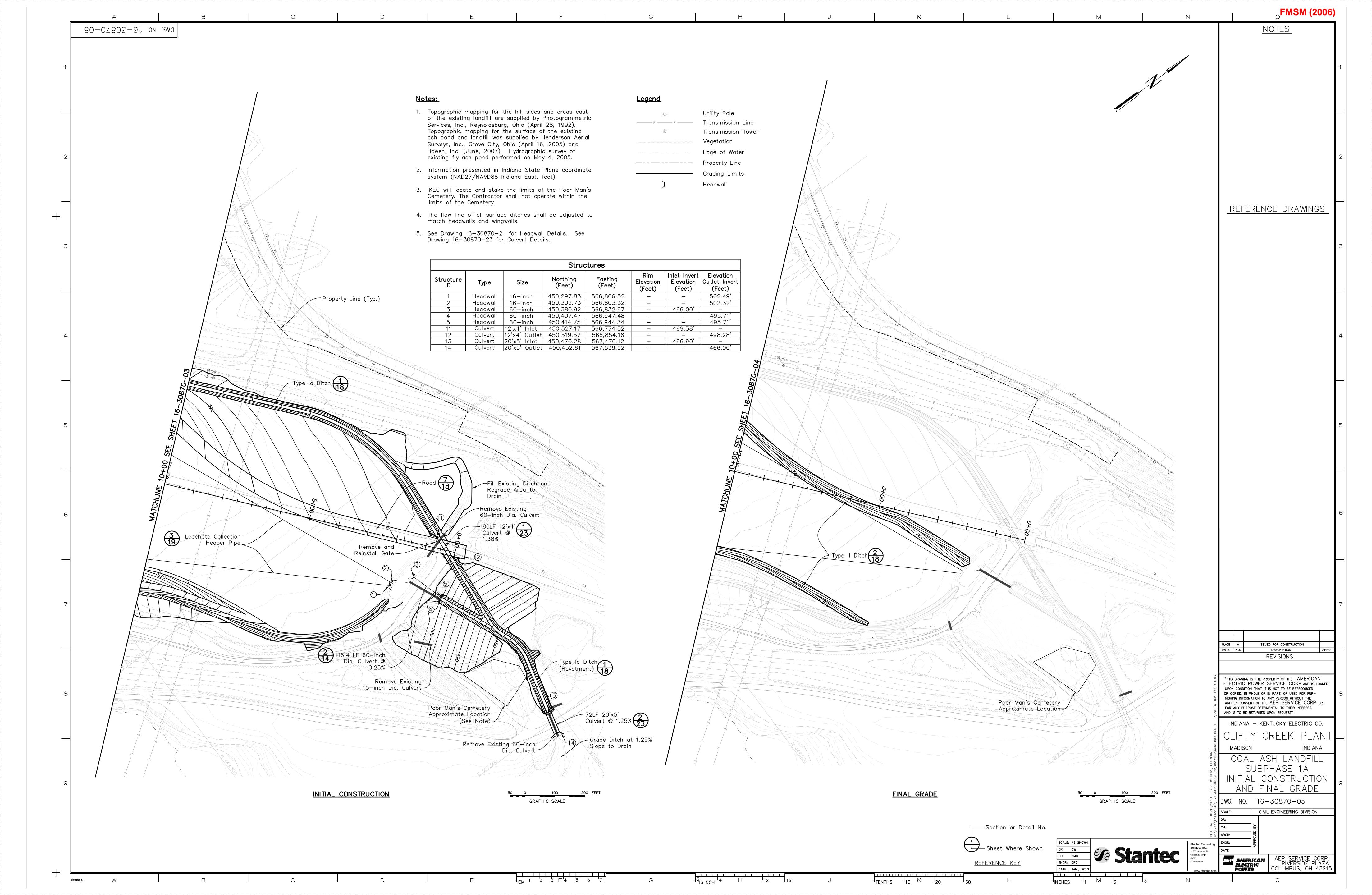
APPENDIX C

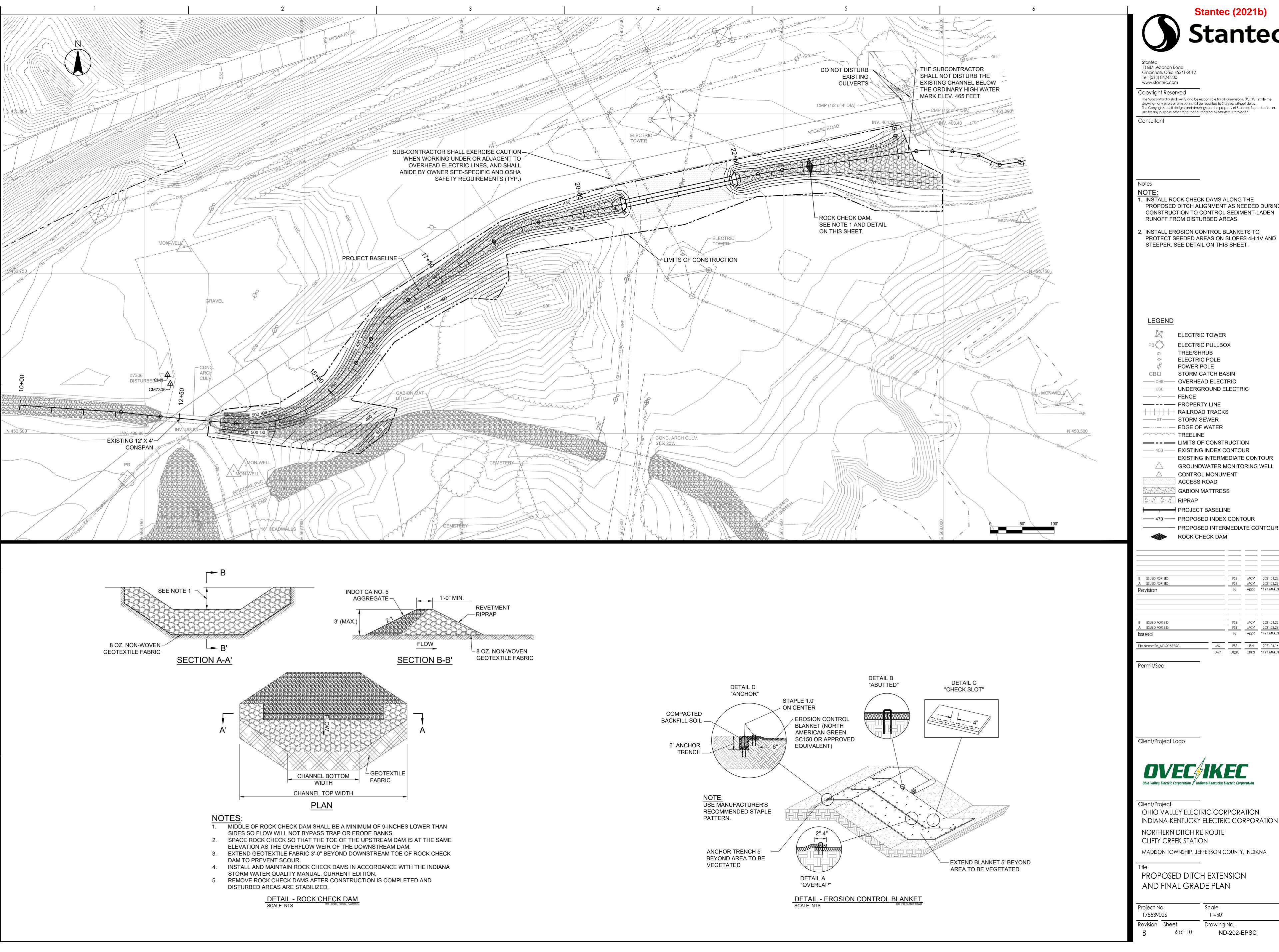
Reference Drawings











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INSTALL ROCK CHECK DAMS ALONG THE PROPOSED DITCH ALIGNMENT AS NEEDED DURING CONSTRUCTION TO CONTROL SEDIMENT-LADEN RUNOFF FROM DISTURBED AREAS.

INSTALL EROSION CONTROL BLANKETS TO PROTECT SEEDED AREAS ON SLOPES 4H:1V AND

ELECTRIC TOWER ELECTRIC PULLBOX TREE/SHRUB ELECTRIC POLE POWER POLE STORM CATCH BASIN OVERHEAD ELECTRIC ---- UGE---- UNDERGROUND ELECTRIC — -- — PROPERTY LINE ——ST—— STORM SEWER —···— EDGE OF WATER

—— - - LIMITS OF CONSTRUCTION —— 450 —— EXISTING INDEX CONTOUR EXISTING INTERMEDIATE CONTOUR GROUNDWATER MONITORING WELL CONTROL MONUMENT

GABION MATTRESS

—— 470 —— PROPOSED INDEX CONTOUR

ROCK CHECK DAM

Dwn. Dsgn. Chkd. YYYY.MM.DD



OHIO VALLEY ELECTRIC CORPORATION INDIANA-KENTUCKY ELECTRIC CORPORATION

MADISON TOWNSHIP, JEFFERSON COUNTY, INDIANA

PROPOSED DITCH EXTENSION AND FINAL GRADE PLAN

Scale 1''=50' Drawing No. ND-202-EPSC